Application Proof

Chifeng Jilong Gold Mining Co., Ltd.
赤峰吉隆黃金礦業股份有限公司

(a joint stock company incorporated in the People's Republic of China with limited liability)

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赤峰黄金
CHIFENG GOLD

Chifeng Jilong Gold Mining Co., Ltd.
赤峰吉隆黃金礦業股份有限公司

(A joint stock company incorporated in the People's Republic of China with limited liability)

[REDACTED]

Number of [REDACTED] under the [REDACTED]	**:**	**[REDACTED] H Shares (subject to the [REDACTED])**
Number of [REDACTED]	**:**	**[REDACTED] H Shares (subject to reallocation)**
Number of [REDACTED]	**:**	**[REDACTED] H Shares (subject to reallocation and the [REDACTED])**
[REDACTED]	**:**	**HK$[REDACTED] per [REDACTED] plus brokerage of 1.0%, SFC transaction levy of 0.0027%, Hong Kong Stock Exchange trading fee of 0.00565% and AFRC transaction levy of 0.00015% (payable in full on application in Hong Kong dollars and subject to refund)**
Nominal value	**:**	**RMB1.00 per H Share**

[REDACTED]

Sole Sponsor, **[REDACTED]**

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We are incorporated, and substantially all of our businesses are located, in the PRC. Potential [**REDACTED**] should be aware of the differences in the legal, economic and financial systems between the mainland of the PRC and Hong Kong and that there are different risk factors relating to [**REDACTED**] in PRC-incorporated business. Potential [**REDACTED**] should also be aware that the regulatory framework in the PRC is different from the regulatory framework in Hong Kong and should take into consideration the different market nature of the H Shares. Such differences and risk factors are set out in the sections headed "Risk Factors", "Summary of Principal Legal and Regulatory Provisions" in Appendix V and "Summary of Articles of Association" in Appendix VI to this Document.

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[REDACTED]

IMPORTANT

[**REDACTED**]

IMPORTANT

[**REDACTED**]

EXPECTED TIMETABLE[(1)]

[**REDACTED**]

EXPECTED TIMETABLE[1]

[**REDACTED**]

EXPECTED TIMETABLE[1]

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***This summary aims at giving you an overview of the information contained in this Document and should be read in conjunction with the full text of this Document. As the following is only a summary, it does not contain all the information that may be important to you. You should read this Document in its entirety before you decide to* [REDACTED] *in the* [REDACTED].**

There are risks associated with any* [REDACTED]. *Some of the particular risks in* [REDACTED] *in the* [REDACTED] *are set out in the section headed "Risk factors" in this Document. You should read that section carefully before you decide to* [REDACTED] *in the* [REDACTED]. *Various expressions used in this summary are defined in the sections headed "Definitions" and "Glossary of technical terms" in this Document.

OVERVIEW

We are committed to becoming a prominent gold producer well recognized around the world. Our core value is "To benefit more people through the development of Chifeng Gold." We are principally engaged in the mining, processing, and sales of gold. We are the largest non-state owned gold producer in China.

As of the Latest Practicable Date, we owned and operated seven gold and polymetallic mines across the world, including China, Southeast Asia, and West Africa. According to Frost & Sullivan:

- we experienced the fastest growth among listed gold producers in China, with enormous growth potential. From 2021 to 2023, our gold production achieved a CAGR of 33.1%, which by far outpaced the 16.4% average growth rate of major listed gold producers in China;

- we ranked fifth among gold producers in China in terms of gold Resources, with gold Resources of 14.6 million oz as of March 31, 2024, and we ranked fifth among listed gold producers in China in terms of gold production, with gold production of 461.5 koz in 2023;

- our operational efficiency enhancement surpassed the worldwide industry average by a notable margin and we positioned significantly lower in terms of gold all-in sustaining costs ("**AISC**") than that of the global average. For the year ended December 31, 2023, our gold AISC stood at only US$1,179.1 per ounce, placing us in the first quartile in the worldwide gold mining industry, while the global average for the same period was approximately US$1,348.5, which is 14.4% higher than ours. In 2023, we beat the global trend of increased costs, as we decreased our gold AISC by 12.0%, whereas the average AISC for international gold producers increased by 7.2% during the same period; and

- among listed gold producers in China, we had the greatest overseas presence in terms of both total assets and revenue contribution derived from business activities outside of the PRC as of December 31, 2023 and in 2023, respectively. In 2023, approximately 76.9% of our total gold production and 71.9% of our total revenue was generated from our overseas business. As of March 31, 2024, approximately 73.6% of our total assets were contributed by our overseas business.

We conducted our gold production business primarily through six gold mines, including: (i) four mines in the PRC, namely the Jilong Gold Mine, Wulong Gold Mine, Jintai Gold Mine and Huatai Gold Mine; (ii) one mine in Laos, namely the Sepon Gold, Copper and Rare Earth Mine; and (iii) one mine in Ghana, namely the Wassa Gold Mine. Furthermore, we operate one polymetallic mine in Jilin Province, China, namely the Hanfeng Polymetallic Mine, the principal products of which are zinc, lead, copper and molybdenum concentrate powder. Also, we are developing rare earth Resources in Laos. In addition to our mining business, we have a resource recycling business, where we recycle waste electrical and electronic products.

As of the Latest Practicable Date, we held a total of 12 valid mining licenses in the PRC, including (i) one mining license for Wulong Mining, (ii) two mining licenses for Jilong Mining, (iii) six mining licenses for Huatai Mining, (iv) one mining license for Jintai Mining, and (v) two mining licenses for Hanfeng Mining. In addition, as of the Latest Practicable Date, we held 5 valid exploration permits in the PRC, including (i) one exploration permit for Jilong Mining, (ii) two exploration permits for Wulong Mining, (iii) one exploration permit for Jintai Mining, and (iv) one exploration permit for Hanfeng Mining. Moreover, as of the Latest Practicable Date, we held one valid mining license and one valid exploration permit in Laos. In addition, as of the Latest Practicable Date, we held three mining licenses and one valid exploration permit in Ghana, with two additional exploration permits in the process of being renewed and converted.

We have high visibility and certainties in our production expansion plans for our gold mines and aim to achieve Resources and Reserve enhancement through exploration activities as set out below:

- In terms of our international gold assets, we are accelerating the construction of the open-pit and underground mining projects of the Sepon Gold, Copper and Rare Earth Mine, which is expected to increase the annual underground mining capacity to 806,000 tonnes by 2025 from the current capacity of 536,000 tonnes. We plan to also start copper production in 2025 at Kharong area, which has over 6,000,000 tonnes of copper ore, and over 57,000 tonnes of copper metal contained according to the resource model. Meanwhile, we are accelerating modelling and study work of exploration prospects of Discovery West Deeps and Phavat North with open-pit and underground mining potentials, the annual underground mining capacity will be increased further after 2026 and 2027. A high-level resource range assessment of Discovery West Deeps and Phavat North prospects estimated a total tonnage of 5,000,000 tonnes, with an average grade of 3.5g/t of gold resources expected to be added.

- In terms of our domestic gold assets, we have been undergoing several rounds of technological transformation and we are still working on several technological improvement projects, including continuous improvement of technique, upgrade of machinery, enhancement of equipment, at Wulong Mining. These are expected to enable us to increase Wulong Mining's annual mining and annual processing capacity to approximately 700,000 tonnes by the end of 2024 to maintain the sustainable development of the Company to ensure the competitive edge. We have also initiated an expansion project at Jilong Mining to increase its annual processing capacity to approximately 300,000 tonnes by June 2024 and increase its annual mining capacity to approximately 300,000 tonnes by end of 2025.

Apart from our core gold business, our exploration and development of rare earth resources in Laos also create new growth opportunities. Anomalies in rare earth elements were discovered at the Sepon Gold, Copper and Rare Earth Mine during exploration in early 2021. Following further exploration, we estimate that the total Resources of the rare earth oxides amount to 32,000 tonnes with an average grade of 0.045%. In October 2022, together with Xiamen Tungsten we established a joint venture, Chijin Xiawu, where we hold a 51% equity interest. Chijin Xiawu focuses on the development of rare earth Resources in Laos. The collaboration with Xiamen Tungsten is expected to improve our competitiveness in the development of rare earth and generate new growth opportunities for our business.

COMPETITIVE STRENGTHS

We believe that our leading market position is reflected in the following competitive strengths:

- the largest non-state owned gold producer with leading growth in gold production and revenue in China, possessing robust market prospects;

- extensive overseas experience and global recognition with proven track record in identifying synergetic acquisition targets, executing transactions and integrating global operations;

- continuously improving on the cost curve to enhance efficiency through technological upgrade and to drive profitability;

- distinctive "Mutual Prosperity and Development" corporate culture and effective incentive programs continuously motivate the management and employees to boost continuous growth;

- a strong social responsibility and solid commitment to promoting green and sustainable development with high ESG standards; and

- seasoned and dedicated management team with deep expertise in the gold industry and proven track record in mine operations locally and globally.

Please see "Business — Competitive Strengths" for further details of our competitive strengths.

BUSINESS STRATEGIES

We aim to become a world-class gold mining company, and we intend to implement the following business strategies to achieve our goal:

- continue to increase Reserves through exploration activities and expand production volume at existing mines to realize our full growth potential;
- continue to obtain Resources and Reserves and increase production volume through domestic and overseas acquisitions of high-quality gold assets for robust and sustainable growth;
- continue to improve productivity, reduce cost and enhance profitability;
- adhere to our culture of "Mutual Prosperity and Development" to ensure strong motivation for the management team and employees; and
- continue to improve our ESG governance and enhance our standards of environmental protection, safety, social responsibility and corporate governance.

Please see "Business — Business Strategies" for further details of our business strategies.

MINERAL RESOURCES AND RESERVES

Our Mineral Resources and Ore Reserves in China

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in the PRC as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(Koz)*	*(t)*
Wulong Gold Mine. .	Measured	–	–	–	–
	Indicated	1,309	8.22	346	10.75
	Inferred	1,754	7.21	407	12.65
	Total	3,063	7.64	753	23.40
Jilong Gold Mine . . .	Measured	510	11.92	194	6.00
	Indicated	440	9.22	132	4.10
	Inferred	530	9.23	157	4.90
	Total	1,480	10.14	483	15.00
Huatai Gold Mine . .	Measured	385	5.88	73	2.26
	Indicated	2,146	7.27	502	15.60
	Inferred	1,249	6.90	284	8.62
	Total	3,780	7.06	859	26.48

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(Koz)*	*(t)*
Jintai Gold Mine . . .	Measured	3,363	1.68	181	5.64
	Indicated	4,800	1.01	155	4.83
	Inferred	2,710	1.29	112	3.50
	Total	10,873	1.28	448	13.97
Total consolidated.	**Measured**	**4,258**	**3.27**	**448**	**13.90**
	Indicated	**8,695**	**4.06**	**1,135**	**35.28**
	Inferred	**6,243**	**4.75**	**960**	**29.67**
	Total	**19,196**	**4.11**	**2,543**	**78.85**

Note:

1. All figures are rounded to reflect the relative accuracy of the estimate.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in the PRC as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Wulong Gold Mine. .	Proved	–	–	–	–
	Probable	1,028	7.34	243	7.55
	Total	1,028	7.34	243	7.55
Jilong Gold Mine . . .	Proved	537	9.66	167	5.18
	Probable	431	7.27	101	3.13
	Total	968	8.59	267	8.31
Huatai Gold Mine . .	Proved	226	5.21	38	1.18
	Probable	1,468	6.35	300	9.32
	Total	1,694	6.20	338	10.50
Jintai Gold Mine . . .	Proved	–	–	–	–
	Probable	1,563	0.74	37	1.15
	Total	1,563	0.74	37	1.15
Total consolidated.	**Proved**	**763**	**8.34**	**204**	**6.36**
	Probable	**4,490**	**4.71**	**680**	**21.15**
	Total	**5,253**	**5.24**	**885**	**27.51**

Our Mineral Resources and Ore Reserves in Laos and Ghana

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in Laos and Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Measured	302	7.78	76	2.35
	Indicated	8,618	3.93	1,090	33.90
	Inferred	6,174	3.60	715	22.25
	Total	15,095	3.88	1,881	58.50
Wassa Gold Mine	Measured	7,505	2.89	698	21.73
	Indicated	10,498	3.07	1,038	32.28
	Inferred	61,084	3.37	6,619	205.88
	Total	79,086	3.29	8,355	259.88
Total consolidated	**Measured**	**7,807**	**3.08**	**774**	**24.08**
	Indicated	**19,116**	**3.46**	**2,128**	**66.17**
	Inferred	**67,258**	**3.39**	**7,334**	**228.13**
	Total	**94,181**	**3.38**	**10,236**	**318.38**

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Mineral Resources include the resources from open-pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in Laos and Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Proved	295	4.74	45	1.40
	Probable	9,049	3.00	873	27.17
	Total	9,344	3.06	918	28.56
Wassa Gold Mine	Proved	4,216	2.17	294	9.14
	Probable	6,029	2.07	401	12.46
	Stockpile	52	0.87	1	0.05
	Total	10,297	2.10	696	21.64
Total consolidated	**Proved**	4,511	2.34	339	10.54
	Probable	15,078	2.63	1,274	39.63
	Stockpile	52	0.87	1.45	0.05
	Total	19,641	2.56	1,614	50.21

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Ore Reserves include the ore from open pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

Our Other Mineral Resources and Ore Reserves in the PRC

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our non-ferrous metal Resources in the PRC conducted through our subsidiary, Hanfeng Mining, as of March 31, 2024:

	Lishan Mining Area							Dongfeng Mining Area		
Category	Tonnage	Zn Grade	Zn Metal Contained	Cu Grade	Cu Metal Contained	Pb Grade	Pb Metal Contained	Tonnage	Mo Grade	Mo Metal Contained
	(kt)	*%*	*(Kt)*	*%*	*(Kt)*	*%*	*(Kt)*	*(kt)*	*%*	*(Kt)*
Measured	750	2.36	18	0.01	0	0.12	1	1,820	0.11	2
Indicated	8,580	2.66	229	0.07	6	0.12	10	26,490	0.12	32
Inferred	10,620	2.90	308	0.09	10	0.13	14	37,050	0.12	45
Total	**19,950**	**2.78**	**555**	**0.08**	**16**	**0.13**	**25**	**65,360**	**0.12**	**79**

Notes:

1. All figures are rounded to reflect the relative accuracy of the estimate.

2. It should be noted that only the Lishan Lower Part (Stage 1) is included in the Ore Reserves, as there are insufficient technical studies regarding the Lishan Lower Part (Stage 2) and the Dongfeng Lower Part.

   In order to classify as Proved or Probable Ore Reserve category, technical studies need to be completed to at least a PFS level with an appraisal of how access would be achieved, mining methodology (including extraction and dilution factors), the geotechnical understanding as well as ventilation. Along with the technical understanding and extraction achievability, the economics of each area needs to be proved, i.e. with the application of Capex and Opex, is it economic to mine, cash flow positive.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our non-ferrous metal Reserves in the PRC conducted through our subsidiary, Hanfeng Mining, as of March 31, 2024:

	Lishan Mining Area		
Category	Tonnage	Zn Grade	Zn Metal Contained
	(kt)	*(%)*	*(kt)*
Proved	390	2.26	9
Probable	2,920	2.47	72
Total	**3,310**	**2.45**	**81**

Our Mineral Resources and Ore Reserves in Laos

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Resources in Laos conducted at LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Measured	–	–	–
	Indicated	4,868	1.41	68.63
	Inferred	2,078	1.71	35.55
	Total	**6,946**	**1.50**	**104.18**

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Reserves in Laos conducted at LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Proved	–	–	–
	Probable	1,638	0.95	15.48
	Total	**1,638**	**0.95**	**15.48**

Our Gold Production Volume

The following table sets forth our ore mined volume, ore processed volume and mine production volume in relation to our gold mining businesses for the periods indicated:

	Year Ended December 31,									Three Months Ended March 31, 2023			Three Months Ended March 31, 2024		
	2021			2022			2023								
	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production
	(Kt)	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*
Wulong Gold Mine	383	383	28.0	389	423	43.8	577	578	59.2	130	123	9.2	160	139	12.4
Jilong Gold Mine	138	146	34.3	153	156	29.5	154	155	44.7	27	30	8.5	35	34	7.5
Huatai Gold Mine	56	60	4.9	18	19	1.3	1	2	0.5	1	2	0.5	–	–	–
Jintai Gold Mine[1]	–	–	–	–	–	–	–	–	2.4	–	–	–	–	–	2.2
Sepon Gold, Copper and Rare Earth Mine – Gold	4,560	3,407	193.0	5,700	3,792	199.5	2,790	3,085	193.2	1,089	894	49.5	1,007	759	47.3
Wassa Gold Mine[2]	–	–	–	2,024	1,969	162.1	2,530	2,551	161.5	644	630	38.1	710	719	45.9
Total	**5,137**	**3,996**	**260.3**	**8,284**	**6,359**	**436.2**	**6,052**	**6,371**	**461.5**	**1,891**	**1,679**	**105.8**	**1,912**	**1,651**	**115.3**

Notes:

1. In January 2023, we completed the acquisition of a 51% equity interest in Xinhenghe Mining, which in turn directly holds a 90% equity interest in Jintai Mining, and we began consolidating the accounts of Jintai Mining from January 31, 2023. As such, ore mined volume, ore processed volume and mine production volume of Jintai Gold Mine prior to January 31, 2023 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Xinhenghe Mining."

2. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, ore mined volume, ore processed volume and mine production volume of Wassa Gold Mine prior to February 1, 2022 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources."

For more details regarding the year-to-year comparison of the gold production volume, please refer to "— Our Gold Production Business in China — Overview — Operation Performance", and "Business — Our Gold Production Business in Laos — Overview — Operation Performance".

Our Other Mineral Resources Production Volume

The following table sets forth the ore mined volume, ore processed volume and mine production volume in relation to our other mineral resources businesses for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	Three Months Ended March 31,
	2021	2022	2023	2023	2024
	(Kt)	*(Kt)*	*(Kt)*	*(Kt)*	*(Kt)*
Ore Mined					
Hanfeng Polymetallic Mine – Polymetallic metals	510	502	457	8	126
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes[1]	149	–	–	–	–
Ore Processed					
Hanfeng Polymetallic Mine – Polymetallic metals	506	579	434	–	135
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes	255	772	1,105	222	311
Production Volume					
Hanfeng Polymetallic Mine					
Zinc concentrate powder	19.93	22.04	11.29	–	2.19
Lead concentrate powder	3.48	3.31	2.72	–	0.52
Copper concentrate powder	2.93	2.05	1.44	–	0.29
Molybdenum concentrate powder	–	0.04	0.21	–	0.14
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes	5.02	6.43	6.49	1.11	1.26

Note:

1. The ore mined volume for Sepon Gold, Copper and Rare Earth Mine's copper mine dropped to zero in 2022, because Sepon Gold, Copper and Rare Earth Mine resumed gold production in 2020 while only keeping a small portion of processing capacity for its copper business since then. As of the Latest Practicable Date, Sepon Gold, Copper and Rare Earth Mine did not have any active copper mining projects while only processed the ore from its stockpile.

Our Revenue Breakdown

During the Track Record Period, we generated revenue from the PRC, Laos and Ghana. The following table sets forth a breakdown of our revenue by geographical region of our subsidiaries for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31, 2024	
	2021		2022		2023			
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000*	*%*
PRC	1,259,760	33.3%	1,477,471	23.5%	2,026,833	28.1%	436,928	23.6%
Laos	2,522,864	66.7%	2,998,740	47.9%	3,054,614	42.3%	787,600	42.5%
Ghana	–	–	1,790,576	28.6%	2,139,505	29.6%	629,378	33.9%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,853,906**	**100.0%**

Note:

1. Our revenue in Ghana was generated from Golden Star Resources. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, the revenue of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources".

During the Track Record Period, we generated our revenue primarily from gold mining, other mineral resources and other businesses. The following table sets forth the breakdown of our revenue by business segments for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31, 2024	
	2021		2022		2023			
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000*	*%*
Gold mining	2,968,694	78.5%	5,304,729	84.6%	6,322,263	87.6%	1,682,389	90.7%
Other mineral resources	551,278	14.6%	650,206	10.4%	495,752	6.9%	104,444	5.6%
Others	262,652	6.9%	311,852	5.0%	402,937	5.5%	67,073	3.7%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,853,906**	**100.0%**

Note:

1. "Others" primarily comprised recycling of waste electrical and electronic products business conducted through Guangyuan Technology.

OUR MINING OPERATIONS AND PRODUCTION FACILITIES

Our gold production operations in PRC, Laos and Ghana can generally be divided into two steps, namely, (i) mining and (ii) processing.

PRC

In relation to mining, we primarily utilize the resuing method for our underground mining at the Wulong Gold Mine, Jilong Gold Mine and the Huatai Gold Mine, and we also utilize the open-pit mining method at Jintai Gold Mine. In relation to processing, the Wulong Gold Mine primarily utilizes the flotation process method, whereas the Jilong Gold Mine and the Huatai Gold Mine primarily utilize the all-slime cyanidation absorption gold extraction method, and the Jintai Gold Mine primarily utilize the carbon-in-pulp gold extraction process method. See "Business — Our Gold Production Business in China — Operating Process of Gold Production Business in the PRC".

Laos

In relation to mining, we generally follow the open-pit mining method, and also adopt the underground mining method. In relation to processing, we utilize the flotation-pressure oxidation method to process both primary ores and oxide ores. See "Business — Our Gold Production Business in Laos — Operating Process of Gold Production Business in Laos".

Ghana

In relation to mining, (i) the Wassa mining area primarily utilizes the open-pit mining method and the sub level open stoping method, (ii) the Hwini Butre mining area utilizes the open-pit mining method, and (iii) the Benso mining area primarily utilizes the open-pit mining method. In relation to processing, we primarily utilize the gravity-flow all-slime cyanidation absorption gold extraction method. See "Business — Our Gold Production Business in Ghana — Operating Process of Gold Production Business in Ghana".

SALES AND MARKETING

During the Track Record Period, our primary products were gold, copper cathodes and other mineral resources products.

In relation to our sales of products in PRC, our products are sold to a wide range of customers in China and we adopt different arrangements to determine the price and facilitate our sales. In relation to our sales of products in the PRC, we generally enter into sales agreements with our customers on an annual basis without entering into any long-term agreement. For details, please refer to the section headed "Business — Sales and Customers — Sales in the PRC".

In relation to our sales of products in Laos, we generally enter into sales agreements our customers for generally one to three years. Given the high quality of our products, various potential customers have approached us. Accordingly, we believe that it would not be difficult for us to find alternative customers for sales of products on terms comparable to those we have with our existing customers. For details, please refer to the section headed "Business — Sales and Customers — Sales in Laos".

In relation to our sales of products in Ghana, we generally enter into sales agreements with our customers for two years or longer terms. For details, please refer to the section headed "Business — Sales and Customers — Sales in Ghana".

OUR CUSTOMERS

During the Track Record Period, our top five customers were refiners of precious metals and other non-ferrous metals as well as trading companies. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, revenue contributed by our top five customers amounted to RMB2,946.2 million, RMB5,345.8 million, RMB5,565.6 million and RMB1,591.1 million, respectively, accounting for 77.9%, 85.4%, 77.1% and 85.8% of our total revenue for the same periods. Revenue contributed by our largest customer amounted to RMB2,126.6 million, RMB2,602.2 million, RMB2,672.1 million and RMB722.6 million, for the same periods, accounting for 56.2%, 41.5%, 37.0% and 39.0% of our total revenue.

To the best of our knowledge, during the Track Record Period and up to the Latest Practicable Date, our customers were Independent Third Parties. As of the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest customers. See "Business — Sales and Customers — Customers".

PROCUREMENT AND SUPPLIERS

We conduct our business in China, Laos and Ghana, and we consider that procurement management excellency is one of our key focuses. We have adopted headquarter-supported global centralized procurement system to enhance our procurement management efficiency. As supplemented procurement methods, we also procure individually in each country.

In the PRC, we procure a wide range of raw materials used in our mining operations, such as explosive materials, diesel, sodium cyanide and cement, from local suppliers. And we procure various machinery and equipment for our production activities, including mining and processing equipment which mainly comprises rock drilling machines, drilling jumbos, scrappers, crushing circuits, grinding circuits, flotation circuits, pressure filters, conveyers, and other ancillary equipment. For details, please see "Business — Procurement and Suppliers — Our PRC Operations". In Laos and Ghana, we also procure various materials, such as diesel fuel, processing chemicals and reagents, explosives, and related consumables, as well as machinery and equipment for our production operations from (i) different local suppliers in Laos and Ghana and/or (ii) the original equipment manufacturers. We also procure various services, such as security services, civil work services, engineering services and loading and hauling services, from various local suppliers. For details, please see "Business — Procurement and Suppliers — Our Operations in Laos and Ghana".

During the Track Record Period, all of our top five suppliers were service or commodity providers such as suppliers of electricity, fuel, and transportation. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, purchases from our top five suppliers amounted to RMB647.3 million, RMB855.2 million and RMB666.5 million and RMB213.5 million, respectively, accounting for 25.6%, 19.1%, 13.7% and 17.3% of our cost of sales, respectively. For the same period purchases from our largest supplier amounted to RMB159.5 million, RMB210.6 million, RMB149.5 million and RMB61.2 million, respectively, accounting for 6.3%, 4.7%, 3.1% and 5.0% of our cost of sales, respectively.

During the Track Record Period, we did not experience any material impact to our operation or financial condition due to any significant fluctuation in prices set by our suppliers or breach of contract on the part of our suppliers. As of the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest suppliers. See "Business — Procurement and Suppliers — Suppliers".

CONTRACTORS

In the PRC, we outsource a portion of our exploration and shaft construction/engineering work to qualified contractors to qualified thirdparty contractors. In Laos, we outsource third-party contractors, especially mining and processing work in our projects in Laos. In Ghana, we engaged third-party contractors to provide exploration and drilling services to our operations in Ghana. For details, please see "Business — Contractors — Our PRC Operations", "Business — Contractors — Our Operations in Laos" and "Business — Contractors — Our Operations in Ghana".

During the Track Record Period and up to the Latest Practicable Date, we did not encounter any material disputes with our contractors in PRC, Laos and Ghana or experience any suspension or delay in our operations as a result of misconduct of our contractors.

COMPETITIVE LANDSCAPE

The gold industry has become more concentrated due to mergers and resource integration of gold companies. Large gold companies with advantages, such as efficient operations, global presence, financial strength and other advantages, are leading the industry. At the same time, regulatory controls, including safety and environmental protection requirements, have further tightened. Less competitive gold production companies with aging facilities and insufficient resources have been forced to shut down or undergo significant changes. Furthermore, the total production cost of gold mining has increased due to several factors, and smaller gold companies have gradually exited the market. See "Industry Overview — Competitive Landscape".

SUMMARY OF HISTORICAL FINANCIAL INFORMATION

The following is a summary of our historical financial information as of and for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024 extracted from the Accountants' Report set out in Appendix IA to this Document. The summary below should be read in conjunction with the consolidated financial information in Appendix IA, including the accompanying notes and the information set forth in the section headed "Financial Information" in this Document.

Summary of Results of Operations

The following table sets forth a summary of our results of operations for the periods indicated. Our historical results presented below are not necessarily indicative of the results that may be expected for any future period.

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Revenue	3,782,624	6,266,787	7,220,952	1,586,753	1,853,906
Cost of sales	(2,525,121)	(4,471,868)	(4,868,078)	(1,130,846)	(1,232,228)
Gross profit	**1,257,503**	**1,794,919**	**2,352,874**	**455,907**	**621,678**
Profit before tax	**770,375**	**822,012**	**1,206,795**	**159,410**	**352,946**
Profit for the year/period	**613,408**	**493,880**	**871,585**	**90,765**	**238,264**
Attributable to:					
Owners of the parent	581,949	450,976	804,471	75,743	201,718
Non-controlling interests	31,459	42,904	67,114	15,022	36,546
Profit for the year/period	**613,408**	**493,880**	**871,585**	**90,765**	**238,264**

Summary of Consolidated Statements of Financial Position

The following table sets forth a summary of our consolidated statements of financial position as of the dates indicated.

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Total non-current asset	4,295,439	13,434,829	13,822,413	13,804,650
Total current asset	3,758,167	4,109,465	4,895,380	5,054,429
Total asset	8,053,606	17,544,294	18,717,793	18,859,079
Total current liabilities	1,341,612	3,279,882	3,722,409	3,605,662
Net current assets	2,416,555	829,583	1,172,971	1,448,767
Total assets less current liabilities	6,711,994	14,264,412	14,995,384	15,253,417
Total non-current liabilities	1,710,963	6,856,109	6,453,176	6,303,849
Net assets	5,001,031	7,408,303	8,542,208	8,949,568
Non-controlling interests	380,614	2,220,733	2,390,218	2,594,018

Summary of Cash Flows Analysis

The following table sets forth a summary of our cash flows for the periods indicated.

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Net cash flows from operating activities	755,149	1,090,133	2,203,080	519,730	436,227
Net cash flows from/(used in) investing activities	(277,873)	(3,984,047)	(1,771,119)	(528,722)	(400,190)
Net cash flows from/(used in) financing activities	55,905	2,225,143	(228,120)	158,487	(2,898)
Effect of foreign exchange rate changes, net	(1,732)	13,448	18,249	(8,633)	16,149
Net increase/(decrease) in cash and cash equivalents	533,181	(668,771)	203,841	149,495	33,139
Cash and cash equivalents at beginning of year/period	1,176,419	1,707,868	1,052,545	1,052,545	1,274,635
Cash and cash equivalents at the end of the year/period	**1,707,868**	**1,052,545**	**1,274,635**	**1,193,407**	**1,323,923**

ACQUISITION OF GOLDEN STAR RESOURCES

In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, for a consideration of in aggregate approximately US$291.0 million, which was fully settled in January 2023. The acquisition was completed on January 31, 2022, upon which Golden Star Resources became our non-wholly owned subsidiary. To finance the acquisition of Golden Star Resources, we incurred long-term borrowings of in aggregate RMB1,104.0 million at an interest rate of 4.95% per annum. For more information, see "Business — Our Gold Production Business in Ghana" and "Financial Information — Key Factors Affecting Our Results of Operations — Acquisition — Acquisition of Golden Star Resources."

KEY FINANCIAL RATIOS

The following table sets forth certain of our key financial ratios for the periods indicated.

	Year Ended December 31,			Three Months Ended/As of March 31
	2021	2022	2023	2024
Rates of return				
Return on assets	7.6%	2.8%	4.7%	1.3%
Return on equity	12.3%	6.7%	10.2%	2.7%
Liquidity ratios				
Current ratio	2.8	1.3	1.3	1.4
Quick ratio	1.7	0.6	0.7	0.7
Gearing ratio	0.6%	35.1%	32.0%	32.4%

Notes:

1. Return on assets ratio is calculated using net profit divided by total assets at the end of the year, multiplied by 100%.
2. Return on equity ratio is calculated using net profit divided by total equity at the end of the year, multiplied by 100%.
3. Current ratio is calculated using total current assets divided by total current liabilities.
4. Quick ratio is calculated using total current assets less inventories divided by total current liabilities.
5. Gearing ratio is calculated by dividing total debt (which includes current and non-current bank loans, lease liabilities and other borrowings) by total equity.

See "Financial Information — Key Financial Ratios" for details.

[**REDACTED**]

[**REDACTED**] represent professional fees, [**REDACTED**] and other fees incurred in connection with the [**REDACTED**]. We expect to incur [**REDACTED**] of approximately HK$[**REDACTED**], representing approximately [**REDACTED**] of the [**REDACTED**] from the [**REDACTED**] (based on the mid-point of the indicative [**REDACTED**] and assuming the [**REDACTED**] is not exercised). The [**REDACTED**] we incurred in the Track Record Period and expect to incur would consist of approximately HK$[**REDACTED**] fees and approximately HK$[**REDACTED**] fees (including fees and expenses of legal advisors and the reporting accountant of approximately HK$[**REDACTED**] and other fees and expenses of approximately HK$[**REDACTED**]). Among the total [**REDACTED**] which we expect to incur, approximately HK$[**REDACTED**] will be directly attributable to the issue of our Shares and capitalized, and the remaining HK$[**REDACTED**] will be expensed upon [**REDACTED**]. Our Directors do not expect such expenses to materially impact our results of operations in 2024. See ["Financial Information — [**REDACTED**]"] for details.

RECENT DEVELOPMENT AND NO MATERIAL ADVERSE CHANGE

On March 4, 2024, an equity transfer agreement was entered into among China Investment (Property) Limited (中國投資(置業)有限公司) ("**China Investment**"), Chixia Laos and Chijin Xiawu, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd. at a total consideration of US$18,963,000 and it is pending regulatory approval as of Latest Practicable Date. This acquisition is expected to strengthen our position in rare earth Resource development in Laos while upholding our strategic focus on gold. See "History, Development and Corporate Structure — Post-Track Record Period Acquisition".

On October 30, 2023, Zhaojin Capital (Hong Kong) Limited ("**Zhaojin Capital**") and an Independent Third Party, lodged a bidder statement to the shareholders of Tietto Minerals, pursuant to which it made an offer to acquire all the outstanding issued shares of Tietto Minerals at an offer price of AUD0.58 per share (and subsequently increased the offer price to AUD0.68 per share on April 15, 2024). Upon resolution by the Board, Chijin HK accepted the above offer and tendered for all its 140,855,864 shares of Tietto Minerals to Zhaojin Capital during the offer period total consideration of AUD95.782 million had been received. Upon completion of the transfer, our Group no longer held any interest in Tietto Minerals. See "History, Development and Corporate Structure — Major Acquisitions and Disposals — 3. Acquisitions and Disposal of Tietto Minerals".

After due and careful consideration, our Directors confirm that, up to the date of this document, there has been no material adverse change in our financial and trading position or prospects since March 31, 2024.

[REDACTED] STATISTICS

All statistics in the following table are based on the assumptions that: (i) the [**REDACTED**] has been completed and [**REDACTED**] new [**REDACTED**] are issued pursuant to the [**REDACTED**]; and (ii) the [**REDACTED**] is not exercised:

	Based on an [REDACTED]	**Based on an [REDACTED]**
[**REDACTED**] of our Shares	[**REDACTED**]	[**REDACTED**]
Unaudited [**REDACTED**] adjusted consolidated net tangible assets per H Share	[**REDACTED**]	[**REDACTED**]

FUTURE PLANS AND [REDACTED]

The aggregate [**REDACTED**] from the [**REDACTED**], after deducting [**REDACTED**] fees and other estimated expenses in connection with the [**REDACTED**], assuming that the [**REDACTED**] is not exercised and an [**REDACTED**] of [**REDACTED**] per [**REDACTED**] (being the mid-point of the indicative [**REDACTED**] range of [**REDACTED**] to [**REDACTED**] per [**REDACTED**]) will be approximately [**REDACTED**], which will be applied as follows:

[REDACTED] from the [REDACTED]	**Amount of [REDACTED] from the [REDACTED]**	**Percentage of [REDACTED] from the [REDACTED]**
	HK$ million	*%*
Transformation and exploration of existing mines	[**REDACTED**]	[**REDACTED**]
Potential acquisition	[**REDACTED**]	[**REDACTED**]
General corporate purposes	[**REDACTED**]	[**REDACTED**]
Total	[**REDACTED**]	[**REDACTED**]

Please see "Future plans and [**REDACTED**]" in this Document for details.

DIVIDEND

We declared dividends to our Shareholders of nil, nil, RMB82.4 million and nil for the three years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, respectively.

Subject to our constitutional documents and the Company Law, we have adopted a general annual dividend policy, according to which we may declare dividend by way of cash dividends, stock dividends, or a combination of cash and stock dividends. We prioritize cash dividends. Other than under certain special circumstances, the accumulated profit distributed in cash in

any three consecutive years shall not be less than 30% of the annual distributable profit realized in the same three years. The abovementioned special circumstances include: (i) the Company's net cash flow from operating activities in the year of the consolidated statement of accounts is negative; and (ii) the single amount of investment projects such as proposed internal investment, external investment or assets acquisition in the current year or within the next twelve months reaches or exceeds 10% of the Company's latest audited net assets.

There is no guarantee, representation or indication that our Directors must or will recommend and that we must or will declare and pay dividends at all. The dividend distribution record in the past may not be used as a reference or basis to determine the level of dividends that may be declared or paid by us in the future.

[**REDACTED**]

OUR SINGLE LARGEST SHAREHOLDER GROUP

As of the Latest Practicable Date, Ms. Li and Hanfeng Zhongxing directly held 190,410,595 and 51,515,151 A Shares, accounting for approximately 11.44% and 3.10% of the issued share capital of our Company, respectively. Meanwhile, Ms. Li is the sole limited partner of Hanfeng Zhongxing accounting for approximately 99.00% of the committed capital contribution of Hanfeng Zhongxing. Accordingly, pursuant to the Hong Kong Listing Rules and Chapter 1.1C of the Guide published by the Hong Kong Stock Exchange, Ms. Li and Hanfeng Zhongxing are collectively regarded as the Single Largest Shareholder Group of our Company.

Accordingly, the Single Largest Shareholder Group was entitled to exercise voting rights attached to the 241,925,746 A Shares, representing approximately 14.54% of the total issued share capital of our Company as of the Latest Practicable Date. Immediately following the completion of the [**REDACTED**], the Single Largest Shareholder Group will be interested in approximately [**REDACTED**]% of our total share capital (assuming the [**REDACTED**] is not exercised) or approximately [**REDACTED**]% of our total share capital (assuming the [**REDACTED**] is exercised in full).

RISK FACTORS

Our business faces risks including those set out in the section headed "Risk Factors." As different investors may have different interpretations and criteria when determining the significance of a risk, you should read the section headed "Risk Factors" in its entirety before you decide to [**REDACTED**] in our [**REDACTED**]. Some of the major risks that we face include:

- Changes in the market price for gold mining and other mineral resources, which in the past have experienced significant volatility, affect the profitability of our operations and the cash flows generated by those operations.

- Our operations are subject to risks relating to occupational hazards, production safety and design defects, which may result in increased costs or losses, personal injuries or casualties, damage to reputation, suspension of operation and other penalties.

- We may not be able to expand or replenish our Mineral Resources and Ore Reserves through exploration.

- We may be subject to risks relating to operating our overseas business.

- We are subject to risks related to exchange rate fluctuations, because our gold product from overseas operation is priced in U.S. dollars and our operating costs and expenses are incurred in different currencies, including but not limited to Lao Kip and Ghanaian Cedi.

- Rising inflation may have a material adverse effect on our business, financial condition and results of operations.

For further information and other risks that we face, please see "Risk Factors" in this Document. Past performance is no guarantee of future results.

In this Document, unless the context otherwise requires, the following terms shall have the meanings set out below. Certain technical terms are explained in the section headed "Glossary of Technical Terms" in this Document.

"2022-2024 Property Lease Agreement"	the property lease agreement entered into between Beijing Eagleleap and our Company on January 1, 2022 in relation to the lease of the Leased Premises for a term of three years from January 1, 2022 to December 31, 2024, details of which are set out in the section headed "Connected Transactions — One-off Connected Transactions — Property Lease Agreements" in this Document
"2025-2026 Property Lease Agreement"	the property lease agreement entered into between Beijing Eagleleap and our Company on August 20, 2024 in relation to the lease of the Leased Premises for a term of two years from January 1, 2025 to December 31, 2026, details of which are set out in the section headed "Connected Transactions — One-off Connected Transactions — Property Lease Agreements" in this Document
"A Share(s)"	ordinary share(s) in the share capital of our Company with nominal value of RMB1.00 each, which are traded in Reminbi and listed on the SSE
"affiliate"	any other person, directly or indirectly, controlling or controlled by or under direct or indirect common control with such specified person
"AFRC"	Accounting and Financial Reporting Council
"Articles" or "Articles of Association"	the articles of association of our Company, as conditionally adopted on August 23, 2024, which shall become effective upon [**REDACTED**] (as amended, supplemented or otherwise modified from time to time), a summary of which is set out in Appendix VI to this Document
"associate(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"AUD" or "Australian dollars"	the lawful currency of Australia

"Audit Committee"	audit committee of the Board
"Beijing Eagleleap"	Beijing Eagleleap Technology Co., Ltd. (北京華鷹飛騰科技有限公司), a private limited liability company established under the PRC laws and is held as to 99% and 1% of its equity interest by Hanfeng United and Lv Xiaoming (呂曉銘), an Independent Third Party
"Benso Gold Mine"	a gold mine operated by GSWL in Ghana
"Board" or "Board of Directors"	the board of directors of our Company
"Board Diversity Policy"	the board diversity policy of our Company
"Business Day"	a day which banks in Hong Kong are generally open for normal business to the public and which is not a Saturday, Sunday or public holiday in Hong Kong
"CAGR"	compound annual growth rate
	[**REDACTED**]
"Caystar Finance"	Caystar Finance Co., which is registered in the Cayman Islands and is an indirect wholly owned subsidiary of Golden Star Resources
	[**REDACTED**]
"Cedi", "GH₵" or "Ghanaian Cedi"	the lawful currency of Ghana
"Chairman Wang"	Mr. Wang Jianhua, the Chairman of the Board and an Executive Director of our Group
"Chenzhou Xiongfeng"	Chenzhou Xiongfeng Environment Protection Technology Co., Ltd. (郴州雄風環保科技有限公司), a former wholly owned subsidiary of our Company. Our Company disposed of the entire equity interests in it in 2020

"Chijin Fengyu"	Shanghai Chijin Fengyu Industrial Co., Ltd (上海赤金豐余實業有限公司), a private limited liability company established under the PRC laws and a direct wholly owned subsidiary of our Company
"Chijin Geoexploration"	Chijin (Tianjin) Geoexploration Technology Co., Ltd (赤金(天津)地質勘查技術有限公司), a limited liability company established under the PRC laws and a direct non-wholly owned subsidiary of our Company holding 60% of its equity interest. See the section headed "C. Further Information about our Directors, Supervisors and Substantial Shareholders – 1. Disclosure of Interests – (c) Interests of the Substantial Shareholders of any Member of our Group (other than our Company)" for details
"Chijin HK"	Chijin International (HK) Limited (赤金國際(香港)有限公司), a company incorporated in Hong Kong with limited liability and a direct wholly owned subsidiary of the Company
"Chijin Laos"	CHIJIN Laos Holdings Limited, a company registered in the Cayman Islands with limited liability and a direct wholly owned subsidiary of our Company
"Chijin Xiawu"	Shanghai Chijin Xiawu Metal Resources Limited (上海赤金廈鎢金屬資源有限公司), a private limited liability company established under the PRC laws and a direct non-wholly owned subsidiary of our Company
"China" or "PRC"	the People's Republic of China, and solely for the purpose of this Document and by reference to region, excluding Taiwan, the Macao Special Administrative Region and Hong Kong Special Administrative Region
"Chixia Laos"	CHIXIA Laos Holdings Limited (赤廈老撾控股有限公司), a company registered in the Cayman Islands with limited liability and wholly owned by Chijin Xiawu

"CIRE Mining"	China Investment Rare Earth Mining Co., Ltd, a company registered in Laos with limited liability, a subsidiary of China Investment Mining (Laos) Sole Co., Ltd. as of the Latest Practicable Date (see the section headed "History, Development and Corporate Structure — Post-Track Record Period Acquisition" in this Document for details), and the operator of the Mengkang Rare Earth Mine
"CIREX Mining"	China Investment Rare Earth Mining Xiangkhouang Co. Ltd, a company registered in Laos with limited liability and a subsidiary of China Investment Mining (Laos) Sole Co., Ltd. as of the Latest Practicable Date (see the section headed "History, Development and Corporate Structure — Post-Track Record Period Acquisition" in this Document for details), and the operator of the Rare Earth Xiangkhouang Mine in Laos
"close associate(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"Companies (Winding Up and Miscellaneous Provisions) Ordinance"	the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Chapter 32 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Companies Ordinance"	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Company" or "our Company"	Chifeng Jilong Gold Mining Co., Ltd. (赤峰吉隆黃金礦業股份有限公司), a joint stock company incorporated under the laws of the PRC with limited liability on June 22, 1998
"Company Law" or "PRC Company Law"	the Company Law of the People's Republic of China (中華人民共和國公司法), as amended, supplemented or otherwise modified from time to time
"Competent Person" or "SRK"	has the same meaning ascribed to it under Rule 18.01 of the Hong Kong Listing Rules and, in the context of this document, means SRK Consulting China Ltd, an independent mining and geological consultant, which is an Independent Third Party

"Competent Person's Reports" or "SRK Reports"	the Competent Person's reports prepared by SRK on the PRC Gold Mines, the Sepon Gold, Copper and Rare Earth Mine and the Wassa Gold Mine, the effective date of which is March 31, 2024 and details of which are set out in Appendices IIIA to IIID to this Document
"connected person(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"connected transaction(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"core connected person(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"Corporate Governance Code"	the Corporate Governance Code set out in Appendix C1 to the Hong Kong Listing Rules
"CSDC"	China Securities Depository and Clearing Corporation Limited (中國證券登記結算有限責任公司)
"CSRC"	the China Securities Regulatory Commission (中國證券監督管理委員會)
	[**REDACTED**]
"Director(s)"	director(s) of our Company
"EIT"	the PRC enterprise income tax
"EIT Law"	the Enterprise Income Tax Law of the PRC (中華人民共和國企業所得税法)
"ESG"	environmental, social, and corporate governance
"ESOPs"	the Phase I ESOP and the Phase II ESOP, collectively
	[**REDACTED**]

"Extreme Conditions"	extreme conditions caused by a super typhoon as announced by the government of Hong Kong
	[**REDACTED**]
"Frost & Sullivan"	Frost & Sullivan (Beijing) Inc., Shanghai Branch Co., an independent industry consultant commissioned by us to prepare the Frost & Sullivan Report
"Frost & Sullivan Report"	an independent market research report commissioned by our Company and prepared by Frost & Sullivan
"FVOCI"	fair value through Other Comprehensive Income (OCI) investment
"GDP"	gross domestic product
	[**REDACTED**]
"Ghana"	the Republic of Ghana
"Ghana Legal Advisor"	REM Law Consultancy, our legal advisor as to Ghana laws
	[**REDACTED**]
"Group", "our Group," "we" or "us"	our Company and its subsidiaries (or our Company and any one or more of its subsidiaries, as the context may require)
"GSR" or "Golden Star Resources"	Golden Star Resources Ltd., a company registered in Canada and an indirect non-wholly owned subsidiary of our Company

"GSWL"	Golden Star (Wassa) Ltd, a company registered in Ghana and an indirect non-wholly owned subsidiary of Golden Star Resources
"Guangyuan Technology"	Anhui Guangyuan Technology Development Co., Ltd. (安徽廣源科技發展有限公司), a private limited liability company established under the PRC laws and a direct non-wholly subsidiary of our Company
"Guide"	the Guide for New Listing Applicants issued by the Hong Kong Stock Exchange (as amended, supplemented or otherwise modified from time to time)
"H Share(s)"	overseas listed foreign shares in the share capital of our Company with nominal value of RMB1.00 each, which are to be [**REDACTED**] for and [**REDACTED**] in HK dollars and are to be [**REDACTED**] on the Hong Kong Stock Exchange
	[**REDACTED**]
"Hanfeng Mining"	Jilin Hanfeng Mining Technology Co., Ltd. (吉林瀚豐礦業科技有限公司), a private limited liability company established under the PRC laws and a direct wholly owned subsidiary of our Company
"Hanfeng Polymetallic Mine"	a polymetallic mine operated by Hanfeng Mining in PRC
"Hanfeng United"	Beijing Hanfeng United Technology Co., Ltd. (北京瀚豐聯合科技有限公司), which is directly wholly owned by Ms. Li
"Hanfeng Zhongxing"	Yantai Hanfeng Zhongxing Management Consultancy Center (Limited Partnership) (煙台瀚豐中興管理諮詢中心(有限合夥)), a limited liability partnership established under the PRC laws, the sole limited partner of which is Ms. Li, accounting for approximately 99.00% of its committed capital contribution, and the sole general partner of which is Wu Zengxiang (武增祥), accounting for approximately 1.00% of its committed capital contribution
"High and New Technology Enterprise"	an enterprise certified by the Chinese government through the Ministry of Science and Technology (MOST) for businesses

"HK$", "Hong Kong dollars", "HK dollars" or "cents"	Hong Kong dollars and cents, respectively, and being the lawful currency of Hong Kong

[**REDACTED**]

"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"Hong Kong Listing Rules" or "Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, as amended, supplemented or otherwise modified from time to time

[**REDACTED**]

[**REDACTED**]

"Hong Kong Stock Exchange" or "Stock Exchange"	The Stock Exchange of Hong Kong Limited, a wholly owned subsidiary of Hong Kong Exchanges and Clearing Limited

[**REDACTED**]

"Huatai Gold Mine"	a gold mine operated by Huatai Mining in PRC
"Huatai Mining"	Chifeng Huatai Mining Co., Ltd (赤峰華泰礦業有限責任公司), which is registered in the PRC and is a wholly owned subsidiary of Jilong Mining
"IFRS"	the International Financial Reporting Standards, which include standards, amendments and interpretations promulgated by the International Accounting Standards Board (IASB) and the International Accounting Standards (IAS) and interpretation issued by the International Accounting Standards Committee (IASC)
"Independent Third Party(ies)"	any entity(ies) or person(s) which, to the best of our Directors' knowledge, information and belief having made reasonable enquiries, is not a connected person of our Company within the meaning ascribed to it under the Hong Kong Listing Rules

[**REDACTED**]

"Jilong Gold Mine"	a gold mine operated by Jilong Mining in PRC
"Jintai Gold Mine"	a gold mine operated by Jintai Mining in PRC
"Jilong Mining"	Chifeng Jilong Mining Co., Ltd. (赤峰吉隆礦業有限責任公司), a private limited liability company established under the PRC laws and a direct wholly owned subsidiary of our Company
"Jintai Mining"	Eryuan Jintai Mining Development Co., Ltd. (洱源錦泰礦業開發有限責任公司), a private limited liability company established under the PRC laws and a direct non-wholly owned subsidiary of Xinhenghe Mining

"JORC Code"	the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves sets out the minimum standards, recommendations and guidelines for public reporting. The JORC Code is adopted by the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and endorsed by the Mineral Council of Australia, as detailed under the section headed "Summary of the JORC Code" of this Document
"KIP" or "LAK" or "Lao Kip"	the lawful currency of Laos
"Lao", "Lao PDR" or "Laos"	the Lao People's Democratic Republic
"Laos Legal Advisor"	ZICOLaw (Laos) Sole Co., Ltd., our legal advisor as to Laos laws
"Latest Practicable Date"	August 20, 2024 being the latest practicable date for the purpose of ascertaining certain information in this Document prior to its publication
"Leased Premises"	the office premises of our headquarters in the PRC
"Lianhuashan Gold Mine"	a gold mine operated by Huatai Mining in PRC

[**REDACTED**]

"LXML"	Lane Xang Minerals Limited Company, a company registered in Laos, an indirect non-wholly owned subsidiary of our Company and is the operator of the Sepon Gold, Copper and Rare Earth Mine
"Main Board"	the stock exchange (excluding the option market) operated by the Hong Kong Stock Exchange, which is independent from and operated in parallel with GEM of the Hong Kong Stock Exchange

"MEE"	Ministry of Ecology and Environment of the PRC
"Mengkang Rare Earth Mine"	a rare earth mine operated by CIRE Mining in Laos
"Minerals and Mining Act"	the Ghanaian Minerals and Mining Act, 2006 (Act 703)
"MOF" or "Ministry of Finance"	Ministry of Finance of the PRC (中華人民共和國財政部)
"MOFCOM"	Ministry of Commerce of the PRC (中華人民共和國商務部)
"Ms. Li"	Ms. Li Jinyang (李金陽), a member of the Single Largest Shareholder Group. Ms. Li directly held approximately 11.44% of the shareholding interest in our Company as of the Latest Practicable Date
"NDRC"	the National Development and Reform Commission of the PRC (中華人民共和國國家發展與改革委員會)
"NEEQ"	the National Equities Exchange and Quotations Co., Ltd.(全國中小企業股份轉讓系統有限責任公司), a PRC over-the-counter system for trading shares of public companies
"Nomination Committee"	the nomination committee of the Board
"NPC"	the National People's Congress of the People's Republic of China (中華人民共和國全國人民代表大會)

[REDACTED]

[**REDACTED**]

"PBOC"	People's Bank of China (中國人民銀行), the central bank of the PRC
"Phase I ESOP"	the Phase I Employee Stock Ownership Plan adopted by our Company on October 14, 2020 (as revised on May 27, 2021, October 1, 2022 and April 21, 2023), details of which are set out in the paragraph headed "C. Further Information about our Directors, Supervisors and Substantial Shareholders — 3. Employee Stock Ownership Plans" in Appendix VII to this Document
"Phase II ESOP"	the Phase II Employee Stock Ownership Plan adopted by our Company on February 11, 2023 (as revised on March 21, 2023), details of which are set out in the paragraph headed "C. Further Information about our Directors, Supervisors and Substantial Shareholders — 3. Employee Stock Ownership Plans" in Appendix VII to this Document
"PRC GAAP"	Accounting Standard for Business Enterprises — Basic Standard, and the specific accounting standards and other relevant regulations issued by the MOF on February 15, 2006 and in subsequent periods
"PRC Gold Mine(s)"	Wulong Gold Mine, Jilong Gold Mine, Jintai Gold Mine and Huatai Gold Mine, individually or collectively

"PRC Government"	the central government of the PRC and all government subdivisions (including provincial, municipal and other regional or local government entities) and instrumentalities thereof or, where the context requires, any of them
"PRC Legal Advisor"	Tianyuan Law Firm LLP, our legal advisor as to PRC laws
"PRC Mine(s)"	PRC Gold Mine(s) and Hanfeng Polymetallic Mine, collectively

[**REDACTED**]

"Property Lease Agreements"	2022-2024 Property Lease Agreement and 2025-2026 Property Lease Agreement, collectively
"Property Management Services Agreement"	the property management services agreement entered into between Beijing Eagleleap and our Company on August 20, 2024 in relation to the provision of Property Management Services from Beijing Eagleleap to our Company, details of which are set out in the section headed "Connected Transactions — Fully Exempt Continuing Connected Transactions — Property Management Services Agreement" in this Document
"Property Management Services"	the property management services provided by Beijing Eagleleap to our Company under the Property Management Services Agreement, details of which are set out in the section headed "Connected Transactions — Fully Exempt Continuing Connected Transactions — Property Management Services Agreement "in this Document
"Document"	this document being issued in connection with the [**REDACTED**]
"QIB"	a qualified institutional buyer within the meaning of Rule 144A
"R&D"	research and development

"Regulation S"	Regulation S under the U.S. Securities Act
"Relevant Persons"	the Company, the Sole Sponsor, the [**REDACTED**], [the [**REDACTED**], the [**REDACTED**], the [**REDACTED**], the [**REDACTED**], the [**REDACTED**],] any of their respective directors, officers, employees, partners, agents, advisers and any other parties involved in the [**REDACTED**]
"Remuneration and Appraisal Committee"	remuneration and appraisal committee of the Board
"Reporting Accountants"	Ernst & Young
"RMB" or "Renminbi"	the lawful currency of the PRC
"Rule 144A"	Rule 144A under the U.S. Securities Act
"SAFE"	the State Administration of Foreign Exchange of the PRC (中華人民共和國國家外匯管理局)
"SAMR"	the State Administration of Market Regulation of the PRC (國家市場監督管理總局)
"SCNPC"	the Standing Committee of the National People's Congress of the PRC (中華人民共和國全國人民代表大會常務委員會)
"Securities Law" or "PRC Securities Law"	the Securities Law of the People's Republic of China (中華人民共和國證券法), as amended, supplemented or otherwise modified from time to time
"Sepon Gold, Copper and Rare Earth Mine"	a gold, copper and rare earth mine operated and managed by LXML, a subsidiary of Chifeng Gold
"SFC"	the Securities and Futures Commission of Hong Kong
"SFO" or "Securities and Futures Ordinance"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Shanghai-Hong Kong Stock Connect"	a securities trading and clearing links program developed by the Hong Kong Stock Exchange, SSE, HKSCC and CSDC for mutual market access between Hong Kong and Shanghai

"Share(s)"	ordinary share(s) in the share capital of our Company, with a nominal value of RMB1.00 each, comprising our A Shares and our H Shares
"Shareholder(s)"	holder(s) of Share(s)
"Single Largest Shareholder Group"	Ms. Li and Hanfeng Zhongxing collectively

[**REDACTED**]

"SSE"	the Shanghai Stock Exchange

[**REDACTED**]

"State Council"	State Council of the People's Republic of China (中華人民共和國國務院)
"Strategy and Sustainability Committee"	strategy and sustainability committee of the Board
"subsidiary(ies)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"substantial shareholder(s)"	has the meaning ascribed to it under the Hong Kong Listing Rules
"Supervisor(s)"	member(s) of our Supervisory Committee
"Supervisory Committee"	the supervisory committee of our Company
"Tietto Minerals"	Tietto Minerals Limited, a company previously listed on the Australian Securities Exchange under the stock code TIE
"Track Record Period"	the three financial years ended December 31, 2023 and the three months ended March 31, 2024

"U.S." or "United States"	the United States of America, its territories, its possessions and all areas subject to its jurisdiction
"U.S. Securities Act"	United States Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder
"Underlying Financial Statements"	the consolidated financial statements of the Group

[**REDACTED**]

"US$" or "USD" or "U.S. dollars"	the lawful currency of the United States
"Wassa Gold Mine"	a gold mine operated by GSWL in Ghana

[**REDACTED**]

"Wulong Gold Mine"	a gold mine operated by Wulong Mining in PRC
"Wulong Mining"	Liaoning Wulong Gold Mining Co., Ltd. (遼寧五龍黃金礦業有限責任公司), a private limited liability company established under the PRC laws and a direct wholly owned subsidiary of Jilong Mining
"Xiamen Tungsten"	Xiamen Tungsten Co., Ltd. (廈門鎢業股份有限公司), a company listed on the SSE (stock code: 600549)
"Xinhenghe Mining"	Kunming Xinhenghe Mining Co., Ltd. (昆明新恒河礦業有限公司), a private limited liability company established under the PRC laws and is a direct non-wholly owned subsidiary of our Company
"%"	per cent

In addition to the terms above, this Document contains a glossary of certain technical terms relating to our industry and business. See "Glossary of Technical Terms."

The English names of the PRC entities, PRC laws and regulations, and the PRC governmental authorities referred to in this Document are translations from their Chinese names and are for identification purposes only. If there is any inconsistency between the Chinese original and the English translation, the Chinese names shall prevail.

GLOSSARY OF TECHNICAL TERMS

This glossary contains explanations of certain technical terms used in this Document in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

"all-in sustaining costs" or "AISC"	a non-PRC GAAP measure which means operating costs excluding amortisation and depreciation, plus all costs not included therein relating to sustaining current production including sustaining capital expenditure. It generally comprises of cash costs (including by product credits), sustaining capital, exploration expenses and general and administrative expenses
"annual production capacity"	the maximum annual production capacity within the permitted annual production volume that can be achieved by our Group in the usual and ordinary course of business based on our existing resources and mine design
"Au"	the chemical symbol for of gold
"cathode"	a negative electrode
"CCD"	counter current decantation
"concentrate" or "gold concentrate"	a powdery or wet product containing an upgraded mineral content resulting from initial processing of mined ore to remove some waste materials. A concentrate is an intermediary product, which would still be subject to further processing, such as smelting, to effect recovery of metal
"crusher"	a machine for crushing rocks to smaller grain size
"cut-and-fill"	a method of stoping in which ore is removed in slices, or lifts, with the excavation subsequently filled with rock or other waste material (backfill), before the next slice is extracted
"cut-off grade"	the grade threshold above which a mineral material is considered potentially economic and is selectively mined and processed as ore
"deposit"	natural occurrence of a useful mineral, or an ore, sufficient in extent and degree of concentration to invite exploitation

"dilution"	the reduction of grade for mined ore due to the inclusion of waste material in the mined ore
"doré"	unrefined gold bar produced at the mine site or other gold sources before sending to a refinery where the gold is refined or processed to meet specific requirements
"drilling"	use of a machine to create holes for exploration or for loading with explosives
"exploration"	activity to prove the location, volume and quality of an orebody
"feed grade"	in respect of mineral processing, the relative content of gold compared to the full content, including gold and other substances, in the ore fed at the processing mill, with reference to the mass with gold in the total mass of the ore and expressed in g/t Au
"floatation"	a process by which some mineral particles are induced to become attached to bubbles of froth and float, and others to sink, so that the valuable minerals are concentrated and separated from the remaining rock or mineral material
"GFA"	gross floor area
"g"	gram(s)
"g/t"	gram(s) per metric tonne — metal concentration
"gold bullion"	refined gold in the form of bars
"gold mine production volume" or "gold production volume"	production volume of gold that is mined from gold mines and as by-products from non-ferrous metal ores
"gold recovery rate"	the percentage of gold produced compared to the amount of gold contained in the feed ore in the context of a processing plant, or the percentage of gold produced compared to the amount of gold contained in the feed concentrates in the context of a smelting plant

"grade"	ratio of the content of a useful element or its compounds in an ore, for which the greater the content, the higher the grade. For gold, grade is commonly expressed in grams per tonne of milled ore (g/t Au)
"Indicated Mineral Resource" or "Indicated Resource"	see the definition under the JORC Code as set out in the section headed "Summary of the JORC Code" in this Document
"Inferred Mineral Resource" or "Inferred Resource"	see the definition under the JORC Code as set out in the section headed "Summary of the JORC Code" in this Document
"kg"	kilogram(s), the basic unit of mass in the international system of units
"km"	kilometer(s), a metric unit measure of distance equal to 1,000 meters
"km^2"	square kilometer(s)
"koz"	thousand ounces, a unit of weight
"kt"	thousand metric tonnes, a metric unit of weight, being equivalent to 1.0 million kg
"ktpa"	kt per annum
"ktpd"	kt of ore per day
"KwH"	kilowatt hours
"LBMA"	London Bullion Market Association, a wholesale over-the-counter market for the trading of gold and silver, which sets gold prices twice daily at 10:30 am and 3:00 pm London BST with the price set in U.S. dollars
"LBMA AM"	the daily gold prices set by LBMA at 10:30 am London BST with the price set in U.S. dollars
"LBMA PM"	the daily gold prices set by LBMA at 3:00 pm London BST with the price set in U.S. dollars

"leach"	dissolve minerals or metals out of ore with chemicals
"LOM"	life of mine. It refers to the shortest timeframe that the Mineral Reserve of a mine are estimated to be fully utilized after considering the actual situation of the mine and strategic plan of the mining operation. Should the mine owner decide to reduce the mining and processing volume per annum and/or discover additional Mineral Reserve, it would take longer time to utilize the Mineral Reserve of the mine and the life of mine would be lengthened
"m^2"	square metre(s)
"Measured Mineral Resource" or "Measured Resource"	see the definition under JORC in the section headed "Summary of the JORC Code" in this Document
"mineralization"	area with continuous distribution belts of mineralization, including the occurrence of deposits, mine sites and alteration of waste rock, as exploration indicators and under control of same geology conditions. It is a key zone for estimation and further planning of exploration of minerals
"mining loss"	that part of a mineral reserve which is not recovered during the mining process
"mining rights"	the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed
"Modifying Factors"	see the definition under the JORC Code as set out in the section headed "Summary of the JORC Code" in this Document
"open pit mine"	a deposit from a pit open to surface and usually carried out by stripping of overburden materials
"open-pit mining"	mining of a deposit from a pit open to surface and usually carried out by stripping of overburden materials
"ore"	mineral bearing rock which can be mined and treated profitably under current or immediately foreseeable economic conditions

"orebody"	natural mineral accumulations which can be extracted for use under existing economic conditions and using existing extraction techniques
"ore mined volume"	the volume of ores mined from gold mines
"ore processing" or "processing"	process which in general refers to the extraction of usable portions of ores by using physical and chemical methods
"ounce(s)" or "oz"	unit of weight for precious metals, and one troy ounce equals 31.1034768 grams
"permitted annual production volume"	indicates the production scale of a mine
"POX"	concentrate pressure oxidation
"Probable Mineral Reserve" or "Probable Reserve(s)"	see the definition under the JORC Code as set out in the section headed "Summary of the JORC Code" in this Document
"processing/smelting recovery rate"	percentage of metal produced compared to the amount of metal contained in the feed ore in the context of a processing plant, or the percentage of metal produced compared to the amount of metal contained in the feed concentrates in the context of a smelting plant
"Proved Mineral Reserve" or "Proved Reserve"	see the definition under the JORC Code as set out in the section headed "Summary of the JORC Code" in this Document
"refining"	final stage of the metallurgical process of refining crude metal products to a pure or very pure end-product
"rehabilitation"	in the context of mining, the process of returning the land to another productive use or the restoration of land and environmental values to a mine site after the mining has been completed
"Reserves" or "Ore Reserves"	portion of the measured and/or indicated resources that can be economically mined, which is an estimate after a pre-feasibility study, feasibility study or equivalent technical and economic evaluation, with possible ore losses and depletion, and the reasonable use of conversion factors fully taken into account to make mining technically feasible and economically viable. This contains both credible and proven reserves

"Resources" or "Mineral Resources"	solid mineral resources identified by mineral resource exploration, generally reviewed, and expected to be economically minable, which quantity, grade or quality is estimated with reference to geological information, geological understanding and relevant technical requirements including inferred resources, indicated resources and measured resources
"ROM"	run-of-mine, of or relating to ore that is in its natural and unprocessed state produced from a mine
"smelting"	pyro metallurgical process of separating metal by fusion from those impurities with which it is chemically combined or physically mixed
"standard gold"	gold bullion which satisfies both standard content requirements (Au99.99, Au99.95, Au99.9, Au99.5) and standard weight requirements (50g, 100g, 1kg, 3kg, 12.5kg) set by the Shanghai Gold Exchange
"stope"	an underground excavation from which ore is being extracted
"stoping"	removal of the ore from an underground mine leaving behind an open space known as a stope
"tailings"	the waste materials (residue) produced by the processing plant after extraction of valuable minerals
"tailings dam" or "TSF"	a storage facility for tailings
"tonne" or "t"	metric tonne, a metric unit of weight, being equivalent to 1,000 kg
"underground mine"	openings in the earth accessed via shafts and adits below the land surface to extract minerals
"vein"	sheet-like body of minerals formed by fracture filling or replacement of host rock

SUMMARY OF THE JORC CODE

The Mineral Resources and Ore Reserves statements in this Document have been prepared in accordance with the JORC Code. The JORC Code is an internationally accepted Mineral Resources and Ore Reserves classification system established in Australia, which was first published in February 1989 and last revised in December 2012. The JORC Code is commonly used in competent person's report for reporting resources and reserves for public companies reporting to the Hong Kong Stock Exchange. The JORC Code is used by the Competent Person to report the Mineral Resources and Ore Reserves of our mines in this Document.

The JORC Code defines "Mineral Resource" as a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided in order of increasing geological confidence into the following categories:

- **Inferred Mineral Resource** — is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes;

- **Indicated Mineral Resource** — is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered; and

- **Measured Mineral Resource** — is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

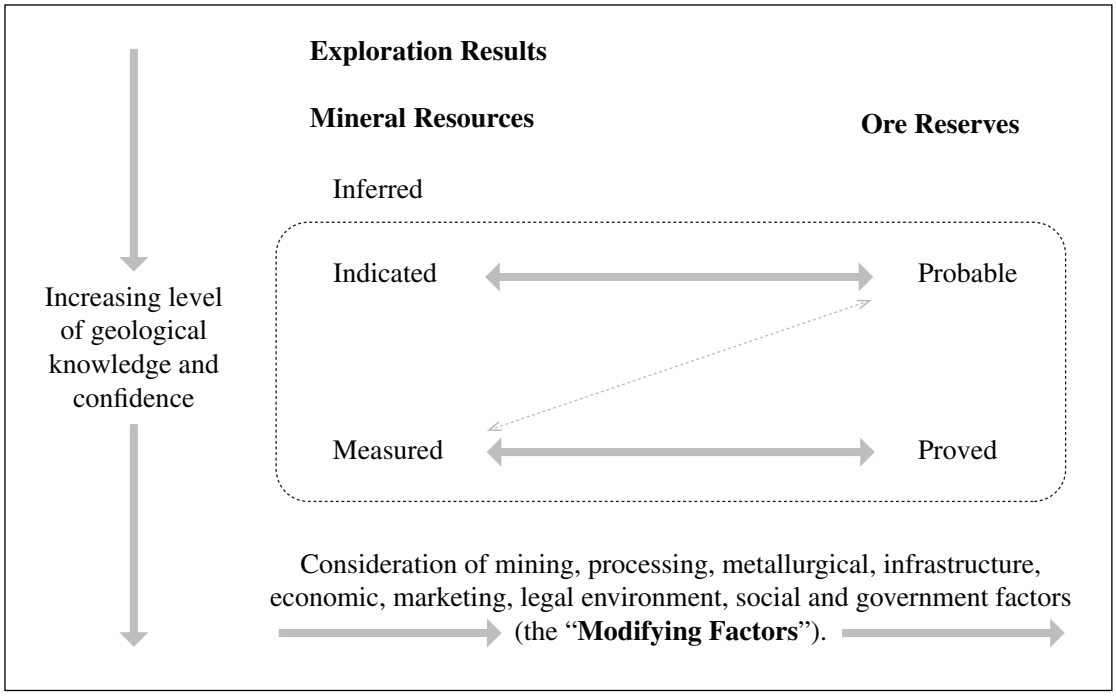
The JORC Code defines "Ore Reserve" as the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Ore Reserves are sub-divided into the following categories:

- **Probable Ore Reserve** — is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve; and

- **Proved Ore Reserve** — is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The following diagram summarises the general relationship between Exploration Results, Mineral Resources and Ore Reserves under the JORC Code:



Source: the JORC Code, 2012

Ore Reserves are generally quoted as comprising a portion of the total Mineral Resource rather than the Mineral Resources being additional to the Ore Reserves quoted. Under the JORC Code either procedure is acceptable, provided the method adopted is clearly identified. The Competent Person's Reports in this Document report all of the Ore Reserves as part of the Mineral Resources.

FORWARD-LOOKING STATEMENTS

This Document contains certain forward-looking statements relating to our plans, objectives, beliefs, expectations, predictions and intentions, which are not historical facts and may not represent our overall performance for the periods of time to which such statements relate. Such statements reflect the current views of our management with respect to future events, operations, liquidity and capital resources, some of which may not materialize or may change. These statements are subject to certain risks, uncertainties and assumptions, including the other risk factors as described in this Document. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. The risks, uncertainties and other factors facing our Company which could affect the accuracy of forward-looking statements include, but are not limited to, the following:

- our business strategies and plans to achieve these strategies;
- our future debt levels and capital needs;
- changes to the political and regulatory environment in the industry and markets in which we operate;
- our expectations with respect to our ability to acquire and maintain regulatory licenses or permits;
- changes in competitive conditions and our ability to compete under these conditions;
- future developments, trends and conditions in the industry and markets in which we operate;
- general economic, political and business conditions in the markets in which we operate;
- effects of the global financial markets and economic crisis;
- our financial conditions and performance;
- changes in the price of gold and other metals;
- our dividend policy; and
- change or volatility in interest rates, foreign exchange rates, equity prices, volumes, operations, margins, risk management and overall market trends.

Additional factors that could cause actual performance or achievement to differ materially including but not limited to those discussed in the section headed "Risk Factors" and elsewhere in this Document. In some cases, we use the words "aim," "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "going forward," "intend," "ought to," "may," "might," "plan," "potential," "predict," "project," "seek," "should," "will," "would" and similar expressions to identify forward-looking statements. In particular, we use these forward-looking statements in the sections headed "Business" and "Financial Information" in this Document in relation to future events, our future financial, business or other performance and development, the future development of our industry and the future development of the general economy of our key markets.

We caution you not to place undue reliance on these forward-looking statements which are based on current plans and estimates, and speak only as of the date they were made. We undertake no obligation to update or revise any forward-looking statements in light of new information, future events or otherwise. Past performance is no guarantee of future results, and forward-looking statements involve inherent risks and uncertainties and are subject to assumptions, some of which are beyond our control. We caution you that a number of important factors could cause actual outcomes to differ, or to differ materially, from those expressed in any forward-looking statements.

Our Directors confirm that the forward-looking statements are made after reasonable care and due consideration. Nonetheless, due to the risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Document might not occur in the way we expect, or at all. Statements of or references to our intentions or those of any of our Directors are made as of the date of this Document. Any such intentions may change in light of future developments.

Accordingly, you should not place undue reliance on any forward-looking statements in this Document. All forward-looking statements contained in this Document are qualified by reference to this cautionary statement.

Potential* [REDACTED] *should carefully read and consider all the information set out in this Document. In particular, you should evaluate the risks and uncertainties described below before making any* [REDACTED] *in our H Shares. This includes (without limitation) the fact that we conduct a large part of our operations in China, the legal and regulatory environment of which in some respects may differ from that in Hong Kong. Any of the risks and uncertainties listed below could have a material adverse effect on our business, results of operations, financial condition, or on the* [REDACTED] *of our H Shares (causing them to decline significantly) and could cause you to lose all or part of your* [REDACTED]. *Additional risks and uncertainties not presently known to us or that we currently deem immaterial could also harm our business, results of operations, financial condition, or on the* [REDACTED] *of our H Shares. Past performance is no guarantee of future results.

RISKS RELATING TO OUR BUSINESS AND INDUSTRY

Changes in the market price for gold mining and other mineral resources, which in the past have experienced significant volatility, affect the profitability of our operations and the cash flows generated by those operations.

During the Track Record Period, a substantial portion of our revenue was derived from the sales of gold. Our revenue contribution derived from sales of gold mining grew significantly during the Track Record Period, increasing from 78.5% of our total revenue in 2021 to 84.6% in 2022 and to 87.6% in 2023, and 90.8% for the three months ended March 31, 2024. We also generated revenue from sales of other mineral resources, including, amongst others, copper, for the same period. From 2019 to 2023, the prices of gold mining and other mineral resources experienced volatility. See "Industry Overview — Gold Price" for further details of fluctuations in gold price and "Industry Overview — Overview of the Copper Industry — Copper Price" for copper price. Although we hedge against the potential financial impacts due to price volatility from time to time, our hedging strategy may not be effective, and we are exposed to fluctuations in the gold price, which could lead to fluctuations in our results of operations. Gold price has been and may in the future be affected by numerous factors beyond our control, including, among others:

- the strength or weakness of the U.S. dollar (the currency in which gold price generally is quoted) and of other currencies, including the Renminbi, the Lao Kip and the Ghanaian Cedi, among others;

- the demand for gold, including the demand for gold for different uses, particularly use in jewelry, technological or industrial uses, investment (including gold bars, coins and exchange traded funds ("**ETF**")), and central bank reserves;

- actual or expected purchases and sales of gold bullion holdings by central banks or other large gold bullion holders or dealers;

- international or regional political and economic events or trends;
- demand for ETFs which replicate the exact performance of gold;
- demand for gold for investment purposes;
- demand for gold investment alternatives, including the emerging demand for bitcoin, ether and other cryptoassets;
- investor confidence in gold and the gold business;
- speculative trading activities in gold;
- the overall level of forward sales by gold companies;
- the overall cost of production of gold;
- the global gold supply and demand forecasting;
- inflation; and
- interest rates.

It is not possible for us to predict the aggregate effect of these or other factors. If gold price falls near or below our costs to produce gold, we may experience losses and, should the gold price remain at such levels for any sustained period, our revenue and profit would be materially and adversely affected. As a result, we may be forced to curtail or suspend some or all of our projects or operations or reduce operational expenditures in part or completely. In addition, we might not be able to recover any losses incurred during or after such periods. Moreover, since our gold Resources and Reserves estimates are based on assumed gold prices, our estimates of gold Resources and Reserves may also be affected by significant deviations from and fluctuations in actual gold prices, resulting in material impairments of our investment in mining properties or a reduction in our Resources and Reserves estimates and corresponding restatements of our Resources and Reserves as well as increased amortization, reclamation and closure charges.

Due to the recent changes in the global geopolitical and economic environment, including, but not limited to, the persistent inflation, which resulted in the strengthening of U.S. dollars, the interest rate hikes by major central banks globally, the Russo-Ukrainian War, and the Hamas-Israel War, the gold price has experienced significant volatility. For example, according to Frost & Sullivan, for the years ended December 31, 2021, 2022 and 2023, the average spot price of gold on the Shanghai Gold Exchange was RMB374.3 per gram, RMB392.1 per gram, and RMB449.6 per gram, respectively. For the same period, the LBMA PM gold spot price was US$1,798.9 per ounce, US$1,801.3 per ounce, and US$1,942.1 per ounce, respectively, according to Frost & Sullivan. The fluctuations in gold spot price were

primarily influenced by the devaluation of the Renminbi, global gold supply and demand forecasting, and political developments and uncertainties according to Frost & Sullivan. The fluctuations in gold prices have contributed to, and may continue to contribute to, fluctuations in our revenue and profitability. As a result, a sustained period of significant gold price volatility may adversely affect our ability to evaluate the feasibility of undertaking new capital projects or continuing existing operations or to make other long-term strategic decisions.

We primarily engage in gold mining activities and process the gold mined into gold doré and gold concentrate, and, to a lesser extent, we also produce the copper cathode as by-product of our gold mining activities as well as other mineral resources. During the Track Record Period, changes in current and expected supply and demand have impacted the market price of other mineral resources. For example, market prices for copper products experienced fluctuations from 2019 to 2023 according to Frost & Sullivan, primarily as a result of the fluctuations in market demands. Material declines in the market prevailing copper prices could adversely affect our business, results of operations, financial condition and prospects. According to Frost & Sullivan, factors that may impact prices of other mineral resources include, but is not limited to, global economic growth, supply and demand dynamics, changes to the cost of production including energy and raw materials costs, changes to the cost of production including labor costs, changes to freight costs, changes to exchange rates, stockpiling of commodities, technological developments, and COVID-19 impact. There is no assurance that a fall in prices of other mineral resources will not occur.

As a result, any of these factors may adversely affect our businesses, financial condition, and results of operations.

Our operations are subject to risks relating to occupational hazards, production safety and design defects, which may result in increased costs or losses, personal injuries or casualties, damage to reputation, suspension of operation and other penalties.

Our operations are subject to a number of operating risks and hazards, some of which are beyond our control and cannot be completely eliminated through prevention efforts. Mining, processing and exploration activities are typically exposed to elements of significant risks and hazards, including, but not limited to, (i) mining risks; (ii) legal and regulatory risks; (iii) infrastructure and equipment risks; and (iv) environmental, social, health and safety risks.

Mining Risks. Risks and hazards commonly associated with mining operations include:

- unexpected maintenance or technical problems;
- interruptions to our mining operations due to hazardous weather conditions and natural disasters, such as, floods, including, but not limited to, surface and underground flooding, landslides and earthquakes;
- electricity or fuel supply interruptions;

- critical equipment failures in our mining, processing and production operations;
- the handling and storage of certain dangerous substances and the use of heavy machinery;
- unusual or unexpected variation in the mine and geological or mining conditions, such as instability of the slopes and subsidence of the working areas;
- seismic events;
- exposure to health-related hazards, such as inhalable dust, silicosis and noise;
- surface or underground fires and explosions, including those caused by flammable gas or in connection with blasting;
- cave-ins, blockages, wall collapses or gravity induced falls of ground;
- discharges of gases and toxic substances;
- releases of radioactivity;
- electrocution;
- falling from height;
- accidents related to the presence of mobile machinery, including underground trains and shaft conveyances;
- industrial accidents, including, but not limited to, accidents and conditions resulting from drilling, blasting and removing and processing material which would also include, but is not limited to, the inhalation of dust and noise induced hearing loss;
- human errors and conduct;
- environmental degradation, including pollution of ground and surface water, air or soil;
- environmental issues, including production disruption due to weather conditions; and
- other accidents or conditions resulting from mining activities, such as blasting and the transport, storage and handling of hazardous materials.

Thereto, our operations involve the handling and storage of explosives and other dangerous articles. For example, we use sodium cyanide in our gold processing operations. We have implemented a set of guidelines and rules regarding the handling of dangerous articles, which comply with applicable existing laws, regulations and policies. However, there can be no assurance that accidents arising from the mishandling of dangerous articles will not occur in the future.

The above risks and hazards may result in personal injury, damage to, or destruction of, properties or production facilities, environmental damages, business interruptions and damage to our business reputation. Further, dust emission from our production process may adversely affect the health of our on-site employees and in extreme cases, it may cause pneumoconiosis or other occupational diseases.

Legal and regulatory risks. As an integrated gold company engaged in mining, processing and exploration, we are subject to extensive laws, rules and regulations imposed by the governments in the respective jurisdictions in which we operate regarding production safety. As these governments continues to strengthen the enforcement of safety regulations in relation to the mining industry, there can be no assurance that more stringent laws and regulations regarding production safety will not be implemented or that existing laws and regulations will not be more stringently enforced. We may not be able to comply with all existing or future laws and regulations in relation to production safety economically, or at all. Should we fail to comply with any production safety laws or regulations, we may be required to suspend our operations, rectify the production safety problems within a limited period and pay fines.

Infrastructure and equipment risks. Our infrastructure and facilities may contain design defects which may not guarantee the success of commissioning and trial production for smooth operation in the future. By the same token, our operation may be faced by ageing infrastructure, unplanned breakdowns and stoppages that may result in production delays, increased costs and industrial accents. Once shafts reach the end of their planned lifespan and begin operating under extended life of mine conditions, additional maintenance, condition monitoring and care is required. The infrastructure in some of our PRC operating regions fall into this category. Although we have comprehensive strategies in place to address these issues, incidents resulting in production delays, increased costs or industrial accidents may occur. Such incidents may have a material adverse effect on our business, financial condition and results of operations.

Similarly, the breakdown of facilities or machinery (and the downtime required to fix or modify such facilities or machinery) may delay the production and incur significant costs. We and our third-party contractors may encounter accidents, technical difficulties, mechanical failure or breakdown in mining, processing and exploration activities, as well as possible flooding, mudslides, instability of the slopes, and subsidence of the working areas and the like due to severe weather conditions and natural disasters.

In addition, as we increasingly conduct mining at greater depths, we may face higher operational risks associated with deep underground mining, including, but not limited to, increased stress on our mining structures, increased temperatures and ventilation difficulties, higher risk of rock bursts and seismic activities that may affect the operation and safety of our mines. Deeper mining will require us to enhance our mining infrastructure, methods and techniques, and devote more manpower and utilities to our mining activities, which will increase our costs. For example, from time to time Wassa Gold Mine may be adversely affected by severe weather conditions as its climate, terrain and vegetation are conducive to naturally occurring fires.

Furthermore, our operations rely on the existence and maintenance of appropriate and adequate infrastructure, including, but not limited to, the continuous and stable supply of power, at our mining concessions and surrounding areas. As a result, our operations may be adversely affected where such infrastructure ceases to exist or fails to be properly maintained by the local authorities and/or third parties. This may be beyond our control, and such risks cannot be completely eliminated through prevention efforts.

Environmental, social, health and safety risks. The mining industry is inherently susceptible to work-related injuries and industrial and mining accidents. There can be no guarantee that accidents will not occur at our operations in the future despite our efforts to comply with safety protocols and applicable laws and regulations. The occurrence of accidents may result in, amongst other things, damage to or destruction of production facilities, personal injuries or casualties, environmental damage, business interruption, delays in production, increased production costs, monetary losses, damage to our reputation and potential legal liability to us. Such incidents may also result in breaches of the conditions for our mining and exploration licenses or any other approvals, permits or authorizations, which may result in fines and penalties or even potential revocation of such licenses, approvals, permits and authorizations. Should we fail to comply with any relevant laws, regulations or policies or should any accident occur, our reputation, business, financial condition, and results of operations may be adversely affected, and we may be subject to penalties, civil liabilities, and/or criminal liabilities. Moreover, our operations may be affected by accidents of third parties. In addition to adversely affecting our business and results of operations, safety accidents in the region may also adversely affect our reputation.

Finally, our operations are subject to health and safety legislation which imposes duties and obligations on the employer to ensure, amongst other things, a working environment which is healthy and safe, as far as is reasonably practicable. For details, see "Regulatory Overview — Laws and Regulations Relating to Safe Production." In terms of the health and safety legislation, an employer may be subject to significant penalties and/or administrative fines for non-compliance. Depending on the particular circumstances, litigation (criminal and/or civil) may be instituted against the employer in respect of an accident, dangerous occurrence or health threatening occurrence which has resulted in the death of an employee (or contractor staff). Any changes to the health and safety laws which increase the burden of compliance on the employer and impose higher penalties for non-compliance may result in further significant costs for us.

We may not be able to expand or replenish our Mineral Resources and Reserves through exploration.

The limited life of mines requires us to replenish our Reserves from time to time. Moreover, discovery of new Mineral Resources and Reserves is crucial to our growth. During the Track Record Period, we have continued to carry out exploration work in areas where we hold exploration permits. However, exploration of Mineral Resources and Reserves is speculative in nature, and our exploration activities may not result in the discovery of Mineral Resources. Furthermore, the future mining and development in the areas currently covered by exploration licenses is subject to further government approvals. There can be no guarantee that our future plan to expand our Mineral Resources and Reserves will succeed. Such plans may be delayed or adversely affected by various factors, including, but not limited to, failure to obtain relevant regulatory approvals, failure to secure sufficient financing to fund our expansion and production, the occurrence of geotechnical difficulties, constraints on managerial, operational, technical and/or other resources, and the incurrence of higher-than-expected operational costs. In addition, to the extent we participate in the development or operation of a project through a joint venture or any other multi-party commercial structure, there could be technical, legal or other disagreements, or divergent interests or goals among the parties, which could jeopardize the success of the project.

In addition, if a viable deposit is discovered, it could take several years and a large amount of capital expenditure from the initial phases of exploration to production commencement, during which time the presumed market price of gold may change, and the capital cost and economic feasibility of such deposit may change. There is also no assurance that we will have, or be able to raise, the required funds to engage in these activities or to meet our obligations with respect to any exploration properties in which we have or may acquire an interest. Furthermore, there can be no assurance that reported Resources will be converted into Reserves, and actual results upon production may materially differ from those anticipated at the time of discovery. Accordingly, there can be no assurance that any future exploration activities or development projects will extend the life of our existing mining operations or result in any new economic mining operations. For our future expansion plans, please refer to "Business — Development and Expansion". In the event we fail to replace our Resources and Reserves depletion, to expand our Resources or Reserves base or our future expansion plans are delayed or fails to deliver the expected economic benefits, our business, financial condition, results of operations and future growth may be materially and adversely affected.

We may be subject to risks relating to operating our overseas business.

Our overseas revenue contributed a substantial portion during the Track Record Period, accounting for 66.7%, 76.4%, 71.9% and 76.4% of our total revenue for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, respectively. An important driver of such overseas revenue growth during the Track Record Period is our global expansion.

In November 2018, we acquired a 90% equity interest in LXML. LXML is a large local mining enterprise in Laos focusing on gold and copper mining and processing business, specifically engaged in the production and operation of the mines of Sepon Gold, Copper and Rare Earth Mine. The remaining 10% equity interest in LXML is held by the Laotian Government. In January 2022, we acquired an 62% equity interest in Golden Star Resources, which in turn indirectly holds an 90% equity interest in GSWL. GSWL is a large local mining enterprise in Ghana focusing on gold mining and processing business, specifically engaged in the production and operation of the mines of GSWL. The remaining 10% equity interest in GSWL is held by the Ghanaian Government. In January 2023, we acquired a 51% equity interest in Xinhenghe Mining, which directly holds a 90% stake in Jintai Mining. Jintai Mining is a local mining enterprise in China focusing on gold mining and processing business, specifically engaged in the production and operation of the mines of Jintai Mining. In March 2024, an equity transfer agreement was entered into among China Investment, Chixia Laos and Chijin Xiawu, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd., which in turn holds an 86% equity interest in CIRE Mining. CIRE Mining is a large local mining enterprise in Laos focusing on rare earth mining and processing business, specifically engaged in the production and operation of the Mengkang Rare Earth Mine. These acquisitions have further enhanced our mining operations and gold production.

We believe our increased Mineral Resources and enlarged production scale as well as our expansion into overseas markets will present us with further growth opportunities. However, there can be no guarantee that there will not be any material disputes between local government authorities and us in connection with the performance of a party's obligation or the scope of a party's responsibilities under relevant agreements, nor can we guarantee that we will be able to resolve any such disputes through amicable negotiation. In the event a material dispute cannot be resolved, the business and operations of LXML, GSWL, Jintai Mining, and/or CIRE Mining may be adversely affected. Furthermore, any potential social unrest and changes in regimes could have an adverse impact on the business of LXML, GSWL, Jintai Mining, and/or CIRE Mining. In the event that any of the above occurs, our business, financial condition and results of operations may be adversely affected.

Our current overseas operations, namely our operations in Laos and Ghana, as well as any future overseas operations that we set up or acquire, expose us, and may further expose us, to various risks associated with conducting business in foreign countries and territories, which may include, among other risks:

- an increase in competition from local or international competitors or failure to anticipate changes to the competitive landscape in overseas markets;

- difficulties integrating overseas business and management systems with our existing operations;

- political risks, including civil unrest, acts of terrorism, acts of war, regional and global political or military tensions and strained or altered foreign relations, which may lead to interruptions in our business operations and/or loss of property;

- economic, financial and market instability and credit risks;

- difficulties and costs associated with complying with, and enforcing remedies under, a wide variety of complex domestic and international laws, treaties, regulations, and rules;

- inability to obtain or maintain the requisite licenses, permits, approvals and certificates in foreign jurisdictions;

- economic sanctions, trade restrictions, discrimination, protectionism or unfavorable policies against PRC companies;

- potential loss of key employees, and difficulties with staffing and managing overseas operations after localization, including with respect to compliance with local labor laws;

- exposure to litigation or third-party claims outside of the PRC, including labor disputes;

- foreign currency exchange controls and fluctuations;

- uncertainties in the interpretation and application of tax laws and regulations, more onerous tax obligations and unfavorable tax conditions;

- potential disputes with, and loss of, overseas or international customers or other parties we work with;

- cultural differences and language barriers;

- infringement of our intellectual property rights in foreign jurisdictions; and

- lack of a well-developed or independent legal system in certain foreign jurisdictions in which we conduct our business, which may create difficulties in the enforcement of our legal rights.

Any of the above factors could lead to, among other things, business disruptions and increased costs and losses, which could have a material and adverse effect on our business, results of operations and overall growth. In particular, current and future geopolitical tensions globally and political tensions in the jurisdictions we operate could have a material and adverse impact on our existing business and future strategies.

We are subject to risks related to exchange rate fluctuations, because our gold product from overseas operation is priced in U.S. dollars and our operating costs and expenses are incurred in different currencies, including, but not limited to, Lao Kip and Ghanaian Cedi.

The revenue generated and cost incurred by our Company and PRC subsidiaries are denominated in Renminbi. The revenues of our overseas subsidiaries are denominated in U.S. dollars, while operating costs and expenses of our overseas subsidiaries are denominated in different currencies, primarily in U.S. dollars and in some cases in local currency. In addition, as our group reporting currency is Renminbi and the functional currency of our overseas subsidiaries is the U.S. dollar, the financial report of overseas subsidiaries are converted to Renminbi for consolidation. Any exchange rate fluctuation between U.S. dollars, Lao Kip and Ghanaian Cedi, and Renminbi will affect our financial performance.

We operate a significant part of our business in Laos and Ghana. Revenue generated by our operations in Laos and Ghana are denominated in U.S. dollars through sales of gold and copper, while operating and capital costs for our mines there are predominantly denominated in the Lao Kip and the Ghanaian Cedi, respectively. As a result, our business, financial condition and results of operations are affected by exchange rate fluctuations between the U.S. dollar and the Lao Kip as well as the Ghanaian Cedi. During the Track Record Period, the Lao Kip and the Ghanaian Cedi experienced significant depreciated against the U.S. dollar. For the three years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, our net foreign exchange gains of RMB86.2 million, RMB27.2 million, RMB20.2 million and RMB15.0 million, respectively, were primarily due to exchange rate fluctuations. There can be no guarantee that future fluctuations of the exchange rate would not have a material and adverse impact on our business, financial condition and results of operations.

We also have four subsidiaries conducting gold mining business in the PRC. Since the trend in gold price in Renminbi is generally consistent with the trend in international gold price, which is denominated in U.S. dollar, our earnings may be materially affected by a material change in the Renminbi/U.S. dollar exchange rate. As of December 31, 2021, 2022 and 2023 and March 31, 2024, the Renminbi to U.S. dollar exchange rate was 6.38:1, 6.96:1, 7.08:1 and 7.10:1, respectively, according to the central parity rate of Renminbi from SAFE. Since December 31, 2022, the Renminbi to U.S. dollar exchange rate has also experienced significant volatility. For example, if the U.S. dollar weakens materially relative to the Renminbi, our operating costs and expenses in relation to our gold mining business in the PRC may increase disproportionally relative to revenue, and as a result our business, financial condition and results of operations consolidated financial results could be materially and adversely affected.

The value of the Lao Kip, Ghanaian Cedi and Renminbi is subject to changes in the local governmental policies and international economic and political environment. The respective local government may adopt further reforms of the local exchange rate system in the future. There can be no assurance that such exchange rate will remain stable against the U.S. dollar or other foreign currencies in the market. Volatility of the Lao Kip, Ghanaian Cedi and Renminbi against foreign currencies may adversely affect our local and overseas operations.

Rising inflation may have a material adverse effect on our business, financial condition and results of operations.

Our business has been, and may continue to be, directly affected by volatile commodity costs and other inflationary pressures. Inflation in the PRC, Laos and Ghana could increase our production costs and expenses, including, for example, raw materials, transportation, wages and power costs. The average annual inflation rate, indicated by the average annual percentage change in the consumer price index was 1%, 2% and 0.2% for PRC, 10.0%, 31.3% and 38.1% for Ghana, and 3.8%, 23.0% and 31.2% for Laos in 2021, 2022 and 2023, respectively, according to the World Bank Group.

Geopolitical risks and conflicts around the world could further disrupt supply chains and create additional inflationary pressures. Specifically, the Russo-Ukrainian War has led to sanctions, travel bans, and asset or financial freezes being levied by the United States, European Union and other countries against Russian entities and individuals, with additional sanctions being proposed. These sanctions and other measures have had a significant impact on commodity prices, including increased oil, gas, ammonia nitrate, copper, steel and gold prices. The oil price is a driver of a number of our input costs, including fuel and transport costs, while gas prices have an impact on power costs, and other commodity prices drive direct mining and processing costs. These inflationary pressures could also cause interest rates and the cost of borrowing to increase and could have a material adverse effect on global financial markets and economic conditions. The extent and duration of the war, sanctions and resulting market disruptions are impossible to predict. Any inflationary impacts or disruptions caused by the war or resulting sanctions may have a material adverse effect on our business, financial condition and results of operations, and may magnify the impact of other risks described in this document.

Our workers are subject to risks of serious injury caused by the use of machinery, production equipment and tools and other production-related risks.

The mining industry is characterized by a higher risk of mining accidents due to the nature of the work environment, which is typically underground, confined, and subject to geological uncertainties. The risk of accidents is further exacerbated by the use of heavy machinery such as drilling machines and scrappers, which are potentially dangerous in our operations. Furthermore, there is risk associated with the use of hazardous, toxic or flammable raw materials and intermediate products. The storage of such materials near our production facilities and the handling of these materials in the mining and production process pose inherent risks.

Despite our efforts to protect our employees' health through executing safety measures, we cannot rule out such risks caused by factors beyond our control. An accident could lead to death or personal injuries and could materially disrupt our mining and manufacturing operations. We may also be subject to business interruptions caused by equipment shutdowns for government investigation or implementation or imposition of safety measures as a result of the accident. Any such accident may also subject us to adverse publicity and damage to our brand name and reputation. Due to the growing awareness of and concern about safety and environmental protection, the risk of such accident may result in social demonstrations against the construction and operation of our plants and facilities, which may further disrupt our business operations, negatively affect our image and reputation and materially and adversely affect our business and financial condition.

To the extent that we seek to expand through acquisitions, investment in joint ventures and associates, and strategic collaborations, we may experience problems and difficulties in executing, managing and integrating the acquisitions, joint ventures, associates and strategic collaborations.

To further grow our businesses and increase our competitiveness and profitability, we intend to continue expanding our mining and production operations in various product segments or regions inside and outside of China. We may strategically pursue acquisitions, investment in joint ventures and associates, or strategic collaborations to maintain or expand our operations and our Mineral Resources and Reserves base.

Over the past few years, we have entered into negotiations relating to certain target companies in which we were interested in acquiring a stake. For example, in November 2018 we acquired a 90% equity interests in LXML. LXML is a large local mining enterprise in Laos focusing on gold and copper mining and processing business, specifically engaged in the production and operation of the Sepon Gold, Copper and Rare Earth Mine. In January 2022, we acquired a 62% equity interests in Golden Star Resources, which in turn indirectly holds 90% an equity interest in GSWL. In January 2023, we acquired a 51% equity interest in Xinhenghe Mining, which directly holds a 90% stake in Jintai Mining. This acquisition has further enhanced our mining operations and gold production. In March 2024, an equity transfer agreement was entered into among China Investment, Chixia Laos and Chijin Xiawu, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd., which in turn holds an 86% equity interest in CIRE Mining. CIRE Mining is a large local mining enterprise in Laos focusing on rare earth mining and processing business, specifically engaged in the production and operation of the Mengkang Rare Earth Mine.

Any acquisition, joint venture, associate or strategic collaboration may change the scale of our business and operations and may expose us to new geographic, geological, political, social, strategic, operating, financial, legal, regulatory and contractual risks, including, but not limited to:

- significant changes in commodity prices after we have committed to complete a transaction and established a purchase price or share exchange ratio;
- risks arising from historical non-compliance from acquired properties, which we may not be able to identify in spite of pre-acquisition due diligence;
- mineral ore bodies that may not meet expectations;
- difficulties integrating and assimilating the operations and personnel of any acquired companies, realizing anticipated synergies and maximizing the financial and strategic position of the combined enterprise, and maintaining uniform standards, policies and controls;

- higher costs of integration than we anticipated;
- diversion of management's attention from our day-to-day business;
- inability to manage the newly acquired entities due to new operating and regulatory requirements;
- undetected liabilities which may be significant;
- disputes or breaches by our joint venture partners or strategic business partners, or the inability of our joint venture partners or strategic business partners to fulfil contractual obligations due to their businesses or financial condition; and
- difficulties in obtaining various governmental approvals and consents.

We may incur losses in relation to our investments in joint ventures and associates. Any significant investment losses charged against our investments in associates or joint ventures could have a material adverse effect on our business, financial condition and results of operations.

In respect of future acquisitions, we may encounter difficulties in integrating acquired operations, services, corporate culture and personnel into our existing business and operations. Further, we may discover previously unidentified liabilities or other issues that we did not discover in our pre-acquisition due diligence investigations. These activities may divert significant management attention from existing business operations, which may harm our business. In addition, acquisitions may require our management to develop expertise in new areas and manage new business relationships. There can be no assurance that any acquisition, joint venture, associate or strategic collaboration will achieve the results intended. In particular, if any of the new businesses fail to perform as we expected, we may be required to recognize a significant impairment charge, which may materially and adversely affect our business, financial condition and results of operations. There may also be established competitors in these sectors and markets which enjoy significant market share, and it may be difficult for us to win market share from them. Furthermore, some of the overseas markets that we are targeting may have high barriers of entry for foreign companies. There can be no assurance that our acquisition or expansion plans will be successful.

Furthermore, there are complex procedures for certain acquisitions of PRC companies as established by the PRC Anti-monopoly Law (中華人民共和國反壟斷法) and the Provisions of the State Council on the Threshold for the Reporting of Undertaking Concentrations (國務院關於經營者集中申報標準的規定), which require us to file anti-monopoly applications for some acquisitions based on the turnover of the acquirer and the target entity. The Provisions on the Examination of Concentrations of Undertakings (經營者集中審查規定) was promulgated SAMR on March 10, 2023 and implemented on April 15, 2023. SAMR is responsible for conducting the anti-monopoly examination of concentrations of undertakings, as well as investigating and punishing illegal concentrations of undertakings.

In addition, the PRC Anti-monopoly Law prohibits monopolistic acts include monopolistic agreements, abuse of a dominant market position and concentration of businesses that may have the effect to eliminate or restrict competition. The relevant restrictions and requirements may affect our ability to expand our operations, result in adjustments to our business plans and limit the growth of our business.

We also face intense competition for the acquisition of attractive gold mining properties. Industry competition may lessen our opportunities to acquire new mineral resources or other gold mining companies and, ultimately, may have a material adverse impact on our business, financial condition, results of operations and growth prospects.

From time to time, we evaluate the acquisition of Ore Reserves, development properties or operating mines, either as stand-alone assets or as part of existing companies. The decision to acquire these properties may be based on a variety of factors, including, for example, historical operating results, estimates and assumptions regarding the extent of the Ore Reserves, cash and other operating costs, mineral prices, projected economic returns and evaluations of existing or potential liabilities (including environment liabilities) associated with the relevant property and its operations and how these factors may change in the future. Other than historical operating results, these factors are uncertain and could have an impact on revenue, cash and other operating costs, as well as the process used to estimate the Ore Reserves. To the extent that we are unable to realize the anticipated benefits of such acquisitions, our growth strategy, along with our business, financial condition and results of operations, may be materially impacted.

Any problems experienced by us in connection with an acquisition, joint venture, associate or strategic collaboration as a result of one or more of these or other factors could have a material and adverse effect on our business, financial condition and results of operations.

We face industry competition.

We compete with a number of large PRC gold companies and international gold companies, for further details of our competitors, please refer to "Industry Overview — Competitive Landscape". Our competitors may have certain advantages over us, including, for example, diversified sources of fundings, better financial performance, greater technical and Mineral Resources, greater economies of scale, broader name recognition and more established relationships in certain markets. As a result, these competitors may be able to devote more resources to the discovery of new mineral resources and reserves and acquire new mineral resources or other gold mining companies. Competition could also have an adverse impact on the demand for, and pricing of, our gold products, which in turn affects our business growth and financial condition. There can be no assurance that we will be able to continue to compete effectively or maintain or improve our market position. If we fail to compete effectively, it will have a material adverse effect on our businesses, results of operations and financial condition.

Our Mineral Resources and Ore Reserves estimates are based on a number of assumptions, which, if changed, may require us to lower our estimates.

Our Mineral Resources and Ore Reserves estimates are based on a number of assumptions. Neither Mineral Resource estimates, nor Ore Reserve estimates, are precise calculations. Ore Reserve estimates are based on available assumptions and considerations on extraction of Measured and Indicated Mineral Resources; and the Mineral Resources estimates are dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The accuracy of the estimates depends on the quantity and quality of available data, the assumptions made, and the judgments used in engineering and geological interpretation, which in each case may prove to be unreliable.

The Ore Reserves estimates contained in this Document represent the tonnage and grade of gold and other Mineral Resources that we believe can be economically mined and processed and are estimated based on a number of economic and technical assumptions, including our costs, expenditures, commodity prices, currency exchange rates, geological and design losses, dilutions, metallurgical and mining recovery assumptions, which may prove inaccurate due to a number of factors, many of which are beyond our control. Ore Reserve estimation is a time-related behavior and activity, and the Ore Reserves presented in this Document has reflected the considerations and assumptions made being valid on the date of the Competent Person's Report, and such considerations and assumptions comprise of the Modifying Factors. In the future, we may need to update the Modifying Factors and further our Ore Reserves if, for instance, our production costs increase or the prices of gold and/or other Mineral Resources decrease and as a result the extraction of a portion (or all) of the Ore Reserves at our mines becomes uneconomic. There is no assurance that our estimates will prove accurate or that the Ore Reserves can be mined or processed profitably. For details, please refer to "Appendix IIIB — Competent Person's Report for the Sepon Gold and Copper Mine — 20 Project Qualitative Risk Analysis" and "Appendix IIID — Competent Person's Report for the Sepon Rare Earth Mine — 19 Risk Analysis".

In addition, compared to Measured or Indicated Mineral Resources, Inferred Mineral Resources have a greater amount of uncertainty as to their existence and as to whether they can be mined economically as such Mineral Resources are inferred from geological evidence and assumed but not verified. It cannot be guaranteed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category. No Inferred Mineral Resources have been included in LoM plan presented in this Document.

The inclusion of Mineral Resources estimates should not be regarded as a representation that all these amounts can be economically mined or processed, and nothing contained in this Document should be interpreted as assurances of the economic viability of the mines that we hold mining licenses or exploration permits to or the profitability of our future operations. A reduction of our Mineral Resources or Reserves, including due to any of the above could have a material adverse effect on our business, financial condition and results of operations.

We amortize our mining rights based on the units-of-production method. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, our amortization expenses related to our mining rights amounted to RMB313.8 million, RMB578.3 million, RMB546.8 million and RMB148.7 million, respectively. We review the remaining useful life of our mining rights in accordance with our production plans and Reserves levels of each mine. Any material decrease in the amount of our Reserves for our mines or changes to our production plans may result in impairment of the carrying value of our mining and exploration rights, which may have a material and adverse effect on our business, financial condition and results of operations.

We may not be able to meet our estimated gold and other minerals production volume.

Our production estimates are based on, among other things, Ore Reserves estimates, gold recovery rates, and the assumptions regarding ground conditions and physical characteristics of Ore Reserves, our mining schedule, utilization of production facilities, costs of production, conditions of the industry, political stability and the general economy. There are uncertainties in our ability to develop sufficient mining flexibility to achieve our mining schedule. Our Ore Reserves estimates are based on assumed price of gold and other minerals, and as a result, our Reserves estimates, production schedule, operation and actual production may be adversely affected if the actual price of gold and other minerals falls below these gold price assumptions.

Actual production may vary from estimates for a variety of reasons, including risks and hazards of the types discussed elsewhere in this Document, including, but not limited to:

- actual ore mined varying from estimates in grade, tonnage, and metallurgical and other characteristics;
- encountering unusual or unexpected geological conditions;
- mining dilution;
- actual gold recovery rate in formal production lower than estimates during the testing;
- restrictions imposed by government authorities;
- industrial accidents;
- equipment failures;
- natural phenomena such as weather conditions, floods, rock slides and earthquakes;
- changes in the costs of utilities;
- decreases in price of gold and other minerals which may cause Ore Reserves that are currently economic to become uneconomic;

- labor unrest, strikes or turnover;
- interference from local communities and competitors;
- socio-economic impact; and
- shortages of supplies needed for operation.

Such occurrences could result in damage to mineral properties, interruptions in production, injury or death to persons, damage to our property or the property of others, monetary losses and legal liabilities. These factors may cause a mineral deposit that has been mined profitably in the past to become unprofitable. New mining operations frequently experience unexpected issues during the initial development phase. Delays can often occur in the commencement of production. Estimates of production from properties not yet in production or from operations that are to be expanded are based on similar factors (including, in some instances, feasibility studies prepared by our personnel and/or outside consultants), but it is possible that actual facilities utilization, gold recovery rate, cash operating costs and economic returns will differ significantly from those currently estimated. There is no assurance that we will achieve our production estimates. If we are unable to achieve our production estimates, this could have a material and adverse effect on our business, financial condition and results of operations.

We may fail to obtain, maintain or renew the government permits, licenses and approvals required for our mining and exploration activities.

Our right to exploit mineral deposits is governed by the laws and regulations of the jurisdictions in which our mining properties are located. Currently, a significant portion of our deposits are located in countries where mining rights could be suspended or cancelled should we breach our obligations in respect of the acquisition and exploitation of these rights.

In all of the countries where we operate, the formulation or implementation of governmental policies on certain issues may be unpredictable. This may include changes in laws relating to mineral rights and ownership of mining assets and the right to prospect and mine, and, in extreme cases, nationalization, expropriation or nullification of existing rights, concessions, licenses, permits, agreements and contracts.

Under the PRC Mineral Resources Law, all Mineral Resources in the PRC are owned by the State. Mining companies, including our Company, are required to obtain mining and exploration permits prior to undertaking any mining or exploration activities, and the mining and exploration permits are limited to a specific geographic area and a certain time period. Our mining licenses in the PRC are generally valid for 10 to 30 years. Our exploration permits are generally valid for five years and renewed accordingly subject to some conditions. Under the current Laotian laws and regulations, mining concessions provide up to twenty (20) years' mining rights to the holder, with such initial term being extendable for ten (10) year periods at a time. LXML has nevertheless been granted a mining concession by the Government of the

Lao PDR under its Mineral Exploration and Production Agreement (MEPA), as amended, with an operating period of thirty (30) years, or until September 29, 2033, with the right to apply for two extensions, with each extension being for a period of ten (10) years, in accordance with mining legislation at the time of the 1st MEPA Amendment, which provided for the period of mining concession of up to thirty (30) years, subject to two extensions of ten (10) year periods. Under the current Ghanaian laws and regulations, mining concessions provide up to thirty (30) years' mining rights to the holder. In addition, pursuant to relevant PRC, Laotian, and Ghanaian laws and regulations, before commencing production, we are required to pass a number of inspections and obtain permits and licenses with respect to environmental protection and production safety, among other things.

As of the Latest Practicable Date, we held a total of 12 valid mining licenses in the PRC, including (i) one mining license for Wulong Mining, (ii) two mining licenses for Jilong Mining, (iii) six mining licenses for Huatai Mining, (iv) one mining license for Jintai Mining, and (v) two mining licenses for Hanfeng Mining. In addition, as of the Latest Practicable Date, we held 5 valid exploration permits in the PRC, including (i) one exploration permit for Jilong Mining, (ii) two exploration permits for Wulong Mining, (iii) one exploration permit for Jintai Mining, and (iv) one exploration permit for Hanfeng Mining. Moreover, as of the Latest Practicable Date, we held one valid mining license and one valid exploration permit in Laos. In addition, as of the Latest Practicable Date, we held three mining licenses and one valid exploration permits in Ghana, with two additional exploration permits in the process of being renewed and converted. We need to renew or obtain relevant permits for our operations from time to time, including, but not limited to, mining permits and exploration permits. As of the Latest Practicable Date, although one mining lease of GSWL has been renewed by the Ghanaian Government, it is still pending ratification by the Parliament of Ghana as required by the Ghana Constitution. The Supreme Court of Ghana has held that without such ratification, a mining lease confers no legal right. It remains uncertain when such mining lease will be ratified. However, our mining operations at the Wassa Gold Mine would continue uninterrupted under the original mining lease until the renewed mining lease is ratified by the Parliament of Ghana. The process of ratification of the Wassa Mining Lease would not have any material adverse effect on the Company's operations as advised by our Ghanaian Legal Adviser.

In addition, to comply with Laos environmental laws, we have submitted an updated environmental and social impact assessment and an environmental and social management and monitoring plan to the Laotian Government for the expanded project scope at our mines in Laos, which is pending review by the Laotian Government. There can be no assurance that the review will be completed in time, as per our current expectation, or at all, which may hinder the expansion of our Laos mining project. According to our PRC, Laotian, and Ghanaian Legal Advisers, as of the Latest Practicable Date, we had obtained all material approvals, licenses and permits for our current operations in all material aspects. There can be no guarantee that we will continue to be deemed to be acting in compliance with our existing permits by the relevant governmental authorities. Also, there can be no assurance that we will be able to fully and economically utilize the entire Mineral Resources of all of our mines during the currently effective permit or approval periods.

While our PRC, Laotian and Ghanaian Legal Advisers do not anticipate material legal impediments in the renewal process for our mining licenses and exploration permits as long as we meet the substantive and procedural conditions stipulated in the relevant laws and regulations, we may not be able to obtain or renew such approvals, licenses or permits, comply with all conditions requested by governmental authorities to maintain those permits, or obtain, retain or renew other approvals, licenses and permits necessary for our business operations in the future, either in respect of our existing mines or at any mines we may operate in the future. In addition, we may require new permit(s), license(s) and/or approval(s) from time to time.

Changes in local laws, regulations and policies, including those with respect to environmental protection and mining and exploration activities, are outside of our control may affect our ability to obtain timely renewals for such permits, licenses and/or approvals, and during such time we may be compelled by law or regulators to cease mining and exploration activities in accordance with PRC, Laotian and Ghanaian laws and regulations.

Any failure to obtain, retain or renew, or any delay in obtaining or renewing, such approvals, licenses or permits could subject us to a variety of administrative penalties or other government actions and adversely impact our business, financial condition and results of operations.

We may be materially and adversely affected by challenges relating to slope and stability of underground openings.

In general, as mining activities continue and expand, underground mines (including ours) are dug deeper while the waste and tailings deposits increase in size. Under these circumstances, certain geotechnical challenges may arise, including, for example, the possibility of failure of the mine's underground openings or voids. If additional actions are required to prevent such failure, additional expenses could be incurred, and stated Ore Reserves could be negatively affected. While we have undertaken industry standard tests, studies and actions to maintain the stability of our mines and associated waste infrastructure, adverse conditions may nevertheless take place, and additional actions may be required in the future.

We may not be able to effectively execute our business strategies. In addition, estimates relating to expansion projects of existing operations are uncertain and we may incur higher costs and lower economic returns than estimated.

The ability to grow our business will depend on the successful implementation of our existing and proposed strategic initiatives, such as to improve productivity, reduce cost and enhance profitability, and to obtain Resources and Reserves and increase production volume through acquisitions of high-quality gold assets for robust and sustainable growth. See "Business — Business Strategies" for further details of our business strategies. The successful implementation of our strategic initiatives depends upon many factors, including those outside our control. For example, while we have identified rare earth resources in Laos, the successful exploration of such rare earth resources will depend on, among other things, our ability to apply for licenses on trial development to the Laotian Government. We may also prove unable

to deliver on production targets and strategic initiatives. Unforeseen difficulties, delays or costs may adversely affect the successful implementation of our business strategy and projects, and such strategy and projects may not result in the anticipated benefits. Any such difficulties, delays or costs could prevent us from fully implementing our business strategy, which could have a material adverse effect on our business, financial condition and results of operations.

Our future expansion may place a significant strain on our managerial, operational, technical and financial resources. In order to better allocate our resources to facilitate our growth, we must hire, recruit and manage our workforce effectively and implement adequate internal controls in a timely manner. Our risk management and internal control system may not be effective or adequate. If we fail to maintain sufficient internal sources of liquidity and secure external sources of funding for future growth, we may encounter, among other things, significant delays in production and operational difficulties. If we are unable to effectively manage our growth and the associated increased scale of our operations, the efficiency of our operations, our ability to attract and retain key personnel and our business and prospects could be materially and adversely affected.

Our operations are exposed to risks in relation to environmental protection and rehabilitation.

Our operations are subject to extensive environmental laws and regulations in PRC, Laos and Ghana, including, for example, those relating to waste treatment and disposal, emissions and water management. Further, we must comply with permits or standards governing, among other things, land rehabilitation, tailings and waste disposal areas, water use, air emissions, water discharges, naturally occurring radioactive material, transportation of ore or hazardous substances, power use and generation, use and storage of explosives, as well as workers' occupational health and safety. We are required to conduct our mining operations in a manner that minimizes the impact on the environment, such as through rehabilitation and revegetation of mined land. In the future, we may have rehabilitation obligations in respect of areas we have cleared for mining and production purposes. Environmental hazards may occur in connection with our operations as a result of human negligence, force majeure or otherwise. Environmental laws and regulations are continually changing and are generally becoming more stringent. Changes to our environmental compliance obligations or operating requirements could adversely affect our production cost and revenue.

Further, failure to obtain the required environmental approvals with regard to any of our operations could affect our environmental management activities including, but not limited to, tailings disposal facilities and water management projects. For example, the process of obtaining mining, environmental, and other permits and approvals from the Government of Ghana has been taking longer lead times and incurring higher costs. In addition, as of the Latest Practicable Date, our Environment Compliance Certificate for LXML issued on January 8, 2024 is valid.

In addition to the above, failure to comply with the conditions thereof, variations in laws and regulations, assumptions made to estimate liabilities, standards or operating procedures, more stringent emission or pollution thresholds or controls, or the occurrence of unanticipated conditions, may require operations to be suspended or permanently closed, and could increase our expenses and provisions.

As advised by our PRC, Laotian and Ghanian Legal Advisers, we did not have any material incidents of non-compliance with relevant environmental laws and regulations at our mines during the Track Record Period. However, there can be no guarantee that such incidents will not occur at our operations in the future. The occurrence of any environmental hazards may delay production, increase production costs, cause personal injuries or property damage, result in liability to us and damage our reputation. Such incidents may also result in breaches of the conditions for our mining and exploration licenses or other approvals, permits or authorizations, which may result in fines or penalties or even possible revocation of such licenses, approvals, permits and authorizations.

We may experience increased production costs arising from compliance with environmental laws and regulations. As the PRC, Laotian and Ghanaian economies develop and the living standards of the population improve, heightened awareness of environmental protection may lead to more stringent environmental laws and regulations being implemented in the future, or the existing environmental laws and regulations may be more strictly enforced. We may not always be able to comply with future laws and regulations in relation to environmental protection and rehabilitation economically or at all. Should we fail to comply with any such laws and regulations, we may be subject to penalties and liabilities, including, but not limited to, warnings, fines, suspension of production and closure of the relevant facility that fails to comply with the relevant environmental standards.

Failure to comply with our environmental protection and rehabilitation obligations could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition to compliance with local laws and regulations, our operations are also increasingly subject to stakeholder expectations concerning the application of stringent internationally recognized environmental, health and safety and social standards and benchmarks. Such standards include the World Gold Council Conflict-Free Gold Standard, the World Gold Council's Responsible Gold Mining Principles, the International Finance Corporation Performance Standards and other World Bank guidelines. The application of such standards could impose significant compliance costs on us. Certain financial institutions from whom we borrow money may also require compliance with any of these standards the subsequent deviation from which could prevent or adversely affect our financial condition, existing financing arrangements and ability to secure future financing.

Any contraventions of environmental statutes may result in compliance and enforcement action being instituted against us by the relevant authorities, including commencement of criminal prosecution. Any related expenses and provisions could adversely affect our results of operations and financial condition.

The failure to comply with these laws and regulations may subject us to the imposition of significant fines, cessation of mining activities, criminal liability (including prosecution of our Directors, agents and/or employees in their personal capacities), and risks of litigation.

We may not be able to obtain financing on favorable terms, or at all, to fund our on-going operations, existing and future capital expenditure requirements, acquisitions and investment plans and other funding requirements, and our ability to raise additional funds could be materially affected by the fluctuations in the capital markets.

Our mining, production and exploration activities are highly capital intensive. During the Track Record Period, we had funded our working capital and capital expenditure primarily through cash flow from operations, bank loans and gold leasing contracts. To fund our ongoing operations, existing and future capital expenditure requirements, investment plans and other financing requirements, we may need access to additional financing from external sources in addition to internal sources of liquidity. Our ability to obtain external financing in the future depends on a number of factors that are beyond our control, including, for example, market conditions, lenders' perception of our creditworthiness, the global and local economies and regulations that affect the availability and costs of financing. Any disruptions, uncertainty or volatility in the capital and credit market resulting from any global financial crisis may also limit our ability to obtain financing to meet our funding requirements. If adequate funding is not available to us on commercially acceptable terms in time, or at all, it may materially and adversely affect our ability to fund our existing operations, and to develop or expand our business.

We may fail to maintain our current financial performance, particularly with respect to our AISC.

In the mining industry, operations such as enhanced exploration and the initiation of mining activities, along with fluctuations in labor and raw material costs, and the growing stringency of environmental regulations, may increase our costs, including both capital cost and operating costs. For details, please refer to "Appendix IIIB — Competent Person's Report for the Sepon Gold and Copper Mine — 20 Project Qualitative Risk Analysis" and "Appendix IIID — Competent Person's Report for the Sepon Rare Earth Mine — 19 Risk Analysis". While our operational efficiency has historically exceeded the global industry average, resulting in a competitive AISC of US$1,179.1 per ounce as of December 31, 2023, and despite our successful reduction of AISC by 12.0% in 2023, we cannot guarantee the continuation of this trend. Our historical AISC performance is not indicative of future results, and the inherent risks associated with cost management in our industry could materially affect our financial outlook. Factors beyond our control, such as fluctuations in commodity prices, changes in production costs, and unforeseen operational disruptions, may lead to an increase in our cost structure. Any such increase could adversely affect our financial results and market position, potentially diminishing our comparative advantage in the industry.

Our indebtedness and the conditions and restrictive covenants imposed on us by our financing agreements could materially and adversely affect our business, financial condition and results of operations.

As of December 31, 2023 and as March 31, 2024, our long-term borrowings amounted to RMB1,640.3 million and RMB1,649.1 million respectively, which represented approximately 8.8% and 8.7% of our total assets. For example, GSWL's outstanding loan facilities and hedging and guarantee facilities provide creditors with liens on substantially all of its assets, including the mining lease of GSWL, which may cause risks. Timely payment under these facilities is important as failure to do so may cause the creditors to foreclose on and sell substantially all of GSWL's assets to satisfy payment obligations, which could prevent us from accessing these assets for our business and conducting our business as planned. Our business, financial condition, prospects and results of operations could be materially adversely affected as a result of any of these events. For a detailed outline of our indebtedness, see "Financial Information — Indebtedness". This indebtedness could have consequences for our business and operations including, but not limited to:

- limiting or impairing our ability to obtain financing, refinance any of our indebtedness, obtain equity or debt financing on commercially reasonable terms or at all, which could cause us to default on our obligations and materially impair our liquidity;

- restricting or impeding our ability to access capital markets at attractive rates and increasing the cost of future borrowings;

- reducing our flexibility to respond to changing business and economic conditions or to take advantage of business opportunities that may arise;

- requiring us to dedicate a substantial portion of our cash flow from operations to payments of principal and interest on our indebtedness, thereby reducing the availability of our cash flow for other purposes;

- placing us at a competitive disadvantage compared to our competitors that have lower leverage, better financing terms, and/or better access to capital resources;

- limiting our ability to dispose of assets that secure our indebtedness or utilize the proceeds of such dispositions and, upon an event of default under any such secured indebtedness, allowing the lenders thereunder to foreclose upon our assets pledged as collateral;

- increasing our vulnerability to downturns in general economic or industry conditions, or in our business; and

- restricting our subsidiaries' ability to pay dividend to us.

In addition, our bank loan agreements include various conditions and covenants that require us to obtain the lending bank's prior consent for certain transactions. We may be required to comply with similar restrictive covenants or other terms under any new loan and other financing arrangements in the future. In addition, we are required to comply with various financial covenants, and new financial covenants may be imposed under any new loan and other financing arrangements.

Should market conditions deteriorate, or if our operating results were to be depressed, we may need to request amendments or waivers to the covenants and restrictions under our debt agreements. There can be no assurance that we will be able to obtain such relief should it be needed. A breach of any of these covenants or restrictions could result in a default that would permit our lenders to declare all amounts outstanding thereunder to be due and payable, together with accrued and unpaid interest, trigger cross-default provisions under other debt agreements and, as applicable, cause the termination of commitments of relevant lenders to make further extensions of credit under our financing agreements or credit facilities. If we were unable to repay our indebtedness to our lenders in such an event, the lenders could, among other things, proceed against collateral, which could include substantially all of our assets. Our future ability to comply with financial covenants and other conditions, to make scheduled payments of principal and interest, or to refinance existing borrowings depends on our business performance, which is subject to economic, financial, competitive and other factors, including, but not limited to, the other risks described in this Document. Any failure to comply with the covenants of our financing agreements or to obtain financing for our business could have a material and adverse effect on our business, financial condition, results of operations and prospects. Any failure to make required debt payments could, among other things, adversely affect our ability to conduct operations or raise capital, which could have a material adverse effect on our business, financial condition and results of operations.

We may suffer material adverse consequences as a result of our reliance on contractors to conduct a portion of our business activities.

During the Track Record Period, we outsourced a portion of our exploration, mining and processing activities to contractors at our PRC, Laos and Ghana operations. For instance, we outsourced a substantial portion of our engineering work in the PRC, mining and processing work in our projects in Laos and exploration and drilling services to our operation in Ghana to qualified contractors, see "Business — Contractors". As a result, our operations have been affected by the performance of these contractors. Our operations at sites utilizing contractors or contract mining are subject to a number of risks, some that are outside our control, including, but not limited to, contract risk, execution risk, dispute and litigation risk, regulatory risk and labor risk, which could result in additional costs and liabilities.

Although we monitor the work of contractors to ensure that they are carried out on time, on budget and in accordance with our specifications and quality standards, we may not be able to control the quality, safety and environmental standards of the works conducted by contractors to the same extent as the works conducted by our own employees. There can be no guarantee that the contractors are in full compliance with all relevant laws and regulations,

which may subject them to suspension of relevant licenses, approvals, permits and/or authorizations that would adversely and materially impact our operation. Should this happen, we may not be able to engage replacement contractors on similar terms or at all in a timely manner. We may become engaged in disputes with our contractors, which could lead to additional expenses, distractions and potential loss of production time and additional costs, any of which could materially and adversely affect our business, financial condition and results of operations. In addition, we may be legally obligated, as an owner of the exploration permit or mining license, to ensure operational safety. In the event of any safety-related accident involving a contractor, we may be held directly liable or liable for compensation to the extent of our faults regardless of any contractual provisions to the contrary. Any failure by contractors to meet any of our quality, safety and environmental standards may result in liabilities to us and could also affect our compliance with government rules and regulations relating to exploration, mining and workers' safety.

The occurrence of one or more of these risks could have a material and adverse effect on our business, financial condition and results of operations.

We may not be able to maintain adequate, uninterrupted, timely and specification-compliant supplies of utilities, materials, equipment and service at commercially acceptable prices, or at all.

Electricity and water are the main utilities used in our operations. In the PRC, during the Track Record Period, we obtained most of our electricity from the local state grid and our water supply from underground water sources and local water companies. The mines of Sepon Gold, Copper and Rare Earth Mine obtained electricity from the licensed state-owned electricity enterprise and sourced water for industrial and domestic usage from local water companies. The mines of Wassa Gold Mine obtained electricity from a local gas-fired power plant and local state electricity power grid. In addition, the water for production and domestic usage is mainly sourced from underground water. For more information, see "Business — Utilities." As of the Latest Practicable Date, all the water permits for Wassa Gold Mine are valid. While we do not expect any difficulties in such renewal so long as we meet the applicable requirements and conditions and adhere to the procedures set forth in the relevant laws and regulations, there can be no guarantee that we will be granted such extension, and if not, we will not be able to continue to access the relevant water resources. For certain of our mines that are situated in more remote areas, there can be no guarantee that there will be no interruption in electricity or water. We need to compete with other natural resource companies for our overseas mining operations, and shortage of critical parts and equipment may adversely affect our operations and development projects. In the event that our existing suppliers cease to supply us with electricity, water, materials or equipment at commercially acceptable prices or at all, our operations will be interrupted, and our business, financial condition and results of operations will be materially and adversely affected. In addition, as of the Latest Practicable Date, all our PRC mines were underground mines except Jintai Gold Mine adopting open-pit mining, the Sepon Gold, Copper and Rare Earth Mine in Laos uses the combination of underground mining and open-pit mining, with open-pit mining playing a key role, and the Wassa Gold Mine in

Ghana uses a combination of underground mining and open-pit mining, where underground mining plays a key role. As such, an interruption of electricity supply will materially and adversely affect our production and safety by disrupting operations, including water pumping and ventilation.

In addition to utilities, in the PRC, during the Track Record Period we also procured most of the principal materials used in our production from local suppliers, including, for example, explosive materials, diesel, sodium cyanide, and cement. In Laos, we procured diesel fuel and certain low-value consumables from local suppliers, while we procured industrial chemicals and reagents, explosive materials, equipment maintenance spare parts and other consumables from overseas suppliers (mainly from PRC suppliers). In Ghana, we procured drilling service and various materials, such as diesel oil, electricity, certain low-value consumables, bulk industrial chemicals and reagents, explosive materials, equipment maintenance spare parts and other major consumables from domestic and overseas suppliers. For more information, see "Business — Procurement and Suppliers — Suppliers."

We regularly monitor the fluctuations in market prices for the materials used in our operations. However, there can be no assurance that such supplies will not be interrupted or that their prices will not increase in the future. Additionally, if the materials, equipment and services provided by our suppliers do not meet our requirements or specifications, it may lead to production disruptions, safety incidents, legal disputes and financial losses. Furthermore, we may face the risk delay in international procurement. We cannot assure that our suppliers will not encounter delays during the customs clearance process. Such unforeseen hold-ups can disrupt our supply chain, potentially leading to production setbacks and increased costs. The complexity of international logistics, regulatory compliance, and geopolitical factors all contribute to the inherent uncertainty in the timely delivery of critical components and materials necessary for our operations. Consequently, any disruption in the flow of goods across borders could adversely affect our ability to meet market demands and maintain our competitive edge, which could impact existing profit margins and have a material adverse effect on our business, financial condition and results of operations.

Power outages and usage constraints may force us to halt or curtail operations or subject us to penalties.

Electricity is used for most of our business and safety-critical operations, including cooling, hoisting and dewatering. Any power outage, disruption or shortage in power supply available to our operations could therefore have a material adverse impact on our production and employee safety. Our operations may be adversely affected by power outages. For instance, since the Wassa Gold Mine in Ghana is subject to extremely high temperature, an increased electrical power demand may lead to power outages. There may be incidents of power cuts in certain places of the PRC, Laos, and Ghana in the future. There can be no guarantee that our production will not be reduced as a result of the power outages. In addition, we may be subject to penalties if our consumption of electricity exceeds the permissible maximum demand pursuant to electricity supply agreements.

Should we experience power fluctuations or usage constraints at any of our operations, then our business, financial condition and results of operations may be materially adversely impacted.

We received government grants and enjoyed preferential tax treatment during the Track Record Period, and any significant reduction in such grants or any adverse change of tax treatment offered to us may materially and adversely affect our financial condition and results of operations.

Two of our subsidiaries, namely Wulong Mining and Jilong Mining, were accredited as High and New Technology Enterprises during the Track Record Period and, therefore, enjoyed the preferential EIT rate of 15.0%. In support of our R&D projects and mining activities, we have also recognized income from government grants of RMB1.4 million, RMB4.0 million, RMB17.0 million and RMB0.1 million for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, respectively. We are required to renew our respective accreditations as a High and New Technology Enterprise upon its expiration. While we do not expect any difficulties in such renewal so long as we meet the applicable requirements and conditions and adhere to the procedures set forth in the relevant laws and regulations, there can be no guarantee that we will be granted such extension, and if not, we will not be able to continue to enjoy the preferential tax treatment for High and New Technology Enterprises in the future. In addition, there can be no guarantee that the government grants and preferential tax treatments will continue to be available to us. The discontinuation of any preferential tax treatment currently available to us will cause our effective tax rate to increase, which could have an adverse effect on our results of operations. In addition, the PRC Government from time to time adjusts or changes its policies on business tax and other taxes. Such adjustments or changes, together with any uncertainties resulting therefrom, could have an adverse effect on our financial condition and results of operations. Moreover, as we have substantial overseas operations, we may be subject to the imposition of additional taxes and royalties due to the complexity of tax laws in different jurisdictions.

We are subject to regulatory risks with respect to our tax compliance.

In the ordinary course of business we may be subject to inquiries, reviews, claims, assessments or other regulatory actions conducted by relevant tax or revenue authorities in the jurisdictions in which we operate. We may be subject to additional tax or duty liabilities, or increased statutory royalties in relation to our mining and mineral production operations, as a result of any unfavorable decisions made by such relevant tax or revenue authorities, which may materially and adversely affect our business, financial position and results of operations. Such regulatory actions may also divert our management's attention and other resources, especially if they are not resolved in a timely manner. For example, we carried out certain intra-group transactions in 2021, and our profit allocation and income tax positions in connection with such transfer pricing arrangements are subject to the interpretations by relevant tax authorities of applicable tax law as well as applicable rules and regulations with respect to transfer pricing in relevant jurisdictions. There is no assurance that the respective tax authorities would not challenge the appropriateness of our historical transfer pricing arrangements or that the relevant regulations or standards governing such arrangements will not be subject to future changes. If a competent tax authority later determines that the transfer prices and the transaction terms that we have adopted as well as our historical income tax

provisions and accruals are not appropriate, such authority may require the relevant subsidiaries to re-assess the transfer prices and re-allocate the income or adjust the taxable income. If we are considered not to be in compliance with the applicable transfer pricing rules and regulations, the relevant tax authority may also have the power to order us to pay all outstanding tax and statutory interest and/or fines.

Our insurance coverage may be inadequate to satisfy potential claims and fluctuations in insurance cost and availability could adversely affect our business, financial condition and results of operations.

Mining, exploration and production activities involve numerous risks, including, for example, unexpected or unusual geological conditions, fire, floods, earthquakes, severe weather conditions, other environmental occurrences and political and social instability. These risks can result in, among other things, damage to and destruction of mining assets or production facilities, personal injury, environmental harm, financial losses and legal liability.

We maintain insurance for our operations in line with law, regulation and industry practice in the PRC, Laos and Ghana, including, but not limited to, social insurance for our PRC employees, directors' and officers' liability insurance, medical and accidental injury insurance of expatriate employees, property insurance, liability insurance (including tailings insurance), cargo transportation insurance, aircraft operation liability insurance, and production safety liability insurance. However, in line with industry practice in the PRC, Laos and Ghana, we have elected not to maintain certain types of insurances, such as business interruption insurance or key man insurance. In addition, insurance may not continue to be available at economically acceptable premiums. The costs of maintaining adequate insurance coverage, most notably property damage insurance and environmental liability insurance, have increased significantly recently and may continue to do so in the future, thereby adversely affecting our results of operations. If such costs continue to increase, we may be forced to accept lower coverage and higher deductibles, which, in the event of a claim, could require significant, unplanned expenditures of cash and inhibit our ability to maintain our profitability.

In addition, we may become subject to liability against potential claims which we have not insured, cannot insure or have insufficiently insured, or are unable to insure the amount needed due to lack of capacity by insurers in the market, including those in respect of past mining activities. Our insurance may not cover a particular event at all or be sufficient to fully cover any losses we may incur, including, without limitation, as a result of natural disasters, public health emergencies and other events that could disrupt our operations, such as pandemics alike COVID-19. Our existing liability insurance contains exclusions and limitations on coverage. For example, should we be subject to any regulatory or criminal fines or penalties, such amounts would not be covered under our insurance program, either due to exclusions or limitations, or because it is prohibited by legislation in some jurisdictions. As a result, in the future, our insurance coverage may not cover the extent of claims against it, including, but not limited to, claims for environmental or industrial accidents, occupational illnesses or pollution or any cross-claims made.

We rely on the continued service of our senior management and technically skilled employees, and we may experience labor shortages, disputes, unrest or strikes.

Our ability to operate or expand effectively depends largely on the experience, skills and performance of our senior management team and technically skilled employees, particularly Mr. Wang Jianhua, our Chairman of the Board and Ms. Yang Yi-fang, our Chief Executive Officer. We rely on the expertise, experience and leadership of our directors and senior management. Their extensive knowledge and experience in mining industry, extensive managerial experience, as well as their established relationships with our customers and their experience dealing with local government authorities, have played a major role in our attainments. Additionally, the market for employees with industry experience and technical skills can be highly competitive. There can be no guarantee that the services of our senior management and a sufficient number of technically skilled employees in the PRC, Laos and Ghana will continue to be available to us. If one or more of our senior management and other key personnel are unable or unwilling to continue to serve in their present positions, we may not be able to replace them with qualified personnel in a timely manner. Any senior management departures or unavailability (due to death, injury, illness or other reasons) or technically skilled worker shortages could adversely affect our operational efficiency and production levels. We may be unable to hire or retain appropriate management personnel or technically skilled employees or may have to pay higher levels of remuneration than we currently project and intend. In particular, qualified personnel may be scarce in some or all of the regions where our mines are located. If we are unable to hire and retain appropriate management and technically skilled personnel, or if there are inadequate succession plans in place, our business may be materially and adversely affected.

In addition, we may be involved in labor disputes and experience labor unrest or strikes in the ordinary course of our business. During the Track Record Period, we had been involved in certain labor disputes, including termination of employment agreements, work-related injury compensation, etc. There can be no guarantee that labor disputes, unrest or strikes will not occur in the future. In the event that we experience such incidents, our mining activities and production levels may be disrupted, which may have a material and adverse effect on our business, financial condition, results of operations, reputation and future prospects.

Any negative publicity regarding our Company, Directors, employees or products, regardless of its nature or veracity, could adversely affect our business.

As an established brand, our image is sensitive to the public's perception of us as a business in entirety, which includes not only the quality of our products, but also our corporate management and culture. We cannot guarantee that no one will, intentionally or incidentally, disseminate information about us, including the quality of our products, our internal management matters and negative information for management, that may result in negative perception of us by the public. Although we had promptly taken clarification or rectification measures when we faced negative publicity in the past, we cannot assure you that such measures will always be effective in the future. In addition, as a listed company, our Company and member of our management or employees are under the supervision of securities regulatory bodies and in the past, we were subject to certain regulatory inquiries and penalties. Any negative publicity about our Company, Directors, employees, spokespersons or products, regardless of nature or veracity, could lead to potential loss of customers or investors' confidence or difficulty in retaining or recruiting talents that are essential to our business operations. As a result, our business, financial condition, results of operations, reputation and prospects may be materially and adversely affected.

Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control may have a material adverse effect on our business, financial condition and results of operations.

Natural disasters, epidemics, acts of war or terrorism or other factors beyond our control may adversely affect the economy, infrastructure and livelihood of the people in the regions where we conduct our business. For example, our operations may be under the threat of flood, earthquake, sandstorm, snowstorm, fire or drought, power, water or fuel shortages, critical equipment failures, malfunction and breakdown of information management systems, unexpected maintenance or technical problems, or are susceptible to epidemics, potential wars or terrorist attacks. Serious natural disasters may result in loss of lives, injury, destruction of assets, reduction in our productivity and/or disruption of our business and operations. Severe communicable disease outbreaks (such as COVID-19) could result in a widespread health crisis that could materially and adversely affect the economy and financial markets. Acts of war or terrorism may also injure our employees, cause loss of lives, disrupt our business network and/or destroy our markets. Any of these factors and other factors beyond our control could have an adverse effect on the overall business sentiment and environment, cause uncertainties in the regions where we conduct business, cause our business to suffer in ways that we cannot predict and materially and adversely impact our business, financial condition and results of operations.

The physical impacts of climate change and relevant regulations may adversely affect our mining operations, workforce and supply chain.

Our operations, workforce and supply chain may be exposed to a number of physical risks posed by climate change, such as changes in rainfall rates or patterns, rising sea levels, reduced water availability, higher temperatures and more frequent extreme weather events. For example, from time to time our operations in Ghana may be adversely affected by severe weather conditions as its climate, terrain and vegetation are conducive to naturally occurring fires. Such potential physical impacts of climate change on our operations are highly uncertain and would vary by operation based on particular geographic circumstances. As a result, we may face increased operational costs associated with, for example, power and supply chain disruption, delays and increased pricing. In addition, the potential for overall decreases in precipitation could affect the availability of water needed for our operations, leading to increased operating costs, or in extreme cases, disruptions to mining operations. In addition, our operations could be exposed to a number of physical risks from climate change, such as changes in rainfall rates or patterns, reduced water availability, higher temperatures and extreme weather events. Such events or conditions, including, for example, flooding or inadequate water supplies, could disrupt mining and transport operations, mineral processing and rehabilitation efforts, create resource or energy shortages or damage our property or equipment and increase health and safety risks on site. Such events or conditions could have other adverse effects on our workforce and on the communities around our mines, such as an increased risk of food insecurity, water scarcity and prevalence of disease, all of which could have a material adverse effect on our results of operations and financial condition. Each of these potential physical impacts of climate change could disrupt our operations and have a materially adverse effect on our business, financial condition and results of operations.

Our operations may also be affected by climate change regulations. Greenhouse gases are emitted by our operations as a result of fuel and energy consumption. While our operations are not presently subject to specific regulatory measures to address or limit greenhouse gas emissions, the relevant governments in the jurisdictions we operate may be bound by international or local climate change treaties, for example, the Ghanaian Government ratified the 2015 UN Framework Convention on Climate Change (also known as the Paris Agreement). As regulatory requirements in respect of climate change evolve, compliance may require additional costs and involve other unexpected effects, which could have a material adverse effect on our operations, financial condition and results of operations. As producing gold is an energy-intensive business, transitioning to a lower-carbon economy will require significant investment and may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change.

Maintaining and increasing compliance of industry standards and keeping sufficient ESG disclosure to maintain our reputation and care for local communities could increase our operation costs.

The continued success of our existing operations and future projects are in part dependent upon broad support of and a healthy relationship with the local communities in which our operations are located, in addition to conducting operations in a manner that is not detrimental to the environment. While formal permission to operate is ultimately controlled by host governments, many mining activities require social permission from host communities and influential stakeholders to carry out operations effectively, sustainably and profitably.

The consequences of negative community reaction could therefore give rise to material reputational damage which can pose obstacles to our ability to develop our projects and maintain our operations, and have a material adverse impact on the cost, profitability, ability to finance or even the viability of an operation. If our operations are delayed or shut down as a result of political and community instability, our earnings may be constrained and the long-term value of our business could be adversely impacted. Even in cases where no action adverse to us is actually taken, the uncertainty associated with such political or community instability could negatively impact the perceived value of our assets and mining investments and, consequently, have a material adverse effect on our financial condition. In order to maintain our social license to operate, we may need to design or redesign parts of our affected mining operations to minimize their impact on the relevant communities and the environment, either by changing mining plans to avoid such impact, by modifying operations, by changing planned capital expenditures, or by relocating the affected people to an agreed location.

Specifically, some of our current and potential mining activities are or may be located in or near communities that may regard such operations as having a detrimental effect on their safety or environmental, economic or social circumstances. It has become common in Laos and Ghana for communities surrounding mines to look to the mines to improve standards of living in the area. Such communities may engage in protest action, which may affect access to the mine and production.

For example, the local regulations and MEPA between mining right holders and government stakeholders in Laos stipulate that every mining right holder is required to promote local employment, advance social and economic welfare, contribute to transforming the mining industry and ensure that mining companies contribute to the development of the areas where they operate. In Ghana, the Minerals and Mining (Local Content and Local Participation) Regulations, 2020 (L.I. 2431) was passed to promote, prioritize, and facilitate local content and local participation in the entire mining sector value chain. The regulations came into force on December 22, 2020 and seek to achieve this by stipulating requirements for registration and approval by the Minerals Commission of Ghana of localization program of holders of mineral rights and service providers in the mining industry. The regulations also seek to promote the utilization of local goods and services by reserving certain specified services to only Ghanaian citizens or Ghanaian owned companies which are registered with the Minerals Commission of Ghana. Failure to comply with the social obligations could have a material and adverse impact upon our operations and may result in the suspension and/or cancellation of the environmental certificate and the corresponding suspension or stoppage of project implementation and activities.

Also, action is increasingly taken by members of the general financial and investment communities, such as asset managers, sovereign wealth funds, public pension funds, universities and other groups, to promote improvements in ESG performance by mining companies, which may impact our ability to raise funds if are perceived to have ESG deficiencies. Voluntary compliance with gold industry standards and reporting against multiple sustainability and ESG indices could result in significant costs. Stringent standards relating to responsible gold, including but not limited to the World Gold Council Conflict-Free Gold Standard and the World Gold Council Responsible Gold Mining Principles have been introduced. Additionally, the increasing demand for disclosure on performance with regard to ESG and the plethora of disclosure formats and indices being demanded, may result in significant costs to ensure and demonstrate compliance (particularly where standards change rapidly or duplication in reporting is required).

The cost of measures and other issues relating to the sustainable development of mining operations has placed significant demands on our resources and could increase capital and operating costs and have a material and adverse impact on our reputation, business, financial condition and results of operations.

The failure of a tailings storage facility could negatively impact our business, reputation and results of operations.

Mining companies face inherent risks in their operation of tailings storage facilities. Tailings storage facilities are structures designed and managed to contain fine mining waste, known as "tailings". Tailings are a by-product of mining, consisting of the processed rock or soil left over from separating the commodities of value from the rock or soil within which they occur. However, the use of tailings storage facilities exposes us to certain risks that could be detrimental to operations, the environment, and/or public health and safety that may arise from some present process or future event. Tailings storage facilities designed as upstream raised

facilities may present greater risk, particularly where the facility is located in a high seasonal rainfall area or an area of high seismic activity. When tailings storage facilities fail, the consequences can be catastrophic for communities, local economies and the surrounding environment. The occurrence of a dam failure at one of our tailings storage facilities could also lead to the loss of human life and/or extensive property and permanent environmental damage, leading to the need for a large expenditure on contingencies and on recovering the regions and people affected, and the payment of penalties, fines or other monetary damages.

Tailings facilities are in a near-constant state of change, from initial construction, during operations and until closure. This presents a significant challenge in reviewing and assessing their safety, requiring a multi-faceted program with multiple levels of safety assessment in order to be effective. We maintain measures to manage our dams' safety, including compliance with the International Council on Mining and Metals' Tailings Governance Position Statement, adoption of new safety measures, and undertaking routine reviews by independent international consulting companies. However, there can be no guarantee of the effectiveness of our designs, the construction quality of the tailings storage facilities, or that any monitoring throughout of the operations of the tailings storage facilities will identify any safety concerns. Nor can there be any guarantee that any of the measures that have been put in place to safeguard our tailings storage facilities will prevent the failure of one or more of them, or that such potential failure will be detected in advance. We also cannot guarantee that our operating partners maintain similar safety precautions or monitoring systems on their tailings storage facilities.

The failure of a dam at a tailings storage facility could lead to multiple legal proceedings and investigations, which could include class action lawsuits, criminal proceedings and public civil actions (against the Company, any of its subsidiaries and/or individuals) for significant amounts of damages.

As a result of any dam failures, additional environmental, health and safety laws and regulations may be forthcoming globally, including in jurisdictions where we operate, which may ban or curtail any storage of wet tailings or the construction or use of upstream tailings storage facilities. In addition, changes in industry standards, laws and regulations may impose more stringent conditions in connection with the licensing process of projects and operations and increased criminal and civil liability for companies, officers and contractors. For example, on August 5, 2020, the International Council on Mining and Metals (ICMM), the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) established an international tailings standard, the Global Industry Standard on Tailing Management (GISTM).

The occurrence of any of the above mentioned such risks could have a material and adverse effect on our business, financial condition and results of operations.

Our existing mining operations have a finite life and eventual closure of our operations will entail costs and risks regarding on-going monitoring, rehabilitation and compliance with environmental standards, which may exceed the provisions we have made.

Despite our efforts in identifying and acquiring additional resources in the areas surrounding our existing mines and other regions in the PRC and abroad, our existing mining operations have a finite life and will eventually close. The key costs and risks for mine closures relate to (i) long-term management of permanent engineered structures, (ii) achievement of environmental remediation, rehabilitation and closure standards (including the assessment, funding and implementation of post-closure polluted and extraneous water pumping treatment), (iii) orderly retrenchment of employees, and (iv) relinquishment of the site with associated permanent structures and community development infrastructure and programs to new owners. Please also see "Appendix IIIB — Competent Person's Report for the Sepon Gold and Copper Mine — 20 Project Qualitative Risk Analysis". The successful completion of these tasks is dependent on our ability to successfully implement of closure plan agreed with the relevant government authorities, community and employees. Any issues relating to the closure of mines in accordance with their closure plans may increase closure costs and result in handover delays, damage to our reputation if a desired outcome cannot be achieved, as well as give rise to potential liabilities if the relevant mines fail to meet the relevant closure standard or if a post-closure accident or environmental incident occurs, all of which could materially and adversely affect our business and results of operations.

We cannot guarantee that we will not be involved in claims, disputes and legal proceedings in our ordinary course of business.

From time to time, we may be involved in claims, disputes and legal proceedings in our ordinary course of business. These may concern issues relating to, among others, health and safety accidents, environmental matters, breach of contract, employment or labor disputes and infringement of intellectual property rights. As of the Latest Practicable Date, we were not involved in any litigations and legal proceedings in the PRC, Laos and Ghana that may materially affect our business and results of operations. If we are found liable on any of the claims, we would have to incur a charge against our current earnings to the extent that a reserve had not been established for the matter in our accounts, or to the extent the claims were not sufficiently covered by our insurance coverage. Claims brought by us against our customers may include claims for additional costs incurred in excess of current contract provisions arising out of delays and changes in the initial scope of work. Both claims brought against us and by us, if not resolved through negotiation, are often subject to lengthy and expensive litigation or arbitration proceedings. Amounts ultimately realized from our customers or other claims by us could differ materially from the balances included in our financial statements, resulting in a charge against earnings to the extent profit has already been accrued on a project or other contract. Charges associated with claims brought against us and write-downs associated with claims brought by us could have a material adverse impact on our businesses, financial condition, results of operations and cash flow. Moreover, legal proceedings resulting in judgments or findings against us may harm our reputation and damage our prospects to secure contracts in the future.

We may not be able to detect and prevent fraud, bribery or other misconduct committed by our employees or third parties, and any actual or alleged misconduct may lead to censure, penalties, fines, sanctions, loss of licenses or permits and may negatively impact our reputation.

We operate globally in multiple jurisdictions and with numerous and complex legal frameworks, applicable rules, codes and standards, and our governance and compliance framework and implemented processes may not always prevent potential breaches of law or accounting or other governance practices. We may be exposed to fraud, bribery, or other misconduct committed by our employees or third parties that could subject us to financial losses and sanctions imposed by governmental authorities, which may adversely affect our reputation. Our internal control procedures are designed to monitor our operations and ensure overall compliance. However, our internal control procedures may be unable to identify all incidents of non-compliance or suspicious transactions or incidents of corruption or bribery in a timely manner or at all. Furthermore, it is not always possible to detect and prevent fraud, bribery, and other misconduct, and the precautions we take to detect and prevent such activities may not be effective. There can be no assurance that fraud, bribery, or other misconduct will not occur in the future. If such fraud, bribery, or other misconduct does occur, it may cause negative publicity and damage our reputation as a result.

The occurrence of any of these events could have a material adverse effect on our business, financial condition and results of operations.

We are subject to regulatory or legislative impositions of various costs, and such legislative changes to which may have a material adverse effect on our operations and profits.

In recent years, governments (local and national), communities, non-governmental organizations and trade unions in several jurisdictions, have sought and, in some cases, have implemented greater costs on the mining industry, including, for example, the imposition of additional taxes and royalties, and relevant policies.

For example, in Ghana, the ownership of land on which there are mineral deposits is separate from the ownership of the minerals, as minerals are the property of the Ghanaian Republic and are vested in the president in trust for the people of Ghana. Under the Ghanaian Minerals and Mining Act, 2006 (Act 703) ("**Minerals and Mining Act**"), the Government of Ghana has a statutory right to a free 10% carried interest in the rights and obligations of all mineral operations in Ghana. In addition, stool/land rents of approximately US$3.2 per acre are payable to the Government of Ghana. Furthermore, under the Minerals and Mining Act the Ghanaian Minister of Lands and Natural Resources has the right of pre-emption over all minerals obtained in Ghana and products derived from the refining or treatment of these minerals. In February 2018, the Government of Ghana announced that it would implement a new audit program targeted at mining companies in Ghana, and as such, we may be subject to additional audits that could result in the reversal of currently recorded tax losses or additional tax expenses. On July 31, 2018, the Ghanaian Minister of Lands and Natural Resources

informed the Ghanaian Chamber of Mines of the Government of Ghana's intention to exercise its right of pre-emption to acquire up to 20% of all gold mined in Ghana for the benefit of Ghanaian refineries. In November 2022, the Government of Ghana directed all gold mining companies, effective January 2023 to sell up to 20% of their products to the Bank of Ghana to be paid for at the World Market Spot Price in Ghanaian Cedis. We generally are able to utilize all Ghanian Cedis for our operating expenses, but there is a risk that our holding of Ghanaian Cedis is subject to fluctuation and foreign exchange loss.

For the details of the taxes and royalties that we are subject to, see the section headed "Regulatory Overview" in this Document. The policies adopted may impose additional restrictions, obligations, operational costs, taxes or royalty payments on gold mining companies, including us, any of which could have a material adverse effect on our business, financial condition and results of operations.

We are exposed to credit risk in relation to defaults of our trade counterparties.

During the Track Record Period, we had trade receivables primarily relating to our sale of gold, copper cathode and the concentrate mineral powder of copper, lead and zinc. As of December 31, 2021, 2022 and 2023 and three months ended March 31, 2024, our trade receivables from comprehensive recycling of resources business amounted to RMB311.4 million, RMB339.2 million, RMB397.5 million and RMB407.1 million, respectively, and our trade receivables from other sales amounted to RMB25.3 million and RMB29.6 million, RMB115.7 million and RMB85.1 million, respectively. Our trade receivables turnover days 31 days, 21 days, 22 days and 25 days for the periods ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, respectively. We have implemented a customer credit assessment system to evaluate the creditworthiness and financial condition of our customers. There can be no assurance that all of our counterparties are creditworthy and reputable and will not default on us in the future, despite our efforts to conduct credit assessments on them. In addition, our sales contracts with customers allow them to terminate the contracts upon the occurrence of certain events. There is limited financial or public information on many of our counterparties, and as a result, we are exposed to risks that our counterparties may fail to fulfil their obligations to us under our contracts.

We face high concentration of customers during the Track Record Period and the loss of one or more of these customers could adversely affect our business, financial condition, and results of operations.

Due to the nature of our business and industry norm, we have a limited customer base and face high concentration of a small number of customers for a significant portion of revenues. During the Track Record Period, our top five customers were refiners of precious metals and other non-ferrous metals as well as trading companies. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, revenue contributed by our top five customers amounted to RMB2,946.2 million, RMB5,345.8 million, RMB5,565.6 million and RMB1,591.1 million, respectively, accounting for 77.9%, 85.4%, 77.1% and 85.8% of our total revenue. Revenue contributed by our largest customer, which is a global large-scale precious

metal assayer, refiner and mint, amounted to RMB2,126.6 million, RMB2,602.2 million, RMB2,672.1 million and RMB722.6 million, for the same periods, accounting for 56.2%, 41.5%, 37.0% and 39.0% of our total revenue. Although there are readily available customer and a diversified customer portfolio to mitigate potential customer attrition, we cannot assure that our business will be unaffected by changes in our customer composition. Shifts in our customer base may significantly impact our revenue and profitability, particularly in the event of a reduction or termination of business with key customers.

We are subject to risks related to our various financing activities, such as hedging activities. We also face exposure to fair value change. Fluctuations in fair value of our financial assets at FVOCI and derivative financial instruments would adversely affect our financial results.

During the Track Record Period, we entered into gold leasing contracts, in which we leased gold from commercial banks to supplement our working capital. We usually enter into forward contracts under which we agree to purchase the same amount of gold, at the same price and on the maturity date of the gold leasing contracts to repay the leased gold (as well as payment of the leasing fees) to effectively hedge our position under gold leasing contracts. Hedging instruments, such as gold forward sales contracts, were utilized during the Track Record Period to lock up part of our future gold sales revenue in view of the volatility in gold price. There can be no assurance that the use of hedging techniques will always benefit us. Gold hedging instruments may prevent us from realizing the full benefit of potential subsequent increases in the gold price, which would cause us to record a mark-to-market loss in the consolidated income statements.

The fair value of these transactions is recorded as financial liabilities at fair value through profit or loss in our consolidated statement of financial position. We recorded the gains or losses from, and fair value changes of, these transactions as other gains or as finance costs in our consolidated statement of profit or loss. We recorded fair value loss on gold leasing contracts at RMB3.1 million, RMB30.4 million, RMB63.4 million and RMB10.3 million in 2021, 2022, 2023 and for the three months ended March 31, 2024, respectively.

Changes in gold price may affect the effectiveness of our hedging and gold leasing contracts. Gold price has been fluctuating in the global market and we will continue to assess whether to enter into further hedging or gold leasing activities. In addition, our business, financial condition and results of operations could be materially and adversely affected if for any reason our gold production is unexpectedly interrupted and, as a result, we are unable to produce sufficient gold to cover any hedging or gold leasing contracts that we have entered into. There is also a risk that the counterparty to any hedging transaction could default on its obligations. Without hedging transactions, we may not be able to lock in our selling price when the gold price decreases, which may reduce the revenue that we may receive. Moreover, we may experience cash flow problems if we do not continue to, or are unable to, engage in gold leasing.

Any of the above could have a negative impact on our business, financial condition and results of operations.

We may incur impairment losses related to our mining rights and related assets, which may adversely affect our results of operations.

Based on our accounting policy, our subsurface use rights are amortized using the production method, based on proven and probable reserves, from the time of the beginning of ore mining. The process of Reserve estimate is inherently uncertain and complex and requires significant judgments and decisions based on available geological, engineering and economic data. If the value of our mining rights is over-estimated, the over-estimated amounts will be recognized as impairment losses, which in turn may have a material adverse effect on our result of operations. The carrying amount of the property, plant and equipment, including exploration and evaluation assets, is tested by us for impairment whenever facts and circumstances indicate assets' impairment in accordance with our accounting policy. Any material decrease of our Reserve may result in impairment on the carrying value of our mining rights and related assets, and this may have a material adverse effect on our business, financial condition and results of operations.

We are exposed to the risk of obsolescence and impairment of our inventory.

Our inventories primarily consist of raw materials, work-in-progress, finished goods and consumable materials. While our work-in-progress and finished goods are not exposed to the risk of obsolescence since they do not deteriorate easily, we made provision for write-down of inventories for certain low-value consumption goods. When the carrying amount of inventories is greater than their net realizable value at the end of a period, we will write down our inventory to net realizable value and record a provision of write-down of inventories. Our provision for write-down of inventories decreased from RMB298.7 million as of December 31, 2021 to RMB250.1 million as of December 31, 2022 and decreased to RMB190.9 million as of December 31, 2023, and increased to RMB196.4 million as of March 31, 2024. Assumptions regarding gold price and recovery rate will have impact on the assessment of the value of our inventories.

We have been actively managing our inventory to effectively plan our production to avoid stocking out and to minimize the risk of obsolescence of our inventory. Maintaining inventory at a proper level due to various factors, including but not limited to delivery delay, product quality not meeting standard, may result in interruptions in our production, failure to achieve anticipated production expansions, excessive purchases, etc. Excessive inventory on hand may increases the risk of inventory obsolescence, we may need to either sell off such inventory at a lower price to third parties or write off such inventory, in the event of which our financial condition and results of operations may be adversely affected.

We rely on information technology and communications systems, the failure of which may significantly and adversely impact our operations and business.

We rely on our information technology and communications systems, such as our transportation monitoring and GPS system, toxic gas monitoring system, underground personnel locating system, and office approval and financial reporting system. These systems are vital to our operations. Our information technology and communications systems could be exposed to, among other things, damage or interruption from telecommunications failure, unauthorized entry and malicious computer code, fire, natural disaster, power loss, industrial action and human error. While we have backup systems in place, the occurrence of any of the above may also disrupt our information technology and communications systems and may lead to important data (including, for example, geophysical and geological data) being irretrievably lost or damaged.

Such damage or interruption may adversely affect our business, financial condition and results of operations.

Our risk management and internal control systems may not fully protect us against various risks inherent in our business.

We have established risk management and internal control systems consisting of the relevant organizational framework policies, risk management policies and internal control procedures to manage our risk exposures, primarily our operational risk, legal risk and liquidity risk. However, during the Track Record Period, there were deficiencies in our internal control and corporate governance measures in relation to anti-fraud management, procurement management, transfer pricing management, HR management, and payment control. We need to continuously improve our internal control systems and fix such deficiencies, failure of which may cause losses from both a financial perspective and regulatory perspective. Moreover, we may not be successful in implementing our risk management and internal control systems. While we seek to continue to enhance such systems from time to time, there can be no assurance that our risk management and internal control systems are adequate or effective notwithstanding our efforts, and any failure to address any potential risks and internal control deficiencies could materially and adversely affect our business, financial condition and results of operations.

Since our risk management and internal control systems depend on their implementation by our employees, there can be no assurance that all of our employees will adhere to such policies and procedures, and the implementation of such policies and procedures may involve human errors or mistakes. Moreover, our growth and expansion may affect our ability to implement stringent risk management and internal control policies and procedures as our business evolves. If we fail to timely adopt, implement and modify, as applicable, our risk management and internal control policies and procedures, our business, financial condition and results of operations could be materially and adversely affected.

Share-based compensation expenses may cause shareholding dilution to our existing Shareholders and have a material and adverse effect on our financial performance.

We have adopted a share incentive plan for the benefit of our directors, senior management and key employees as remuneration for their outstanding services provided to us to incentivize and reward eligible persons who have contributed to our success. To further incentivize our directors, senior management and key employees to contribute to us, we may grant additional share-based compensation in the future. Issuance of additional Shares with respect to such share-based payment may dilute the shareholding percentage of our existing Shareholders. Expenses incurred with respect to such share-based payment may also increase our operating expenses and, therefore, have a material and adverse effect on our financial performance.

RISKS RELATING TO DOING BUSINESS IN LAOS AND GHANA

Artisanal mining, gold theft and robbery may occur on some of our properties. These activities are difficult to control and can disrupt our business and expose us to liability.

Artisanal mining activities, theft and robbery of gold bearing materials and production inputs are common in Laos and Ghana. Illegal mining is mining activity that is carried out without land rights, mining license, exploration or transportation permit, or any document that can legitimate the ongoing operations. It is generally associated with a number of negative impacts, including poor working practices, corruption, child labor and human trafficking. Effective local government administration is often lacking in the locations where illegal and artisanal miners operate because of rapid population growth and the lack of functioning structures which can create a complex and unstable social environment. Activities of the illegal miners and artisanal miners may cause pollution or other damage to our properties, including, for example, underground fires, or personal injury or death, for which we may potentially be held liable. In addition, activities of artisanal mining may cause safety concerns and a negative image of our Company. In particular, artisanally-mined gold channeled through large-scale mining operators like us may impact negatively on the reputation of our Company as well as the industry. Illegal miners are often assisted by a syndicate of employees of legal mining operations. Consequently, in the event that our employees are found to be assisting illegal miners we will be required to dismiss all implicated employees, and this may result in labor unrest. Illegal mining activities could also result in depletion of mineral deposits, potentially making the future mining of such deposits uneconomic. The presence of illegal miners could lead to project delays and disputes regarding the development or operation of commercial gold deposits.

Any theft or robbery of gold may reduce the amount of gold that we are able to recover from our operations. Rising gold prices may increase the likelihood such thefts or robbery occurring. There can be no assurance that our security measures will effectively prevent illegal activities — which may be committed by third parties, employees or former employees — from happening in the future, or, in such case, that our insurance will be adequate to recover part

or all of our loss (if any). Illegal mining, gold theft and robbery could result in lost Ore Reserves, mine stoppages, and have a material and adverse effect on our business, results of operations and financial position.

Economic, political or social instability and security risks as well as shifts in political and social attitudes affecting Laos and Ghana may have a material adverse effect on our operations and profits.

We generate a substantial amount of gold and copper production from Laos and Ghana, representing 42.3% and 29.6% of our revenue in 2023, respectively. As a result, changes or instability affecting the economic, political or social environment in Laos and Ghana or in neighboring countries could materially and adversely affect our operations and profitability. The Laotian and Ghanaian environments are subject to changes in a manner that may be materially adverse to us, including changes to government policies and regulations governing mining production, foreign investment, price controls, import and export control, tariffs, subsidies, income and other forms of taxation (including policies relating to the granting of advance rulings on taxation matters), nationalization or expropriation of property, repatriation of income, royalties, the environment and health and safety.

In Laos and Ghana, we are exposed to a greater than average risk of overt or effective expropriation or nationalization. For example, under the Minerals and Mining Act, the Ghanaian Minister of Lands and Natural Resources has the right of pre-emption over all minerals obtained in Ghana and products derived from the refining or treatment of these minerals. On July 31, 2018, the Minister of Lands and Natural Resources informed the Ghanaian Chamber of Mines of their intention to exercise their right of pre-emption to acquire up to 20% of all gold mined in Ghana for the benefit of Ghanaian refineries. In November 2022, the Ghanaian Government directed all gold mining companies, effective January 2023, to sell up to 20% of their produce to the Bank of Ghana at the World Market Spot Price in Ghanaian Cedis.

In recent years, major rating agencies have lowered or maintained a relatively low sovereign credit rating of Laos and Ghana. Downgrading, or the expected downgrading, of Laos and Ghana's sovereign credit ratings to non-investment grade status by major credit rating agencies have caused a loss of investor confidence and resulted in widening credit spreads, increased credit losses and tighter credit conditions, which have generally adversely affected the overall Laotian and Ghanaian economies, as well as their respective gold mining industries. Given that we operate in these jurisdictions, our business, financial condition and results of operations may be adversely affected, as it may be more difficult for us to secure external financing and, where such external financing is secured, may be at greater borrowing costs and on more restrictive terms.

In addition, there are difficult security environments in both Laos and Ghana as a result of high levels of unemployment, inflation and poverty in the countries. Significant security challenges remain in areas where we have operations, and we may experience instances of

injury to security personnel, including members of our internal security and third-party security providers we engage, from time to time. Any such instances could disrupt our operations and adversely affect our reputation, results of operations and financial condition.

There is also a skills deficiency across many sectors in Laos and Ghana, including the mining industry, and we face intense competition from other mining companies. As a result, we may have difficulty attracting and retaining key employees at all levels with the appropriate technical skills and operating and managerial experience necessary to operate and supervise the different parts of our business. There has also been regional political and economic instability and civil unrest in certain of the countries surrounding Laos and Ghana. Any similar political or economic instability or other uncertainty in Laos and/or Ghana could have a negative impact on our business operations and our financial performance.

Financial and securities markets in Laos and Ghana are influenced by global economic and market conditions. Laos and Ghana's economies remain vulnerable to external shocks, including those relating to, or similar to, the global financial crisis of 2007-2008 and the uncertainties surrounding the Asia-Pacific and the Sub-Saharan Africa regions. Although economic conditions vary from country to country, investors' perceptions of events occurring in one country may substantially affect capital flows into and investments in securities in other countries. In particular, each of Laos and Ghana's economy is also vulnerable to adverse developments affecting its principal trading partners. Deterioration of the economies of their major trading partners, such as the PRC or the United States, could have a material adverse impact on Laos' and Ghana's balance of trade and adversely affect Laos' and/or Ghana's economic growth and may consequently adversely affect the financial condition and results of operations of LXML and GSWL. Consequently, there can be no assurance that the Laotian and Ghanaian financial system and securities markets will not continue to be adversely affected by events in other regional economies or markets, which could, in turn, adversely affect the Laotian and/or the Ghanaian economy and, as a consequence, the financial condition and results of operations of LXML and GSWL.

In addition, economic and political instability in regions outside of the jurisdictions where we operate and geopolitical events, such as the Russo-Ukrainian War and Israeli-Palestinian conflict, may result in unavoidable uncertainties and events. These uncertainties and events could negatively affect costs of business, cause volatility in commodity prices, currency exchange rates, interest rates and worldwide political, regulatory, economic or market conditions. They could also cause instability in political institutions, regulatory agencies and financial markets.

Occurrence of any of the above-mentioned developments could result in our operations experiencing opposition or disruptions. Such opposition or disruption to any of our operations, in particular if it has an adverse impact or cost or causes any stoppages (including, for example, as a result of any protests aimed at government and other mining operations that affect operations), could have a material and adverse effect on our business, financial condition and results of operations.

It may be difficult for the Hong Kong regulators to obtain information or call for regulatory assistance in Laos where circumstances necessitate in the course of overseeing us as a [REDACTED] company by the regulations in Hong Kong.

Our Directors and us, which will be regulated by the SFO and other applicable laws and regulations in Hong Kong upon the [**REDACTED**], shall be required to provide the SFC with all information relating to our business in Laos that is necessary for its investigation of our affairs as may be required under Hong Kong laws or regulations. However, as the Laos has not signed any regulatory cooperation agreement or memorandum of understanding with the SFC or the Hong Kong Stock Exchange, nor is it a member of the International Organization of Securities Commissions (the "**IOSCO**") or a signatory to the IOSCO Multi-lateral Memorandum of Understanding (the "**IOSCO MMOU**"), it may be difficult for the Hong Kong regulators to obtain information or call for regulatory assistance in Laos where circumstances necessitate in the course of overseeing us as a [**REDACTED**] company by the regulations in Hong Kong.

Although we continue to grow our operations in our core markets and expand our presence into further global jurisdictions, we will continuously monitor our local business operations and business expansion rate in Laos on an ongoing basis. Our management will also report periodic information of the revenue generated by our operating entities in Laos to our Board of Directors. We will take necessary steps with respect to access to our Laotian operating entities' books and records and fully cooperate with regulatory requests in order to facilitate the Hong Kong Stock Exchange and the SFC's access to information of these operating entities based abroad.

Our business and operations may be adversely affected by union activity and new and existing labor laws.

Our employees in Ghana are highly unionized, and unions hence have a significant impact on the general labor relations environment. Trade unions are active in Ghana and advocate for improved conditions of employment and change to labor regulations, and to promote various political and social goals by using their collective power and ability to withhold labor. The broader labor relations climate also remains fragile in Ghana.

In Laos, while employees are not highly unionized, unions are maintained within large organizations and recognized at the organization, provincial and district level, and are organized under the Lao Federation of Trade Unions.

Therefore, union involvement in wage negotiations and collective bargaining increases the risk of strike action and rising labor costs. Wage negotiations in other industries and other mining sectors may influence the stance unions take toward the industry in which we operate.

Our employees might exercise their right to strike within the ambit of the legislations, such as the Labor Law of the Lao People's Democratic Republic and Ghanaian Labor Act, 2003 (Act 651), and in which case, it could have a material and adverse effect on both our business and reputation, and the operation of our mines could be disrupted. Our employees might

exercise their right to strike per the relevant local laws and regulations, and, in such case, it could have a material and adverse effect on both our business and reputation, and the operation of our mines could be disrupted.

We may be exposed to various diseases or public health emergency that result in loss of productivity and increased costs.

In Ghana and Laos, we face the potential risk of various contagious diseases, including tuberculosis, yellow fever, malaria, and dengue fever. An outbreak of such diseases or a public health emergency could have a substantial impact on our operations in terms of reduced productivity and increased medical and other costs. These health threats can impair the health of workers and negatively affect our operations and financial position as a result of workers' diminished focus or skill, absenteeism, treatment costs and allocated resources. Furthermore, our financial position may be jeopardized by the cumulative effects of these factors. Any current or future medical program may not be successful in preventing or reducing the infection rate amongst our employees or in affecting consequent illness or mortality rates. We may incur significant costs in addressing these issues in the future, which could also adversely impact our results of operations and financial condition.

RISKS RELATING TO OUR DOING BUSINESS IN THE PRC

The economic landscape of PRC is subject to change and the future performance of China's economy is uncertain.

We conduct our business and generate a portion of our revenue in the PRC. As a result, economic developments in the PRC have a significant effect on our business, financial condition, results of operations and prospects. In recent years, the PRC has been one of the world's fastest growing economies in terms of GDP growth. However, the COVID-19 outbreaks have caused disruption to the global economy, which may in the future continue to have an impact on the PRC's economy. Any significant slowdown in the PRC's economy could have a material adverse effect on our business and operations. In particular:

- during a period of economic slowdown, there is a greater likelihood that more of our customers or contractual parties could become delinquent in respect of their obligations to us;

- we may not be able to raise additional capital on terms that are commercially favorable to us, or at all; or

- trade and capital flows may further contract as a result of protectionist measures introduced in certain markets, which could cause a further slowdown in economies and materially and adversely affect our business and prospects.

In addition, factors such as consumer, corporate and government spending, business investment, volatility of the capital markets and inflation all affect the business and economic environment, the growth of the PRC's mining industry and ultimately, the profitability of our business. Our labor and other costs may also increase due to pressure from inflation. Any future

calamities, such as natural disasters, outbreaks of contagious diseases or social unrest, may cause a decrease in the level of economic activities and adversely affect the economic growth in the PRC, Asia and elsewhere in the world.

As such, if the PRC's economy experiences significant adverse developments or a significant downturn, our business, financial condition and results of operations would be materially and adversely affected.

Changes in the economic, political and social conditions in the PRC may have a material adverse effect on our business, financial condition and results of operations.

A portion of our assets are located in the PRC and a portion of our revenue is derived from our business in the PRC. Accordingly, our business, financial condition, results of operations and prospects are, to a material extent, subject to economic, political and legal developments in the PRC. The PRC economy differs from the economies of developed countries in many respects, including, among other things, government involvement, level of economic development, growth rate and resources allocation.

In recent years, the PRC Government has implemented measures emphasizing the utilization of market forces in economic reform and the establishment of sound corporate governance practices in business enterprises. These economic reform measures may be adjusted or modified, or applied inconsistently, from industry to industry or across different regions of the country. If the business environment in the PRC changes, our business in the PRC may also be materially and adversely affected.

You may have limited recourse in effecting services of legal process or enforcing overseas judgments against us, our Directors, Supervisors and our senior management.

Most of our Directors and executive officers reside within the PRC, and some of our company's assets and the assets of those persons are located within the PRC. It may be difficult, complicated and time-consuming for investors to effect service of process upon us or those persons inside the PRC or to enforce against us or them in the PRC any judgments obtained from non-PRC courts.

A judgment of a court of another jurisdiction may only be reciprocally recognized or enforced if the jurisdiction has a treaty with the PRC or if the judgment complies with the principle of reciprocity and do not violate the basic principles of the PRC laws, national sovereignty, security, social interests and public interests, subject to the satisfaction of other requirements. On January 25, 2024, the Supreme People's Court issued the Arrangement on Mutual Recognition and Enforcement of Judgments in Civil and Commercial Matters by Courts of the Mainland and of the Hong Kong Special Administrative Region (關於內地與香港特別行政區法院相互認可和執行民商事案件判決的安排) (the "**Arrangement**"), which was implemented on January 29, 2024. Under the Arrangement, any relevant party may apply to the relevant PRC court or Hong Kong court for recognition and enforcement of a final court judgment in civil and commercial cases subject to the conditions set forth in the Arrangement.

Although the Arrangement has come into effect, uncertainties remain as to the outcome and effectiveness of any action brought under the Arrangement. The recognition and enforcement of foreign judgments are provided for under the PRC Civil Procedures Law. Courts in mainland China may recognize and enforce foreign judgments in accordance with the requirements of the PRC Civil Procedures Law on basis of either on (i) the treaties between mainland China and the country where the judgment is made or (ii) on principles of reciprocity between jurisdictions. In addition, according to the PRC Civil Procedures Law, the courts in mainland China will not enforce a foreign judgment against us or our Directors and officers if they decide that the judgment violates the basic principles of PRC law or national sovereignty, security or public interest. As a result, in case of violation of the above principles, there is no assurance that a judgment rendered by a court outside the PRC would be recognized and enforced in a court in mainland China.

Gains on the sales of H Shares and dividends on the H Shares may be subject to PRC income taxes.

Under the applicable PRC tax laws, both the dividends we pay to non-PRC resident individual holders of H shares ("**non-resident individual holders**"), and gains realized through the sale or transfer by other means of H shares by such Shareholders, are subject to PRC individual income tax at a rate of 20%, unless reduced by the applicable tax treaties or arrangements.

Under applicable PRC tax laws, the dividends we pay to, and gains realized through the sale or transfer by other means of H shares by non-PRC resident enterprise holders of H shares ("**non-resident enterprise holders**"), are both subject to EIT at a rate of 10%, unless reduced by applicable tax treaties or arrangements. Pursuant to the Arrangements between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Incomes (內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排) dated August 21, 2006, any non-resident enterprise registered in Hong Kong that holds, directly, at least 25% of the shares of our Company shall pay Enterprise Income Tax for the dividends declared and paid by us at a tax rate of 5% if the Hong Kong non-resident enterprise is the beneficial owner of the equity and certain other conditions are met.

For non-resident individual holders, gains realized through the transfer of properties are normally subject to PRC individual income tax at a rate of 20%. However, according to the Circular of the Ministry of Finance and the State Taxation Administration on Issues Concerning Individual Income Tax Policies (財政部、國家税務總局關於個人所得税若干政策問題的通知) effective as of May 13, 1994, income received by individual foreigners from dividends and bonuses of a foreign-invested enterprise are exempt from individual income tax for the time being. According to the Circular Declaring that Individual Income Tax Continues to Be Exempted over Individual Income from Transfer of Shares issued by the MOF and the STA (關於個人轉讓股票所得繼續暫免徵收個人所得税的通知) effective as of March 30, 1998, income from individuals' transfer of stocks of listed companies continued to be temporarily exempted from individual income tax. On February 3, 2013, the State Council approved and promulgated

the Notice of Suggestions to Deepen the Reform of System of Income Distribution (國務院批轉發展改革委等部門關於深化收入分配制度改革若干意見的通知). On February 8, 2013, the General Office of the State Council promulgated the Circular Concerning Allocation of Key Works to Deepen the Reform of System of Income Distribution (國務院辦公廳關於深化收入分配制度改革重點工作分工的通知). According to these two documents, the PRC Government is planning to cancel foreign individuals' tax exemption for dividends obtained from foreign-invested enterprises, and the Ministry of Finance and the State Taxation Administration should be responsible for making and implementing details of such plan. However, relevant implementation rules or regulations have not been promulgated by the Ministry of Finance and the State Taxation Administration.

Considering these uncertainties, non-resident holders of our Shares should be aware that they may be obligated to pay PRC income tax on the dividends and gains realized through sales or transfers of the H shares.

Policies regarding foreign currency conversion may affect our foreign exchange transactions and our ability to pay dividends and meet other obligations.

During the Track Record Period, we received our revenue both in Renminbi and U.S. dollars. Currently, the conversion of RMB into foreign currency has to comply with the relevant laws and regulations and remittance of foreign currencies are subject to the PRC foreign exchange regulations. We may have to convert a portion of our revenue into other currencies to meet our foreign currency obligations, such as payments of dividends declared in respect of our H Shares, if any, and settlement of foreign investment. Shortage in the availability of foreign currency may restrict the ability of our Group to remit sufficient foreign currency out of the PRC, or otherwise satisfy our foreign currency denominated obligations.

Under existing PRC foreign exchange regulations, payments of current account items, such as profit distributions and trade and service-related foreign exchange transactions, can be made in foreign currencies without prior approval from the SAFE, by complying with certain procedural requirements. However, approval from or registration with appropriate governmental authorities is required where RMB is to be converted into foreign currency and remitted out of the PRC to pay capital expenses under the capital account such as the repayment of loans denominated in foreign currencies.

The policies regarding foreign exchange transactions under the current account and the capital account may not necessarily continue in the future. In addition, these foreign exchange policies may restrict our ability to obtain sufficient foreign exchange, which could have an adverse effect on our foreign exchange transactions and the fulfilment of our other foreign exchange requirements. If there are changes in the policies regarding the payment of dividends in foreign currencies to shareholders or other changes in foreign exchange policies resulting in insufficient foreign exchange, our payment of dividends in foreign currencies may be affected.

If we fail to comply with environmental, health and safety laws and regulations, we could be subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations and related inquiries in relation to our production processes. For example, our construction projects are subject to Regulations on the Administration of Construction Project Environmental Protection (《建設項目環境保護管理條例》), and its environmental impact assessment documents shall be approved by the relevant environmental protection department. Our production plants and the facilities we use are subject to regular inspections by the regulatory authorities for compliance with the Safe Production Law of the PRC (《中華人民共和國安全生產法》) and Regulation on Work Safety Permits (《安全生產許可證條例》). Furthermore, under the PRC Labor Law (《中華人民共和國勞動法》) and Law of the PRC on the Prevention and Treatment of Occupational Diseases (《中華人民共和國職業病防治法》), we must ensure that our facilities comply with the PRC standards and requirements on occupational health and safety conditions for employees.

As of the Latest Practicable Date, we are in the process of obtaining one environmental impact assessment approval for project under construction from the relevant environmental protection department. As advised by our PRC Legal Advisor, the risk of material administrative penalty for such noncompliant incident is remote and does not have a material and adverse effect on our business operation, and will not materially jeopardize the proposed [**REDACTED**].

As of the Latest Practicable Date, we had submitted the materials for the extension of the safety production permit and we are in the process of obtaining one updated safety production permit. There are no provisions for administrative penalties against the company for failing to complete the renewal application before the expiration of the certificate and we had not been imposed administrative actions, nor received any notice from the competent authorities. As advised by our PRC Legal Advisor, it does not have a material and adverse effect on our business operation, and will not materially jeopardize the proposed [**REDACTED**].

However, there can be no assurance that any new laws and regulations or any changes in the implementation of the existing laws and regulations will not require us to pay any contribution shortfall retroactively or any administrative penalties. And we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions, thereby adversely affecting our financial condition and results of operations.

Implementation and enforcement of the labor laws and regulations in China may adversely affect our business and results of operations. Failure to fully comply with PRC labor-related laws may expose us to potential liabilities and penalties.

Pursuant to the PRC Labor Contract Law (中華人民共和國勞動合同法) that took effect in January 2008, with its amendment that took effect in July 2013, and its implementation rules that took effect in September 2008, (the "**Labor Contract Law**") employers are subject to strict requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employees' probation and unilaterally terminating labor contracts. Due to lack of detailed interpretative rules and broad discretion of the local competent authorities, it is uncertain as to how the Labor Contract Law and its implementation rules will affect our current employment policies and practices. Our employment policies and practices may violate the Labor Contract Law or its implementation rules, and we may thus be subject to related penalties, fines or legal fees. Compliance with the Labor Contract Law and its implementation rules may increase our operating expenses, in particular our personnel expenses. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the PRC Labor Contract Law and its implementation rules may also limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations.

On October 28, 2010, the Standing Committee of the NPC promulgated the PRC Social Insurance Law (中華人民共和國社會保險法), which became effective on July 1, 2011 and was amended on December 29, 2018 and took effect on the same date (the "**Social Insurance Law**"). According to the Social Insurance Law, employers should make the social insurance registration and employees must participate in pension insurance, work-related injury insurance, medical insurance, unemployment insurance and maternity insurance and the employers must, together with their employees or separately, pay the social insurance premiums for such employees. Recently, the PRC Government enhanced its measures relating to social insurance collection, which may lead to stricter enforcement.

Pursuant to the Regulations on Management of Housing Provident Fund (住房公積金管理條例) promulgated by the State Council on April 3, 1999 and took effect on the same date, which was amended, supplemented or otherwise modified from time to time and was lately amended on March 24, 2019 to take effective on the same date, employers must open housing provident fund account and pay housing provident fund for its employees. However, our social insurance and/or housing provident fund policies and practices may in the future be found to have violated the relevant laws regulations, and we may therefore be subject to related administrative measures, penalties, fines or legal fees. Compliance with the relevant laws and regulations may increase our operating expenses, in particular our personnel expenses.

As the interpretation and implementation of labor laws and regulations are still evolving, there can be no assurance that our employment practice policy and will at all times be deemed to be in full compliance with labor-related laws and regulations in China, which may subject

us to labor disputes or government investigations. If we are deemed to have violated relevant labor laws and regulations, we could be required to provide additional compensation to our employees and our business, financial condition and results of operations could be materially and adversely affected.

As of the Latest Practicable Date, we had not paid the social insurance and/or housing provident funds for some of our employees, and we had not been imposed administrative actions, nor received any notice from the competent authorities ordering rectification or specifying deadline for payment of outstanding fees or administrative penalties in respect of social insurance and housing provident fund. As advised by our PRC Legal Advisor, the enforcement risk for such non-compliant incidents is remote and does not have a material and adverse effect on our business operation, or materially jeopardize the proposed [**REDACTED**]. However, there can be no assurance that any new laws and regulations or any changes in the implementation of the existing laws and regulations will not require us to pay any contribution shortfall retroactively or any administrative penalties, thereby materially and adversely affecting our financial condition and results of operations.

We have not obtained title certificates for some of our properties and some of our lessors may lack title certificates for properties leased to us, which could materially and adversely affect our right to use such properties.

We have certain title defects relating to the lands or properties that we own, use or lease. For example, a failure to obtain construction approval documents, apply for changes in the type of land use rights, or go through the rental registration procedures for housing leases. As advised by our PRC Legal Advisor, the risk of administrative penalty for such non-compliant incident is remote and does not have a material and adverse effect on our business operation, or materially jeopardize the proposed [**REDACTED**]. Nevertheless, there can be no assurance that we will not be subject to challenges, lawsuits or other actions taken against us with respect to the lands or properties owned, used or leased by us for which we or the relevant lessors do not hold perfected title certificates. Furthermore, we may be subject to fines and penalties imposed by government authorities with respect to certain title defects.

The PRC legal system is evolving and may have uncertainties that could limit the legal protection available to us and investors.

The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions under the civil law system may be cited for reference but have limited precedential value.

In late 1970s, the PRC Government began to promulgate a comprehensive system of laws and regulations governing economic matters in general. The overall effect of legislation since then has significantly enhanced the protections afforded to various forms of foreign investments in China. However, recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. In particular, the interpretation and enforcement of these laws and regulations involve uncertainties.

In addition, administrative proceedings and judicial procedures in China may be protracted, which could result in higher costs and diversion of resources and management attention. Since PRC administrative and court authorities have discretion in interpreting and implementing statutory provisions and contractual terms, it may be difficult to evaluate the outcome of administrative and court proceedings. These uncertainties may affect our judgment on the relevance of legal requirements and our ability to enforce our contractual rights or tort claims.

RISKS RELATING TO THE [REDACTED]

Our A Shares were listed in China in 2004, and the characteristics of the A Share and H share market may differ.

Our A Shares were listed and traded on the Shanghai Stock Exchange in 2004. Following the [**REDACTED**], our A Shares will continue to be traded on the SSE, and our H Shares will be [**REDACTED**] on the Hong Kong Stock Exchange. Without regulatory approval, our A Shares and H Shares are neither convertible into nor fungible with each other. The A share and H share markets have different characteristics, including different [**REDACTED**] and [**REDACTED**] and different [**REDACTED**] bases. As a result of these differences, the [**REDACTED**] of our A Shares and H Shares may not be the same. Fluctuations in the price of our A Shares may adversely affect the [**REDACTED**] of our H Shares, and vice versa. Due to the different characteristics of the A share and the H share markets, the historical prices of our A shares may not be indicative of the performance of our H Shares. You should not rely on the prior trading history of our A Shares when evaluating an [**REDACTED**] in our H Shares. Past performance is no guarantee of future results.

There has been no prior public market for our H Shares, and an active [REDACTED] market for our H Shares may not develop or be sustained.

Prior to the [**REDACTED**], there was no public market for our H Shares. There can be no assurance that the [**REDACTED**] will result in the development of an active, liquid [**REDACTED**] market for our H Shares. The initial [**REDACTED**] for our H Shares to the public will be the result of negotiations between us and the [**REDACTED**] (for itself and on behalf of the [**REDACTED**]), and the [**REDACTED**] may differ significantly from the market price of the H Shares following completion of the [**REDACTED**].

We have applied to the Hong Kong Stock Exchange for the [**REDACTED**] of, and permission to [**REDACTED**] in, the H Shares (including any H Shares which may be issued pursuant to the exercise of the [**REDACTED**]). However, there can be no guarantee that (i) an active and liquid [**REDACTED**] market for the H Shares will develop; (ii) or, if it does develop, that it will be sustained following the [**REDACTED**]; or (iii) that the market price of the H Shares will not decline below the [**REDACTED**]. If an active public market for our H Shares does not develop following the completion of the [**REDACTED**], the market price and liquidity of our H Shares could be materially and adversely affected. You may not be able to resell your Shares at a price that is attractive to you, or at all.

The [REDACTED] of our H Shares may be volatile, which could result in substantial losses to you.

The [**REDACTED**] and [**REDACTED**] of our H Shares may be volatile. The [**REDACTED**] of our Shares may fluctuate significant and rapidly in response to factors beyond our control, including, but not limited to:

- actual or anticipated variations of our results of operations;
- loss of key suppliers and/or contractors;
- changes in securities analysists' estimates or market perception of our financial performance;
- announcement by us of significant acquisitions, depositions, strategic alliances or joint ventures;
- addition or departure of key senior management or other key personnel;
- fluctuations in the stock market price and volume;
- regulatory or legal developments, including involvement in litigations;
- fluctuations in [**REDACTED**] or the release of lock-up or other transfer restrictions on our outstanding Shares or sales of additional Shares by us; and
- general market conditions of the securities markets in Hong Kong, China, the United States and elsewhere in the world.

Furthermore, the performance and fluctuation of the market prices of other companies with business operations located mainly in mainland China that have listed their securities in Hong Kong may affect the volatility in the [**REDACTED**] of and [**REDACTED**] for our H Shares. A number of mainland China-based companies have listed their securities, and some are in the process of preparing for listing their securities, in Hong Kong. Some of these companies have experienced significant volatility, including significant price declines after their initial public offerings. The trading performances of the securities of these companies at the time of or after their offerings may affect the overall investor sentiment towards mainland China-based companies listed in Hong Kong and, consequently, may materially and adversely impact the [**REDACTED**] performance of our H Shares.

You should not place any reliance on any information released by us in connection with the listing of our A Shares on the Shanghai Stock Exchange.

Since the listing of our A Shares on the SSE, we have been subject to periodic reporting and other information disclosure requirements in the PRC. As a result, from time to time we publicly release information relating to us on the SSE or other media outlets designated by the SSE. However, the information we announce in connection with our A Shares listing is based on regulatory requirements and market practices in the PRC, which differ from those applicable to the [**REDACTED**]. Such information does not and will not form a part of this Document. As a result, [**REDACTED**] in our H Shares are reminded that in making their [**REDACTED**] decisions as to whether to purchase our H Shares, they should rely only on the financial, operating and other information included in this Document. Past performance is no guarantee of future results. By applying to purchase H Shares in the [**REDACTED**] you will be deemed to have agreed that you will not rely on any information other than that contained in this Document, and any formal announcements made by us in Hong Kong related to the [**REDACTED**].

Future sales or perceived sales of substantial amounts of our H Shares in the public market could have a material adverse effect on the [REDACTED] of our H Shares and our ability to raise additional capital in the future.

The [**REDACTED**] of our H Shares could decline as a result of future sales of a substantial number of our H Shares or other securities relating to our H Shares in the public market, or the issuance of new shares or other securities, or the perception that such sales or issuances may occur. Future sales, or anticipated sales, of substantial amounts of our securities, including any future offerings, could also materially and adversely affect our ability to raise capital at a specific time and on terms favorable to us. In addition, our Shareholders may experience dilution in their holdings if we issue more securities in the future. New shares or shares-linked securities issued by us may also confer rights and privileges that take priority over those conferred by the H Shares.

You will incur immediate and substantial dilution if the [REDACTED] of the [REDACTED] is higher than the net tangible asset value per H Share and may experience further dilution if we issue additional Shares in the future.

The [**REDACTED**] of the [**REDACTED**] is higher than the net tangible asset value per H Share immediately prior to the [**REDACTED**]. Therefore, purchasers of the [**REDACTED**] in the [**REDACTED**] will experience an immediate dilution in [**REDACTED**] consolidated net tangible asset value. To expand our business, we may consider offering and issuing additional Shares in the future. If additional funds are raised through the issuance of new equity or equity-linked securities of our Company, other than on a pro rata basis to existing Shareholders, then: (i) the percentage ownership of the existing Shareholders may be reduced, and they may experience subsequent dilution and reduction in their earnings per share; (ii) such newly issued securities may have rights, preferences or privileges superior to those of the Shares of the existing Shareholders; and/or (iii) subscribers and purchasers of our Shares may experience dilution in the net tangible assets value per Share if we issue additional Shares in the future at a price which is lower than our net tangible assets value per Share.

There will be a gap of several days between [REDACTED] and [REDACTED] of our H Shares, and the price of our H Shares when [REDACTED] begins could be lower than the [REDACTED].

The [**REDACTED**] to the [**REDACTED**] of our H Shares sold in the [**REDACTED**] is expected to be determined on the [**REDACTED**]. However, the Shares will not commence [**REDACTED**] on the Hong Kong Stock Exchange until they are delivered, which is expected to be several business days after the [**REDACTED**]. As a result, investors may not be able to sell or otherwise [**REDACTED**] in the [**REDACTED**] during that period. Accordingly, holders of our H Shares are subject to the risk that the price of the Shares when [**REDACTED**] begins could be lower than the [**REDACTED**] as a result of adverse market conditions or other adverse developments that may occur between the time of sale and the time [**REDACTED**] begins.

We have significant discretion as to how we will use the [REDACTED] of the [REDACTED], and you may not necessarily agree with how we use them.

Our management may spend the [**REDACTED**] from the [**REDACTED**] in ways you may not agree with or that do not yield a favorable return. See "Future Plans and [**REDACTED**]" for details of our intended [**REDACTED**]. However, our management will have discretion as to the actual application of our [**REDACTED**]. You are entrusting your funds to our management, upon whose judgment you must depend, for the specific use we will make of the [**REDACTED**] from this [**REDACTED**].

A future significant increase or perceived significant increase in the supply of our H Shares in public markets could cause the [REDACTED] of our H Shares to decrease significantly, and/or dilute shareholdings of holders of H Shares.

The [**REDACTED**] of our H Shares could decline as a result of future sales of a substantial number of our H Shares or other securities relating to our H Shares in the public market, or the issuance of new shares or other securities, or the perception that such sales or issuances may occur. Future sales, or anticipated sales, of substantial amounts of our securities, including any future offerings, could also materially and adversely affect our ability to raise capital at a specific time and on terms favorable to us. In addition, our Shareholders may experience dilution in their holdings if we issue more securities in the future. New shares or shares-linked securities issued by us may also confer rights and privileges that take priority over those conferred by the H Shares.

The interests of our Single Largest Shareholder Group may not necessarily be aligned with the interests of our other Shareholders.

The interests of our Single Largest Shareholder Group may differ from the interests of our other Shareholders. They could through their shareholding interest in our Company exert influence in determining the outcome of any corporate transaction or other matter submitted to our Shareholders for approval, including mergers, consolidations, the sale of all or substantially all of our assets, election of Directors, and other significant corporate actions. This as a result, may discourage, delay or prevent a change in control of our Company, which

could deprive our Shareholders of an opportunity to receive a premium for their H Shares in a sale of our Company or may reduce the market price of our H Shares. In addition, to the extent the interests of our Single Largest Shareholder Group conflict with the interests of other Shareholders, the interests of other Shareholders may be disadvantaged or harmed.

Our historical dividends may not be indicative of our future dividend policy, and we may not be able to pay any dividends on our H Shares.

We declared dividends to our Shareholders of nil, nil, RMB82.4 million and nil respectively, for the three years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, in light of our cumulative business growth. All of such dividends declared during the Track Record Period had been fully settled by bank transfer to our Shareholders as of the Latest Practicable Date. See also Note 16 to the Accountants' Report in Appendix IA to this Document. However, our historical dividends may not be indicative of our future dividend policy. There can be no guarantee: (i) when, if at all, will be paid on our H Shares following the [**REDACTED**]; or (ii) if dividends are paid, what form they will take. The declaration of dividends is proposed by the Board and is based on, and limited by, various factors, including without limitation, macroeconomic factors, our business and financial performance, capital and regulatory requirements, and general business conditions. We may not have sufficient or any profits to enable us to make dividend distributions to our Shareholders in the future, even if our financial statements indicate that our operations have been profitable. See the section headed "Financial Information — Dividend" in this Document for more details. Past performance is no guarantee of future results.

If securities or industry analysts do not publish research reports about our business, or if they adversely change their [REDACTED] regarding our H Shares, the [REDACTED] and [REDACTED] of our H Shares may decline.

The [**REDACTED**] of our H Shares may be influenced by research reports that industry or securities analysts publish about us or our business. If one or more analysts who cover us downgrade our H Shares or publish negative opinions about us, the [**REDACTED**] of our H Shares would likely decline regardless of the accuracy of the information. If one or more of these analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the [**REDACTED**], which, in turn, could cause the [**REDACTED**] and/or [**REDACTED**] of our H Shares to decline.

RISKS RELATING TO THE STATEMENTS MADE IN THIS DOCUMENT

Forward-looking statements contained in this document are subject to risks and uncertainties.

This document contains certain statements and information that are forward-looking and uses forward-looking terminology such as "aim", "anticipate", "believe", "can", "could", "continue", "estimate", "going forward", "intend", "plan", "project", "potential", "predict", "seek", "expect", "may", "might", "ought to", "should", "would" or "will" and similar

expressions. These statements are, by their nature, subject to significant risks and uncertainties. Prospective investors are cautioned that reliance on any forward-looking statement involves risk and uncertainties and that, even if the Directors believe the assumptions related to those forward-looking statements are reasonable, any or all of those assumptions could prove to be inaccurate and as a result, the forward-looking statements based on those assumptions could also be incorrect.

The risks and uncertainties in this regard consist of those identified in the risk factors discussed above. In light of these and other risks and uncertainties, the disclosure of forward-looking statements in this document should not be regarded as representations by our Company that the plans and objectives will be achieved, and investors should not place undue reliance on such statements. Past performance is no guarantee of future results. Our Company does not undertake any obligation to update publicly or release any revisions of any forward-looking statements, whether as a result of new information, future events, or otherwise. For details of these forward-looking statements including the associated risks, see "Forward-looking Statements."

The industry data and forecasts in this Document obtained from various government publications have not been independently verified.

This Document includes industry data and forecasts that we obtained from various government publications. However, there can be no assurance of the accuracy or completeness of information obtained from these sources. We have not independently verified any of the data, forecasts and other statistics from such sources, nor have we ascertained that the underlying economic assumptions relied upon in those sources. Also, the Sole Sponsor, the [**REDACTED**], the [**REDACTED**], any of their respective directors, officers, affiliates, advisors and representatives, or any other parties involved in the [**REDACTED**] make no representation as to the accuracy or completeness of aforementioned facts, forecasts and other statistics in this Document. Moreover, such facts, forecasts and other statistics may not be prepared on the same basis or with the same degree of accuracy (as the case may be) in other publications or jurisdictions. For these reasons, the information from various government publications contained in this Document may not be accurate and should not be given undue reliance as a basis for making your [**REDACTED**] in our H Shares.

You should read the entire Document carefully, and we strongly caution you not to place any reliance on any information contained in press articles and other media regarding us and the [REDACTED].

We strongly caution you not to rely on any information contained in press articles or other media regarding us and the [**REDACTED**]. Prior to the publication of this Document, there has been press and media coverage regarding us, our business, our industry, and the [**REDACTED**]. There may be additional media coverage regarding us, our business, our industry, and the [**REDACTED**] after the date of this Document but prior to the completion of the [**REDACTED**]. Such press and media coverage may include references to certain information that does not appear in this Document, including certain operating and financial

information and projections, valuations and other information. Neither the Company nor any other person involved in the [**REDACTED**] has authorized the disclosure of any such information in the press or media, and none of us accepts any responsibility for any such press or media coverage or the accuracy or completeness of any such information or publication. We make no representation as to, and do not accept any responsibility for, the appropriateness, accuracy, completeness or reliability of any such information or publication. To the extent that any such information is inconsistent or conflicts with the information contained in this Document, we disclaim responsibility for it, and you should not rely on such information.

In preparation for the [**REDACTED**], our Company has sought the following waivers from strict compliance with the relevant provisions of the Hong Kong Listing Rules.

MANAGEMENT PRESENCE IN HONG KONG

According to Rule 8.12 of the Hong Kong Listing Rules, a new applicant for a primary [**REDACTED**] on the Hong Kong Stock Exchange must have a sufficient management presence in Hong Kong. This normally means that at least two of our executive Directors must be ordinarily resident in Hong Kong. Rule 19A.15 of the Hong Kong Listing Rules further provides that the requirement in Rule 8.12 of the Hong Kong Listing Rules may be waived by having regard to, among other considerations, our arrangements for maintaining regular communication with the Hong Kong Stock Exchange.

We do not have a sufficient management presence in Hong Kong for the purpose of satisfying the requirement under Rules 8.12 and 19A.15 of the Hong Kong Listing Rules. Our management headquarters, senior management, business operations and assets are primarily based outside Hong Kong. Our Directors consider that either by means of relocation of our existing executive Directors or appointment of additional executive Directors who will be ordinarily resident in Hong Kong would not be beneficial to, or appropriate for, our Group and therefore would not be in the best interests of our Company or our Shareholders as a whole. As such, we have applied to the Hong Kong Stock Exchange for[, and the Hong Kong Stock Exchange has granted us] a waiver from strict compliance with Rules 8.12 and 19A.15 of the Hong Kong Listing Rules. We will ensure that there is a regular and effective communication between us and the Hong Kong Stock Exchange by way of, among others, the following conditions:

(i) pursuant to Rule 3.05 of the Hong Kong Listing Rules, we have appointed and will continue to maintain two authorized representatives, who will act as our principal channel of communication with the Hong Kong Stock Exchange and ensure that our Company complies with the Hong Kong Listing Rules at all times. The two authorized representatives appointed are Ms. Yang Yi-fang (楊宜方) ("**Ms. Yang**"), our executive Director and Chief Executive Officer, and Mr. Wong Hok Bun Mario (黃學斌) ("**Mr. Wong**"), our Vice President, Chief Financial Officer and company secretary. Ms. Yang and Mr. Wong are situated and based in Hong Kong, and will be available to meet with the Hong Kong Stock Exchange in Hong Kong within a reasonable time frame upon the request of the Hong Kong Stock Exchange. Both of our authorized representatives will be readily contactable by telephone and email to deal promptly with enquiries from the Hong Kong Stock Exchange. Our Company has provided contact details of the two authorized representatives to the Hong Kong Stock Exchange and will inform the Hong Kong Stock Exchange promptly in respect of any change in the authorized representatives;

(ii) both authorized representatives have means to contact all Directors (including the independent non-executive Directors) promptly at all times as and when the Hong Kong Stock Exchange wishes to contact our Directors for any matters. Our Company has implemented a policy whereby: (a) each Director has provided their respective valid phone numbers or other means of communication to the authorized representatives; (b) in the event that a Director expects to travel or is otherwise out of office, he/she will endeavour to provide his/her phone number of the place of his/her accommodation to the authorised representatives or maintain an open line of communication via his/her mobile phone; and (c) each Director has provided his or her mobile phone number, office phone number, e-mail address and, where available, fax number to the Hong Kong Stock Exchange and will inform the Hong Kong Stock Exchange promptly if there are any changes to the contact details of the Directors;

(iii) pursuant to Rule 3.20 of the Hong Kong Listing Rules, each Director has provided his or her contact information to the Hong Kong Stock Exchange and to the authorized representatives. This will ensure that the Hong Kong Stock Exchange and the authorized representatives should have means for contacting all Directors promptly at all times as and when required;

(iv) all our Directors who are not ordinarily resident in Hong Kong have confirmed that they possess or can apply for valid travel documents to visit Hong Kong and will be able to meet with relevant members of the Hong Kong Stock Exchange in Hong Kong upon reasonable notice, when required;

(v) pursuant to Rule 3A.19 of the Hong Kong Listing Rules, we have retained the services of Goldlink Capital (Corporate Finance) Limited as our compliance advisor (the "**Compliance Advisor**") upon [**REDACTED**] for a period commencing on the [**REDACTED**] and ending on the date on which we comply with Rule 13.46 of the Hong Kong Listing Rules in respect of our financial results for the first full financial year commencing after the [**REDACTED**], which will act as an additional channel of communication with the Hong Kong Stock Exchange and will be available to respond to enquiries from the Hong Kong Stock Exchange; our Company has provided the Hong Kong Stock Exchange with the names, mobile phone numbers, office phone numbers, fax numbers and email addresses of the Compliance Advisor's officers who will act as the Compliance Advisor's contact persons between the Hong Kong Stock Exchange and the Company;

(vi) our authorized representatives, Directors and other officers of our Company will provide promptly such information and assistance as the Compliance Advisor may reasonably require in connection with the performance of the Compliance Advisor's duties as set forth in Chapter 3A of the Hong Kong Listing Rules. There will be adequate and efficient means of communication between our Company, authorized representatives, Directors and other officers of our Company and the Compliance

Advisor, and to the extent reasonably practicable and legally permissible, we will keep the Compliance Advisor informed of all communications and dealings between the Hong Kong Stock Exchange and us; meetings between the Hong Kong Stock Exchange and our Directors could be arranged through our authorized representatives or the Compliance Advisor, or directly with our Directors within a reasonable time frame. We will inform the Hong Kong Stock Exchange as soon as practicable in respect of any change of authorized representatives and/or the Compliance Advisor;

(vii) we will appoint other professional advisors (including legal advisor in Hong Kong) after the Listing to assist us in dealing with any questions which may be raised by the Hong Kong Stock Exchange and to ensure that there will be prompt and effective communication with the Hong Kong Stock Exchange; and

(viii) our Company has designated one of our staff members as the communication officer at our headquarters after the [**REDACTED**] who will be responsible for maintaining day-to-day communication with Ms. Yang and Mr. Wong and our Company's professional advisors in Hong Kong, including our legal advisor in Hong Kong and the Compliance Advisor, to keep abreast of any correspondences and/or enquiries from the Hong Kong Stock Exchange and report to our executive Directors to further facilitate communication between the Hong Kong Stock Exchange and our Company.

[**REDACTED**]

WAIVERS FROM STRICT COMPLIANCE WITH THE HONG KONG LISTING RULES

[**REDACTED**]

WAIVERS FROM STRICT COMPLIANCE WITH THE HONG KONG LISTING RULES

[**REDACTED**]

THE POST-TRACK RECORD PERIOD ACQUISITION

Rules 4.04(2) and 4.04(4) of the Hong Kong Listing Rules require that the new applicant include in its accountants' report the results and balance sheet of any business or subsidiary acquired, agreed or proposed to be acquired, since the date to which its latest audited accounts have been made up, in respect of each of the three financial years immediately preceding the issue of the listing document.

Pursuant to note (4) of Rule 4.04(4) of the Hong Kong Listing Rules, the Hong Kong Stock Exchange may consider an application for a waiver from strict compliance with Rules 4.04(2) and 4.04(4) of the Hong Kong Listing Rules taking into account the following factors:

(a) that all the percentage ratios (as defined under Rule 14.07 of the Hong Kong Listing Rules) are less than 5% by reference to the most recent audited financial year of the new applicant's trading record period;

(b) if the acquisition will be financed by the proceeds raised from a public offer, the new applicant has obtained a certificate of exemption from the SFC in respect of the relevant requirements under paragraphs 32 and 33 of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance; and

(c) (i) where a new applicant's principal activities involve the acquisition of equity securities (the Hong Kong Stock Exchange may require further information where securities acquired are unlisted), the new applicant is not able to exercise any control, and does not have any significant influence over the underlying company or business to which Rules 4.04(2) and 4.04(4) of the Hong Kong Listing Rules relate, and has disclosed in its listing document the reasons for the acquisition and a confirmation that the counterparties and their respective ultimate beneficial owners are independent of the new applicant and its connected persons. In this regard, "control" means the ability to exercise or control the exercise of 30% (or any amount specified in the Hong Kong Code on Takeovers and Mergers as the level for triggering a mandatory general offer) or more of the voting power at general meeting, or being in a position to control the composition of a majority of the board of directors of the underlying company or business; or (ii) with respect to an acquisition of a business (including acquisition of an associated company and any equity interest in a company other than in the circumstances covered under sub-paragraph (a) above) or a subsidiary by a new applicant, the historical financial information of such business or subsidiary is unavailable, and it would be unduly burdensome for the new applicant to obtain or prepare such financial information; and the new applicant has disclosed in its listing document information required for the announcement for a discloseable transaction under Rules 14.58 and 14.60 of the Hong Kong Listing Rules on each acquisition. In this regard, "unduly burdensome" will be assessed based on each new applicant's specific facts and circumstances (e.g. why the financial information of the acquisition target is not available and whether the new applicant or its controlling shareholder has sufficient control or influence over the seller to gain access to the acquisition target's books and records for the purpose of complying with the disclosure requirements under Rules 4.04(2) and 4.04(4) of the Hong Kong Listing Rules).

On March 4, 2024, our subsidiaries, Chixia Laos and Chijin Xiawu entered into an equity transfer agreement with China Investment (Property) Limited (中國投資(置業)有限公司) ("**China Investment**") and China Investment Mining (Laos) Sole Co., Ltd (the "**Target Company**"), pursuant to which Chixia Laos shall acquire from China Investment 90% of the equity interest in the Target Company, which was wholly owned by China Investment, at a consideration of US$18,963,000.

The Target Company operates the Laos Muang Kham Rare Earth Project and has two subsidiaries which held a rare earth mineral processing permit (experimental), a mineral extraction permit (experimental) and a rare earth exploration permit. The project is still at the construction stage covering the mining area of 50 km^2, whereby the genetic type of the mineral deposit belongs to the weathering curst ion-adsorbed rare earth deposit.

Based on the accounts provided by the Target Company, the consolidated total assets of the Target Company amounted to approximately KIP228,001,488,000 as of December 31, 2023. Its consolidated net loss before (and after) tax for the years ended December 31, 2022 and 2023 was approximately KIP86,757,701,000 and KIP94,724,614,000, respectively.

As of the Latest Practicable Date, our Company was still in the process of preparing the relevant filings with the development and reform commission and foreign exchange administration authority in the PRC. Accordingly, the above proposed acquisition was yet to be completed. For details, see the section headed "History, Development and Corporate Structure — Post-Track Record Period Acquisition" in this Document.

The proposed acquisition is in the ordinary and usual course of business of our Company. Our Directors are of the view that: (i) the acquisition represents an opportunity for our Group to tap into the potential for quality rare earth resources with a relatively higher economic value to be realised through the medium-heavy rare earth ore held by the project; and (ii) the terms of the proposed acquisition are on normal commercial terms, and are fair and reasonable and in the interests of our Company and our Shareholders as a whole. The consideration for the proposed acquisition is to be satisfied by the internal resources of our Group and will not use any [**REDACTED**] from the [**REDACTED**].

Our Company has applied to the Hong Kong Stock Exchange for[, and the Hong Kong Stock Exchange has granted,] a waiver from strict compliance with Rules 4.04(2) and 4.04(4)(a) of the Hong Kong Listing Rules in respect of the above proposed acquisition on the following grounds:

(i) Immateriality of the acquisition

The scale of the business operated by the Target Company and its subsidiaries (collectively the "**Target Group**") as compared to that of our Group is not material. The applicable percentage ratios calculated in accordance with Rule 14.07 of the Hong Kong Listing Rules for the Acquisition are all less than 5% by reference to the most recent financial year or period in the Track Record Period.

In addition, notwithstanding that the proposed acquisition represents a suitable strategic acquisition target of our Group, it will not result in any significant change to our financial position since March 31, 2024, and all information that is reasonably necessary for the potential [**REDACTED**] to make an informed assessment of the activities or our financial position has been included in this Document. As such, a waiver from compliance with Rules 4.04(2) and 4.04(4)(a) of the Hong Kong Listing Rules would not prejudice the interests of the [**REDACTED**] public.

(ii) Impracticality and undue burden

As of the Latest Practicable Date, the proposed acquisition was yet to have been completed. Further, as there is no statutory audit requirement under the laws of Laos, our Company and our Reporting Accountants will unlikely gain full access to the financial information of the Target Group in a readily available manner and would require considerable time and resources to become fully familiarized with the accounting system and accounting policies and to gather and compile the necessary financial information and supporting documents for disclosure in this Document. Therefore, it would be impracticable and burdensome for our Company to prepare and include the full historical financial information of the Target Group in this Document.

(iii) Alternative disclosure

With a view of allowing our potential investors to understand in greater details, we have provided information in this Document the following information regarding the proposed acquisition, which is comparable to the information required for a discloseable transaction under Chapter 14 of the Hong Kong Listing Rules, including, among others: (a) a general description of the principal business activities of the Target Group and the consolidated financial information of the Target Company that are available to us; (b) confirmation that China Investment is an Independent Third Party; (c) the consideration of the proposed acquisition; (d) the basis on which the consideration is determined; (e) how the consideration is expected to be satisfied; and (f) the reasons for and benefits of the proposed acquisition.

[REDACTED]

[REDACTED]

[REDACTED]

[**REDACTED**]

[REDACTED]

DIRECTORS

Name	Address	Nationality
Executive Directors		
Mr. Wang Jianhua (王建華)	Room 1009, Building 2 A7 Xiaojing Wanfeng Road Fengtai District Beijing PRC	Chinese
Ms. Yang Yi-fang (楊宜方) (also known as Lydia Yang)	Flat 19C 147-151 King's Road North Point Hong Kong	Canadian
Mr. Lyu Xiaozhao (呂曉兆) (former name: Lu Xiaozhao)	102, Unit 1 1/F, Building 6 Court No. 8, Linquan Street Chaoyang District Beijing PRC	Chinese
Mr. Gao Bo (高波)	901, Unit 1 9/F, Building 3 Fourth Court, Dexiu North Street Fengtai District Beijing PRC	Chinese
Non-executive Director		
Mr. Zhang Xudong (張旭東)	Room 601, No. 47 Mingshen Garden Alley No. 633, Wuzhong Road Shanghai PRC	Chinese (Hong Kong)

Independent Non-executive Directors

Dr. Mao Jingwen (毛景文)	No. 35, Zhonglangxia Hutong Xicheng District Beijing PRC	Chinese
Dr. Shen Zhengchang (沈政昌)	No. 18, 1st Door Building No. 5 Zhenwu Temple 5th Lane Xicheng District Beijing PRC	Chinese
Mr. Hu Nailian (胡乃連) (former name: 胡乃聯)	Room 1102 5th Door, 1/F Bairuyuan 11 Linbei Road Haidian District Beijing PRC	Chinese
Dr. Wong Yet Ping Ambrose (黃一平)	Unit D, 8/F Merrill Court 42 Broadcast Drive Kowloon Tong Hong Kong	Chinese (Hong Kong)

SUPERVISORS

Name	Address	Nationality
Mr. Cheng Zhenlong (成振龍)	601, Unit 5 Zhonglian Apartment Yulong Main Street Songshan District Chifeng Inner Mongolia Autonomous Region PRC	Chinese
Mr. Ji Hongyong (季紅勇)	1101, Unit 3 Building D2 Binhe International Precinct Binshui Road Huadian Jilin Province PRC	Chinese
Mr. Liu Fengwu (劉鳳伍)	No. 2, Unit 2 Block 31 Family Building Pingbu Zhonglou Precinct Yuanbaoshan District Chifeng Inner Mongolia Autonomous Region PRC	Chinese

For further details regarding our Directors and Supervisors, see the section headed "Directors, Supervisors and Senior Management" in this Document.

PARTIES INVOLVED IN THE [REDACTED]

Sole Sponsor

CITIC Securities (Hong Kong) Limited
(a licensed corporation under the SFO to engage in type 4 (advising on securities) and type 6 (advising on corporate finance) regulated activities)
18/F, One Pacific Place
88 Queensway
Hong Kong

[**REDACTED**]

Legal Advisors to our Company

as to Hong Kong and United States laws:

DLA Piper Hong Kong
25th Floor
Three Exchange Square
8 Connaught Place
Central
Hong Kong

as to PRC laws:

Beijing Tian Yuan Law Firm
Suite 509
Tower A, Corporate Square
35 Financial Street
Xicheng District
Beijing 100033
PRC

	as to Ghana laws:
	REM Law Consultancy P. O. Box CT 4600 Cantonments-Accra No. 15 Kofi Annan Avenue North Legon, Residential Area Accra Republic of Ghana
	as to Laos laws:
	ZICOLaw (Laos) Sole Co., Ltd. 6th Floor Vieng Vang Tower Bourichane Road, Unit 15 Dongpalane Thong Village Sisattanak District Vientiane Capital Lao People's Democratic Republic
Legal Advisors to the Sole Sponsor and the [REDACTED]	*as to Hong Kong and United States laws:* **[REDACTED]**
	as to PRC laws:
	JunHe LLP 20/F, China Resources Building 8 Jianguomenbei Avenue Beijing 100005 PRC
Competent Person	**SRK Consulting China Ltd** B1301 COFCO Plaza No. 8 Jianguomennei Avenue Dongcheng District Beijing 100005 PRC

Auditor and Reporting Accountants	**Ernst & Young** *Certified Public Accountants* *Registered Public Interest Entity Auditor* 27/F, One Taikoo Place 979 King's Road Quarry Bay Hong Kong
Industry Consultant	**Frost & Sullivan (Beijing) Inc., Shanghai Branch Co.** 2504, Wheelock Square 1717 Nanjing West Road Shanghai 200040 PRC
	[**REDACTED**]

CORPORATE INFORMATION

Registered Office	Fumin Village Sidaowanzi Town Aohan, Chifeng Inner Mongolia Autonomous Region PRC
Headquarters and Principal Place of Business in the PRC	A7 Xiaojing Wanfeng Road Fengtai District Beijing PRC
Principal Place of Business in Hong Kong	Room 1905, 19th Floor China Resources Building 26 Harbour Road Wanchai Hong Kong
Company's Website	**cfgold.com** (*the information contained on the website does not form part of this Document*)
Company Secretary	Mr. Wong Hok Bun Mario Room 1905, 19th Floor China Resources Building 26 Harbour Road Wanchai Hong Kong
Authorized Representatives	Ms. Yang Yi-fang Room 1905, 19th Floor China Resources Building 26 Harbour Road Wanchai Hong Kong Mr. Wong Hok Bun Mario Room 1905, 19th Floor China Resources Building 26 Harbour Road Wanchai Hong Kong

Strategy and Sustainability Committee	Mr. Wang Jianhua (*chairman*) Ms. Yang Yi-fang Mr. Lyu Xiaozhao Mr. Zhang Xudong Dr. Wong Yet Ping Ambrose
Audit Committee	Mr. Wong Yet Ping Ambrose (*chairman*) Mr. Zhang Xudong Mr. Hu Nailian
Nomination Committee	Mr. Hu Nailian (*chairman*) Mr. Lyu Xiaozhao Dr. Shen Zhengchang Dr. Wong Yet Ping Ambrose
Remuneration and Appraisal Committee	Mr. Hu Nailian (*chairman*) Ms. Yang Yi-fang Dr. Mao Jingwen Dr. Shen Zhengchang
Compliance Advisor	**Goldlink Capital (Corporate Finance) Limited** 28/F, Bank of East Asia Harbour View Centre 56 Gloucester Road Wanchai Hong Kong

[**REDACTED**]

Principal Banks	**China CITIC Bank Chifeng Branch** Jiutian Jianhua Linhuang Street Songshan District Chifeng Inner Mongolia Autonomous Region PRC

Industrial and Commercial Bank of China Chifeng Branch
No. 1, Third South Section
Hada Street
Hongshan District
Chifeng
Inner Mongolia Autonomous Region
PRC

China Construction Bank Corporation Chifeng Ninglan Road Sub-branch
Steel West Street
Hongshan District
Chifeng
Inner Mongolia Autonomous Region
PRC

Agricultural Bank of China Limited Beijing Chaoyang Road North Sub-branch
No. 4, North Lane
West End
Liulitun
Chaoyang District
Beijing
China

China Everbright Bank Co., Ltd. Hohhot Branch
Chilechuan Street
Saihan District
Hohhot
Inner Mongolia Autonomous Region
PRC

Industrial Bank Co., Ltd. Hohhot Branch
Block F, Wanda Plaza
No. 4 University East Street
Saihan District
Hohhot
Inner Mongolia Autonomous Region
PRC

China Merchants Bank Hohhot Branch
China Merchants Bank Building
No. 9 Chilechuan Street
Hohhot
Inner Mongolia Autonomous Region
PRC

The information and statistics set out in this section and other sections of this Document were extracted from the Frost & Sullivan Report prepared by Frost & Sullivan, which was commissioned by us, and from various official government publications and other publicly available publications. We engaged Frost & Sullivan to prepare the Frost & Sullivan Report, an independent industry report, in connection with the* [REDACTED]*. The information from official government sources has not been independently verified by us, the Sole Sponsor, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED]*, the* [REDACTED]*, any of our or their respective directors, supervisors, officers, representatives, employees, advisers or any other persons or parties involved in the* [REDACTED]*, and no representation is given as to its accuracy.

SOURCE AND RELIABILITY OF INFORMATION

We have commissioned Frost & Sullivan, an Independent Third Party, to conduct a study of global and China's gold and other non-ferrous metals industry. We agreed to pay Frost & Sullivan a fee of RMB900,000 for the preparation of the Frost & Sullivan Report, and our Directors consider that such fee reflects market rates and are of the view that the payment of the fee does not affect the fairness of conclusions drawn in the Frost & Sullivan Report. Founded in 1961, Frost & Sullivan has over 45 offices globally with more than 3,000 industry consultants, market research analysts, technology analysts and economists.

RESEARCH METHODOLOGY

During the preparation of the Frost & Sullivan Report, Frost & Sullivan conducted primary research that involved discussing the status of the industry with industry participants and industry experts, as well as secondary research that involved reviewing company reports, independent research reports and Frost & Sullivan's own database. Our Directors have confirmed that there has been no adverse change in the market situation since the date of Frost & Sullivan Report which may qualify, contradict, or have impact on the information of this section.

BASIS AND ASSUMPTION

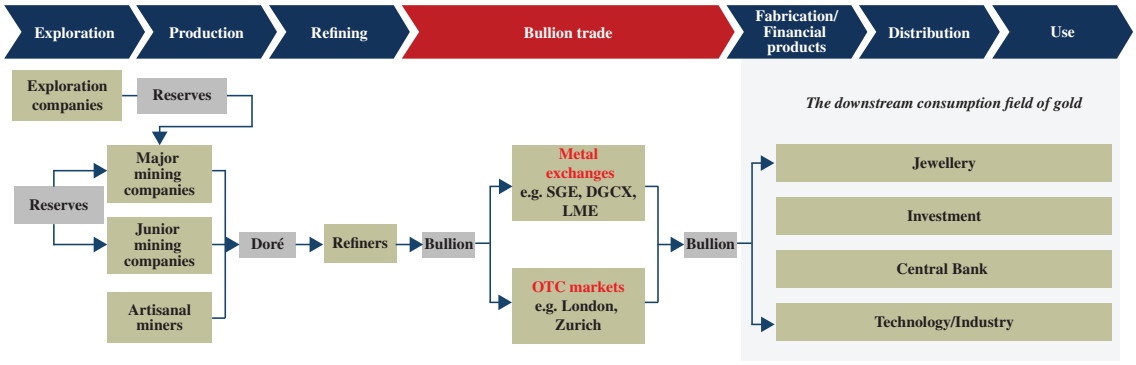
The Frost & Sullivan Report was compiled based on the following assumptions: (i) government policies on gold and gold mining industries in China and major overseas countries discussed will remain consistent during the forecast period; (ii) government policies on copper and other industries discussed in China and major overseas countries discussed will remain consistent during the forecast period; (iii) the global and Chinese gold and gold mining market will be driven by the factors which are stated in Frost & Sullivan Report; and (iv) the global and Chinese copper and other industries discussed will be driven by the factors which are stated in Frost & Sullivan Report.

OVERVIEW OF THE GOLD INDUSTRY

Introduction of Gold

Gold is a precious metal that has been used for coinage, jewelry, and arts throughout recorded history. It is also widely used in high-tech manufacturing, such as electronics, telecommunication, and aerospace. Gold products include physical gold such as gold bullion, gold doré, and gold coins, gold concentrate produced during the smelting of gold products, and gold derivatives. Gold doré, as a semi-pure alloy of gold and silver, is typically refined and further purified with the end product being gold bullion, which refers to high purity physical gold with no less than 99.5% gold content (such as gold bars, coins and medals). Gold concentrate powder refers to the processing of gold ore into mineral powder through crushing, grinding, and beneficiation, with its main components being gold, silicon dioxide, and so on. The semi-finished gold produced in the last step of the gold smelting process is called gold-loaded carbon.

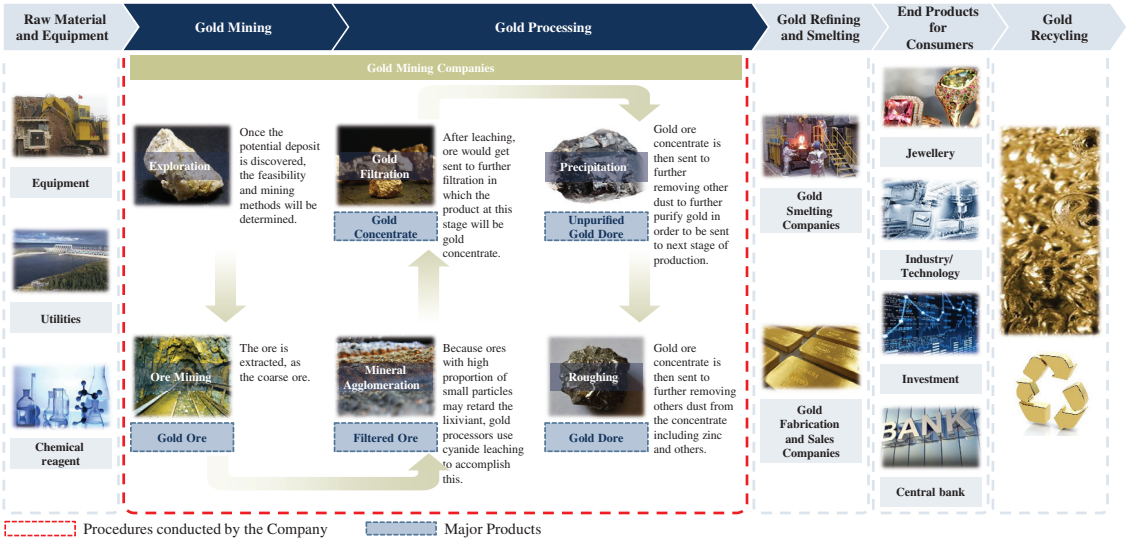
Gold Global Trading Activities



Source: World Gold Council, Frost & Sullivan

The following diagram sets forth the gold industry's value chain:

Value Chain of the Global Gold Industry



Source: Frost & Sullivan

Relevant information about China's, Lao's, and Ghana's gold industry

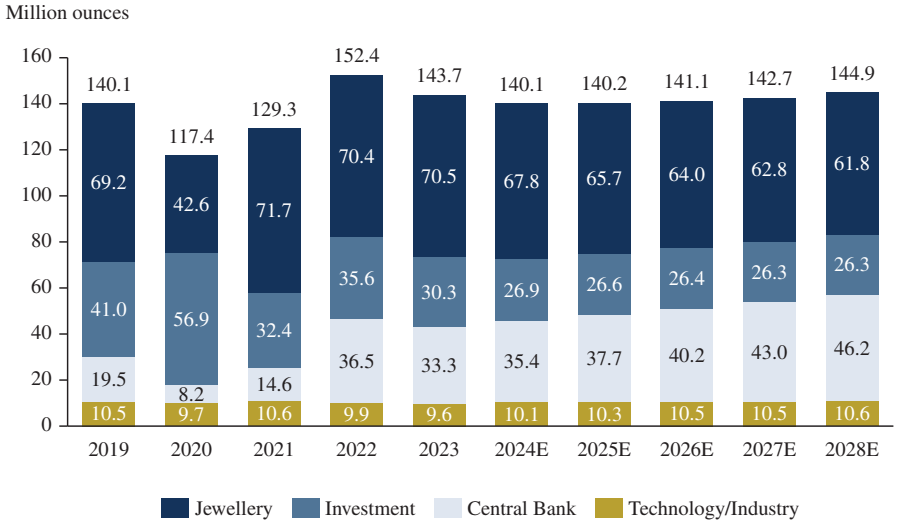
China is the world's largest gold producing country with resources in Shandong, Tibet, and Gansu and other regions. In 2023, the gold resources in Shandong Province amounted to 1.4 million oz, accounting for 27.6% of the total national resources. China is also one of the world's largest gold consuming countries. China has introduced a series of plans such as the Opinions on Further Strengthening the Work of Mine Safety Production (關於進一步加強礦山安全生產工作的意見) and Notice on the Guarantee of Mining Land (關於做好採礦用地保障的通知) to ensure the production safety of mines. Laos is one of the main gold producing countries in Southeast Asia, and its mineral resources are mainly distributed in the southern and central regions of the country. The Laotian Government actively encourages gold mining and investment and has introduced relevant industrial policies to promote gold mining. As one of the important gold producing countries in Africa, gold is one of Ghana's important export products. The Ghanaian Government has issued a series of policies to strengthen mining regulation.

Gold Demand

Global demand for gold is generally divided into the following categories: (i) jewellery, (ii) investment (including gold bars, coins and exchange traded funds ("**ETF**")), (iii) central bank reserves, and (iv) technological or industrial use. The following chart sets forth the volume and breakdown of global gold demand for the periods indicated.

Gold Demand (by End Use), Global, 2019-2028E

	Jewellery	Investment	Central Bank	Technology/ Industry	Total
CAGR 19-23	0.5%	-7.3%	14.4%	-2.2%	0.6%
CAGR 24E-28E	-2.3%	-0.5%	6.9%	1.2%	0.8%



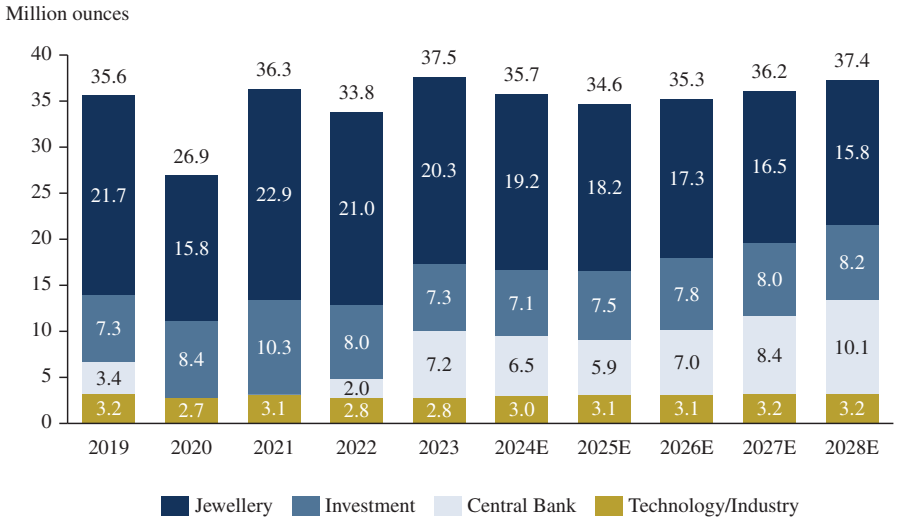
Source: World Gold Council, Frost & Sullivan

Global gold demand increased at a CAGR of 0.6% from 2019 to 2023, reaching 143.7 million oz in 2023. The decrease in gold demand as compared with 2022 is mainly attributed to decrease in gold reserve demand by investment and central banks. From 2024 to 2028, global gold demand is expected to grow steadily at a CAGR of 0.8% due to: (i) increase in gold demand from investment and by central banks for value preservation and risk diversification; (ii) increase in gold demand for technology and industry.

The following chart sets forth the volume and breakdown of China gold demand for the periods indicated:

Gold Demand (by End Use), China, 2019-2028E

	Jewellery	Investment	Central Bank	Technology/ Industry	Total
CAGR 19-23	-1.8%	0.0%	20.8%	-3.8%	1.3%
CAGR 24E-28E	-4.7%	3.7%	11.7%	2.4%	1.1%



Source: China Gold Association, Frost & Sullivan

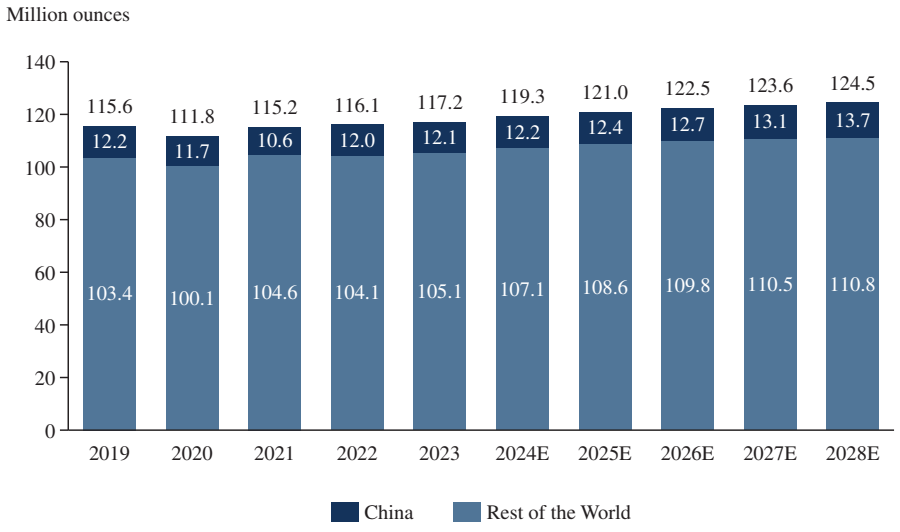
Gold demand in China increased from 2019 to 2023 at a CAGR of 1.3%. During this period, China's gold demand experienced fluctuations, mainly influenced by the changes in the demand for jewellery consumption. The decline in gold demand in 2020 was mainly due to the lasting impact of COVID-19 on the consumer economy, which caused a significant decrease in gold jewelry demand. China's gold consumption saw a strong recovery in 2021, as gold jewellery demand grew significantly, driven by economic recovery and a pullback in gold prices from 2020. In 2023 due to the significant increase in the gold reserves of China's central bank, China's gold demand achieved a year-on-year growth rate of 10.9%, with a total volume of 37.5 million ounces. During the forecast period, China's gold demand is expected to maintain a stable level. Concerns about future economic uncertainties may suppress consumers' demand for jewellry, and also stimulate the central bank's reserve growth and investment demand. In the future, there will decrease in gold jewellry demand and increase in gold demand for investment and central bank, resulting a stable level of gold demand in China.

Gold Supply

Generally, global and China's gold supply has consistently maintained relatively stable. The supply of gold is influenced by various factors, mainly including the grade, resources and mining difficulty of gold mines, the market demand for gold, fluctuations in gold prices and governments' policies of gold mining industry. The following chart sets forth the global and China's gold mine production volume for the periods indicated:

Gold Supply*, Global and China, 2019-2028E

	China	RoW	Global
CAGR 19-23	-0.3%	0.4%	0.3%
CAGR 24E-28E	3.0%	0.8%	1.1%



* Global and China's gold supplies include gold produced from gold mines and gold produced as by-product from NFM ores.

Source: World Gold Council, China Gold Association, Frost & Sullivan

In 2023, global mined gold production volume amounted to 117.2 million oz. The major mined gold production countries include China, Russia, Australia, Canada, and the U.S. In 2023, China was the largest mined gold producer with 12.1 million oz production, accounting for approximately 10.3% of global gold supply. Assuming there is ongoing global economic recovery, global gold supply is expected to grow at a CAGR of 1.1% from 2024 to 2028, driven by robust gold demand, rising in gold price, and advancements in mining and exploration technologies.

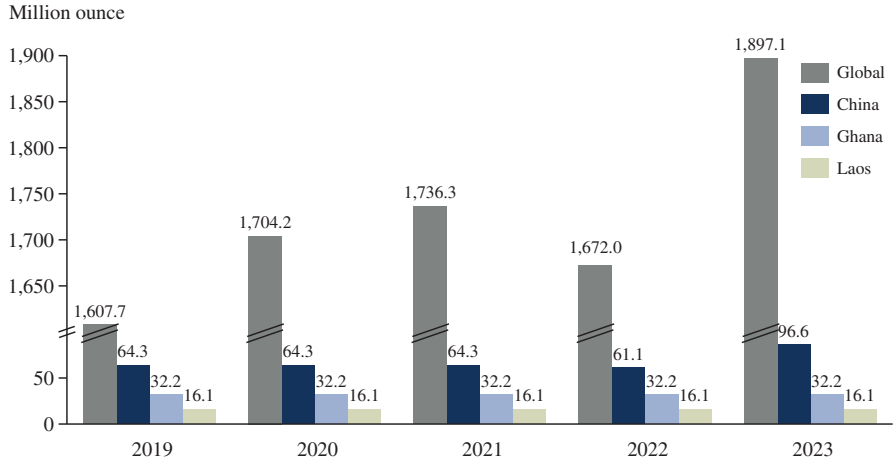
The major areas in China which produced gold include Shandong, Henan, Inner Mongolia, Gansu, Yunnan and Xinjiang. In 2023, Shandong ranked the first with 1,417.0 koz of gold produced from gold mines. Regarding China's gold supply, while production dropped by approximately 10% in 2021, by 2022 production had recovered as companies resumed operations post inspections. It is anticipated that China's mined gold output will increase by 12.3% from 2024 to 2028, which will be supported by advancements in technology and equipment and a steady rise in demand from various sectors.

Gold Resources and Reserves

From 2019 to 2023, global and Chinese gold Reserves increased with the discovery of newly identified gold mines each year. During the same period, the gold Reserves in Laos and Ghana remained stable.

Gold Reserves*, Global, Ghana, Laos and China, 2019-2023

	Global	China	Ghana	Laos
CAGR 19-23	4.2%	10.7%	0.0%	0.0%



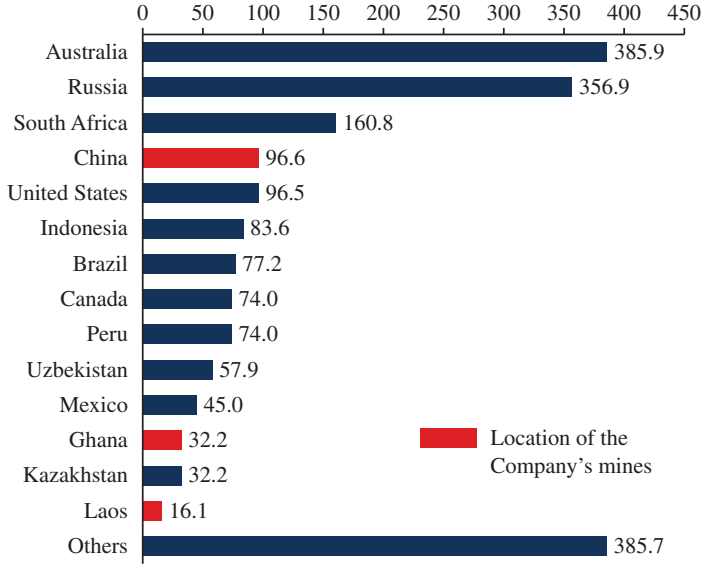
* "Reserve" refers to part of the reserve base that could be economically extracted or produced at the time of determination and include only recoverable materials.

Source: The U.S. Geological Survey, Frost & Sullivan

As of the end of 2023, there was approximately a total of 1,897.1 million oz of gold Reserves identified across the globe. The following two charts set forth the global gold Reserves by country as of 2023 year end and the gold Resources by provinces in China as of the same date, respectively.

Gold Reserves* by Countries, Global, 2023

Total = 1,897.1 million ounces

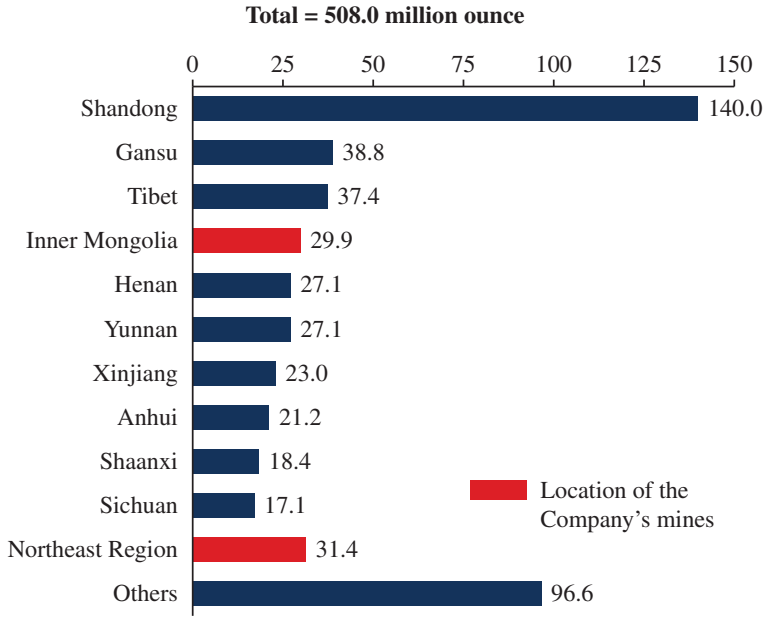


* "Reserve" refers to part of the reserve base that could be economically extracted or produced at the time of determination and include only recoverable materials. Due to data availability, Reserves are usually used to demonstrate the gold resources of different countries.

Source: The U.S. Geological Survey, Frost & Sullivan

In terms of identified gold Resources as of 2023-year end in China, Shandong was the largest with approximately 140 million oz of identified gold Resources as of 2023 year end, followed by Gansu and Tibet. Inner Mongolia ranked fourth with approximately 29.9 million oz of identified gold Resources as of 2023 year end.

Identified Gold Resources* by Provinces, China, 2023



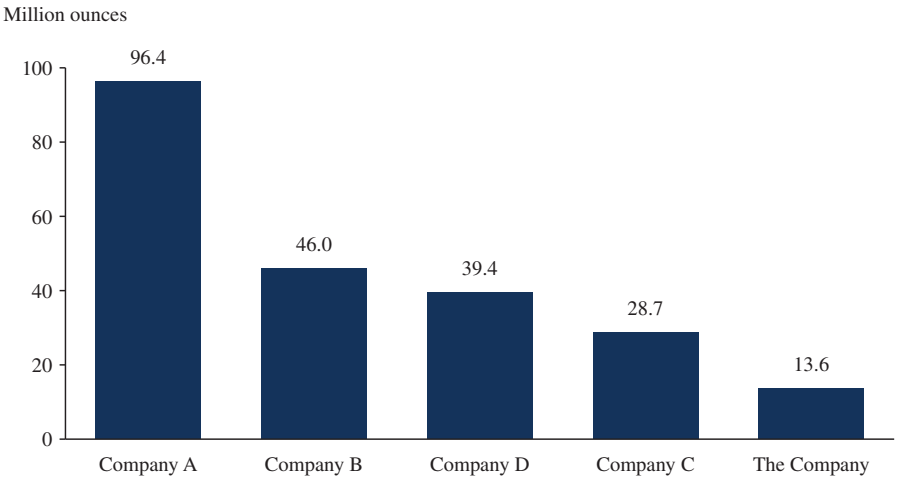
* China identified gold Resources in or prior 2019 refers to identified gold Resources as defined in GB/T 17766-1999, after 2019 refers to gold Resources as defined in GB/T 17766-2020. Northeast region contains Heilongjiang, Jilin and Liaoning.

Source: China Gold Association, Frost & Sullivan

PRC Gold Mining Market

We have achieved the fastest growth rate in the gold production volume from 2021 to 2023 among the top 5 listed gold producers in China. We ranked fifth in terms of gold production and gold Resources in China as of December 31, 2023. Moreover, we have a more diversified mineral product profile and larger overseas business coverage than most of the major players in the market.

Top 5 Listed Gold Producers (by Resources), China, 2023



Growth rate in the gold production volume 2021-2023	19.5%	29.8%	18.0%	-1.8%	33.1%

Source: Annual Report, China Gold Association, Frost & Sullivan

Cost of Supply

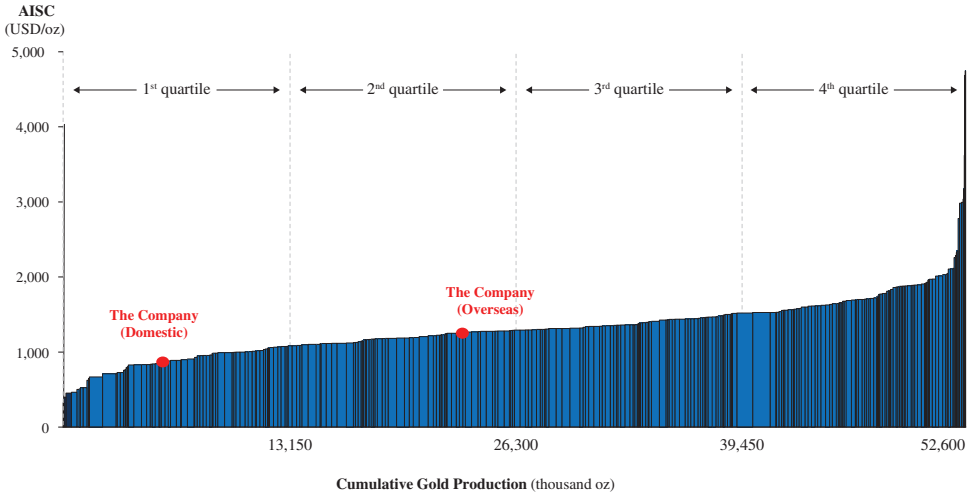
The following chart sets forth the global average AISC (quarterly) from 2021Q1 to 2024Q1.

Average AISC (Quarterly), Global, 2021Q1-2024Q1

Source: Frost & Sullivan

The AISC of the Company's domestic gold mines and overseas gold mines falls within the 1st quartile and 2nd quartile of the cost curve, respectively, indicating that the Company's gold mines operate at a relatively low cost level globally. The following chart sets forth the global cost curve in 2023:

Cost Curve*, Global, 2023



* Excluding the extreme mining situation, i.e. the Matilda mine.

Source: Frost & Sullivan

Gold Price

Global Gold Pricing Trend

In 2019 and 2020, the U.S. Federal Reserve and other central banks of major economies introduced financial and monetary stimuli to inject liquidity into the market, causing the U.S. dollar to depreciate, and major asset classes experienced bearish trends. The global market sought gold for value preservation and risk hedging, which raised the gold price in 2020. In 2021, as the economy started to recover and interest in gold investments decreased, the growth of the global gold spot price slowed down. In 2022, the Russia-Ukraine conflict led to a significant increase in the global gold price. Concurrently, the U.S. Federal Reserve began to raise interest rates to address the high inflation issue in the U.S., which led to an increase in gold investment in coins and bars globally. Additionally, central banks increased their gold reserves as a precaution against a potential economic recession. In 2023, global gold spot price continued to increase from USD1,801.3 per ounces in 2022 to USD1,942.1 per ounces in 2023.

Worries of economic downturn under the context of high inflation and high fuel cost is to last in the forecast time period, plus the existing geopolitical uncertainties (e.g. Russia-Ukraine tensions). Additionally, markets are also concerning on the over-aggressiveness of the U.S. Federal Reserve on rising interest rate, which may cause possible economic recession soon afterwards. Therefore, gold is needed for investment portfolio diversification to hedge risks and value preservation. Looking ahead, considering the strong demand for gold, global gold spot price is expected to go up steadily during 2024 to 2028 at CAGR of 5.6%, from USD2,283.4 per ounces in 2024 to USD2,844.5 per ounces in 2028.

No single industry player or factor can significantly impact gold prices on its own. Generally, gold mining companies adjust their production plans in response to gold price forecasts. They tend to ramp up production if prices are expected to rise. However, production increases are constrained by various challenges, such as increasing mining cost, license, climate change, etc.

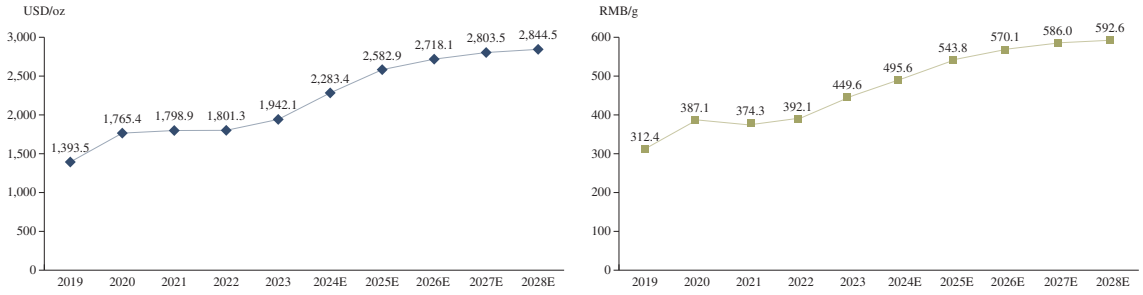
Latest development in gold ETFs and their demand

Investments include purchase of gold bars and coins as well as exchange traded funds ("**ETF**"). From 2018 to 2020, there was a growing trend towards gold investments, which was attributed to the increase in the gold price and consumers' purchase of bars and coins for value preservation. In 2021, investments in gold decreased by more than 40% compared with the 2020 level. This was mainly caused by a decrease in gold investments through ETFs. In 2022, investments in gold increased, especially for investments in gold coins and bars, which was largely due to geopolitical concerns and hedging against inflation. In 2023, investments in gold decreased by 15% compared with the 2022 level. This was mainly caused by the rising gold price. As of the second quarter 2024, global gold ETFs have shown an outflow trend, with total global gold ETF holdings decreasing by 7.2 tonnes to 3,105.5 tonnes.

Global Average Gold Spot Price

The following chart sets forth the annual average gold spot price of the London Bullion Market and the Shanghai Gold Exchange for the period indicated.

Annual Average Gold Spot Price*, Global & China, 2019-2028E



* Global gold price is set as quarterly averaged gold spot price of the London Bullion Market. The price is set in USD per fine troy oz, which is a troy oz (equals approximately 31.1 grams) of 99.5% pure gold. "China gold spot price" refers to the closing price of Au99.95 traded on the Shanghai Gold Exchange.

Source: London Bullion Market Association, Shanghai Gold Exchange, Frost & Sullivan

The gold price is predominantly impacted by factors such as the real interest rate, the value of the U.S. dollar, global geographical uncertainties, and inflation expectations. Typically, when there exist instabilities in the political or economic environment or turbulence in the stock market, gold is treated as a risk-hedging tool, and its price will typically exhibit an upward trend. Moreover, monetary policies by central banks (e.g. fluctuations in the currency exchange rate) and macroeconomic factors (e.g. interest rate and inflation expectations) are also important factor that influence the gold price. Upon a long-term observation of gold price trends, it can be observed that there is an overall upward trend of volatility. Even during periods of cyclical adjustments, the bottom of the price is gradually rising, demonstrating the stability and growth potential of gold as a store of value.

From 2019 to 2023, the gold spot price in China grew at a CAGR of 9.5% from RMB312.4 per gram in 2019 to RMB449.6 per gram in 2023. It is expected to climb steadily at a CAGR of 4.6% from 2024 to 2028, from RMB495.6 per gram in 2024 to RMB592.6 per gram in 2028. China's gold spot price in 2023 increased by approximately 14.7% as compared with 2022, which was greater than the 7.8% increase in the global gold spot price across the same periods. This was mainly due to the depreciation of the Renminbi against the U.S. dollar.

Competitive Landscape

Overview

The gold industry has become more concentrated due to mergers and resource integration of gold companies. Large gold companies with advantages, such as efficient operations, global presence, financial strength and other advantages, are leading the industry. At the same time, regulatory controls, including safety and environmental protection requirements, have further tightened. Less competitive gold production companies with aging facilities and insufficient resources have been forced to shut down or undergo significant changes. Furthermore, the total production cost of gold mining has increased due to several factors, and smaller gold companies have gradually exited the market.

Global Gold Mining Market

The top 10 global gold producers contributed approximately 25.1% of the global gold mining production in 2023. Among them are various big names such as Newmont Mining, Barrick Gold, Agnico Eagle and PJSC Polyus, etc. Most of the top gold producers are headquartered in U.S., Australia, Canada, South Africa, and Russia, with their footprints spanning across several continents. The global gold mining industry is relatively fragmented; although, a consolidation trend has emerged in the past years.

PRC Gold Mining Market

We have achieved the fastest growth rate in gold production volume from 2021 to 2023 among the top 5 listed gold producers in China, and we ranked fifth in China in terms of gold production in 2023. Moreover, we have a more diversified mineral product profile and larger overseas business coverage than most of the major players in the market.

Gold Production* of Top 5 Listed Gold Producers in China, 2023

Rank	Company	Gold Production (Thousand Oz)	Gold Resources (Million Oz)
1	Company A	2,084.9	96.4
2	Company B	1,343.3	46.0
3	Company C	607.4	28.7
4	Company D	565.3	39.4
5	**The Company**	**461.5**	**13.6**

* Gold production includes domestic and overseas mines.

Source: Annual Reports, Frost & Sullivan

Gold Production Growth Ranking Among Top 5 Listed Gold Producers in China, 2021-2023

Rank	Company	Gold Production CAGR21-23
1	**The Company**	**33.1%**
2	Company B	29.8%
3	Company A	19.5%
4	Company D	18.0%
5	Company C	-1.8%

Source: Annual Reports, Frost & Sullivan

In comparison with other leading players in the gold mining market in China, we have comparative advantages in multiple aspects. For example, we offer a more extensive range of mineral products and larger overseas business coverage than most of the major players in the market. In terms of the gold production growth in the past three years, we were the highest among listed gold producers in China, representing a gold production growth of 33.1% from 2019 to 2023. Regarding the proportion of overseas business, we maintain the status as the leading player in the market.

Entry Barriers

The principal entry barriers to the gold industry include the following:

- ***Policy Barrier.*** Globally, majority of governments implement an admittance system for the exploitation of gold resources. The application for gold mining and smelting shall comply with the requirements of the national gold industry planning, industrial policies and the state regulations on the approval of investment projects, environmental protection and land administration, etc. Gold mining companies shall be qualified for the exploitation of gold resources in order to obtain the mining license issued by the governments of where the gold mines are located . In addition, gold mining enterprises can only conduct mining within the area stipulated by the state, and comply with increasingly strict safety production and environmental protection regulations. It is difficult for new market entrants to obtain relevant qualifications in a short period of time.
- ***Capital Barrier.*** The gold industry is a capital-intensive industry, which requires a significant investment in infrastructure and production equipment in the early stage. The costs of exploration, mining, and refining are extremely high, while significant initial investment is required for the purchase of equipment. Notably, gold manufacturing needs a large amount of initial capital for the procurement of gold ore, the construction of manufacturing facilities as well as the purchase or installation of machines in order to produce gold products.
- ***Technology Barrier.*** As the grade of gold ore decreases and mining depths increase, the difficulty and complexity of gold mining procedures rise accordingly, creating a high technical barrier for new entrants. Additionally, it takes a significant amount of time and effort for gold mining companies to acquire qualified professionals capable of applying new mining technologies. Furthermore, only companies with advanced technology and sufficient experience can meet the increasingly strict government requirements for safe production and environmental protection, further increasing the challenges for new entrants.
- ***Human Capital Barrier.*** As the mining industry shifting towards intelligent mining and green mining as global popular trends, the mining industry will become more technology-intensive in the future. The industry will become more human-capital-intensive as industry demand for talent with experiences in IT, ESG and mining is booming. Professionals with such rich experiences are extremely popular in recruiting market, and new market entrants often struggle to find experienced professionals.

Market Drivers

- ***Increasing Gold Reserve by Central Banks.*** Internationalization of the Renminbi is the result of national economic development. Since being included in the IMF's Special Drawing Right (SDR) in 2016, the Renminbi has become a big part of international reserve currency. As an important means of reserve and settlement, gold reserves are used to hedge the risk of international financial markets. There is a trend by China to increase its central bank gold reserves to meet the demand following the Renminbi's internationalization.
- ***Sustained Consumer Demand.*** The ongoing and long-term consumer demand for gold jewellery and gold as an investment asset plays an essential role in the global gold market. As a traditional pillar of the gold market, the demand for gold jewellry remains relatively stable. Moreover, facing economic fluctuations or uncertainties, individual investors are increasing their investment in gold.
- ***Rising Gold Price.*** The gold price drives gold supply, while gold demand is influenced by various factors. In recent years, under the combined effect of the increasing downward pressure on major economies and pessimism in the global financial, the safe-haven function of gold has been fully highlighted, and the price of gold has begun to trend upward.

- ***Increasing Demand for Safe Haven Assets.*** Global socio-economic fluctuations and uncertainties, coupled with geopolitical risks such as the Russia-Ukraine conflict and conflicts in Israel, have collectively fueled market demand for safe-haven assets. Against this backdrop, gold, as a traditional choice for risk aversion, is likely to attract some investors, and countries may increase their gold reserves to protect their economies from exchange rate fluctuations, thereby driving the growth of the global gold market.

Development Trend

The following are some of the trends of the global and PRC gold mining industry:

- ***Green Mining.*** Governments around the world have successively issued a series of policies calling for the development of environmentally friendly gold mining technologies. Therefore, gold mining companies are bound to renew their technologies to promote environmental-friendly mining.
- ***Deep Mining.*** With the consumption of shallow gold resources, global gold mining industry gradually turns to deep mining. With the gradual depletion of surface resources, many mining companies have begun to turn to deep mining. Deep gold mines may range from several hundred meters to several thousand meters deep, and some specific gold mines may even reach 4,000 meters or deeper. In China, the NDRC issued Guide Catalogue for Industrial Restructuring (2019 edition) encourages the development of deep gold mining. Enterprises with gold mining capabilities in challenging terrain, such as Our Company, are more competitive in the gold industry.
- ***Intelligent Mining.*** With the decrease in the cost of digital technologies and the successful trial and testing of digital solutions, it is becoming increasingly feasible to apply intelligent mining. Intelligent mining will enable the management of resources such as energy, labor, equipment, and infrastructure as variable costs. It integrates with smart automation based on equipment capacity, availability, and utilization. Optimizing these variable resources across the value chain will improve sustainability, reduce utility consumption, and significantly enhance mining efficiency.
- ***Enterprise mergers and acquisitions.*** Gold mining players are facing increasingly higher production cost and lower profit margin due to the large proportion of low-grade ore and refractory gold resources globally. Gold mining companies may turn to seek overseas gold resources, capital, and technology. Global mergers and large-scale acquisitions have become a major trend in the development of the gold industry.

Key Success Factors for Gold Mining Companies

- ***Increasing and Diversified Gold Mine Resources.*** It is crucial for gold mining companies maintaining competitiveness to increase and diversify their gold mine resources. The scale and quality of gold mine resources are foundations for gold mining companies to establish scale economy, maintain long-term growth and attract investments. The geographical diversity of gold mine resources will significantly increase the risk resistance capacity of gold mining companies.
- ***Technological Innovation.*** Chinese gold producers should continue to develop new technologies and strive to achieve low-cost operations and effective resource utilization through technological innovation and application. Advanced production management systems and technologies help enterprises achieve highly mechanized, digital, and intelligent control and optimization in the gold production process.
- ***ESG Governance.*** The gold industry should continue to adhere to the concept of green development. Chinese gold producers will continue to attach importance to the environment and safety, humanistic care, and social responsibility as one of the important goals of enterprise development.
- ***Supply Chain Management.*** In the process of gold mining and processing, gold mining companies need to procure various types of equipment and raw materials, such as rock drilling machines, drilling jumbos, scrapers, explosives, diesel, sodium cyanide, etc. Additionally, gold mining companies may employ different third-party

subcontractors for tasks like refining and logistics. A well-established supply chain management capability is crucial for gold mining companies to maintain efficient production and expand their asset portfolios globally.

- ***Gold Price Fluctuations.*** Gold price is the critical factor affecting a company's revenue and profits. Gold producers must closely monitor gold price trends, flexibly adjust production plans and sales strategies to cope with market opportunities and challenges.

OVERVIEW OF THE COPPER INDUSTRY

Introduction of Copper

Copper is one of the most used and reused of all metals. The demand for copper is due to its good strength, excellent electrical and thermal conductivity, outstanding resistance to corrosion, and ease of fabrication. Copper is often found in areas along the western continental edges of North and South America as well as southwestern part of the U.S. Currently, copper is used in building construction, power generation and transmission, electronic product manufacturing, and production of industrial machinery and transportation vehicles. It is also used in alloys such as brass and bronze, alloy castings, and electroplated protective coating in undercoats of nickel, chromium, and zinc.

Copper Reserves

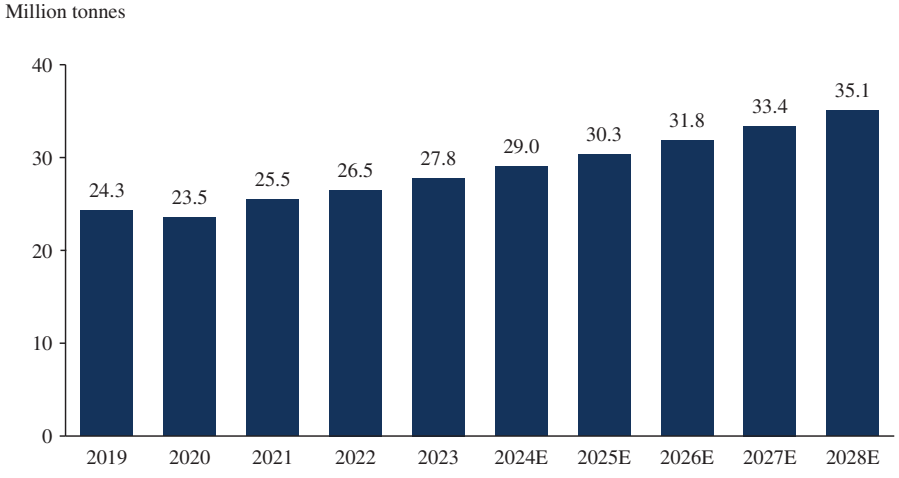
The global copper Reserves reached 1,000.6 million tonnes as of December 31, 2023, and the top three countries in terms of copper Reserves were Chile, Peru, and Australia, with their copper Reserves estimated at 190.0 million tonnes, 120.0 million tonnes, 100.0 million tonnes as of December 31, 2023, respectively. In addition, the copper Reserves in Laos were estimated at 1.7 million tonnes as of December 31, 2023. China's copper Reserves, which were largely concentrated in areas such as Tibet, Jiangxi and Yunnan, were estimated at 41.0 million tonnes and accounted for 4.1% of the global copper Reserves as of December 31, 2023.

Copper Demand

The following table sets forth the volume of global copper demand by end uses for the periods indicated.

Copper Demand, Global, 2019-2028E

	CAGR 19-23	CAGR 24E-28E
Copper Demand	3.5%	4.9%



Source: Frost & Sullivan

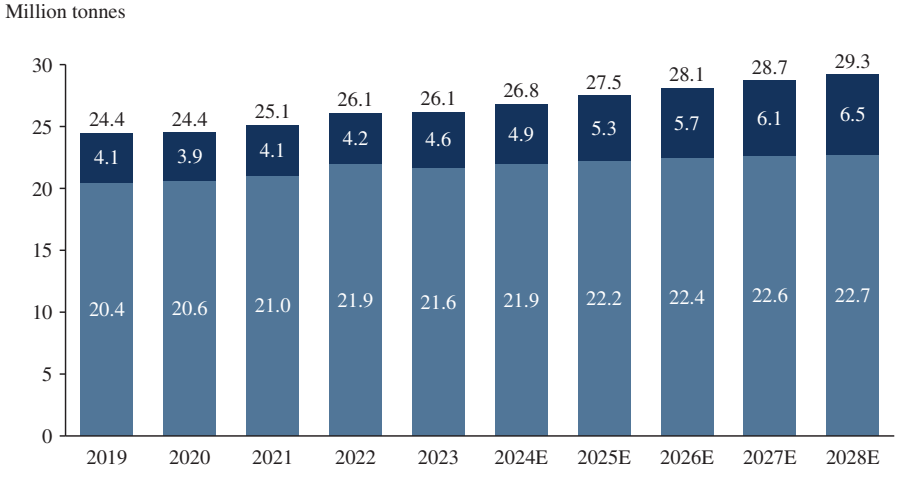
From 2019 to 2023, global copper demand increased at a CAGR of 3.5% from 24.3 million tonnes to 27.8 million tonnes. The significant increases in downstream industries, such as mechanical equipment, construction and power supply, have strongly supported the steady growth in global copper demand. In the future, the wide application of electric vehicles is expected to stimulate copper demand from transportation in global market, which will further drive the steady growth of global copper demand. Over the forecast periods, it is expected that global copper demand will further rise at a CAGR of 4.9% from 29.0 million tonnes in 2024 to 35.1 million tonnes in 2028.

Copper Supply

The following chart sets forth the volume of global copper supply for the periods indicated:

Copper Supply, Global, 2019-2028E

	CAGR 19-23	CAGR 24E-28E
Recycled Copper	2.9%	7.3%
Mine Production of Copper	1.4%	0.9%
Total	1.7%	2.2%

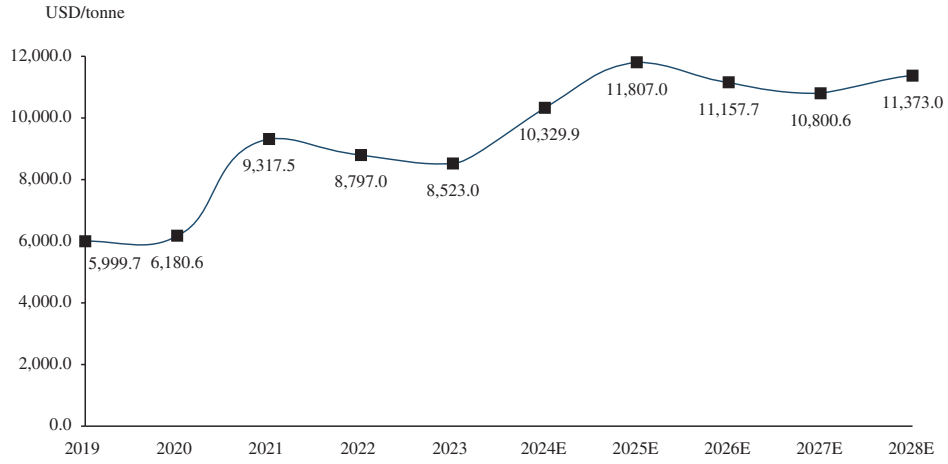


Source: Frost & Sullivan

Copper mining increased slightly from 20.4 million tonnes in 2019 to 21.6 million tonnes in 2023. Although mined copper outputs in multiple countries were affected by temporary smelter shutdowns for maintenance and upgrades, the post-pandemic economic recovery and the increased demand from downstream industries have stimulated steady growth of global mine production of copper. In the future, the global long-term transition towards renewable energy is expected to further boost copper demand. Over the forecast period from 2024 to 2028, mine production of copper is expected to grow at a CAGR of 0.9%, with production reaching 22.7 million tonnes by 2028. In addition, with the continuous improvement of recycled copper utilization technology, recycled copper will play a more important role in global copper supply. Over the forecast period during 2023 to 2028, global copper supply is expected to grow at a CAGR of 2.2%, with production reaching 29.3 million tonnes by 2028. In particular, it is estimated that global recycled copper production will increase at a CAGR of 7.3% and reach 6.5 million tonnes by 2028.

Copper Price

Copper Price, Global, 2019-2028E



Source: Frost & Sullivan

Due to the economic recovery after the COVID-19 pandemic and insufficient supply of copper mines, the global copper price rose sharply from USD5,999.7/tonne in 2019 to USD8,523.0/tonne in 2023. In the future, it is estimated that the global copper price will increase at a CAGR of 2.4% from 2024 to 2028 and reach USD11,373.0/tonne in 2028. The high demand for copper is expected to increase significantly in 2024, and this positive trend is expected to continue in 2025. To meet increasing copper demand, it is anticipated that the copper supply will undergo expansion in the coming years, which may cause a slight fluctuation after 2025. However, the expectation is that the increased scale of copper supply will be less than that of demand, indicating that the copper price will continue to increase during the subsequent years. Moreover, under the global accelerated transformation to the green economy, global demand for copper is expected to rise steadily and lead to a long-term structural gap between demand and supply, which will stimulate the recovery of the global copper price.

OVERVIEW OF INDUSTRIES RELATED TO OTHER MINERAL RESOURCES

Rare Earth

Rare earth metals are usually soft, ductile, and malleable, and are particularly reactive in powder form at high temperatures. Rare earths are relatively abundant in the Earth's crust, but minable concentrations are less common than for most other mineral commodities. In 2023, the global Reserves of rare earths amounted to 3,537.0 billion oz, and was mainly distributed in countries such as China, Vietnam, and Brazil. Among them, China has the highest proportion of rare earths Reserves in the world, totaling 1,414.8 million oz. China adheres to a principle of demand-driven allocation for rare earths and strictly controls the supply side of rare earths. The ongoing deepening of supply-side reforms is aimed at accelerating the integration of rare earth resources, promoting relative stability of product prices, and ensuring the safety and continuity of the supply chain.

Other Non-ferrous Metals

- ***Zinc***

Zinc has good corrosion resistance, ductility, and flowability. Zinc mainly exists in the form of sulphides, and the main zinc containing mineral is sphalerite. In 2023, the global Reserves of zinc amounted to 7,074.0 million oz, and was mainly distributed in countries such as Australia, China, and Russia. Among them, Australia has the highest proportion of zinc Reserves in the world, totaling 2,057.9 million oz.

- ***Lead***

Lead has good ductility and corrosion resistance, making it easy to make excellent alloys with other metals. Lead is mainly hidden in galena, a sulphide in the crust. In 2023, the global Reserves of lead amounted to 3,054.7 million oz, and was mainly distributed in countries such as Australia, China, and Russia. Among them, Australia has the highest proportion of lead Reserves in the world, totaling 1,125.4 million oz.

- ***Molybdenum***

Molybdenum occurs as the principal metal sulphide in large low-grade porphyry molybdenum deposits and as an associated metal sulphide in low-grade porphyry copper deposits. It is a silver-white metal, with a hard texture, high melting point, and relatively high thermal conductivity. In 2023, the global Reserves of molybdenum amounted to 482,315.1 million oz, mainly distributed in countries such as China, the United States, and Peru. China has the highest proportion of molybdenum Reserves in the world, totaling 186,495.2 million oz.

The following sets out a summary of the significant laws and regulations that affect our businesses in the PRC, Laos and Ghana. Information contained below shall not be construed as a comprehensive summary of all the laws and regulations applicable to us.

LAWS AND REGULATIONS RELATED TO OUR PRC OPERATIONS

Overview

Our business operations are subject to supervision and regulation by the PRC government. This section sets out a summary of the major laws, regulations and policies which we are subject to.

Principal Laws and Regulations Related to our Businesses in the PRC

Industry Classification

According to the Industry Classification of the National Economy (GB/T4754-2017) jointly issued by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of the People's Republic of China on June 30, 2017, the industry in which Chifeng Gold is engaged falls within "B0911 copper mining and processing" and "B0921 gold mining and processing" under "B09 non-ferrous metal mining and processing industry".

Laws and Regulations relating to Mineral Resources

According to the Mineral Resources Law of the People's Republic of China (《中華人民共和國礦產資源法》) which was promulgated by the Standing Committee of the National People's Congress (the "SCNPC") on March 19, 1986 and latest revised on August 27, 2009, all mineral resources of the PRC are owned by the State. Anyone who wishes to explore or mine mineral resources shall separately make an application according to law and shall register after obtaining the right of exploration or mining upon approval, with the exception of the mining enterprises that have, in accordance with the law, applied for and obtained the right of mining and are conducting exploration within the designated mining area for the purpose of their own production.

Administrative Measures for the Block Registration of Mineral Resource Prospecting (《礦產資源勘查區塊登記管理辦法》) was promulgated by the State Council on February 12, 1998 and latest revised on July 29, 2014. The State implements a unified registration management system for mineral resources exploration. Exploration of mineral resources listed in the Measures can only be launched with the approval and registration by the competent department of geology and mineral resources with the exploration licenses issued.

Rights and Obligations of Holders of Exploration Permits

When the prospecting right owner conducts an exploration during the validity period of the exploration permit and finds a complex type of deposit that meets the State's requirements about the mineral that can be mined while being explored, it may apply for mining and go through the mining registration formalities after approval by the registration management authority.

Administrative Measures for the Registration of Mineral Resources Exploitation (《礦產資源開採登記管理辦法》) was promulgated by the State Council on February 12, 1998 and latest revised on July 29, 2014. Mining mineral resources listed in the Measures must be examined and registered by the competent department of geology and mineral resources, and a mining right license must be issued. The valid period of the exploitation licenses shall be determined according to the construction scale of the mines. The maximum validity period of a mining permit for a big-scale mine, medium-scale mine and small-scale mine shall be 30 years, 20 years and 10 years, respectively.

Interim Measures on the Supervision and Control of Mineral Resources (《礦產資源監督管理暫行辦法》) was promulgated by the State Council on April 29, 1987 and came into effect on the same day. To develop and utilize mineral resources, mining enterprises shall strengthen mining management, select reasonable mining and processing methods, promote advanced technologies and improve the utilization of mineral resources.

Provisions on the Appraisal Procedures for the Value of Mineral Resources Destroyed by Illegal Mining and Destructive Mining (《非法採礦、破壞性採礦造成礦產資源破壞價值鑒定程序的規定》) was promulgated by the former Ministry of Land and Resources on August 31, 2005 and became effective on the same day. In the case of illegal mining or destructive mining which causes damage to the value of mineral resources, specific procedures shall be followed to identify and punish offences relating to mineral resources in accordance with the law. The value of mineral resources destroyed by illegal mining and destructive mining shall be appraised according to the following principle: the value of mineral resources destroyed by illegal mining includes the value of minerals extracted and the discounted value of mineral resources that should have been extracted by scientific and reasonable mining methods but are difficult to extract as a result of the destruction of deposits.

Measures for the Administration of Bidding, Auction and Listing Concerning Exploration Rights and Mining Right (for Trial Implementation) (《探礦權採礦權招標拍賣掛牌管理辦法(試行)》) was promulgated by the former Ministry of Land and Resources on June 11, 2003 and came into effect on August 1, 2003. The types of exploration rights and mining rights specified in this Measures shall be granted by the government at or above the county level through bidding, auction and listing. The Ministry of Land and Resources shall be responsible for the supervision and administration of the bidding, auction and listing activities of exploration rights and mining rights nationwide.

According to the Administrative Measures for the Transfer of Exploration Rights and Mining Rights (《探礦權採礦權轉讓管理辦法》) which was promulgated by the State Council on February 12, 1998 and latest revised on July 29, 2014, and the Provisions on Issues Concerning the Examination and Approval of the Transfer of Exploration Rights and Mining Rights (《探礦權採礦權轉讓審批有關問題的規定》) which was promulgated by the former State Land Administration on December 14, 1998 and became effective on the same day, the transfer of exploration rights and mining rights shall meet the conditions stipulated in these Measures. The transferee of exploration rights or mining rights shall meet the conditions for applicants of exploration rights or mining rights stipulated in the Administrative Measures for the Block Registration of Mineral Resource Prospecting (《礦產資源勘查區塊登記管理辦法》) or Administrative Measures for the Registration of Mineral Resources Exploitation (《礦產資源開採登記管理辦法》). The transfer of exploration rights and mining rights based on state-funded exploration must be assessed. The cost of exploration right and mining right based on state-funded exploration, shall be assessed by the agencies with mining right assessment qualification. The assessment report shall be filed with the registration and administration authority of exploration right and mining right. If a mining enterprise or individual transfers part of the exploration area under an exploration right or part of the mining area under a mining right, they must complete the alteration and division registration in respect of such exploration right or mining right after obtaining the prior approval of the original registration authority, and submit the application for transfer to the transfer approval authority.

Laws and Regulations relating to Production Safety

The PRC government has formulated a relatively comprehensive set of laws and regulations on productions safety, including the Law on Work Safety of the PRC (《中華人民共和國安全生產法》) (coming into effect on November 1, 2022 and revised on August 31, 2014), the Interim Measures for the Supervision and Administration of 'Three Simultaneities' for Safety Facilities of Construction Projects (《建設項目安全設施"三同時"監督管理辦法》) (coming into effect on June 1, 2012 and revised on April 2,2015), the Law on Mine Safety of the PRC (《中華人民共和國礦山安全法》) (coming into effect on May 1, 1993 and revised on August 27, 2009) as well as the Implementation Rules for the Mine Safety Law of the People's Republic of China (《中華人民共和國礦山安全法實施條例》) (coming into effect on October 30, 1996) promulgated by the State Council, covering mineral resources exploration, mining and mine construction. The State Administration of Work Safety (國家安全生產監督總局) is responsible for the overall supervision and management of the safety production nationwide, while the departments in charge of safety production at the county level or above are responsible for the overall supervision and management of the safety production within their own jurisdictions.

Regulations on Work Safety Licenses (《安全生產許可證條例》) was promulgated by the State Council on January 13, 2004 and latest revised on July 29, 2014. The State applies the work safety licensing system to enterprises engaged in mining, construction, and the production of dangerous chemicals, fireworks and crackers, and civil use explosive material. No enterprise may engage in production activities without a work safety license.

The PRC government implements a licensing system for production safety of mining enterprises under the Regulations on Work Safety Permits (coming into effect on January 13, 2004 and revised on July 29, 2014). No mining enterprise may engage in production activities without holding a valid production safety license. Enterprises which fail to fulfill the production safety conditions may not carry out any production activity. Mining enterprises which have obtained the production safety licenses shall not lower their production safety standards, and shall be subject to the supervision and inspection by the licensing authorities from time to time. If the licensing authorities are of the opinion that the mining enterprises do not fulfill the production safety requirements, the production safety licenses may be withheld or revoked.

Pursuant to the relevant requirements of the Law on Mine Safety of the PRC (《中華人民共和國礦山安全法》), the Regulations on Reporting, Investigation and Treatment of Work Safety Accidents (《生產安全事故報告和調查處理條例》) (State Council Order No. 493), the Notice on Regulating the Inspection for Acceptance upon Completion of Safety Facilities in Metal and Non-metal Mine Construction Projects (《關於規範金屬非金屬礦山建設項目安全設施竣工驗收工作的通知》) issued by the State Administration of Work Safety (SAWS — [2016] No. 14), the authorities in charge of mining enterprises under the people's governments at or above the county level shall exercise the following functions and responsibilities with respect to the control of safety work in mines: (i) to inspect the implementation of laws and regulations on safety in mines by mining enterprises; (ii) to examine and approve designs of safety facilities in mine construction projects; (iii) to supervise the inspection for acceptance upon completion of safety facilities in mine construction projects; (iv) to manage the training of managers of mines and personnel in charge of safety work in mining enterprises; (v) to investigate and handle work safety accidents at mines; and (vi) other controlling functions and responsibilities provided for in laws and administrative rules and regulations.

Upon occurrence of accidents, mining enterprises shall immediately take measures to rescue their workers and report any casualty to the relevant authority. In the event of a general mine accident, the mining enterprise shall be responsible for investigating and handling the case. In the event of a fatal accident, the government, the relevant authority, the labor union and the mining enterprise shall conduct investigation and handle the case together. In addition, mining enterprise shall pay compensation to any staff who was injured or died in the accident in accordance with the national requirements. Such mining enterprise may only resume production after the relevant danger at the scene has been eliminated.

Pursuant to Measures on the Implementation of Work Safety Permit for Non-Coal Mining Enterprises (《非煤礦礦山企業安全生產許可證實施辦法》) (coming into effect on May 17, 2004 and revised on May 26, 2015), non-coal mining enterprises must obtain the production safety permit and are prohibited from engaging in any production activities without obtaining the permit.

Pursuant to the Law of the PRC on the Prevention and Control of Occupational Diseases (《中華人民共和國職業病防治法》), which was promulgated on October 27, 2001 and latest amended on December 29, 2018, and Measures for the Declaration of Projects with Occupational Hazards (《職業病危害項目申報辦法》), which was promulgated on April 27, 2012 and became effective on June 1, 2012, the facilities for the prevention and control of occupational diseases of a construction project must be designed, constructed and put into production and be used with the principal project at the same time. Besides, where there are occupational disease hazard factors listed in the catalogue of occupational diseases in the work site, production entities shall truthfully declare the hazardous project to the local health administrative department in a timely manner and be subject to their supervision.

Laws and Regulations relating to Environmental Protection

The PRC laws and regulations relating to environmental protection mainly include: Environmental Protection Law of the People's Republic of China (《中華人民共和國環境保護法》) (revised on April 24, 2014 and implemented on January 1, 2015), Water Pollution Prevention and Control Law of the People's Republic of China (《中華人民共和國水污染防治法》) (promulgated on June 27, 2017 and implemented on January 1, 2018), Atmospheric Pollution Prevention and Control Law of the People's Republic of China (《中華人民共和國大氣污染防治法》) (promulgated on June 27, 2017 and implemented on January 1, 2018), Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes (《中華人民共和國固體廢物污染環境防治法》) (promulgated and implemented on November 7, 2016) and Implementation Regulation on the Environmental Protection Tax Law of the People's Republic of China (《中華人民共和國環境保護稅法》) (promulgated on December 25, 2017 and implemented on January 1, 2018).

Pursuant to the aforesaid laws and regulations, enterprises that discharge and dispose of toxic and dangerous substances such as waste water, waste gas and solid waste must comply with the national and local standards of use, and shall declare to and register with the relevant environmental protection administration authorities and pay pollution discharge fees as required depending on the circumstances.

Law of the People's Republic of China on Environmental Impact Assessment (《中華人民共和國環境影響評價法》) was promulgated by the SCNPC on October 28, 2002 and latest revised on December 29, 2018. The State implements a classification-based management on environmental impact assessment of construction projects according to the impact of the construction projects on the environment. Construction entity shall prepare the environmental impact report or environmental impact statement or fill out the environmental impact registration form.

Regulations on the Administration of Construction Project Environmental Protection (《建設項目環境保護管理條例》) was promulgated by the State Council on November 29, 1998 and latest revised on July 16, 2017. State standards and local standards for the discharge of pollutants must be complied with in building construction projects that generate pollution; requirements for aggregate control of discharge of major pollutants must be met in areas under aggregate control of discharge of major pollutants.

Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution (《中華人民共和國大氣污染防治法》) was promulgated by the SCNPC on September 5, 1987 and latest revised on October 26, 2018. Enterprises, public institutions and other producers and operators that build projects having impacts on the atmospheric environment shall conduct environmental impact assessment and disclose the environmental impact assessment documents to the public in accordance with the law; where pollutants are discharged to the atmosphere, the discharging units must comply with the discharging standard for atmospheric pollutants as well as the requirements on control of the total discharging amount of key atmospheric pollutants.

The Law of the People's Republic of China on the Prevention and Control of Environmental Pollution caused by Solid Waste (《中華人民共和國固體廢物污染環境防治法》) was promulgated by the SCNPC on October 30, 1995, and was latest revised on April 29, 2020 and implemented on September 1, 2020. The construction of projects that produce, store, use, and treat solid wastes shall be performed with environmental impact assessment conducted as legally required and in compliance with the relevant provisions issued by the state concerning the management of environmental protection in respect of construction projects. The facilities for the prevention and control of environmental pollution by solid wastes required to be built as ancillaries determined in the environmental impact assessment document of a construction project shall be designed, built and put into operation at the same time as the main part of the project. A mining enterprise shall adopt scientific mining methods and techniques for mineral separation so as to reduce the production and storage of tailings, coal gangue, waste rock and other mining solid wastes.

The Law of the People's Republic of China on the Prevention and Control of Water Pollution (《中華人民共和國水污染防治法》) was promulgated by the SCNPC on May 11, 1984 and was latest revised on June 27, 2017. EIA must be carried out according to law for newly-formed projects and reconstruction, or extensions projects that directly or indirectly discharge pollutants to water bodies and other installations on water. The water pollution prevention and control facilities shall meet the requirements of environmental impact assessment documents approved or filed for the record. Enterprises, institutions and other production and operation units directly or indirectly discharging industrial waste water and medical sewage to waters and enterprises, institutions and other production and operation units required to obtain pollutant discharging permit before discharging waste water and sewage must obtain the pollutant discharging permit. When constructing underground facilities or conducting underground exploitation or mining activities, preventive measures must be taken to prevent groundwater pollution.

The Law of the People's Republic of China on the Prevention and Control of Noise Pollution (《中華人民共和國噪聲污染防治法》) was promulgated by the SCNPC on December 24, 2021 and will take effect on June 5, 2022. New construction, reconstruction or expansion projects that may cause noise pollution shall be subject to the environmental impact assessment in accordance with the law.

The Regulation on Land Reclamation (《土地復墾條例》) was promulgated by the State Council and became effective on March 5, 2011, and the Measures for the Implementation of the Regulation on Land Reclamation (《土地復墾條例實施辦法》) was promulgated on December 27, 2012 and amended on July 24, 2019. A production or construction entity or individual (the 'Land User') must undertake measures to restore a mining site to its original state within a prescribed time frame if its mining activities result in damage to arable land, grassland or forestry land. The land user is also required to formulate and implement a land rehabilitation plan and to restore the land to a state appropriate for use by rehabilitation if its mining activities result in damage to the land. The land rehabilitation plan shall be approved by the relevant land resources authority. The land user is also required to set aside funds to be used in land rehabilitation. The rehabilitated land is legally required to meet rehabilitation standards and may only be subsequently used upon examination and approval by the land authorities. Any failure to comply with this requirement or failure to restore the mining site to its original state will result in the imposition of fines, rehabilitation fees, rejection of applications for land use rights or rejection of application for new mining permits or renewal, alteration or cancellation of mining permits by the local bureau of natural resources.

Laws, Regulations and Normative Documents relating to Foreign Investment and Foreign Exchange

The Measures for the Administration of Overseas Investment of Enterprises (《企業境外投資管理辦法》) were promulgated by the NDRC on December 26, 2017 and came into effect on March 1, 2018. To make outbound investment, any investor shall go through the formalities to have a proposed overseas investment project approved or filed on the record, report relevant information, and cooperate with supervision and inspection. An investor shall, in overseas investment, neither violate the laws and regulations of China nor threaten or damage the national interests and national security of China.

The Notice of the SAFE on Issues Concerning the Foreign Exchange Administration of Overseas Listing (《國家外匯管理局關於境外上市外匯管理有關問題的通知》) was promulgated by the SAFE on December 26, 2014 and became effective on the same day. SAFE and its branches with foreign exchange authorities supervise, manage and inspect, among other things, the business registration, account opening and use, cross-border payments and capital exchange involved in the overseas listing of domestic companies. A domestic company shall conduct overseas listing registration with Foreign Exchange Bureaus at the place of its incorporation with the relevant materials within 15 working days after the completion of the offering of its overseas listing shares.

The Circular of the State Administration of Foreign Exchange on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts (《國家外匯管理局關於改革和規範資本項目結匯管理政策的通知》) was promulgated by the State Administration of Foreign Exchange on June 9, 2016 and came into effect on the same day. The foreign exchange receipts under capital accounts of domestic institutions are subject to discretionary settlement policies. That the foreign exchange receipts under capital accounts (including foreign exchange capital, foreign debts, and repatriated funds raised through overseas listing) subject to discretionary settlement as expressly prescribed in the relevant policies may be settled with banks according to the actual need of domestic institutions for business operations has been clearly implemented in relevant policies. Domestic institutions may, at their discretion, settle up to 100% of foreign exchange receipts under capital accounts for the time being. The SAFE may adjust the above proportion in due time according to balance of payments. While being eligible for discretionary settlement of foreign exchange receipts under capital accounts, domestic institutions may also opt to use their foreign exchange receipts according to the payment-based settlement system. A bank shall, in handling each transaction of foreign exchange settlement for a domestic institution according to the principle of payment-based settlement, review the authenticity and compliance of the use of the fund settled in the previous transaction (including discretionary settlement and payment-based settlement) of such institution. The receipts under the capital account shall not be directly or indirectly used for expenditures beyond the business scope of the enterprise or prohibited by the laws and regulations. Except as otherwise provided by laws and regulations, they shall not be directly or indirectly used for securities investment or other investment and wealth management products except for principal-guaranteed products launched by banks; they shall not be used for granting loans to non-affiliated companies (except explicitly approved within business scope); and they shall not be used for building or purchasing real estate not for their own use (except for real estate enterprises).

The Notice by the State Administration of Foreign Exchange to Facilitating Promoting Cross-border Trade and Investment (《國家外匯管理局關於進一步促進跨境貿易投資便利化的通知》) was promulgated by the State Administration of Foreign Exchange on October 23, 2019 and came into effect on the same day. Foreign-invested enterprises engaged in non-investment business are permitted to settle foreign exchange capital in RMB and make domestic equity investments with such RMB funds according to the law under the condition that the Negative List is not violated and the relevant domestic investment projects are true and compliant.

The Circular on Optimizing Administration of Foreign Exchange to Support the Development of Foreign-related Business (《關於優化外匯管理支持涉外業務發展的通知》) was promulgated by the State Administration of Foreign Exchange on April 10, 2020 and became effective on the same day. Eligible enterprises are allowed to make domestic payments by using their capital, foreign credits and the income under capital accounts of overseas listing, with no need to provide the evidentiary materials concerning authenticity of such capital for banks in advance, provided that their capital use shall be authentic and in line with provisions, and conform to the prevailing administrative regulations on the use of income under capital accounts. The concerned bank shall conduct spot checking in accordance with the relevant requirements.

Laws, Regulations and Normative Documents relating to Labor Relations, Social Insurance and Housing Provident Fund

The Labor Law of the People's Republic of China (《中華人民共和國勞動法》) was promulgated by the SCNPC on July 5, 1994 and was latest revised on December 29, 2018. An employer shall establish a sound system of employment rules so as to ensure that its workers enjoy the labor rights and perform the employment obligations. Employers must establish comprehensive labor safety and health policies. They must strictly implement national labor safety and health regulations and standards, provide labor safety and health education to workers, prevent accidents at work, and reduce occupational hazards.

The Labor Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》) (promulgated by the SCNPC on June 29, 2007 and latest revised on December 28, 2012) and the Regulations on the Implementation of the Labor Contract Law of the People's Republic of China (《中華人民共和國勞動合同法實施條例》) (promulgated by the State Council on September 18, 2008 and came into effect on the same day) stipulate the rights and obligations of the parties to the labor contract, including the conclusion, performance, modification, rescission and termination of the labor contract, etc. Employers must enter into written labor contracts with workers and pay labor remuneration to workers timely and in full amount in accordance with the provisions of the labor contract and national regulations. Employers may terminate labor contracts with workers under certain circumstances and pay economic compensation to workers according to law.

The Social Insurance Law of the People's Republic of China (《中華人民共和國社會保險法》) was promulgated by the SCNPC on October 28, 2010 and latest revised on December 29, 2018. Employers shall register for social insurance at a local social insurance agency and pay social insurance premiums for workers, including basic endowment insurance premiums, basic medical insurance premiums, work-related injury insurance premiums, unemployment insurance premiums and maternity insurance premiums, etc.

The Regulations on the Administration of Housing Provident Fund (《住房公積金管理條例》) was promulgated by the State Council on April 3, 1999 and was latest revised on March 24, 2019. The employer shall undertake housing provident fund payment and deposit registrations at the housing provident fund administration center, and open housing provident fund accounts on behalf of its workers. The employer shall pay and deposit housing provident fund for its employees with a rate of not less than 5% of the average monthly salary of the employees concerned in the previous year.

Laws, Regulations and Normative Documents relating to Enterprise Tax

The Enterprise Income Tax Law of the People's Republic of China (《中華人民共和國企業所得稅法》) (promulgated by the SCNPC on March 16, 2007 and latest revised on December 29, 2018) and the Regulations on the Implementation of the Enterprise Income Tax Law of the People's Republic of China (《中華人民共和國企業所得稅法實施條例》) (promulgated by the State Council on December 6, 2007 and latest revised on April 23, 2019), a resident enterprise is subject to enterprise income tax for the income derived from both inside and outside the

territory of the PRC. The enterprise income tax rate is 25%. Qualified small low-profit enterprises are given the reduced enterprise income tax rate of 20%. High and new technology enterprises which are supported by the State may enjoy a reduced EIT rate of 15%.

The Notice on Issues Concerning the Foreign Income Tax Credit of Enterprises (《關於企業境外所得税收抵免有關問題的通知》) was promulgated by the Ministry of Finance and the State Administration of Taxation of the People's Republic of China on December 25, 2009 and became effective on the same day. A resident enterprise may deduct from the taxable amount of incomes of the current period its taxable incomes derived outside China. Where the income received by a resident enterprise from a country (region) that has entered into a tax treaty (or arrangement) with the Chinese government has enjoyed tax exemption or reduction treatment in accordance with the tax laws of the country (region), and the amount of tax exempted or reduced should be deemed that the tax paid is credited against the tax payable in China in accordance with the provisions of the tax treaty, the amount of tax exempted or reduced may be used as the amount of overseas income tax actually paid by the enterprise for tax credit purpose.

LAWS AND REGULATIONS IN RELATION TO OUR OPERATIONS IN LAOS

Legislation on Foreign Investments

The Investment Promotion Law No. 14/NA dated 17 November 2016 ("**Investment Promotion Law**") is the main legislation on investment in Laos. It defines the forms of investments and procedure for investors to engage in general investment and concession businesses in Laos. This law provides for the incentives, support, and process for investments in the country.

Under the Investment Promotion Law, business activities are classified as:

1. general investments not in the controlled business list, such as a general construction company;
2. general investments under the controlled business list, defined as businesses that have an impact to the stability of national security, public order, national fine tradition and environment, society and nature; or
3. concession investments, which are investments for which an investor is authorized by the Laotian Government in accordance with relevant laws and regulations to develop and operate a business notably involving mining, concession of land, development of special economic zones, zones for industrial processing for export, electric energy development, aviation, and telecommunication. The term of investment in a concession investment depends on the type, size, investment value, conditions, and feasibility study of the business in compliance with relevant laws, but shall not exceed fifty years. This investment term may be extended with the approval of the Laotian Government or the Laotian National Assembly or a provincial level assembly, as set out in the relevant law.

The Investment Promotion Law requires an investor in concession business to submit an application for investment license to the Ministry of Planning and Investment ("**MPI**"). The form of incorporation of the project company and the issuance of investment license will also be considered by the MPI for a project in a concession business. The project owner may request for the change of the form of investment. Such request will be subject to the consideration of the MPI.

The Prime Minister's Decree on the Approval of Controlled Business List and Concession Activity in Lao PDR No. 03/PM dated 10 January 2019 ("**Decree No. 03**") enumerates the controlled business list (business that has impact on national security, social peace and tradition, and environment, society, nature) and concession list (includes businesses where investor receives approval for land concession, development of energy sources). Mining activities are included in the list as a concession investment.

Under the Investment Promotion Law, registered capital for concession investment such as mining investments shall not be less than thirty (30%) percent of total capital. Registered capital for concession investment shall be clearly expressed in assets, and throughout the investment operation period the asset value shall not be less than the registered capital.

For a project company incorporated for a concession investment, the following minimum paid up registered capital for concession investment must be made within 90 days from date of the investment license issuance under the Investment Promotion Law:

1. three percent (3%) of registered capital for projects with investment value of less than ten million U.S. dollars;

2. two percent (2%) of registered capital for projects with investment value from ten million to five hundred million U.S. dollars;
3. one and a half percent (1.5%) of registered capital for projects with investment value of more than five hundred million to one billion U.S. dollars;
4. one percent (1%) of registered capital for projects with investment value of more than one billion U.S. dollars.

The remaining amount shall be imported within two years.

Mineral Law

The Law on Minerals No. 31/NA dated 3 November 2017 ("**Mineral Law**") is the main legislation governing mining development in Laos PDR. It provides for the principles, rules, and regulations relating to managing, monitoring, and inspecting protection, trading, mineral resource and minerals utilization, and the campaign of minerals to make it transparent, efficient, and in order in detection, survey, excavation, and mineral processing, ensuring the protection of heath, life, and safety of effected community, workers, and social and environment protection; aiming to develop mineral area under economical plan, green and sustainability, friendly to environment, create opportunities for economic growth, transform to advanced industrialization gradually, contribute to national socio-economic development, improve the livelihoods of Lao people.

The Ministry of Energy and Mines ("**MEM**") is the primary ministry responsible for the management and monitoring of mineral business activities in Laos.

Mineral Activities

Activities concerning minerals are as follows:

a. Prospecting

Mineral prospecting refers to the study of data and information and field work to determine geological conditions of the area and occurrences of mineralization, including evaluation of mineral data aiming to identify feasible areas for exploration. Mineral prospecting shall use advanced equipment to ensure efficient results. Individuals, entities, and organizations are not allowed to operate mineral prospecting without legal approvals.

Prospecting license is issued to certify the right of investors to conduct prospecting activities under an approved plan of the MEM. The application of the prospecting license shall include following documents:

1. Investment license;
2. The report on results of the field data collection;
3. Location defined map of prospecting application;
4. Prospecting fund sources, minimum expenditure and prospecting plans; and
5. Academic and experience qualifications on minerals of officers.

Prospecting license is valid up to two years extendable once but not more than one year. Conditions on Prospecting license renewal are as follows:

1. Application shall be submitted ninety days before the expiry date of existing license, otherwise, the application is not taken into consideration;
2. Financial obligations, obligations under local administrative authorities, and other obligations under the law shall be implemented;
3. Submit reports on prospecting results and completing least sixty percent of operations under the prospecting plan have been undertaken;
4. Propose plan to continue the prospecting;
5. Rehabilitate areas that have been excavated, drilled such as unnecessary trenches and pits; and
6. Return at least twenty five percent of implemented area with non-economic benefit minerals along with the reports on prospecting operations which include prospecting information, relevant maps, sample inventory location, and analyzed results.

A legal entity can operate one area of mineral prospection which covers maximum of two hundred square kilometers. The applied area must be consistent with concession area management system of the MEM.

b. Exploring

Mineral exploration refers to the study and evaluation of geological structures and mineral sources, within the identified areas, that may include geological work, geophysics, drilling, tunneling, trenching, pitting, sampling, analysis and assay and other activities to learn about quantity and grade of any mineral reserves and to assess the Technical-Economic Feasibility Studies for mining. Individuals, entities, and organizations are not allowed to operate mineral exploration and mineral mining without legal approvals.

After completion of prospecting and determining the feasibilities in exploration, the investor shall apply to the MEM for an exploration license within ninety days prior to expiry date of the prospecting license. The application shall include the following documents:

1. Prospecting license and reports on prospection;
2. Fund sources for exploration, minimum expenditure and exploration plans,
3. Socio-natural environment monitoring, inspecting, and management plans; and
4. Certificates of implementation of financial obligations and other obligations under the law.

For areas that have been prospected and have geologic information, a legal entity can directly apply for exploration.

The MEM considers the application within thirty workdays from the date of receiving the prospecting reports and exploration application.

c. Technical-Economic Feasibility Studies

Technical-Economic Feasibility Studies review and evaluate the results from mineral exploration in order to determine the best option for mineral development by comparison in technics, technologies, marketing, investments, and the impacts on social and natural environment.

After the acceptance of the summary report on mineral exploration, the investors shall apply for certificate of Technical-Economic Feasibility Study implementation with the MEM within fifteen workdays from the date of the application.

The term of a Technical-Economic Feasibility Study is up to two years extendable once but not more than one year. After completion of the Technical-Economic Feasibility Study, the licensed investors are able to implement mining under the negotiations and contracts with the Laotian Government.

d. Mining

Mining is the extraction of minerals from the surface and underground by any process of excavating, mining, digging, drilling, pumping, blasting, concentrating, removing, and storing of minerals. Individuals, entities, and organizations are not allowed to operate mining without legal approvals.

The investment in mineral mining shall have a mineral development concession contract, mineral license approvals, and mine closure. After receiving the investment certificate and signing the mineral development concession contract, the investor must apply for mining license before the MEM. Under the current Mineral Law, the term of mining license is not over twenty years extendable for ten years each time. The term of the mining license includes inspecting period after mine closure.

We note that in the previous Mining Law No. 04-97/NA dated April 12, 1997, the period of mineral exploitation concession shall not exceed 30 years from the grant of the concession, which may be extended twice, each time for no more than 10 years, as approved by the Laotian Government on a case-to-case basis.

Conditions for renewal of the mining license are as follows:

1. The application must be submitted twelve months before the expiry date of the mining license;
2. Completed implementation of financial obligations and other obligations under the laws;

3. Compliance with approved mining plans;
4. Plan for the continuation of the implementation of the mining project;
5. Negotiation on conditions of contract, if necessary.

e. Mineral processing

Mineral processing is the procedure of extraction of products with economic value from raw minerals by crushing, grinding, separating, washing, refining, separation by machine, grinding, polishing, leaching, flotation, filtering, electrical separation, smelting, storing, and managing the waste products. The investor with mineral processing license has the right to buy and sell, import and export mineral products.

f. Selling and Buying minerals and mineral products

Selling and buying minerals and mineral products is an agreement between the mining investors with individuals or legal entities, both domestic and foreign, to trade mined minerals and process into products or commodities to supply to domestic and international markets.

Individuals or legal entities with processing license has the right to buy, sell, and import raw materials and semi-finished products to process into products or commodities to supply to domestic and international markets.

g. Transporting minerals and mineral products

Transportation of minerals and mineral products refers to the moving of minerals and mineral products from one location to another location domestically or to overseas or from overseas into the domestic market, which must be done in accordance with the Mineral Law and other relevant laws and regulations.

h. Mine closure

Mine closure refers to the process of restoration and rehabilitation of the land after the completion of mining activities to hand over the concession area to the Laotian Government.

After completion of each mining area, the investor must proceed with mine closure according to the mine closure procedures, timetables and evaluations of the expenditures on area rehabilitation, mine closure, and the inspection after mine closure in accordance with the approved mine closure and mining area rehabilitation plans.

The mining and mine closure plans must be continually implemented from the beginning of mining operation and be reviewed and improved every three years. The investors must periodically report the progress of mining area rehabilitation and mine closure to the MEM.

Two years before end of mine closure, the MEM coordinates with the Ministry of Natural Resources and Environment, relevant local administrative authorities and communities in project areas to consult on the utilization of land, infrastructure, building and others.

After completion of mining area rehabilitation and mine closure, the investors must return the concession area along with infrastructure and other relevant rights to the State. If investors correctly complete all the conditions, the MEM will issue a certificate for mine closure and return of the concession area.

Investors must guaranty the costs of environment rehabilitation and mine closure including the inspecting activities after mine closure by providing a cash guaranty, bonds or other financial instrument from a bank in Laos according to the value stated in the approved mine closure and mining area rehabilitation plans.

i. Transfer of the mining area

Transfer the mining area is the handing over the rights on the licensed mining area to the government.

Measures for Violation

Under the Mineral Law, individuals, legal entities or organizations violating the Mineral Law shall be subject to measures from re-education, warning, disciplinary measures, fines, civil measures, or penal prosecution, depending on the seriousness of the violation.

The Decree Fines and Other Measures against Violators of Laws and Regulations on Minerals No. 373/GOV dated 01 December 2023 enumerates the fines and application of other measures for administrative violations of the mineral legislation that shall be imposed to individuals, legal entities, and organizations involved in mineral activities.

Labor Matters

Labor Standards

The Labor Law (amended) No. 43/NA dated 24 December 2013 ("**Labor Law**") sets the labor standards, labor relations, health, safety and welfare conditions for workers in Laos.

This Law sets the hours of work to six days per week and eight hours per day. The hours of work is reduced to not exceeding six hours per day for hazardous occupations, such as work in pits, underground tunnels, underwater or in high elevations, work directly with constantly vibrating equipment, or direct exposure to dangerous materials or chemicals such as explosives. Normal hours of work may also be reduced in cases where danger cannot be prevented or controlled. The limited hours may apply to workers in the infrastructure markets, depending on the work location and conditions. Overtime is also limited to forty-five hours per month or three hours per day, and in no case be for more than four consecutive days, except in case of emergency work such as to combat natural disasters or accident that would cause great damage to the labor unit.

A company may hire needed foreign workers when granted authorization for importation of foreign labor according to the allowed quota from the Ministry of Labor and Social Welfare ("**MLSW**"). Foreign workers need to secure a work permit, work visa, and stay permit. Foreign workers are allowed to remain for a period of twelve months, which can be extended for the same period for up to five years. Management level workers and specialists may be considered specifically for extensions.

The Labor Law provides for instances where employment contracts may be cancelled by mutual agreement or unilaterally by either the employer or employee (without fault) by giving notice for at least thirty (30) days in advance for unskilled or manual labor and forty-five (45) days for skilled or academic employees. The same thirty or forty-five day notice requirements apply in case of a sale or transfer of business, or a change in employer. Contracts may also be cancelled in case of fault of an employee or employer, and in the latter case, the employee may be reinstated or be paid compensation.

The internal regulations of a labor unit, or Rules of Work, are considered as legislation that the employer must devise to implement the Labor Law. The Rules of Work is registered for approval of the Labor Administration Agency and must be written in the Lao language and in case where the labor unit includes foreign labor, translated into the language of the foreign employee.

Social Security

The Law on Social Security No. 54/NA dated 27 June 2018 ("**Social Security Law**") sets out the benefits provided under the National Social Security Fund for health care, maternity, employment injury, occupational disease, invalidity, sickness, pension, death, survivor's benefit and unemployment. Under this Law, employers are required to contribute 6% and employees contribute 5.5% of employee's monthly insurable earnings to the social security fund for the payment of social security benefits. Employers are required to register with the Social Security Organization in order to pay the contributions required under this Law.

Labor Health and Safety

The Decree on Labor Safety and Health No. 22/GOV dated 05 February 2019 defines the regulations and measures related to labor safety and health to prevent labor accidents and occupational diseases. The Decree provides the requirement for appropriate personal protective equipment, installation of danger signs and warnings, and safety culture. Employers are required to report labor accidents and occupational diseases to the Labor Management Department. The employer and Social Security Organization bears the cost of treatment, allowance and compensation of workers who suffered from labor accidents and occupational disease.

Larger labor units with 101 to 1,000 employees are required to have a part time or full time specialist such as doctor, nurse, sanitation officer and engineer under the Decree on Labor Safety and Health. Under the Labor Law, for labor units in remote areas with 50 or more employees, a medical practitioner must be assigned to the labor unit.

Employees responsible for labor health and safety must have knowledge and undergone training, or have a degree or certification from an institute or organization on labor health and safety that is recognized by the Labor Administration Agency of the MLSW.

Environment

Laws and Policies on Environment

The Environmental Protection Law No. 29/NA dated 18 December 2012 ("**Environmental Law**") is the main legislation that provides the regulations and measures related to environmental management, aiming to provide balance between social and natural environment, to sustain and to protect natural resources and public health; and contribution into the national socio-economic development and reduction of global warming.

Under this Law, the issuance of Environmental Compliance Certificate ("**ECC**") is a required document for every project that is subject to the requirement for the submission of environmental assessment report. The term of the ECC shall cover the term of the project unless the project owner fails to implement the project within 2 years from the issuance date, in which case the certificate will expire. In case that the project owner has the interest to continue the operations or activities, there shall be a petition submitted to revalidate the certificate.

The Environmental Law compels the project owner to be responsible for environmental rehabilitation of the affected area in case of the occurrence of environmental disaster. For natural disaster, project owner has the duty to fulfill obligations in preventing and safeguarding against natural disaster and report a disaster to authorities.

Environmental Impact Assessment

The Decree on Environmental Impact Assessment No. 389/PMO dated 20 October 2022 ("**EIA Decree**") details the process for the submission and approval of the Environmental Impact Assessment ("**EIA**") and Environmental Social Management and Monitoring Plans ("**ESMMP**"). An EIA is defined in the EIA Decree as "a process of studying, surveying, analyzing and evaluating positive and negative impacts on social and natural environment caused by investment projects and activities both in the short and long terms, including setting appropriate methods and measures to protect, avoid, and mitigate those impacts".

There are two types of EIAs:

a. Initial Environmental Assessment ("**IEE**"), which is conducted for projects expected to generate low or insignificant environmental social impacts; and

b. Environmental and Social Impact Assessment ("**ESIA**") is for activities that are expected to generate significant or adverse environmental and social impacts.

An ESIA report is the result of the studies on the environmental impacts generated by investment projects and activities which will include direct and indirect impacts on living organisms, ecology, and the environment so that measures to prevent, mitigate and remedy the potential environmental impacts can be determined. The ESIA report has to provide clear information and be easy to understand including the methodology and data collection technique that have been applied in the ESIA process.

While contents may differ depending on the type of project, an ESIA must include project descriptions, alternatives, baseline information on the existing environment such as physical, biological, socio-economic, environmental information in the project area and its proximity, cumulative impacts, compensation, resettlement and occupations and restoration of people's livelihood, health impacts, gender, ethnicity as well as the appropriate methodology and measures to prevent, reduce, and mitigate properly the potential environmental impacts and disasters.

The ESIA Report must be prepared in Lao language, while for a complex project has to be prepared in both Lao and English. For a health risk associated project, the project owner has to prepare a separate health impact assessment report in parallel with the preparation of the ESIA Report.

All mineral operations involving metallic minerals require an ESIA report.

ECC

The ECC is the document certifying the environmental acceptance of the investment project and activities. It has validity for the lifetime of the project but may be subject to either suspension or withdrawal. An ECC may be suspended if it is found that the investment project violated environmental laws and regulations but with no serious environmental impact, failed to comply with conditions of the ECC, failed to comply with financial, environmental or other obligations under laws and regulations, non-implementation of the ESMMP, hidden or concealed or unreliable and non-existing environmental impact information, non-implementation of mitigation measures after receiving notification from Natural Resources and Environment authorities, or project is with significant impacts on people's health, livelihood, assets, and environment. If the ECC is suspended, the project owner has to stop the operations of the investment project. The owner is provided with a timeframe to improve and mitigate the problem causing the suspension.

An ECC is withdrawn if the suspension conditions are not implemented, the project owner has made no action on the project 2 years after obtaining the ECC, or if there is violation of environmental laws and regulations that cause significant environmental impacts.

Environmental Protection Fund

The project company is required to contribute to the Environmental Protection Fund ("**EPF**") and the funding obligations under the ESMMP. The EPF is allocated for use in research for environmental protection and green development, mitigation of climate change impacts, etc., pollution prevention and control, development of environmental laws and regulations, environmental studies, capacity building and awareness, environmental management and problem solving, and for the EPF's administration and investment.

Water Law

The Law on Water and Water Resources No. 23/NA dated 11 May 2017 **("Water Law")** grants rights to individuals, legal entities and incorporated bodies to use water for any objectives provided that such usage is economical, reasonable, and efficient, and does not have major impact on environment, society or nature. The Law on Water and Water Resources classes the use of water into three categories, namely small, medium and large water usage, and requires that medium and large usage of water shall be subject to the approval of the natural resource and environment sector. The entity involved in activities that uses medium and large amount of water shall also pay natural resource royalties for the water usage according to the relevant regulation.

Under this Law, the use of water is considered medium size usage for use of water in mineral manufacturing at 15 to 1,000 cubic meters per day. Water-related activities that are consider large size water usage activities are use of water in mineral manufacturing exceeding 1,000 cubic meter per day.

Taxation

Income Tax

The Law on Income Tax No. 67/NA dated 18 June 2019 ("**Income Tax Law**") as amended by the Law on the Amendment of Certain Articles of the Laws on Taxation No. 01 dated 7 August 2021 ("**Tax Amendments Law**") enumerates the obligations and measures in relation to income taxation.

(1) Corporate Profit Tax Rate

Corporate Profit Tax rate is 20%, for general businesses and 35% for mineral mining concessions.

(2) Personal Income Tax Rates

For personal income tax, the progressive tax rate is from 0% to 25% of salaries, wages, overtime payments, allowances, bonuses, and other benefits, in cash or in kind.

(3) Other Relevant Income Tax Rates

(1) Income tax at the rate of 2% for:

— Share purchase and transfer

— Construction and maintenance services

(2) Income tax at the rate of 5% for:

— Gift either in kind or in cash

— Intellectual property

— Consultancy fee

(3) Income tax at the rate of 10% for:

— Dividend or other benefit paid to shareholders

— Leases, such as lease of land, house constructed items, vehicles, machinery, or other assets

Companies doing business in Laos are generally subject to tax based on the Lao tax legislation as enacted at the time.

Value Added Tax

Valued added tax ("**VAT**") is imposed on various goods and services under the amended ***Value Added Tax Law No. 48 dated 20 June 2018*** ("**VAT Law**"), as amended by the **Tax Amendments Law** and the Decree on the Revision of the Value Added Tax Rate No. 003/PO dated 19 March 2024. Under these legislation, VAT at the standard rate of 10% shall be collected from the following activities:

1. Importation of goods;

2. Supply of goods and services in Lao PDR that are subject to VAT collection;
3. import of minerals and supply of minerals within the country;
4. use of electricity for general electricity consumers, producers, distributors.

Export of goods is imposed VAT at zero (0%) rate. On the other hand, VAT exemption is granted for mineral export and electric power export to a foreign country or to a special economic zone.

VAT exemption is also granted for certain imported goods such as raw materials used in the production of fertilizers and pesticides; materials and machinery for agricultural purposes; raw materials for production and parts for manufacturing for export; materials for production that may not be procured or manufactured in Laos and machineries for use as fixed assets and use directly in manufacturing activities; aircraft and materials for use in air transportation domestically and internationally; fuel oil and other oil for use in the provision of air transportation services; vehicles for specialized operations that is used in the operations for public interests, fire extinguisher truck, maintenance car, television and radio signal car, and other cars of public sector or social organizations.

Provision of certain goods and services within the country are also exempt, such as raw materials, materials for assembling, and parts for manufacturing for export; international transportation; products sold on aircraft providing air transportation services; deposit interest, loan interest, income from money transfers, profit margin from exchange rate and other financial transactions from the operations of a commercial bank or other financial institution as authorized Bank of the Lao PDR; return on investment in securities listed in the stock market, provision of securities market services, securities depository services, intermediary services for securities that provide services in the securities sector, and other services in the securities sector; and health, life, and plantation insurance business.

Customs Duties

The ***Law on Customs No. 04/NA dated 20 December 2011*** and ***Law on Customs*** (revised on certain articles) ***No. 57/NA 24 December 2014*** (collectively, "**Customs Law**") require all types of exported and imported goods to be subjected to customs declaration according to the code of each type of good as prescribed in the International Harmonized System. The Law nevertheless acknowledges that to promote investment and motivate production, certain goods and articles are eligible for reduction or exemption of customs duty and other obligations as provided in the Investment Promotion Law.

The ***Presidential Decree on the List of Goods and Export Tax Rates No. 001/PO dated 28 August 2023*** lists the goods and applicable export tax rates, including for copper (10%) and gold (5%). Nevertheless, ***Instruction No. 09899/TD dated 04 October 2023*** issued by the Tax Department notified that for large-scale mining projects that has a mineral exploration and production agreement with the Laotian Government, the same will be implemented according to such agreement, subject to the negotiation of amendments to implement the Decree No. 001/PO.

LAWS AND REGULATIONS IN RELATION TO OUR OPERATIONS IN GHANA

Regulations relating to Minerals and Mining Activities (Constitution, Minerals and Mining Act 2006 (Act 703), Minerals and Mining (Licensing) Regulations 2012 (L.I 2176) and Minerals and Mining-Health, Safety and Technical Regulations, 2012 (L.I 2182), the Minerals and Mining (Explosives) Regulations 2012 (LI 2177) and Minerals and Mining (Local Content and Local Participation Regulations, 2020 (L.I 2431)

The Government of Ghana through the Ministry of Lands and Natural Resources in conjunction with the regulatory body; the Minerals Commission act on behalf of the Republic of Ghana in all transactions related to minerals. The current legislative, regulatory and contractual framework for mining in Ghana is contained in provisions relating to mining in the 1992 Constitution of Ghana (the "**1992 Constitution**") and more specifically in the Minerals and Mining Act 2006 (Act 703) as amended, (the "**Mining Act**") as well as the mining regulations promulgated as subsidiary legislation under the Mining Act (the "**Mining Regulations**").

The Constitution and the Mining Act establish a domain system of mineral ownership which vests the State with legal ownership of all minerals occurring in their natural state within Ghana's land and sea territory, regardless of who owns the land upon which the minerals are situated.

Minerals are defined in the Mining Act to include "any substance in solid or liquid form which occurs naturally in or on the earth or under the seabed formed by or subject to geological process, including building and industrial minerals and "mineral rights" under the Act include reconnaissance license, prospecting licence and mining lease.

The Mining Act and the Mining Regulations set out in great detail the various types of mineral rights that could be granted at each stage of the mining sequence in the form of reconnaissance, license exploration or exploitation license/mining lease, the eligibility criteria for the grant of a specific license and the rights and obligations attached to each license that is granted under the Mining Act.

In broad terms, no qualify for the grant of a mineral right under the Mining Act and the Mining Regulations an applicant must be a Ghanaian registered body corporate established in Ghana under a law in force. Foreign registered companies are therefore not allowed to hold reconnaissance, exploration or mining licences directly within the mining industry, without first being incorporated locally. Prior to making an application, the prospective applicant must conduct an official search on the Cadastral search on the Mineral Title Register kept by the Minerals Commission to ascertain whether the targeted area is unencumbered. Standard application forms would then be obtained from the Minerals Commission, duly completed by the applicant with the requisite supporting documents and submitted to the Minerals Commission for review and processing. The application is evaluated on the basis of the financial and technical capability of the applicant to carry out the mineral activity applied for and applications are treated on a first come first served basis. Successful applications are then recommended to the Minister for Lands and Natural Resources (the "**Sector Minister**") who would actually issue a licence on behalf of the Government of Ghana.

All agreements granting mineral rights are required to be stamped under the Stamp Duty Act 2005 (Act 689) and registered at the Land Registry in the Region where the land is situated in accordance with the Land Act 2020 (Act 1036) Additionally, unless specifically exempted by parliament, contracts involving the grant of rights to exploit minerals (i.e. mining leases) must be ratified by parliament. Similarly, an assignment, transfer, mortgage or similar dealings in mineral rights also require the prior approval of the sector Minister.

Regulations relating to Production of Gold and other Minerals

Only duly licensed persons under the Mining Act and the Mining Regulations may engage in the production, export, sale or disposal of a mineral including gold. The Mining Regulations set out in detail the application procedures to obtain a licence for the production, export, sale or disposal of minerals.

The holder of a mining lease may apply to the sector Minister to export, refine and sell its mineral produce. Such application must be accompanied with a refining contract with a credible refinery and a sales and marketing agreement with the company that would sell the refined gold. A lessee who is granted a licence to export and sell its gold produce is also required by the terms and conditions of the gold export licence prior to each shipment to furnish the Minerals Commission with particulars of the quantity and grade of the minerals to be shipped before making any shipment and provide access for a government approved assay laboratory to assay each consignment of gold shipment.

Bank of Ghana ("**BoG**") Authorisation is also required for export of unprocessed minerals under the Export and Import Act (Act 503). This authorization is compiled with by the completion of BoG Form A2 that must be endorsed by an authorized bank in Ghana.

Regulations relating to Labour Matters pursuant to the Constitution, the Labour Act and the 2012 Health, Safety and Technical Regulations

The Constitution, Labour Act 2003 (Act 651) and subsidiary regulations made since 2007 under the Act regulate all legal issues pertaining to labour matters in Ghana and must be complied with.

Additionally, mining industry specific regulations are set out in the 2012 Health, Safety and Technical Regulations. The regulations provide for the safety of workmen and conditions of employment, maximum working hours for employees as well as the minimum age for employment in a mine. A person shall not be employed in a mine unless that person is at least eighteen years old, and a person shall not work in an underground mine unless that person is at least 21 years old. The regulations provide detailed requirements on the mine environment such as safety of mine workers, mine- risks and how to eliminate or minimize such risks. The regulations also require every mine must employ a duly qualified and competent mine manager who must be certified by the Chief Inspector of Mines. A mine manager must employ a supervisor who is able to communicate effectively with the employees who work under that supervisor.

The manager of a mine is required to ensure that an employee does not undertake any work in the mine unless the fitness and health of that employee has been assessed as sufficient to enable that employee to carry out that work. The health and fitness of employees must also be assessed regularly to determine that each employee is capable of performing his duties assigned to him at all times.

Regulations relating to Protection of the Environment

The Environmental Protection Agency ("**EPA**") established by the Environmental Protection Agency Act 1994 (Act 490) is responsible for ensuring conservation and protection of the environment. The EPA performs this function through its subsidiary legislation the Environmental Assessment Regulations, 1999 (LI 1652).

Environmental issues relating to mining are regulated by the EPA in accordance with the EPA Act and the regulations made thereunder.

As far as environmental issues are concerned, the holder of a mineral right must obtain necessary approvals and permits from the EPA before commencing any mining activity or operation. Holders of mineral rights are also required to comply with other applicable regulations made under the Mining Act or other enactments in force such as obtaining a permit from the Forestry Commission where the proposed mining activity falls within a Forest Reserve. With regard to utilisation of water from natural sources for mining purposes or the disturbance of the natural flow of a water body, the holder of a mineral right is required to obtain a water right in the form of license or permit from the Water Resources Commission. Such water rights would permit the mining company to extract the water for mining operations or divert it in furtherance of the mining or ancillary operations.

Some of the tools employed by EPA for protecting the environment and ensuring environmental compliance by the mining companies include the requirement for the performance of an environmental impact assessment ("**EIA**") in respect of mining operations; an environmental management plan in respect of active mining operations; and the posting of an environmental bond to meet the cost of reclamation after the mining operation. The EPA requires a full blown EIA to be undertaken as part of any major mining undertakings. The EIA report is presented in a format specified in the regulations. This is published in the media and subjected to a public hearing also to the local community of the propose mining project. By law, at least a third of the panellists to preside over the public hearing must be appointed from within the community within which the mining activity is to be undertaken.

Under the Forestry Regulations, a permit is required from the Forestry Commission where a mining licence or activity falls within a forest reserve.

Regulations relating to Foreign Investment

New entrants into the mining sector who are foreigners are required to register with the Ghana Investment Centre ("**GIPC**") established as a body corporate under the Ghana Investment Promotion Centre Act, 2013 (Act 865) (the "**GIPC Act**") and satisfy a minimum capital investment requirement of US$200,000 in cash or kind. Registration with the GIPC provides certain investment guarantees and incentives under the GIPC Act, such as approved immigration quota to employ foreign nationals, free transferability of foreign currency through an authorized dealer bank for payment of dividends to foreign shareholders, foreign debt servicing and remittance of net proceeds from the sale of the registered enterprise.

Regulations relating to Foreign Currency

Under the Mining Act, a lessee or a licensee who earns foreign currency from its mining operations may be permitted by the Bank of Ghana to retain, in a designated account, a portion of the foreign currency earned from the mining operations for use in acquiring spare parts machinery and other inputs required for the mining operations. The Mining Act provides further that the Minister of Finance may permit the holder of a mining lease, where the net earnings from the holder's mining operations are in foreign currency, to open and retain in an account not less than 25% of the foreign currency earned from the mining operations for the acquisition of spare parts, raw materials, and machinery and equipment, debt servicing and dividend payments, remittance in respect of quotas for expatriate personnel, and the transfer of capital in the event of a sale or liquidation of the mining operations. Such retention account must be opened and held in trust by a trustee bank appointed by the lessee or licensee with approval by the Bank of Ghana. A lessee or licensee is further guaranteed free transferability of convertible currency through the Bank of Ghana or, in the case of a net foreign exchange holder, through the trust account.

Regulations relating to Taxation of Mining Companies

Royalties

Under the section 25 of the Mining Act as amended a licensee holding mining lease restricted mining lease or small scale mining lease is required to pay royalties to the state at the rate and the manner that may be prescribed by regulations made under the Act. The current applicable rate of royalty is 5% of the total revenue derived in respect of all minerals won from the mining operations. The royalty is payable quarterly to the Ghana Revenue Authority.

Other Taxes

Corporate income tax

Under the Income Tax Act 2015, as amended, the current corporate income tax rate for a mining company is 35 per cent of net profits. The net profit is determined after deductions of operating costs, allowable capital expenses and investment allowances.

Thin capitalisation restrictions by limitations on debt-to-equity ratio

Section 71 of the Internal Revenue Act 2000 (Act 592) provides for a maximum 2:1 debt to equity ratio for the purposes of allowing interest expense on inter-company debt to be deductible from taxable income.

Where the inter-company debt to equity ratio exceeds 2:1 such interest expense is not permitted to be deducted from taxable income of a resident company. This 2:1 debt to equity ratio would be applicable to every producing company, unless a higher ratio is negotiated with the government and included in the Stability Agreement or Development Agreement, both of which must be approved by parliament.

Carry-over of tax losses

Under the Internal Revenue Act, the period for which losses may be carried forward and set off against future corporate profits is up to a maximum period of five years only in the case of a mining business venture.

For mining companies that had negotiated longer, or unlimited loss carry forward periods in their project investment agreements, as is the case of the thin capitalization ratio, the government has in recent times taken the position that all mining companies must have a level playing field, hence the five-year period contained in the Internal Revenue Act should apply to all mining companies.

Consequently, the government through bilateral negotiations re-negotiated the relevant provisions with the companies that had been granted longer loss carry forward periods.

Withholding taxes

Under the Internal Revenue Act all mining companies unless exempted by specific agreements with the government are required to withhold tax on payments made to third parties, both resident and non-resident in respect of payments for services rendered by such third parties, including management, contractors, sub-contractors and technical service fees, payable to affiliates and non-residents.

The applicable rate of withholding tax varies depending on the nature of the service and when it is payable. The current applicable withholding tax rates are:

- 15% withholding tax on management consulting, technical service and endorsement fees;
- 8% withholding tax on interest payments on foreign debt, including inter-company loans; and
- 8% withholding tax on dividends paid to shareholders.

*Value added tax ("**VAT**"), national health insurance levy ("**NHIL**"), Ghana education trust (GET) fund levy ("**GET FUND**") and COVID-19 Levy*

Mining companies and their affiliates, or contractors, and subcontractors are not exempted by law from the payment of VAT, NHIL, GET FUND, COVID-19 Levy on goods and services whether procured locally or imported.

However, the existing legal arrangements permit the mining companies and their contractors or subcontractors to pay the VAT as the normal output tax and claim a refund from the VAT Service as input tax. The rates currently applicable are VAT at 15%, NHIL at 2.5%, Get Fund at 2.5% and COVID-19 Levy at 1%. In practice the refund arrangements may not have not been implemented effectively resulting in a significant back-log of various sums due to certain mining companies.

Mining companies may have been granted specific exemption from payment of VAT and NHIL in their specific mining project development agreements with the Government which were duly approved/ratified by Parliament in accordance with Articles 174 and 268 of the Constitution.

Import duties and excise taxes

The Mining Act currently permits exemption from payment of customs import duties and excise taxes on mining equipment, plant and machinery which are imported for use exclusively for mining operations.

The list of exempted items is contained in the Official Mining List which is settled between the Government agencies (Ghana Revenue Authority, Minerals Commission) on the one hand and the Ghana Chamber of Mines representing the Mining Companies.

Capital gains tax

Under the Internal Revenue Act the capital gains tax rate is 10% payable by any person on gains accruing from the realization of a chargeable asset. Chargeable assets are defined to include buildings, business assets, land, rights, or interest in shares and stocks.

Other charges and fees

Ground rent is payable annually to the owner of the land in respect of which a mineral right is granted. Annual ground rent payable is GH₵ 15 per square acre. If the land in question is stool land, this rent is paid to the Office of the Administrator of Stool Lands who acts as a public trustee for incomes and revenues due from stool lands.

The Minerals Commission charges annual mineral right fees based on the size of the land holding and various consideration fees for its services relating to its mandate of regulation and management of Ghana's mineral resources. These service and the related consideration fees are set out in the 2012 Licensing Regulations LI 2176. The fee rates applicable differ for Ghanaian and foreign controlled companies.

Regulations on Hazardous Chemicals: Minerals and Mining (Explosives) Regulations, 2012) (L.I. 2177)

These Regulations govern the conveyance, storage, possession, manufacture and use of explosives for mining as well as substances used for the manufacture of explosives. The regulations require a permit/license granted by the inspectorate Division of the Minerals Commission to undertake any of such activities relating to manufacturing, purchase, conveyance, storage and use of explosives. The Regulations put the onus of safety of explosives on the manager of a mine. The mine manager is required to submit detailed plans with proposed activities relating to explosives to the Chief Inspector of Mines for approval. The Regulations also set out monitoring and environmental limits for pollution.

Regulations on Land and Immovable Property

There are three main categories of land ownership in Ghana;

(i) Stool/Skin Land which is land owned by various traditional communities bound by kingship ties and which is held in trust for the communities by the communal leaders such as stools or skins. Such land represents the highest proprietary interest known to customary schemes of interest in land and is therefore often referred to as the allodial or absolute title.

(ii) Family land which is land owned collectively by various traditional family groupings and held in trust for them by the Head of Family.

(iii) Private/individual land which is land vested in individuals or private entities. This ownership arises mostly because of dispositions of customary land interests through common-law type conveyances under various statutes.

Much of the land upon which minerals are situated in Ghana is not public land which is owned by the State. However, since the State owns and grants mineral rights, the grant of such rights necessarily raises an issue of how to give legal access to the land upon which the mineral is situated.

The Mining Act deals with the issue by providing that a mineral right granted by the sector Minister under the Mining Act is sufficient authority for the holder over the land and entitles the holder to enter the land in respect of which the mineral right is granted, subject to the payment of compensation to the land owner or any occupier of the land who is impacted by the mineral operations.

Consequently, the Minerals and Mining (Compensation and Resettlement) Regulations 2012 (LI 2175) set out clearly the rules for making claims of assessment of compensation or resettlements of persons impacted by mineral operations where necessary.

Thus, the grantee of a mineral right has an automatic legal access and right of entry into the land over which the mineral right has been granted. This dispenses with the necessity of the grantee obtaining the express permission of the landowner even where it is not public land that is involved.

The current legal regime for mining therefore makes no legal provision for the express permission of the landowner to be sought in order to gain access to the land for purposes of mineral operations.

However, the procedure for accessing applications for the grant of mineral rights requires that notice of an application for a mineral right must be published in the locality to be affected by the grant for a period of 21 days and also in the National Gazettee. This is expected to afford landowners and the local community the opportunity to raise any objections they may have to the application.

The automatic access to land over which a mineral right is granted is expressly made subject to the payment of appropriate compensation to the land owner or occupiers of the land for any disturbance or damage caused to their surface rights by the mining activity.

Exploration – Rehabilitation and Restoration of Vegetation

Surface mining

The manager of a mine is tasked with preparing and implementing a mine design that is based on sound geotechnical engineering practices and which takes into account: the geology of the mine, assesses the ground stability of the active and proposed workings of the mine, previous occurrences of ground instability and considers as far as is reasonably practicable, the health and safety of workers, and is prepared under the direction of a qualified person.

Dredging: The holder of a mining lease is prohibited from using a dredge in a mining operation unless approved in writing by the Chief Inspector of Mines. A manager is required to ensure that a dredge used at the mine is equipped with adequate and suitable fire-fighting equipment, adequate guard rails to prevent any worker from falling over the edge into the water, among others.

A manager has a duty to ensure that a dredge is equipped with lifesaving equipment that is necessary to preserve the lives and enable the rescue of persons who may fall overboard the dredge.

Underground mining

A manager of a mine is required to ensure that where the natural strata is not safe, each working or pumping shaft, and travelling way, airway or working place is securely supported, filled, walled up or otherwise made secure and kept in a safe condition as long as that shaft is in actual use.

Quality of underground mine air: ventilation and dust prevention

A mine manager is required to ensure that adequate ventilation is supplied to places where persons are travelling or working underground.

Adequate ventilation means that the amount of oxygen in the general body of air should not be less than 19% by volume and the amount of carbon dioxide, carbon monoxide, nitrous fumes, sulphur dioxide and hydrogen sulphide in the general body does not exceed the required percentages, among others.

Rehabilitation and Mine Closure

During the environmental permit application process, where the EPA determines that a mining project requires a reclamation plan, the mining company will be required to post a reclamation bond based on approved work plan for reclamation.

Regulations relating to Local Content Requirements for the Mining Industry

In 2020, new regulations were promulgated under the Minerals and Mining (Local Content and Local Participation) Regulations. The main purpose of the regulations is to expand and deepen Ghanaian participation in the local mining industry. This is to be achieved legally through the use of local expertise, local purchase of specified mining related products and the complete reservation of certain services to Ghanaian citizens or businesses owned by Ghanaian and a monitoring and reporting system to monitor compliance with the regulations.

Under the regulations a holder of a reconnaissance license or prospecting licensee is required to submit the Minerals Commission for approval a localization programme for recruitment and training of Ghanaians. The regulations require that services such as insurance risks, accounting and legal services shall only be performed by firms licensed to practice in Ghana. Administrative penalties are prescribed by the regulations for breaches committed by persons or entities to which the regulations apply.

OVERVIEW

We are a fast-growing international gold producer principally engaged in mining, processing and sales of gold. The history of our Group operating our current business dates back to December 2012 upon completion of the major asset restructuring of our Company when Jilong Mining became our first subsidiary carrying out mining and ore processing activities in the Jilong Gold Mine in Chifeng, Inner Mongolia Autonomous Region, the PRC.

Over the years, committing to our management concept of "Mutual Prosperity and Development", we have grown into the largest non-state owned gold producer in the PRC and developed our global presence through acquisition of quality mineral resources in Laos and Ghana. As of the Latest Practicable Date, we owned and operated seven gold and polymetallic mines across the world. Our A Shares are listed on the Shanghai Stock Exchange under stock code 600988.

OUR BUSINESS MILESTONES

The following table sets forth the business milestones of our Group:

Year	Milestone
2012	Our Company acquired Jilong Mining, which operates the Zhuanshanzi Gold Mine, the first mine of our Company, and renamed as "Chifeng Jilong Gold Mining Co., Ltd.". This represents the formal listing of our current business on the Shanghai Stock Exchange.
2013	Our Group commenced the first expansion of our gold production business through acquisition of Wulong Mining, which operates the Wulong Gold Mine.
2018	Our Company acquired the entire equity interest in Chijin Laos which held a 90% equity interest in LXML, the owner and operator of the Sepon Gold, Copper and Rare Earth Mine in Laos. It marked our first success in overseas expansion.
2019	Our Company acquired the entire equity interest in Hanfeng Mining, which operates the Hanfeng Polymetallic Mine. This represents our further expansion into a diversity of mineral resources production.
2021	Our Group achieved an exponential growth in respect of its production capacity, doubling the total tonnage of gold resources for three consecutive years from approximately 1.52 tonnes in 2018 to 2.07 tonnes in 2019, to 4.59 tonnes in 2020, and further to 8.10 tonnes in 2021.
2022	Our Group acquired a majority stake in Golden Star Resources, which held our operations in the Wassa Gold Mine in Ghana. This marked a scalable overseas expansion into operations in Ghana.
2024	LXML celebrated its 20th anniversary of operations, and its celebratory ceremony was attended by the Prime Minister of the Lao People's Democratic Republic.

MAJOR CHANGES IN SHAREHOLDING AND SHARE CAPITAL OF OUR COMPANY

1. Promoting for Establishment and Initial Capital Increases

Following the establishment of our Company on June 22, 1998 by the Initial Shareholders (see below), on July 17, 2000 and August 23, 2000, respectively upon approval from the Guangzhou City Commission for Restructuring the Economic System (廣州市經濟體制改革委員會) and the Guangzhou City Administration for Industry and Commerce (廣州市工商行政管理局), our Company was converted into a joint stock company with a registered share capital of RMB45,860,000, whereby the audited net assets of approximately RMB45,860,000 of our Company were converted at a rate of 1:1 into 45,860,000 Shares of a par value of RMB1.00 each. The shareholding structure of our Company immediately upon completion of the conversion was as follows:

Names of the Initial Shareholders	Committed capital contribution	Percentage of shareholding
	RMB	
Guangdong Jin'an Automobile Industrial Engineering Company Limited (廣東省金安汽車工業製造有限公司) ("**Jin'an Automobile**")[1]	27,516,000	60.00%
Huang Yizhen (黃乙珍)[1]	17,380,940	37.90%
Yang Wenjiang (楊文江)[1]	458,600	1.00%
Yang Wenying (楊文英)[1]	458,600	1.00%
Yang Jinpeng (楊金朋)[1]	45,860	0.10%
Total	**45,860,000**	**100.00%**

Note:

(1) To the best knowledge of our Directors having made all reasonable enquiries, they were all Independent Third Parties as of the Latest Practicable Date. These shareholders are collectively referred to as the "**Initial Shareholders**".

Upon resolutions at the general meetings of our Company on March 31, 2001 and March 8, 2002, our Company increased its registered share capital to RMB50,446,000 and then to RMB65,579,800 pursuant to bonus issues on the basis of one and three new Shares for every ten existing Shares held by the above Shareholders by way of conversion of capital reserve, respectively. Upon completion of the bonus issues on April 29, 2002 and May 28, 2002 respectively, the shareholding percentage of the above Shareholders remain unchanged.

2. A Shares Offering and Listing on Shanghai Stock Exchange in April 2004

As approved by the CSRC, our Company completed the initial public offering of the A Shares, which were issued at an offer price of RMB9.08 per A Share, upon which our A Shares became listed on the Shanghai Stock Exchange under stock code 600988 on April 14, 2004. Upon completion of the A Shares offering, the registered share capital of our Company was increased to RMB90,579,800.

The shareholding structure of our Company immediately after the A Shares offering was as follows:

Names of the Shareholders	Number of A Shares Held	Percentage of Shareholding
Jinan Automobile	39,347,880	43.44%
Huang Yizhen	24,854,744	27.44%
Yang Wenjiang	655,798	0.72%
Yang Wenying	655,798	0.72%
Yang Jinpeng	65,580	0.07%
Public A Shareholders	25,000,000	27.60%
Total	**90,579,800**	**100.00%**

Note: The shareholding percentage figures above does not add up to 100.00% due to rounding of decimal places.

As of the Latest Practicable Date, our Company had not received any notice from the Shanghai Stock Exchange alleging any material non-compliance incidents on the part of our Company. Our Directors confirm that we had no incidence of non-compliance with the applicable listing rules of the Shanghai Stock Exchange in all material respects, and to the best knowledge of our Directors after having made all reasonable inquiries, there is no matter that should be brought to the attention of the [**REDACTED**] and the Hong Kong Stock Exchange in relation to our compliance record on the Shanghai Stock Exchange.

3. Reform of Non-tradable Shares in April 2007

Pursuant to the Administrative Measures on the Reform of Non-tradeable Shares of Listed Companies Companies (上市公司股權分置改革管理辦法) promulgated by the CSRC on September 4, 2005, companies listed on a domestic stock exchange in the PRC are required to eliminate the trading restrictions on their non-tradeable shares through an arrangement that seeks to balance the interests of holders of non-tradeable shares with those of holders of tradeable shares. In accordance with such measures, holders of more than two-thirds of a listed company's non-tradeable shares shall have the power to propose and then negotiate a conversion scheme with holders of tradeable shares. The conversion scheme is then subject to the approval of two-thirds majority of the tradeable shares participating in the vote and two-thirds majority of all the shares participating in the vote.

On March 30, 2007, our Company resolved at a general meeting to carry out a share reform pursuant to which our Company issued to each shareholder 3.6232 new Shares for every 10 Shares held by the holders of tradeable Shares (meaning the public A Shareholders referred to above), and the shares held by the non-tradeable Shareholders (meaning the Initial Shareholders) became tradeable. Immediately before the reform, the share capital of our Company comprised 65,579,800 non-tradeable Shares held by the Initial Shareholders and 25,000,000 tradeable Shares held by the public A Shareholders.

Immediately after the completion of the reform upon the approval from the Shanghai Stock Exchange on April 18, 2007, the share capital of our Company comprised a total of 99,637,800 A Shares, of which 65,579,800 A Shares held by the Initial Shareholders were subject to certain trading restrictions, namely that the Initial Shareholders agreed not to sell or transfer any of their shares in our Company within 12 months from the completion of the reform (the "**Lock-up Period**"), and each of Jin'an Automobile and Huang Yizhen further agreed that the proportion of A shares sold by them would not exceed 5% and 10% of the total share capital of our Company for the 12 and 24 months from the expiry of the Lock-up Period, respectively. The remaining 34,058,000 A Shares were freely tradable A Shares.

The shareholding structure of our Company immediately after the non-tradeable share reform was as follows:

Names of the Shareholders	Number of A Shares Held	Percentage of Shareholding
Jinan Automobile	39,347,880	39.49%
Huang Yizhen	24,854,744	24.95%
Yang Wenjiang	655,798	0.66%
Yang Wenying	655,798	0.66%
Yang Jinpeng	65,580	0.07%
Public A Shareholders	34,058,000	34.18%
Total	**99,637,800**	**100.00%**

Note: The shareholding percentage figures above does not add up to 100.00% due to rounding of decimal places.

4. Change of controlling shareholder in April 2010 and Major Assets Restructuring in December 2012

Owing to the default of bank loans owed by the then controlling shareholder of Jin'an Automobile and the related court petitions, judgements were issued by the Intermediate People's Court of Dongguan City of Guangdong Province, pursuant to which, among others, 28,884,100 Shares held by Jin'an Automobile, accounting for approximately 28.99% of the registered share capital of our Company, were directed to be transferred to Mr. Wu Peiqing (吳培青) ("**Mr. Wu**"), an Independent Third Party. Accordingly, the controlling shareholder of our Company was changed to Mr. Wu.

On February 23, 2012, upon resolutions by the Board, our Company entered into, among others, a restructuring framework agreement with Mr. Wu and the then equity interest holders of Jilong Mining, namely (i) the late Mr. Zhao Meiguang (趙美光, the late husband of Ms. Li, the "**late Mr. Zhao**"); (ii) Ms. Zhao Guixiang (趙桂香); (iii) Ms. Zhao Guiyuan (趙桂媛) (both being the sisters of the late Mr. Zhao); and (iv) five Independent Third Party individuals, pursuant to which our Company agreed to dispose of all its assets on a debt-free basis to Dongguan Weiyuan Industrial Group Company Limited (東莞市威遠實業集團有限公司, a company controlled by Mr. Wu who was its legal representative), whereas the then equity interest holders of Jilong Mining agreed to sell their entire equity interest in Jilong Mining to our Company in consideration of our Company issuing an aggregate of 183,664,501 Shares to them at the issue price of RMB8.68 per Share, which was determined on the basis of the average price of A Shares of our Company for 20 trading days preceding the announcement date of the Board resolution, calculated by reference to the aggregate transaction amount for the trading of our A Shares divided by the aggregate trading volume of our A Shares during the above period, and accounted for approximately 50.40% of the enlarged share capital of our Company immediately upon completion of the share issuance (the "**Major Asset Restructuring**").

Following the resolutions at the general meeting of our Company on April 5, 2012 and the approvals from the CSRC issued on November 23, 2012, the Major Asset Restructuring was completed on November 28, 2012. Immediately upon completion of the Major Asset Restructuring, the registered share capital of our Company increased to RMB283,302,301 divided in to 283,302,301 A Shares and the late Mr. Zhao became the then controlling Shareholder with approximately a 37.44% shareholding interest in our Company. Our Company was renamed as "Chifeng Jilong Gold Mining Co., Ltd." on December 24, 2012.

5. Capital increase in April 2014 and acquisition of Chenzhou Xiongfeng by way of non-public issuance of A Shares in January 2015

Upon approval at the general meeting of our Company on April 28, 2014, our Company increased our registered share capital to RMB566,604,602 divided into 566,604,602 A Shares by way of a bonus issue on the basis of 10 new A Shares for every ten existing A Shares held by the Shareholders whose name appear on the register of members of our Company on December 31, 2013 by way of conversion of capital reserve.

On August 8, 2014, upon resolutions by the Board, our Company entered into, among others, a framework agreement dated August 8, 2014 and an acquisition agreement dated September 29, 2014 with 30 then Independent Third Party shareholders of Chenzhou Xiongfeng, pursuant to which our Company agreed to acquire the entire equity interest in Chenzhou Xiongfeng from those shareholders at a consideration of RMB905.8 million, which was determined with reference to the appraised value by an independent valuer of the entire equity interest of Chenzhou Xiongfeng as of March 31, 2014 by way of the income approach. 90% of the consideration was satisfied by way of issuance of an aggregate of 114,016,786 A Shares to those 30 sellers of the equity interest of Chenzhou Xiongfeng at the issue price of RMB7.15 per Share, which was determined on the basis of the average price of A Shares of our Company for 20 trading days preceding the announcement date of the Board resolution, calculated by reference to the aggregate transaction amount for the trading of our A Shares divided by the aggregate trading volume of our A Shares during the above period, as adjusted by our Company's capital increase in April 2014 as mentioned above (the "**Adjusted 20 Trading Day Average Price**"), and the remaining 10% of the consideration was satisfied by way of cash payment. Alongside with the above our Company would conduct a non-public issuance to no more than 10 specified investors for fund raising of no more than 25% of the total consideration of the acquisition transaction, representing an issuance of no more than 46,883,500 A Shares at an issue price of RMB6.44 per Share, which was determined at not less than 90% of the Adjusted 20 Trading Day Average Price in compliance with the requirements under the Administrative Measures for the Issuance of Securities by Listed Companies and the Implementation Rules for the Non-public Issuance of Stocks by Listed Companies (collectively the "**Issuance Regulations**").

Upon resolutions at the general meeting of our Company on October 23, 2014 and the approval from the CSRC issued on January 28, 2015, the acquisition was completed on February 5, 2015, upon which the registered share capital of our Company increased to RMB680,621,388 divided into 680,621,388 A Shares. In respect of the non-public issuance, the subscription applications from two institutional investors, being Independent Third Parties, were accepted for an aggregate of 32,569,360 A Shares. Upon completion of the non-public issuance on March 12, 2015, the registered share capital of our Company further increased to RMB713,190,748 divided into 713,190,748 A Shares.

Subsequently, the Board resolved on June 30, 2020 to dispose of the entire equity interest of Chenzhou Xiongfeng by way of public listing-for-sale on the Beijing Stock Exchange at the reserve price of RMB1,598,567,800. Upon expiry of the public listing-for-sale on July 29, 2020, Hanfeng United then held by the late Mr. Zhao, Ms. Li and an Independent Third Party individual as to 71%, 19% and 10% equity interest respectively at the material times, was the sole transferee expressed intention to purchase such equity interest. Our Company, Hanfeng United and the late Mr. Zhao entered into a disposal agreement on July 30, 2020 to effect the above transfer at a consideration of RMB1,598,567,800, which was determined with reference to the appraised value by an independent value of the entire equity interest of Chenzhou Xiongfeng as of April 30, 2020 by way of the income approach. The disposal was completed on December 25, 2020. Based on the publicly available information, 70% and 30% of the equity interest in Chenzhou Xiongfeng was subsequently sold to Dongjiang Environmental Company Limited (a company dually listed on the Main Board of the Hong Kong Stock Exchange (stock code: 895) and the Shenzhen Stock Exchange (stock code: 2672)) and an individual, both being Independent Third Parties, respectively, on September 16, 2021.

6. Capital increase in October 2017 and acquisition of Hanfeng Mining by way of non-public issuance of A Shares in January 2020

Upon approval at the general meeting of our Company on October 11, 2017, our Company increased our registered share capital to RMB1,426,381,496 divided into 1,426,381,496 A Shares by way of a bonus issue on the basis of 10 new A Shares for every ten existing A Shares held by the Shareholders whose name appear on the register of members of our Company on June 30, 2017 by way of conversion of capital reserve.

On April 19, 2019, upon resolutions by the Board, our Company entered into an acquisition agreement with the late Mr. Zhao, Hanfeng Zhongxing and Meng Qingguo (孟慶國), an Independent Third Party individual, which were the then shareholders of Hanfeng Mining, pursuant to which our Company agreed to acquire the entire equity interest in Hanfeng Mining from those shareholders at a consideration of RMB510 million, which was determined with reference to the appraised value by an independent valuer of the entire equity interest of Hanfeng Mining as of December 31, 2018 by way of the asset approach and the income approach. The consideration was satisfied by way of issuance of an aggregate of 128,787,900 A Shares to those sellers of the equity interest in Hanfeng Mining at the issue price of RMB3.96 per Share, which was determined on the basis of not less than 90% of the average price of A Shares for 120 trading days preceding the announcement date of the Board resolution (the "**120 Trading Day Average Price**"), alongside with a non-public issuance of A Shares to no more than 10 specified investors for fund raising of no more than 100% of the total consideration of the acquisition transaction at an issue price of RMB4.69 per Share, which was determined at not less than 90% of the average price of A Shares for 20 trading days preceding the announcement date of the Board resolution in compliance with the requirements under the Issuance Regulations.

Upon resolutions at the general meeting of our Company on May 31, 2019 and the approval from the CSRC issued on October 28, 2019, the acquisition was completed on November 7, 2019, upon which the registered share capital of our Company increased to RMB1,555,169,374 divided into 1,555,169,374 A Shares. In respect of the non-public issuance, the subscription applications from three institutional investors, being Independent Third Parties, were accepted for an aggregate of 108,742,004 A Shares. Upon completion of the non-public issuance on January 19, 2020, the registered share capital of our Company further increased to RMB1,663,911,378 divided into 1,663,911,378 A Shares.

MAJOR ACQUISITIONS AND DISPOSALS

1. Acquisition of LXML through Chijin Laos

Leveraging on the growing demand for gold as both a financial instrument and strategic commodity resources, the scarcity of quality gold resources in the PRC and national policy support for overseas expansion of domestic companies, on June 21, 2018, upon resolutions by the Board, our Company (as purchaser) entered into a share purchase agreement with Album Investment Private Limited ("**Album Investment**") (as seller) and MMG Limited (a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 1208)) (as seller guarantor) (both being Independent Third Parties), pursuant to which our Company agreed to purchase from Album Investment all the issued shares of Chijin Laos (which directly held 90% of the equity interest in LXML, with the remaining 10% equity interest held directly by the Government of Lao PDR (represented by the Ministry of Finance)) at a consideration of US$275 million, which was determined after arm's length negotiation among the parties taking into account of, among others, the reserves and resources of the Sepon Gold, Copper and Rare Earth Mine, the future extraction and development plan and the appraised value by an independent valuer of the entire equity interest of Chijin Laos as of December 31, 2017 by way of the asset approach and the income approach. Pursuant to the share purchase agreement, 90% of the consideration shall be paid as of the completion date of the transaction, and the remaining 10% of the consideration shall be paid on the earlier of (i) December 31, 2021; and (ii) 14 days after (x) LXML has ceased producing copper at the Sepon Gold, Copper and Rare Earth Mine pursuant to the method of production in place as of the date of the agreement; and (y) LXML has, since the date of the agreement, poured gold from the Sepon Gold, Copper and Rare Earth Mine totally in aggregate not less than 1 kg of gold. The transaction was completed on November 30, 2018 with 90% of the consideration paid on the same date, and the remaining 10% of the consideration was settled on July 21, 2022.

Upon completion of the acquisition, LXML became an indirect subsidiary of our Company principally engaged in the operation of our Sepon Gold, Copper and Rare Earth Mine. For details, see the section headed "Business — Our Gold Production Business in Laos" in this Document.

2. Acquisition of Golden Star Resources by way of a Plan of Arrangement

Pursuant to an arrangement agreement dated October 31, 2021 entered into between our Company and Golden Star Resources as amended by an amending agreement dated November 24, 2021 and an assignment and assumption agreement dated December 21, 2021 and entered into by the parties below, our Company through Chijin HK and its assignee Kefei Investment (BVI) Limited (the "**Assignee**"), which is wholly owned by China-Africa Fund for Industrial Cooperation Co., Ltd. (中非產能合作基金有限責任公司), agreed to acquire approximately 62% and 38% of the issued and outstanding common shares of Golden Star Resources, a Canadian federally-incorporated company which was then listed on the NYSE American (symbol: GSS), the Toronto Stock Exchange (symbol: GSC) and the Ghana Stock Exchange (symbol: GSR), by way of a statutory plan of arrangement (the "**Plan of Arrangement**") under section 192 of the Canada Business Corporations Act for US$3.91 per share in cash, representing a total transaction value of approximately US$470 million on a fully-diluted, in-the-money basis. The consideration to be paid by our Company (through Chijin HK) under the Plan of Arrangement amounted to US$291 million.

The consideration was determined after taking into account of, among others, the reserves and resources of the Wassa Gold Mine operated by GSWL, a non-wholly owned subsidiary of Golden Star Resources, the future extraction and development plan, the operating performance of Golden Star Resources and the appraised value by an independent valuer of the entire equity interest of Golden Star Resources as of June 30, 2021 by way of the income approach. Accordingly, the consideration per share of Golden Star Resources represents a 24.13% premium over the closing price of the shares on the NYSE American as of October 29, 2021.

On November 22, 2021, the Ghanaian Ministry of Lands and Natural Resources issued a no objection letter in relation to our Company becoming the controller of GSWL, via Chijin HK and/or the Assignee. On November 25, 2021, the Ontario Superior Court of Justice (Commercial List) ("**Ontario Court**") granted an interim order to direct, among others, a special meeting of shareholders of Golden Star Resources to be held on December 30, 2021 to consider the Plan of Arrangement, upon which a special resolution in relation to the Plan of Arrangement was duly passed at the shareholders' meeting. The Ontario Court issued a final order approving the Plan of Arrangement on January 7, 2022. The acquisition was completed on January 28, 2022 upon receipt of the necessary PRC approvals and alongside with the delisting approvals from the NYSE American, the Toronto Stock Exchange and the Ghana Stock Exchange by January 29, 2022, the shares of Golden Star Resources had been delisted from the NYSE American and the Toronto Stock Exchange on February 7, 2022 and from the Ghana Stock Exchange on February 9, 2022.

The reasons for the delisting of Golden Star Resources include, among others, (i) to permit our Company to make strategic decisions focused on long-term growth and benefits, free from the pressure of market expectations and share price fluctuations of Golden Star Resources as a publicly listed company; and (ii) whilst Golden Star Resources (including its subsidiaries) holds a single mine asset, the administrative burden and costs and management resources associated with maintaining the multiple listing status and compliance with the regulatory requirements does not outweigh the benefits of such. The delisting allows greater flexibility for our Company to manage Golden Star Resources' business. Our Directors confirm that, to the best of their knowledge having made all reasonable enquiries, during the period when the shares of Golden Star Resources were listed on the NYSE American, the Toronto Stock Exchange and the Ghana Stock Exchange, (i) Golden Star Resources and its directors (a) had been compliant with the applicable laws and regulations in all material respects, and (b) had not been subject to any investigations or disciplinary actions by any regulatory authority nor breached the relevant rules governing the listing of Golden Star Resources in any material respect; and (ii) there is no matter that needs to be brought to the attention of the investors and the Hong Kong Stock Exchange.

Upon completion of the acquisition, GSWL became an indirect subsidiary of our Company principally engaged in the operation of our Wassa Gold Mine. The acquisition is line with our Company's strategic positioning for quality overseas mineral resources and integration into our Group's operations. For further details of our Wassa Gold Mine and our Ghana operations, see the section headed "Business — Our Gold Production Business in Ghana" in this Document.

According to Rule 4.05A of the Hong Kong Listing Rules, the acquisition of Golden Star Resources would have been classified at the date of application for our [**REDACTED**] as a major transaction under Chapter 14 of the Hong Kong Listing Rules. For further details of the financial performance of Golden Star Resources, please refer to the history financial information of Golden Star Resources set out in Appendix IB to this Document.

3. Acquisitions and disposal of Tietto Minerals

In line with our Company's strategic positioning on investing in quality overseas mineral resources operations, on September 9, 2022, Chijin HK entered into a share subscription agreement with Tietto Minerals, a company then listed on the Australian Securities Exchange ("**ASX**") under the stock code TIE, pursuant to which Chijin HK subscribed for 85,000,000 shares of Tietto Minerals at the issue price of AUD0.58 per share, representing a total consideration of AUD49.3 million. The per share issue price was determined based on the 20-day volume weighted average price of the shares of Tietto Minerals quoted on the ASX. The consideration was settled and the acquisition was completed on September 21, 2022.

Further, on September 13, 2022, Chijin HK obtained a confirmation from the Inner Mongolia Property Rights Exchange Center to purchase 25,190,076 shares of Tietto Minerals through the listing-for sale process for a consideration of RMB50.7 million. The consideration was settled and the acquisition was completed on January 7, 2023. Following the completion of the above acquisitions, together with the 30,665,788 shares already held by Chijin HK, our Group held 140,855,864 shares, accounting for 13.05% of the then shareholding interest in Tietto Minerals.

Tietto Minerals is an Australian-headquartered gold miner operating the Abujar Gold Mine in Côte d'Ivoire which commenced its commercial production on July 6, 2023. The Abujar Gold Mine includes three contiguous exploration tenements, namely Middle, South, and North. In October 2020, the Target received environmental approval and in December 2020 a gold exploitation (mining) licence within the Abujar Middle tenement covering an area of 120.36 km^2.

The above acquisitions constituted an acquisition of business by our Group pursuant to Rule 4.02A(1) of the Hong Kong Listing Rules as Tietto Minerals was, upon completion of the above acquisitions and prior to being disposed of by our Group, accounted for as an associate of our Group in accordance with the applicable accounting standards. Our Directors have confirmed that none of the applicable percentage ratios as stipulated under the Hong Kong Listing Rules in respect of the above acquisitions, on an aggregated basis, exceeds 25%. Accordingly, the pre-acquisition financial information of Tietto Minerals is not required to be disclosed in the Document under Rule 4.05A of the Hong Kong Listing Rules.

On October 30, 2023 (the "**Offer Announcement Date**"), Zhaojin Capital, which is an indirect wholly owned subsidiary of Zhaojin Mining Industry Company Limited (a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 1818)) ("**Zhaojin Mining**", an Independent Third Party), lodged a bidder statement to Tietto Minerals, pursuant to which it made a conditional offer to acquire all the outstanding issued shares of Tietto Minerals at an offer price of AUD0.58 per share (and subsequently increased to AUD0.68 per share on April 15, 2024), representing a premium of approximately 36% and 60% to Tietto Minerals' last closing price on ASX prior to the Offer Announcement Date respectively, which, based on the public disclosure of Zhaojin Mining, was determined with reference to (i) the operating performance of Tietto Minerals; (ii) Tietto Minerals' historical trading price and the premia to trading price in recent comparable public takeover transactions; and (iii) Tietto Minerals' market capitalisation of approximately AUD479 million as of October 27, 2023.

Upon resolution by the Board, Chijin HK accepted the above offer and transferred all the 140,855,864 shares of Tietto Minerals to Zhaojin Capital during the offer period at a total consideration of AUD95.782 million by April 29, 2024. Upon completion of the transfer, our Group no longer held any interest in Tietto Minerals.

The offer was completed on May 14, 2024 upon which Zhaojin Capital obtained 90.72% of the voting rights in Tietto Minerals. Upon the commencement of exercise of the compulsory acquisition rights against the remaining shares of Tietto Minerals on May 24, 2024, the shares of Tietto Minerals ceased trading on the ASX on June 3, 2024 and Tietto Minerals was delisted on June 6, 2024.

4. Acquisition of Xinhenghe Mining

As an expansion of our mineral gold reserves and domestic mining operations, on December 30, 2022, our Company entered into an equity transfer agreement with Liu Xin (劉信), Li Yuanyuan (李媛媛), Wang Zhonghua (王忠華) (an Independent Third Party), Yunnan Yuanhao Mining Co., Ltd. (雲南源浩礦業有限公司) ("**Yuanhao Mining**", and together with the above sellers, the "**Sellers**", whereby Zhu Jiande (朱建德), a director of our subsidiary Jintai Mining, held approximately 47.5% of the equity interest in Yuanhao Mining as of the Latest Practicable Date) and Xinhenghe Mining, pursuant to which our Company acquired an aggregate of 51% equity interest in Xinhenghe Mining from the Sellers at a total consideration of RMB61.20 million, which was determined after arm's length negotiation by the parties taking into account of, among others, the resources of the Jintai Gold Mine held by Jintai Mining, a direct non-wholly owned subsidiary of Xinhenghe Mining, and the future extraction and development plan of the mine. For details, please see the paragraph headed "— Our Principal Subsidiaries — Jintai Mining" in this section and the section headed "Business — Our Gold Production Business in China — Overview — Jintai Mining" in this Document.

Immediately upon completion of the acquisition on January 4, 2023, Xinhenghe Mining is held as to 51% equity interest by our Company, with the remaining 30%, 12% and 7% equity interest held Liu Xin, Li Yuanyuan and Yuanhao Mining. Yuanhao Mining disposed of its 7% equity interest in Xinhenghe Mining to Zhu Jiande on July 1, 2024.

The financial information of Xinhenghe Mining since the completion of the acquisition has been reflected in our consolidated financial statements for the Track Record Period. Our Directors have confirmed that none of the applicable percentage ratios as stipulated under the Hong Kong Listing Rules in respect of the acquisition of Xinhenghe Mining exceeds 25%. Accordingly, the pre-acquisition financial information of Xinhenghe Mining is not required to be disclosed in this Document under Rule 4.05A of the Hong Kong Listing Rules.

POST-TRACK RECORD PERIOD ACQUISITION

In light of our overseas expansion and to promote our rare earth operations in Laos, on March 4, 2024, China Investment (Property) Limited (中國投資(置業)有限公司) ("**China Investment**") (as seller, and an Independent Third Party), China Investment Mining (Laos) Sole Co., Ltd ("**Target Company**"), Chixia Laos (as purchaser) and Chijin Xiawu (as guarantor) entered into an equity transfer agreement, pursuant to which Chixia Laos shall acquire from China Investment 90% of the equity interest in the Target Company, which was wholly owned by China Investment, at a total consideration of US$18,963,000.

The Target Company holds 86% equity interest in each of its two subsidiaries, namely CIRE Mining and CIREX Mining, and the remaining 14% equity interest in each of CIRE Mining and CIREX Mining is held by DDC Mining Sole Co., Ltd., an Independent Third Party. The Target Company operates the Laos Muang Kham Rare Earth Project which is still at the construction stage covering the mining area of 50 km^2, whereby the genetic type of the mineral deposit belongs to the weathering crust ion-adsorbed rare earth deposit. CIRE Mining holds a rare earth mineral processing permit (experimental) and a mineral extraction permit (experimental). CIREX Mining holds a rare earth exploration permit.

Based on the accounts provided by the Target Company, the consolidated total assets of the Target Company amounted to approximately KIP228,001,488,000 as of December 31, 2023 (being the most recent financial year of the Track Record Period of the Target Company). Its consolidated net loss before (or after) tax for the two years ended December 31, 2023 was approximately KIP86,757,701,000 and KIP94,724,614,000, respectively.

The consideration for the proposed acquisition was determined after arm's length negotiations among the parties after taking into consideration, among others, the aforementioned status of the rare earth project, the licences obtained by CIRE Mining and CIREX Mining for the project, the future extraction and development plan of the project and the appraised value by an independent valuer of the entire equity interest of the Target Company as of December 31, 2023 by way of asset approach. The consideration shall be satisfied by the internal resources of the Group. The Target Company will be accounted for as a subsidiary of our Company upon completion of the proposed acquisition.

The rare earth project represents an opportunity for our Group to tap into the potential for quality rare earth resources with a relatively higher economic value to be realised through the medium-heavy rare earth ore held by the project. Our Directors are of the view that the proposed acquisition is in our ordinary and usual course of business and on normal commercial terms, and are fair and reasonable and in the interests of our Company and our Shareholders as a whole. As of the Latest Practicable Date, our Company was still in the process of preparing the relevant filings with the development and reform commission and foreign exchange administration authority in the PRC. Accordingly, the proposed acquisition was yet to have been completed.

We have applied to the Hong Kong Stock Exchange[, and the Hong Kong Stock Exchange has granted,] a waiver from strict compliance with Rules 4.04(2) and 4.04(4)(a) of the Hong Kong Listing Rules in relation to the above proposed acquisition. For more details, see the section headed "Waivers from Strict Compliance with the Hong Kong Listing Rules — The Post-Track Record Period Acquisition" in this Document.

Save as disclosed above in this section, throughout the Track Record Period and as of the Latest Practicable Date, we did not conduct any major acquisitions, disposals or mergers.

OUR PRINCIPAL SUBSIDIARIES

As of the Latest Practicable Date, we had a total of 10 principal subsidiaries. The following table sets forth the detailed information of these principal subsidiaries as of the Latest Practicable Date:

Names of major subsidiaries	Place of incorporation/ establishment	Date of incorporation/ establishment	Effective equity interest attributable to our Company	Issued share capital/ registered capital/ committed capital	Principal activities
Jilong Mining	PRC	October 24, 2005	100%	RMB175,000,000	Gold mining and processing
Huatai Mining	PRC	January 8, 2005	100%	RMB20,000,000	Gold mining and processing
Wulong Mining	PRC	April 8, 2008	100%	RMB40,000,000	Gold mining and processing
Guangyuan Technology	PRC	August 6, 2003	55%	RMB44,776,000	Disassembly of waste electrical and electronic products
Jintai Mining	PRC	February 20, 2008	46%	RMB41,710,000	Gold mining
LXML	Laos	September 30, 1993	90%	USD169,001,980	Gold and non-ferrous metal mining and processing

Names of major subsidiaries	Place of incorporation/ establishment	Date of incorporation/ establishment	Effective equity interest attributable to our Company	Issued share capital/ registered capital/ committed capital	Principal activities
Hanfeng Mining	PRC	September 24, 2004	100%	RMB429,200,000	Non-ferrous metal mining and processing
Chijin Fengyu	PRC	March 25, 2021	100%	RMB100,000,000	Import and export of trade, goods or technology
GSWL	Ghana	November 22, 2001	56%	USD1,000,000	Gold mining and sales
Chijin Xiawu	PRC	October 18, 2022	51%	RMB400,000,000	Non-ferrous metal sales

For further information of our Company's subsidiaries, please refer to the paragraph headed "— Corporate Structure" in this section below and Note 1 to the Accountants' Report set out in Appendix IA to this Document.

Jilong Mining

Jilong Mining was established under the laws of the PRC with limited liability on October 24, 2005 with an initial registered capital of RMB20 million, for which the late Mr. Zhao and two Independent Third Party individuals held 51%, 29% and 20% of the equity interest in Jilong Mining, respectively.

Following various rounds of equity interest transfer and capital increase, as of April 25, 2011, the registered capital of Jilong Mining was increased to RMB75 million with (i) the late Mr. Zhao held 57.75% equity interest; (ii) each of Zhao Guixiang and Zhao Guiyuan holding 10.00% equity interest; (iii) each of Liu Yongfeng (劉永峰), Ren Yiguo (任義國), Ma Li (馬力) and Li Xiaohui (李曉輝) holding 5.00% equity interest; and (iv) Meng Qingguo holding 2.25% equity interest. To the best knowledge of our Directors having been all reasonable enquiries, save for the late Mr. Zhao, Zhao Guixiang and Zhao Guiyuan, all other equity interest holders of Jilong Mining were Independent Third Parties.

On February 23, 2012, our Company entered into a restructuring framework agreement with Mr. Wu and the above equity interest holders of Jilong Mining, pursuant to which, among others, the latter agreed to sell their entire equity interest in Jilong Mining to our Company in consideration of our Company issuing an aggregate of 183,664,500 Shares to them at the issue price of RMB8.68 per Share. See the paragraph headed "— Major Changes in Shareholding and Share Capital of our Company — 4. Change of controlling shareholder in April 2010 and Major Assets Restructuring in November 2012" in this section for details. Jilong Mining became our wholly owned subsidiary upon completion of the Major Assets Restructuring on November 28, 2012.

Upon resolutions at the general meeting of Jilong Mining on August 14, 2017, the registered capital of Jilong Mining was increased to RMB175 million on August 30, 2017. Subsequently, upon resolutions at the general meeting of Jilong Mining on January 29, 2019, our Company entered into an equity transfer agreement with Inner Mongolia Financial Assets Management Company Limited (內蒙古金融資產管理有限公司) ("**IM Financial Asset Management**") on January 30, 2019, pursuant to which our Company transferred 45% equity interest in Jilong Mining to IM Financial Asset Management at a consideration of RMB300 million, which was determined after arm's length negotiation between the parties taking into account of, among others, the status of the mineral resources, the historical performance and prospect of Jilong Mining. Upon completion of the equity transfer on the same date, Jilong Mining is held as to 55% and 45% of the equity interests by our Company and IM Financial Asset Management, respectively.

Our Company entered into two equity transfer agreements with IM Financial Asset Management on April 23, 2020 and September 21, 2020, pursuant to which our Company repurchased 30% and 15% equity interest from IM Financial Asset Management at a consideration of RMB200 million and RMB100 million, respectively. Upon resolutions at the general meetings of Jilong Mining on April 24, 2020 and September 21, 2020, the equity transfers were completed on April 27, 2020 and September 9, 2020, respectively, and up to the Latest Practicable Date, Jilong Mining was a wholly owned subsidiary of our Company.
For details of our operations in Jilong Mining, see the section headed "Business — Our Gold Production Business in China — Jilong Mining" in this Document.

Huatai Mining

Huatai Mining was established under the laws of the PRC with limited liability on January 8, 2005 with an initial registered capital of RMB20 million by way of asset injection with the late Mr. Zhao and Zhao Guixiang holding approximately 90% and 10% of the equity interest in Huatai Mining, respectively.

Upon resolution at the general meeting of Huatai Mining on December 2, 2010, the late Mr. Zhao and Zhao Guixiang entered into an equity transfer agreement with Jilong Mining on December 8, 2010, pursuant to which Jilong Mining acquired from the late Mr. Zhao and Zhao Guixiang 90% and 10% of the equity interest in Huatai Mining at a total consideration of RMB50 million, with reference to, among others, the resources of the Huatai Gold Mine, the historical operating performance and the future extraction and development plan of Huatai Mining. Upon completion of the said transfers on December 10, 2010 and up to the Latest Practicable Date, Huatai Mining was a wholly owned subsidiary of our Company. For details of our operations in Huatai Mining, see the section headed "Business — Our Gold Production Business in China — Huatai Mining" in this Document.

Wulong Mining

Wulong Mining was established under the laws of the PRC with limited liability on April 8, 2008 with a registered capital of RMB40 million. Zhongjin Gold Corp., Ltd. (中金黃金股份有限公司, a company listed on the Shanghai Stock Exchange (stock code: 600489), and an Independent Third Party) ("**Zhongjin Gold**") was the sole equity interest holder of Wulong Mining upon establishment.

On January 22, 2010, Zhongjin Gold entered into a property right transfer agreement (產權交易合同) with Tangshan Zhonghe Industrial Group Company Limited (唐山中和實業集團有限公司) ("**Tangshan Zhonghe**"), an Independent Third Party, pursuant to which Zhongjin Gold transferred the entire equity interest in Wulong Mining to Tangshan Zhonghe at a consideration of RMB352,691,800. Upon completion of the transfer on March 2, 2010, Tangshan Zhonghe was the sole owner of the equity interest in Wulong Mining.

On April 25, 2013, Jilong Mining entered into an equity transfer agreement with Tangshan Zhonghe, pursuant to which Jilong Mining acquired the entire equity interest in Wulong Mining from Tangshan Zhonghe at a consideration of RMB625,959,200, which was determined after arm's length negotiation between the parties taking into account of, among others, the historical performance, the resource potential and the future development plan of Wulong Mining. Upon completion of the transfer on November 11, 2013 and up to the Latest Practicable Date, Wulong Mining was a wholly owned subsidiary of our Company. For details of our operations in Wulong Mining, see the section headed "Business — Our Gold Production Business in China — Wulong Gold Mine" in this Document.

Guangyuan Technology

Guangyuan Technology was established under the laws of the PRC with limited liability on August 6, 2003 with an initial registered capital of RMB1.38 million. Upon establishment, Guangyuan Technology was owned as to 71.00%, 14.50% and 14.50% equity interest by Lu Hong (鲁弘), Cheng Xi (程曦) and Zhao Xiaoyan (趙小燕), all being Independent Third Parties.

Upon various equity interest transfers and capital increase, the registered capital of Guangyuan Technology increased to RMB30 million on June 5, 2014 with Liang Xioayan (梁曉燕) and Lu Hong holding 95% and 5% equity interest in Guangyuan Technology, respectively.

On July 1, 2015, our Company entered into an equity transfer and capital increase agreement with Liang Xiaoyan and Lu Hong, pursuant to which our Company paid RMB38 million and RMB2 million to Liang Xiaoyan and Lu Hong, respectively, and injected RMB60 million into the registered capital of Guangyuan Technology. The consideration was determined upon arm's length negotiations among the parties after taking into account, among others, the historical performance, expected capital needs and future prospect of Guangyuan Technology. Upon completion of the said transfer and capital increase on July 23, 2015, the registered capital of Guangyuan Technology was increased to RMB44,776,000 with our Company, Liang Xiaoyan and Lu Hong holding 55.00%, 42.75% and 2.25% equity interest in Guangyuan Technology, respectively. Since then and up to the Latest Practicable Date, Guangyuan Technology was a non-wholly owned subsidiary of our Company. For details of our operations in Guangyuan Technology, see the section headed "Business — Our Other Business — Operations of Resource Recycling Business" in this Document.

Jintai Mining

Jintai Mining was established under the laws of the PRC with limited liability on February 20, 2008 with a registered share capital of RMB5 million. Upon establishment, Jintai Mining was held as to 70% and 30% of the equity interest by Shanghai Fuduo Mining Exploration Technology Company Limited (上海復多礦業勘探科技有限公司, and currently known as Yunnan Fudo Mining Exploration Technology Company Limited (雲南復多礦業勘探科技有限公司)) ("**Fuduo Exploration**") and Dali Geology and Mining Drawing and Printing Company Limited (大理地礦繪圖印刷有限責任公司) ("**Dali Geology**"), respectively, both being Independent Third Parties.

Upon resolution at the general meeting of Jintai Mining on January 25, 2011, Dali Geology and Yunnan Shengyuan Mining Development Company Limited (雲南生原礦業開發有限公司) ("**Yunnan Shengyuan**"), an Independent Third Party, entered into an equity transfer agreement on March 31, 2011, pursuant to which Dadi Geology transferred 30% equity interest in Jintai Mining to Yunnan Shengyuan at a consideration of RMB1.5 million. Upon completion of the transfer on May 17, 2011, Jintai Mining was held as to 70% and 30% of the equity interest by Foduo Exploration and Yunnan Shengyuan.

Upon resolution at the general meeting of Jintai Mining on September 26, 2018, the registered capital was increased to RMB41.71 million pursuant to which certain debts in the amount of RMB36.71 million owed by Yunnan Shengyuan to Jintai Mining was converted into equity and recognised as the capital contribution by Yunnan Shengyuan into Jintai Gold Mine. Upon completion of the debt-to-equity conversion on the same date, the registered capital of Jintai Mining was increased to RMB41.71 million with Yunnan Shengyuan and Fuduo Exploration holding as to approximately 91.61% and 8.39% equity interest, respectively.

Further, upon resolution at the general meeting of Jintai Mining on February 1, 2021, Xinhenghe Mining entered into an equity transfer agreement with Yunnan Shengyuan on the same date, pursuant to which Xinhenghe Mining acquired 90% of the equity interest in Jintai Mining at a consideration of RMB38.28 million which was determined after arm's length negotiation between the parties taking into account of, among others, the proportion of the registered capital of Jintai Mining. Upon completion of the acquisition on the same date, Jintai Mining was held as to approximately 90%, 8.39% and 1.61% equity interest by Xinhenghe Mining, Fuduo Exploration and Yunnan Shengyuan, respectively. For details of our operations in Jintai Mining, see the section headed "Business — Our Gold Production Business in China — Jintai Gold Mine "in this Document.

LXML

LXML was established under the laws of Lao PDR as a limited company on September 30, 1993 with an initial registered capital of USD5 million pursuant to the Mineral Exploration and Production Agreement (the "**MEPA**") entered into between the Government of Lao PDR and CRA Exploration (Laos) Limited, an Independent Third Party, on June 15, 1993. Following various capital increases and equity interests, and upon the exercise its option under MEPA (as amended), the Government of Lao PDR (represented by the Ministry of Finance) held 10% equity interest in LXML, with the remaining 90% equity interest held by Chijin Laos (which was then held by an Independent Third Party), by June 30, 2007. Subsequently, the registered capital of LXML increased to USD169,001,980 as certified by the Ministry of Planning and Investment of Lao PDR and reflected in the amended Investment License (3rd Amendment) No. 025-2021/MPI.IV4 dated 21 July 2021.

LXML became a subsidiary of our Company since completion of the acquisition of Chijin Laos on November 30, 2018 and up to the Latest Practicable Date. For details, see the paragraph headed "Major Acquisitions and Disposals — 1. Acquisition of LXML through Chijin Laos" in this section. For details of our operations in LXML, see the section headed "Business — Our Gold Production Business in Laos" in this Document.

Hanfeng Mining

Hanfeng Mining was established under the laws of the PRC with limited liability on September 24, 2004 with an initial registered capital of RMB10 million. Upon establishment, Hanfeng Mining was held as to 90%, 5% and 5% of the equity interest by the late Mr. Zhao, Zhao Guixiang and Zhao Guiyuan, respectively.

Upon resolutions at the general meeting of Hanfeng Mining on December 1, 2010, the late Mr. Zhao entered into an equity transfer agreement with Jilong Mining on December 2, 2010, pursuant to which the late Mr. Zhao (for himself and on behalf of the other shareholders) disposed of the entire equity interest to Jilong Mining at a consideration of RMB25 million. Upon completion of the transfer on December 6, 2010, Jilong Mining held the entire equity interest in Hanfeng Mining.

The general meeting of Hanfeng Mining resolved on December 26, 2011 to transfer the entire equity interest in Hanfeng Mining to the equity interest holder of Jilong Mining in proportion to their equity interest in Jilong Mining. On the same date, the late Mr. Zhao (for himself and on behalf of the other shareholders of Jilong Mining) entered into an equity transfer agreement to effect the above transfer at a total consideration of RMB25 million, which was determined with reference to the acquisition price paid by Jilong Mining in December 2010. Upon completion of the aforesaid transfer as of December 30, 2011. Hanfeng Mining was held as to (i) 57.75% equity interest by the late Mr. Zhao; (ii) 10.00% equity interest by each of Zhao Guixiang and Zhao Guiyuan; (iii) 5.00% equity interest by each of Liu Yongfeng, Ren Yiguo, Ma Li and Li Xiaohui; and (iv) 2.25% equity interest by Meng Qingguo.

In preparation for the quotation on the NEEQ, Hanfeng Mining was converted from a company with limited liability to a joint stock company on December 26, 2014. Upon conversion, Hanfeng Mining had a registered capital of RMB10,000,000 comprising 10,000,000 shares with a nominal value of RMB1 each, which were subscribed by all the then shareholders in proportion to their respective equity interests in Hanfeng Mining immediately prior to such conversion. Hanfeng Mining became quoted on the NEEQ on August 4, 2015 under the stock code: 833180.

Upon resolution at the general meeting of Hanfeng Mining on November 17, 2015, Hanfeng Mining increased its registered share capital to RMB100 million pursuant to bonus issue on the basis of nine new shares for every existing share held by the above shareholders by way of conversion of capital reserve, which was completed on December 3, 2015. Further, the general meeting of Hanfeng Mining resolved to issue 39,200,000 shares at an issue price of RMB1.02 per share, amounting to a total consideration of RMB39,984,000 on a *pro rata* basis to existing shareholders. Upon completion of the share issuance on March 8, 2016, the share capital of Hanfeng Mining was increased to RMB139.20 million.

On February 25, 2019, having considered that the trading activity, equity liquidity, the future business strategy and costs of maintaining the listing status on the NEEQ, Hanfeng Mining voluntarily ceased to be quoted on the NEEQ. Upon resolutions at the general meeting on March 12, 2019, Hanfeng Mining was converted into a private limited liability company. Further, the general meeting of Hanfeng Mining resolved on March 14, 2019 resolved to approve the transfer of the equity interest held by Zhao Guixiang, Zhao Guiyuan, Ren Yiguo, Liu Yongfeng, Ma Li and Li Xiaohui in Hanfeng Mining to Hanfeng Zhongxing at total consideration of RMB204 million. Upon completion of the transfer, Hanfeng Mining was held as to 57.75%, 40.00% and 2.25% equity interest by the late Mr. Zhao, Hanfeng Zhongxing and Meng Qingguo, respectively.

Our Directors confirm that during the period when the shares of Hanfeng Mining were quoted on the NEEQ, (i) Hanfeng Mining had been in compliance with all applicable laws and regulations as well as rules and regulations of the NEEQ in all material respects; (ii) Hanfeng Mining had not been subject to any disciplinary action by the relevant regulators or any material litigation in this respect; (iii) the directors and supervisors of Hanfeng Mining had not been subject to any administrative penalty by the NEEQ or the CSRC; and (iv) there are no other issues that need to be brought to the attention of our Shareholders, potential [**REDACTED**] or the Hong Kong Stock Exchange.

Our Company entered into an acquisition agreement with the then shareholders of Hanfeng Mining on November 5, 2019, pursuant to which, among others, our Company agreed to acquire the entire equity interest in Hanfeng Mining at a consideration of RMB510 million. See the paragraph headed "— Major Changes in Shareholding and Share Capital of our Company — 6. Capital increase in October 2017 and acquisition of Hanfeng Mining by way of non-public issuance of A Shares in January 2020" in this section for details. Upon the completion of the acquisition on November 7, 2019 and up to the Latest Practicable Date, Hanfeng Mining was a wholly owned subsidiary of our Company.

Pursuant to the resolutions at the general meeting of Hanfeng Mining on February 21, 2020, the registered capital was further increased to RMB429.20 million on the same date. For details of our operations in Hanfeng Mining, see the section headed "Business — Our Other Mineral Resources Production Business — Our Other Mineral Resources Production Business in China" in this Document.

Chijin Fengyu

Chijin Fengyu was established under the laws of the PRC with limited liability on March 25, 2021 with an initial registered capital of RMB100,000,000. Since the date of its establishment and up to the Latest Practicable Date, Chijin Fengyu was wholly owned by our Company. Chijin Fengyu is principally engaged in the procurement of supplies in the PRC for our overseas operations.

GSWL

GSWL was established under the laws of Ghana as a private limited liability company with an authorized share capital of 10,000,000 equity shares with a par value of 0.305 pesewas on November 22, 2001. Upon establishment, 90% and 10% of the equity interest in GSWL were held by Satellite Goldfields Limited, an Independent Third Party and the Ghana Government, respectively. In 2002, Satellite Goldfields transferred its entire equity interest in GSWL to Wasford Holdings, which, together with GSWL, became our non-wholly owned subsidiaries upon completion of the acquisition of Golden Star Resources. For details, see the paragraph headed "— Major Acquisitions and Disposals — 2. Acquisition of Golden Star Resources by way of a Plan of Arrangement" in this section.

Upon shareholders' resolutions passed on December 21, 2023, the issued share capital of GSWL increased from US$756 to US$1,000,000 and the authorised shares of GSWL increased from 10,000,000 shares to 500,000,000 shares. For details of our operations in GSWL, see the section headed "Business — Our Gold Production Business in Ghana" in this Document.

Chijin Xiawu

Chijin Xiawu was established under the laws of PRC with limited liability on October 18, 2022 with a registered capital of RMB60,000,000, of which RMB30,600,000 was contributed by our Company and the remaining RMB29,400,000 was contributed by Xiamen Tungsten. Upon establishment, Chijin Xiawu was held as to 51% and 49% of the equity interest by our Company and Xiamen Tungsten, respectively.

At the general meeting of Chijin Xiawu on January 8, 2024, our Company and Xiamen Tungsten resolved to increase the registered capital of Chijin Xiawu to RMB400 million by way of a *pro rata* capital injection. The percentage of equity interest held by our Company and Xiamen Tungsten remained unchanged.

Since its establishment and up to the Latest Practicable Date, Chijin Xiawu was a non-wholly owned subsidiary of our Company. For details of our operations in Chijin Xiawu, see the section headed "Business — Our Rare Earth Business in Laos" in this Document.

COMPLIANCE WITH LAWS AND REGULATIONS

All of the above capital increases, equity transfers, acquisitions and disposals of our Company and our subsidiaries are effective, legally completed, duly settled and in compliance with the applicable PRC, Laos and Ghana laws and regulations, and all permits, authorizations, approvals and consents necessary for the above transactions have been obtained from the relevant government and regulatory authorities of the PRC, Laos and Ghana.

SUBSIDIARY UNDER DEREGISTRATION PROCESS

To optimize our management and other resources and to focus on our core business, we commenced voluntary deregistration of Chijin Geoexploration by way of a resolution at the general meeting. As of the Latest Practicable Date, the deregistration was yet to have been completed.

As confirmed by our Directors, Chijin Geoexploration had not been involved in any material claims, litigations or non-compliant incidents since its establishment and up to the Latest Practicable Date. In addition, its deregistration would not have a material impact on our Group's business and financial performance.

PREVIOUS LISTING ATTEMPT

On October 29, 2022 and November 14, 2022, resolutions were passed by our Board and the general meeting of our Company, respectively, to prepare for our Company's potential application for listing of global depositary receipts ("**GDR Listing**") representing our A Shares on the SIX Swiss Exchange Ltd. ("**SIX**") (the "**GDR Listing Application**").

During the process of preparing for the GDR Listing Application, taking into account of the changes in the domestic and foreign stock market conditions and the regulatory requirements, as well as a holistic review of the capital needs and long-term development needs of our Group, we determined that an application for [**REDACTED**] on the Hong Kong Stock Exchange, considering, among others, its international recognition and reputation and diversified fund-raising channels provided by the Hong Kong capital market, may better suit our needs. Our Board resolved to cease the GDR Listing Application on August 19, 2023.

Our Directors confirm that as of the Latest Practicable Date, no application had been filed with SIX in relation to the GDR Listing. To the best of our Directors' knowledge, our Directors are not aware of (i) any enquiries from the CSRC or SIX in relation to GDR Listing Application; (ii) any other matters relating to the GDR Listing Application which may have implications on our Company's suitability for [**REDACTED**] on the Hong Kong Stock Exchange; or (iii) any other matters which need to be brought to the attention of the Hong Kong Stock Exchange and the [**REDACTED**] in relation to the GDR Listing Application.

REASONS FOR [REDACTED] ON THE HONG KONG STOCK EXCHANGE

Our Company is seeking a [**REDACTED**] on the Hong Kong Stock Exchange in order to raise further capital for the development and expansion of our Company's business, and to further raise our profile as a business with a global presence and thus, enhance our ability to attract new customers, business partners, strategic investors and key management personnel. See also the section headed "Future Plans and [**REDACTED**]" in this Document for further details.

PUBLIC FLOAT

The aggregate of 241,925,746 A Shares collectively held by Ms. Li and Hanfeng Zhongxing, will not be considered as part of the public float as (i) Hanfeng Zhongxing's acquisition of securities has been financed by Ms. Li, the sole limited partner of Hanfeng Zhongxing; and (ii) they comprise the Single Largest Shareholder Group constituting a core connected person of our Company.

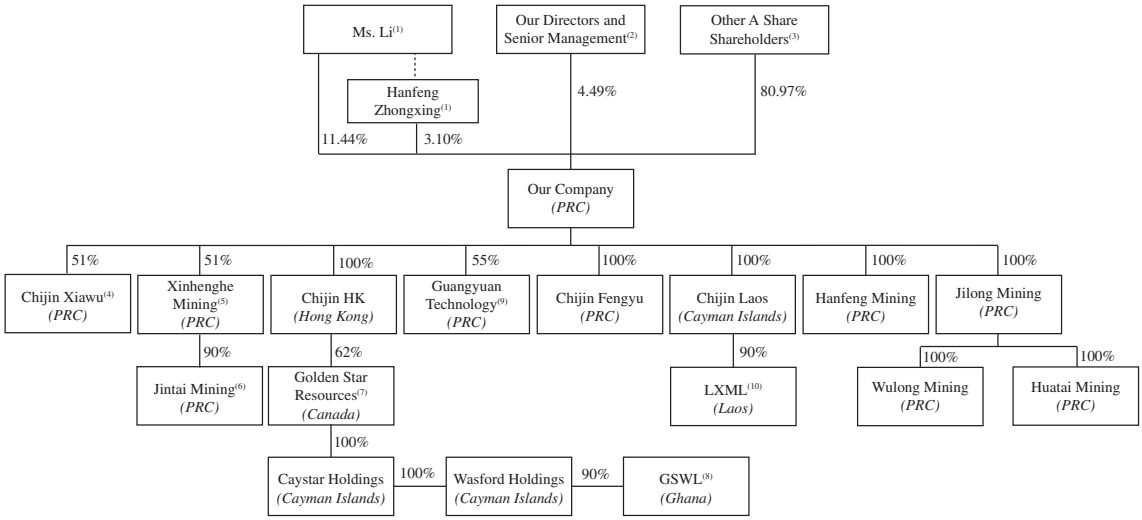
Further, as of the Latest Practicable Date, (i) our executive Directors, namely Mr. Wang Jianhua, Ms. Yang Yi-fang, Mr. Lyu Xiaozhao and Mr. Gao Bo held 74,200,071, 113,000, 111,700 and 153,500 A Shares, respectively; and (ii) Mr. Zhao Qiang (趙強), a director of Chijin Xiawu, held 204,000 A Shares, accounting for an aggregate of 74,782,271 A Shares. These A Shares will not be considered as part of the public float as they are all core connected persons of our Company.

Save for an aggregate of 316,708,017 A Shares held by the Single Largest Shareholder Group, our executive Directors and Mr. Zhao as mentioned above, to the best of our Directors' knowledge having made reasonable enquiries, the remaining 1,347,203,361 A Shares, as well as the H Shares to be issued pursuant to the [**REDACTED**], will be counted towards the public float as such Shareholders are not core connected persons of our Company upon the [**REDACTED**] nor accustomed to take instructions from our Company's core connected persons in relation to the acquisition, disposal, voting or other disposition of their Shares and their acquisition of Shares were not financed directly or indirectly by our Company's core connected persons.

Immediately following completion of the [**REDACTED**], assuming that (i) [**REDACTED**] H Shares are allotted and issued in the [**REDACTED**]; and (ii) the [**REDACTED**] is not exercised, our Company will have [**REDACTED**] issued Shares upon completion of the [**REDACTED**], and based on the minimum [**REDACTED**] of HK$[**REDACTED**] per H Share, the total number of Shares held by the public (on all regulated market(s) including the Hong Kong Stock Exchange) represents approximately [**REDACTED**]% of our total issued Shares upon [**REDACTED**], whilst the H Shares to be issued upon the [**REDACTED**] accounts for [**REDACTED**]% of our Company's total number of issued Shares, having an expected minimum [**REDACTED**] of approximately HK$[**REDACTED**]. Therefore, our Company will be able to meet the minimum public float requirement under Rules 8.08 and 19A.13A of the Hong Kong Listing Rules.

OUR STRUCTURE IMMEDIATELY PRIOR TO THE [REDACTED]

The following chart sets forth a simplified corporate structure of our Group immediately prior to the completion of the [**REDACTED**].



Notes:

(1) As of the Latest Practicable Date, Ms. Li and Hanfeng Zhongxing directly held 190,410,595 and 51,515,151 A Shares, respectively. Meanwhile, Ms. Li is the sole limited partner of Hanfeng Zhongxing accounting for approximately 99.00% of the committed capital contribution of Hanfeng Zhongxing. Accordingly, Ms. Li and Hanfeng Zhongxing are regarded as the Single Largest Shareholder Group of our Company. Please refer to the section headed "Relationship with our Single Largest Shareholder Group — Our Single Largest Shareholder Group" in this Document for details.

(2) These shares comprised of (i) Mr. Wang Jianhua, our Chairman of the Board and executive Director, holding 74,200,071 A Shares; (ii) Ms. Yang Yi-fang, our executive Director and Chief Executive Officer, holding 113,000 A Shares; (iii) Mr. Lyu Xiaozhao, our executive Director, Vice President and Chief Engineer, holding 111,700 A Shares; (iv) Mr. Gao Bo, our executive Director and Vice President, holding 153,500 A Shares; (v) Mr. Zhou Xinbing, our Vice President, holding 112,800 A Shares; and (vi) Mr. Dong Shubao, our Board Secretary, holding 38,500 A Shares, accounting for an aggregate of 74,729,571 A Shares.

(3) Save for Mr. Zhao Qiang, a director of Chijin Xiawu, who held 204,000 A Shares as of the Latest Practicable Date, to the best of our Directors' knowledge having made reasonable enquiries, these A Share Shareholders were not core connected persons of the Company.

(4) The remaining 49% of the equity interest in Chijin Xiawu was held by Xiamen Tungsten, a company listed on the Shanghai Stock Exchange (stock code: 600549).

(5) The remaining 30%, 12% and 7% of the equity interest in Xinhenghe Mining was held by Liu Xin, Li Yuanyuan and Zhu Jiande, respectively. See the paragraph headed "— Major Acquisitions and Disposals — 4. Acquisition of Xinhenghe Mining" in this section for details.

(6) The remaining 8.39% and 1.61% of the equity interest in Jintai Mining was held by Fuduo Exploration and Yunnan Shengyuan, respectively. Fuduo Exploration was held as to 88%, 7% and 5% equity interest by Chen Hua (陳華), Yang Chunbin (楊春彬) and Bao Youdi (包幼娣), respectively, who are all Independent Third Parties. Yunnan Shengyuan was wholly owned by Chen Hua. See the paragraph headed "— Our Principal Subsidiaries — Jintai Mining" in this section for details.

(7) The remaining 38% of the equity interest in Golden Star Resources was held by Kefei Investment (BVI) Limited, which was wholly owned by China-Africa Fund for Industrial Cooperation Co., Ltd. ("**CAFIC**"). CAFIC was held as to (i) 80% of the equity interest by Wutongshu Investment Platform Company Limited (梧桐樹投資平台有限責任公司) ("**Wutongshu Investment**"), which was wholly owned by the State Administration of Foreign Exchange Central Foreign Exchange Business Center (國家外匯管理局中央外匯業務中心), an Independent Third Party; and (ii) 20% of the equity interest by the Export-Import Bank of China (中國進出口銀行), which in turn was owned as to 89.26% and 10.74% equity interest by Wutongshu Investment and MOF, an Independent Third Party.

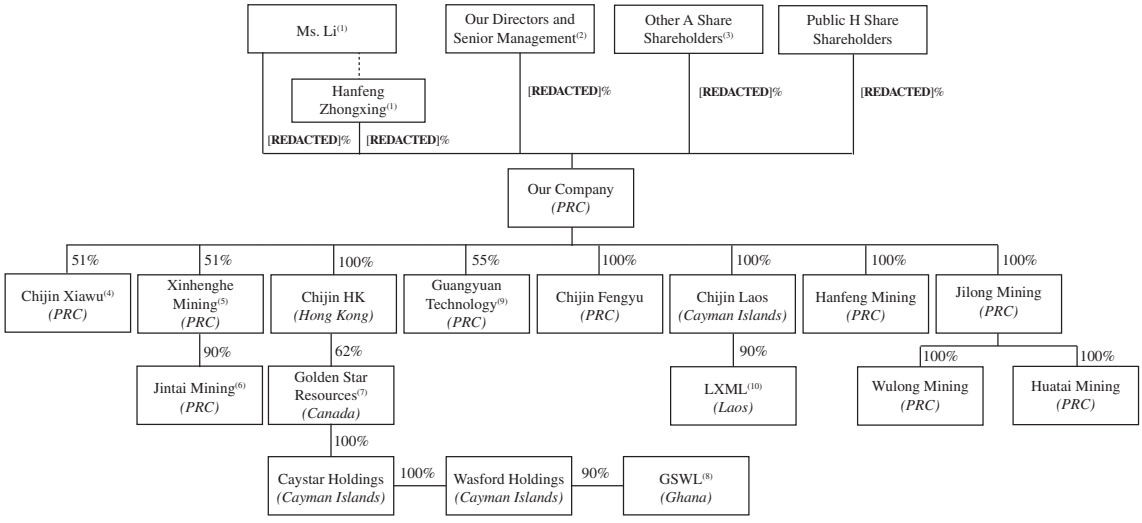
(8) The remaining 10% of the equity interest in GSWL is held by the Ghana Government.

(9) The remaining 42.75% and 2.25% of the equity interest in Guangyuan Technology were held by Liang Xiaoyan and Lu Hong, respectively. See the paragraph headed "Our Principal Subsidiaries — Guangyuan Technology" in this section for details.

(10) The remaining 10% of the equity interest in LXML was held by the Government of Lao PDF (represented by the Ministry of Finance). See the paragraph headed "Our Principal Subsidiaries — LXML" in this section for details.

OUR STRUCTURE IMMEDIATELY FOLLOWING THE [REDACTED]

The following chart sets forth a simplified corporate structure of our Group immediately after the [**REDACTED**] (assuming the [**REDACTED**] is not exercised).



Notes:

(1) — (10) Please refer to the corresponding notes to the chart in "— Our Structure Immediately Prior to the [**REDACTED**]" in this section.

OVERVIEW

We are committed to becoming a prominent gold producer well recognized around the world.

Our core value is "To benefit more people through the development of Chifeng Gold".

Who We Are

We are a fast-growing, international gold producer mainly engaged in the mining, processing and sales of gold and, according to Frost & Sullivan, we have enormous growth potential. Reaping the benefits of our strong corporate culture and management concept of "Mutual Prosperity and Development", we are committed to becoming a prominent gold producer well recognized around the world.

Our operations are centered in gold, and we work towards greater international development and expansion through continuous technological advancements, maintaining cost-effective operations, optimizing resource utilization, and the acquisition of high-quality overseas resources.

As of the Latest Practicable Date, we owned and operated seven gold and polymetallic mines across the world, including China, Southeast Asia, and West Africa. According to Frost & Sullivan:

- we experienced the fastest growth among listed gold producers in China, with enormous growth potential. From 2021 to 2023, our gold production achieved a CAGR of 33.1%, which by far outpaced the 16.4% average growth rate of major listed gold producers in China;

- we ranked fifth among gold producers in China in terms of gold Resources, with gold Resources of 14.6 million oz as of March 31, 2024, and we ranked fifth among listed gold producers in China in terms of gold production, with gold production of 461 koz in 2023, we are the largest non-state owned gold producer in China;

- our operational efficiency enhancement surpassed the worldwide industry average by a notable margin and we positioned significantly lower in terms of AISC than that of the global average. For the year ended December 31, 2023, our gold AISC stood at only US$1,179.1 per ounce, placing us in the first quartile in the worldwide gold mining industry, while the global average for the same period was approximately US$1,348.5, which is 14.4% higher than ours. In 2023, we beat the global trend of increased costs, as we decreased our gold AISC by 12.0%, whereas the average AISC for international gold producers increased by 7.2% during the same period; and

- among listed gold producers in China, we had the greatest overseas presence in terms of both total assets and revenue contribution derived from business activities outside of the PRC as of December 31, 2023 and in 2023, respectively. In 2023, approximately 76.9% of our total gold production and 71.9% of our total revenue was generated from our overseas business. As of March 31, 2024, our overseas assets accounted for approximately 73.6% of our total assets.

Business Overview

We are principally engaged in the mining, processing, and sales of gold. We operate multiple gold mines across the world and continuously aim to expand production and exploration. Additionally, we are engaged both (i) in the mining, processing, and sales of other mineral resources; and (ii) in the business of recycling waste electrical and electronic products, promoting comprehensive resource utilization and circular economy.

As of the Latest Practicable Date, we conducted our gold production business primarily through six gold mines: (i) four mines in the PRC, namely the Jilong Gold Mine, Wulong Gold Mine, Jintai Gold Mine and Huatai Gold Mine; (ii) one mine in Laos, namely the Sepon Gold, Copper and Rare Earth Mine, and (iii) one mine in Ghana, namely the Wassa Gold Mine. Furthermore, we operate one polymetallic mine in Jilin Province, China, namely the Hanfeng Polymetallic Mine, the principal products of which are zinc, lead, copper and molybdenum concentrate powder. Also, we are developing rare earth Resources in Laos. In addition to our mining business, we have a resource recycling business, where we recycle waste electrical and electronic products.

In terms of our development strategies, our focus is on the gold mining business, gradually divesting non-core assets and achieving significant organic growth. For example, in July 2020, we sold Chenzhou Xiongfeng for approximately RMB1.6 billion. Chenzhou Xiongfeng was a non-core subsidiary which principally engaged in recycling of low-grade complex materials, and rare and precious metals. The proceeds from that sale allowed us to continue implementing our strategic focus on our gold business and improved our capital structure.

We actively seek to and have acquired suitable, high-quality domestic and overseas gold assets to maintain our sustainable growth. Through acquisitions we have continuously strengthened our Resources, Reserves and production capacity and expanded our global presence:

- In November 2018, we acquired a 90% equity interest in LXML in Laos. According to Frost & Sullivan, LXML held the largest copper-gold mine in Laos in terms of gold Reserves by 2023. As of March 31, 2024, the total gold Resources of LXML were approximately 1.88 million oz and its total gold Reserves were approximately 918 koz in contained metals.

- We have been collaborating with third parties to jointly conduct exploration projects for multiple types of mineral resources in Laos. For example, (i) we entered into a cooperative exploration agreement with Lao Mining Development State Enterprise in July 2022; (ii) we formed a joint venture with Xiamen Tungsten Co., Ltd. ("**Xiamen Tungsten**") in September 2022 to obtain synergies and strengthen our respective positions in rare earth Resource development in Laos.

- In January 2022, we acquired a 62% equity interest in Golden Star Resources, which holds a 90% equity interest in GSWL. As of March 31, 2024, the total gold Resources of GSWL were approximately 8.35 million oz and its total gold Reserves were approximately 696 koz in contained metals.

- In January 2023, we acquired a 51% equity interest in Xinhenghe Mining, which holds a 90% stake in Jintai Mining. As of March 31, 2024, the total gold Resources of Jintai Gold Mine is 448 koz and its total gold Reserves were approximately 37 koz in contained metals. This acquisition has further enhanced our mining operations and gold production.

Cost Control

We continue to research and develop applications of new technologies and have implemented a series of cost reduction and efficiency enhancement measures such as centralized procurement and optimization of the organizational and staff structures, with the aim to continuously reduce production costs.

Through centralized procurement, we have realized substantial cost reduction benefits for our domestic and overseas mines. We meticulously analyze procurement paths and implement trial orders in increments. By selecting suppliers across the globe, including China, Thailand, Vietnam, and other regions, we collaborate with cost-efficient suppliers and hence have enhanced our bargaining position during procurement negotiations, which has allowed us to mitigate against unfavorable terms in procurement contracts. In addition, we have also broadened our supplier options and increased procurement activities in low-cost regions, ultimately contributing to cost savings.

We have utilized the specific circumstances of various mines to achieve targeted cost reduction and efficiency enhancement. The Sepon Gold, Copper and Rare Earth Mine continuously seeks to improve its ore processing by adopting re-grinding techniques to enhance efficiency, improve gold ore recovery rates, and decrease costs. As a result, its gold recovery rates increased significantly from 54.6% in 2021 to 65.3% in the three months ended March 31, 2024. The Wassa Gold Mine has improved its efficiency in excavation projects by involving external contractors, leading to substantially lower unit costs and relatively high gold recovery rates of 95.6%, 95.5% and 95.3% in 2022 and 2023 and in the three months ended March 31, 2024, respectively.

Meanwhile, we have rigorously controlled capital expenditures, yielding significant cost reductions. According to Frost & Sullivan, our operational efficiency enhancement surpassed the worldwide industry average by a notable margin, and we placed significantly lower in terms of gold AISC than that of the global average. As of December 31, 2023, our gold AISC stood at only US$1,179.1 per ounce, placing us in the first quartile in the worldwide industry, while the global average for the same period was approximately US$1,348.5, which is 14.4% higher than ours. In 2023, we decreased our gold AISC by 12.0%, whereas the average AISC for international gold producers increased by 7.2% during the same period. Set forth below is our gold AISC and the global average for the periods indicated:

	Year Ended December 31,		Changes from Year Ended December 31, 2022 to Year Ended December 31, 2023	Three Months Ended March 31, 2024
	2022	2023		
	US$/ounce		*%*	*US$/ounce*
PRC Gold Mines	1,205.7	877.4	(27.2)	1,014.6
Sepon Gold, Copper and Rare Earth Mine	1,476.9	1,330.0	(9.9)	1,297.6
Wassa Gold Mine	1,371.2	1,197.1	(12.7)	1,170.93
Our Group	**1,340.0**	**1,179.1**	**(12)**	**1,193.3**
Global Average	**1,258.1**	**1,348.5**	**7.2**	**1,496.2**

Note:

1. Company started to make voluntary disclosure of AISC since the year of 2022, in align with the global industrial reporting practice.

Capacity Enhancement

We are committed to upgrading the mining and processing capacity of our existing mines in order to achieve the growth of overall asset.

In terms of our overseas gold assets, we are accelerating the construction of the open-pit and underground mining projects of the Sepon Gold, Copper and Rare Earth Mine, which is expected to increase the annual underground mining capacity to 806,000 tonnes by 2025 from the current capacity of 536,000 tonnes. We will also start copper production in 2025 at Kharong area, which has over 6,000,000 tonnes of copper ore, and over 57,000 tonnes of copper metal contained according to the resource model. Meanwhile, we are accelerating modelling and study work of exploration prospects of Discovery West Deeps and Phavat North with open-pit and underground mining potentials, the annual underground mining capacity is expected to be increased further after 2026 and 2027. A high-level resource range assessment of Discovery West Deeps and Phavat North prospects estimated a total tonnage of 5,000,000 tonnes, with an average grade of 3.5g/t of gold Resources expected to be added. This effort also includes the re-evaluation of historical open pits at higher gold prices.

We expect to build the Wassa Gold Mine of into a large-scale gold mine with (i) an annual processing capacity of approximately 3.3 million tonnes and (ii) an annual production of 200-250 koz gold leading up to 2028. Furthermore, the focus and effort will extend to increase annual gold production in the future of between 250-350 koz. In order to realize this goal, we will adopt various measures, including carrying out more exploration activities at different exploration targets, upgrading our mining and processing infrastructure, driving improvements in operations efficiency and at lower cost whilst maintaining the average gold processing recovery rate at between 95%-96%.

In terms of our domestic gold assets, we have been undergoing several rounds of technological transformation and we are still working on several technological improvement projects, including continuous improvement of technique, upgrade of machinery, enhancement of equipment, at the Wulong Gold Mine. These are expected to enable us to increase the Wulong Gold Mine's annual processing capacity to approximately 700,000 tonnes by the end of 2024 to maintain the sustainable development of the Company to ensure the competitive edge. We have also initiated an expansion project at the Jilong Gold Mine to increase its annual processing capacity to approximately 300,000 tonnes by June 2024 and increase its annual mining capacity to approximately 300,000 tonnes by end of 2025.

ESG Practice and Mining Safety

Adhering to our core value of benefitting more people through the development of Chifeng Gold, we attach great importance to the environment and corporate governance, honor our social responsibilities, emphasize mining safety, and care for our staff and the people and communities in which we operate. We pursue high-quality and sustainable development with high ESG standards and are committed to following the high standards and sound practices of our industry.

- We continuously enhance our environmental management system, optimize water resources, energy, and logistics management strategies, judiciously use natural resources, practice the principles of the circular economy, strictly control and manage tailings, waste, wastewater and pollutants, and minimize the negative impact on the natural environment. In addition, we actively address climate change and consider potential climate risks and impacts following the framework

recommendations of the Task Force on Climate-Related Financial Disclosures (the "**TCFD**"). As alternative energy and electricity continues to develop, we plan to continuously increase our proportion of renewable energy use to reduce our carbon emission. For example, the Wulong Gold Mine, Sepon Gold, Copper and Rare Earth Mine and Wassa Gold Mine are all actively planning to build their own clean energy power generation projects, which will further enhance our capability to source and utilize renewable energy. In particular, the Jilong Gold Mine is planning to build a 10-megawatt solar power plant, with the full capacity expected to be installed and ready for commercial operation by the end of 2025.

- We prioritize the construction of green mines, actively seek a balance between mining development and ecological impacts, and adhere to the development concept of "Mutual Prosperity and Development" with the community. In 2023, our total investment in green mine construction reached approximately RMB26.2 million, with a total land restoration of approximately 62.3 hectares. To ensure workplace safety, we also conducted 2,375 workplace safety inspections and provided safety training for 33,495 participants in 2023. As a result, no significant safety or environmental accidents occurred in 2023. Furthermore, in 2023 we invested approximately RMB212.8 million in compliance with the applicable environmental protection rules and regulations in PRC, and we reduced approximately 1,057.4 tonnes of carbon dioxide and its equivalent during the same period.

- We seek to actively aim to explore solutions that bring positive impacts to the local community. Amongst other things, we take actions in promoting employment, rural revitalization, improving people's livelihoods, and public welfare education. For example, LXML has long supported construction of infrastructure in its surrounding communities; the Golden Star Oil Palm Plantation Project (the "**Golden Star Oil Palm Project**") is a not-for-profit, multi-award winning social enterprise that continues to empower small farmers and workers in Ghana by providing them with support, management and agricultural extension expertise to maintain and develop smallholder palm plantations and obtain steady income streams; Hanfeng Mining assists the local community in resettlement work; and Wulong Mining drives local economic development through high-quality development. We leverage our own resource advantages, take action to shoulder corporate social responsibility, and share our achievements with the society.

- Our ESG practices have been recognized through numerous honors and ratings, reflecting widespread recognition from various sectors of society. For example, Our Company was awarded the 17th Crystal Ball Award as the "2023 Most Socially Responsible (ESG) Listed Company" in January 2024; the mines of Jilong Mining and Hanfeng Mining were designated as National Green Mines in January 2020; LXML received (i) the Certificate of Excellent (A) from the Laos government in recognition of its exceptional implementation of its environmental management and monitoring plan in January 2024, and (ii) the Third-Class Labor Medal from the Lao government in December 2023 in recognition of its exceptional practice in work

safety, health care, and social welfare support to Laos employees; and GSWL was honored with the Ghana 2023 Best Safe Mine First Prize from the Ghana Chamber of Mines in November 2023.

- We adopt high safety standards and seek to continuously update and improve our internal control measures to enhance production safety in our operations. Our production management systems and technologies enable us to achieve automation, digitization, and intelligence control in the gold production process. During the Track Record Period, we did not have any material safety incidents involving our workforce.

For more details, please see "— Environmental, Social and Governance".

Management

Since 2019, we have transformed ourselves from a diversified mining company covering various sectors into a mature, sophisticated, and specialized mining company with a global outlook that is primarily focused on gold under the leadership of our management team. We established our corporate culture of "Mutual Prosperity and Development" by unifying the interests and goals of our shareholders, management, and employees, and adopted a long-term internal incentive mechanism, which effectively motivates the management team and our key employees. Furthermore, by incentivizing our international management and key employees, we have enhanced our decision-making processes and response mechanisms for international management, which enables us to efficiently manage our operations across the globe and assess strategic acquisition prospects.

Our management team consists of seasoned professionals with extensive expertise in various fields, including, amongst other things, corporate administration, mining, mineral processing, geology, finance, and law. Chairman Wang Jianhua, renowned for his exceptional leadership skills within major corporate entities, brings a wealth of experience in management and corporate governance which is characterized by an emphasis on employee safety and welfare. The key members of our senior management team have previously been entrusted with significant roles in reputable global mining companies, showcasing remarkable operational and managerial track records. Moreover, the Company has enlisted experts such as scholars professors from renowned universities and institutes, infusing the Board with robust professional knowledge.

We are implementing worldwide talent integration using an open and transparent strategy, engaging in sincere collaboration with both international and local management staff and employees. Each mine is overseen and operated by a management team composed of local specialists. We apply our previous experiences to our mines globally, while local experts implement localized innovation and practices. We aim to maintain the representation of Ghanaian, Laotian, and talents with international experience within our management. Our executives directors boast an average of more than 20 years of pertinent expertise in the mining

industry, and we have introduced cutting-edge global management strategies to our mining operations. Additionally, we actively promote talent growth and consistently screen and cultivate high-quality talents through our international mining talent program.

We have established a long-term incentive mechanism for our employees through employee stock ownership plans, aligning the interests of employees and the Company. These incentives have boosted employees' commitment and contributed to our continued high-quality, sustainable growth. Shareholders' interests are prioritized within our Company. The robust support from our controlling shareholders and the proactive shareholding by members of the management team and key employees further exemplify our corporate culture of "Mutual Prosperity and Development".

Financial Overview

During the Track Record Period, our total revenue was approximately RMB3,782.6 million, RMB6,266.8 million, RMB7,221.0 million and 1,853.9 million, respectively. The revenue from the gold mining business for the Track Record Period was approximately RMB2,968.7 million, RMB5,304.7 million, RMB6,322.3 million and RMB1,682.4 million, representing 78.5%, 84.7%, 87.6% and 90.8% of the total revenue, respectively.

During the Track Record Period, the gross profit from the gold mining business was RMB868.7 million, RMB1,465.8 million, RMB2,256.7 million and RMB605.8 million, respectively.

Recent Development

On March 4, 2024, an equity transfer agreement was entered into among China Investment, Chixia Laos and Chijin Xiawu, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd. at a total consideration of US$18,963,000 and it is pending regulatory approval as of Latest Practicable Date. This acquisition is expected to strengthen our position in rare earth Resource development in Laos while upholding our strategic focus on gold. See "History, Development and Corporate Structure — Post-Track Record Period Acquisition"

On October 30, 2023, Zhaojin Capital (Hong Kong) Limited ("Zhaojin Capital") and an Independent Third Party, lodged a bidder statement to the shareholder of Tietto Minerals, pursuant to which it made an offer to acquire all the outstanding issued shares of Tietto Minerals at an offer price of AUD0.58 per share (and subsequently increased to AUD0.68 per share on April 15, 2024). Upon resolution by the Board, Chijin HK accepted the above offer and tendered all the 140,855,864 shares of Tietto Minerals to Zhaojin Capital during the offer period for a total consideration of AUD95.782 million, which had been received. Upon completion of the transfer, our Group no longer held any interest in Tietto Minerals. See "History, Development and Corporate Structure — Major Acquisitions and Disposals — 3. Acquisitions and disposal of Tietto Minerals".

COMPETITIVE STRENGTHS

We believe our leading market position is reflected in the following competitive strengths:

The largest non-state owned gold producer with leading growth in gold production and revenue in China, possessing robust market prospects

We achieved rapid growth in gold production from 2021 to 2023. From 2021 to 2023, our total gold production volume was 260 koz, 436 koz and 461 koz, respectively. Our gold production grew at a CAGR of 33.1% from 2021 to 2023, outpacing the major listed gold producers in China and making us the leading gold producer in China in terms of gold production growth rate during the same period according to Frost & Sullivan.

Our domestic gold mines have relatively high ore grades, making them one of the top-tier deposits in China. According to Frost & Sullivan, as of December 31, 2023, our major domestic gold mines at the Jilong Gold Mine, Wulong Gold Mine and Huatai Gold Mine had the highest gold grades among the top five listed gold producers in China.

We have high visibility and certainties in our production expansion plans for our gold mines and aim to achieve Resources and Reserves enhancement through exploration activities as set out below:

In terms of our international gold assets, we are accelerating the construction of the open-pit and underground mining projects of the Sepon Gold, Copper and Rare Earth Mine, which is expected to increase the annual underground mining capacity to 806,000 tonnes by 2025 from the current capacity of 536,000 tonnes. We will also start copper production in 2025 at Kharong area, which has over 6,000,000 tonnes of copper ore, and over 57,000 tonnes of copper metal contained according to the resource model. Meanwhile, we are accelerating modelling and study work of exploration prospects of Discovery West Deeps and Phavat North with open-pit and underground mining potentials, the annual underground mining capacity is expected to be increased further after 2026 and 2027. A high-level resource range assessment of Discovery West Deeps and Phavat North prospects estimated a total tonnage of 5,000,000 tonnes, with an average grade of 3.5g/t of gold Resources expected to be added.

In terms of our domestic gold assets, we have been undergoing several rounds of technological transformation and we are still working on several technological improvement projects, including continuous improvement of technique, upgrade of machinery, enhancement of equipment, at the Wulong Gold Mine. These are expected to enable us to increase the Wulong Gold Mine's annual mining and annual processing capacity to approximately 700,000 tonnes by the end of 2024 to maintain the sustainable development of the Company to ensure the competitive edge. We have also initiated an expansion project at the Jilong Gold Mine to increase its annual processing capacity to approximately 300,000 tonnes by June 2024 and increase its annual mining capacity to approximately 300,000 tonnes by end of 2025.

Apart from our core gold business, our exploration and development of rare earth resources in Laos also create new growth opportunities. Anomalies in rare earth elements were discovered at the Sepon Gold, Copper and Rare Earth Mine during exploration in early 2021. Following further exploration, we estimate that the total Resources of the rare earth oxides amount to 32,000 tonnes with an average grade of 0.045%. In October 2022, together with Xiamen Tungsten we established a joint venture, Chijin Xiawu, where we hold a 51% equity interest. Chijin Xiawu focuses on the development of rare earth resources in Laos. The collaboration with Xiamen Tungsten is expected to improve our competitiveness in the development of rare earth and generate new growth opportunities for our business. We have commenced the general infrastructure construction and commence production.

Extensive overseas experience and global recognition with proven track record in identifying synergetic acquisition targets, executing transactions and integrating global operation

We believe that a core competitiveness metric of gold companies is the ability to continuously obtain high-quality Mineral Resources. Newly discovered gold deposits in China have been limited in recent years and the grade of gold is generally at a relatively low level. As a result, we have strategically focused our expansion plan on identifying and acquiring suitable and high-quality overseas assets to maintain a sustainable growth.

We acquired LXML and GSWL in 2018 and 2022, respectively. As of March 31, 2024, our overseas assets accounted for approximately 73.6% of our total assets, and our overseas revenue accounted for approximately 76.4% of our total revenue. According to Frost & Sullivan, we are the gold company in China with the greatest overseas presence both in terms of overseas assets contribution as of December 31, 2023 and in terms of overseas revenue contribution in 2023.

Our management team has profound experience in overseas acquisitions. We have established well-rounded decision-making and execution procedures in the identification of acquisition targets, transaction execution and post-acquisition operation integration. For example, our technical team accurately identified the Sepon Gold, Copper and Rare Earth Mine's development potential once it is transformed from a copper-focused open-pit mine into a gold-focused underground mine and decisively seized the acquisition opportunity. We had extensive communication with local government authorities in the preliminary stage of the acquisition. With regard to the Wassa Gold Mine, we carried out in-depth inspections and research on areas with abundant gold Reserves in West Africa and properly assessed local policies and the economic environment before deciding to acquire the Wassa Gold Mine. Based upon a sensible understanding of the conditions presented and perceived, our management team efficiently seized the opportunity. The speed and effectiveness of our decision-making and execution procedures is evident from the fact that — an investment decision was made and announced within eight months after we identified that opportunity.

The fact that we have a management team which is highly competent in integration and operation of acquired overseas assets makes all the difference. Since the acquisition of LXML in November 2018, we have committed to becoming "a prominent gold producer well recognized around the world" and have promoted an inclusive culture during the integration process. We advantageously fuse Chinese and international management models, ignite the passion for work, and encourage creativity among our employees. We enhanced communications with local government authorities and communities and supported them with job opportunities, skill training, pandemic preventative measures and charity donations and enjoyed reciprocal treatments. We transformed the processing plant at the mine and recommenced gold production within 18 months–well ahead of schedule. Previous operators paused gold development at the Sepon Gold, Copper and Rare Earth Mine because of challenges in relation to processing refractory ores. With continuous technological upgrades and a series of capital investments and operational improvements, the mine's gold recovery rate has increased significantly. In 2023, the Sepon Gold, Copper and Rare Earth Mine recorded a gold AISC of approximately $1,330.0 per ounce, showing a decrease of 9.9% year-on-year.

Since the completion of our acquisition of the GSWL in January 2022, we have actively promoted localized management and operation concepts, built up a sound relationship with local government authorities, served local communities, and taken initiatives to contribute to regional development. We were one of the first large-scale Chinese mining companies operating in Ghana and have earned accolades for boosting the local economy. Since the acquisition in 2022, we have been investing in improving efficiency and expanding the production of underground mines, developing the 242 Ramp and B-shoot South Ramp to pave the way for underground mining operations in 2024 and the next 5 years. In 2023, the Wassa Gold Mine recorded a gold AISC of approximately US$1,197.1 per ounce, showing a decrease of 12.7% year-on-year.

We believe our overall overseas capabilities in both acquisition and operational levels are well proved by the track records of our successfully completed and integrated acquisitions. We aim to further leverage our strengths in overseas expansions to achieve sustainable and efficient growth.

Continuously improving on the cost curve to enhance efficiency through technological upgrade and to drive profitability

Under the leadership of our management team, we have implemented a series of cost reduction and efficiency improvement measures. These initiatives have enabled us to achieve a more favorable position on the cost curve relative to our industry peers. According to Frost & Sullivan, our operational efficiency enhancement surpassed the worldwide industry average by a notable margin and we positioned significantly lower in terms of gold AISC than that of the global average. As of December 31, 2023, our gold AISC stood at US$1,179.1 per ounce, placing us in the first quartile in the worldwide industry, while the global average for the same period was approximately US$1,348.5, which is 14.4% higher than ours. In 2023, we decreased our gold AISC by 12.0%, whereas the average AISC for international gold producers increased by 7.2% during the same period. Set forth below is our gold AISC and the global average for the periods indicated:

	Year Ended December 31,		Changes from Year Ended December 31, 2022 to Year Ended December 31, 2023	Three Months Ended March 31, 2024
	2022	2023		
	US$/ounce		*%*	*US$/ounce*
PRC Gold Mines	1,205.7	877.4	(27.2)	1,014.6
Sepon Gold, Copper and Rare Earth Mine	1,476.9	1,330.0	(9.9)	1,297.6
Wassa Gold Mine	1,371.2	1,197.1	(12.7)	1,170.93
Our Group	**1,340.0**	**1,179.1**	**(12)**	**272.5**
Global Average	**1,258.1**	**1,348.5**	**7.2**	**1,193.3**

Note:

1. Company started to make voluntary disclosure of AISC since the year of 2022, in align with the global industrial reporting practice.

LXML has made significant progress in reducing unit costs through improvements in gold recovery rates and the implementation of underground mining projects. Since resuming gold production in 2020, the LXML team has made great strides in overcoming challenges related to refractory ore and has continuously improved its ore processing and recovery processes. We have implemented a series of technical measures to minimize the environmental impact of our carbon-in-leach (CIL) process, including carbon desorption, recycling process improvements, industrial water quality enhancements, and the replacement of certain chemicals to reduce the impact of chloride ions. Moreover, we launched an underground mining project in a selected mining area in the first half of 2022. The project involves mining underground mines with a depth of 450 meters below the surface. This initiative has helped us to increase our gold processing recovery rate. We also adopted a series of capital investments and operational

improvements which were completed to debottleneck process constraints and improve plant reliability and efficiency. As a result, the mine's gold recovery rate increased significantly from 54.6% in 2021 to 65.3% in the three months ended March 31, 2024. Looking ahead, through the adaption of the replacement from active carbon to resin and one regrinding technique, we expect that the gold processing recovery rate of the Sepon Gold, Copper and Rare Earth Mine will further increase to approximately 75% by June 2025. In 2023, the Sepon Gold, Copper and Rare Earth Mine recorded a gold AISC of approximately $1,330.0 per ounce, showing a decrease of 9.9% year-on-year.

We have also achieved significant progress in cost reduction at the Wassa Gold Mine by optimizing procurement channels, enhancing material utilization, and increasing our production capacity, in addition to other initiatives. In 2023, the Wassa Gold Mine recorded gold AISC of approximately US$1,197.1 per ounce, showing a decrease of 12.7% year-on-year.

In terms of our domestic operation, we seek to continuously improve our operational efficiency and recovery rate at our mines through incremental changes and investments, and this is evident from, for example, the implementation by both the Jilong Gold Mine and the Huatai Gold Mine of the tailings decyanide pressure filtration processes, which improves our recovery of valuable metals like gold and silver from the tailings solution, leading to, inter alia, improved economic benefits, attaining an internationally advanced standard, and achieves a greater water balance and recycling in the concentration production following cyanide tailings treatment.

The operational effect of these continuous improvements is evident from the fact that in 2023 our PRC Gold Mines recorded gold AISC of approximately US$877.4 per ounce, showing a decrease of 27.2% year-on-year.

Overall, we remain committed to ongoing efforts in cost reduction and efficiency improvement across our operations, with a view towards achieving greater cost competitiveness and operational excellence in the years ahead.

Distinctive "Mutual Prosperity and Development" corporate culture and effective incentive programs continuously motivate the management and employees to boost continuous growth

We established our corporate culture of "Mutual Prosperity and Development" by unifying our shareholders, management and employees, where the interests of stakeholders and our Company are aligned such that our shareholders, managers and workers share the successes and face the challenges together, as they are all invested in the same collective goal. Led by Chairman Wang Jianhua, the teams across our Company are united by shared missions and vision, and our Company has developed a management model and a long-term incentive mechanism that cater to its conditions and has performed effectively in reducing costs and improving efficiency.

In September 2020, we launched the first phase of an employee stock ownership plan and as of April 30, 2021, approximately 41.6 million shares were repurchased for the purpose of equity incentives, involving no more than 98 core employees of both the headquarters and our subsidiaries. In January 2022, we announced the second phase of the share repurchasing plan. As of January 16, 2023, approximately 16.6 million shares had been repurchased amounting to approximately RMB300.0 million in value, where the repurchased shares would be used for the second phase of the employee stock ownership plan. In June 2023, we launched the third phase of the share repurchasing plan and as of February 29, 2024, approximately 15.2 million shares were repurchased for purpose of equity incentives or employee stock ownership, amounting to approximately RMB220.0 million in value. The equity incentives align the interests of the key employees with those of the Company, laying a sound foundation for high-quality, sustainable, and organic growth.

Our corporate culture of "Mutual Prosperity and Development" is strongly supported by our shareholders. Following the successful implementation of various rounds of share incentive arrangements for our key management throughout the years since 2020, the shareholding of the largest shareholder (and its associates) had dropped to 14.54% as of December 31, 2023 from 20.59% as of December 31, 2020. Meanwhile, the management team's shareholding had increased. In January 2021 and February 2024, our management team increased its shareholding by further purchasing our Company's shares on the secondary market. As of March 31, 2024, the management team and the key employees of our Company in aggregate held approximately 5.5% of the total shares outstanding. We believe the current shareholding and corporate governance structure reflect a management approach that prioritizes the interests of all shareholders.

With the proper mechanism, the management team is well incentivized, contributing to the ongoing growth and development of the Company. From 2021 to 2023, we achieved an unparalleled CAGR of 33.1% in gold production among all major listed gold producers in China according to Frost & Sullivan.

A strong social responsibility and solid commitment to promoting green and sustainable development with high ESG standards

"To benefit more people through the development of Chifeng Gold" is our core value. We attach great importance to the environment and workplace safety. We care about the people and communities in which we operate and honor our social responsibilities. Upon joining our Group as a director in August 2022, Ms. Lydia Yang introduced a series of reforms to continuously improve our ESG practice. In September 2022, the Strategy and Sustainable Development Committee under the Board of Directors was established, and it has been chaired by Chairman Wang Jianhua. The purpose of this committee is to provide support and guidance for our medium- and long-term development strategies, decision-making on major investments for our sustainable development and to supervise the preparation and implementation of our ESG goals. In March 2023, the ESG reports of LXML and GSWL were issued, and in March 2024 a consolidated ESG report covering all mines of the company was issued.

International industry standards and best international practices are applied in our overseas mines and the same standards are adopted in our domestic mines on a step-by-step basis. The Wassa Gold Mine executes relevant ESG procedures in accordance with the standards required by the World Gold Council (WGC) and the United Nations Global Compact (UNGC), a voluntary initiative based on the management's commitments to implement universal sustainability principles and to take steps to support UN goals, and publishes ESG reports on a regular basis. Before our acquisition, MMG Limited, the shareholder of LXML at that time, was part of the International Council on Mining and Metals (ICMM). Starting from our acquisition of LXML in November 2018, we have consistently upheld ICMM standards in the mining operations of LXML. We are also making efforts to ensure greater compliance with WGC standards by consolidating the governance of our domestic and overseas mines and continuously seek to improve the ESG governance of our mines.

We have demonstrated a distinctive performance in various ESG matters, leveraging a well-founded framework that adheres to high national and international industrial standards. Our integrated management system and infrastructure aim to decrease pollutant emissions and restore land for agricultural and functional purposes. Our commitment to sustainable development has been acknowledged through various honors and ratings. For example: (i) the Jilong Gold Mine and Hanfeng Polymetallic Mine were designated as National Green Mines in January 2020; (ii) the Wulong Gold Mine and Huatai Gold Mine were rated as Provincial (Autonomous Region) Level Green Mines in December 2020 and May 2020, respectively; and (iii) the Sepon Gold, Copper and Rare Earth Mine received the Certificate of Excellent (A) from the Laos Government in recognition of its exceptional implementation of its environmental management and monitoring plan in January 2024.

As of December 31, 2023, we had rehabilitated approximately 514.3 hectares of land, demonstrating our unwavering dedication to sustainable practices. In 2023, we completed the construction of the gravity-fed water supply system project in Vilabouly District, Laos, which significantly enhanced the agricultural production efficiency of the local community. Our commitment to community development is further exemplified by our support for local projects such as the Golden Star Oil Palm Project, for which we were awarded by the Ghanaian Government in June 2022. In the third quarter of 2022, we received five awards in Women in Mining and Energy Award (WIMEA) in Africa, highlighting our focus on promoting diversity and inclusion.

We have also implemented strong governance initiatives in Ghana and continuously strive to reduce our energy consumption and emissions. We prioritize workplace safety and the health and development of our employees and have implemented systematic measures and protocols to achieve these goals.

In addition to our commitment to sustainability and community development, through LXML we have been investing in eliminating unexploded ammunition and local economic development in Laos. Through community development funds, LXML also contributes direct and indirect welfare benefits to the local government. Furthermore, GSWL is also dedicated to local community development funds, further underscoring our commitment to sustainable practices and community development.

Seasoned and dedicated management team with deep expertise in the gold industry and proven track record in mine operations locally and globally

We have assembled a highly skilled and experienced team of industry and capital markets experts, covering a broad range of disciplines, including, among other things, corporate management, mining, processing, geology, finance, and law. Our team boasts comprehensive experience in various aspects of the gold industry such as corporate governance, technology, mergers and acquisitions, overseas mine operations, environmental protection, safety, and social responsibility. Under our existing equity and corporate governance structure, the management team pursues interest consistent goals with all shareholders and employees and is committed to advancing our market value, to benefit more people through the development of Chifeng Gold.

Renowned for his charismatic and exceptional management capabilities, Chairman Wang is a transformative and effective leader who time and again has leveraged his extensive experience and know-how in managing and leading large-scale enterprise groups, global mine mergers and acquisitions, and global mining operations to unlock value and catapult businesses to higher levels under the creed of "Mutual Prosperity and Development". Before joining Chifeng Gold, he served as chairman of Shandong Gold Group Co., Ltd. ("**Shandong Gold**"), director and president of Zijin Mining Group Co., Ltd. ("**Zijin Mining**") and chairman of Yunan Baiyao Holdings Co., Ltd. (雲南白藥控股有限公司).

During his tenure at Shandong Gold, Chairman Wang proactively implemented transformative governance, management and operational reforms to, inter alia, improve worker safety, corporate governance, operational resilience, and improve overall performance, streamlined corporate policies and protocols, championed large-scale, green development and production of gold mines, and completed a series of high-grade mine acquisitions in China. While at Shandong Gold, Chairman Wang implemented the principle of "Resources are the Unshakable Fundamental Interests of Shandong Gold" ("資源是山東黃金不可撼動的根本利益"). Under Chairman Wang's leadership and influenced by his first-mover spirit, Shandong Gold engaged in the first deep drilling for gold exploration in China ("中國岩金勘查第一深鑽"), which included three groundbreaking and precedent-setting hole depths of 3,000 meters, 3,000 meters and 4,000 meters, respectively, in the Xiling mining area of Sanshan Island, Laizhou, which have been deemed of epoch-making significance for the Chinese mining industry. In addition, Chairman Wang supported a major scientific research "Ultra-deep Comprehensive Geological Research and Resource Prediction in Northwest Jiaoxi Gold Ore Concentration Area" ("膠西北金礦集區超深部綜合地質研究與資源預測"). From these initiatives, the Resources, Reserves and production capacity of Shandong Gold increased significantly during his tenure, the number of mines within the group increased, and in 2012 Shandong Gold was among the top gold producers in China.

During his tenure at Zijin Mining, as President and director of Zijin Mining, Chairman Wang placed employee safety as a top priority and overhauled the company's environmental, social and corporate governance by implementing greater safety standards and new management policies to lay a strong foundation for future growth. In addition, Chairman Wang participated in the successful acquisition of a series of high-profile mining companies and mines, including Norton Gold Fields, Kolwezi Copper Mine, Kamoa Copper Mine, Porgera Gold Mine, and other overseas mines, boosting Zijin Mining's quality of gold and copper Resources and Reserves.

As a pioneering leader, Chairman Wang's record at our Company includes undertaking a series of value-adding investments to boost our annual gold output from 48.8 koz in 2018 to an expected 514.4 koz in 2024 — an increase of more than 10 times, improving our foundation for continued and greater success, and successfully leading and managing a drilling program through 2021 to 2022 in Dandong area with a record-breaking depth of 3,003 meters, which introduced a new era of deep drill gold exploration in China's northeast region. Characteristic of Chairman Wang's leadership style is his attention to detail, grand bird's-eye view, and mindfulness of employee safety and welfare. Under Chairman Wang's leadership, we have formed a team of international experts to carry out in-depth research on high-quality assets across the globe, further streamlined our business, seized acquisition opportunities for high-quality assets, obtained and developed leading technologies, promoted greater employee safety and welfare, and developed a strong management practice with a global outlook.

We are aligning talent on a global scale through an open and transparent method, promoting collaboration among international and local management and staff. Our mines around the world are overseen and run collectively by a seasoned management team and local specialists. This enables us to leverage our previous experiences our mines across the globe and implement region-specific innovations and practices guided by local experts.

Our Chief Executive Officer, Ms. Yi-fang Yang, has extensive managerial experience in the global mining industry, Hong Kong listed companies and capital markets generally. For example, Ms. Yang served as Head of the Business Development Department (October 2010 to October 2011) and later executive director and CEO (September 2011 to January 2013) of CST Mining Group Limited, a company previously listed on the Main Board of the Hong Kong Stock Exchange until December 2023 (stock code: 0985) ("**CST Mining**"), and between June 2018 to April 2020 she served as an executive director and president at Hengxing Gold Holding Company Limited (恒興黃金控股股份有限公司), a company previously listed on the Main Board of the Hong Kong Stock Exchange (stock code: 2303) until it was acquired by Shandong Gold for around HK$3 billion.

Illustrative of Ms. Yang's entrepreneurial nature and prowess in skillful execution, she was a driving force in a series of major deals while at Zijin Mining and CST Mining, including (i) Zijin Mining's investment of USD200 million in Glencore's USD2.2 billion convertible bond issue, which formed part of Zijin Mining's plan to "form a long-term strategic partnership with Glencore through the subscription"; and (ii) CST Mining's sale of the Mina Justa Copper Project in Peru for USD505 million to a subsidiary of Minsur S.A. — one of the major mining transactions in that year; Minsur was at the time the world's fourth largest tin producer and Peru's largest tin miner by tonnage.

Furthermore, she has significant operational experience, including at mines in the PRC, CST Mining's Lady Annie Copper Mine in Australia, where she stabilized the mine operation and turned around the mine from lossmaking to profitmaking, and Mina Justa Copper Project in Peru. In addition to the abovementioned positions, Ms. Yang's distinguished managerial record includes serving in positions as chief executive officer of CST Mining, senior management positions in various group companies of Zijin Mining, including as the chairperson of Xiamen Zijin Tongguan Investment Development Company Limited (廈門紫金銅冠投資發展有限公司) and the director and general manager of Gold Mountains (H.K.) International Mining Company Limited (金山(香港)國際礦業有限公司).

Since joining our Group, Ms. Yang has implemented a series of management and operational changes to strengthen the Company's cashflow management, internal control and corporate governance, and championed technological upgrades across our operations throughout the world to minimize costs, improve mine recovery rates, advance operational excellence, and improve employee health and safety. In adherence to our value to "benefit more people through the development of Chifeng Gold", Ms. Yang has also prioritised "best in class" health and safety standards and strengthened safety awareness for our staff across the world, promoted responsible mining, emphasized the need for a responsible and excellent supply chain that strives to deliver a cost-efficiency and sustainable operation, and implemented other ESG measures, such as promoting greater equality and inclusion, across the Group to strengthen the basis for our continued success and take us ever closer to be a prominent gold producer well recognized around the world.

Mr. Lyu Xiaozhao, our Executive Director, Vice President and Chief Engineer, has been a leading force within our Group. After successfully leading our Company's Major Asset Restructuring in 2012, he has successively served as a Director and General Manager of Jilong Mining from December 2012 to August 2018, the Chairman of the Board and General Manager of our Company from December 2012 to February 2016, the Chairman of the Board of our Company from February 2016 to December 2019, the Deputy Chairman of the Board and Chief Executive Officer of our Group from December 2019 to January 2022 and the Co-chairman of the Board of our Company from January 2022 to September 2023, respectively. Mr. Lyu's business acumen, leadership skills and business development have been instrumental to help shape and develop our Group to its current heights.

Mr. Lyu has significant management experience leading listed and non-listed companies, including, in addition to his stellar record at our Company, successively serving as a Deputy Party Secretary, Executive Director, Deputy General Manager, and a member of the Strategic Committee of Lingbao Gold Group Company Limited, a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 3330), from September 2002 to March 2011.

Mr. Lyu also serves in positions of trust, including as Vice President of the China Gold Association (中國黃金協會) since December 2019, Vice Director of the Mining Geology Professional Committee of the Geological Society of China (中國地質學會礦山地質專業委員會) since December 2011, a member of the National Technical Committee on Gold of Standardization Administration of China (全國黃金標準化技術委員會) since May 2008. Due to his managerial record, expertise and mining insight, Mr. Lyu is a sought-after keynote speaker for mining related conferences, including, for example, as the keynote speaker at the World Gold Technology Conference jointly organized by the China Gold Association, the Society for Mining, Metallurgy, and Exploration (SME) of the United States, the Canadian Institute of Mining, Metallurgy, and Petroleum (CIM), the Australasian Institute of Mining and Metallurgy (AusIMM), and the South African Institute of Mining and Metallurgy (SAIMM).

To stay up to date with the latest research, developments and best practices within the mining industry and related businesses and to improve the quality of the decision-making process of our Company, our Board regularly connects with acknowledged professors, researchers and other scholars from top tier universities and research institutions.

Since 2022, our Board has included four Independent Directors: two of which are well-known scholars from a top educational institution in China, and one of which is a senior professor specializing in geology, mining, and processing.

BUSINESS STRATEGIES

We aim to become a world-class gold mining company and we intend to implement the following business strategies to achieve our goal.

Continue to increase Ore Reserves through exploration activities and expand production volume at existing mines to realize our full growth potential

Our existing mines at home and abroad are situated in favorable mineralization environments, showcasing significant exploration prospects across the majority of the relevant mining regions. Therefore, we plan to further maximize the potential of our existing mines by continuous production expansion, further exploration and Reserve enhancement as set out below:

For Wulong Gold Mine, we have identified several gold orebodies in its mining area and its peripheral areas, a precursor of exploration and Reserve enhancement in its deep and peripheral areas. We are advancing multiple underground development projects at the Wulong Gold Mine to increase its annual mining and processing capacity to approximately 700,000 tonnes by the end of 2024. The mine's average daily processing capacity increased to over 1,800 tonnes in the second half of 2023. We will continue investing in exploration and Reserve enhancement at the mine to tap into the potential of Resources in the deep and peripheral areas. We have also entered into cooperation framework agreement with China Geological Survey Bureau Shenyang Geological Survey Center, which is expected to strengthen the exploration foundation.

For the Jilong Gold Mine, we have undertaken drilling programs in both peripheral and deep areas, yielding promising results such as the discovery of industrial ore bodies in six drill holes. We have completed the 180,000-tonne gold ore processing plant expansion project and commenced trial production by June 2024. We plan to increase annual processing capacity to approximately 300,000 tonnes by June 2024 and increase annual mining capacity to approximately 300,000 tonnes by end of 2025. Additionally, we initiated construction of a new tailings storage facility in November 2023, with other construction projects progressing as planned. We have entered into a framework agreement with the Aohanqi Longxing Resources Development Company Limited, and this cooperation is expected to expand our exploration area.

For the Huatai Gold Mine, the expansion project is currently under construction and it will initiate a comprehensive transformation of the mine's infrastructure and the commencement of shaft engineering construction by the end of 2024. Infrastructure

development is projected to be substantially finished by the end of 2026, with the Huatai Gold Mine gradually recommencing mining operations in 2026. Upon completion, we expect to increase the Huatai Gold Mine's annual mining capacity by an additional 30,000 tonnes.

For the Sepon Gold, Copper and Rare Earth Mine, we will continue our further construction and production expansion plans for underground mines and proceed with the exploration in the peripheral areas of the mine. For example, the Sepon Gold, Copper and Rare Earth Mine has commenced development system construction in its mining area since April 2022, which facilitates underground mining at 450 meters below the surface providing access to the deeper Mineral Resources. We are also conducting a series of research projects at the underground copper mine and open-pit copper mine to increase the gold and copper Reserves and further improve ore processing recovery rates.

In addition, we formed a joint venture with Xiamen Tungsten in September 2022 (with our equity interest being 51%) to synergize and strengthen our respective positions in rare earth Resource development in Laos. We believe the development of rare earth resources will bring another growth opportunity for our business.

For Wassa Gold Mine, we will further expand our mining and processing capacity, with a goal to develop the Wassa Gold Mine into a large-scale gold mine and expect to achieve (i) an annual processing capacity of approximately 3.3 million tonnes and (ii) an annual production of 350 koz gold by the end of 2028. Apart from that, we will also carry on our continued exploration of the peripheral areas of the Wassa Gold Mine for more Resources and Reserves as well as a longer mine life.

For more details, please see "— Development and Expansion".

Continue to obtain Resources and Reserves and increase production volume through domestic and overseas acquisitions of high-quality gold assets for robust and sustainable growth

We believe one of the core competitive strengths in the gold industry is the ability to continuously obtain high-quality Resources and Reserves. According to Frost & Sullivan, we ranked fifth among gold producers in the PRC in terms of gold Resources and have gold Resources of 13.6 million oz as of December 31, 2023. Furthermore, we ranked fifth among listed gold producers in China in terms of gold production, with gold production of 461.5 koz, representing 3.8% market share, in 2023. We will seek to source further high-quality assets and will remain focused on both domestic and overseas quality assets to keep expanding the scale of our Resources and gold production, and further consolidate and strengthen our market position.

The following factors are considered in our assessment of potential acquisitions:

- Asset quality and production volume: Asset quality is the primary factor for consideration in potential merger and acquisition transactions. Close attention will be paid to high-quality assets, i.e., those with large Resources, high grade, high production volume and low production cost;

- Asset location: Preferably developed countries with stable political and economic landscape and relatively low risks;

- Stages of assets: To proactively manage the risk associated with acquisitions, we focus on open-pit producing assets or brownfield projects nearing production; and

- Equity stake of assets: We seek strategic investment prospects, focusing on opportunities to acquire controlling shareholdings of the target asset.

At the same time, we intend to persist in acquiring further cutting-edge, international technologies and mining management techniques, operational models, and global talent through overseas acquisitions for our long-term growth. Upholding the core value of "To benefit more people through the development of Chifeng Gold," we actively implement international strategies and progressively infuse ESG principles into all facets of our mining production and operations across the world. We consistently aim to adhere to relevant global industry standards and optimum practices in our overseas mines and move towards standardized integration in our domestic mines. As a prominent national gold enterprise in China, we joined the Shanghai Gold Exchange as a full-fledged member in 2023. Our efforts have been acknowledged with multiple national accolades and awards for promoting mining safety, environmental conservation and sustainable development.

Continue to improve productivity, reduce cost and enhance profitability

With the current industry trend of increasing overall costs in the gold mining sector and the scarcity of high-grade Mineral Resources, we recognize the critical importance of enhancing operational efficiency, cutting expenses, and boosting profitability for our long-term sustainability. Our strategy involves ongoing exploration of innovative technologies, along with a dedicated focus on cost-cutting measures such as centralized procurement, organizational streamlining, workforce optimization, and detailed assessment of gold production and pricing strategies.

To further drive cost efficiencies, we have adopted global centralized procurement center in Shanghai for our mines both domestically and internationally. Through such centralized procurement and resource optimization, we aim to effectively control and reduce procurement costs securing low prices and favorable contractual terms. In 2023, our global procurement center entered into certain framework agreements facilitated bidding processes for 41 projects, spanning critical price terms construction, equipment, services, and bulk material acquisitions essential for exploration, mining, and processing operations.

In addition, we intend to consistently apply tailored strategies based on the specific circumstances of each mine to enhance efficiency and reduce costs. We plan to continue research on processing technologies to optimize Resource utilization. For instance, at the Sepon Gold, Copper and Rare Earth Mine in Laos, we applied a new regrinding ball mill, tested waste rejection techniques and adopted resin instead of activated carbon, all showing great potential to elevate recovery rates and cut costs.

Beyond cost reduction efforts, we are dedicated to optimizing operational effectiveness. In particular, post-acquisition of new assets we will seek to optimize the corporate framework to lower administrative expenses and identify additional cost-saving methods. For example, detailed budget and capital management strategies have already resulted in significant enhancements. Recent steps, such as stringent cost controls through organizational restructuring and trimming non-essential positions, underscore our dedication to prudent financial stewardship and the enduring success of our business.

Adhere to our culture of "Mutual Prosperity and Development" to ensure strong motivation for the management team and employees

We firmly believe that highly efficient systems and mechanisms are key factors for continuous business growth and success in the global gold mining industry. The corporate culture of "Mutual Prosperity and Development" will be valued and put into action.

In 2023, we implemented the third phase of share repurchases, with the repurchase amount of approximately RMB220 million as of December 31, 2023. The repurchased shares will be used for equity incentive plans or employee share ownership plans. This is anticipated to strengthen our employees' loyalty and dedication and, foster a more cohesive work environment. In the future, our equity incentives will be more inclusive by offering equity or phantom stock incentives to both domestic and overseas teams and further increase the management team's shareholding. The implementation of equity incentive schemes is poised to enhance employee engagement and performance, aligning individual goals with organizational objectives.

Continue to improve our ESG governance and enhance our standards of environmental protection, safety, social responsibility and corporate governance

We will continuously adhere to our core value of "To benefit more people through the development of Chifeng Gold" and constantly consider the environment, the safety and care of our people and communities, and our social responsibilities as key targets in our corporate development activities, including the following:

We are committed to energy saving and emissions reduction. Overall, we are transitioning to cleaner, more efficient energy sources for our mining activities. As part of our commitment to emissions reduction, we are currently evaluating the potential of renewable energy sources for our operations. We are exploring various options for renewable energy projects with an aim to achieve a 30% reduction in greenhouse gas emission intensity by 2030. We have opted for energy-efficient and eco-friendly machinery for all newly constructed ore processing plant areas and are progressively upgrading high-energy-consuming equipment at the existing operational sites. In particular, the Jilong Gold Mine is planning to build a 10-megawatt solar power plant and expects to have the full capacity installed and ready for commercial operation

by the end of 2025. Concurrently, the Wulong Gold Mine, Sepon Gold, Copper and Rare Earth Mine, and Wassa Gold Mine are also actively strategizing the development of their renewable energy systems, thereby bolstering our renewable energy utilization capabilities. Moving forward, we aim to expedite the advancement of new energy infrastructure, actively participate in low-carbon transitions, systematically and gradually phase out fossil fuels through diverse clean energy blends and accomplish our transition to substantial decarbonization.

We aim to promote green mining and land rehabilitation throughout our global operation. For instance, we are committed to our Golden Star Oil Palm Project in Ghana, through which we contribute to post-mining environmental restoration and support the Sustainable Development Goals adopted by the United Nations. By December 31, 2023, we had grown more than 140,000 oil palm trees in ten different communities covering more than 1,000 hectares of land. We will continue to fund the Golden Star Oil Palm Project through our contribution of US$1 per oz of gold produced. We will also continue to undertake biodiversity conservation activities in Ghana.

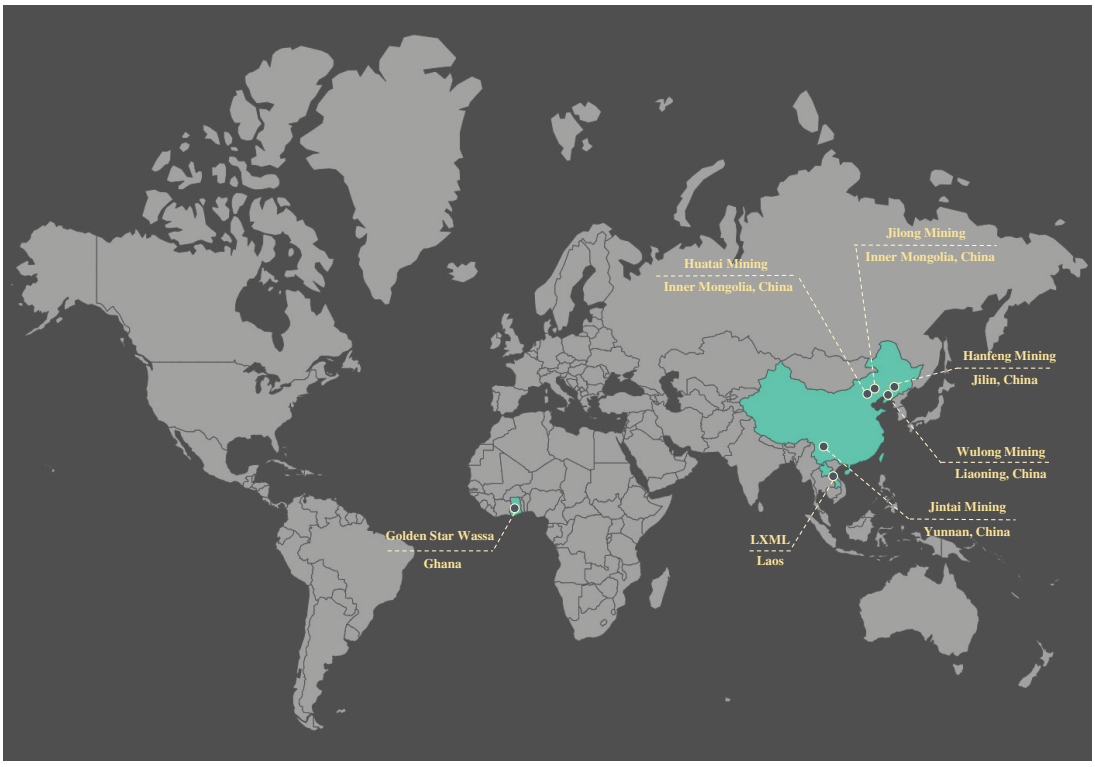
- We will further enhance our waste management capability. We are dedicated to minimizing the environmental impact of our operations, including the safe and comprehensive utilization of tailings. To this end, we utilize decyanide technology for the harmless treatment of tailings, while adopting a dry discharge method for domestic mine tailings slag. We also aim to reduce the amount of tailings in stockpiles, and repurpose them as filling materials for mine geological environment management and road subgrade materials where feasible. In addition, we take proactive measures to minimize the impact of tailings on the environment, including covering tailings discharged into the tailings pond with soil, planting grass for greening, and conducting ongoing monitoring of groundwater, soil, and solid waste either internally or by enlisting the expertise of third-party specialists.

- We will continue to provide economic benefits and supports to local communities. We seek to contribute to host communities through economic upliftment, by contributing to community development funds, paying our fair share of taxes and prioritizing local recruitment, as well as by supporting local vendors through procurement and training.

BUSINESS MODEL

We are a fast-growing, international gold producer mainly engaged in the mining, processing and sales and we are committed to becoming "a prominent gold producer well recognized around the world." As of the date this Document, we conducted our gold mining business through: (i) four subsidiaries in the PRC, namely Wulong Mining, Jilong Mining, Huatai Mining and Jintai Mining; (ii) one subsidiary in Laos, namely LXML; and (iii) one subsidiary in Ghana, namely GSWL. In addition, we engaged in exploration, mining, processing and sales of other mineral resources, which mainly include (i) non-ferrous metals produced by our PRC subsidiary, Hanfeng Mining, (ii) copper cathodes produced by LXML. Aside from our main business above, we engaged in recycling of waste electrical and electronic products business through our PRC subsidiary, Guangyuan Technology.

Set forth below is an illustration of geographic coverage of our operation, including key subsidiaries and mine locations, as of the Latest Practicable Date.



Our gold production business produces doré, gold concentrate powder and gold-loaded carbon with different gold content. Our gold production experienced rapid growth during the Track Record Period, with total gold production volume of approximately 260 koz, 436 koz, 461 koz and 115 koz, respectively. According to Frost & Sullivan, we ranked first among the top five listed gold producers in China, in terms of gold production growth rate from 2021 to 2023, during which period our gold production grew with a CAGR of 33.1%.

Our doré product

In terms of our other mineral resources business, the non-ferrous metals we mine through the Hanfeng Polymetallic Mine are processed into a wide range of products including (i) zinc concentrate powder, (ii) lead concentrate powder (containing silver), (iii) copper concentrate powder, (containing silver) and (iv) molybdenum concentrate powder. We also produce copper cathode in Laos through the Sepon Gold, Copper and Rare Earth Mine. In addition, as Laos possesses abundant rare earth Resources, we have leveraged our established infrastructure and technologies to expand rare earth business operations in Laos.

Mineral Resources and Reserves

Independent Report

We engaged SRK Consulting (Beijing) Limited, an Independent Third Party and an international consulting company that offers advice and solutions to resource industries for mining projects, as the Independent Technical Consultant, to prepare the Competent Person's Report as set out in Appendix IIIA-IIID to this Document, which is an independent assessment and evaluation of our Mineral Resources and Ore Reserves as of March 31, 2024.

The information set forth below relating to our Mineral Resources and Ore Reserves constitutes forward looking information, which is subject to certain risks and uncertainties. Please refer to "Risk Factors" and "Forward-Looking Statements" for details.

According to the Independent Technical Consultant, except for the expected addition of two new ore bodies at the Jintai Gold Mine, there was no material change in the Competent Person's Report or our Mineral Resources and Ore Reserves estimate since March 31, 2024, being the effective date of our Mineral Resources and Ore Reserves estimate, and up to the date of this Document.

Our Mineral Resources and Ore Reserves in China

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in the PRC as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(Koz)*	*(t)*
Wulong Gold Mine	Measured	–	–	–	–
	Indicated	1,309	8.22	346	10.75
	Inferred	1,754	7.21	407	12.65
	Total	3,063	7.64	753	23.40
Jilong Gold Mine	Measured	510	11.92	194	6.00
	Indicated	440	9.22	132	4.10
	Inferred	530	9.23	157	4.90
	Total	1,480	10.14	483	15.00
Huatai Gold Mine	Measured	385	5.88	73	2.26
	Indicated	2,146	7.27	502	15.60
	Inferred	1,249	6.90	284	8.62
	Total	3,780	7.01	859	26.48
Jintai Gold Mine	Measured	3,363	1.68	181	5.64
	Indicated	4,800	1.01	155	4.83
	Inferred	2,710	1.29	112	3.50
	Total	10,873	1.28	448	13.97
Total consolidated	**Measured**	**4,258**	**3.27**	**448**	**13.90**
	Indicated	**8,695**	**4.06**	**1,135**	**35.28**
	Inferred	**6,243**	**4.75**	**960**	**29.67**
	Total	**19,196**	**4.11**	**2,543**	**78.85**

Note:

1. All figures are rounded to reflect the relative accuracy of the estimate.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in the PRC as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Wulong Gold Mine	Proved	–	–	–	–
	Probable	1,028	7.34	243	7.55
	Total	1,028	7.34	243	7.55
Jilong Gold Mine	Proved	537	9.66	167	5.18
	Probable	431	7.27	101	3.13
	Total	968	8.59	267	8.31
Huatai Gold Mine	Proved	226	5.21	38	1.18
	Probable	1,468	6.35	300	9.32
	Total	1,694	6.20	338	10.50
Jintai Gold Mine	Proved	–	–	–	–
	Probable	1,563	0.74	37	1.15
	Total	1,563	0.74	37	1.15
Total consolidated	**Proved**	**763**	**8.34**	**204**	**6.36**
	Probable	**4,490**	**4.71**	**680**	**21.15**
	Total	**5,253**	**5.24**	**885**	**27.51**

Our Mineral Resources and Ore Reserves in Laos and Ghana

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in Laos and Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Measured	302	7.78	76	2.35
	Indicated	8,618	3.93	1,090	33.90
	Inferred	6,174	3.60	715	22.25
	Total	15,095	3.88	1,881	58.50
Wassa Gold Mine	Measured	7,505	2.89	698	21.73
	Indicated	10,498	3.07	1,038	32.28
	Inferred	61,084	3.37	6,619	205.88
	Total	79,086	3.29	8,355	259.88
Total consolidated	**Measured**	**7,807**	**3.08**	**774**	**24.08**
	Indicated	**19,116**	**3.46**	**2,128**	**66.17**
	Inferred	**67,258**	**3.39**	**7,334**	**228.13**
	Total	**94,181**	**3.38**	**10,236**	**318.38**

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Mineral Resources include the resources from open-pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in Laos and Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Proved	295	4.74	45	1.40
	Probable	9,049	3.00	873	27.17
	Total	9,344	3.06	918	28.56
Wassa Gold Mine	Proved	4,216	2.17	294	9.14
	Probable	6,029	2.07	401	12.46
	Stockpile	52	0.87	1	0.05
	Total	10,297	2.10	696	21.64
Total consolidated	**Proved**	4,511	2.34	339	10.54
	Probable	15,078	2.63	1,274	39.63
	Stockpile	52	0.87	1.45	0.05
	Total	19,641	2.56	1,614	50.21

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Ore Reserves include the ore from open pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

Our Other Mineral Resources and Ore Reserves in the PRC

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our non-ferrous metal Resources in the PRC conducted at subsidiary, Hanfeng Mining, as of March 31, 2024:

	Lishan Mining Area							Dongfeng Mining Area		
Category	Tonnage	Zn Grade	Zn Metal Contained	Cu Grade	Cu Metal Contained	Pb Grade	Pb Metal Contained	Tonnage	Mo Grade	Mo Metal Contained
	(kt)	*%*	*(Kt)*	*%*	*(Kt)*	*%*	*(Kt)*	*(kt)*	*%*	*(Kt)*
Measured	750	2.36	18	0.01	0	0.12	1	1,820	0.11	2
Indicated	8,580	2.66	229	0.07	6	0.12	10	26,490	0.12	32
Inferred	10,620	2.90	308	0.09	10	0.13	14	37,050	0.12	45
Total	**19,950**	**2.78**	**555**	**0.08**	**16**	**0.13**	**25**	**65,360**	**0.12**	**79**

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our non-ferrous metal Reserves in the PRC conducted at subsidiary, Hanfeng Mining, as of March 31, 2024:

	Lishan Mining Area		
Category	Tonnage	Zn Grade	Zn Metal Contained
	(kt)	*(%)*	*(kt)*
Proved	390	2.26	9
Probable	2,920	2.47	72
Total	**3,310**	**2.45**	**81**

Note:

1. All figures are rounded to reflect the relative accuracy of the estimate.

2. It should be noted that only the Lishan Lower Part (Stage 1) is included in the Ore Reserves, as there are insufficient technical studies regarding the Lishan Lower Part (Stage 2) and the Dongfeng Lower Part.

   In order to classify as Proved or Probable Ore Reserve category, technical studies need to be completed to at least a PFS level with an appraisal of how access would be achieved, mining methodology (including extraction and dilution factors), the geotechnical understanding as well as ventilation. Along with the technical understanding and extraction achievability, the economics of each area needs to be proved, i.e. with the application of Capex and Opex, is it economic to mine, cash flow positive.

Our Mineral Resources and Ore Reserves in Laos

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Resources in Laos conducted at our subsidiary, LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Measured	–	–	–
	Indicated	4,868	1.41	68.63
	Inferred	2,078	1.71	35.55
	Total	**6,946**	**1.50**	**104.18**

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Reserves in Laos conducted at our subsidiary, LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Proved	–	–	–
	Probable	1,638	0.95	15.48
	Total	**1,638**	**0.95**	**15.48**

Our Gold Production Volume

The following table sets forth our ore mined volume, ore processed volume and mine production volume in relation to our gold mining businesses for the periods indicated:

	Year Ended December 31,									Three Months Ended March 31, 2023			Three Months Ended March 31, 2024		
	2021			2022			2023								
	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production
	(Kt)	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*
Wulong Gold Mine	383	383	28.0	389	423	43.8	577	578	59.2	130	123	9.2	160	139	12.4
Jilong Gold Mine	138	146	34.3	153	156	29.5	154	155	44.7	27	30	8.5	35	34	7.5
Huatai Gold Mine	56	60	4.9	18	19	1.3	1	2	0.5	1	2	0.5	–	–	–
Jintai Gold Mine[1]	–	–	–	–	–	–	–	–	2.4	–	–	–	–	–	2.2
Sepon Gold, Copper and Rare Earth Mine – Gold	4,560	3,407	193.0	5,700	3,792	199.5	2,790	3,085	193.2	1,089	894	49.5	1,007	759	47.3
Wassa Gold Mine[2]	–	–	–	2,024	1,969	162.1	2,530	2,551	161.5	644	630	38.1	710	719	45.9
Total	**5,137**	**3,996**	**260.2**	**8,284**	**6,359**	**436.2**	**6,052**	**6,371**	**461.5**	**1,891**	**1,679**	**105.8**	**1,912**	**1,651**	**115.3**

Notes:

1. In January 2023, we completed the acquisition of a 51% equity interest in Xinhenghe Mining, which in turn directly holds a 90% equity interest in Jintai Mining, and we began consolidating the accounts of Jintai Mining from January 31, 2023. As such, ore mined volume, ore processed volume and mine production volume of the Jintai Gold Mine prior to January 31, 2023 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Xinhenghe Mining."

2. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, ore mined volume, ore processed volume and mine production volume of the Wassa Gold Mine prior to February 1, 2022 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources."

For more details regarding the year-to-year comparison of the gold production volume, please refer to "— Our Gold Production Business in China — Overview — Operation Performance", and "— Our Gold Production Business in Laos — Overview — Operation Performance".

Our Gold Operating Costs

Our operational efficiency enhancement surpassed the worldwide industry average by a notable margin and we positioned significantly lower in terms of gold AISC than that of the global average. As of December 31, 2023, our gold AISC stood at only US$1,179.1 per ounce, placing us in the first quartile in the worldwide industry, while the global average for the same period was approximately US$1,348.5, or 14.4% higher than that of ours. In 2023, we decreased our gold AISC by 12.0%, whereas the average AISC for international gold producers increased by 7.2% during the same period. Set forth below is our gold AISC and the global average for the periods indicated:

	Year Ended December 31,		Changes from Year Ended December 31, 2022 to Year Ended December 31, 2023	Three Months Ended March 31, 2024
	2022	2024	2023	2024
	US$/ounce		*%*	*US$/ounce*
PRC Gold Mines	1,205.7	877.4	(27.2)	1,014.6
Sepon Gold, Copper and Rare Earth Mine	1,476.9	1,330.0	(9.9)	1,297.6
Wassa Gold Mine	1,371.2	1,197.1	(12.7)	1,170.93
Our Group	**1,340.0**	**1,179.1**	**(12)**	**1,193.3**
Global Average	**1,258.1**	**1,348.5**	**7.2**	**1,496.2**

Note: Company started to make voluntary disclosure of AISC since the year of 2022, in align with global industrial reporting practice.

Our Other Mineral Resources Production Volume

The following table sets forth the ore mined volume, ore processed volume and mine production volume in relation to our other mineral resources businesses for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	Three Months Ended March 31,
	2021	2022	2023	2023	2024
	(Kt)	*(Kt)*	*(Kt)*	*(Kt)*	*(Kt)*
Ore Mined					
Hanfeng Polymetallic Mine – Polymetallic metals	510	502	457	8	126
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes[1]	149	–	–	–	–
Ore Processed					
Hanfeng Polymetallic Mine – Polymetallic metals	506	579	434	–	135
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes	255	772	1,105	222	311
Production Volume					
Hanfeng Polymetallic Mine					
Zinc concentrate powder	19.93	22.04	11.29	–	2.19
Lead concentrate powder	3.48	3.31	2.72	–	0.52
Copper concentrate powder	2.93	2.05	1.44	–	0.29
Molybdenum concentrate powder	–	0.04	0.21	–	0.14
Sepon Gold, Copper and Rare Earth Mine – Copper cathodes	5.02	6.43	6.49	1.11	1.26

Note:

1. The ore mined volume for the Sepon Gold, Copper and Rare Earth Mine's copper mine dropped to zero in 2022, because the Sepon Gold, Copper and Rare Earth Mine resumed gold production in 2020 while only keeping a small portion of processing capacity for its copper business since then. As of the Latest Practicable Date, the Sepon Gold, Copper and Rare Earth Mine did not have any active copper mining projects while only processed the ore from its stockpile.

Our Revenue Breakdown

During the Track Record Period, we generated revenue from the PRC, Laos and Ghana. The following table sets forth a breakdown of our revenue by geographical region of our subsidiaries for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31, 2024	
	2021		2022		2023			
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000*	*%*
PRC	1,259,760	33.3%	1,477,471	23.5%	2,026,833	28.1%	436,928	23.6%
Laos	2,522,864	66.7%	2,998,740	47.9%	3,054,614	42.3%	787,600	42.5%
Ghana	–	–	1,790,576	28.6%	2,139,505	29.6%	629,378	33.9%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,853,906**	**100.0%**

Note:

1. Our revenue in Ghana was generated from Golden Star Resources. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, the revenue of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources".

During the Track Record Period, we generated our revenue primarily from gold mining, other mineral resources and other businesses. The following table sets forth the breakdown of our revenue by business segments for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31, 2024	
	2021		2022		2023			
	RMB'000	*%*	*RMB'000*	*%*	*RMB'000*	*%*	*RMB'000*	*%*
Gold mining	2,968,694	78.5%	5,304,729	84.6%	6,322,263	87.6%	1,682,389	90.7%
Other mineral resources	551,278	14.6%	650,206	10.4%	495,752	6.9%	104,444	5.6%
Others	262,652	6.9%	311,852	5.0%	402,937	5.5%	67,073	3.7%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,853,906**	**100.0%**

Note:

1. "Others" primarily comprised recycling of waste electrical and electronic products business conducted through Guangyuan Technology.

OUR GOLD PRODUCTION BUSINESS IN CHINA

Overview

We have four subsidiaries conducting gold production business in the PRC, namely Wulong Mining, Jilong Mining, Huatai Mining and Jintai Mining.

Wulong Mining

Wulong Mining was established in April 2008 and was 100% acquired by us in November 2013. The mining areas of the Wulong Gold Mine are located at Zhen An District, Dandong City, Liaoning Province. The Wulong Gold Mine has three active underground mining areas. As of the Latest Practicable Date, Wulong Mining held one valid mining license which covered an area of approximately 6.27 km^2 and two valid permits which covered an area of approximately 4.49 km^2. The major product of the Wulong Gold Mine is gold concentrate powder with gold content of 50g/t and more.

Development and Expansion

Wulong Gold Mine has identified several gold orebodies in its mining area and its peripheral areas, a precursor of exploration and Reserve enhancement in its deep and peripheral areas. It is advancing multiple underground development projects to increase its annual mining and processing capacity to approximately 700,000 tonnes by the end of 2024. The mine's average daily processing capacity increased to over 1,800 tonnes in the second half of 2023. It will continue to invest in exploration and Reserve enhancement at the mine to tap into the potential of Resources in the deep and peripheral areas.

In addition, Wulong Mining has participated in the following research projects:

Wulong Gold Mine is in the southwest of Liaodong — Jinan polymetallic metallogenic gold belt and is the key research mine for the "Liaodong — Tonghua Ultra-large Gold Metallogenic Belt" ("遼東–通化金超大型成礦帶") national project. As such, the Wulong Gold Mine was designated as a key target area for exploration as well as a strategic gold production base on a national level by the 21st Century Agenda Management Centre of the Ministry of Science and Technology (科學技術部21世紀議程管理中心) of the PRC.

To better evaluate the Resources of the Wulong Gold Mine, in July 2016, Wulong Mining participated in the national key research and development program of "Three-dimensional Structure and Ore Formation Prediction of Complex Ore Formation System in Liaodong" (遼東複雜成礦系統三維結構與成礦預測) initiated by the Ministry of Science and Technology of the PRC and led by the Institute of Geology and Geophysics of the Chinese Academy of Science (中國科學院地質與地球物理研究所). In August 2018, Wulong Mining participated in the downstream project of "Demonstration of Prediction and Deep Exploration of Gold Polymetallic Ore in the Important Mineralised Zone of North China Kraton Liaodong/Jiaodong" (華北克拉通遼東/膠東重要成礦區帶金多金屬礦深部預測及勘查示範) led

by the Development Research Centre of the China Geological Survey (中國地質調查局發展研究中心) in order to research the relevant mining area of the Wulong Gold Mine. A 3,000 meters in-depth drilling project at the Wulong Gold Mine was undertaken in May 2021, which was the first deep-hole drill for non-coal solid minerals in Northeast China. This project resulted in the discovery of four gold orebodies, three gold mineralization bodies, two zinc orebodies and one zinc mineralized body. In response to these findings, we have increased investments in the Wulong Gold Mine and implemented a technical transformation of the mine engineering in order to carry out a strategic expansion of the scale of the mine. We have also entered into Cooperation framework agreement with China Geological Survey Bureau Shenyang Geological Survey Center, which is expected to strengthen our exploration foundation.

Jilong Mining

Jilong Mining was established in October 2005, and it acquired 100% interest in the Jilong Gold Mine (also known as Zhuanshanzi Gold Mine (撰山子金礦)) from the state authorities of the PRC. The mining areas of the Jilong Gold Mine are located at Sidaowanzi Town, Aohan County, Chifeng City, Inner Mongolia Autonomous Region. The Jilong Gold Mine has three active underground mining areas. Pursuant to Frost & Sullivan, the Zhuanshanzi mining area is located on one of the most important major gold metallogenic belts in China with high grade ores. As of the Latest Practicable Date, Jilong Mining held two valid mining licenses and one valid exploration permit, which covered an aggregate area of approximately 17.7 km^2 and 3.8 km^2. The major product of the Jilong Gold Mine is doré with gold content of over 80%.

Development and Expansion

The Jilong Gold Mine has undertaken drilling projects in both peripheral and deep areas, yielding promising results such as the discovery of industrial ore bodies in 6 drill holes. It has completed the 180,000-tonne gold ore processing plant expansion project, and trial production has commenced since June 2024. We plan to increase annual processing capacity to approximately 300,000 tonnes by June 2024 and increase annual mining capacity to approximately 300,000 tonnes by end of 2025. Additionally, it started construction of a new tailings storage facility in November 2023, with other construction projects progressing as planned. We have entered into a framework agreement with Aohanqi Longxing Resources Development Company Limited, and this cooperation is expected to expand our exploration area.

Huatai Mining

Huatai Mining was established in January 2005, and it acquired 100% interest in the Huatai Gold Mine (also known as Honghuagou Gold Mine (紅花溝金礦)) from the state authorities of the PRC. The mining areas of Huatai Gold Mine are located at Wang Fu Town, Song Shan District, Chifeng City, Inner Mongolia Autonomous Region. As of the Latest Practicable Date, the Huatai Gold Mine held six valid mining licenses which covered an aggregate area of approximately 10.5 km^2, respectively. The major product of the Huatai Gold Mine is doré with gold content of over 65%.

Development and Expansion

Due to the limited production capacity specified in the mining licenses of the Huatai Gold Mine, it is incapable of executing large-scale mining activities. Therefore, since 2022 we have been strategizing and drafting plans for expanding and enhancing the capacity of various mining zones within the Huatai Mining's mining permits. As of the Latest Practicable Date, preliminary designs for capacity expansion initiatives in certain mining areas had been finalized and approved by the local authority, and the mine is in the process of selecting construction contractors. We expect the Huatai Gold Mine will initiate a comprehensive transformation of the mine's infrastructure and commence shaft engineering construction in 2024. Infrastructure development is projected to be substantially completed by the end of 2026. Upon completion, we expect to increase the Huatai Gold Mine's annual mining capacity by an additional 30,000 tonnes. As a result of the construction, mining activities at the Huatai Gold Mine were affected for the years ended December 31, 2022 and 2023 and the three months ended March 31, 2024.

Jintai Mining

On January 8, 2023, we completed the acquisition of 51% equity interest in Xinhenghe Mining, which in turn directly holds a 90% equity interest in the Jintai Gold Mine. The mining areas of Jintai Mining are located at Xidengping, Eryuan County, Dali City, Yunnan Province, China. As of the Latest Practicable Date, Jintai Mining held one valid mining licenses and one valid exploration permit, which covered an aggregate area of approximately 1.09 km^2 and 10.28 km^2, respectively. The major product of the Jintai Gold Mine is gold-loaded carbon.

Development and Expansion

In October 2023, we completed the construction project at the Jintai Gold Mine with its annual mining and processing capacity of approximately 140,000 tonnes. Since 2024, we commenced a further expansion project of the Jintai Gold Mine, pursuant to which the Xidengping mining area is expected to reach an annual mining and processing capacity of approximately 50,000 tonnes, and the Tangzibian mining area is expected to reach an annual mining and processing capacity of approximately 600,000 tonnes.

Operation Performance

During the Track Record Period, our gold mining business in the PRC produced 67.2 koz, 74.6 koz, 106.8 koz and 22.1 koz of gold, respectively. The following table sets forth the ore mined volume, ore processed volume and mine production volume of the Wulong Gold Mine, Jilong Gold Mine, Jintai Gold Mine and Huatai Gold Mine for the periods indicated.

	Year Ended December 31,														
	2021			2022			2023			Three Months Ended March 31, 2023			Three Months Ended March 31, 2024		
	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production
	(Kt)	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*
Wulong Gold Mine . .	383	383	28.0	389	423	43.8	577	578	59.2	130	123	9.2	160	139	12.4
Jilong Gold Mine . . .	138	146	34.3	153	156	29.5	154	155	44.7	27	30	8.5	35	34	7.5
Huatai Gold Mine . .	56	60	4.9	18	19	1.3	1	2	0.5	1	2	0.5	–	–	–
Jintai Gold Mine[1] . . .	–	–	–	–	–	–	–	–	2.4	–	–	–	–	–	2.2
Total	**577**	**589**	**67.2**	**560**	**598**	**74.6**	**732**	**735**	**106.8**	**158**	**155**	**18.2**	**195**	**173**	**22.1**

1. In January 2023, we completed the acquisition of a 51% equity interest in Xinhenghe Mining, which in turn directly holds a 90% equity interest in Jintai Mining, and we began consolidating the accounts of Jintai Mining from January 31, 2023. As such, ore mined volume, ore processed volume and mine production volume of Jintai Gold Mine prior to January 31, 2023 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Xinhenghe Mining."

The gold production volume of the Wulong Gold Mine increased by 56.4% from 28.0 koz in 2021 to 43.8 koz in 2022. This was primarily due to (i) the completion of our technological upgrade and (ii) improvement in our mining and processing capacity and ore grade. Its gold production volume further increased by 35.1% from 43.8 koz in 2022 to 59.2 koz in 2023. This was primarily due to the completion of our technological upgrade and improvement in our mining and processing capacity and ore grade. The gold production volume of the Wulong Gold Mine increased by 34.7% from 9.2 koz as of March 31, 2023 to 12.4 koz as of March 31, 2024. This was primarily due to gold ore processing volume increased compared with the same period of last year.

The gold production volume of the Jilong Gold Mine decreased by 14.0% from 39.3 koz in 2021 to 29.5 koz in 2022. This was primarily due to deterioration of the ore grade. Its gold production volume increased by 51.1% from 29.5 koz in 2022 to 44.7 koz in 2023. This was primarily attributed to its relatively high-level gold grade and steady expansions. The gold production volume of the Jilong Gold Mine decreased by 12.3% from 8.5 koz as of March 31, 2023 to 7.5 koz as of March 31, 2024. This was primarily due to average grade of gold ore processed declines compared with the same period of last year.

The gold production volume of the Huatai Gold Mine decreased by 73.3% from 4.9 koz in 2021 to 1.3 koz in 2022, then decreased by 60.0% to 0.5 koz in 2023, and further decreased to nil in three months ended March 31, 2024. The gold production volume of the Huatai Gold Mine decreased by 100.0% from 0.5 koz as of March 31, 2023 to 0 koz as of March 31, 2024. These changes were primarily due to production halted for the first half of the year as the mine is undergoing technology upgrades for expansion of production capacity, which affected the mine's production.

The Jintai Gold Mine was acquired by us in January 2023. The gold production volume of the Jintai Gold Mine was 2.4 koz and 2.2 koz in 2023 and in the three months ended March 31, 2024, respectively, because its gold production was in the early stage and ramping up.

The following table sets forth the processing recovery rate of the Wulong Gold Mine, Jilong Gold Mine, Huatai Gold Mine and Jintai Gold Mine for the periods indicated.

	Year Ended December 31,			Three Months Ended March 31,
	2021	2022	2023	2024
Wulong Gold Mine	89.7%	89.8%	91.3%	91.0%
Jilong Gold Mine	97.1%	96.2%	97.7%	96.7%
Huatai Gold Mine	93.8%	93.4%	92.8%	–
Jintai Gold Mine	–	–	87.2%	80.3%

Mineral Resources and Ore Reserves

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our Mineral Resources of the Wulong Gold Mine, Jilong Gold Mine, Huatai Gold Mine and Jintai Gold Mine as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Wulong Gold Mine . . .	Measured	–	–	–	–
	Indicated	1,309	8.22	346	10.75
	Inferred	1,754	7.21	407	12.65
	Subtotal	3,063	7.64	753	23.40
Jilong Gold Mine	Measured	510	11.92	194	6.00
	Indicated	440	9.22	132	4.10
	Inferred	530	9.23	157	4.90
	Subtotal	1,480	10.14	483	15.00
Huatai Gold Mine	Measured	385	5.88	73	2.30
	Indicated	2,146	7.27	502	15.60
	Inferred	1,249	6.90	284	8.80
	Subtotal	3,780	7.01	859	26.48
Jintai Gold Mine	Measured	3,363	1.68	181	5.64
	Indicated	4,800	1.01	155	4.83
	Inferred	2,710	1.29	112	3.50
	Subtotal	10,873	1.28	448	13.97
Total consolidated	Measured	4,258	3.27	448	13.90
	Indicated	8,695	4.06	1,135	35.28
	Inferred	6,243	4.75	960	29.67
	Total	**19,196**	**4.11**	**2,543**	**78.85**

Note:

1. All figures are rounded to reflect the relative accuracy of the estimate.

The following table, which is based on the Competent Person's Report in accordance with JORC Code, sets forth the information of our gold Reserves of Wulong Gold Mine, Jilong Gold Mine, Huatai Gold Mine and Jintai Gold Mine as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(Kt)	*(g/t)*	*(Koz)*	*(t)*
Wulong Gold Mine . . .	Proved	–	–	–	–
	Probable	1,028	7.34	243	7.55
	Total	**1,028**	**7.34**	**243**	**7.55**
Jilong Gold Mine	Proved	537	9.66	167	5.18
	Probable	431	7.27	101	3.13
	Total	**968**	**8.59**	**267**	**8.31**
Huatai Gold Mine	Proved	226	5.21	38	1.18
	Probable	1,468	6.35	300	9.32
	Total	**1,694**	**6.20**	**338**	**10.50**
Jintai Gold Mine	Proved	–	–	–	–
	Probable	1,563	0.74	37	1.15
	Total	**1,563**	**0.74**	**37**	**1.15**
Total	Proved	763	8.34	204	6.36
	Probable	4,490	4.71	680	21.15
	Total	**5,253**	**5.24**	**885**	**27.51**

Mining Licenses and Exploration Permits

As of the Latest Practicable Date, our PRC gold production business held a total of 10 valid mining licenses, including (i) two mining licenses for Jilong Mining, (ii) six mining licenses for Huatai Mining, (iii) one mining license for Wulong Mining, and (iv) one mining license for Jintai Mining. These mining licenses covered a total area of approximately 35.6 km^2.

In addition, as of the Latest Practicable Date, our PRC gold production business held a total of four valid exploration permits, including (i) one exploration permit for Jilong Mining, (ii) two exploration permits for Wulong Mining and (iii) one exploration permit for Jintai Mining. These exploration permits covered a total area of approximately 18.6 km^2.

Our mining licenses in the PRC are generally valid for 10 to 30 years. Our exploration permits are generally valid for five years and renewed accordingly subject to some conditions respectively. We aim to renew our mining licenses or exploration permits before their respective expiry dates. As advised by our PRC Legal Advisor, there are no explicit regulations limiting the number of times a mining license or an exploration permit may be renewed in the PRC. We do not expect any material legal impediment in the renewal process. For details of relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We may fail to obtain, maintain or renew the government permits, licenses and approvals required for our mining and exploration activities."

We firstly undertake exploration activities in the areas covered by our exploration permits. If we deem the return of our exploration activities economically reasonable, we will apply to the relevant competent authorities for mining licenses covering such areas. The PRC mining laws and regulations grant the holder of an exploration permit priority in obtaining a mining license upon successful discovery of Mineral Resources. For details of the PRC mining laws and regulations, see "Regulatory Overview".

The following table sets forth information regarding our relevant mining licenses and exploration permits as of the Latest Practicable Date:

Wulong Mining

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining license	C2100002011084140116558	6.2732	December 4, 2020 to August 4, 2035	Valid
Exploration Permit	T2100002008044010006347	3.88	March 9, 2023 to June 2, 2025	Valid
Exploration Permit	T2100002008044010005662	0.6112	June 2, 2023 to June 2, 2028	Valid

Jilong Mining

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining License	C1500002009114120054250	8.61	May 1, 2024 to September 29, 2026	Valid
Mining License	C1500002023124210156146	9.1340	December 27, 2023 to March 27, 2032	Valid
Exploration Permit	T1500002008044010006035	3.83	March 25, 2021 to March 24, 2026	Valid

Huatai Mining

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining License	C1500002009064120021513	2.7978	June 6, 2024 to June 5, 2044	Valid
Mining License[1]	C1500002011014140119663	0.8138	September 14, 2022 September 14, 2024	Valid
Mining License	C1500002013094210131353	1.0164	March 11, 2024 to September 5, 2025	Valid
Mining License	C1500002015114210140450	1.8332	November 17, 2015 to November 17, 2025	Valid
Mining License	C1500002015114210140451	0.3199	November 17, 2015 to November 17, 2024	Valid
Mining License	C1500002015114210140449	3.7362	November 18, 2023 to November 17, 2025	Valid

Note:

1. The renewed Mining License with the same serial number has been obtained on August 19, 2024 with the effective period from September 15, 2024 to September 14, 2027.

Jintai Mining

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining license	C5300002012054110124688	1.0920	June 7, 2022 to June 6, 2032	Valid
Exploration Permit	T5300002009034010026977	10.28	June 3, 2021 to June 3, 2026	Valid

Development Plan and Planned Production Schedule

Development Plan

The following timeline illustrates key historical and planned milestones in the development of our PRC Gold Mines:

Wulong Mining	
Year	**Milestone**
1949	Officially commenced production
1958	Processing capacity of processing plant reached 150 t/d
1966	Annual gold production exceeded 1 ton for the first time, reaching 1.1 ton
2013	Wulong Mining was merged into the Company
2022	A new 3,000 t/d Processing plant was completed and put into operation The "First Deep Drill Hole of Gold Exploration in the Liaodong Area" at Wulong project area was completed with a final depth of 3,003.99 meters, achieving a significant breakthrough in gold exploration

Jilong Mining

Year	Milestone
1958 . . .	Mine construction started
2008 . . .	Processing capacity of the processing plant reached 400 t/d
2012 . . .	Annual gold production exceeded 1 ton for the first time, reaching 1.3 ton Jilong Mining was merged into the Company
2024 . . .	Mining capacity of #1, #2, #3 mining areas expanded from 400 t/d to 600 t/d A new processing plant completed with a processing capacity of 600t/d, bringing the total processing capacity of the mine up to 1000 t/d

Huatai Mining

Year	Milestone
1959 . . .	Mine construction started
1987 . . .	The #2 vertical shaft at Honghuagou #1 mining area, single shaft gold production exceeded 300 kg
1988 . . .	Processing capacity of processing plant reached 200 t/d
2012 . . .	Huatai Mining was merged into the Company
2022 . . .	Started process to obtain permits for production expansion

Jintai Mining

Year	Milestone
2008 . . .	Jintai Mining was established
2023 . . .	Became a subsidiary of the Company
2023 . . .	The Phase I mining and processing project with a capacity of 140,000 t/a was put into operation; gold production of 75 kg in 2023
2024 . . .	The Phase II mining and processing project with an additional capacity of 600,000 t/a was launched

Planned Production Schedule

As set forth in the Competent Person's Report, the following chart sets forth the planned mining and production schedule for the operations in our PRC Gold mines for the periods indicated over the life of mine of 30 years:

Underground	Unit	LOM	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Jilong Gold Mine																																
Ore_Tonnes	kt	968	136	184	180	194	109	58	55	38	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mined Au	g/t	8.59	7.82	7.44	6.54	7.67	9.18	12.11	13.09	15.09	16.12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	koz	267	34	44	38	48	32	23	23	18	7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	t	8.3	1.1	1.4	1.2	1.5	1.0	0.7	0.7	0.6	0.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Huatai Gold Mine																																
Ore_Tonnes	kt	1,693	–	–	60	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	50
Mined Au	g/t	6.20	–	–	5.64	5.20	4.64	5.25	5.56	5.49	4.87	5.29	5.07	5.53	5.38	5.12	5.88	6.85	6.34	6.02	7.38	5.88	8.73	10.14	9.13	9.14	7.51	7.85	7.06	4.17	4.20	3.85
Contained Au	koz	337	–	–	11	10	9	10	11	11	10	10	10	11	11	10	11	13	12	12	14	12	17	20	18	18	15	15	14	8	8	6
Contained Au	t	10.5	–	–	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.2
Wulong Gold Mine																																
Ore_Tonnes	kt	1,029	72	99	99	98	99	108	108	102	101	66	44	33	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mined Au	g/t	7.35	7.64	7.55	8.70	7.71	7.40	7.32	7.51	7.19	5.83	7.74	7.58	4.63	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	koz	243	18	24	28	24	24	25	26	24	19	16	11	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	t	7.6	0.5	0.7	0.9	0.8	0.7	0.8	0.8	0.7	0.6	0.5	0.3	0.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total																																
Ore_Tonnes	kt	3,690	208	282	340	353	269	227	224	200	175	127	105	94	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	50
Mined Au	g/t	7.15	7.76	7.48	7.01	7.25	7.50	8.00	8.35	8.15	6.29	6.57	6.12	5.21	5.38	5.12	5.88	6.85	6.34	6.02	7.38	5.88	8.73	10.14	9.13	9.14	7.51	7.85	7.06	4.17	4.20	3.85
Contained Au	koz	848	52	68	77	82	65	58	60	53	35	27	21	16	11	10	11	13	12	12	14	12	17	20	18	18	15	15	14	8	8	6
Contained Au	t	26.4	1.6	2.1	2.4	2.6	2.0	1.8	1.9	1.6	1.1	0.8	0.6	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.3	0.2

Open Pit	Unit	LOM	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Jintai Gold Mine																																
Ore_Tonnes	kt	1,563	100	140	139	140	140	137	137	132	135	129	140	94	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Waste_Tonnes	kt	2,708	343	99	77	35	127	72	112	178	141	179	891	453	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total Material	kt	4,271	444	239	216	175	267	208	249	310	276	307	1,031	548	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Moment																																
Strip Ratio	t/t	1.73	3.42	0.71	0.55	0.25	0.91	0.52	0.82	1.35	1.05	1.39	6.37	4.81	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Mined Au	g/t	0.74	0.66	0.57	0.62	1.01	0.60	0.58	0.77	0.53	0.63	0.69	1.29	0.95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	koz	37	2	3	3	5	3	3	3	2	3	3	6	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Contained Au	t	1.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Note: The planned production schedule of the LOM, was made based on the data collected of our PRC Gold mines since April 1, 2024.

Capital Costs

With the reference to the Independent Technical Report, our Directors confirmed that the capital costs for the period of 2021 to 2023 of the PRC Gold Mines was approximately RMB1,101.9 million. The Independent Technical consultant has reviewed the breakdown of the capital forecast and considered appropriate capital has been allocated to support the development of the PRC Gold Mines and the basis of the capital cost estimation is considered reasonable. For detailed capital cost of the PRC Gold Mines, please refer to "Appendix IIIA — Competent Person's Report for the PRC Mines — Capital Expenditure Forecast".

Operating Costs

In 2022 and 2023, our PRC Gold Mines recorded gold AISCs of approximately $1,205.7 per ounce and $877.4 per ounce, respectively, showing a decrease of 27.2% year-on-year.

The table below sets forth a summary of the forecasted operating costs between 2024 and 2053 for our PRC Gold Mines, as stated in the Competent Person's Report:

Underground Gold Mine in China	Unit	LoM	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Jilong Gold Mine . .	RMB Million	730.1	102.7	138.6	136.0	146.5	82.4	44.1	41.3	28.3	10.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Processing	RMB Million	134.9	19.0	25.6	25.1	27.1	15.2	8.2	7.6	5.2	1.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General & Administrative . .	RMB Million	145.8	20.5	27.7	27.2	29.3	16.5	8.8	8.3	5.7	2.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Huatai Gold Mine . .	RMB Million	1,537.6	–	–	54.7	55.2	55.4	55.2	55.2	55.2	55.4	55.2	55.2	55.2	55.4	55.2	55.2	55.2	55.4	55.2	55.2	55.2	55.4	55.2	55.2	55.2	55.4	55.2	55.2	55.2	55.4	45.4
Processing	RMB Million	315.4	–	–	11.2	11.3	11.4	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.4	11.3	11.3	11.3	11.4	9.3
General & Administrative . .	RMB Million	374.3	–	–	13.3	13.4	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.5	13.4	13.4	13.4	13.5	11.1
Wulong Gold Mine . .	RMB Million	716.1	50.0	68.7	69.0	68.1	69.1	75.0	75.5	71.1	70.1	45.9	30.6	23.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Processing	RMB Million	566.9	39.6	54.4	54.7	53.9	54.7	59.3	59.8	56.3	55.5	36.4	24.2	18.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General & Administrative . .	RMB Million	227.4	15.9	21.8	21.9	21.6	21.9	23.8	24.0	22.6	22.3	14.6	9.7	7.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Open Pit Gold Mine in China																																
Jintai Gold Mine . .	RMB Million	47.0	4.9	2.6	2.4	1.9	2.9	2.3	2.7	3.4	3.0	3.4	11.3	6.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Processing	RMB Million	75.6	4.9	6.8	6.7	6.8	6.8	6.6	6.6	6.4	6.5	6.2	6.8	4.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
General & Administrative . .	RMB Million	48.8	3.1	4.4	4.4	4.4	4.4	4.3	4.3	4.1	4.2	4.0	4.4	2.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

Note: The calculation of the operating costs of the Life of Mine was made based on the data collected of the PRC Gold Mines since April 1, 2024.

Risks Associated with the PRC Gold Mines

The mining industry is inherently associated with a high level of risk, which is accumulated due to factors such as the nature of ore body, ore distribution, grade and variations in mining and ore processing, which are not able to be accurately predicted or accounted for. The following table sets forth a selected summary of the risk assessment regarding the material risks undertaken by the Independent Technical Consultant, including the assessment result and the ratings of the relevant risks. For more details of the risks associated with of the PRC Gold Mines, please refer to "Appendix IIIA — Competent Person's Report for the PRC Mines — Risk Assessment."

Material Risk Assessment of the PRC Gold Mines

Risk Source/Issue	Likehood	Consequence	Risk
Jilong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Ore Reserve ...	Unlikely	Major	Medium
Mining			
Poor Underground Condition	Possible	Moderate	Medium
Significantly lacking Ore Reserves ..	Unlikely	Major	Medium
Ore processing and smelting			
Lower throughtput	Unlikely	Moderate	Low
Lower Smelting Recovery	Possible	Moderate	Medium
Capital and Operating Costs			
Operating Cost Underestimated	Possible	Moderate	Medium
Huatai Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Ore Reserve ...	Unlikely	Major	Medium
Mining			
Significant Geological Structure ...	Unlikely	Moderate	Low
Significantly lacking Ore Reserves .	Unlikely	Major	Medium
Ore Processing and smelting			
Lower Smelting Recovery	Possible	Moderate	Medium
Capital and Operating Costs			
Project Timing Delay	Likely	Minor	Low
Wulong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Ore Reserve ...	Unlikely	Major	Medium

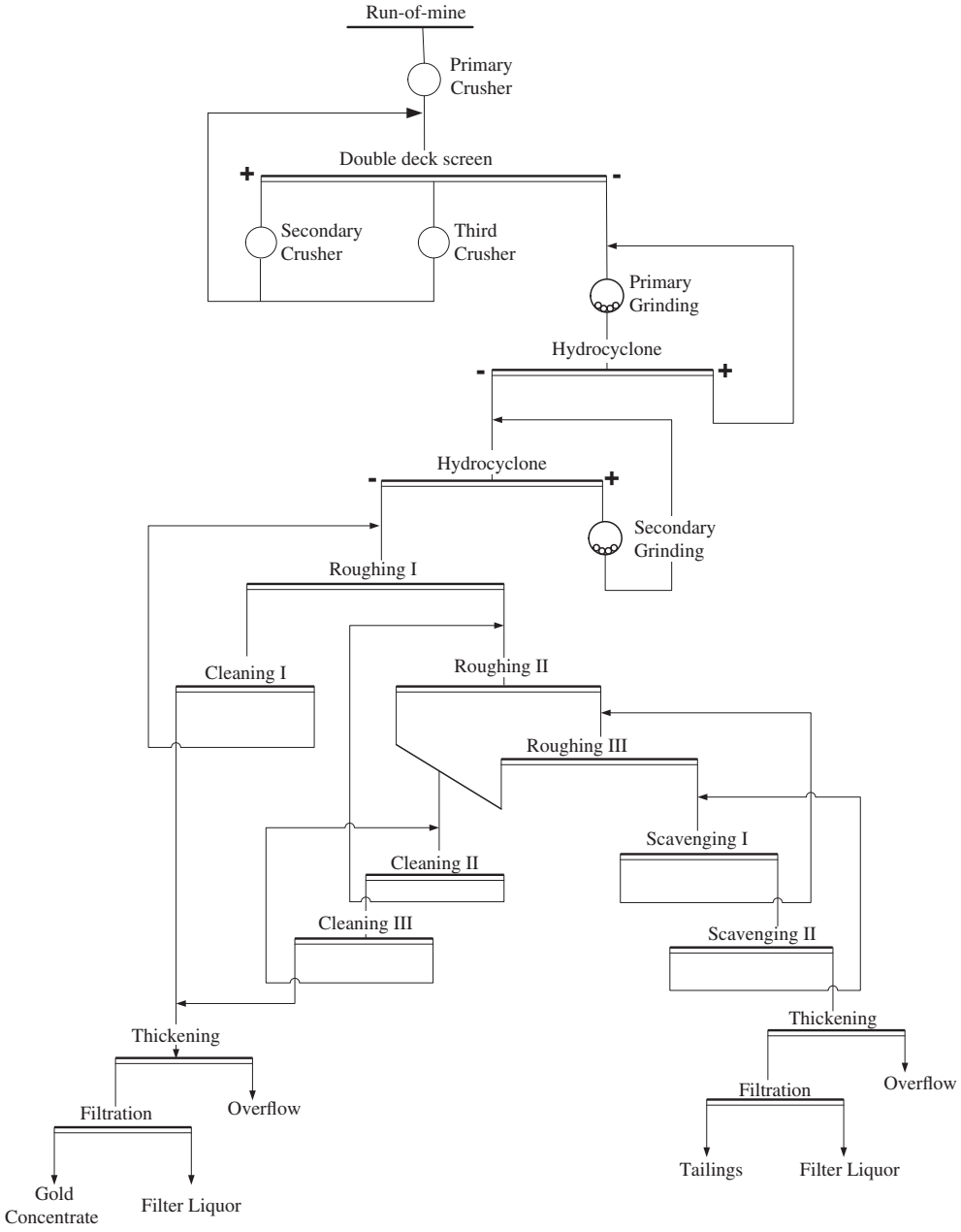
Material Risk Assessment of the PRC Gold Mines

Risk Source/Issue	Likehood	Consequence	Risk
Mining			
Significantly lacking Ore Reserves .	Unlikely	Major	Medium
Environmental and Social			
Environmental Approval	Possible	Moderate	Medium
Capital and Operating Costs			
Capital Cost Increases	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Jintai Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Ore Reserve . . .	Unlikely	Major	Medium
Mining			
Significantly lacking Ore Reserves .	Unlikely	Major	Medium
Processing and Metallurgy			
Poor Permeability of Ore Heap	Possible	Moderate	Medium
Lower Gold Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Major	Medium
Waste Rock and Tailings Management	Unlikely	Moderate	Low
Capital and Operating Costs			
Capital Cost Increases	Possible	Moderate	Medium

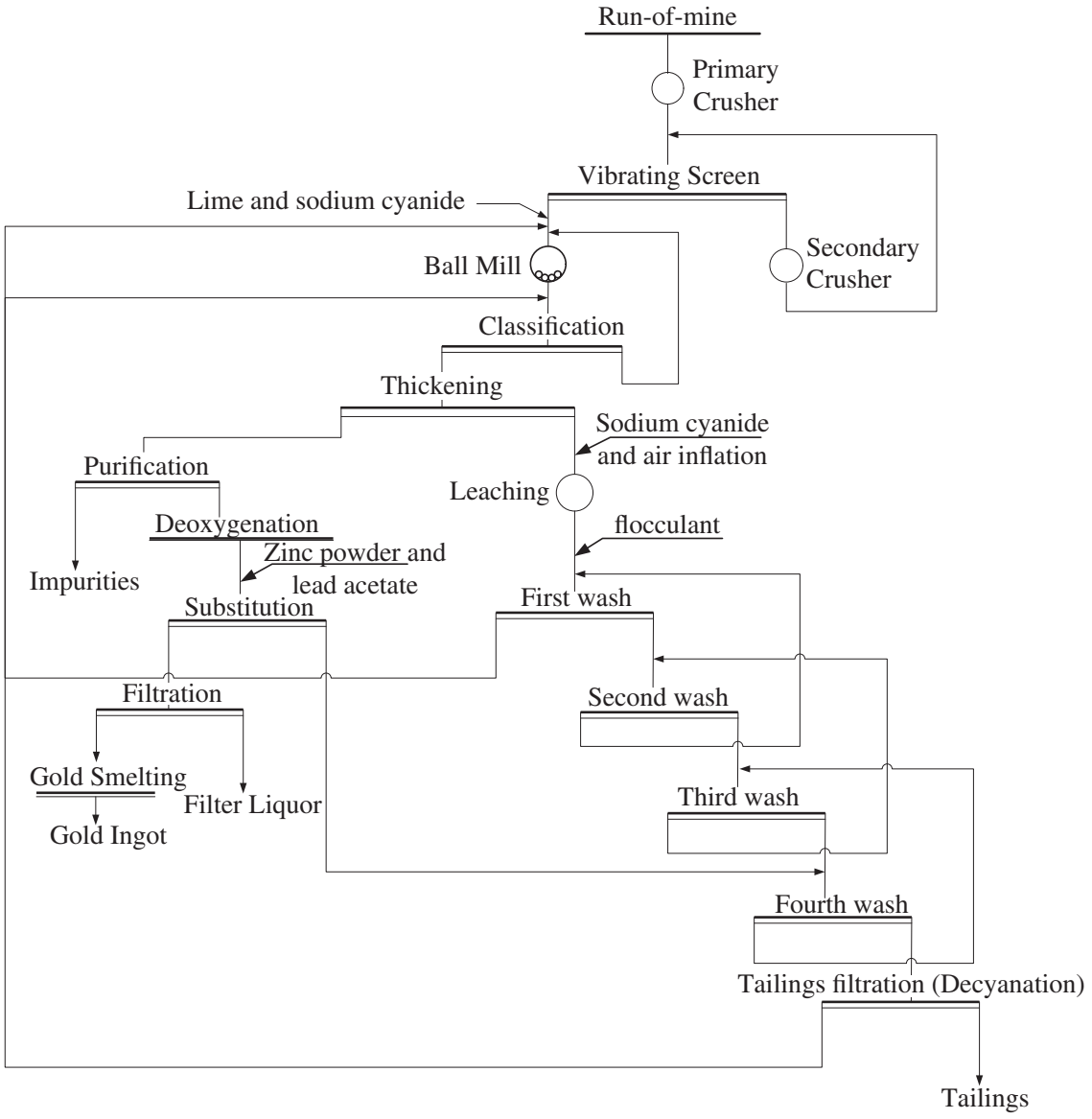
Operating Process of Gold Production Business in the PRC

(a) Overview

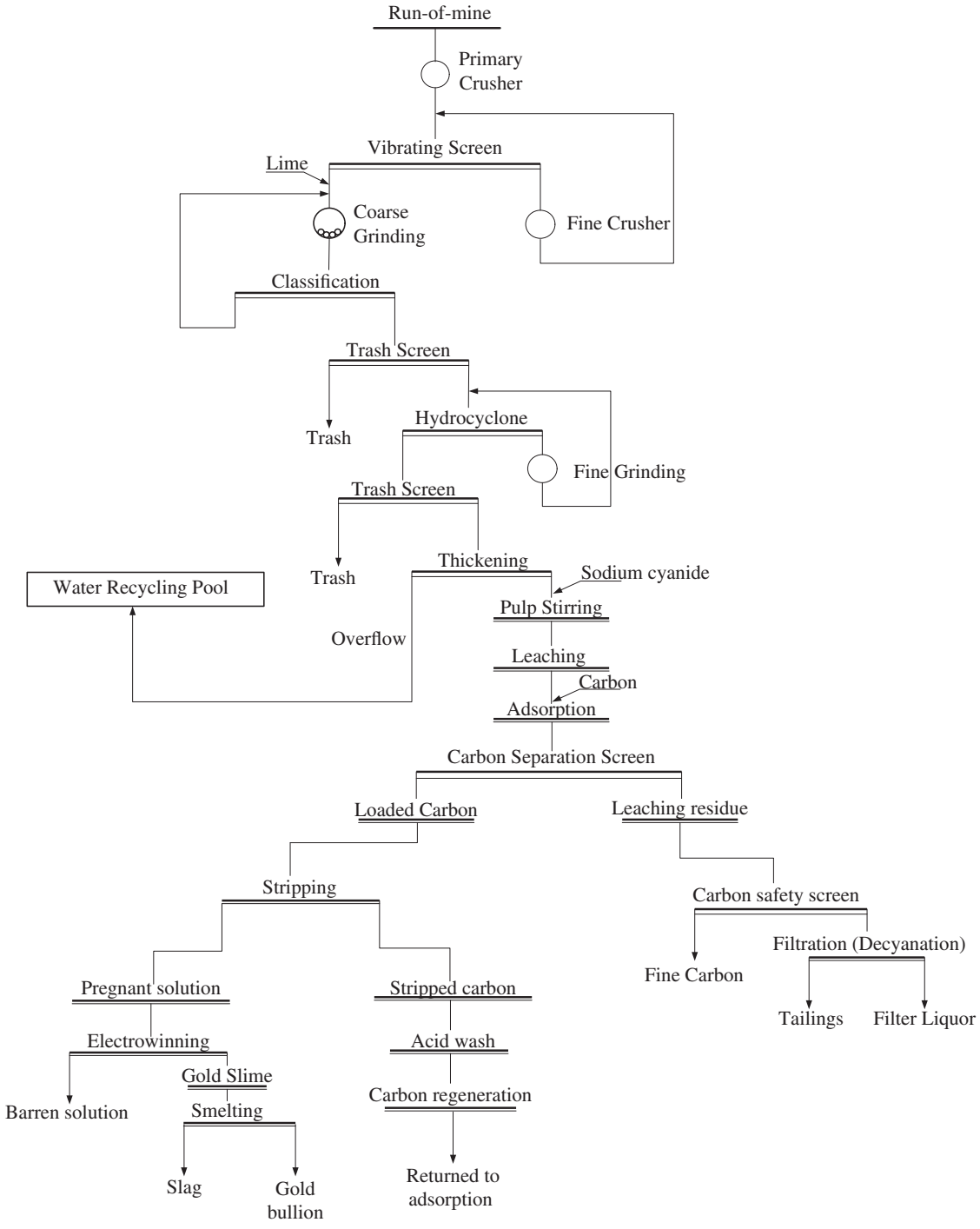
Our gold production operations in the PRC can generally be divided into two steps, namely, (i) mining and (ii) processing. Our mines in the PRC are also equipped with processing plants to process the ores that we mine into doré, gold concentrate powder or gold-loaded carbon. The following diagrams sets forth the general workflow of the gold production process in our PRC Gold Mines:



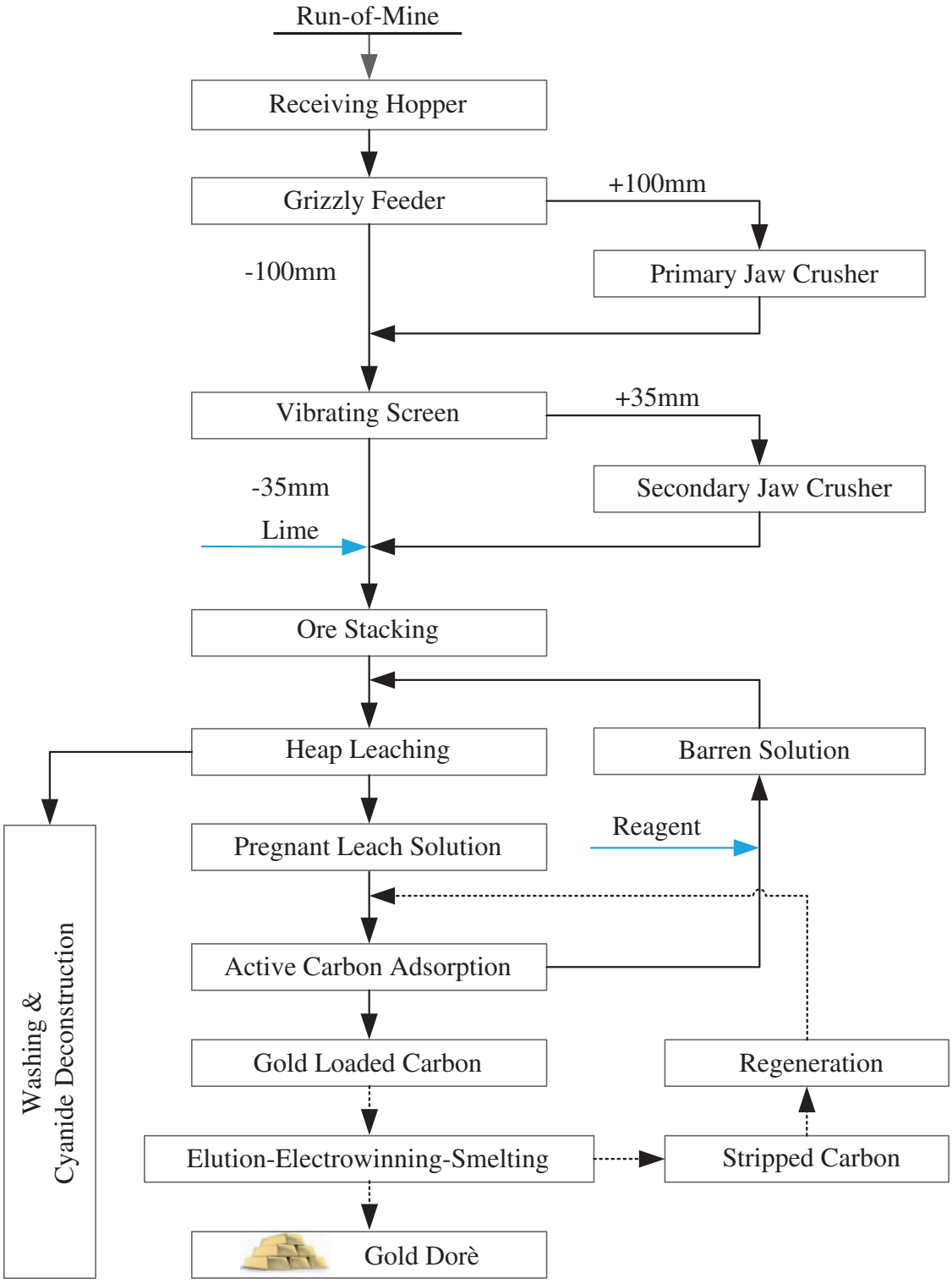
Production Process Flowsheet of Wulong Processing Plant



Production Flowsheet of Jilong Processing Plant



Processing Flowsheet of Huatai Processing Plant



Heap Leaching Process Flowsheet of Jintai Gold Mine

(b) Mining

We primarily utilize the resuing method for our underground mining at the Wulong Gold Mine, Jilong Gold Mine and Huatai Gold Mine in the PRC. Our mining equipment mainly includes rock drilling machines, jacklegs, and scrappers. Details of the mining workflow are set forth below:

- **Planning**. We undertake detailed planning prior to actual production, which covers chambers, pillars, ventilation shaft, ore passes and filling raises. We generally divide the mine area into different subsections, and use each subsection as a stoping unit.

- **Preparation and cutting**. We conduct extensive planning and cut for the ventilation raises, ore passes and filling raises. Then we drill holes in the rock wall, charge such holes with explosives and blast the rock wall.

- **Stoping**. We extract ore from the surrounding rock wall and it creates a void. Stoping is conducted in a hierarchical manner.

- **Extraction**. We transport the ore to the surface via ore passes by minecarts or mining trucks.

- **Filling**. We backfill the void with different kinds of filling materials, such as the waste rock from our blasting and/or development cutting, in order to reinforce the ground.

To a lesser extent, we also the utilize open-pit mining method at the Jintai Gold Mine. Details of the mining workflow are set forth below:

- **Planning**. Before actual production, we carry out detailed planning, which includes the layout of the mine benches, stripping of overburden, and the mining of the ore.

- **Stripping**. We undertake extensive preparatory work. Initially, a small amount of the overburden on top of the ore body is stripped away, followed by the commencement of mining. The entire stripping process is carried out entirely by excavators for digging, without the need for blasting.

- **Transportation**: We use trucks to transport the stripped soil and ore through transportation benches, separately to the waste dump and workshop.

(c) Processing

The Wulong Gold Mine primarily utilizes the flotation process method. Our plant mainly includes crushing circuits, grinding circuits, flotation circuits, filter machines and conveyers. Details of the processing workflow are set forth below:

- **Crushing circuit**. Typically, ores the from underground are crushed in multi-stages of closed-circuit crushing.

- **Grinding circuit**. The final crushed ore is ground in a grinding circuit operated in a closed circuit.

- **Flotation circuit**. The ground product is processed in a floatation circuit, which typically consists of rougher floatation, multi-stage clean floatation and scavenger floatation.

- **Concentrate dewatering**. The concentrate is dewatered by filter machine and separated from tailings.

The Jilong Gold Mine and Huatai Gold Mine primarily utilize the all-slime cyanidation absorption gold extraction method. Our plants mainly include crushing circuits, grinding circuits, pressure filters and conveyers. Details of the processing workflow are set forth below:

- **Crushing circuit**. Typically, ores from underground are crushed in multi-stages of closed-circuit crushing.

- **Grinding circuit**. The final crushed ore is ground in a grinding circuit operated in a closed circuit.

- **Cyanidation leaching**. Ore pulp is absorbed through multi-cyanidation leaching.

- **Replacement**. Replaced gold concentrate is obtained through purification, deoxidation and replacement by zinc powder or carbon.

- **Tailings dewatering**. Gold concentrate is dewatered by pressure filter and decyanated by chemicals and then separated from tailings.

The Jintai Gold Mine primarily utilize the carbon-in-pulp gold extraction process method. The plants mainly include the crushing process, stacking process, leaching process, adsorption equipment, and stripping equipment. Details of the processing workflow are set forth below:

- **Crushing**. Typically, the mined ore is crushed through the crushing process. The crushed ore is then transported by truck to the heap leaching site for stacking.

- **Stacking**. In accordance with the design plan, the crushed ore is stacked using a self-leaching site entry with a mining inlet, where the ore is poured into the heap by truck and gradually pushed to the outer boundary of the leaching site.

- **Leaching**. For the heaps that have been stacked and turned over, a drip irrigation system is installed on top of the heap for heap leaching, and an environmentally friendly mineral processing reagent is sprayed evenly onto the surface of the ore heap after being mixed in proportion. The pregnant leach solution generated by the ore heap is collected centrally and transported to the pregnant leach solution pond.

- **Adsorption**. The adsorption tank in the adsorption workshop is filled with ground and cleaned activated carbon, and the precious liquid is transported from the pregnant leach solution pond to the adsorption tank for adsorption. The activated carbon is stirred by pressurized air equipment to ensure even adsorption.

- **Stripping**. The loaded gold-loaded carbon is extracted by the stripping equipment and serves as the final sale product.

Exploration Activities for Gold Production Business in China

Our exploration activities for gold production business in the PRC are mainly carried out by our in-house exploration team. For relevant risks relating to our exploration activities, see "Risk Factors — Risks Relating to Our Business and Industry — We may not be able to expand or replenish our Mineral Resources and Reserves through exploration."

Exploration Process

In the field of mining geology, we primarily rely on our in-house exploration team, which collect relevant geological data each year. After the initial study by the exploration team, we conduct comprehensive studies repeatedly and finalize the exploration plans and mining plans for the following year. These plans are submitted for internal approval, followed by expert reviews organized by our headquarters. After necessary revisions and approvals, the plans are executed quarterly and monthly. Throughout this process, external experts and research teams may participate in specific research projects intermittently.

For surface exploration, we typically consider various factors, including experience and qualifications, for third-party collaborations. Upon completion of exploration, reputable mining consultancy firms prepare the relevant exploration reports. All exploration activities strictly adhere to China's national safety production standards, environmental protection regulations, and mining laws. Local governments may request us to submit technical reports for reference before commencing mining projects.

Third-party Exploration Teams

To a lesser extent, we engage third-party exploration service providers to conduct exploration activities for gold production business in the PRC. When selecting the third-party exploration teams, we generally take into account a number of factors, including experience, reputation, qualification and technical conditions. Our technical staff from relevant production departments are responsible for supervising and managing the work of third-party exploration teams, such as the progress of the project and stage acceptance check. Our third-party exploration teams are required to work in strict accordance with all the applicable PRC laws and regulations in relation to occupation safety and environmental protection. For more information on third-party exploration teams, see "— Contractors."

OUR GOLD PRODUCTION BUSINESS IN LAOS

Overview

LXML is the operator of the Sepon Gold, Copper and Rare Earth Mine, the mining area of which is located in Vilabouly District, Savannakhet Province, south-central Laos. It is located on the Chuankuang-Changshan polymetallic metallogenic belt, which is an important endogenous metal ore belt in Laos, with various mineral resources, especially copper, gold and tin. We acquired a 90% equity interest in LXML in November 2018 through the acquisition of 100% equity interest in MMG Laos Holdings Limited ("**MMG Laos**"), i.e. Chijin Laos, for a consideration of US$275 million. The remaining 10% equity interest in LXML is held by the Government of Laos. LXML is a large local mining enterprise in Laos focusing on gold and copper mining and processing business.

The mining area of the Sepon Gold, Copper and Rare Earth Mine was discovered by Rio Tinto in 1992, and LXML was established in September 1993. In 1999, Oxiana acquired 80% stake in LXML, which later increased to 100% in 2004. LXML commenced gold production in 2003 and copper production in 2005. In 2008, LXML was acquired by OZ Minerals, a mining company listed on the Australian Securities Exchange. In 2010, MMG Laos acquired LXML from OZ Minerals and from 2011 started to focus on copper production. In 2013 MMG Laos decided to halt gold production as the gold Reserves, grade and recovery rates by that time were not in line with the expectation coupled with the technical constraints on gold processing. Following our acquisition of LXML in 2018, we shifted the business focus from copper back to gold and made significant investments in improving the infrastructure, equipment and technologies for gold production. LXML resumed gold production in 2020, and we have been consistently increasing the volume of annual gold production since then. For further details, see subsection "Development and Expansion" below.

The mining operations of the Sepon Gold, Copper and Rare Earth Mine are generally carried out through open pit mining, with an underground mining project under construction which is commenced mining ore in the third quarter of 2023. It has one production line of gold and one production line of copper. In the future, the Sepon Gold, Copper and Rare Earth Mine will adopt a combination of open pit mining and underground mining. For details of our copper cathodes business, see "— Our Other Metal Production Business — Our Copper Cathodes Business in Laos" below. The Sepon Gold, Copper and Rare Earth Mine has three separate gold pits that are actively mined. The main products are doré with 30%-80% gold content and 10%-70% silver content. It has a designed annual mining capacity of approximately 3.5 million tonnes and designed annual processing capacity of approximately 3.5 million tonnes.

The Sepon Gold, Copper and Rare Earth Mine has been accredited as a Grade A+ Mine, which is the highest grade awarded to mines in the country, by the Laos Ministry of Energy and Mines for six successive years since 2016, which is the highest grade awarded to mines in the country. Meanwhile, LXML was awarded the "Laos Business Leader Award" by the Lao National Chamber of Commerce and Industry in January 2023 due to the distinguished and significant contributions it has made to the development of Laos.

Operation Performance

In 2021, 2022 and 2023 and the three months ended March 31, 2024, our gold production business in Laos produced 193.0 koz, 199.5 koz, 193.2 koz and 47.3 koz of gold, respectively. The following table sets forth the ore mined volume, ore processed volume and mine production volume in relation to gold by the Sepon Gold, Copper and Rare Earth Mine for the periods indicated.

	Year Ended December 31,									Three Months Ended March 31, 2023			Three Months Ended March 31, 2024		
	2021			2022			2023								
	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production
	(Kt)	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*
Sepon Gold, Copper and Rare Earth Mine – Gold . . .	4,560	3,407	193.0	5,700	3,792	199.5	2,790	3,085	193.2	1,089	894	49.5	1,007	759	47.3

The gold production volume of the Sepon Gold, Copper and Rare Earth Mine increased by 3.3% from 193.0 koz in 2021 to 199.5 koz in 2022. This was primarily due to the increase of gold recovery rate following a series of capital investments and operational improvements. Its gold production volume slightly decreased by 3.1% from 199.5 koz in 2022 to 193.2 koz in 2023. The gold production volume of the Sepon Gold, Copper and Rare Earth Mine decreased by 4.0% from 49.5 koz as of March 31, 2023 to 47.3 koz as of March 31, 2024, mainly due to higher grade and larger processing volume in 2023.

In 2021, 2022 and 2023 and the three months ended March 31, 2024, the gold processing recovery rate of the Sepon Gold, Copper and Rare Earth Mine was approximately 54.6%, 63.8%, 64.1% and 65.3%, respectively. In 2021, we recorded relatively low gold processing recovery rate mainly due to the nature and quality of the ore mined by the Sepon Gold, Copper and Rare Earth Mine. In particular, the primary gold ore is a "double refractory" ore, whereby the gold is bound up in fine sulphides (pyrite) and has preg-robbing materials that impact recovery.

We have made constant efforts to improve the average gold processing recovery rate of the Sepon Gold, Copper and Rare Earth Mine. We focus on addressing the key challenges related to its gold processing by improving ore blending, high pressure oxidation, flotation and leaching. In particular, we increased the gold processing recovery rate through measures such as carbon desorption optimization, elution circuit optimization, improvement in industrial water quality, and leaching chemicals in the carbon-in-leach process. This resulted in a significant increase in the mine's gold recovery rate increased significantly from 54.6% in 2021 to 65.3% in the three months ended March 31, 2024. We are also undertaking optimization of flash flotation and resin in leach project with the aim to further improve the gold processing recovery rate. Looking ahead, we expect that the gold processing recovery rate will increase further to approximately 75% by June 2025.

Development and Expansion

The Sepon Gold, Copper and Rare Earth Mine adopted the "One Focus with Two Steps" development strategy. "One Focus" refers to the target that the volume of copper production will keep stable while the volume of gold production will increase. "Two Steps" refer to: (i) increasing the intensity of exploration in our mining area, with the goal of discovering significant Resources within the next three years; and (ii) increasing investment in both experimental research on low-grade complex ores and research on the processing technology, together with further work on enhancing our gold processing recovery rate.

In 2019, LXML invited several geological experts from the United States, United Kingdom, Australia and other countries to conduct a detailed study on the exploration area of the Sepon Gold, Copper and Rare Earth Mine, which resulted in the determination of 42 gold and 24 copper target areas in January 2020. In 2021, we formed the "Sepon 2.5 Project" team to increase the processing capacity of our plant through the addition of a second pressure oxidation station to double the processing capacity.

In terms of our international gold assets, we are accelerating the construction of the open-pit and underground mining projects of the Sepon Gold, Copper and Rare Earth Mine, which is expected to increase the annual underground mining capacity to 806,000 tonnes by 2025 from the current capacity of 536,000 tonnes. We will also start copper production in 2025 at Kharong area, which has over 6,000,000 tonnes of copper ore, and over 57,000 tonnes of copper metal contained according to the resource model. Meanwhile, we are accelerating modelling and study work of exploration prospects of Discovery West Deeps and Phavat North with open-pit and underground mining potentials, the annual underground mining capacity will be increased further after 2026 and 2027. A high-level resource range assessment of Discovery West Deeps and Phavat North prospects estimated a total tonnage of 5,000,000 tonnes, with an average grade of 3.5g/t of gold resources expected to be added.

Mineral Resources and Ore Reserves

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in Laos as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Measured	302	7.78	76	2.35
	Indicated	8,618	3.93	1,090	33.90
	Inferred	6,174	3.60	715	22.25
	Total	**15,095**	**3.88**	**1,881**	**58.50**

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Mineral Resources include the resources from open-pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in Laos as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Sepon Gold, Copper and Rare Earth Mine – Gold	Proved	295	4.74	45	1.40
	Probable	9,049	3.00	873	27.17
	Total	**9,344**	**3.06**	**918**	**28.56**

Notes:

1. As to the Sepon Gold, Copper and Rare Earth Mine, the Ore Reserves include the ore from open-pit, underground and stockpile.

2. Numbers were rounded to the second significant digit. Total may not add up due to rounding discrepancies.

Mining Licenses and Exploration Permits

As of the Latest Practicable Date, LXML held one valid mining license covering a total area of approximately 116.96 km^2. The operation period under the permit started on March 1, 2003, with a maximum operation period of 50 years. The latest mining license was granted with a term of 10 years from September 30, 2023, which can be renewed for subsequent 10 year periods.

In addition, as of the Latest Practicable Date, LXML held one valid exploration permit covering a total area of approximately 1,010.40 km^2. The exploration permit has a total exploration period (including two extensions) of nine years.

We aim to renew our mining licenses or exploration permits before their respective expiry dates. We do not expect any material legal impediment in the renewal process. For details of Laos mining laws and regulations, see "Regulatory Overview."

The following table sets forth information regarding LXML's relevant mining licenses and exploration permits as of the Latest Practicable Date:

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining license	No. 24-23/MEM. DMM	116.96	September 30, 2023 to September 29, 2033	Valid
Exploration Permit	No. 1466/MEM. DGM.3	1,010.40	June 15, 2023 to June 14, 2026	Valid

Development Plan and Planned Production Schedule

Development Plan

The following timeline illustrates key historical and planned milestones in the development of the Sepon Gold, Copper and Rare Earth Mine:

Year	Milestone
2003	Gold production started.
2005	Completed the construction of copper processing plant and started copper production.
2013	Gold production stopped.
2017	Peak production of copper cathode reached 90,000 tonnes per year.
2018	Chifeng Gold acquired LXML which owns the Sepon Gold, Copper and Rare Earth Mine.
2020	The Sepon project started production of gold from mining primary gold mineral resources.

Planned Production Schedule

As set forth in the Competent Person's Report, the following chart sets forth the planned mining and production schedule for the operations at the Sepon Gold, Copper and Rare Earth Mine for the periods indicated from 2024 to 2030:

Type	Unit	LOM	2024	2025	2026	2027	2028	2029	2030
Gold Production									
Open pit mining									
Ore tonnage	kt	2,891	1,641	829	421	–	–	–	–
Au grade	g/t	2.17	2.11	1.66	3.43	–	–	–	–
Au metal	kg	6,275	3,459	1,372	1,444	–	–	–	–
Waste tonnage	kt	19,509	9,909	3,180	6,420	–	–	–	–

Type	Unit	LOM	2024	2025	2026	2027	2028	2029	2030
Stockpile rehandling									
Ore tonnage	kt	2,703	436	1,230	1,036	–	–	–	–
Au grade	g/t	2.34	2.34	2.34	2.34	–	–	–	–
Au metal	kg	6,322	1,021	2,878	2,423	–	–	–	–
Underground mining									
Ore tonnage	kt	3,750	465	744	793	770	546	402	31
Au grade	g/t	4.26	4.37	4.94	4.53	3.61	3.81	4.25	3.21
Au metal	kg	15,961	2,031	3,676	3,592	2,774	2,082	1,705	101

Note: The planned production schedule of the LOM, was made based on the data collected of Sepon Gold, Copper and Rare Earth Mine since April 1, 2024.

Capital Costs

With the reference to the Independent Technical Report, our Directors confirmed that the capital costs for the period of 2021 to 2023 of the Sepon Gold and Copper Mine was approximately RMB1,684.0 million. The Independent Technical consultant has reviewed the breakdown of the capital forecast and considered appropriate capital has been allocated to support the development of the Sepon Gold and Copper Mines and the basis of the capital cost estimation is considered reasonable. For detailed capital cost of the Sepon Gold and Copper Mines, please refer to "Appendix IIIB — Competent Person's Report for the Sepon Gold and Copper Mine — Capital Expenditures".

Operating Costs

In 2022 and 2023, the Sepon Gold, Copper and Rare Earth Mine recorded a gold AISC of approximately US$1,476.9 per ounce and US$1,330.0 per ounce, respectively, showing a decrease of 9.9% year-on-year.

The table below sets forth a summary of the forecasted operating costs between 2024 and 2030 for the Sepon Gold, Copper and Rare Earth Mine, as stated in the Competent Person's Report:

Item	Unit	2024	2025	2026	2027	2028	2029	2030
				Gold Operation				
Open-pit Mining	USD million	34.7	12.0	20.5	–	–	–	–
Underground Mining	USD million	16.3	26.0	27.7	26.9	19.1	14.1	1.1
Processing	USD million	114.4	126.1	101.2	34.6	24.6	18.1	1.4
General and Administration	USD million	22.9	25.2	20.2	6.9	4.9	3.6	0.3
Subtotal	**USD million**	**188.2**	**189.4**	**169.7**	**68.5**	**48.6**	**35.7**	**2.8**

Note: The calculation of the operating costs of the Life of Mine was made based on the data collected of the Sepon Gold, Copper and Rare Earth Mine since Apri 1, 2024.

Risks Associated with the Sepon Gold, Copper and Rare Earth Mine

The mining industry is inherently associated with a high level of risk, which is accumulated due to factors such as the nature of ore body, ore distribution, grade and variations in mining and ore processing which are not able to be accurately predicted or accounted for. The following table sets forth a selected summary of the risk assessment regarding the material risks undertaken by the Independent Technical Consultant, including the assessment result and the ratings of the relevant risks. For more details and recommendations for actions to mitigate technical risks associated with the Sepon Gold, Copper and Rare Earth Mine, please refer to "Appendix IIIB — Competent Person's Report for the Sepon Gold and Copper Mine — Risk Assessment."

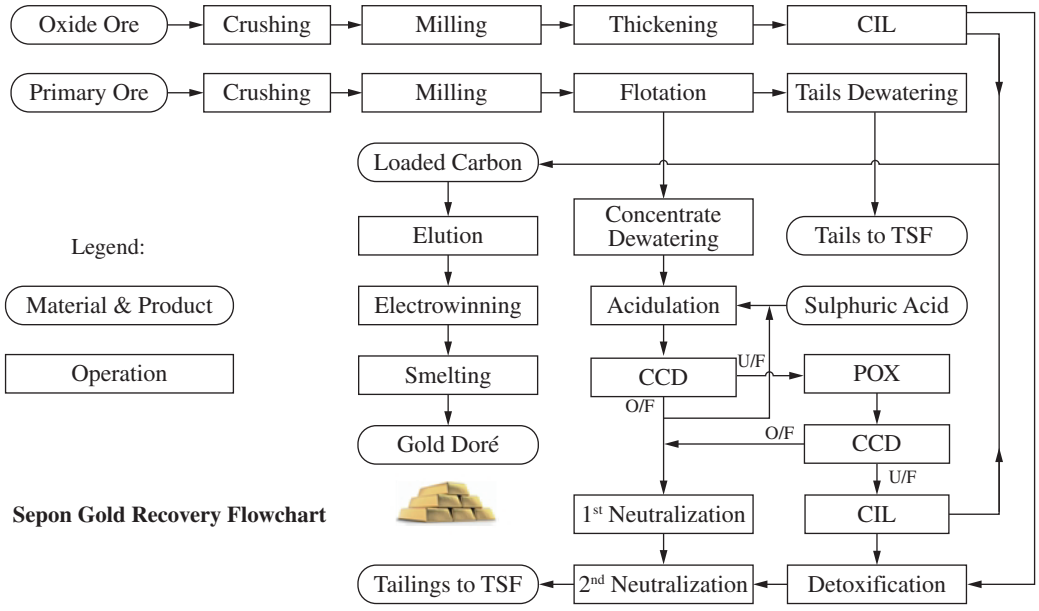
Material Risk Assessment of the Sepon Gold, Copper and Rare Earth Mine

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Ore Reserves	Possible	Major	High
Unexpected Groundwater Ingress	Unlikely	Minor	Low
Ore Processing			
High Production Cost	Possible	Minor	Low
Capital and Operating Costs			
Project Timing Delays	Possible	Minor	Low
Operating Cost Underestimated	Likely	Minor	Medium

Operating Process of Gold Production Business in Laos

(a) Overview

During the Track Record Period, our gold production operations in Laos can generally be divided into two steps, namely, (i) mining and (ii) processing. The following diagram sets forth the general workflow of the production process:



(b) Mining

In relation to mining, we generally follow the open-pit mining method, and details of that workflow are set forth below:

- **Planning**. We undertake detailed planning prior to actual production, which covers mine bench, rock stripping and rock extraction.

- **Preparation and cutting**. We conduct extensive preparation. Then we drill holes in the rock wall, charge such holes with explosives and blast the rock wall.

- **Extraction**. We transport the ore by trucks through mine benches and discharge earth.

To a lesser extent, we also adopt the underground mining method and details of that workflow are set forth below:

- **Planning**. We carry out detailed planning prior to production, which involves economic analysis to mine the ore, including access design, stope design, drilling plans, and sequencing of the stopes.

- **Development**. We develop access to the ore body through the construction of ramps, levels, and ore drives. This includes the excavation of tunnels to reach the ore zones.

- **Drilling and Blasting**. Once development is complete, we drill long, parallel holes into the ore body using longhole drills. These holes are charged with explosives and blasted to break the ore.

- **Loading and Hauling**. The broken ore is collected using remote-controlled loaders and transported to stockpiles or directly to haulage trucks. The ore is then transported from the underground workings to the surface.

- **Ventilation and Dewatering**. We maintain proper ventilation systems to ensure air quality and manage water ingress through dewatering systems.

- **Support and Stability**. We ensure ground stability by installing ground support systems such as rock bolts and shotcrete as needed.

(c) Processing

In relation to processing, we utilize the flotation-pressure oxidation method to process both primary ores and oxide ores. Our plants mainly include crushing circuits, milling circuit, flotation circuit, pre-heated vessel, pressure oxidation facility, autoclave vessel and stripping facility. Details of the processing workflow for primary ores are set forth below:

- **Primary crushing and grinding**. Typically, mined ores are crushed through crushing circuit. Crushed ores will be stockpiled and fed into the milling circuit.

- **Flotation**. The milled ores are pumped into flotation circuit, including scavenger flotation. The flotation tails will be dewatered and discharged to tailings storage pit.

- **Acidulation and pressure oxidation**. The final flotation concentrate is used for acidulation where acid source is used for carbonate removal. The concentrate will then be pumped into the pre-heater vessel, the pressure oxidation facility and then the autoclave vessel, where the sulphides and pyrites are oxidized. The products will undergo the basic ferric sulphate dissolution process and then washed.

In addition, details of the processing workflow for oxide ores are set forth below:

- **Oxide grinding**. Typically, mined ores are processed through milling circuit and then pumped for cyanidation with air and lime addition.

- **Carbon in leach, elution and gold room**. The ores are leached by using sodium cyanide with air injection. Loaded carbon is transferred into the stripping facility for elution and the final gold will be poured within the gold room.

- **Cyanide destruction and neutralization**. The residues of carbon in leach will go through detoxification where chemicals are added for cyanide destruction. The final tails will go through neutralization before tailing disposal.

Exploration Activities for Gold Production Business in Laos

Our exploration activities for the gold production business in Laos are primarily conducted by our in-house exploration team, which has a well-defined strategy aimed at extending the mine life through the discovery of substantial ore deposits.

Exploration Process

In the realm of mining geology in Laos, our exploration process is systematic, encompassing preliminary research, data analysis, detailed drilling, sampling, interpretation of mineralization controls, and geological modeling. We dynamically allocate exploration resources based on real-time analysis of risks and uncertainties.

For surface exploration in Laos, we consider various factors, including experience and qualifications, when collaborating with third parties. After exploration is completed, reputable mining consultancy firms prepare the relevant exploration reports. All exploration activities strictly adhere to Laos's national safety production standards, environmental protection regulations, and mining laws. Local authorities may request us to submit technical reports for reference before commencing mining projects.

In-house Exploration Teams

Our in-house exploration teams at the Sepon Gold, Copper and Rare Earth Mine focus on accelerating the exploration of quality greenfields opportunities in remote areas that were previously inaccessible. The teams are responsible for conducting exploration drilling at near-mine prospects and regional greenfields targets. The exploration process involves airborne geophysical surveys, stream sediment surveys, soil and ground geophysical surveys, geological mapping, trenching, and pattern drilling.

Third-party Exploration Teams

In addition to our in-house capabilities, we also engage third-party exploration service providers for specific tasks. When selecting these teams, we consider their experience, reputation, qualifications, and technical conditions. Our technical staff supervises and manages the work of these third-party teams, ensuring compliance with all applicable laws and regulations in Laos related to occupational safety and environmental protection. These third-party teams contribute to our stratigraphic studies, structural interpretations, and refining of gold and copper targeting models, leveraging their expertise to enhance our exploration strategy.

OUR GOLD PRODUCTION BUSINESS IN GHANA

Overview

In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, for a consideration of approximately US$291 million. The remaining 38% equity interest in Golden Star Resources is held by the China-Africa Fund for Industrial Cooperation Co., Ltd. (中非產能合作基金有限責任公司), and the remaining 10% equity interest in GSWL is held by the Government of Ghana. The mining areas are located around Akyempim Village in the Wassa East District in the Western Region of Ghana, approximately 150 kilometers west of Accra, the capital of Ghana. It is on the renowned Ashanti gold belt, which is the largest gold metallogenic belt in Ghana. Before our acquisition, Golden Star Resources was listed on the NYSE American (NYSE American: GSS), the Toronto Stock Exchange (TSX: GSC) and the Ghana Stock Exchange (GSE: GSR). Following our acquisition, Golden Star Resources was delisted from each of these stock exchanges and now operates as a privately-held company.

Ghana is a former British colony with a relatively sound legal system and attaches great importance to the development of its mining industry. Since 2021, Ghana's national gold output has surpassed that of South Africa to become the largest gold producer in Africa in terms of annual production. According to Frost & Sullivan, the political environment in Ghana is stable, and the jurisdiction is suitable for long-term investment with low political risk. Ghana, commonly known as the Gold Coast, is home to several large mines and major international mining companies, such as Newmont Corporation, Gold Field Limited and AngloGold Ashanti Limited. For details, please see "Regulatory Overview."

The mining areas held by the Wassa Gold Mine generally include (i) the Wassa mining area, (ii) the Hwini Butre mining area, and (iii) the Benso mining area. These mining areas have experienced local small-scale and colonial mining activities since the beginning of the 20th century. Golden Star Resources acquired the mining rights to its Wassa mining area from a syndicate of banks led by Standard Bank London Limited in September 2003. This was followed by the acquisitions of the mining rights in Hwini Butre and Benso mining areas in late 2006.

The Wassa Gold Mine commenced open pit production in 2005 and started commercial underground production in 2017. It currently adopts a combination of underground mining and open pit mining, with a focus on underground mining. The mining areas are equipped with well-developed production systems, complete underground equipment and facilities, a processing plant and necessary production equipment. It has a designed annual mining capacity of approximately 3 million tonnes and a designed annual processing capacity of approximately 4 million tonnes. During the Track Record Period, it had produced approximately 407 koz of gold. The main products of the Wassa Gold Mine are doré with more than 80% gold content.

Operation Performance

In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, ore mined volume, ore processed volume and mine production volume of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see "Financial Information — Key Factors Affecting Our Results of Operations — Acquisitions–Acquisition of Golden Star Resources."

In 2022 and 2023 and the three months ended March 31, 2024, our gold production business in Ghana produced 162.1 koz, 161.5 koz and 45.9 koz of gold, respectively. The following table sets forth the ore mined volume, ore processed volume and mine production volume in relation to gold by Wassa Gold Mine for the periods indicated.

	Year Ended December 31,														
	2021			2022			2023			Three Months Ended March 31, 2023			Three Months Ended March 31, 2024		
	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production	Ore Mined	Ore Processed	Gold Production
	(Kt)	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*	*(Kt)*	*(Kt)*	*(Koz)*
Wassa Gold Mine . . .	–	–	–	2,024	1,969	162.1	2,530	2,551	161.5	644	630	38.1	710	719	45.9

The gold production volume of the Wassa Gold Mine remained relatively stable at 162.1 koz and 161.5 koz in 2022 and 2023, respectively. The gold production volume was increased to 45.9 koz as of March 31, 2024 from 38.1 koz as of March 31, 2023 mainly due to the contribution of production volume from the construction of two new declines since in July 2023.

In 2022 and 2023 and in the three months ended March 31, 2024, the processing recovery rate of Wassa Gold Mine was 95.6%, 95.5% and 95.3%, respectively.

Development and Expansion

We are accelerating the production expansion project at the Wassa Gold Mine, especially focusing on developing deep orebodies and other orebodies to the largest extent permitted by the mining license. According to a preliminary economic assessment, we expect to build the Wassa Gold Mine into a large-scale gold mine with (i) an annual processing capacity of approximately 3.3 million tonnes and (ii) an annual production of 353 koz gold by 2028. In order to realize this goal, we will adopt various measures, including carrying out more exploration activities at different exploration targets, upgrading our mining and processing infrastructure and maintaining the average gold processing recovery rate.

In addition, the Forestry Commission of Ghana has granted us an entry permit for exploration at the forest region of the mining area.

Mineral Resources and Ore Reserves

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Resources in Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(Kt)	*(g/t)*	*(Koz)*	*(t)*
Wassa Gold Mine.	Measured	7,505	2.89	698	21.73
	Indicated	10,498	3.07	1,038	32.28
	Inferred	61,084	3.37	6,619	205.88
	Total	**79,086**	**3.29**	**8,355**	**259.88**

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our gold Reserves in Ghana as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Au Grade	Au Metal Contained	Au Metal Contained
		(kt)	*(g/t)*	*(koz)*	*(t)*
Wassa Gold Mine	Proved	4,216	2.17	294	9.14
	Probable	6,029	2.07	401	12.46
	Stockpile	**52.00**	**0.87**	**1**	**0.05**
	Total	**10,297**	**2.10**	**696**	**21.64**

Mining Licenses and Exploration Permits

As of the Latest Practicable Date, GSWL held three valid mining licenses and three valid exploration permits which covered an aggregate area of approximately 125.45 km^2 and 72.27 km^2, respectively.

The mining licenses in Ghana are generally granted with a term of up to 30 years. The exploration permits are generally renewed every three years. We aim to renew our mining licenses or exploration permits before their respective expiry dates. As advised by our Ghana Legal Advisor, there are no explicit regulations limiting the number of times a mining license or exploration permit may be renewed in Ghana. We do not expect any material legal impediment in the renewal process.

For details of Ghana mining laws and regulations, see "Regulatory Overview."

The following table sets forth information regarding the Wassa Gold Mine's relevant mining licenses and exploration permits as of the Latest Practicable Date:

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining Lease . . .	LVDGAST35364682022	63.00	January 26, 2022 to January 25, 2047	Lease renewed and in the process of ratification.
Mining Lease . . .	LVDGAST37993462020	19.45	August 25, 2020 to August 24, 2031	Valid
Mining Lease . . .	LVDGAST38000372020	43.00	August 25, 2020 to August 24, 2031	Valid
Exploration Permit	LVB9113/1994 & PL 2/155	24.81	December 30, 2020 to December 29, 2023	In renewal process
Exploration Permit	LVB5528/2005 & PL 2/378	96.44	March 4, 2022 to March 3, 2025	Valid
Exploration (reconnaissance) Permit	LVB1624/2006 & RL2/117	26.9	February 2006 – NA	In the process of converting to exploration (prospecting) permit

[As of the Latest Practicable Date, one mining lease (LVDGAST35364682022) of GSWL has been renewed by the Ghanaian Government, it is still pending Ghana parliamentary ratification as required by the Ghana constitution. With respect to exploration (reconnaissance) permit (LVB1624/2006 & RL2/117), we submitted an application to convert this exploration (reconnaissance) permit to an exploration (prospecting) permit on November 27, 2020 to the Minerals Commission of Ghana. The Minister of the Ministry of Lands and Natural Resources of Ghana by a letter dated January 1, 2023 approved the recommendation of the Minerals Commission to convert this exploration (reconnaissance) licenses to an exploration (prospecting license). On July 19, 2024, the Minerals Commission of Ghana brought the approval of the prospecting licenses agreement before the Ministry of Lands of Natural Resources for signing, which is pending as of the Latest Practicable Date. Our mining operations at the Wassa Gold Mine would continue uninterrupted under the original mining lease while the renewed mining lease is ratified by the Ghana Parliament, while such approvals are being obtained, as advised by our Ghana Legal Advisor. For more details, please see "Risk Factors — We may fail to obtain, maintain or renew the government permits, licenses and approvals required for our mining and exploration activities."

Development Plan and Planned Production Schedule

Development Plan

The following timeline illustrates key historical and planned milestones in the development of the Wassa Gold Mine:

Year	Milestone
2005 . . .	CIL plant commissioned.
2007 . . .	commenced open pit mining at South Akyempim. Construction of haul road to Hwini Butre.
2012 . . .	Commenced drilling to test underground potential below Wassa.
2013 . . .	Upgraded plant to 2.7 Mtpa capacity with fresh ore, consolidated mining at Wassa main pit.
2017 . . .	Commercial production declared at Wassa Underground and deep definition drilling program defines what was later to become the Southern Extension zone. Underground averages 1,865 ore t/d.
2018 . . .	Open pit mining of main pit completed and Underground ore mining rate increases to 2,945 t/d. Wassa Underground Inferred Mineral Resource reported growth to 5.2 Moz with addition of Southern Extension zone.
2020 . . .	Completed construction of paste backfill plant and on-site gas-fired power generation. Underground ore mining rate increased to 4,480 t/d (1.6 Mtpa).
2023 . . .	Commenced construction of B-shoot South and 242 decline

Planned Production Schedule

As set forth in the Competent Person's Report, the following chart sets forth the planned mining and production schedule for the operations at the Wassa Gold Mine for the periods indicated over the life of mine of 5 years.

Mine production & development	Unit	LOM	2024	2025	2026	2027	2028
Open-pit							
Open-pit – Ore Tonnes	t	785,551	327,491	458,061			
Open-pit – Au Grade	g/t	0.96	1.04	0.90			
Open-pit – Au Metal	oz	24,172	10,974	13,198			
Open-pit – Waste Tonnes	t	2,548,826	1,502,686	1,046,140			
Open-pit – Total Material Movement	t	3,334,377	1,830,177	1,504,200			
UNDERGROUND							
Development	t	554,122	254,356	190,949	83,529	23,156	2,132
Au Grade	g/t	2.82	2.53	2.96	3.46	2.45	3.42
LHOS	t	8,905,468	1,830,519	2,559,850	2,433,348	1,591,067	490,686
Au Grade	g/t	2.17	2.16	2.06	2.25	2.24	2.04
Underground – Ore Tonnes	t	9,459,590	2,084,874	2,750,799	2,516,877	1,614,222	492,818
Underground – Au Grade	g/t	2.20	2.21	2.13	2.29	2.24	2.05
Underground – Au Metal	oz	670,222	147,888	187,961	185,510	116,452	32,411
Underground – Waste Tonnes	t	2,835,259	994,274	1,123,668	574,812	132,779	9,726
Underground – Total Material Movement	t	12,294,849	3,079,149	3,874,466	3,091,689	1,747,002	502,543
Total							
Ore Tonnes	t	10,245,142	2,412,365	3,208,859	2,516,877	1,614,222	492,818
Au Grade	g/t	2.11	2.05	1.95	2.29	2.24	2.05
Au Metal	oz	694,394	158,862	201,159	185,510	116,452	32,411
Waste Tonnes	t	5,384,085	2,496,961	2,169,807	574,812	132,779	9,726
Total Material Movement	t	15,629,227	4,909,326	5,378,667	3,091,689	1,747,002	502,543
Development Meters							
Lateral operating development	m	18,541	7,394	5,372	3,945	1,635	194
Lateral capital development	m	26,013	8,994	11,067	5,123	828	–
Vertical capital development	m	2,307	1,079	733	414	82	–

Note: The planned production schedule of the LOM, was made based on the data collected of the Wassa Gold Mine since April 1, 2024.

Capital Costs

With the reference to the Independent Technical Report, our Directors confirmed that the capital costs for the period of 2021 to 2023 of the Wassa Gold Mine was approximately RMB1,588.7 million. The Independent Technical consultant has reviewed the breakdown of the capital forecast and considered appropriate capital has been allocated to support the development of the Wassa Gold Mine and the basis of the capital cost estimation is considered reasonable. For detailed capital cost of the Wassa Gold Mine, please refer to "Appendix IIIB — Competent Person's Report for the Wassa Gold Mine — Capital Cost".

Operating Costs

In 2022 and 2023, GSWL recorded the gold AISC of approximately $1,371.2 per ounce and $1,197.1 per ounce, respectively, showing a decrease of 12.7% year-on-year.

The table below sets forth a summary of the forecasted operating costs between 2024 and 2028 for GSWL, as stated in the Competent Person's Report:

Opex	Unit	LOM	2024	2025	2026	2027	2028
Underground Mining Total	USD Million	442.5	109.5	127.9	115.1	70.4	19.7
Open-pit Mining	USD Million	20.7	11.3	9.3	–	–	–
Processing	USD Million	158.5	37.3	49.6	38.9	25.0	7.6
General and Administrative	USD Million	76.4	18.0	23.9	18.8	12.0	3.7
Total	**USD Million**	**698.0**	**176.1**	**210.8**	**172.8**	**107.4**	**31.0**

Note: The calculation of the operating costs of the Life of Mine was made based on the data collected of Wassa Gold Mine since April 1, 2024.

Risks Associated with the Wassa Gold Mine

The mining industry is inherently associated with a high level of risk, which is accumulated due to factors such as the nature of ore body, ore distribution, grade and variations in mining and ore processing which are not able to be accurately predicted or accounted for. The following table sets forth a selected summary of the risk assessment regarding the material risks undertaken by the Independent Technical Consultant, including the assessment result and the ratings of the relevant risks as well as recommendations for actions to mitigate technical risks. Please refer to "Appendix IIIC — Competent Person's Report for the Wassa Gold Mine — Risk Assessment" for more details and recommendations for actions to mitigate technical risks.

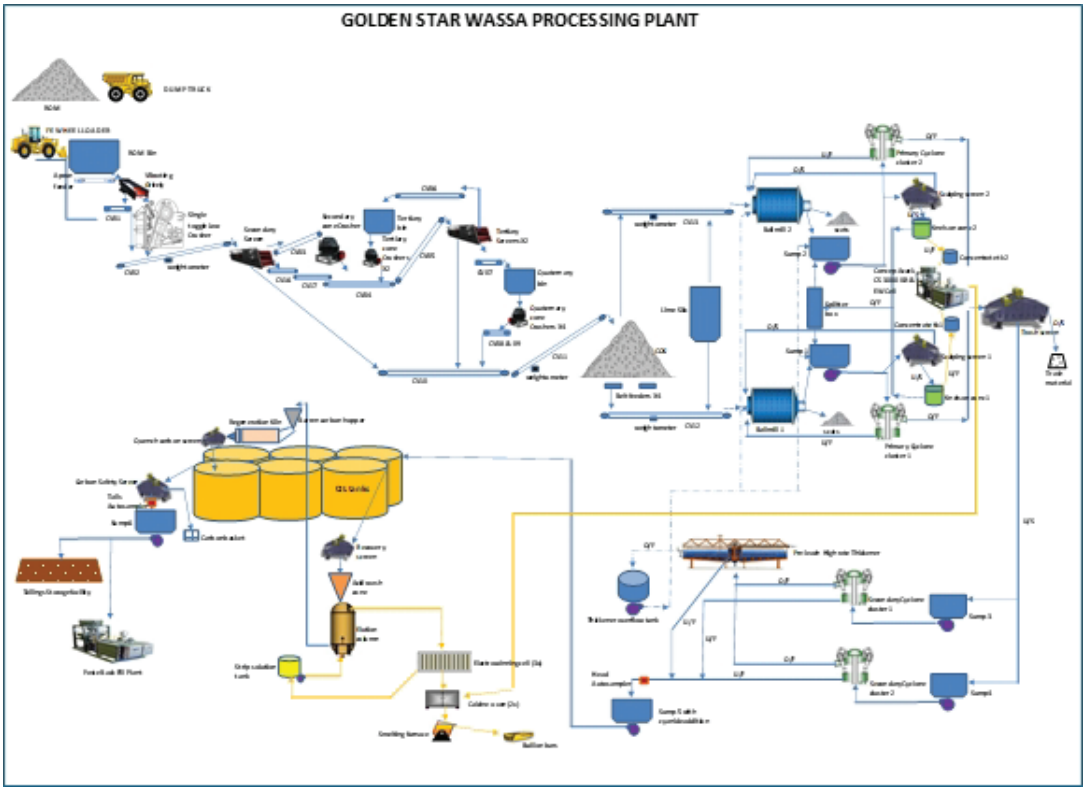
Material Risk Assessment of the Wassa Gold Mine

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Overestimate of Resource Grade	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Possible	Moderate	Medium
Ore Processing			
Higher Processing Cost	Possible	Moderate	Medium
Project Timing Delays	Unlikely	Moderate	Low
Capital Cost and Operating Cost Increases	Possible	Moderate	Medium

Operating Process of Gold Production Business in Ghana

(a) Overview

Our gold production operations in Ghana can generally be divided into two steps, namely, (i) mining and (ii) processing. Our mines in Ghana are also equipped with processing plants to process the ores that we mine into doré. The following diagram sets forth the general workflow of the production process:



(b) Mining

In relation to mining, the Wassa mining area primarily utilizes the open-pit mining method and the sub level open stoping method.

Details of the open-pit mining workflow are set forth below:

- **Planning**. We undertake detailed planning prior to actual production, which covers mine bench, rock stripping and rock extraction.

- **Preparation and cutting**. We conduct extensive preparation. Then we drill holes in the rock wall, charge such holes with explosives and blast the rock wall.

- **Extraction**. We transport the ore by trucks through mine benches and discharge earth.

In relation to the long-hole mining workflow, it generally follows the similar processes and methods as we adopt for mining process for gold production business in the PRC. For details, see "— Our Gold Production Business in China — Operating Process of Gold Production Business in the PRC."

(c) Processing

We primarily utilize the gravity-flow all-slime cyanidation absorption gold extraction method. Our plants mainly include crushing circuits, grinding circuits, gravity-flow concentrator, pressure filters and conveyers. Details of the processing workflow are set forth below:

- **Crushing circuit**. Typically, ores from the underground are crushed in multi-stages of closed-circuit crushing.

- **Grinding circuit**. The final crushed ore is ground in a grinding circuit operated in a closed circuit.

- **Gravity flow**. The ore is transferred into centrifugal separator and separated into concentrate and tailings. The concentrate will be used for leaching and the tailings will be transferred back to grinding circuit.

- **Cyanidation leaching**. Ore pulp is absorbed through multi-cyanidation leaching.

- **Replacement**. Replaced gold concentrate is obtained through purification, deoxidation and replacement by zinc powder or carbon.

- **Tailings dewatering**. Gold concentrate is dewatered by pressure filter and decyanated by chemicals and then separated from tailings.

Exploration Activities for Gold Production Business in Ghana

Our exploration activities for gold production business in Ghana are mainly carried out by third-party exploration service providers and to a lesser extent our in-house exploration team.

Exploration Process

Before commencing any exploration activities the Wassa Gold Mine geology group will gather relevant information related to the exploration target. The group then drafts an exploration plan for the area, considering the Wassa Gold Mine's objectives for the year. This plan may include diamond drilling, reverse circulation drilling, mapping, soil sampling, grab sampling, or any other suitable exploration technique for the target.

The exploration plan is then presented to our management for review and approval. Upon approval, third-party exploration teams will conduct more in-depth research, which may include topographic surveying, geological mapping, trench exploration, drilling exploration, pit exploration, geological sample collection and analysis, as well as identifying and determining the position, size, grade and other key information of the relevant minerals. They may also need to conduct relevant hydrogeology and engineering geology work to ascertain the mining technical conditions.

Once approved, the plan is implemented, with the geology group managing the work program. If the exploration program requires drilling, third-party drilling service providers are engaged. These service providers supply the drill rigs, manpower, and tooling required to complete the planned drilling program.

After the field work is completed, the third-party exploration teams prepare the exploration report for our review. The exploration report might then be submitted to relevant governmental authorities for evaluation and filing. Upon completion of the program, the exploration results are reviewed and communicated to management and any applicable government authority.

Third-party Drilling Service Providers

When selecting third-party exploration teams and drilling service providers, the Wassa Gold Mine generally considers factors such as experience, reputation, qualification, and technical ability. Our technical staff from relevant production departments and geology staff are responsible for supervising and managing the work of third-party exploration teams and drilling service providers. Our third-party exploration team drilling service providers are required to work in strict accordance with all applicable Ghanaian laws and regulations related to occupational safety and environmental protection.

In-house Exploration Teams

The Wassa Gold Mine also utilizes its in-house exploration team and geology group to a lesser extent. This group conducts preliminary geological studies, such as collecting relevant materials and geological mapping, to understand the geological features of the relevant areas. The company also employs dedicated geomechanics, geotechnical engineers, and hydrogeologists to conduct on-site hydrology, hydrogeology, and geotechnical geology studies.

The exploration design plan is then submitted to the technology management department for review and approval, and this process may involve the expertise of external geology experts. Third-party exploration teams will then carry out the relevant physical explorations, chemical explorations, and drilling explorations according to the design plan. When selecting third-party exploration teams, we generally consider factors such as experience and qualifications. After the exploration is completed, a reputable mining consulting firm prepares the relevant exploration report. All exploration activities are carried out in strict compliance with the JORC Code as well as relevant laws related to work safety, environmental protection,

and mining. The local government may request us to submit technical reports for reference before commencing mining projects. For relevant risks relating to our exploration activities, see "Risk Factors — Risks Relating to Our Business and Industry — We may not be able to expand or replenish our mineral resource and Reserves through exploration."

OUR OTHER MINERAL RESOURCES PRODUCTION BUSINESS

Our Other Mineral Resources Production Business in China

Overview

Hanfeng Mining in the PRC primarily engages in mining of polymetallic ore including zinc, lead, copper and molybdenum. The main products include zinc concentrate powder, lead concentrate powder (containing silver), copper concentrate powder (containing silver) and molybdenum concentrate powder.

Hanfeng Mining was established in September 2004 and became part of our Group upon completion of the acquisition of its entire equity interest in November 2019. The Hanfeng Polymetallic Mine has two main underground mining areas: (i) the Lishan mining area (立山礦區), which mainly produces zinc, with lead and copper as co-product minerals, as well as lead, copper and silver as by-product minerals; and (ii) the Dongfeng mining area (東風礦區), which mainly produces zinc, with copper and molybdenum as co-product minerals, as well as lead as by-product minerals. The Hanfeng Polymetallic Mine has a designed annual mining capacity of approximately 699,000 tonnes and a designed annual processing capacity of approximately 825,000 tonnes.

The mining areas of the Hanfeng Polymetallic Mine are located at Laotougou Town, Longjing City, Yanbian Korean Autonomous Prefecture, Jilin Province, which is designated as the key exploration area for important Mineral Resources (lead and zinc ore) according to the National Mineral Resources Planning (2016-2020) (全國礦產資源規劃(2016-2020年)). Due to the superior metallogenic geological conditions, this area has an important concentration area of polymetallic mineralization.

Operation Performance

The following table sets forth the ore mined volume, ore processed volume and mine production volume of the Hanfeng Polymetallic Mine for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31, 2023	Three Months Ended March 31, 2024
	2021	2022	2023		
	(Kt)	*(Kt)*	*(Kt)*	*(Kt)*	*(Kt)*
Ore Mined	510	502	457	8	126
Ore Processed	506	579	434	–	135
Production Volume					
Zinc concentrate powder	20	22	11	–	2
Lead concentrate powder	3	3	3	–	0.5
Copper concentrate powder	3	2	1	–	0.3
Molybdenum concentrate powder	–	0.04	0.2	–	0.1

The following table sets forth the processing recovery rate of the Hanfeng Polymetallic Mine by its principal products for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31, 2024
	2021	2022	2023	
Zinc concentrate powder	87.5%	88.3%	89.2%	88.7%
Lead concentrate powder	64.5%	59.6%	71.7%	65.9%
Copper concentrate powder	61.2%	49.8%	54.4%	51.8%
Molybdenum concentrate powder	–	–	78.5%	72.8%

Development and Expansion

As reported in December 2020, we discovered additional Reserves of 542,600 tonnes of zinc, 30,900 tonnes of copper (including co-product and by-product), 28,600 tonnes of lead and 131 tonnes of silver in the deep ore bodies of the Lishan mining area. As a result, we undertook a project to building over 1,000 meters of shafts in 2022 in order to exploit the newly discovered Resources. Upon completion, this project will assist us to enter the next stage of development and construction and to further improve output. We also plan to undertake work on a ventilation shaft and a mining development system.

The Dongfeng Molybdenum Mine is expected to begin construction in 2025. Currently, the mine is preparing the feasibility study report. The projected annual mining capacity is 1.65 million tonnes per year, using underground mining methods, with an annual production of 3,990 tonnes of molybdenum concentrate at 47% Mo content. The estimated life of mine is 33 years.

Mineral Resources

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our non-ferrous metal Resources and Reserves in the PRC conducted through our subsidiary, Hanfeng Polymetallic Mine, as of March 31, 2024:

	Lishan Mining Area							Dongfeng Mining Area		
Category	Tonnage	Zn Grade	Zn Metal Contained	Cu Grade	Cu Metal Contained	Pb Grade	Pb Metal Contained	Tonnage	Mo Grade	Mo Metal Contained
	(kt)	*(%)*	*(kt)*	*(%)*	*(kt)*	*(%)*	*(kt)*	*(kt)*	*(%)*	*(kt)*
Measured	750	2.36	18	0.01	0	0.12	1	1,820	0.11	2
Indicated	8,580	2.66	229	0.07	6	0.12	10	26,490	0.12	32
Inferred	10,620	2.9	308	0.09	10	0.13	14	37,050	0.12	45
Total	**19,950**	**2.78**	**555**	**0.08**	**16**	**0.13**	**25**	**65,360**	**0.12**	**79**

Note:

1. All figures are rounded to reflect the relative accuracy of the estimate.

Mining Licenses and Exploration Permits

As of the Latest Practicable Date, Hanfeng Mining held a total of two valid mining licenses, including (i) one for the Lishan mining area, and (ii) one for the Dongfeng mining area. Its mining licenses covered a total area of approximately 4.65 km^2. In addition, as of the Latest Practicable Date, Hanfeng Mining held one valid exploration permit, which covered a total area of approximately 2.3 km^2.

The mining licenses are generally valid for 10 to 30 years. The exploration permits are generally valid for five years and renewed accordingly subject to some conditions. We aim to renew our mining licenses or exploration permits before their respective expiry dates. As advised by our PRC Legal Advisor, there are no explicit regulations limiting the number of times a mining license or exploration permit may be renewed in the PRC. We do not expect any material legal impediment in the renewal process. For details of the PRC mining laws and regulations, see "Regulatory Overview."

The following table sets forth information regarding the relevant mining licenses and exploration permits for Hanfeng Mining as of the Latest Practicable Date:

Type	Serial Number	Geographical Area (km^2)	Effective Period	Status
Mining license	C2224002021083210152512	2.2250	August 27, 2021 to August 27, 2050	Valid
Mining license	C2200002010123120093830	2.4207	April 28, 2019 to February 24, 2025	Valid
Exploration Permit	T10000202103302800361	2.3191	December 20, 2020 to December 20, 2025	Valid

Development Plan

The following timeline illustrates key historical and planned milestones in the development of the Hanfeng Polymetallic Mine:

Hanfeng Polymetallic Mine	
Year	**Milestone**
1951	Began large-scale mining
2004	The combined mining and processing capacity of Dongfeng and Lishan reached 1,000 t/d
2019	Hanfeng Mining was merged into the Company
2022	Construction of the lower part of the Lishan Mining Area (Phase I project) began, with a designed capacity of 2,000 t/d
2024	The deep development project of the Dongfeng Molybdenum Mine (below 250 meters above sea level) began design, with a designed capacity of 5,000 t/d

Planned Production Schedule

As set forth in the Competent Person's Report, the following chart sets forth the planned mining and production schedule for the operations in the Hanfeng Polymetallic Mine for the periods indicated over the life of mine of 8 years.

Underground	Unit	LOM	2024	2025	2026	2027	2028	2029	2030	2031	2032
Hanfeng Polymetallic Mine											
Ore Tonnes	kt	3,310	–	435	435	426	362	451	434	398	367
Mined Zn	%	2.45	–	2.32	2.25	2.32	2.13	2.80	3.03	2.40	2.23
Contained Zn	kt	81	–	10	10	10	8	13	13	10	8

Note: The planned production schedule of the LOM, was made based on the data collected of the Hanfeng Polymetallic Mine since April 1, 2024.

Risks Associated with the Mineral Area

The mining industry is inherently associated with a high level of risk, which is accumulated due to factors such as the nature of ore body, ore distribution, grade and variations in mining and ore processing which are not able to be accurately predicted or accounted for. The following table sets forth a summary of the risk assessment undertaken by the Independent Technical Consultant, including its assessment result and the ratings of the relevant risks as well as recommendations for actions to mitigate technical risks associated with the Hanfeng Polymetallic Mine, please refer to "Appendix IIIA — Competent Person's Report for the PRC Mines — Risk Assesments".

Risk Source/Issue	Likehood	Consequence	Risk
Hanfeng Project			
Mining			
Significantly lacking Ore Reserves .	Unlikely	Major	Medium
Ore Processing			
Poor Plant Reliability	Possible	Moderate	Medium
Lower Processing Recovery	Possible	Moderate	Medium
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium

Exploration Activities for Other Mineral Resources Business in China

During the Track Record Period, our exploration activities for non-ferrous metal production business in the PRC were carried out our by in-house exploration team as well as third-party exploration service providers.

Before commencement of exploration activities, the third-party exploration teams will gather relevant materials for preliminary study of the relevant mine's geology features to, assist them to understand the mineral distribution and facilitate search for potential Resources. After the preliminary study, they will formulate an implementation plan, which sets out detailed steps for exploration, for our review and approval. Upon approval, the third-party exploration teams will carry out more in-depth research, including topographic survey, geological mapping, trench exploration, drilling exploration, pit exploration, geological sample collection and analysis, identifying and determining the position, size, grade and other key information of the relevant minerals. They may also need to undertake the relevant hydrogeology and engineering geology work in order to ascertain the mining technical conditions. After completion of field work, the third-party exploration teams will prepare the exploration report for our review. Such exploration report might be submitted to the relevant governmental authorities for evaluation and filing.

When selecting the third-party exploration teams, we generally take into account a number of factors, including experience, reputation, qualification and technical conditions. Our technical staff from relevant production departments are responsible for supervising and managing the work of third-party exploration teams, such as the progress of the project and stage acceptance check. Our third-party exploration teams are required to work in strict accordance with all the applicable PRC laws and regulations in relation to occupation safety and environmental protection. For more information on third-party exploration teams, see "— Contractors."

When the mine is put into production, the exploration design will be carried out by our in-house exploration team, where it undertakes preliminary geology study, such as collection of relevant materials and geology mapping, in order to understand the geology features of the relevant areas. As we have dedicated geomechanics who undertake on-site hydrology and geology studies, the design plan will also reflect the relevant engineering and geology conditions. The exploration design plan will then be submitted to the technology management department for review and approval, during which external geology experts may be involved from time to time. Then third-party exploration teams will carry out the relevant physical explorations, chemical explorations and drilling explorations pursuant to the design plan. When selecting the third-party exploration team, we generally take into account a number of factors, including experience and qualification. After completion of the exploration, the relevant exploration report will be then prepared by reputable mining consulting firms. All exploration activities are carried out in strict compliance with Chinese national safety production standards as well as the relevant laws in relation to work safety, environmental protection and mining. The relevant local government may request us to submit technical reports for reference before commencement of mining projects.

For relevant risks relating to our exploration activities, see "Risk Factors — Risks Relating to Our Business and Industry. We may not be able to expand or replenish our mineral resource and Reserves through exploration."

Operating Process of Other Mineral Resources Business

During the Track Record Period, our other mineral resources operations in the PRC can generally be divided into two steps, namely, (i) mining, and (ii) processing.

Hanfeng Polymetallic Mine primarily utilizes the selective mining method for mining in China. Its mining equipment mainly includes rock drills and loaders. The details of the mining process are listed as follows:

- **Design**. Detailed planning is carried out before actual production begins, including the layout of stopes, pillars, ventilation shafts, ore passes, and backfill entry points. We generally divide the mining area into different sections, and each section is treated as a mining unit.

- **Preparatory cutting**. A detailed plan is made to drill ventilation shafts, ore passes, and backfill entry points. After that, we drill holes in the ore body, fill the holes with explosive materials, and then blast the ore body.

- **Mining**. Extracting the ore from the rock mass to form a mined-out area. Our mining method is by stratified mining.

- **Ore transportation**. We transport the ore to the surface using mine carts through mine roads and vertical shafts.

- **Backfilling**. We backfill the mined-out area with various backfilling materials (including rocks produced by blasting and/or preparatory cutting) to prevent surface subsidence.

Hanfeng Polymetallic Mine mainly uses the flotation process for processing, which mainly includes the crushing circuit, grinding and classification circuit, flotation circuit, concentrate dewatering, and tailings transportation. The details of the processing are listed as follows:

- **Crushing circuit**. Generally, we carry out multi-stage closed circuit crushing for the ore mined underground.
- **Grinding and classification circuit**. The crushed ore that meets the standards is processed in a closed circuit.
- **Flotation circuit**. The ground and classified ore is subjected to flotation, which includes roughing, multiple scavenging, and cleaning processes.
- **Concentrate dewatering**. The concentrate is dewatered through a filter press to separate the concentrate.
- **Tailings transportation**. The tailings after flotation are transported to the tailings storage facility.

Our Copper Cathodes Business in Laos

Overview

Our copper cathodes business is carried out by our subsidiary LXML in Laos, which has one production line of copper. It has seven separate copper pits that are actively mined and produces copper cathode. During the Track Record Period, due to a general decrease of copper oxide Reserves as well as our refocusing our business strategy from other mineral resources to the expansion of our gold mining business, the copper production volume of the Sepon Gold, Copper and Rare Earth Mine declined from 5,020 tonnes in 2021 to 6,485 tonnes in 2023. However, we have continued our production of copper through the remaining copper Reserves, and since 2022 we have been studying and testing the feasibility of heap leaching treatment to extract copper. The Sepon Gold, Copper and Rare Earth Mine has a designated annual processing capacity of approximately 1.4 million tonnes.

Our Copper Cathodes product

Operation Performance

In 2021, 2022 and 2023 and the three months ended March 31, 2024, our copper cathodes business in Laos produced 5,020 tonnes, 6,433 tonnes, 6,485 tonnes and 1,259 tonnes of copper cathodes, respectively. During the Track Record Period, the copper processing recovery rate of the Sepon Gold, Copper and Rare Earth Mine was 86.4%, 64.5%, 55.7% and 41.0%, respectively. The following table sets forth the ore mined volume, ore processed volume and mine production volume in relation to copper cathodes by the Sepon Gold, Copper and Rare Earth Mine for the periods indicated.

	Year Ended December 31,			Three Months Ended March 31,
	2021	2022	2023	2024
	(Kt)	*(Kt)*	*(Kt)*	*(Kt)*
Ore mined	149	–	–	–
Ore processed	246	772	1,105	310
Production volume	5	6	6	1

Note:

1. The ore mined volume for the Sepon Gold, Copper and Rare Earth Mine's copper mine dropped to zero in 2022, because the Sepon Gold, Copper and Rare Earth Mine resumed gold production in 2020 while only keeping a small portion of processing capacity for its copper business since then. As of the Latest Practicable Date, the Sepon Gold, Copper and Rare Earth Mine did not have any active copper mining projects while only processed the ore from its stockpile.

Mineral Resources and Ore Reserves

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Resources in Laos conducted at subsidiary, LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Measured	–	–	–
	Indicated	4,868	1.41	68.63
	Inferred	2,078	1.71	35.55
	Total	**6,946**	**1.50**	**104.18**

The following table, which is based on the Competent Person's Report in accordance with the JORC Code, sets forth the information of our copper Reserves in Laos conducted at subsidiary, LXML, as of March 31, 2024:

Mineralized Zone/Block	Category	Tonnage	Cu Grade	Cu Metal Contained
		(kt)	*(%)*	*(kt)*
Sepon Gold, Copper and Rare Earth Mine – Copper	Proved	–	–	–
	Probable	1,638	0.95	15.48
	Total	**1,638**	**0.95**	**15.48**

Mining Licenses and Exploration Permits

As advised by our Laos Legal Advisor, our copper cathodes business and our gold production business in Laos are subject to the same mining licenses and exploration permits of LXML. For details of relevant mining licenses and exploration permits, see "— Our Gold Production Business in Laos — Mining licenses and Exploration Permits."

Development Plan and Planned Production Schedule

The development plan and planned production schedule of our copper cathodes business in Laos is subject to the same development plan of the Sepon Gold, Copper and Rare Earth Mine. For details, see "— Our Gold Production Business in Laos — Development Plan and Planned Production Schedule."

As set forth in the Competent Person's Report, the following chart sets forth the planned mining and production schedule for the copper operation at the Sepon Gold, Copper and Rare Earth Mine for the periods indicated from 2024 to 2030:

Type	Unit	Total	2024	2025	2026	2027	2028	2029	2030
Copper Production									
Stockpile rehandling									
Ore tonnage	kt	1,638	899	738	–	–	–	–	–
Cu grade	%	0.95	0.95	0.95	–	–	–	–	–
Cu metal	kt	15	8	7	–	–	–	–	–

Capital Costs

The capital costs of our copper cathodes business in Laos are subject to the same capital costs of the Sepon Gold, Copper and Rare Earth Mine. For details, see "— Our Gold Production Business in Laos — Capital Costs."

Operating Costs

The operating costs of our copper cathodes business in Laos are subject to the same operating costs of the Sepon Gold, Copper and Rare Earth Mine. For details, see "— Our Gold Production Business in Laos — Operating Costs."

The table below sets forth a summary of the forecasted copper production operating costs between 2024 and 2030 for Sepon Gold, Copper and Rare Earth Mine, as stated in the Competent Person's Report:

Item	Unit	2024	2025	2026	2027	2028	2029	2030
				Copper Operation				
Processing	USD million	31.5	25.8	–	–	–	–	–
General & Administrative	USD million	8.1	6.6	–	–	–	–	–
Subtotal	USD million	16.2	13.3	–	–	–	–	–
Total Opex	**USD million**	**227.8**	**221.9**	**169.7**	**68.5**	**48.6**	**35.7**	**2.8**

Note: The calculation of the operating costs of the Life of Mine was made based on the data collected of Sepon Gold, Copper and Rare Earth Mine since April 1, 2024.

Risks Associated with the Sepon Gold, Copper and Rare Earth Mine

The risks associated with our copper cathodes business in Laos are subject to the same risks of the Sepon Gold, Copper and Rare Earth Mine. For details, see "— Our Gold Production Business in Laos — Risks Associated with the Sepon Gold, Copper and Rare Earth Mine."

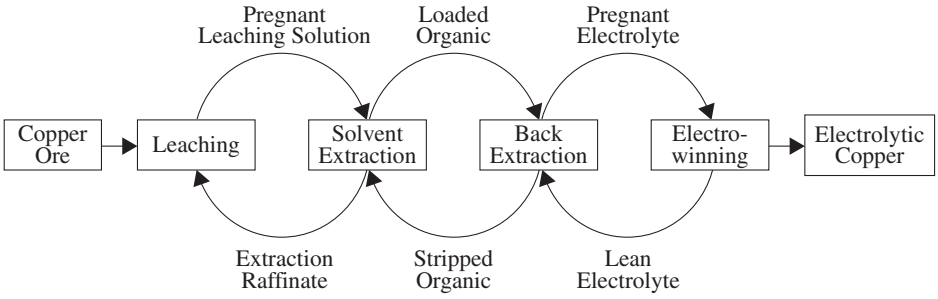
Exploration Activities for Copper Cathodes Business in Laos

During the Track Record Period, we had been conducting the exploration activities for copper cathodes business through LXML. Our exploration activities for copper cathodes business in Laos follow similar processes and methods as we adopt for exploration activities for gold production business in the PRC. For details, see "— Our Gold Production Business in China — Exploration Activities for Gold Production Business in China."

Operating Process of Copper Cathodes Business in Laos

During the Track Record Period, our copper cathodes production operations in Laos can generally be divided into three steps, namely, (i) mining, (ii) processing and smelting. In relation to mining, we generally follow the open-pit mining method. For details, see "— Our Gold Production Business in Laos — Operating Process of Gold Production Business in Laos."

In relation to processing and smelting, we utilize the flotation-pressure oxidation method to process both mined ores. Our plants mainly include scrubber circuit, leaching tanks, counter current decantation circuit, atmospheric leach thickener, mixer-settler, wash dip tank, stripping machine and neutralization tank. Details of the processing workflow for primary ores are set forth below and following diagram sets forth the general workflow of the production process:



- **Run of mine and scrubber**. Typically, mined ores are crushed and washed by scrubber circuit in order to screen out the larger particles. The products will then be sent to leaching tanks.

- **Cold acid leach and counter current decantation**. Chemical is added into leaching tank to dissolve copper into solution. Atmospheric leach thickener is used to create solid underflow stream and clear overflow stream in counter current in order to wash copper, acid and iron from the solid underflow stream. Additional chemicals will be added to improve the settling rate.

- **Solvent extraction**. The solution (with copper in solution) is pumped into mixer-settlers with different functions for extraction and the impurities will be washed out and diluted.

- **Electrowinning.** Copper is recovered from the solution by connecting direct electric current. High purity copper cathode metal so generated will grow for certain days and then pulled and transferred to a cathode wash dip tank. The copper cathode is later stripped in stripping machine and put into stacks.

- **Neutralization**. Tailings are pumped into neutralization tanks and then pumped into tailings storage facility.

Our Rare Earth Business in Laos

Overview

We intend to engage in rare earth business principally through our subsidiary under Chijin Xiawu, Chixia Laos, in Laos. Rare earth minerals are a scarce resource on a global scale. Due to the technical difficulties involved in mining these minerals, as well as volume control and strategic reserves policies implemented by rare earth exporting countries, rare earth minerals have been in short supply globally for an extended period.

At the beginning of 2021, during the gold and copper exploration activities in the southern mining area, we discovered ionic medium and heavy rare earth minerals anomalies in the granite distribution area. We subsequently conducted a general survey on the area and, in August 2022, we issued a report identifying two ore bodies within the western scope of the southern mining area that belong to the relatively scarce medium and heavy rare earth group. The total rare earth oxides in the area are estimated at 32,000 tonnes with average grade of 0.045%.

In relation the latest development of our rare earth business, as of the Latest Practicable Date:

- LXML had submitted an application to the Minister of Planning and Investment of Laos in relation to rare earth mining right in an area of 2.96 km^2 located within its mining area. The relevant border verification under this application had been completed.

- Chijin Laos had submitted an application to the Ministry of Planning and Investment of Laos in relation to rare earth exploration right in an area of 50 km^2 in the Kham District of Xiangkhouang Province. This application had been accepted by the aforementioned governmental authority.

- The Ministry of Energy and Mine of Laos had granted Chijin Laos permits in relation to reconnaissance (investigation) at: (i) the Meang Hiem District in Houaphanh Province with an area of 198 km^2; and (ii) Huameang District in Houaphanh Province with an area of 139 km^2. The aforementioned explorations will be collectively undertaken by Chijin Laos and Lao Mining Development State Enterprise.

In light of the new business opportunity brought by this discovery, we entered into a strategic cooperation framework agreement with Xiamen Tungsten, a company listed on Shanghai Stock Exchange, in September 2022, pursuant to which we and Xiamen Tungsten established a joint venture company to seize the business opportunity brought by rare earth. Xiamen Tungsten has comprehensive capabilities covering the whole rare earth industry chain, from mining and processing to product development and research. We believe that this joint venture will bring together the resources and relevant industry experience to sustainably and profitably develop these rare earth Resources.

On March 4, 2024, an equity transfer agreement was entered into among China Investment, Chixia Laos and Chijin Xiawu, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd., which in turn holds an 86% equity interest in CIRE Mining.

Operation Performance

During the Track Record Period, we did not produce any rare earth products in Laos.

OUR OTHER BUSINESS

Overview

Our other business primarily comprised recycling of waste electrical and electronic products through Guangyuan Technology, which was established on August 6, 2003 under the laws of the PRC and acquired by us in July 2015.

Although Guangyuan Technology operates as a non-core business within our Group, it contributes to our financial metrics including operating income and net profit. Guangyuan Technology specializing in the recycling of waste electrical and electronic products, which is a strategically important sector supported on a national level and, further enhances our ESG efforts. Besides, the resource recycling business is a beneficial complement to our mining business in relation to, for instance, supply of copper and other metals. According to Frost & Sullivan, local and national government bodies in the PRC have introduced a series of policies to encourage and support the development of the industry. As such, the PRC has gradually established a multi-level recycling system led by enterprises with qualification to recycle waste electrical and electronic products.

Guangyuan Technology's primary market is located in Hefei City, Anhui Province, where it procures waste electrical and electronic products, including computers, monitor screens, televisions, washing machines, refrigerators and air conditioners. It also has a presence in more than 30 counties and cities around Hefei City. The main channels for raw material procurement include:

- Municipal recycling point. We have established various recycling points in five cities and are gradually expanding with an aim to cover the whole Anhui Province.

- Home appliance sales. We have established strategic cooperation relationships with leading home appliance companies in Hefei City and assist them recycle trade-in old home appliance.

- Home appliance manufacturing. We have also established partnership with leading home appliance manufacturing companies in China and assist them recycle defective or scraped products.

- Governmental and public institutions. We have been appointed as Provincial Designated Enterprise for Recycling Scraped Electrical and Electronic Products in Anhui (安徽省省級電器電子產品報廢定點處置企業) and assist various governmental and public institutions, such as schools and hospitals, recycle waste electrical and electronic products.

- Social welfare organizations. We also cooperate with various social welfare organizations to recycle waste electrical and electronic products from the local communities.

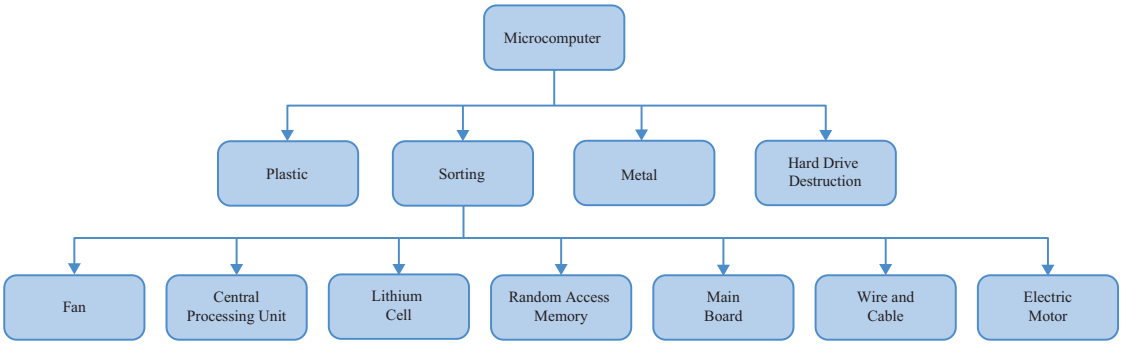
Guangyuan Technology has an annual processing capacity of 2.65 million units. Guangyuan Technology adopts a comprehensive recycling and disposal process integrating manual disassembling and mechanical disposal followed by comprehensive treatment such as in-depth mechanical sorting and separation of the disassembled materials. It then delivers the materials produced in its recycling process to enterprises with hazardous waste management licenses for utilization or treatment.

Guangyuan Technology possesses a Waste Electrical and Electronic Products Disposal Certificate (廢棄電器及電子產品處理證書) and is the only company in Hefei City that qualifies for waste electric and electronic products disposal. Guangyuan Technology conducts its business process in accordance with the "Guidelines for the Standardized Dissembling and Disposal Operations and Production Management of Waste Electrical and Electronic Equipment 2015" (廢棄電器電子產品規範拆解處理作業及生產管理指南(2015年版)). Guangyuan Technology has been nominated as a New Energy Vehicle Power Battery Recycling Trail Unit in Anhui Province (安徽省新能源汽車動力蓄電池回收利用試點單位) in December 2008 and was included in the National Waste Electrical and Electronic Equipment Treatment Fund Subsidy List (國家廢棄電器電子產品處理基金補貼名單) in September 2013.

Operations of Resource Recycling Business

Guangyuan Technology adopts a comprehensive recycling and disposal technology that combines manual dismantling and mechanical disposal and carries out in-depth mechanical sorting and separation of the dismantled materials. The materials generated in the recycling process are then delivered to enterprises holding hazardous waste operation licenses for recycling or disposal.

Our standard operation process can be exemplified by our workflow for computer disassembling. As shown in the flowchart below, we first transport the waste computers into the disassembling storage place. Then the waste computers are put onto a conveyor belt and delivered to different sectors for manual disassembling. The computer plastic cases are directly delivered to the plastic weighing area. We deliver the remaining parts to the sorting area for further dismantling into different materials, such as fan, battery, central processing unit, main board etc. In relation to hard drives, these will go through mechanical destruction. The various materials produced from disassembly will then be placed into recycling bags to be collected by enterprises with hazardous waste management licenses for utilization or treatment.



SALES AND CUSTOMERS

Overview

During the Track Record Period, our primary products were gold, copper cathodes and other mineral resources products. Details of our major products as of the Latest Practicable Date are set out as below:

Business	Products
Gold production in the PRC	Doré with more than 80% gold content, gold concentrate powder with gold content of 50g/t and more, or gold-loaded carbon
Gold production in Laos	Doré with 30%-80% gold content and 10%-70% silver content

Business	Products
Gold production in Ghana	Doré with more than 80% gold content
Other mineral resources in the PRC	(i) zinc concentrate powder, (ii) lead concentrate powder (containing silver), (iii) copper concentrate powder (containing silver), and (iv) molybdenum concentrate powder
Copper cathodes in Laos	Copper cathodes with Grade A quality
Others (resource recycling)	Dismantled materials

Sales in the PRC

Our products are sold to a wide range of customers in China and we adopt different arrangements to determine the price and facilitate our sales. In relation to our sales of products in the PRC, we generally enter into sales agreements with our customers on an annual basis without entering into any long-term agreement. The following table sets forth the major customers and our pricing and sale arrangement for our sales in the PRC.

Business	Major Customers	Pricing and Sales Arrangements
Gold production in the PRC	Members of the Shanghai Gold Exchange, i.e. precious metal refiners	We determine the selling price based on the spot trading price of the Shanghai Gold Exchange and the relevant customer's agreement. The settlement price is determined at the market price of the spot pricing less smelting/refining fees and handling charges. The payment may be either settled on the day of the spot pricing or the immediately following day or partly settled in advance. As confirmed by Frost & Sullivan, the sale of gold in PRC is not subject to any govermental regulatory pricing guidlines.

Business	Major Customers	Pricing and Sales Arrangements
Other mineral resources in the PRC	Large downstream smelters with long-term cooperation	As a general practice, we determine sales prices based on the market prices of the relevant metals contained in the concentrates, including zinc, lead, copper, silver and molybdenum. The prices of 1# zinc ingot and 1# spot lead available on the Shanghai Metals Network and the settlement price of the spot copper contract on the Shanghai Futures Exchange are largely used as benchmarks. Settlement prices are determined based on the actual metal contents in the refined powder products, with transportation costs, weighing check fees and other factors taken into account.
Others	Downstream enterprises with hazardous waste management licenses for utilization or treatment of disassembled waste electrical and electronic products	Sales prices are determined by reference to the quantity of disassembled products and the market conditions and at a price set by a bidding process. The goods are available to be picked up by clients at our relevant premises on condition of full payment.

Sales in Laos

In relation to our sales of products in Laos, we generally enter into sales agreements our customers for generally one to three years. Given the high quality of our products, various potential customers have approached us. Accordingly, we believe that it would not be difficult for us to find alternative customers for sales of products on terms comparable to those we have with our existing. The following table sets forth the major customers and our pricing and sale arrangement for our sales in Laos.

Business	Major Customers	Pricing and Sales Arrangements
Gold production in Laos	Mainly include large, international gold refiners selected across the globe	Based on the current agreement we may sell up to 90% of the products as per our laboratory's assay results at spot price once gold doré is handed over to our contracted transportation service provider at the mine site's gold room and sell all the remaining products once the refinery's results are available at spot price. The payment may be either settled on the day of the spot pricing or the immediately following business day. We generally arrange the products to be transported to the factory of the customer. As confirmed by Frost & Sullivan, the sale of gold in Laos is not subject to any governmental regulatory pricing guidelines.
Copper cathodes in Laos	Mainly include international commodity traders	The details and terms of the sales are determined by the agreement reached by the parties in accordance with international trade rules. Generally, we are paid at a provisional provision, which is set at the average price of the London Metal Exchange in the previous month. Within three days after the original bill of lading is received by the customer, we receive payment at the average price of the London Metal Exchange in the coming month. We generally arrange for the products to be transported to the factory of the customer.

Sales in Ghana

In relation to our sales of products in Ghana, we generally enter into sales agreements with our customers for two years or longer terms. The following table sets forth the major customers and our pricing and sale arrangement for our sales in Ghana.

Business	Major Customers	Pricing and Sales Arrangements
Gold production in Ghana	The products are consigned to large gold refineries selected through a bidding process. During the Track Record Period, our major customers include large international refineries	The pricing is mainly based on the gold spot price set by the London Bullion Market Association as benchmark after deducting certain relevant fees, and payments are generally settled within three business days of shipment. We are also subject to obligations in relation to sales of doré under a streaming agreement. For details, see subsection of "Metal Streaming" below. We generally arrange for the products to be transported to the relevant factory of the customer. As confirmed by Frost & Sullivan, the sale of gold in Ghana is not subject to any governmental regulatory pricing guidelines.

Customers

During the Track Record Period, the brand and quality of our products were widely recognized by the market. In addition, we have established long-term and stable relationships with precious metals refiners and trading companies. We have maintained business relationships of over three years with our top five customers during the Track Record Period. In line with industry practice, we generally do not engage in marketing activities.

During the Track Record Period, our top five customers were refiners of precious metals and other non-ferrous metals as well as trading companies. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, revenue contributed by our top five customers amounted to RMB2,946.2 million, RMB5,345.8 million, RMB5,565.6

million and RMB1,591.1 million, respectively, accounting for 77.9%, 85.4%, 77.1% and 85.8% of our total revenue. Revenue contributed by our largest customer amounted to RMB2,126.6 million, RMB2,602.2 million, RMB2,672.1 million and RMB722.6 million, for the same periods, accounting for 56.2%, 41.5%, 37.0% and 39.0% of our total revenue. The following tables set out details of our five largest customers in each year/period of the Track Record Period:

Rank	Customer	Type of Product(s) Sold	Country/ Region	Year(s) of Business Relationship as of the Latest Practicable Date	Credit terms	Revenue	% of our Total Revenue
						(RMB'000)	
For the three months ended March 31, 2024							
1.	Customer A	Gold	Australia	4	Up to 90% prepayment	722,585	39.0
2.	Customer B	Gold	South Africa	18	15 business days from invoice date	583,146	31.5
3.	Customer C	Gold	PRC	1.25	N/A	115,682	6.2
4.	Customer D	Gold	Ghana	2	2 days upon receipt of delivery notice	94,687	5.1
5.	Customer E	Copper	Singapore	6	3 days upon delivery	75,018	4.0
For the year ended December 31, 2023							
1.	Customer A	Gold	Australia	4	Up to 90% prepayment	2,672,102	37.0
2.	Customer B	Gold	South Africa	18	15 business days from invoice date	1,841,610	25.5
3.	Customer E	Copper	Singapore	6	3 days upon delivery	382,512	5.3
4.	Customer C	Gold	PRC	1.25	N/A	365,980	5.1
5.	Customer F	Gold	PRC	3	N/A	303,364	4.2
For the year ended December 31, 2022							
1.	Customer A	Gold	Australia	4	Up to 90% prepayment	2,602,266	41.5
2.	Customer B	Gold	South Africa	18	15 business days from invoice date	1,745,489	27.9
3.	Customer E	Copper	Singapore	6	3 days upon delivery	393,342	6.3

Rank	Customer	Type of Product(s) Sold	Country/ Region	Year(s) of Business Relationship as of the Latest Practicable Date	Credit terms	Revenue	% of our Total Revenue
						(RMB'000)	
4.	Customer G	Gold	PRC	3	N/A	381,649	6.1
5.	Customer H	Gold	PRC	4	N/A	222,609	3.6
For the year ended December 31, 2021							
1.	Customer A	Gold	Australia	4	Up to 90% prepayment	2,126,600	56.2
2.	Customer E	Copper	Singapore	6	3 days upon delivery	274,582	7.3
3.	Customer G	Gold	PRC	3	N/A	247,632	6.5
4.	Customer I	Gold	PRC	5	N/A	162,645	4.3
5.	Customer J	Zinc	PRC	7	N/A	134,711	3.6

To the best of our knowledge, during the Track Record Period and up to the Latest Practicable Date, our customers were Independent Third Parties. As of the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest customers.

PROCUREMENT AND SUPPLIERS

We conduct our business in China, Laos and Ghana, where we face different social and natural environment and have different business needs. We consider that procurement management excellency is one of our key focuses. We have adopted headquarter-supported global centralized procurement system to enhance our procurement management efficiency. As supplemented procurement methods, we also procure individually in each country.

Our PRC Operations

In terms of our business development strategies, we focus on our gold mining business through acquisitions, expansions and gradual divestment of non-core assets, thereby achieving significant organic growth. This has allowed us to transform ourselves into a specialized gold production company and we will continue to enhance our capabilities in this regard. As such, all disclosure of our practice in the subsections titled "Our PRC Operations" here and below mainly covers our gold production business in China.

We have developed a dedicated procurement platform to manage our procurement activities. This platform covers the whole procurement process, such as ascertaining procurement needs, on-site visits to suppliers, obtaining fee quotes, arranging public bidding, signing of agreements, order placement and fee payments. Through this platform, we undertake centralized management in relation to our procurement in the PRC.

(a) Raw Materials

We procure a wide range of raw materials used in our mining operations, such as explosive materials, diesel, sodium cyanide and cement, primarily from local suppliers in the PRC.

The quality of our raw materials meets the relevant standards set by the industry and the state. For certain hazardous and explosive materials, we only procure these from suppliers approved by the competent authorities, and we require such suppliers to provide us with copies of the special permits issued by the relevant governmental authorities. Our suppliers generally are responsible for delivering raw materials to locations designated by us pursuant to the relevant procurement agreements. We undertake inspection of the raw materials before we accept delivery. We also require our suppliers to provide warranties on the raw materials with varying terms depending on the specific type of raw materials.

(b) Machinery and Equipment

We procure various machinery and equipment for our production activities, including mining and processing equipment which mainly comprises rock drilling machines, drilling jumbos, scrappers, crushing circuits, grinding circuits, flotation circuits, pressure filters, conveyers, and other ancillary equipment. Our equipment and machinery include both leading international and domestic brands, which we purchase mainly from local suppliers.

We own the majority of the machinery and equipment used in our operations. The lifespan of our machinery and equipment generally ranges from two years to 20 years with depreciation calculated using the straight-line method. We have on-site personnel who undertake routine checks and maintenance on our machinery and equipment. We also conduct regular equipment inspections and upgrades.

Our Operations in Laos and Ghana

We procure various materials, such as diesel fuel, processing chemicals and reagents, explosives, and related consumables, as well as machinery and equipment for our production operations mainly from (i) different local suppliers in Laos and Ghana and/or (ii) the original equipment manufacturers. We also procure various services, such as security services, civil work services, engineering services and loading and hauling services, from various local suppliers in Laos and Ghana. We usually source qualified suppliers through (i) public bidding and tendering, or (ii) market research and request of fee quotes. We require candidates to provide the relevant licenses and permits for reference. We may undertake further due diligence, such as background checks and risk assessments, as and when necessary. The selected suppliers are put on our approved supplier list, which is reviewed and updated on a periodical basis.

Suppliers

We generally select suppliers of raw materials and machinery and equipment, through a public bidding and tendering process. In selecting suppliers, we consider a wide range of factors, such as the supplier's qualifications, experience, pricing, service or product quality, reputation and delivery time, and any past business relationship we may have. To secure competitive prices, we may enter into long-term agreements with certain suppliers for the provision of materials and/or service from time to time. Our suppliers usually grant us a credit term of around 30 days from our receipt of the invoice for payment settlement. Our suppliers generally transport the purchased materials or supplies to our facilities.

We consider it important to maintain good and long-term business relationships with our suppliers. We also employ a performance management program to evaluate our suppliers in order to confirm that each supplier remains capable to provide products and/or services that satisfy our production needs, as well as future development needs and future development needs. We may set out key performance indicators in our agreements with suppliers. In addition, we seek to diversify our supplier base to avoid disruptions in the provision of key supplies. We believe that most of the supplies we procure can be readily obtained from a wide range of suppliers at reasonable prices and we do not rely on any particular supplier. During the Track Record Period, we did not encounter any material disruption to our business as a result of shortage or delay in the supply of raw materials and machinery and equipment.

During the Track Record Period, all of our top five suppliers were service or commodity providers such as suppliers of electricity, fuel, and transportation. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, purchases from our top five suppliers amounted to RMB647.3 million, RMB855.2 million and RMB666.5 million and RMB213.5 million respectively, accounting for 25.6%, 19.1%, 13.7% and 17.3% of our cost of sales, respectively. For the same period purchases from our largest supplier amounted to RMB159.5 million, RMB210.6 million, RMB149.5 million and RMB61.2 million, respectively, accounting for 6.3%, 4.7%, 3.1% and 5.0% of our cost of sales, respectively. The following table sets forth our top five suppliers for each year/period during the Track Record Period:

Rank	Supplier	Type of products/ services provided	Country/ Region	Year(s) of business relationship as of the Latest Practicable Date	Credit terms	Purchase amount	% of our total cost of sales
						(RMB'000)	
For the three months ended March 31, 2024							
1.	Supplier A	Project drilling	Ghana	1	30 days upon receipt of invoice	61,173	5.0
2.	Supplier B	Electricity	Laos	5	14 days after the invoice	46,129	3.7

Rank	Supplier	Type of products/ services provided	Country/ Region	Year(s) of business relationship as of the Latest Practicable Date	Credit terms	Purchase amount	% of our total cost of sales
						(RMB'000)	
3.	Supplier C	Transport and logistics services	Laos	5	14 days after the invoice	37,469	3.0
4.	Supplier D	Fuel and lubricant	Ghana	3	30 days upon receipt of approved invoice	36,452	3.0
5.	Supplier E	Fuel	Laos	5	30 days after the invoice	32,241	2.6
For the year ended December 31, 2023							
1.	Supplier B	Electricity	Laos	5	14 days after the invoice	149,506	3.1
2.	Supplier C	Transport and logistics services	Laos	5	14 days after the invoice	147,873	3.0
3.	Supplier E	Fuel	Laos	5	30 days after the invoice	130,497	2.7
4.	Supplier F	Fuel	Laos	5	30 days after the invoice	129,820	2.7
5.	Supplier G	Services	Ghana	2	30 days after the invoice	108,839	2.2
For the year ended December 31, 2022							
1.	Supplier C	Transport and logistics services	Laos	5	14 days after the invoice	210,623	4.7
2.	Supplier E	Fuel	Laos	5	30 days after the invoice	182,465	4.1
3.	Supplier F	Fuel	Laos	5	30 days after the invoice	167,377	3.7
4.	Supplier H	Sulphuric acid (H_2SO_4)	Thailand	5	30 days after the invoice	161,982	3.6
5.	Supplier I	Material	Thailand	5	30 days after the invoice	132,754	3.0

Rank	Supplier	Type of products/ services provided	Country/ Region	Year(s) of business relationship as of the Latest Practicable Date	Credit terms	Purchase amount	% of our total cost of sales
						(RMB'000)	
For the year ended December 31, 2021							
1.	Supplier E	Fuel	Laos	5	30 days after the invoice	159,453	6.3
2.	Supplier J	Services	Laos	5	14 days after the invoice	145,014	5.7
3.	Supplier C	Transport and logistics services	Laos	5	30 days after the invoice	121,193	4.8
4.	Supplier F	Fuel	Laos	5	30 days after the invoice	120,114	4.8
5.	Supplier K	Services	Laos	5	30 days after the invoice	101,530	4.0

During the Track Record Period, we did not experience any material impact to our operation or financial condition due to any significant fluctuation in prices set by our suppliers or any material breach of contract on the part of our suppliers. As of the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our five largest suppliers.

CONTRACTORS

Our PRC Operations

In line with industry practice, we outsource a portion of our exploration and shaft construction/engineering work in the PRC to qualified contractors. As we expand our production scale, we believe that these outsourcing arrangements will enable us to meet our operational needs, reduce our operational costs, and lower operating risks. We believe that the services provided by our contractors are common in the market, and it would not be difficult for us to find alternative contractors to provide similar services on terms comparable with those between our existing contractors and us. The table below sets forth the breakdown of the category, number and fees incurred during the Track Record Period:

	As of December 31,						As of March 31,	
	2021		2022		2023		2024	
	Number	*Fee incurred (RMB'000)*	*Number*	*Fee incurred (RMB'000)*	*Number*	*Fee incurred (RMB'000)*	*Number*	*Fee incurred (RMB'000)*
Exploration	6	19,448.7	8	27,966.5	11	23,045.0	5	7,330.3
Construction	8	111,076.3	13	75,135.6	27	68,381.7	15	32,774.3
Excavation and Mining	6	141,690.3	7	151,798.2	3	61,019.0	1	3,045.3
Other	3	23,292.9	4	10,163.7	4	1,483.7	1	3,220.6
Total	**23**	**274,791.0**	**32**	**255,958.5**	**45**	**153,929.5**	**22**	**46,370.5**

Due to the intensive competition in the relevant contracting service market, we do not believe that it would be difficult for us to find alternative contractors to provide similar services on terms comparable to those with our existing contractors. During the Track Record Period and up to the Latest Practicable Date, we did not encounter any material disputes with our contractors in the PRC or experience any suspension or delay in our operations as a result of misconduct of our contractors. For relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We may suffer material adverse consequences as a result of our reliance on contractors to conduct a portion of our business activities."

To the best of our knowledge, during the Track Record Period and up to the Latest Practicable Date, our contractors were Independent Third Parties. As of the Latest Practicable Date, none of our Directors, their associates or any of our shareholders (who or which to the knowledge of the Directors owned more than 5% of our issued share capital) had any interest in any of our contractors.

We select contractors mainly through public bidding or by invitations to tender. Before engaging a contractor, we will assess their qualification, competence and experience. In particular, we require candidates to provide copies of their qualifications, licenses, certificates and permits for review and verification. We then form an evaluation committee and supervision committee and follow the prescribed selection procedure to shortlist candidates for business negotiations, after which we will make the final decision. During the Track Record Period, all of our contractors were independent third parties.

We require our contractors to comply with all applicable laws and regulations in respect of safety and environmental protection. We also require our contractors to abide by our safety management system and our internal control requirements. The relevant departments in our Company undertake regular check of our contractors to confirm that they are operating in accordance with the technical specifications of our project and industry standards. In the event we discover significant non-compliance or other issues in the implementation of our project, we are entitled to suspend such contractor's work and require them to take correctional actions. In addition, we require our contractors to purchase insurance for their employees and properties.

(a) Exploration

As of March 31, 2024, we had five third-party contractors engaged in exploration activities. We require contractors to hold the requisite qualifications for geological exploration. We generally enter into contracting agreements for a term of one year with such contractors.

(b) Construction

As of March 31, 2024, we had 15 third-party contractors for construction. These contractors are construction work professionals holding the requisite qualifications and licenses and majority engaged in our shaft construction projects, which includes mine construction, tunneling, hoisting and transportation, and for shaft engineering this includes pitshaft equipment installation and removal and derrick installation. We generally enter into contracting agreements based on the total project duration.

(c) Excavation and Mining

As of March 31,2024, we had one third-party contractor for excavation and mining. The contractor provided their labor to conduct excavation and mining work in our projects. They also provide relevant technical support. We enter into agreement with the contractor for the term of one to three years.

(d) Other Services

As of March 31, 2024, we had one third-party contractor for crushing services.

Our Operations in Laos

As of March 31, 2024, we engaged (i) 20 third-party contractors to undertake various construction work, including permanent river alignment project, (ii) 36 third-party contractors for mining and processing work in our projects in Laos, and (iii) 22 third-party contractors for other services. From time to time, we may engage other third-party contractors to support our mining activities, such as construction or improvement of tailing dams and roads in mining sites. During the Track Record Period and up to the Latest Practicable Date, we did not encounter any material disputes with our contractors in Laos or experience any suspension or delay in our operations as a result of misconduct of our contractors. The table below sets forth the breakdown of the category, number and fees incurred during the Track Record Period:

	As of December 31,						As of March 31,	
	2021		2022		2023		2024	
	Number	Fee incurred	Number	Fee incurred	Number	Fee incurred	Number	Fee incurred
		(RMB'000)		*(RMB'000)*		*(RMB'000)*		*(RMB'000)*
Exploration	5	26,560.5	6	28,234.2	4	14,000.4	0	–
Construction	32	265,949.7	29	192,538.4	25	99,516.4	20	20,777.4
Mining and Processing	48	427,857.7	60	240,662.7	60	198,548.8	36	54,717.4
Other	31	69,201.5	33	33,455.3	28	24,860.1	22	6,530.6
Total	**116**	**789,569.4**	**128**	**494,890.6**	**117**	**336,925.8**	**78**	**82,025.5**

Our Operations in Ghana

As of March 31, 2024, we engaged nine third-party contractors to provide excavation, mining, exploration, processing, construction and drilling services to our operations in Ghana. These contractors hold drilling and exploration service operating permits from the Minerals Commission of Ghana. We require our contractors in Ghana to strictly comply with all applicable laws and regulations in respect of safety and environmental protection. Furthermore, we also hold them to specific technology and quality standards as well as detailed work schedules. We evaluate the progress of exploration on frequent basis and monitor the service providers to ensure compliance. During the Track Record Period and up to the Latest Practicable Date, we did not encounter any material disputes with our contractors in Ghana that would have material adverse impact on our operation. The table below sets forth the breakdown of the category, number and fees incurred during the Track Record Period:

	As of December 31,				As of March 31,	
	2022		2023		2024	
	Number	Fee incurred	Number	Fee incurred	Number	Fee incurred
		(RMB'000)		*(RMB'000)*		*(RMB'000)*
Exploration	4	107,597.2	2	119,194.1	2	28,926.4
Construction	1	2,392.3	1	135.3	0	0
Excavation and Mining	2	23,157.5	3	143,720.5	2	168,675.9
Other	0	0	1	7,020.0	1	4,920.7
Total	**7**	**133,146.9**	**7**	**270,070.0**	**5**	**202,523.0**

GOLD LEASING, HEDGING AND STREAMING

Gold Leasing

We obtain short-term financing by gold leasing arrangements, through which we mainly lease gold from the various PRC commercial banks which is sold in the market through the system of the Shanghai Gold Exchange in order to supplement our working capital. Upon maturity of the lease, we return such leased gold back to the relevant commercial banks with payment of leasing fees. Meanwhile, we usually enter into forward purchase contracts in the form of futures standard agreements at the Shanghai Futures Exchange, pursuant to which we agree to purchase the same amount of gold, at the same price and on the maturity date of the lease in order to repay the leased gold. Through this framework, our gold leasing arrangements are generally not subject to material risks caused by fluctuation of gold market prices. The term of our gold leasing arrangement is generally within one year. During the Track Record Period, the interest rates of our gold leasing arrangement ranged from 1.5% to 2.7% and were lower than that of bank borrowings or other financing means.

Hedging

We have entered into, and expect to continue to enter into, futures hedging transactions to forward sell gold and other metals produced by our mines in order to secure desired prices and hedge against volatility in market prices. Our hedging transactions are mainly conducted through gold futures contracts on the Shanghai Futures Exchange and other international exchanges. Pursuant to standard gold futures contracts, we will provide an agreed amount of gold on a specific date at an agreed sale price. Based on the outlook of the gold prices and our expected gold production amount, we negotiate the price, settlement date and other contract terms accordingly.

Pursuant to our policy, a hedging management group composed of certain members of our senior management is responsible for managing our hedging activities. For our hedging transactions, we may not hold positions that in aggregate exceed 10% of our annual gold production volume, and the size of each hedging position should be in line with our production volume and capital strength at the time pursuant to our Board authorization. Under the hedging management group, we have a designated hedging trading group responsible for planning and proposing hedging transactions based on our production plan as well as market analysis, including analysis of the expected gold prices. Such proposals are submitted to our the hedging management group for review and approval, after which we execute the transactions. We record our hedging transactions in our accounts and keep documentation relating to these transactions. In the event of any significant fluctuations in gold prices, our hedging trading group will promptly provide our senior management with an analysis of the risk of losses and a proposal of the measures that should be taken. We also have under our hedging management group, a hedging settlement group mainly responsible for fund settlement, and a hedging risk control group mainly responsible for risk assessment and monitoring during such hedging transactions.

Metal Streaming

Golden Star Resources, through a wholly owned subsidiary Caystar Finance Co. ("**Caystar Finance**"), entered into a Gold Purchase and Sale Agreement with RGLD GOLD AG ("RGLD"), dated May 6, 2015, which was subsequently amended and restated on June 29, 2018 and September 30, 2020 (the "**Streaming Agreement"**).

Pursuant to the Streaming Agreement, RGLD paid an advance payment in the amount of US$145,000,000 in exchange for a gold stream of the Wassa Mine, entitling RGLD to purchase a stream of our gold production at a reduced gold price. Specifically, RGLD is entitled to purchase (1) 10.5% of the gold production of the Wassa Mine at a cash purchase price of 20% of the spot price until 240,000 ounces ("**Delivery Threshold**") have been delivered; and (2) thereafter, 5.5% of gold production ("**Tail Stream Percentage**") at a cash purchase price of 30% of spot price (the "**Streaming Transaction**").

The term of the Streaming Transaction continues until the date that is 40 years after 6 May 2015, and may be extended by either RGLD or us for successive 10 year periods, subject to certain conditions.

We are subject to certain covenants in, and RGLD enjoys certain rights under, the Streaming Agreement, principally:

- **Information rights**. We shall deliver to RGLD, among other information, reports related to Wassa Mine's mineral reserves and resources, forecast of annual production and project economics, life of mine plan and updates thereof, feasibility studies and engineering and metallurgical and related data and evaluations, notice of material events, financing agreements, etc. RGLD is also entitled to inspect the Wassa Mine, subject to certain conditions.

- **Ranking**. Our obligation to sell and deliver gold production under the Streaming Agreement will rank as an operating expense in any cash waterfall agreed with any provider of financing. All proceeds received by us for any sale of gold will be used in satisfaction of its obligations to RGLD prior to any payment of such proceeds to any other person.

- **Negative pledge**. We will not grant any encumbrance on the Wassa Mine other than encumbrances in connection with senior financing, in which case, RGLD will enter into a subordination agreement with the relevant senior financing parties.

- **Leverage Ratio**. GSWL's leverage ratio shall be less than or equal to 3.50:1.

- **Right of First Refusal**. RGLD enjoys a right of first refusal with respect to any additional stream of gold production or royalty arrangement proposed to be sold by GSWL.

- **Election to increase or decrease the Tail Stream Percentage**. at any time after the Delivery Threshold, we have a one time election to offer to reduce the Tail Stream Percentage by a specified amount (the "**Specified Percentage**") or, at RGLD's option following our's exercise of the Tail Stream Election to increase the Tail Stream Percentage by the Specified Percentage, in each case for the same cash price.

- **Other negative covenants**. We are also subject to certain negative covenants with respect to sale, disposal and encumbrances of GSWL's assets and our operations of the Wassa Mine.

During Track Record Period, our revenue generated under the Gold Purchase and Sale Agreement (as part of the sale of products of our gold production business in Ghana) was nil, RMB47.2 million, RMB52.3 million and RMB16.7 million, representing nil, 0.8%, 0.8% and 0.9%, respectively, of our total revenue for the same period.

UTILITIES

Electricity

(a) Our PRC Operations

We mainly obtain electricity from the state electrical power grid. We generally enter into agreements with the state electrical power grid authority on an annual basis. The price of electricity is determined pursuant to the relevant electricity market rate by following related guidance thereon published by the governmental authorities in the PRC. We may enjoy a discounted price for electricity under clean energy policies promulgated in the PRC. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruptions in our operations in the PRC as result of power shortage or outages.

(b) Our Operations in Laos

We obtain electricity from the state electricity company of Laos. The price of the electricity is mainly determined in accordance with the purchase agreement we signed and subject to the local pricing policies published by Laotian Government. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruption in our operations as result of water shortage.

(c) Our Operations in Ghana

We mainly obtain electricity from a local gas-fired power plant. We also engaged the local state electricity power grid as back-up power supplier. The price of electricity is primarily determined through arm's length negotiations by reference to the relevant electricity market rate. In addition, we have diesel generators in place for power supply in case of emergency. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruptions in our operations in Ghana as a result of power shortage or outages.

Water

(a) Our PRC Operations

The majority of our mines in the PRC are underground mines and we mainly use underground water, and to a lesser extent surface water, for industrial use. Water for domestic use is sourced from both local water companies underground water. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruption in our operation as result of water shortage.

(b) Our Operations in Laos

The water supply for both industrial use and domestic use in Laos are secured from local water companies. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruption in our operations in Laos as result of water shortage.

(c) Our Operations in Ghana

The water supply for both industrial and domestic use in Ghana is mainly secured from underground water. During the Track Record Period and up to the Latest Practicable Date, we did not experience any significant interruption in our operations in Ghana as result of water shortage.

For details of the relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We may not be able to maintain the provision of adequate and uninterrupted supplies of electricity, water, materials and equipment at commercially acceptable prices, or at all" and "Risk Factors — Risks Relating to Our Business and Industry — Power outages and usage constraints may force us to halt or curtail operations, or subject us to penalties."

LOGISTICS

Our PRC Operations

We engage professional third-party logistics service providers for transporting mined ore to the processing facilities, our products to the relevant customers as well as various materials we procured from suppliers from time to time. We use positioning systems to track the specific location of fleet vehicles and video-links allow for real-time monitoring of the transport security personnel. Generally, such logistics service providers are responsible for maintaining insurance associated with the transportation and bear the relevant risks. During the Track Record Period and up to the Latest Practicable Date, we did not experience any material shortage of transportation capacity.

Our Operations in Laos and Ghana

For our operations in Laos and Ghana, we engage professional third-party logistics service providers for the cross-border transportation of our products to customers by air and/or land transport and, to a lesser extent, transportation of certain materials we procured from suppliers. Generally, such logistics service providers are responsible for maintaining insurance associated with the transportation and bear the relevant risks. During the Track Record Period and up to the Latest Practicable Date, we did not experience any material shortage of transportation capacity.

INVENTORY

Our PRC Operations

Our inventories mainly include raw materials, work-in-progress, inventory commodities, turnover materials, consignment goods and inventory consumables. We have established inventory management policies to manage inventory levels pursuant to our production plan and the prevailing market conditions.

Following our standard inspection procedures, our inventory personnel examine each shipment pursuant to our agreements or purchase orders to ensure conformity of the shipment with the relevant specifications, quality and quantity requirements. Where the documents are incomplete, the relevant supplies are stored pending acceptance check at later stage. If the specifications, quality or quantity of the supplies do not match the agreement or purchase orders, we will reject the supplies and liaise with suppliers to follow up. All movements of our inventories are subject to inventory controls at the warehouse, are recorded in our inventory management system and are subject to review and confirmation by our finance department.

We undertake routine inventory reviews and arrange inventory checks on a more detailed and in-depth basis for at least once a year. All personnel entering our inventory warehouses are subject to strict security check, and we have real-time video camera, alarm system, and security guards in place to prevent security issues. Furthermore, we have insurance coverage on our inventories.

Our Operations in Laos and Ghana

Similar to our operations in the PRC, our inventories in Laos and Ghana mainly include raw materials, work-in-progress, turnover materials and inventory consumables. Our inventory personnel in Laos and Ghana are generally responsible for implementation of our inventory policies. Our inventory personnel are separated into: (i) a warehousing team, which is responsible for physical management, such as receiving, storing and issuing supplies; and (ii) an inventory team, which is responsible for managing our inventory system and data, such as the actual levels for individual items. Our inventory levels are managed pursuant to our consumption record and lead time for supplies. All inventory information is recorded in our inventory system and categorized for ease of data analysis. We set the minimum and maximum

inventory levels in our inventory system, which assists us arrange timely procurement. We undertake routine inventory review every three months for small-sized items and annually for large-sized items. We generally increase our inventory of raw materials prior to certain predicable events, such as monsoon seasons.

For details of relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We are exposed to the risk of obsolescence and impairment of our inventory."

QUALITY CONTROL

Quality control is crucial to our operations. We have a dedicated product quality department, which comprises laboratories, a measurement team and a sampling team to ensure quality control. We have also established a stringent quality control system to ensure the quality of our products throughout our different production stages. If a quality issue is raised by a customer, we will undertake comprehensive investigations and consult with the relevant customers, and, to the extent needed, may submit any dispute to qualified third-party organization for arbitration. During the Track Record Period, we did not receive any material complaints due to quality issues of our products.

With respect to mining and processing, we have implemented a comprehensive quality control system to monitor the quality at each key stage of our mining and processing procedures. We have established specific guidelines for procedures to manage the quality of the ores mined. Ores mined from our mines are sample-tested at our laboratories on a regular basis to monitor the grade of the ore.

We provide quality and technical specifications to our suppliers and generally require suppliers to provide warranties for the supplies they provide. We inspect shipments of raw materials before accepting delivery. We require our third-party contractors to meet our qualification requirements and conduct their operations in accordance with our internal standards, industry standards and relevant laws and regulations. We regularly inspect the work of our suppliers, and we conduct full quality inspections upon project completion.

COMPETITION

Industry concentration has continued to increase in light of the continuous mergers and integration of gold enterprises. The top ten global gold producers in 2023 accounted for around 25.1% of the global gold mining production, according to Frost & Sullivan. Most of the top gold producers are headquartered in the United States, Australia, Canada, South Africa, Russia, Uzbekistan and China. We compete with international players in acquiring attractive gold mining properties.

The gold mining industry in China is relatively fragmented with the market dominated by small- and medium-sized gold mining companies accounting for majority of the market share. In 2023, (i) we ranked fifth among listed gold producers in China in terms of gold Resources, with gold Resources of 13.6 million oz; and (ii) we ranked fifth among listed gold producers

in China in terms of gold production, with production of 461 koz of gold, according to Frost & Sullivan. Moreover, we also had the highest number of overseas assets as of December 31, 2023 and overseas revenue contribution in 2023 compared with any listed gold producer in China, according to Frost & Sullivan.

Our major competitors are large international and PRC mining companies. We primarily compete based on our ability to obtain gold Reserves and Resources, which is dependent on our financial conditions, technical ability, equipment and machinery and human capital. The mining industry is a capital-intensive industry that requires significant technical, exploration and management experience. Moreover, mining is subject to extensive regulations and requires a number of licenses and permits to operate. These factors constitute significant barriers to enter the gold mining industry. For further details of the competition landscape and our market position, see "Industry Overview."

RESEARCH AND DEVELOPMENT

We are committed to continuous research and development, which we believe will ensure our competitiveness in the industry and enable us to sustainably grow our business in the future. As of March 31, 2024, our dedicated R&D team comprised 594 employees. Our R&D team focuses on exploration to improving our mining and processing technologies, including, in particular increasing our processing recovery rate. Our research achievements are reflected in our academic publications, such as (i) "The Research and Setting of Energy Consumption Limitation of Product Unit for Gold Mining, Processing and Refining" (黃金開採、選冶、精煉單位產品能源消耗限額的研究與制定), which was awarded the 2016 China Gold Association Technology First Prize (2016年中國黃金協會科學技術獎一等獎), and (ii) The Research and Application of Key Technologies of Decyanidation Treatment of Cyanide Tailings (氰化尾渣脱氰處理關鍵技術研究與應用) co-authored by Jilong Mining and Changchun Gold Research Institute (長春黃金研究院), which was awarded the "2018 China Gold Associate Technology Second Prize" (2018年中國黃金協會科學技術獎二等獎).

Our continuous efforts in research and development have also paid off in terms of the various intellectual property rights, including patents and copyrights, we have obtained. As of the Latest Practicable Date, we had 18 registered patents in the PRC. For further details, please refer to the paragraph headed "— Intellectual Property Rights" below. In addition, our subsidiaries Wulong Mining and Jilong Mining have been recognized as high and new technology enterprises. Therefore, each of these enjoys a preferential enterprise income tax rate of only 15%, as opposed to 25% for general enterprises in China. For details of the relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We received government grants and enjoyed preferential tax treatment during the Track Record Period, and any significant reduction in such grants or tax treatment offered to us may materially and adversely affect our financial condition and results of operations." In 2021, 2022 and 2023 and the three months ended March 31, 2024, our research and development expenses amounted to approximately RMB24.8 million, RMB27.7 million, RMB51.8 million and RMB16.4 million, respectively.

INTELLECTUAL PROPERTY

Intellectual property rights play an important role in our business operations. We conduct our business under the trade names of "赤峰黃金" and "Chifeng Gold." As of the Latest Practicable Date, the intellectual property rights owned by us include: (i) 23 trademarks registered in China; (ii) 18 patents in China; (iii) seven domain names in China; (iv) seven software copyrights in China; (v) one copyright of works in China; and (vi) two trademarks registered in Laos. See "Appendix VII — Statutory and General Information — Further Information about Our Business — Intellectual Property Rights" for details of our material intellectual property rights.

To protect our intellectual property rights, we monitor whether there is any infringement of our brand by conducting internet searches, including searches on the website of the National Intellectual Property Administration of the PRC. During the Track Record Period and up to the Latest Practicable Date, we were not involved in any material dispute or litigation relating to infringement of trademarks and patents nor, to the best of our knowledge, did we infringe any trademarks and patents belonging to other parties.

EMPLOYEES

We believe that our employees are critical to our success. Our human resources department is responsible for recruiting, managing and training our employees. As of March 31, 2024, we had 7,035 full-time employees in total, among which 2,271 employees were in Laos and 811 employees were in Ghana.

The following table sets forth the number of our employees by function as of the dates indicated:

	As of December 31,			Three Months Ended March
Function	**2021**	**2022**	**2023**	**31, 2024**
Production	3,071	3,689	3,515	5,404
Sales	3	7	7	7
Technology	777	632	887	501
Finance	44	59	57	53
Administration	820	750	991	1,070
Total	**4,715**	**5,137**	**5,457**	**7,035**

We are required by PRC social insurance and housing provident fund laws and regulations to make contributions to mandatory social insurance and housing provident funds for our employees. During the Track Record Period, we did not make adequate contributions to the social insurance and housing provident funds with respect to certain of our employees as required by the relevant PRC laws and regulations. See "Risk Factors — Risks Relating to Our Business — Implementation and enforcement of the labour laws and regulations in China may adversely affect our business and results of operations. Failure to fully comply with PRC labour-related laws may expose us to potential liabilities and penalties."

We have maintained a good relationship and expect to maintain an amicable relationship in the future with our employees. During the Track Record Period and up to the Latest Practicable Date, there were no material strikes which had an adverse impact on our operation and no material disputes between the Group and our employees.

Our PRC Operations

We view our employees as critical to our success, and we are committed to recruiting, training and retaining skilled and experienced employees throughout our operations. We intend to achieve this by offering competitive remuneration packages, which is above the market average, as well as focusing on training and career development. Our remuneration packages, including salary, bonus, commercial insurance and other benefits, are designed to reward our employees based on their work performance as measured against specified work objectives. We undertake yearly research on prevailing market remuneration conditions and adjust our remuneration packages accordingly to ensure that our offer remains attractive compared with our competitors. In addition, we provide induction training and a wide range of on-job trainings to our employees on regular basis to enhance their professional knowledge, improve their working skills and strengthen teamwork within our Company.

In line with customary industry practice in China, our employees are represented by labor unions. We engage external legal counsel to provide professional legal support in relations to various labor issues involving our employees. In addition, our human resource staff also attend regular trainings on labor law and other related laws and regulations held by the relevant governmental authorities. During the Track Record Period, we did not experience any strikes, work stoppages or significant labor disputes, nor did we experience any significant difficulties in recruiting or retaining qualified personnel. We have complied with the applicable labor law and regulations in Laos and Ghana in all material respects. We believe that we have also maintained a stable and motivated workforce and high level of employee loyalty.

We dedicate significant resources to employee recruitment and promotion. We recruit employees through internal channels, such as function hiring and internal referrals by our employees, and external channels such as online platforms, job fairs and head-hunters. We place significant importance on internal promotion as a means to offer long-term career paths and performance incentives for our employees. In particular, we formulate the talent cultivation plans for mid-level and higher management employees. Leveraging our strong connections with various leading colleges, we have also fostered our talent development

system by conducting mentorship training programs for college students from various leading universities in China. We believe such arrangements have enabled us to secure a stable pipeline of high-quality employees which strongly support our continued business development and success.

Our Operations in Laos and Ghana

We have established comprehensive human resources systems to manage recruitment, employee development, salary and compensation, among other things. We design our remuneration packages by reference to the local mining industry benchmark and are competitive compared with our competitors. We also make contributions to mandatory social security funds for our employees as required by the relevant laws and regulations of Laos and Ghana, respectively, and provides employee benefits such as commercial insurance. Our Laos Legal Advisor and our Ghana Legal Advisor are of view that, during the Track Record Period and up to the Latest Practicable Date, we have complied with the applicable labor law and regulations in Laos and Ghana in all material respects, respectively. The majority of our employees in Laos and Ghana are represented by labor unions.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE

Our core value is "To benefit more people through the development of Chifeng Gold."

We believe that our efforts in environmental, social and governance matters are the key factors for our long-term sustainable development and continued business success. Accordingly, we attach great importance to the implementation of environmental, social and governance policies at the highest level of our Company.

International industry standards and best international practices have been applied in our overseas mines and the same standards are adopted in our domestic mines on a step-by-step basis. Specifically, GSWL executes ESG procedures in accordance with the standards required by the World Gold Council (WGC) and the United Nations Global Compact (UNGC) and publishes ESG reports on a regular basis. LXML have observed and continues to observe the standards of International Council on Mining and Metals (ICMM). We are making efforts to make our domestic mines in better compliance with WGC standards by consolidating the governance of our domestic and overseas mines as well as finetuning our ESG-related management policies and continue to improve the ESG governance of our mines including disclosure of relevant ESG information.

In addition, we have established a sound ESG-governance structure under which the Board formulates our overall ESG strategies and goals. The Strategy and Sustainable Development Committee under the Board is mainly responsible for undertaking research on mid- and long-term development strategies, major investment decisions and sustainable development policies and providing detailed recommendations. It also assists in identifying ESG risks, evaluating the material ESG issues, coordinating internal and external resources for managing ESG matters and implementing our ESG strategies. The members of the Strategy and

Sustainable Development Committee include Chairman Wang, Ms. Yang Yi-fang, Mr. Lyu Xiaozhao, Mr. Zhang Xudong and Dr. Wong Yet Ping Ambrose. In addition, our senior management, in particular our Environment Department, is responsible for the daily execution of our various ESG policies, analyzing the various ESG matters and opportunities and preparing the materials and annual reports on our ESG performance. Our senior management also actively communicate with the Strategy and Sustainable Development Committee and the Board on key ESG matters which arise during our ongoing business operations. Key performance indicators in relation to environmental protection are also incorporated into our performance evaluation system for our employees. The comprehensive ESG-governance structure we have developed has laid a solid foundation for our ESG performance.

We aim to continuously enhance our systematic environmental management system, optimize water resources, energy, and logistics management strategies, judiciously use natural resources, practice the principles of a circular economy, strictly control tailings, waste, wastewater, and pollutant management, and minimize the negative impact on the natural environment. Simultaneously, we actively address climate change, consider potential climate risks and opportunities impacts following the framework recommendations of TCFD, continuously increase the proportion of renewable energy use through self-built photovoltaics and participation in green energy trading, as well as contribute to reduction of low-carbon emission.

We always prioritize the construction of green mines, actively seek a balance between mining development and ecological protection and strive to adhere to the development concept of "Mutual Prosperity and Development" with the community. In 2023, (i) our total investment in green mine construction was approximately RMB26.2 million; (ii) we restored approximately 62.3 hectares of land; (iii) we conducted workplace safety inspections 2,375 times in 2023; (iv) provided safety training for 33,495 participants; (v) no significant safety or environmental accidents occurred; (vi) we reduced approximately 1,057.4 tonnes of carbon dioxide and its equivalent; and (vii) we invested approximately RMB51.8 million in research and development.

For more details, please see "— Competitive strengths — A strong social responsibility and solid commitment to promoting green and sustainable development with high ESG standards" and "— Business strategies — Continue to improve our ESG governance and enhance our standards of environmental protection, safety, social responsibility and corporate governance."

Our PRC Legal Advisor has confirmed that, during the Track Record Period and up to the Latest Practicable Date, we were not subject to any material claim or penalty in relation to health, work safety, social and environmental protection.

Environmental Protection

We are fully committed to environmental protection and to adhering to the highest standards for sustainable development. Our business operations are subject to various legal requirements in relation to environmental protection, such as air pollution, water discharge, waste disposal and noise control, under the relevant PRC, Lao and Ghanaian laws and regulations. For more details, see "Regulatory Overview."

Our Environmental Protection Policy

In order to systematically address the various environmental protection matters arising from our operations, we have formulated environmental protection policies and measures by following the relevant principles of the International Council of Mining and Metals, which set out the detailed procedures for undertaking various environmental protection work.

In China, we have established a complete environmental protection system to comply with regulations on environmental protection and control pollutant emissions. Our mining and processing are carried out in accordance with relevant standards and management. In particular, our decyanidation process complies with the requirements of the Technical Specification for Cyanide Residue Pollution Control in the Gold Industry (黃金行業氰渣污染控制技術規範).

At LXML in Laos, we have formulated an environmental and social management and monitoring plan by following the Environmental and Social Impact Assessment Guidelines, which sets out a policy framework, management system and environmental monitoring plans in order to achieve full compliance with the relevant regulatory requirements and industrial standards. Such plans are subject to review and update at least every three years.

At GSWL in Ghana, we have established a general policy on environment together with comprehensive environmental management plans for both surface operations and underground operations after considering the specific environmental factors in Ghana. Such plans are subject to review and update at least every three years.

Our environmental protection policies and measures generally cover the major aspects of our operations, such as:

- **Hazardous materials**. We reinforce the groundwork at our industrial sites and store raw materials in our facilities in a way which prevents leakage of hazardous materials into the soil. Hazardous waste is segregated into specific color-coded waste receptacles. Generally, explosives packaging and cyanide packaging are removed for disposal by the relevant suppliers.

- **Prevention of air pollution**. In relation to processing plants, dust suppression sprays are utilized and dry dust collection systems have been installed on ore crushing circuits/conveyor belt transfer points. In relation to underground mining, we install major ventilation systems (including ventilation exhausts) and use water for dust suppression.

- **Wastewater treatment**. We have constructed water recycling systems to ensure that wastewater will be recycled for use as far as practicable. For wastewater which will be released to the external environment, we ensure that the wastewater must go through sediment retention systems before being discharged. We carry out relevant treatment at tailings dams to prevent groundwater pollution. We also maintain comprehensive database of processed water data.

- **Solid waste**. Scrap steel and other clean underground wastes are collected for beneficial re-use where appropriate. Lead batteries are recycled by accredited vendors. We also employ a waste compactor to reduce landfill volumes and associated emissions. In addition, we divert wooden materials, plastics, and other recyclables away from landfill for recycling by approved vendors, thereby reducing landfill volumes and associated emissions.

- **Noise control**. We take various measures to reduce the noise generated in our operations, such as selecting low-noise equipment and machinery, installing silencers, and adsorption materials, as well as noise isolation and elimination equipment.

- **Tailing Storage**. Extensive monitoring systems are included in the design of tailings dams as early warning mechanisms. These systems also enable ongoing assessment of the stability and integrity of the structures. Qualified engineers conduct quarterly inspections as per international standards. In addition, independent auditors conduct regular third-party audits.

- **Biodiversity**. Flora and fauna assessments and updates are undertaken to ensure appropriate planning and impact management. In the context of agreed post-mining land use, sequential re-vegetation is conducted for the establishment of self-sustaining ecosystems. We transplant various exotic and indigenous species to enhance biodiversity. There is also waste receptacle management to reduce risk of vermin infestation.

In addition, due the rapid advancement of environmental protection laws, regulations and industry standards, we closely monitor the latest developments in regulations and standards and regularly update our environmental protection policies and measures with the aim to ensure and uphold the highest standards possible.

Our ESG Practice in the PRC

We are committed to environmental protection by strict adherence to all the relevant laws and regulations in the PRC. We have adopted the relevant environmental protection measures required by such authorities, including carrying out environmental self-monitoring programs in relation to dust, noise, water, soil and discharges. These subsidiaries follow the relevant self-monitoring technical guidelines, have prepared the relevant special emergency plans in case of an accident and employ qualified third-party test units to conduct routine monitoring. At our other subsidiaries, we employ various environmental protections to monitor the emissions and discharges to ensure we operate within the relevant standards. We are also dedicated to the construction of green mines and applying tailing dewatering technology with the aim of achieving zero discharge of sewage from our gold mines.

During the Track Record Period, our cost of compliance with the applicable environmental protection rules and regulations in the PRC amounted to approximately RMB106.0 million, RMB128.6 million, RMB212.8 million and RMB18.5 million, respectively. Moving forward, we expect our environmental protection rules and regulations will maintain at a similar level.

Our efforts and investments in environmental protection has led us to various achievements. For example: (i) Jilong Mining has planted more than 3,000 trees and grown grass covering an area of more than 2.4 hectares in the first half of 2022; (ii) Huatai Mining has achieved 100% recycling of all its wastewater; (iii) as of the Latest Practicable Date, Hanfeng Mining has undertaken afforestation of an area spanning more than 2,400 m^2 and green conservation of an area spanning more than 8,300 m^2; and (iv) GSWL mainly obtains electricity from a local gas-fired power plant and also engages with a hydro-power energy provider. In addition, we are exploring various options for renewable energy projects with an aim to achieve a 30% reduction in greenhouse gas emission intensity by 2030. In particular, Jilong Mining is planning to build a 10-megawatt solar power plant, and it is expected that its full capacity will be installed and ready for commercial operation by the end of 2025. Meanwhile, Wulong Mining and LXML are also actively planning to build their own clean energy power generation projects, which will further enhance our capability in renewable energy utilization.

We have undertaken a number of environmental protection technology research projects. This has allowed us to develope numerous environmentally friendly technologies and processes, which enable us to limit the environmental impact of our production activities. For instance, we have carried out special research on the discharging process at the Jilong Gold Mine and Huatai Gold Mine and, as a result, have adopted the "tailings decyanation filter pressing process" to replace the original tailings filter discharge process, and the content of total cyanide tailings and other harmful elements conforms to requirements of the PRC's Technical Specification for Pollution Control of Cyanide Leaching Residue in Gold Industry (黃金行業氰渣利用與處置污染控制技術規範). This change represented a new approach to cyanide residue tailings processing of ore in the PRC. Since commencing in October 2018, the project has been running stably. Sampling and testing of the treated cyanide tailings by third parties have shown that the total cyanide concentration in the toxic leaching solution is all less than 4mg/L, which is significantly under the limit of 5mg/L for tailings dam disposal in the technical specification of cyanide residue, and other indicators are all in line with the specification requirements.

For our continuous and significant efforts over the years, we have successively won and been awarded various honorary titles, such as "Advanced Unit of Energy Conservation and Emission Reduction during the 12th Five-Year Plan Period" (十二五節能減排先進單位), "National Outstanding Enterprise Practicing Ecological Civilization" (全國踐行生態文明優秀企業) and "Advanced Collective of Energy Conservation and Emission Reduction of National Machinery, Metallurgy and Building Materials Union System" (全國機械冶金建材工會系統節能減排先進集體). In January 2024, our Company was awarded the 17th Crystal Ball Award as the "2023 Most Socially Responsible (ESG) Listed Company". In addition, (i) the Jilong Gold Mine and Hanfeng Polymetallic Mine were rated as National Green Mines (全國綠色礦山) in January 2020, and (ii) the Wulong Gold Mine and Huatai Gold Mine were rated as Provincial (Autonomous Region) Level Green Mines (省(自治區)級綠色礦山) in December 2020 and May 2020, respectively. All these achievements and honors is a testament to our relentless efforts in environmental protection and dedication for long-term sustainable development.

Our PRC Legal Advisor is of view that, during the Track Record Period, we did not have any material incidents of non-compliance with the PRC environmental laws and regulations at our mines in the PRC that resulted in material penalties. In addition, we are not aware of any environmental proceedings or investigations to which we were or might become a party that could have a material adverse effect on our business, financial conditions and results of operations.

Pursuant to the relevant PRC laws and regulations, we are responsible for the rehabilitation of the land in relation to our mining activities and are required to submit a land rehabilitation plan to the relevant governmental authorities for examination when applying for or renewing our mining licenses. Before commencing mining activities, we are also required to deposit funds into an environment control fund set up with banks in amounts agreed with the relevant governmental authorities. The land rehabilitation fund is owned by us while the use of these funds is under the supervision of the relevant governmental authorities. During the Track Record Period and up to the Latest Practicable Date, we have fully paid the aforementioned funds in a timely manner and are committed to strictly performing the approved rehabilitation plan. As our mines in the PRC are still in production, we have not taken any further actions in relation to mine closure and rehabilitation. For details of relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — Our operations are exposed to risks in relation to environmental protection and rehabilitation" and "Risk Factors — Risks Relating to Our Business and Industry — Our existing mining operations have a finite life and eventual closure of our operations will entail costs and risks regarding on-going monitoring, rehabilitation and compliance with environmental standards, which may exceed the provisions we have made."

Our ESG Practice in Laos

Our environmental protection practices in Laos are guided by the "10 Sustainable Development Principles" of the International Council of Mining and Metals. We seek to continuously improve our environmental protection performance by carrying out environmental sampling and monitoring, setting suitable environmental protection targets, implementing and maintaining procedures to identify environmental risks, undertaking thorough investigations of the root causes of environmental risks and proactively implementing corrective measures. In particular, we actively undertake water/sediment management and treatment, drainage on mine infrastructure, waste dump control and tailing management.

During the Track Record Period, our cost of compliance with the applicable environmental protection rules and regulations in Laos amounted to approximately RMB7.2 million, RMB10.1 million, RMB8.4 million and RMB2.2 million, respectively. Moving forward, we expect the local environmental protection rules and regulations will be maintained at a similar level.

In relation to rehabilitation, LXML will enter the closure phase when no more development and ore extraction take place. Once ore has been removed, pit voids are either retained in a "care and maintenance" phase or closed and rehabilitated. Open pits are placed in care and maintenance if they have the potential to yield economic amounts of ore in the future. During the care and maintenance phase, pits walls are stabilized to minimize erosion and any exposed and potentially acid forming material is removed or covered with non-acid forming material and/or water is treated and released.

We have filed a mine closure plan with the relevant governmental authorities, and we continue to refine such plan to incorporate new understanding and contemporary best practice. Mine closure planning is undertaken in close consultation with stakeholders; primarily through the mine closure committee. We have also prepared progressive rehabilitation and reclamation plans, including erosion control, vegetation establishment, and planting and plant maintenance, which seeks to yield significant results in the establishment and regeneration of the natural environment.

Our ESG Practice in Ghana

Our environmental protection practices in Ghana are guided by principles similar to those adopted in our Laos operations, which assists us in maintaining our environmental protection practices at international standards. As such, our operations in Ghana apply measures to mitigate pollution and environmental impact and improve our overall environmental protection system and performance.

During the Track Record Period, our cost of compliance with the applicable environmental protection rules and regulations in Ghana amounted to approximately RMB23.5 million, RMB16.6 million and RMB3.9 million, respectively. Moving forward, we expect the local environmental protection rules and regulations will be maintained at a similar level.

GSWL also undertakes an annual comprehensive corporate responsibility review in relation to our performance and compliance with the UN Global Compact framework and targets aligned with the Sustainable Development Goals indicators.

In recognition of its focus on safety, GSWL was honored with the Ghana 2023 Best Safe Mine First Prize from the Ghana Chamber of Mines in November 2023. Furthermore, GSWL undertakes ongoing rehabilitation activities, which include re-profiling waste dumps, topsoil spreading, and planting for both slope stabilization and long-term rehabilitation. We intend to strictly follow the requirements as stipulated by Ghanaian Mining Law 2012 (LI 2182) regarding rehabilitation activities. As we acquired the Ghanaian operations in January 2022, we are in the process of preparing environment impact assessment report, which will include plans for mine closure and rehabilitation, and we will submit this report to the relevant governmental authorities for approval in due course. We will then enter into rehabilitation guarantee agreement with the government and pay a rehabilitation deposit, which can only be returned to us after inspection and acceptance of the rehabilitation project by the Ghana government.

Our Ghana Legal Advisor is of view that, during the Track Record Period and up to the Latest Practicable Date, our operations in Ghana complied with applicable Ghanaian environmental laws and regulations in all material respects.

Corporate Social Responsibility

We place great emphasis on fulfilling our corporate social responsibilities and are committed to ensuring that the communities and regions in which we operate can genuinely benefit from our development. We actively explore solutions that can bring a positive impact to the local community. We take practical actions in promoting employment, rural revitalization, improving people's livelihoods, public welfare education, increasing tax revenue, and other areas.

We have established a well-built set of policies to guide our activities, including: (i) a stakeholder and community relations policy for LXML; and (ii) a policy on community relations and policy on community development and support for GSWL. We are also subject to community audits undertaken by relevant governmental authorities on a regular basis. In particular, in Ghana, we have strived to promote our philosophy of localized management and operations, built up a sound relationship with local governmental authorities, served local communities and took initiatives to contribute to regional development. We were one of the first batch large-scale Chinese mining company operating in Ghana and, in recognition of our work, earned accolades for boosting the local economy.

We actively participate in a wide range of community services in China, Laos and Ghana, which we believe have been well regarded by both local communities and governments. For more information regarding our corporate social responsibility efforts, please see "— Competitive strengths — A strong social responsibility and solid commitment to promoting green and sustainable development with high ESG standards."

We leverage our own resource advantages, take action to shoulder corporate social responsibility, and share our achievements with the societies within which we operate. For example:

- Jilong Mining has donated more than RMB15 million to local primary schools in need of financial support.

- To address the temporary housing requirements of the residents in the area during the demolition phase, Hanfeng Mining formed an emergency task force to establish temporary relocation facilities for the Tianbaoshan community residents, actively supporting the local community in facilitating the resettlement process for the displaced individuals.

- During the COVID-19 pandemic, Wulong Mining donated RMB600,000 in cash and RMB200,000 in medical and protective equipment to the epidemic prevention and control department.

- During the COVID-19 pandemic, Jilong Mining donated more than RMB300,000 in cash and medical and protective equipment to the epidemic prevention and control department.

- LXML established a partnership with the Laos Ministry of Health, the Lao Women's Union and UNICEF and provided US$2.9 million to the 1,000 Day Project in order to improve maternal health and child nutritional outcomes.

- LXML also made donations of US$3.1 million to Vilabouly, Savannakhet and Mittaphab hospitals for purchase of various medical equipment.

- LXML donated US$11 million to the Community Trust Fund and US$3.26 million to the Village Development Fund in order to improve access to basic services to the underprivileged local residents.

- LXML actively assisted the Laos Government and local community with COVID-19 prevention with an aggregated donation of more than US$370,000.

- GSWL established the Golden Star Development Fund to make contributions of US$1 per oz of gold produced at GSWL together with 0.1% of pre-tax profit for the development of the local community near its mine. GSWL contributes approximately US$200,000 each year into this fund.

- As of December 31, 2023, GSWL had rehabilitated approximately 416.9 hectares of land, demonstrating our unwavering dedication to sustainable practices.

- In April 2006, GSWL established the Golden Star Oil Palm Project to make contributions of US$1 per oz of gold produced at GSWL to assist to develop post-mining land uses and productive assets to achieve sustainable local economic development. Such oil palm trees also have a very positive impact on reduction of greenhouse gases as forestry and agroforestry systems which incorporate tree crops render a significantly larger sequestration potential for longer periods. By the end of 2021, GSWL had directed over US$9.6 million to this initiative, which assists around 400 local farmers and creates approximately 400 temporary job positions. In 2021, GSWL received the inaugural ESG Award for Products at the Mines and Money Outstanding Achievement Awards. In 2022, with the support of the United Nations Industrial Development Organization, the Golden Star Oil Palm Project was awarded as an international certificate from the Round Table on Sustainable Palm Oil. By December 31, 2023, we have grown more than 140,000 oil palm trees in ten different communities covering more than 1,000 hectares of land.

- We also set up the Community Mine Consultative Committee to select community projects for assistance in order to support community-driven and community-owned development.

Occupational health and safety

We adopt high safety standards, continuously update and enhance our internal control measures to enhance production safety in our operations. Our production management systems and technologies enable us to achieve automation, digitization, and intelligence control in the gold production process. During the Track Record Period, we did not have any material safety incidents involving our workforce.

Our PRC Operations

Our business in the PRC is subject to extensive work safety laws and regulations governing our operations. We have also put in place stringent internal policies and procedures with respect to safe use of equipment and consumables, handling of hazardous materials and/or waste, detection and management of work safety issues and regular work safety inspection. In particular, we have formulated detailed guidelines on treatment of hazardous waste. During the Track Record Period and up to the Latest Practicable Date, we believe we had adopted all the occupational safety measures as required under the PRC laws.

In addition, we have adopted relevant systems for recording and handling accidents during operations and provided work safety trainings to our employees on an annual basis in order to strengthen their knowledge and awareness. To maintain a safe work environment, our employees are required to report accidents to a designated person for further actions. We are required to promptly report on the occurrence of any loss, leakage or diffusion of hazardous waste to the relevant health authorities and to keep proper records of such accidents. Our

operations are subject to regulations and periodic examinations by local work safety authorities. We have obtained all the material work safety permits, approvals and registrations necessary to conduct our business.

As advised by our PRC Legal Advisor, during the Track Record Period and up to the Latest Practicable Date: (i) we believe we were in compliance with all applicable work safety laws and regulations in the PRC in all material respects; (ii) we did not have any material incidents of work-related injuries or casualties; (iii) we had not been subject to any claims for personal or property damages and compensation to our employees which were material to our business operations; and (iv) no material administrative sanctions or penalties had been imposed upon us for any violation of work safety laws and regulations. We have not incurred, and do not expect to incur material costs in connection with the compliance with work safety laws and regulations.

Our Operations in Laos and Ghana

Similarly, for our operations in Laos and Ghana, we are subject to the relevant occupational health and safety laws and regulations in Laos and Ghana. We have put in place comprehensive safety and health management systems to maintain compliance with the relevant laws and regulations and monitor the safety of our operations. As advised by our Laos Legal Advisor and our Ghana Legal Advisor, we believe we were in compliance with applicable laws and regulations in Laos and Ghana, respectively, in relation to occupational health and safety in all material respects and there were no significant or recurrent health or safety accidents during the Track Record Period.

For relevant risks relating to our occupational health and safety practice, see "Risk Factors — Risks Relating to Our Business and Industry — Our operations are subject to risks relating to occupational hazards, production safety and design defects, which may result in increased costs or losses, personal injuries or casualties, damage to reputation, suspension of operation and other penalties."

SEASONALITY

Our Directors considered that, and as confirmed by Frost & Sullivan, our gold mining and other mineral businesses are generally subject to any seasonal fluctuations. Based on our past practice, it is possible that our operation would be impacted by the rainy season. During the rainy season, which generally occurs in the third quarter of the year, the continuous rainfall would block our heavy machinery and equipment from accessing our orebodies. Moreover, our regular maintenance sessions are usually scheduled around the holidays, which might lead slight fluctuation in our production volume.

EFFECTS OF THE COVID-19 OUTBREAK

In 2020, outbreak of the COVID-19 in the PRC and around the globe led to an international public health crisis and, as a result, the global economy in general were materially and adversely affected. Due to the imposition of strict travel restrictions and controls in major cities to combat the transmission of the COVID-19, there was a significant decrease in international commercial activities and business transactions.

Given this unprecedented global health crisis, the Group's business operations were briefly impacted by the outbreak in early 2020 due to social and work gatherings, mandatory quarantine requirements and suspended public transportation in certain areas in China, Laos and Ghana. As some of the Group's employees had to work from home, the operations that required onsite service were be interrupted to a limited extent. However, we resumed normal business operations after the initial disruptions in early 2020. In addition, China experienced widespread COVID-19 resurgence in late 2022 and early 2023, but the emergency measures taken by the Chinese government quickly brought the situation under control. Despite the significance of the pandemic, COVID-19 did not have any material adverse impact on our business operation or key operating performance during the Track Record Period.

INSURANCE

We carry insurance covering risks in relation to safety production obligations. We also carry insurance for loss of and damages to our various machinery, equipment and inventories. In addition, we maintain social insurance for our PRC employees, which includes work accident insurance. We also maintain additional accident insurance for our employees engaged in mining activities. In line with industry practice, we generally do not carry any business interruptions or litigation insurance. We consider our insurance coverage to be adequate for the needs of our business operations and in line with the industry norm and the relevant laws and regulations in the PRC. In Laos and Ghana, we maintain insurance in accordance with the laws and regulations of Laos and Ghana, respectively. For instance, the tailings facility of the Wassa Gold Mine is insured as part of our property all risk, machinery breakdown and business interruption insurance.

During the Track Record Period, we did not make any material insurance claims in relation to our business.

However, should any significant uninsured damages to any of our properties, inventories or other assets or liabilities claims against us occur, our business, financial condition and results of operations may be adversely affected. For details, see "Risk Factors — Risks relating to Our Business and Industry — Our insurance coverage may be inadequate to satisfy potential claims and fluctuations in insurance cost and availability could adversely affect our business, financial condition and results of operations."

PROPERTIES

Our headquarters is located at No. 7, Xiaojingjia, Wanfeng Road, Fengtai District, Beijing (北京市豐台區萬豐路小井甲七號). As of the Latest Practicable Date, our various businesses in the PRC were located in Inner Mongolia Autonomous Region, Liaoning Province, Jilin Province, Yunnan Province and Anhui Province. As of the same date, we also held properties located in Laos and in Ghana.

As of March 31, 2024, none of the properties held or leased by us had a carrying amount of 15% or more of our consolidated total assets. Therefore, according to Chapter 5 of the Listing Rules and section 6(2) of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Cap. 32L of the Laws of Hong Kong), this document is exempted from compliance with the requirements of section 342(1)(b) of the Companies (Winding Up and Miscellaneous Provisions) Ordinance in relation to paragraph 34(2) of the Third Schedule to the Companies (Winding Up and Miscellaneous Provisions) Ordinance which requires a valuation report with respect to all our interests in land or buildings.

For details of the relevant risks, see "Risk Factors — Risks Relating to Our Business and Industry — We have not obtained title certificates for some of our properties and some of our lessors may lack title certificates for properties leased to us, which could materially and adversely affect our right to use such properties."

PRC Properties

We own and lease properties in the PRC for mining, industrial, business and office purposes. As of the Latest Practicable Date, (i) we owned 50 parcels of land with an aggregate site area of approximately 1,544,170.7 m^2; (ii) we leased 10 parcels of land with an aggregate site area of approximately 803,665.5 m^2; (iii) we owned 253 buildings with an aggregate gross floor area of 161,180.4 m^2; (iv) we leased three buildings with an aggregate gross floor area of 2,422.3 m^2; and (v) we leased 26 working seats.

Properties Located in Laos

We lease properties in Laos for mining, processing and support purposes. We have entered into commercial leasing agreements for our offices. Moreover, we lease other buildings, primary transportation equipment, machineries and other assets for our mining operations in Laos. We did not hold any land use right certificate over land in Laos as of the Latest Practicable Date.

Properties Located in Ghana

We own and lease properties in Ghana for mining, business and office purposes. As of the Latest Practicable Date, (i) we owned 75 parcels of land, with an aggregate gross floor area of approximately 1,169.22 m^2; and (ii) we leased one parcel of land, with an aggregate gross floor area of approximately 1,708 m^2.

LICENSES AND PERMITS

In addition to mining and exploration permits, we are required to obtain various licenses, permits and certifications for our operations in the PRC, Laos and Ghana. For example, our PRC operations require, among others, work safety permit, pollution discharge permit, explosion operation license, safety standardization certificate, hazardous waste operation license and forest land use permit. Our Laos operations require, among others, gold-copper ore processing plant business license and special radio equipment use license. Our Ghana operations require, among others, forest entry permit, fire certificates, water use permit, explosives permit and environmental certificate.

As advised by our legal advisers in the relevant jurisdictions, during the Track Record Period and as of the Latest Practicable Date, we believe that we have obtained the requisite licenses, permits and certificates required by the relevant laws and regulations for our current operations in all material aspects, other than the mining and exploration permits being renewed.

For more details, please see "— Our Gold Production Business in China — Mining Licenses and Exploration Permits", "— Our Gold Production Business in Laos — Mining Licenses and Exploration Permits", "— Our Gold Production Business in Ghana — Mining Licenses and Exploration Permits", "— Our Other Metal Production Business — Our Other Mineral Resources Business in China — Mining Licenses and Exploration Permits", and "— Our Other Mineral Resources Business — Our Copper Cathodes Business in Laos — Mining Licenses and Exploration Permits."

LEGAL PROCEEDINGS AND NON-COMPLIANCES

Legal Proceedings

During the Track Record Period and up to the Latest Practicable Date, we had not been a party to, and were not aware of any threat of, any material legal, arbitral or administrative proceeding which, in our opinion, would likely have a material and adverse effect on our business, financial condition or results of operations. We may from time to time become a party to various legal, arbitral or administrative proceedings arising in the ordinary course of our business.

Legal Compliance

We primarily operate in China, Laos and Ghana and our business is regulated and supervised under different regulatory environments. We are subject to various regulatory requirements and guidelines issued by the regulatory authorities in the jurisdictions in which we operate. We aim to monitor regulatory environments and adopt adequate internal procedures and guidelines to manage our operations in order to avoid potential non-compliance or misconduct.

During the Track Record Period and up to the Latest Practicable Date, we had not been and were not involved in any material non-compliance incidents that have led to fines, enforcement actions or other penalties that could, individually or in the aggregate, have a material adverse effect on our business, financial condition and results of operations. Our PRC Legal Advisor advised that we have complied with the relevant PRC laws and regulations in all material respects. Our Laos Legal Advisor advised us that we have complied with the relevant Laos laws and regulations in all material respects. Our Ghana Legal Advisor has advised us that we have complied with the relevant Ghana laws and regulations in all material respects.

RISK MANAGEMENT AND INTERNAL CONTROL MEASURES

We are subject to various risks relating to our operations, please see "Risk Factors — Risks Relating to Our Business and Industry — Our risk management and internal control systems may not fully protect us against various risks inherent in our business" for details.

As a joint stock company incorporated in the PRC with our A shares listed on the Shanghai Stock Exchange, we maintain a centralized management and control in the PRC. The decision-making processes, and the coordination and management of the implementation of the corporate matters are conducted by our Directors and management team from its PRC headquarters. The business activities of our Group's subsidiaries in the PRC, Laos and Ghana are managed, monitored, and approved/disapproved by the Company from its PRC headquarters. Through our Group's centralized management system, our Directors and senior management have full and timely access to books and records regarding the Group's operations outside of the PRC. The principal books and records of our Company are also located and maintained in the PRC.

Even though Laos has been proactively applied to become an associate member of the IOSCO, currently it is still not a member of IOSCO or a signatory to the IOSCO MMOU, which may present certain difficulties for the Hong Kong regulators to seek regulatory assistance and information from the statutory securities regulator in Laos on a readily available base. We would spare no effort in taking actions in order to mitigate such enforcement risk so that the Hong Kong regulators can obtain information as to our operations in Laos as and when necessary and in a timely manner.

Please see "Risk Factors — Risks Relating to Our Business and Industry — It may be difficult for the Hong Kong regulators to obtain information or call for regulatory assistance in Laos where circumstances necessitate in the course of overseeing us as a listed company by the regulations in Hong Kong." and "Directors, Supervisors and Senior Management — Corporate Governance" for details.

Our management has designed and implemented risk management policies to address various potential risks we have identified in relation to our operations, including financial risks and corporate governance risks. Our risk management policy sets forth procedures to identify, analyze, mitigate and monitor the relevant risks. We are dedicated to establishing a comprehensive risk management system which operates effectively and is suitable for our long-term business development.

In addition, we have adopted internal control policies and procedures and we plan to continuously monitor and improve our management procedures to ensure the effective operation of those internal controls are in line with the growth of our business and good corporate governance practice. In order to continuously improve the standards of our internal control, we have adopted the following measures:

(i) we have engaged external legal advisors to provide timely legal advice to our Board and other relevant personnel on the applicable laws, rules and regulations concerning our operations;

(ii) we have appointed five independent Directors to provide independent view, monitoring and advice to our Group;

(iii) our independent Directors continuously provide an independent review of the effectiveness of the financial reporting process, internal control and risk management system of our Group and oversee the audit process and performs other duties and responsibilities as assigned by the Board; and

(iv) our Directors have attended, and will continue to undertake, relevant training conducted by our legal advisers on the ongoing obligations, duties and responsibilities of directors of publicly listed companies under applicable laws and regulations.

Our Directors are of the view that we have taken all reasonable steps to establish a proper internal control system. As such, our Directors are of the view, that our internal control measures are adequate and effective.

OUR SINGLE LARGEST SHAREHOLDER GROUP

As of the Latest Practicable Date, Ms. Li and Hanfeng Zhongxing directly held 190,410,595 and 51,515,151 A Shares, accounting for approximately 11.44% and 3.10% of the issued share capital of our Company, respectively. Meanwhile, Ms. Li is the sole limited partner of Hanfeng Zhongxing accounting for approximately 99.00% of the committed capital contribution of Hanfeng Zhongxing. Accordingly, pursuant to the Hong Kong Listing Rules and Chapter 1.1C of the Guide, Ms. Li and Hanfeng are regarded as the Single Largest Shareholder Group of our Company.

Accordingly, the Single Largest Shareholder Group was entitled to exercise voting rights attached to the 241,925,746 A Shares, representing approximately 14.54% of the total issued share capital of our Company as of the Latest Practicable Date. Immediately following the completion of the [**REDACTED**], the Single Largest Shareholder Group will be interested in approximately [**REDACTED**]% of our total share capital (assuming the [**REDACTED**] is not exercised) or approximately [**REDACTED**]% of our total share capital (assuming the [**REDACTED**] is exercised in full).

NO COMPETITION AND CLEAR DELINEATION OF BUSINESS

Each member of the Single Largest Shareholder Group confirmed that, as of the Latest Practicable Date, she/it did not have any interest in any business, other than our business, which compete, or is likely to compete, either directly or indirectly, with our business and would require disclosure under Rule 8.10 of the Hong Kong Listing Rules.

INDEPENDENCE FROM OUR SINGLE LARGEST SHAREHOLDER GROUP

Having considered the following factors, our Directors are satisfied that we are capable of carrying on our business independent from our Single Largest Shareholder Group after [**REDACTED**].

Management Independence

Our daily operational and management decisions are made collectively by our executive Directors and our senior management, with our Board having an overall supervision of our management. Our Board consists of four executive Directors, one non-executive Director and four independent non-executive Directors. We believe that our Directors and senior management can independently perform their duties in our Company and we can operate independently from our Single Largest Shareholder Group for the following reasons:

- each of our Directors is aware of his/her fiduciary duties as a director of our Company which requires, among other things, that he/she acts for the benefit and in the best interests of our Company and does not allow any conflict between his/her duties as a Director and his/her personal interest;

- in the event that there is a potential conflict of interest arising out of any transaction to be entered into between our Group and our Single Largest Shareholder Group or its associates, the interested Director(s), if any, shall abstain from voting at the relevant Board meetings of our Company in respect of such transactions and shall not be counted in the quorum;

- our Board has a balanced composition of executive Directors and independent non-executive Directors which ensures the independence of our Board in making decisions affecting our Company. Specifically, (a) our independent non-executive Directors are not associated with our Single Largest Shareholder Group or its associates; (b) our independent non-executive Directors account for over one-third of the Board; and (c) our independent non-executive Directors individually and collectively possess the requisite knowledge and experience as independent directors of listed companies and will be able to provide professional and experienced advice to our Company. Accordingly, our Directors believe that our independent non-executive Directors are able to bring impartial and sound judgment to the decision-making process of our Board and protect the interest of our Company and the Shareholders as a whole; and

- we will establish corporate governance measures and adopt sufficient and effective control mechanisms to manage conflicts of interest, if any, between our Group and our Single Largest Shareholder Group, which would support our independent management. See the paragraph headed "— Corporate Governance Measures" in this section below.

Having considered the above factors, our Directors are satisfied that our executive Directors and senior management are able to perform their managerial roles in our Company independently, and our Directors are of the view that we are capable of managing our business independently from our Single Largest Shareholder Group after [**REDACTED**].

Operational Independence

Our Group holds all the relevant material intellectual property rights, licenses, qualifications and permits required for conducting our Group's business. Our Group has sufficient capital, facilities and employees to operate our business independently from our Single Largest Shareholder Group and its close associates. We have our own accounting and financial departments, human resources and administration departments, and procurement, production and sales departments. We have also established a set of internal control procedures and adopted corporate governance practices to facilitate the effective operation of our business.

Our Group currently leases a 2,226 square metre office premises for use as our headquarters to maintain our daily business operations. The relevant lease and the property management services pertaining to our use of the headquarters are governed by the Property Lease Agreements and the Property Management Services Agreement, respectively, entered into between our Company and Beijing Eagleleap, which is held as to 99% equity interest by Hanfeng United, and which, in turn, is wholly owned by Ms. Li and thus an associate of Ms. Li, and constitute connected transactions of our Company. For details of the connected transactions, see the section headed "Connected Transactions" in this Document.

Our Directors believe that such connected transactions between Beijing Eagleleap and our Group will not give rise to any business independence or reliance issues due to the following reasons:

(a) the roles of our Company (as the lessee and the procurer of the Property Management Services under the Property Lease Agreements and the Property Management Services Agreement, respectively) and those of Beijing Eagleleap (as the lessor and the provider of the Property Management Services under the Property Lease Agreements and the Property Management Services Agreement, respectively) are complementary and beneficial to each other;

(b) the connected transactions are entered into in the ordinary and usual course of business of our Group and on an arm's length basis and on normal commercial terms. The connected transactions are based on pre-agreed pricing policies which ensure that the pricing is fair and reasonable, particularly the pricing terms are determined with reference to, among others, the prevailing market rates;

(c) given Beijing Eagleleap is the landlord of the office premises of our headquarters, it generally maintains better and more efficient communication and thorough understanding of the conditions of the Leased Premises and commercial needs of our Group, as compared to other services providers. Furthermore, any relocation of our headquarters office premises or change of the current arrangements under the connected transactions may cause unnecessary disruption to our administration and incur additional costs. Accordingly, our Directors consider that it would not be commercial sensible to discontinue the lease and procurement of the Property Management Services from Beijing Eagleleap; and

(d) the risk of Beijing Eagleleap terminating the connected transactions is remote as the parties under the Property Lease Agreements and the Property Management Services Agreement have limited termination rights and the termination would not be in the commercial interest of Beijing Eagleleap. In the unlikely event that Beijing Eagleleap ceases to lease the premises and/or provide the Property Management Services to us, our Directors believe that we will have sufficient time and resources to locate other comparable premises and/or service providers available in the market. Therefore, our Directors do not consider that such termination, if any, will cause a material adverse effect on our business.

Accordingly, we believe that we are capable of carrying on our business independently of our Single Largest Shareholder Group and its close associates. Our Directors are of the view that our Group will be able to operate independently from our Single Largest Shareholder Group and its close associates after [**REDACTED**].

Financial Independence

Our Group has an independent financial system. We make financial decisions according to our own business needs and neither our Single Largest Shareholder Group nor its close associates may intervene with our use of funds. We have opened accounts with banks independently and do not share any bank accounts with our Single Largest Shareholder Group or its close associates. We have established an independent finance department as well as implemented sound and independent audit, accounting and financial management systems. We have adequate internal resources and a credit profile to support our daily operations.

As of the Latest Practicable Date, there were no outstanding loans or guarantees provided by, or granted to, our Single Largest Shareholder Group or its close associates.

Based on the above, we are of the view that there is no financial dependence on our Single Largest Shareholder Group and its close associates.

CORPORATE GOVERNANCE MEASURES

Our Directors recognize the importance of good corporate governance to protect the interest of our Shareholders. We would adopt the following corporate governance measures to manage potential conflict of interests between our Group and our Single Largest Shareholder Group:

(a) where a general meeting is held for considering proposed transactions in which any member of our Single Largest Shareholder Group has a material interest, she/it shall abstain from voting on the relevant resolutions and shall not be counted in the quorum for the voting;

(b) where a Board meeting is held for the matters in which a Director has a material interest, such Director shall abstain from voting on the relevant resolutions and shall not be counted in the quorum for the voting;

(c) in the event that our independent non-executive Directors are requested to review any conflict of interest between our Group and any member of our Single Largest Shareholder Group, she/it shall provide the independent non-executive Directors with all necessary information and our Company shall disclose the decisions of the independent non-executive Directors either in its annual reports or by way of announcements;

(d) our Directors (including our independent non-executive Directors) will seek independent and professional opinions from external advisors at our Company's cost as and when appropriate in accordance with the Corporate Governance Code and Corporate Governance Report set out in Appendix C1 of the Hong Kong Listing Rules;

(e) any transactions between our Company and its connected persons shall be in compliance with the relevant requirements of Chapter 14A of the Hong Kong Listing Rules, including the announcement, annual reporting and independent Shareholders' approval requirements (if applicable) under the Hong Kong Listing Rules; and

(f) We have appointed Goldlink Capital (Corporate Finance) Limited as our compliance advisor, which will provide advice and guidance to us in respect of compliance with the applicable laws and the Hong Kong Listing Rules, including various requirements relating to directors' duties and corporate governance.

Based on above, our Directors are satisfied that sufficient corporate governance measures have been put in place to manage conflicts of interest between our Group and our Single Largest Shareholder Group and/or other Directors to protect minority Shareholders' rights after the [**REDACTED**].

OVERVIEW

Prior to the [**REDACTED**], our Group has entered into certain transactions with the following party which will, upon the [**REDACTED**], become a connected person of our Company. Details of such one-off connected transactions and continuing connected transaction of our Company following the [**REDACTED**] are set out below.

RELEVANT CONNECTED PERSON

Beijing Eagleleap is owned as to 99% equity interest by Hanfeng United, which in turn is wholly owned by Ms. Li, a member of our Single Largest Shareholder Group. Therefore, Beijing Eagleleap will become a connected person of our Company upon [**REDACTED**] pursuant to Chapter 14A of the Hong Kong Listing Rules.

ONE-OFF CONNECTED TRANSACTIONS

Property Lease Agreements

Description of the Transaction

Principal terms

Our Company entered into the 2022-2024 Property Lease Agreement with Beijing Eagleleap on January 1, 2022, pursuant to which Beijing Eagleleap agreed to lease to us the Leased Premises with a total gross floor area of approximately 2,226 square metres located at A7 Xiaojing, Wanfeng Road, Fengtai District, Beijing, the PRC (中國北京市豐台區萬豐路小井甲7號院) as the office premises of our headquarters in the PRC for a term of three years from January 1, 2022 to December 31, 2024. On August 20, 2024, our Company entered into the 2025-2026 Property Lease Agreement with Beijing Eagleleap for the lease of the Leased Premises for a term of two years from January 1, 2025 to December 31, 2026. Under the 2025-2026 Property Lease Agreement, our Company has the priority right to renew the lease upon notification of such request to Beijing Eagleleap 60 days prior to the expiry of the lease.

The Property Lease Agreements were entered into (i) in the ordinary and usual course of business of our Group; (ii) on arm's length basis; and (iii) on normal commercial terms with the rent being determined with reference to, among others, the leased area, geographical location and condition of the Leased Premises and the prevailing market rates for similar properties in the surrounding area.

Under the 2022-2024 Property Lease Agreement, the balance of the lease liabilities, being the present value of the lease payments recognized by our Group in relation to the Leased Premises according to IFRS16 as of March 31, 2024 amounted to approximately RMB4,435,000. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024, the value of the right-of-use assets acquired by us from Beijing Eagleleap were approximately nil, RMB13,070,000, nil and nil, respectively.

Under the 2025-2026 Property Lease Agreement, the balance of the lease liabilities and the value of the right-of-use assets acquired by us from Beijing Eagleleap according to IFRS16 as of the date of the agreement amounted to approximately RMB7,776,000, respectively.

Reasons for and benefits of the transaction

We have been using the Leased Premises during the Track Record Period. Any relocation of our headquarters may cause unnecessary disruption of our administration and incur additional costs. The continuation of such lease is cost efficient and is beneficial to our operations.

In light of the above, our Directors are of the view that the transactions under the Property Lease Agreements are fair and reasonable and in the best interest of our Group and the Shareholders as a whole.

Hong Kong Listing Rules Implication

In accordance with IFRS 16 "Leases", our Company recognized a right-of-use asset on its balance sheet in connection with the lease of the properties from Beijing Eagleleap. Therefore, the leases of the Leased Premises from Beijing Eagleleap under the Property Lease Agreements are regarded as acquisitions of capital asset and one-off connected transactions of our Company for the purposes of the Hong Kong Listing Rules. Accordingly, the reporting, announcement, annual review and independent Shareholders' approval requirements in Chapter 14A of the Hong Kong Listing Rules will not be applicable.

FULLY EXEMPT CONTINUING CONNECTED TRANSACTION

We have entered into the following continuing connected transaction which will be exempt from the annual review, reporting, announcement and independent Shareholders' approval requirements under Chapter 14A of the Hong Kong Listing Rules.

Property Management Services Agreement

Description of the Transaction

Principal terms

Our Company entered into the Property Management Services Agreement with Beijing Eagleleap on August 20, 2024, pursuant to which Beijing Eagleleap agreed to provide the Property Management Services to our Company for our use of the Leased Premises and to address the daily needs of our employees at the headquarters. The scope of services provided by Beijing Eagleleap comprise the following:

(i) Property-related services, including provision of utility (electricity), fire safety, cleaning and security services for the Leased Premises;

(ii) Conference services, including maintaining the conference rooms, reception and catering services at the conferences of our Company;

(iii) Car leasing, including provision of vehicles available for rental for business use by our employees; and

(iv) Other supporting services, including provision of staff dormitory, maintaining the staff canteen and conference meals preparation.

The term of the Property Management Services Agreement is two years from January 1, 2024 to December 31, 2025.

Pricing policy

The pricing of the Property Management Services under the Property Management Services Agreement shall be determined in accordance with the following principles:

(i) the prescribed price imposed by the national or local price administrative departments of the PRC (and in relation to the utility (electricity), that is charged in accordance with the pricing standard for Beijing electricity sales issued by the Beijing Municipal Commission of Development and Reform (北京市發展和改革委員會) from time to time on its website); or in the absence of which,

(ii) the market price upon negotiation between the parties. In determining the market price, both parties shall take into consideration, among others, the following key factors:

    (a) the prevailing market price charged by any third party providing a similar service, after making reference to at least two quotations from Independent Third Party service providers for similar services; and

    (b) in case where the same or similar services have been provided by Beijing Eagleleap to a third party, the minimum quotation offered by Beijing Eagleleap.

Reasons for and benefits of the transaction

Beijing Eagleleap has been providing the Property Management Services to us as ancillary services for the office use of the headquarters during the Track Record Period. Any change of the current arrangement may cause unnecessary disruption of our administration and incur additional costs. The continuation of such arrangement is cost efficient and is beneficial to our operations. See also the paragraph headed "— One-off Connected Transaction — Property Lease Agreements — Reasons for and benefits of the transaction" in this section for details.

Historical transaction amounts

The following table sets forth the historical transaction amounts incurred by our Company for the provision of the Property Management Services by Beijing Eagleleap during the Track Record Period:

Year ended December 31,			Three months ended March 31,
2021	**2022**	**2023**	**2024**
(RMB)			
376,000	908,000	2,147,000	331,000

Annual Caps

The following table sets forth the proposed annual caps for the provision of the Property Management Services during the Track Record Period:

Year ending December 31,	
2024	**2025**
(RMB)	
3,000,000	3,000,000

The proposed annual caps were determined based on, among others, (i) the comparable market prices charged by providers of similar property management services including the provision for cars for leasing and dormitory; and (ii) the estimated utility (electricity) costs with reference to the historical volume consumed by us.

Directors' confirmation

Our Directors (including our independent non-executive Directors) are of the view that (i) the Property Management Services Agreement was entered into in the ordinary and usual course of business of our Group, on arm's length basis and on normal commercial terms or better to us and are fair and reasonable and are in the interest of our Company and the Shareholders as a whole; and (ii) the proposed annual caps under the Property Management Services Agreement are fair and reasonable and in the interest of our Company and the Shareholders as a whole.

Hong Kong Listing Rules Implications

As each of the applicable percentage ratios (other than the profits ratio) is expected to be, on an annual basis, less than 0.1%, the transaction under the Property Management Services Agreement is exempt from the annual review, reporting, announcement and independent Shareholders' approval requirements under Chapter 14A of the Hong Kong Listing Rules.

BOARD OF DIRECTORS

Our Board currently consists of nine Directors, including four Executive Directors, one Non-executive Director and four Independent Non-executive Directors. The Directors are appointed for a term of three years and are eligible for re-election upon expiry of their term in office.

The following table sets out information in respect of the Directors of our Company.

Name	Age	Position for the Current Tenure	Date of Appointment as a Director	Date of Joining Our Group	Roles and Responsibility
Executive Directors					
Mr. Wang Jianhua (王建華)	68	Chairman of the Board and Executive Director	September 2018	September 2018	Overall strategic planning, business direction and operational management of our Group
Ms. Yang Yi-fang (楊宜方) (also known as Lydia Yang)	47	Executive Director and Chief Executive Officer	July 2022	April 2019	Overall execution of our development strategy, daily operation, business development and financial management of our Group
Mr. Lyu Xiaozhao (呂曉兆) (former name: Lu Xiaozhao)	61	Executive Director, Vice President and Chief Engineer	December 2012	December 2012	Overseeing the engineering and technical management and business development of our Group
Mr. Gao Bo (高波) .	55	Executive Director and Vice President	December 2012	December 2012	Overseeing the operations and management of the Sepon Gold, Copper and Rare Earth Mine
Non-executive Director					
Mr. Zhang Xudong (張旭東)	59	Non-executive Director	January 2022	February 2020	Providing guidance and advice to the Board on the corporate and business strategies and strategic investments

Name	Age	Position for the Current Tenure	Date of Appointment as a Director	Date of Joining Our Group	Roles and Responsibility
Independent Non-executive Directors					
Dr. Mao Jingwen (毛景文)	67	Independent Non-executive Director	January 2022	January 2022	Responsible for supervising and providing independent advice to the Board
Dr. Shen Zhengchang (沈政昌)	64	Independent Non-executive Director	January 2022	January 2022	Responsible for supervising and providing independent advice to the Board
Mr. Hu Nailian (胡乃連) (former name: 胡乃聯) . .	69	Independent Non-executive Director	January 2022	January 2022	Responsible for supervising and providing independent advice to the Board
Dr. Wong Yet Ping, Ambrose (黃一平)	45	Independent Non-executive Director	August 2024	August 2024	Responsible for supervising and providing independent advice to the Board

DIRECTORS

Executive Directors

Mr. Wang Jianhua (王建華), aged 68, is the Chairman of the Board and Executive Director of our Company. Chairman Wang is primarily responsible for the overall strategic planning, business direction, and operational management of our Company. Chairman Wang joined our Group in September 2018.

Chairman Wang has extensive experience in the mining industry and is one of the first generation of industry leaders advocating for eco-mining and large-scale mining in the PRC. Having proactively participated in various roles in the industry throughout his tenure, Chairman Wang has accumulated the wealth of experience and skills for the overall operational management and strategic planning to promote the growth of our Company. Upon joining our Group, Chairman Wang successively held leadership roles as the Director of our Company from September 2018 to December 2019, Chairman of the Board of our Company since December 2019, and Chief Executive Officer of our Company from January 2022 to December 2022, respectively. Prior to joining our Group, Chairman Wang served in key roles at numerous renowned mineral companies. Chairman Wang was the Chairman of the board of directors of Shandong Gold Group Company Limited (山東黃金集團有限公司) from February 2006 to March 2013. Chairman Wang has also been an Executive Director and President of Zijin Mining Group Company Limited (紫金礦業集團股份有限公司) ("**Zijin Mining**"), a company dually listed on the Main Board of the Hong Kong Stock Exchange (stock code: 2899) and

Shanghai Stock Exchange (stock code: 601899) from October 2013 to December 2016 and from June 2013 to December 2016, respectively. Chairman Wang also held the position of the Chairman of Yunan Baiyao Holdings Company Limited (雲南白藥控股有限公司) from April 2017 to May 2018.

Chairman Wang has been a forerunner for his technical achievements within the industry. In 2010, he brought Shandong Gold Group Company Limited to new heights of achieving an unprecedented drilling depth of over 4,000 metres within the nation. Further, Chairman Wang's vision for overseas expansion is exemplified by Zijin Mining's successful investment in the Kamoa-Kakula Copper Mine, a world-class and large-scale stratiform copper deposit in the Central African Copperbelt region, during his tenure.

Chairman Wang received a Master of Business Administration Degree from Nankai University in the PRC in December 2005. Chairman Wang also received a Master of Business Administration Degree from the China Europe International Business School in the PRC in October 2013. Chairman Wang obtained the qualification of a senior economist in 2001.

Ms. Yang Yi-fang (楊宜方) (also known as Lydia Yang), aged 47, is an Executive Director and the Chief Executive Officer of our Company. Ms. Yang is mainly responsible for overall execution of our development strategy, daily operation, business development and financial management of our Group. Ms. Yang joined our Group in April 2019.

Ms. Yang is an entrepreneur who embraces challenges and has nearly 20 years of experience in the global mining industry. Ms. Yang's attention to detail, prowess in skillful execution and wealth of expertise in strategic planning, corporate development, global mergers and acquisitions, management of overseas listed corporations and mine projects showcase an acute ability to generate value-generating solutions. Upon joining our Group, Ms. Yang has been serving as a Director of Chijin HK since April 2019. Ms. Yang also served as the Director and Chief Executive Officer of our Group from July 2022 and December 2022, respectively. Prior to joining our Group, Ms. Yang served as a Deputy General Manager of Gold Mountains (H.K.) International Mining Company Limited (金山(香港)國際礦業有限公司) and a Deputy General Manager of the International Department of Zijin Mining from July 2007 to September 2010. Ms. Yang first served as the Head of Business Development Department of CST Mining ("**CST Mining**"), a company previously listed on the Main Board of the Hong Kong Stock Exchange until December 2023 (stock code: 0985) from October 2010 to October 2011. She served as the Chief Executive Officer of CST Mining since September 2011 and concurrently served as an Executive Director of the company from October 2011 until her departure in January 2013. From May 2013 to April 2016, Ms. Yang served in the management positions in various companies of Zijin Mining, including as the Chairperson of Xiamen Zijin Tongguan Investment Development Company Limited (廈門紫金銅冠投資發展有限公司), the Director and General Manager of Gold Mountains International Mining Company Limited, and the assistant to the Chairman of Zijin Mining. During June 2018 to April 2020, Ms. Yang served as an Executive Director and President at Hengxing Gold Holding Company Limited (恆興黃金控股股份有限公司), a company previously listed on the Main Board of the Hong Kong Stock Exchange until February 2020 (stock code: 2303) until it was acquired by Shandong Gold for around HK$3 billion.

Furthermore, Ms. Yang has significant operational experience from managing mines, including, for example, mines in the PRC, and CST Mining's Lady Annie Copper Mine in Australia and Mina Justa Copper Project in Peru. Aside from her wealth of managerial and operational experience, Ms. Yang's significant international, transactional and capital markets experience include, for example, being a driving force in a series of major deals while at CST Mining and Zijin Mining, including CST Mining's sale of the Mina Justa Copper Project in Peru for USD505 million to a subsidiary of Minsur S.A. — one of the largest transactions in that year; Minsur was at the time the world's fourth largest tin producer and Peru's largest tin miner by tonnage.

Ms. Yang received a Bachelor of Arts degree from Tamkang University in Taiwan in June 2000.

Mr. Lyu Xiaozhao (吕曉兆) (former name: Lu Xiaozhao), aged 61, is an Executive Director, Vice President, and Chief Engineer of our Group. Mr. Lyu is responsible for overseeing the engineering and technical management and business development of our Group. Mr. Lyu joined our Group in December 2010.

After successfully leading our Company's Major Asset Restructuring in 2012, Mr. Lyu successively served as a Director and General Manager of Jilong Mining from December 2012 to August 2018, the Chairman of the Board and General Manager of our Company from December 2012 to February 2016, the Chairman of the Board of our Company from February 2016 to December 2019, the Deputy Chairman of the Board and Chief Executive Officer of our Group from December 2019 to January 2022 and the Co-chairman of the Board of our Company from January 2022 to September 2023, respectively. Prior to joining our group, Mr. Lyu successively served as a Deputy Party Secretary, Executive Director, Deputy General Manager, and a member of the strategic committee of Lingbao Gold Group Company Limited, a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 3330), from September 2002 to March 2011.

Mr. Lyu has since December 2019 served as a Vice President of the China Gold Association (中國黃金協會) Vice Director of the Mining Geology Professional Committee of the Geological Society of China (中國地質學會礦山地質專業委員會) since December 2011 and as member of the National Technical Committee on Gold of Standardization Administration of China (全國黃金標準化技術委員會) since May 2008.

Mr. Lyu completed the postgraduate course in political economics (政治經濟學專業研究生) from Shaanxi Normal University (陝西師範大學) in the PRC in July 2004 and the course on Business Management for Executives (工商管理總裁研修班) from the Tsinghua University Corporation Cooperation Committee (清華大學與企業合作委員會) in the PRC in September 2003, and a Master of Business Administration Degree from the University of Northern Virginia in the United States of America in December 2007. Mr. Lyu obtained qualification of a Senior Mining Engineer from the Sinosteel Corporation in August 2006, a Certified Senior Consultant from the Association for Science and Technology Consulting of Henan Province (河南省科技諮詢業協會) in June 2005, and a Certified CPM China Professional Manager from the Human Resources Development Association of China (中國人力資源開發研究會) in October 2010.

Mr. Gao Bo (高波), aged 55, is an Executive Director and Vice President of our Company. Mr. Gao is responsible for overseeing the operations and management of the Sepon Gold, Copper and Rare Earth Mine. Mr. Gao joined our Group in December 2012.

Mr. Gao worked as a Director and Deputy General Manager of Jilong Mining from December 2010 to August 2013. Mr. Gao was a Director and Deputy General Manager of our Company from December 2012 to February 2016 and served as a Director and General Manager of our Company from February 2016 to January 2020. Mr. Gao then was a Director and Executive President of our Company from January 2020 to January 2023, and a Director and Vice President of our Company from January 2023 onwards.

Mr. Gao received a Bachelor of Business Administration degree in the Northeastern University (東北大學) in the PRC by way of online learning in January 2019, and a Master of Business Administration Degree from the Jilin University (吉林大學) in the PRC in December 2011. Mr. Gao obtained the qualification of a senior economist from the Bureau of Human Resources and Social Security of Jilin Province (吉林省人力資源和社會保障廳) in January 2013.

Non-executive Director

Mr. Zhang Xudong (張旭東), aged 59, is currently a Non-executive Director of our Company. Mr. Zhang joined the Board in February 2020 as an Independent Director until January 2022.

Mr. Zhang, a distinguished leader with nearly 40 years of experience in the financial services industry, has served in a series of senior management roles at renowned global investment firms and listed companies in Hong Kong and other jurisdictions. Illustratively, Mr. Zhang was Global Partner and Head of Greater China Securities and was a member of the China Management Committee at Goldman Sachs from September 2009 to December 2012.

Earlier in Mr. Zhang's illustrious career he was a Private Placement Service Analyst in New England Mutual Life Insurance Company from October 1990 to June 1994. Subsequently, from July 1994 to September 1996, Mr. Zhang worked as Vice President of the Corporate Finance Department of BankBoston N.A. From September 1996 to July 1998, Mr. Zhang served as Managing Director of the Corporate Finance Department and Chief Financial Officer of Asia Pacific Region in Koch Industries, Inc.—one of the largest and most prominent private companies in the United States—where he helped the company expand its operations in Asia Pacific. From 1999 to 2007, Mr. Zhang was Chairman and CEO of Anjia Group/Shanghai Anjia Investment Management Co., Ltd, an investment advisory and asset management services firm. From March 2007 to August 2009, Mr. Zhang served as Managing Director and Head of the Institutional Client Group, Debt and Equity for China and Head of Global Markets Equity for China at Deutsche Bank AG, a German multi-national investment bank and financial services company which is dual-listed on the Frankfurt Stock Exchange (symbol: DBK) and the New York Stock Exchange (symbol: DB), in Hong Kong. From January 2017 to November 2022, Mr. Zhang served as an Independent Director of Ping An Securities Company Limited (平安證券股份有限公司), which is a part of the Ping An Group, a large integrated financial group in China. Furthermore, since September 2018 Mr. Zhang has been serving as Chairman and Chief Executive Officer of Hua Kong Tsing Jiao Information Science (Beijing) Company Limited (華控清交信息科技(北京)有限公司), a data science company established by Tsinghua University that focuses on the research, development and implementation of data joint computation security technologies, products and infrastructures based on modern cryptography.

In addition, Mr. Zhang has served in various positions of trust, including serving on the Advisory Board of Shanghai Jiao Tong University, Antai College of Economics and Management, was appointed an Advisor for the China Securities Regulation Committee in 2003, was engaged by China Development Bank as advisor of securitization in the year 2004.

Since February 2018, Mr. Zhang has been serving as an Independent Director of Lufax Holding Limited (陸金所控股公司), which is dual-listed on the New York Stock Exchange (symbol: LU) and on the Main Board of the Hong Kong Stock Exchange (stock code: 6623). Lufax Holding Limited is a leading financial service empowering institution for small and micro businesses in China and is an associate firm of the Ping An Group.

Mr. Zhang received his Master's Degree in Community Economic Development from Southern New Hampshire University (formerly known as New Hampshire College) in September 1990.

Independent Non-executive Directors

Dr. Mao Jingwen (毛景文), aged 67, is an Independent Non-executive Director of our Company in January 2022 and is responsible for supervising and providing independent advice to the Board. Dr. Mao joined our Group in January 2022 and is currently an academician at the Chinese Academy of Engineering (中國工程院) since November 2017.

Dr. Mao has dedicated his life to the study on mineral deposit model and metallogeny as well as mineral prospecting. Dr. Mao has made significant contributions to the breakthroughs in prospecting for concealed orebody in the PRC. Prior to joining our Group, Dr. Mao was the lecturer at the Department of Geological Exploration of Shanxi Mining Institute from 1978 to 1979. Dr. Mao then served successively as an Assistant Researcher, an Engineer and an Associate Researcher at the Institute of Mineral Resources under the Chinese Academy of Geological Sciences (中國地質科學院礦產資源研究所) from 1983 to 1992.

Dr. Mao has been serving as a researcher at the Institute of Mineral Resources under the Chinese Academy of Geological Sciences (中國地質科學院礦產資源研究所) since December 1992. Dr. Mao is also serving as the Independent Non-executive Director of Shenghe Resources Holding (盛和資源控股股份有限公司), a company listed on the Shanghai Stock Exchange (stock code: 600392) from April 2019 to December 2023, the Independent Non-executive Director of CITIC Metal Company Limited (中信金屬股份有限公司), a company listed on the Shanghai Stock Exchange (stock code: 601061) since July 2021, and the Independent Non-executive Director of Zijin Mining Group Company Limited.

Dr. Mao received a Bachelor's Degree in Mineral Deposits from Hebei GEO University (河北地質學院) in the PRC in 1978. Dr. Mao then received a Master's Degree in Mineral Deposits from the Chinese Academy of Geological Sciences (中國地質科學院研究生院) in 1982 in the PRC. Dr. Mao received a Doctorate Degree from the Graduate School of the Chinese Academy of Geological Sciences (中國地質科學院研究生院) in the PRC in 1988. Dr. Mao was awarded the Second Class Award of State Science and Technology Progress (國家科學技術進步二等獎) in 2008, Second Class Award of State Science and Technology Progress (國家科學技術進步二等獎) in 2012, Second Class Award of State Natural Science (國家自然科學二等獎) in 2016, and Second Class Award of State Natural Science (國家自然科學二等獎) in 2020.

Dr. Shen Zhengchang (沈政昌), aged 64, is an Independent Non-executive Director of our Company and is responsible for supervising and providing independent advice to the Board. Dr. Shen joined our Group in January 2022 and has since served as an academician at the Chinese Academy of Engineering (中國工程院).

Dr. Shen has over 40 years of experience engaging in technical research, design, and engineering of selection and metallurgical process technology. From August 1982 to July 2019, Dr. Shen held positions as an Assistant Engineer, Engineer, Senior Engineer, Director of the Flotation Division, and Deputy Chief Engineer of BGRIMM Technology Group Company Limited (北京礦冶研究總院). Dr. Shen has successively served as the Chief Expert and Chief Scientist of BGRIMM Technology Group Company Limited (礦冶科技集團有限公司) since August 2019.

Dr. Shen received a Bachelor's Degree in mining machinery from the Beijing Institute of Iron and Steel Engineering (北京鋼鐵學院) (currently known as the University of Science and Technology Beijing (北京科技大學)) in 1982 in the PRC. Dr. Shen then received a Master's Degree in mineral processing from Central South University of Technology (中南工業大學) in 1995 in the PRC. Dr. Shen received a Doctorate Degree from the University of Science and Technology Beijing (北京科技大學) in 2008 in the PRC. Dr. Shen was awarded the Third Class Award of State Technological Invention (國家技術發明獎三等獎) in 1995, Second Class Award of State Scientific and Technological Progress (國家科學技術進步獎二等獎) in 2000, Second Class Award of State Scientific and Technological Progress (國家科學技術進步獎二等獎) in 2001, and Second Class Award of State Scientific and Technological Progress (國家科學技術進步獎二等獎) in 2012.

Mr. Hu Nailian (胡乃連) (former name: 胡乃聯), aged 69, is an Independent Non-executive Director of our Group and is responsible for supervising and providing independent advice to the Board. Mr. Hu joined our Group in January 2022.

Mr. Hu is primarily engaged in teaching and researching within the realm of mining systems engineering, mine informationization and intelligent mines, mining technology and economics and others. Mr. Hu held academic positions as a Director of the Research Institute, head of the Department of Resource Engineering, and Deputy Dean of the School of Civil and Resource Engineering of the University of Science and Technology Beijing (北京科技大學) from 1996 to 2017, respectively.

Mr. Hu received a Bachelor's Degree in Mining Engineering and a Master's Degree in Engineering from the Beijing Institute of Iron and Steel Engineering in January 1982 and December 1985 in the PRC.

Dr. Wong Yet Ping, Ambrose (黃一平), aged 45, is an Independent Non-executive Director of our Group and is responsible for supervising and providing independent advice to the Board. Dr. Wong joined our Group in August 2024.

Dr. Wong has a strong expertise and experience in finance, audit and risk management. Dr. Wong was part of the Audit department at KPMG China from August 2002 to October 2007, before taking on the role of the Vice President of Risk Analysis, Commercial Business Division of the Hong Kong and Shanghai Banking Corporation Limited from November 2007 to May 2009. Subsequently, he served at the Standard Setting Department of the Hong Kong Institute of Certified Public Accountants from May 2009 to February 2015, holding the position of Associate Director at the time of his departure. He served at KPMG China from March 2015 to January 2020 and was the Director of its Quality and Risk Management Department when he left the firm. He then assumed the position of departmental director at a regulatory authority in Hong Kong from January 2020 until August 2023. Since October 2023, he has also been serving as the Principal of Linkpath CPA Limited.

At present, Dr. Wong is a certified public accountant and a Fellow Member of the Hong Kong Institute of Certified Public Accountants since July 2009 and March 2017 respectively, and a certified public accountant of CPA Australia since December 2005.

Dr. Wong received a Bachelor's Degree in commerce from the University of Melbourne in Australia in December 2001, a Doctorate Degree in Business Administration in the Hong Kong Polytechnic University in October 2023.

SUPERVISORY COMMITTEE

The PRC Company Law requires a joint stock limited company to establish a board of supervisors. Our Supervisory Committee currently consists of three supervisors, one of whom is the chairman of our Supervisory Committee. Each of the supervisors is appointed for a term of three years which is renewable upon re-election and re-appointment.

Pursuant to the Articles of Association, the functions and powers of the board of supervisors include, among other things, reviewing the financial management of our Company, supervising the performance of our Directors and senior management members, and monitoring as to whether they comply with the law, administrative stipulations and Articles of Association when performing their duties, requesting Directors and senior management members to rectify actions detrimental to our Company's interests. In addition, our board of supervisors is responsible for exercising other powers, functions, and duties in accordance with the Articles of Association, and all applicable laws and regulations.

The following table sets out information in respect of the Supervisors.

Name	Age	Position for the Current Tenure	Date of Appointment as a Supervisor	Date of Joining Our Group	Roles and Responsibility
Mr. Cheng Zhenlong (成振龍)	57	Chairman of the Supervisory Committee	January 2022	December 2012	Supervising the Board and daily operation of the Group
Mr. Ji Hongyong (季紅勇)	49	Supervisor	January 2022	April 2017	Supervising the Board and daily operation of the Group
Mr. Liu Fengwu (劉鳳伍)	49	Employee Representative Supervisor	January 2024	February 2017	Supervising the Board and daily operation of the Group

Mr. Cheng Zhenlong (成振龍), aged 57, has been a Supervisor of our Company since January 2022 and the Chairman of the Supervisory Committee of our Company since December 2022, respectively. Mr. Cheng is primarily responsible for supervising the Board and daily operation of the Group.

Mr. Cheng joined our Group in December 2012. Mr. Cheng served as Deputy General Manager and subsequently of General Manager of Jilong Mining from June 2005 to December 2022.

Mr. Cheng received a Bachelor's Degree in Mining Engineering from Shangdong Mining Institute (山東礦業學院) in July 1993. Mr. Cheng obtained qualification of Intermediate Mining Engineer from the Bureau of Human Resources and Social Security of Chifeng (赤峰市人力資源社會保障局) in December 2022.

Mr. Ji Hongyong (季紅勇), aged 49, has been a Supervisor of our Company since January 2022 and is responsible for supervising the Board and daily operation of the Group. In addition to a supervisorship held with our Company, he was the General Manager of Hanfeng Mining from January 2023 to January 2024 and became the General Manager of Huatai Mining.

Mr. Ji joined our group in April 2017. Upon joining our Group, Mr. Ji served as General Manager of Wulong Mining from April 2017 to December 2021. Mr. Ji also served as a Deputy Manager of the domestic mining department of our Company from July 2019 to January 2022. Mr. Ji served as General Manager of Hangfeng Mining from January 2023 to December 2023. Prior to joining our Group. Mr. Ji served as General Manager in Huinan Huibao Gold Mining Company Limited (輝南縣匯寶黃金礦業有限公司) from April 2013 to March 2017.

Mr. Ji received a Bachelor of Business Administration Degree from Beihua University (北華大學) in the PRC by way of online learning in July 2010. Mr. Ji obtained qualification of an Economist from the Ministry of Human Resources and Social Security of the PRC (中華人民共和國人力資源和社會保障部) in November 2013 and a Senior Mining Technician from the Ministry of Human Resources and Social Security of the PRC in September 2013.

Mr. Liu Fengwu (劉鳳伍), aged 49, has been an Employee Representative Supervisor of our Company since January 2024. In addition to a supervisorship held with our Company, Mr. Liu has been serving as the Deputy Head of the Environmental Protection Safety Department and the Ventilation Engineer of Jilong Mining since February 2017 upon joining our Group.

Mr. Liu completed a course in mining machinery (礦山機電) in Inner Mongolia University of Science & Technology Mining College (內蒙古科技大學煤炭學院 (formerly known as 內蒙古煤炭工業學校) in the PRC in 1993. Mr. Liu obtained qualification of an Intermediate Mining Engineer from the Personnel Department of the Inner Mongolia Autonomous Region in September 2004 and an Intermediate Electromechanical Engineer from Bureau of Human Resources and Social Security of Chifeng in November 2012.

SENIOR MANAGEMENT

Our senior management is responsible for your day-to-day management and business operation.

The following table sets forth the key information in respect of the senior management.

Name	Age	Position for the current tenure	Date of Appointment as Senior Management	Date of Joining Our Group	Roles and Responsibility
Ms. Yang Yi-fang (楊宜方) (also known as Lydia Yang)	47	Executive Director and Chief Executive Officer	July 2022	April 2019	Overall execution of our development strategy, daily operation, business development and financial management of our Group
Mr. Lyu Xiaozhao (呂曉兆) (former name: Lu Xiaozhao)	61	Executive Director, Vice President and Chief Engineer	January 2012	December 2012	Overseeing the engineering and technical management and business development of the Group
Mr. Gao Bo (高波) .	55	Executive Director and Vice President	December 2012	December 2012	Overseeing the operations and management of the Sepon Gold, Copper and Rare Earth Mine
Mr. Chen Zhiyong (陳志勇)	51	Vice President	January 2021	August 2018	Overseeing the governance and corporate affairs of Golden Star Resources and stakeholder relations and centralised procurement of GSWL
Mr. Wong Hok Bun Mario (黃學斌) . .	45	Vice President, Chief Financial Officer and Company Secretary	July 2023	July 2023	Overseeing the finance and accounting matters and financial reporting of our Group
Mr. Zhou Xinbing (周新兵)	48	Vice President	January 2023	December 2012	Overseeing the procurement, finance and human resources of, and supporting the mine clinic of, LXML
Mr. Dong Shubao (董淑寶)	41	Board Secretary	January 2022	December 2012	Overall information disclosure and PRC investor relations of our Group

For biographical details of Ms. Yang Yi-fang (楊宜方), Mr. Lyu Xiaozhao (呂曉兆) and Mr. Gao Bo (高波), see "— Board of Directors — Executive Directors" in this section. The details of each of the other senior management members are set out below:

Mr. Chen Zhiyong (陳志勇), aged 51, joined our Group in August 2018 and was appointed as the Vice President of our Company since September 2023. Mr. Chen is responsible for overseeing the governance and corporate affairs of Golden Star Resources and stakeholder relations and centralised procurement of GSWL.

Upon joining our Group, Mr. Chen has been serving as a Deputy General Manager of the international mining division of our Group and Director and Deputy General Manager of LXML from August 2018 to January 2021. Mr. Chen served as the Vice President of our Group from January 2021 to January 2022 and from January 2023 onwards. From January 2022 to September 2023, he served as our Director, and during the period from January 2022 to January 2023, he also served as our Executive President. Mr. Chen served as a Deputy General Manager of Soremi Investment Company Limited (索瑞米投資有限公司), a subordinary company of Zhongjin Gold Corp Limited (中金黃金股份有限公司) (a company listed on the Shanghai Stock Exchange (stock code: 600489)), from February 2014 to August 2018.

Mr. Chen received a Bachelor's Degree in Engineering from Hunan University (湖南大學) in 1996, and dual Master of Business Administration Degrees from Peking University in the PRC and National University of Singapore in Singapore in 2003.

Mr. Wong Hok Bun Mario (黃學斌), aged 45, joined our Group in July 2023 and was appointed as the Chief Financial Officer in July 2023 and the Vice President of our Company in September 2023. Upon Listing, Mr. Wong will also be the Company Secretary of our Company. Mr. Wong is primarily responsible for overseeing the finance and accounting matters and financial reporting of our Group.

Mr. Wong has 23 years of experience in auditing, accounting, financial management, and corporate finance. Prior to joining our Group, he worked at KPMG from August 2001 to August 2005 and from January 2006 to May 2008 with his last position being a Manager of the Audit Department. He then worked at Zijin Mining as a Deputy Manager of the Finance Department from September 2008 to December 2010 and served as the Financial Controller and the Company Secretary of its associated company Monterrico Metals Plc. He then served as the Group Financial Controller of CST Mining from December 2010 to July 2014. He also served consecutively as the Vice President from March 2015 to December 2015, the Company Secretary from July 2015 to August 2018, the Executive Director and the Chief Financial Officer from December 2015 to August 2018 of Theme International Holdings Limited (榮暉國際集團有限公司), a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 0990). Mr. Wong then served as the Chief Financial Officer and Company Secretary of Jinchuan Group International Resources Company Limited (金川集團國際資源有限公司), a company listed on the Main Board of the Hong Kong Stock Exchange (stock code: 2362), from November 2018 to July 2023 and September 2018 to July 2023, respectively.

Concurrently, Mr. Wong served as an Independent Non-executive Director of Good Resources Holdings Limited, a company previously listed on the Main Board of the Hong Kong Stock Exchange until May 2022 (stock code: 0109) from May 2017 to June 2022.

Mr. Wong received a Bachelor's Degree in Economics and Finance from the University of Hong Kong in November 2001. He has been a Fellow Member of the Hong Kong Institute of Certified Public Accountants since July 2005, a Chartered Financial Analyst since December 2008 and a Member of The Australasian Institute of Mining and Metallurgy since May 2015.

Mr. Zhou Xinbing (周新兵), aged 48, joined our Group in December 2012 and was appointed as the Vice President of our Company in January 2023. Mr. Zhou currently serves as Vice President of LXML, where he is responsible for overseeing the procurement, finance and human resources of, and supporting the mine clinic of, LXML at the PRC headquarters.

Mr, Zhou successively served as a Manager of the Securities and Legal Department of Jilong Mining, Manager of Legal Department and Representative of Securities Affairs of our Group from October 2010 to April 2013. Mr. Zhou then served as a Board Secretary of our Group from April 2013 to January 2022. Mr. Zhou then worked as an Executive President of our Group from January 2022 to January 2023.

Mr. Zhou received a Bachelor of Law Degree from Renmin University in the PRC in June 2021. Mr. Zhou obtained the qualifications to practice law from the Ministry of Justice in February 2008.

Mr. Dong Shubao (董淑寶), aged 41, joined our Group in December 2012 and was appointed as the Board Secretary of our Group in January 2022. Mr. Dong is responsible for overall information disclosure and PRC investor relations of our Group.

Mr. Dong worked in the Marketing Department and Securities and Legal Department of Jilong Mining from March 2012 to December 2012. Mr. Dong successively served as a staff member, Deputy Manager, and Manager of the Securities and Legal Department of our Group from December 2012 to September 2018. Mr. Dong then held the positions as a Manager of Securities and Legal Department and Representative of Securities Affairs of our Group from September 2018 to January 2022.

Mr. Dong received a Bachelor's Degree in Political Science and Public Administration Studies from Shandong University of Technology (山東理工大學) in the PRC in July 2005, and a Master's Degree in International Politics from Central China Normal University (華中師範大學) in the PRC in June 2009. Mr. Dong obtained the Board Secretary Qualification granted by the Shanghai Stock Exchange in September 2013 and the qualification of Mining Rights Valuer from the Mineral Resources/Reserves and Property Assessment Professional in the PRC from the Mining Rights Valuer Association in the PRC in March 2023.

INTERESTS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Save as disclosed above, (i) none of our Directors, Supervisors and members of senior management has been a director of any public company the securities of which are listed on any securities market in Hong Kong or overseas in the three years immediately preceding the date of this Document; (ii) none of our Directors has any interests in any business, which competes or is likely to compete, either directly or indirectly, with our business which would require disclosure under Rule 8.10 of the Hong Kong Listing Rules; and (iii) none of our Directors, Supervisors and members of the senior management is related to other Directors, Supervisors and members of the senior management.

Save as disclosed herein, to the best knowledge, information and belief of our Directors and Supervisors having made all reasonable enquiries, there was no other matter with respect to the appointment of our Directors and Supervisors that needs to be brought to the attention of the Shareholders and there was no information relating to our Directors and Supervisors that is required to be disclosed pursuant to Rule 13.51(2)(a) to (v) of the Hong Kong Listing Rules as of the Latest Practicable Date.

COMPANY SECRETARY

Mr. Wong Hok Bun Mario (黃學斌) will become the Company Secretary of our Company upon [**REDACTED**]. For his biographical details, see "Senior Management" in this section.

BOARD COMMITTEES

Our Board delegates certain responsibilities to various committees. In accordance with the relevant PRC laws and regulations and the Corporate Governance Code, Appendix C1 to the Hong Kong Listing Rules, our Company has formed four Board committees, namely the Strategy and Sustainability Committee, the Audit Committee, the Remuneration and Appraisal Committee and the Nomination Committee.

Strategy and Sustainability Committee

We have established a Strategy and Sustainability Committee which consists of Chairman Wang Jianhua, Ms. Yang Yi-fang, Mr. Lyu Xiaozhao, Mr. Zhang Xudong and Dr. Wong Yet Ping Ambrose, with Chairman Wang Jianhua being the Chairman of the Strategy and Sustainability Committee. The primary duties of the Strategy and Sustainability Committee include, but are not limited to, the following:

- conducting extensive research and making recommendations on the long-term strategic development plans of our Company, in particular, to enhance the Company's sustainability in areas of ESG;

- conducting research and providing recommendations on major investment activities and financing proposals that are subject to the approval by the Board in accordance with the Articles of Association of our Company;

- conducting extensive research and furnishing recommendations on major capital financing and asset management projects that are required to be approved by the Board as stipulated in the Articles of Association of our Company;

- conducting extensive research, evaluating and supplementing recommendations to pivotal ESG trends and associated risks and opportunities that our Company faces;

- overseeing the formulation and implementation of our Company's ESG objectives, among others, setting performance goals in respect of our Company's ESG management, tracking the progress towards the achievement of the goals and advising on the forthcoming measures to meet the goals; and

- dealing with other matters that are crucial to the development of our Company.

Audit Committee

We have established an Audit Committee with written terms of reference in compliance with Rule 3.21 of the Hong Kong Listing Rules and paragraph C.4 and paragraph D.3 of Part 2 of the Corporate Governance Code, Appendix C1 to the Hong Kong Listing Rules. The Audit Committee consists of three Directors, namely Mr. Zhang Xudong, Mr. Hu Nailian and Dr. Wong Yet Ping Ambrose, who holds the appropriate professional qualifications as required under Rules 3.10(2) and 3.21 of the Hong Kong Listing Rules. Dr. Wong Yet Ping Ambrose serves as the chairman of the Audit Committee. The primary duties of the Audit Committee include, but are not limited to, the following:

- proposing the appointment or change of external auditors to our Board, and reviewing the qualification, independence and performance of the external auditors;

- guiding and assessing internal audit work;

- evaluating the performance of the audit function and personnel;

- examining the authenticity of financial information of our Company, reviewing financial reports and statements of our Company and giving comments on relevant matters;

- guiding, reviewing and evaluating the effectiveness of risk management and internal control system;

- evaluating whether our Company has any major internal control defaults or deficiencies;

- reviewing results of internal investigations and responses from management in relation to any suspected dishonesty, non-compliances, or suspected violations of laws, rules and regulations;

- coordinating the communication among management, internal audit department, related departments and external audit agency; and

- dealing with other matters as required by laws, regulations, rules, Articles of our Company, terms of reference and applicable securities regulatory authorities, and other matters that are authorized by the Board.

Remuneration and Appraisal Committee

We have established a Remuneration and Appraisal Committee with written terms of reference in compliance with paragraph E.1 of Part 2 of the Corporate Governance Code, Appendix C1 to the Hong Kong Listing Rules. The Remuneration and Appraisal Committee consists of three Directors, namely Mr. Hu Nailian, Ms. Yang Yi-fang, Dr. Mao Jingwen and Dr. Shen Zhengchang. Mr. Hu Nailian serves as the chairman of the Remuneration and Appraisal Committee. The primary duties of the Remuneration and Appraisal Committee include, but are not limited to, the following:

- formulating the overall remuneration policy and structure of our Company's Directors, Supervisors and members of the senior management, formulating proper and transparent remuneration procedures, and making suggestions to our Board;

- formulating individual remuneration plans for Directors, Supervisors and members of the senior management in accordance with the terms of reference of the job responsibilities, the importance of their positions as well as the remuneration benchmarks for the relevant positions in other comparable companies;

- reviewing and approving remuneration proposals of members of our senior management in accordance with our Company's policies and objectives as approved by our Board from time to time;

- making recommendations to our Board on remuneration of our non-executive Directors (including independent non-executive Directors), Supervisors, advisors to the Board (if any) and committees of our Board;

- reviewing and approving compensation payable to our executive Directors, Supervisors and members of senior management for loss or termination of office or appointment, so as to ensure that such compensation is consistent with the terms of relevant contracts, and if such compensation is not determined in accordance with the relevant contract terms, compensation should be fair, reasonable and not excessive;

- examining the criteria of performance evaluation of Directors and the senior management of our Company, and conducting annual performance evaluation;

- supervising the implementation of the remuneration plan of the Company;

- reviewing and/or approving matters relating to share schemes under Chapter 17 of the Hong Kong Listing Rules; and

- dealing with other matters as required by laws, regulations, rules, Articles of our Company, terms of reference and applicable securities regulatory authorities, and other matters that are authorized by the Board.

Nomination Committee

We have established a Nomination Committee with written terms of reference in compliance with paragraph B.3 of Part 2 of the Corporate Governance Code, Appendix C1 to the Hong Kong Listing Rules. The Nomination Committee consists of three Directors, namely Mr. Hu Nailian, Mr. Lyu Xiaozhao, Dr. Shen Zhengchang and Dr. Wong Yet Ping Ambrose. Dr. Wong Yet Ping Ambrose serves as the chairman of the Nomination Committee. The primary duties of the Nomination Committee include, but are not limited to, the following:

- reviewing the structure, composition and diversity of our Board at least once a year with reference to our Company's business activities, scale of assets and shareholding structure, and making recommendations to our Board on any change in Board composition in accordance with our Company's strategies;

- making recommendations on the appointment and re-appointment of our Directors (in particular, the chairperson of our Board, and including our non-executive Directors and independent non-executive Directors) and our general manager;

- conducting extensive search and providing to our Board suitable candidates for Directors, general managers and other members of the senior management;

- evaluating the independence of our independent non-executive Directors, the performance of our Directors (including both executive and non-executive Directors) and whether our Directors have devoted sufficient time in performing their duties;

- developing corporate governance standards and procedures and monitoring the implementation of such standards and procedures, and making recommendations to our Board;

- formulating and evaluating our Board diversity policy, and making disclosures in the corporate governance report (which shall be included as part of our annual report) the relevant policies, including the nomination procedures adopted by the nomination committee and standards for the election of our Board members; and

- dealing with other matters as required by laws, regulations, rules, Articles of our Company, terms of reference and applicable securities regulatory authorities, and other matters that are authorized by the Board.

BOARD DIVERSITY POLICY

We are committed to promoting the culture of diversity in the Company. We have strived to promote diversity to the extent practicable by taking into consideration a number of factors in our corporate governance structure.

We have adopted the Board Diversity Policy which sets out the objective and approach to achieve and maintain diversity of our Board in order to enhance the effectiveness of our Board. Pursuant to the Board Diversity Policy, we seek to achieve Board diversity through the consideration of a number of factors, including but not limited to gender, age, race, cultural background, educational background, industry experience and professional experience. Our Directors have a balanced mix of knowledge and skills, including knowledge and experience in the areas of business management, mining and smelting, legal, economics, investment and accounting. Our independent non-executive Directors have solid experiences in the fields of mining, smelting and resources engineering, representing more than one-third of the members of our Board. Our Board Diversity Policy is well implemented as evidenced by the fact that there are Directors ranging from 45 years old to 69 years old and comprises one female Director and eight male Directors.

We will implement policies to ensure gender diversity when recruiting staff to develop a pipeline of female senior management and potential successors to the Board. We will strive to enhance our female representation and achieve appropriate balance of gender diversity with reference to the stakeholders' expectation and international and local recommended best practices. Furthermore, we will implement comprehensive programs aimed at identifying and training our female staff who display leadership and potential, with the goal of promoting them to the senior management or the Board.

Our Nomination Committee is responsible for ensuring the diversity of our Board members. After the [**REDACTED**], our Nomination Committee will review the Board Diversity Policy from time to time, develop and review measurable objectives for implementing the policy, and monitor the progress on achieving these measurable objectives to ensure its continued effectiveness. We will disclose in our corporate governance report about the implementation of the board diversity policy on an annual basis.

CONFIRMATION UNDER THE HONG KONG LISTING RULES

Each of our Directors has obtained the legal advice in accordance with Rule 3.09D of the Hong Kong Listing Rules from DLA Piper Hong Kong by August 2024 and that each of our Directors has confirmed he/she understood his/her obligations as a director of a listed issuer.

Further, each of our independent non-executive Directors has confirmed:

(a) his independence as regards each of the factors referred to in Rule 3.13(1) to (8) of the Hong Kong Listing Rules;

(b) he has no past or present financial or other interest in the business of our Group or any connection with any core connected person of our Company, if any; and

(c) that there are no other factors that may affect the independent non-executive Director's independence at the time of his appointment.

COMPENSATION OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

The Directors, Supervisors and senior management receive their remuneration in the form of Directors' or Supervisors' salary and allowances, contributions to our retirement benefit scheme, discretionary bonuses and other benefits in kind (if applicable).

For the three years ended December 31, 2023 and the three months ended March 31, 2024, the total remuneration paid to our then Directors amounted to approximately RMB26.89 million, RMB20.34 million, RMB20.95 million, and RMB3.51 million, respectively.

For the three years ended December 31, 2023 and the three months ended March 31, 2024, the total remuneration paid to our then Supervisors amounted to approximately RMB3.99 million, RMB2.24 million, RMB1.56 million, and RMB0.26 million, respectively.

Under the arrangement currently in force, we estimate the total compensation before taxation to be accrued to our Directors and our Supervisors in kind for their service for the year ending December 31, 2024 to be approximately RMB17.07 million. The actual remuneration of Directors and Supervisors in 2024 may be different from the expected remuneration.

For the three years ended December 31, 2023 and the three months ended March 31, 2024, the total emoluments paid to the five highest paid individuals (including Directors and Supervisors) by our Group amounted to approximately RMB19,575,800, RMB15,898,000, RMB17,396,772, and RMB3,733,600, respectively.

For the three years ended December 31, 2023 and the three months ended March 31, 2024, no fees were paid by our Group to any of the Directors, Supervisors or the five highest paid individuals as an inducement to join us or as compensation for loss of office.

During the Track Record Period, no remuneration was paid by the Company to the Directors, Supervisors or the five highest-paid individuals as an inducement to join or upon joining the Company. No compensation was paid to by the Company, or receivable by, the Directors or former Directors of our Company, Supervisors or former Supervisors or the five highest paid individuals for the loss of office as director or supervisor of any member of our Group or for loss of any other office in connection with the management of the affairs of any member of our Group.

Save as disclosed above, none of the Directors or Supervisors waived their remuneration during the relevant period. The remuneration of Directors, Supervisors and senior management is determined with reference to factors including operating results of our Company, market comparables and the achievement of major operating indicators of our Company.

EMPLOYEE STOCK OWNERSHIP PLANS

Our Company adopted the ESOPs to incentivize, among others, our Directors and senior management for their contribution to the Group and to attract, motivate, retain and reward suitable personnel in our Group. See paragraph headed "C. Further Information about our Directors, Supervisors and Substantial Shareholders — 4. Employee Stock Ownership Plans" in Appendix VII to this Document for details.

CORPORATE GOVERNANCE

Our Company aims to achieve high standards of corporate governance which are crucial to our development and safeguard the interests of our Shareholders. To accomplish this, we expect to comply with the Corporate Governance Code set out in Appendix C1 to the Hong Kong Listing Rules after the [**REDACTED**].

As a joint stock company incorporated in the PRC with our A shares listed on the Shanghai Stock Exchange, we maintain a centralized management and control in the PRC. The decision-making processes, and the coordination and management of the implementation of the corporate matters are conducted by our Directors and management team from its PRC headquarters. The business activities of our Group's subsidiaries in the PRC, Laos and Ghana are managed, monitored, and approved/disapproved by the Company from its PRC headquarters. Through our Group's centralized management system, our Directors and senior management have full and timely access to books and records regarding the Group's operations outside of the PRC. The principal books and records of our Company are also located and maintained in the PRC.

COMPLIANCE ADVISOR

We have appointed Goldlink Capital (Corporate Finance) Limited as our compliance advisor (the "**Compliance Advisor**") pursuant to Rule 3A.19 of the Hong Kong Listing Rules. The Compliance Advisor will provide us with guidance and advice as to compliance with the Hong Kong Listing Rules and other applicable laws, rules, codes and guidelines. Pursuant to Rule 3A.23 of the Hong Kong Listing Rules, the Compliance Advisor will advise our Company in certain circumstances including:

(a) before the publication of any regulatory announcement, circular or financial report;

(b) where a transaction, which might be a notifiable or connected transaction, is contemplated, including share issues and share repurchases;

(c) where we propose to use the [**REDACTED**] of the [**REDACTED**] in a manner different from that detailed in this Document or where our business activities, developments or results deviate from any forecast, estimate or other information in this Document; and

(d) where the Hong Kong Stock Exchange makes an inquiry to our Company regarding unusual movements in the [**REDACTED**] or [**REDACTED**] of its listed securities or any other matters in accordance with Rule 13.10 of the Hong Kong Listing Rules.

Pursuant to Rule 3A.24 of the Hong Kong Listing Rules, the Compliance Advisor will, on a timely basis, inform our Company of any amendment or supplement to the Hong Kong Listing Rules that are announced by the Hong Kong Stock Exchange. The Compliance Advisor will also inform our Company of any new or amended law, regulation or code in Hong Kong applicable to us, and advise us on the continuing requirements under the Hong Kong Listing Rules and applicable laws and regulations.

The term of the appointment will commence on the [**REDACTED**] and is expected to end on the date on which our Company complies with Rule 13.46 of the Hong Kong Listing Rules in respect of our financial results for the first full financial year commencing after the [**REDACTED**].

BEFORE THE [REDACTED]

As of the Latest Practicable Date, the registered capital of our Company was RMB1,663,911,378, comprising 1,663,911,378 A Shares of nominal value RMB1.00 each, all of which are listed on the Shanghai Stock Exchange.

Description of Shares	Number of Shares	Percentage of issued share capital
A Shares	1,663,911,378	100.00%
Total	1,663,911,378	100.00%

UPON COMPLETION OF THE [REDACTED]

Immediately following completion of the [**REDACTED**], assuming that the [**REDACTED**] is not exercised, the entire share capital of our Company would be as follows:

Description of Shares	Number of Shares	Approximate percentage of the enlarged issued share capital
A Shares	1,663,911,378	[**REDACTED**]%
H Shares issued pursuant to the [**REDACTED**]	[**REDACTED**]	[**REDACTED**]%
Total	[**REDACTED**]	100.00%

Immediately following completion of the [**REDACTED**] and assuming that the [**REDACTED**] is fully exercised, the entire share capital of our Company would be as follows:

Description of Shares	Number of Shares	Approximate percentage of the enlarged issued share capital
A Shares	1,663,911,378	[**REDACTED**]%
H Shares issued pursuant to the [**REDACTED**]	[**REDACTED**]	[**REDACTED**]%
Total	[**REDACTED**]	100.00%

OUR SHARES

The H Shares in issue upon completion of the [**REDACTED**] and A Shares, are ordinary shares in the registered share capital of our Company. Apart from certain qualified domestic institutional investors in the PRC, the qualified PRC investors under the Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect and other persons who are entitled to hold our H Shares pursuant to relevant PRC laws and regulations or upon approvals of any competent authorities, H Shares generally cannot be [**REDACTED**] for by or [**REDACTED**] between legal or natural PRC persons. A Shares can only be subscribed for by and traded between legal or natural persons of the PRC, qualified foreign institutional investors or qualified foreign strategic investors or the Hong Kong and overseas investors under the Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect. H Shares may only be subscribed for and traded in Hong Kong dollars. A Shares, on the other hand, may only be subscribed for and traded in Renminbi. A Shares and H Shares are regarded as one class of Shares under our Articles of Association.

RANKING

The differences between A Shares and H Shares, the provisions on class rights, the dispatch of notices and financial reports to Shareholders, dispute resolution, registration of Shares on different registers of shareholders, the method of Share transfer, appointment of dividend receiving agents and other matters are set out in our Articles of Association and summarized in the section headed "Summary of Articles of Association" in Appendix VI to this Document.

Except for the differences above, A Shares and H Shares will rank *pari passu* with each other in all other respects and, in particular, will rank equally for all dividends or distributions declared, paid or made after the date of this Document. All dividends in respect of the H Shares are to be calculated in Renminbi and paid by us in Hong Kong dollars whereas all dividends in respect of A Shares are to be paid by us in Renminbi. In addition to cash, dividends may be distributed in the form of Shares.

CONVERSION OF OUR A SHARES INTO H SHARES FOR [REDACTED] AND [REDACTED] ON THE HONG KONG STOCK EXCHANGE

A Shares and H Shares are generally neither interchangeable nor fungible, and the market prices of our A Shares and H Shares may be different after the [**REDACTED**]. In accordance with the Guidelines on Application for "Full Circulation" of Domestic Unlisted Shares of H-share Companies (H股公司境內未上市股份申請"全流通"業務指引) (the "**Full Circulation Guidelines**") published and implemented by the CSRC on November 14, 2019 and latest amended on August 10, 2023, domestic unlisted shares of H-share companies (including domestic unlisted shares held by domestic shareholders prior to the overseas listing, domestic unlisted shares further issued in the PRC after the overseas listing and unlisted shares held by foreign shareholders) could be [**REDACTED**] and [**REDACTED**] on the Hong Kong Stock Exchange after filing with the CSRC. The Full Circulation Guidelines are only applicable to

domestic companies listed on the Hong Kong Stock Exchange and are not applicable to companies dual listed in the PRC and on the Hong Kong Stock Exchange. As of the Latest Practicable Date, there are no relevant rules or guidelines from the CSRC providing that A shares holders may convert A shares held by them into H shares for [**REDACTED**] and [**REDACTED**] on the Hong Kong Stock Exchange.

[**REDACTED**]

SHAREHOLDERS' GENERAL MEETINGS

For details of circumstance under which our Shareholders' general meeting is required, see the section headed "Summary of Articles of Association" in Appendix VI to this Document.

As of the Latest Practicable Date, our share capital was RMB1,663,911,378 comprising 1,663,911,378 A Shares. The following persons directly or indirectly control, or are entitled to exercise, or control the exercise of, 5% or more of our A Shares as of the Latest Practicable Date:

LONG POSITIONS IN THE SHARES OF OUR COMPANY

Name of Shareholders	Nature of interest	Description of Shares	Number of Shares	Approximate percentage of interest in the total issued Share capital as of the Latest Practicable Date
Ms. Li[(1),(2)]	Beneficial owner	A Shares	190,410,595	11.44%
	Interest in controlled corporation	A Shares	51,515,151	3.10%

Notes:

(1) As of the Latest Practicable Date, Ms. Li pledged 44,611,000 A Shares, representing approximately 2.68% of our Company's total issued share capital, to a PRC licensed financial institution for her personal financing purpose.

(2) Ms. Li the sole limited partner of Hanfeng Zhongxing accounting for approximately 99.00% of the committed capital contribution of Hanfeng Zhongxing. Accordingly, Ms. Li is deemed to be interested in the 51,515,151 A Shares held by Hanfeng Zhongxing. Meanwhile, as of the Latest Practicable Date, Hanfeng Zhongxing pledged 27,533,040 A Shares, accounting for approximately 1.65% of our Company's total issued share capital, to a PRC licensed financial institution for Ms. Li's personal financing purposes.

Immediately following the completion of the [**REDACTED**]:

- assuming the [**REDACTED**] is not exercised, our share capital will comprise 1,663,911,378 A Shares and [**REDACTED**] H Shares representing [**REDACTED**]% and [**REDACTED**]% of the total share capital of our Company, respectively; and

- assuming the [**REDACTED**] is fully exercised, our share capital will comprise 1,663,911,378 A Shares and [**REDACTED**] H Shares, representing [**REDACTED**]% and [**REDACTED**]% of the total share capital of our Company, respectively.

So far as our Directors are aware, immediately following the completion of the [**REDACTED**] (and the [**REDACTED**] of any additional H Shares which may be [**REDACTED**] pursuant to the [**REDACTED**]), the following persons will have an interest or short position in our Shares or underlying Shares of our Company which would be required to be disclosed to our Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or will, directly or indirectly, be interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of our Company:

LONG POSITIONS IN THE SHARES OF OUR COMPANY

			Immediately following the completion of the [REDACTED] (assuming the [REDACTED] is not exercised)		
Shareholders	**Nature of Interest**	**Description of Shares**	**Number of Shares**	**Approximate percentage of interest in the A Shares**	**Approximate percentage of interest in the total issued Share capital**
Ms. Li[(1)]	Beneficial owner	A Shares	[**REDACTED**]	[**REDACTED**]%	[**REDACTED**]%
	Interest in controlled corporation	A Shares	[**REDACTED**]	[**REDACTED**]%	[**REDACTED**]%

Note:

(1) Ms. Li is the sole limited partner of Hanfeng Zhongxing accounting for approximately 99.00% of the committed capital contribution of Hanfeng Zhongxing. Accordingly, Ms. Li is deemed to be interested in the 51,515,151 A Shares held by Hanfeng Zhongxing.

Save as disclosed herein, our Directors are not aware of any person who will, immediately following the [**REDACTED**] (and the [**REDACTED**] of any additional H Shares pursuant to the exercise of the [**REDACTED**]), have an interest or short position in our Shares or underlying Shares of our Company which would be required to be disclosed to our Company and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO or will, directly or indirectly, be interested in 10% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of our Company.

You should read the following discussion and analysis with our audited consolidated financial information as of and for the Track Record Period and Golden Star Resources' audited consolidated financial information from January 1, 2021 to January 31, 2022 (date of the acquisition), including the notes thereto, included in the Accountant's Report in Appendix IB to this Document ("Historical Financial Information"). The consolidated financial information has been prepared in accordance with IFRS.

Potential investors should read the whole Historical Financial Information and not rely merely on the information contained in this section. The following discussion and analysis contain forward-looking statements that reflect our current views with respect to future events and financial performance. These statements are based on our assumptions and analysis in light of our experience and perception of historical events, current conditions, expected future developments, and other factors we believe are appropriate under the circumstances. However, whether actual outcomes and developments will meet our expectations and predictions depends on a number of risks and uncertainties. Past performance is no guarantee of future results. In evaluating our business, you should carefully consider the information provided in this Document, including, but not limited to, the sections headed "Risk Factors" and "Business."

OVERVIEW

We are a fast-growing, international gold producer mainly engaged in the mining, processing and sale of gold, and we are committed to becoming "a prominent gold producer well recognized around the world."

Reaping the benefits of our strong corporate culture and management concept of "Mutual Prosperity and Development", we experienced the fastest growth among listed gold producers in China from 2021 to 2023 according to Frost & Sullivan, with a CAGR of 33.1% in gold production over that period. According to Frost & Sullivan, we are the gold company in China with the highest overseas exposure both in terms of overseas assets contribution as of December 31, 2023 and in terms of overseas revenue contribution for the year ended December 31, 2023.

KEY FACTORS AFFECTING OUR RESULTS OF OPERATIONS

Set forth below are certain key factors which have historically affected our results of operations and may continue to impact our results in the future:

Gold and Non-Ferrous Metal Prices and Demand in End Markets

During the Track Record Period, a substantial portion of our revenue was derived from the sale of gold. Our revenue derived from sales of gold was 78.5%, 84.6%, 87.6%, 91.5% and 90.7% in 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024. We also generated revenue from sales of non-ferrous metals for the same period. As such, fluctuations in gold and non-ferrous metal prices directly affect our results of operations. Please also see "Risk Factors — Changes in the market price for gold mining and other mineral resources, which in the past have experienced significant volatility, affect the profitability of our operations and the cash flows generated by those operations."

We sell gold produced in and outside of China to Chinese domestic and international gold refineries, the prices of which is referenced to the market prices quoted by the Shanghai Gold Exchange and the London Bullion Market Association, respectively. The spot price of gold on the Shanghai Gold Exchange closely follows international gold prices. The international price of gold is affected by numerous factors over which we have no control, such as, for example, general supply of and demand for gold, gold sales and purchases by central banks, macroeconomic factors such as inflation and interest rates, geopolitical conflicts (for instance, the Russo-Ukrainian War and Israeli-Palestinian conflict) and speculative trading activity. Historically, international gold prices have experienced significant volatility. For example, according to Frost & Sullivan, in 2021, as the global economy started to recover from the COVID-19 pandemic and interest in gold investments decreased, the growth of the global gold spot price slowed down. However, in 2022, the Russia-Ukraine conflict led to a significant increase in the global gold price. Since November 2022, the gold price has climbed again due to market turbulence, rising recession expectations, slower interest rate hike prospects, and more gold purchases from central banks which underpinned the gold demand. Moreover, the price of gold in China is affected by the Renminbi to U.S. dollar exchange rate. Historically, the gold price generally increases when inflation increases.

The market price of non-ferrous metals, such as copper, is largely subject to market forces, in particular, the supply and demand for such products. Price volatility of non-ferrous metals is also affected by the global and PRC economic cycles and fluctuations in the global currency markets. Any significant decrease in non-ferrous metal prices may materially and adversely affect our business, financial condition and results of operations.

Our revenue also tends to fluctuate with the demand for our products from the end markets. Our gold products are used for, amongst other things, central bank gold reserves, including the PBOC gold reserves, investment, jewelries, and other industrial purposes, and our non-ferrous metals are widely applied in fields such as infrastructure, architecture, and device management. Accordingly, demand for our gold and non-ferrous metals is indirectly affected by the growth and fluctuations of these end markets.

During the Track Record Period, we obtained short-term financing via gold leasing contracts. Meanwhile, we entered into futures contracts to hedge the risk of gold price fluctuations. Furthermore, during the Track Record Period, we entered into hedging transactions, such as gold forward sales contracts and forward exchange contracts, to secure our revenue in view of the volatility in gold prices.

Production Volume

Our results of operations are dependent on our production volume of gold and non-ferrous metals. In 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, in our gold production business in China we produced 67 koz, 75 koz, 107 koz, 18 koz, and 21 koz of gold, respectively. For the same period, in our gold production business in Laos we produced 193 koz, 200 koz, 193 koz, 50 koz, and 47 koz of gold, respectively. Also, in our gold production business in Ghana, which we acquired in January 2022, we produced 162 koz, 161 koz, 38 koz, and 46 koz of gold in 2022 and 2023 and the three months ended March 31, 2023 and 2024, respectively. For more operating data of our mines, please see "Business — Our Gold Production Business in China," "Business — Our Gold Production Business in Laos," and "Business — Our Gold Production Business in Ghana". The following table sets forth our gold production volume in relation to our gold mining businesses for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(Koz)		
Wulong Gold Mine (China)	28.0	43.8	59.2	9.2	12.4
Jilong Gold Mine (China)	34.3	29.5	44.7	8.5	7.5
Huatai Gold Mine (China)	4.9	1.3	0.5	0.5	–
Jintai Gold Mine (China)	–	–	2.4	–	2.2
Sepon Gold, Copper and Rare Earth Mine (Laos)	193.0	199.5	193.2	49.5	47.3
Wassa Gold Mine (Ghana)	–	162.1	161.5	38.1	45.9
Total	**260.3**	**436.2**	**461.5**	**105.8**	**115.3**

Our production volume is affected by various factors, including, for example, the capacity and efficiency of our processing operations and labor and third-party contractors. Actual production volume may vary from our production plan, which may cause our actual results of operations to vary from our projected results. This is due to a variety of reasons, including, among others, actual gold and non-ferrous metal ores mined varying from estimates in grade, tonnage, metallurgical and other characteristics, decreases in metal prices which may cause Reserves that are currently economical to become uneconomical, and natural phenomena such as weather conditions, floods, droughts and rock falls, many of which are beyond our control. Please also see "Risk Factors — Risks Relating to Our Business and Industry — We may not be able to meet our estimated gold and other minerals production volume".

Cost of Sales and Recovery Rate

Our cost of sales primarily comprises materials expense, labor expense, electricity fees, depreciation and amortization, and others. Materials expense primarily consists of explosive materials, diesel and other materials used in our operations. Labor expense refers to the salaries and benefits paid to personnel involved in our production activities. Depreciation and amortization costs are related to the depreciation of fixed assets and amortization of intangible assets. Certain major components of our operating cash costs, such as mining and processing related costs, directly relate to our mining and production volume, and increases in our mining and production volume will lead to increases in such costs. Additional capital expenditure will increase our depreciation and amortization costs, which will in turn increase our cost of sales. See "— Description of Key Statement of Profit or Loss Items — Cost of sales" and "Risk Factors — Risks Relating to Our Business and Industry — We may not be able to maintain the provision of adequate and uninterrupted supplies of electricity, water, materials and equipment at commercially acceptable prices, or at all".

Materials expense is the largest component of our cost of sales, which represented 39.5%, 47.5%, 41.2%, 44.9% and 38.5% of our total cost of sales for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, respectively. The increase of materials expense in 2022 was affected by: (i) our acquisition of Golden Star Resources in January 2022; and (ii) the increase in raw materials prices, affected by inflation and the COVID-19 pandemic. The decrease of materials expense in 2023 was affected by our cost reduction and cost control measures at our gold mines. For our operations in China, we procured most of the principal materials used in our production from local suppliers, including explosive materials, diesel, sodium cyanide, and cement. For our operations in Laos, we procured diesel fuel, electricity, and certain low-value consumables from local suppliers, while we procured industrial chemicals and reagents, explosive materials, equipment maintenance spare parts, and other consumables from overseas suppliers. For our operations in Ghana, we procured various materials, such as diesel oil, electricity, certain low-value consumables, bulk industrial chemicals and reagents, explosive materials, equipment maintenance spare parts, and other major consumables from domestic and overseas suppliers.

Our mining efficiency is also measured by recovery rate, in particular, the gold processing recovery rate in the PRC, Laos and Ghana. In 2023, the gold processing recovery rate of Wulong Gold Mine, Jilong Gold Mine, Huatai Gold Mine and Jintai Gold Mine reached 91.3%, 97.7%, 92.8% and 87.2%, respectively, and the gold processing recovery rate of the Wassa Gold Mine reached 95.5% for the same period. In the first quarter of 2024, Sepon Gold, Copper and Rare Earth Mine's gold recovery rate reached 65.3%. Our processing recovery rate is affected by both the grade and mineralization characteristic ores and the processing process. A lower recovery rate would result in increased cost of sales. For more on the recovery rates of our mines, please see "Business — Our Gold Production Business in China — Operation Performance", "Business — Our Gold Production Business in Laos — Operation Performance", and "Business — Our Gold Production Business in Ghana — Operation Performance". We aim to continuously improve our recovery rate, especially the gold recovery rate of the Sepon Gold, Copper and Rare Earth Mine, through technological improvements.

Acquisitions

We acquired Golden Star Resources and Xinhenghe Mining during the Track Record Period, which significantly improved our financial performances and results of operations in gold mining. For more details, please see "Business — Our Gold Production Business in China" and "Business — Our Gold Production Business in Ghana". We will continue to expand our footprints in the PRC and the global mining market. Please see "Business — Our Strategies" and "Future Plans and [**REDACTED**]" for more details about our expansion plans.

Our overall growth is driven by both ongoing organic growth and strategic acquisitions. We believe that our ability to successfully execute our acquisition strategies and integrate the acquired operations with our existing operations have contributed to our business and results of operations. Going forward, we will continue to consider strategic acquisitions. Our ability to identify quality acquisition targets, negotiate favorable terms, and integrate and optimize acquired operations will continue to impact our business, financial condition and results of operations.

Acquisition of Xinhenghe Mining

On December 30, 2022, we entered into an equity transfer agreement with Yunnan Yuanhao Mining Co., Ltd. (雲南源浩礦業有限公司), certain individual shareholders of Xinhenghe Mining and Xinhenghe Mining, pursuant to which we acquired a 51% equity interest in Xinhenghe Mining. The cash consideration was approximately RMB61.2 million in aggregate and determined by reference to the valuation of the assets of the acquired entity. Xinhenghe Mining holds a 90% equity interest in Jintai Mining, the core assets of which is the Xidengping Mine, a gold mine in Yunnan.

The acquisition was completed on January 9, 2023, upon which Xinhenghe Mining became our non-wholly owned subsidiary. All necessary approvals from the relevant authorities have been obtained. We began consolidating the profit and loss accounts of Xinhenghe Mining from January 9, 2023, and our results of operations for the Track Record Period reflected the consolidation of Xinhenghe Mining' results from January 9, 2023 to March 31, 2024.

Acquisition of Golden Star Resources

In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, for a consideration of in aggregate approximately US$291.0 million, which was fully settled in 2022. To finance the acquisition of Golden Star Resources, we incurred long-term borrowings of in aggregate RMB1,104.0 million at an interest rate of 4.95% per annum. The acquisition was completed on January 31, 2022, upon which Golden Star Resources became our non-wholly owned subsidiary. The acquisition had a significant impact on our results of operations in the financial year ended December 31, 2022.

We consolidated the accounts of Golden Star Resources from February 1, 2022, and our results of operations for the Track Record Period reflected the consolidation of Golden Star Resources' results from February 1, 2022 to March 31, 2024. Partially due to such acquisition and consolidation, the revenue of our gold mining business increased by 78.7% from RMB2,968.7 million for the year ended December 31, 2021 to RMB5,304.7 million for the year ended December 31, 2022. For the same reason, the cost of sales increased by 77.1% from RMB2,525.1 million for the year ended December 31, 2021 to RMB4,471.9 million for the year ended December 31, 2022. As a result of the foregoing, the gross profit of our gold mining business increased by 68.7% from RMB868.7 million for the year ended December 31, 2021 to RMB1,465.8 million for the year ended December 31, 2022. We recorded financial income of RMB20.4 million in 2021, but partially due to the acquisition we recorded finance costs of RMB176.5 million in 2022, among which our interest expenses increased from RMB14.2 million in 2021 to RMB176.5 million in 2022. Our income tax expense increased from RMB157.0 million for the year ended December 31, 2021 to RMB328.1 million for the year ended December 31, 2022. This was partially due to a higher effective income tax rate in Ghana and the losses incurred in the Ghana gold streaming business that was not tax deductible. For detailed analysis of the relevant year-on-year financials comparisons, see "— Year Ended December 31, 2022 Compared to Year Ended December 31, 2021" below.

Partially due to the acquisition: (i) our other intangible assets increased from RMB856.5 million as of December 31, 2021 to RMB6,562.7 million as of December 31, 2022 which mainly reflects the exploration and mining rights of Golden Star Resources; (ii) our property, plant and equipment increased from RMB3,159.7 million as of December 31, 2021 to RMB5,994.3 million as of December 31, 2022; and (iii) our total liabilities increased from RMB3,052.6 million as of December 31, 2021 to RMB10,136.0 million as of December 31, 2022.

The consolidated financial statements and the accompanying notes of Golden Star Resources from January 1, 2021 to January 31, 2022 (date of the acquisition) are set forth in Accountants' Report included in Appendix IB to this Document. For more details of Golden Star Resources' financial information, see "— Financial Information of Golden Star Resources".

Exchange Rates

The presentation currency of our consolidated financial statements presentation is Renminbi, which is also the Company's functional currency. However, procurement and sales activities of our two overseas subsidiaries, LXML and GSWL, are in U.S. dollars.

Major events and occurrences, domestic, international or economic in nature, can affect foreign exchange rates, and, consequently, our operations. These events include changes in inflation rates, interest rates, government debt, political stability, health crises, or economic events such as trade wars or recessions. Exchange rate fluctuations have affected our profitability and resulted in foreign currency exchange losses of our foreign currency-denominated assets and liabilities in the past. For the years ended December 31, 2021, 2022, and 2023 and the three months ended March 31, 2023 and 2024, we recognized foreign exchange gains of RMB86.2 million, RMB27.2 million, RMB20.2 million, exchange loss of RMB18.4 million and exchange gains of RMB15.0 million, respectively.

As a company with global operations, our future results of operations will continue to be affected by fluctuations in exchange rates. We monitor the scale of our foreign currency transactions and foreign currency assets and liabilities. Please also see "Risk Factors — Risks Relating to Our Business and Industry — Because gold is priced internationally in U.S. dollars and our operating costs and expenses are incurred in different currencies, including, but not limited to, Renminbi, Lao Kip and Ghanaian Cedi, we are subject to risks related to exchange rate fluctuations".

Expansion and Capital Expenditures

According to Frost & Sullivan, the gold industry is a capital-intensive sector that demands substantial investment in numerous equipment, land resources, and adherence to strict safety production and environmental protection standards. It necessitates the implementation of resource exploration, recycling processes, merger and acquisition endeavors to secure sustainable and abundant mine Reserves. Additionally, investing in advanced technology is crucial to address the challenges and intricacies associated with gold mining, stemming from declining gold grades and mining at greater depths. Our existing mines in the PRC and overseas are situated in favorable mineralization environments, showcasing significant exploration prospects across the majority of the mining regions, and we aim to further maximize the potential of our existing mines by continuously expanding production and continuously investing in new technologies to improve recovery rates. Besides, we may incur costs from potential acquisitions of high-quality gold assets for a robust and sustainable growth. For details, see "Business — Business strategies".

Our increasing capital expenditures during the Track Record Period reflected our expansion investments to fuel and support our expected future growth. Our capital expenditures amounted to approximately RMB1,559.9 million, RMB1,903.1 million, RMB1,487.4 million, RMB361.9 million and RMB260.5 million respectively, for the years ended 31 December 2021, 2022, and 2023 and the three months ended March 31, 2023 and 2024, representing approximately 41.2%, 30.4%, 20.6%, 22.8% and 14.1% of our revenue, respectively, for the same period. See "— Capital Expenditure" for a breakdown of our total capital expenditure during the Track Record Period.

The costs associated with our capital expenditure plans could have a significant impact on our financial condition and results of operations, particularly if we are unable to generate sufficient gold production and sales to recover our investment or generate a profit. Therefore, our management must consistently assess the necessary capital investments to achieve our sustainable production objectives and boost revenue growth, while taking into account competing cash needs and the subsequent increase in cost of sales due to higher depreciation costs. Furthermore, acquisitions and strategic investments bring about various risks, such as operational integration hurdles, challenges in assimilating cultures and personnel, diversion of management focus, risks associated with entering new markets, and the potential loss of key personnel from the acquired businesses. These factors could have a significant and adverse impact on our business, financial standing, and operational outcomes.

Government Control and Policies on the Gold Mining Industry

The local, provincial, and central authorities of the PRC, Laos, and Ghana each exercise a substantial degree of control over the gold and mining industry within their respective territories. Our operations in these countries are subject to a range of national laws, regulations, policies, standards, and requirements, particularly concerning exploration, mining, production, taxation, labor standards, occupational health and safety, waste treatment, environmental protection, and operational management.

In each of these jurisdictions, the respective governments hold full authority to grant, renew, and terminate the permits and licenses for exploration, mining, and production activities. While we anticipate being able to renew our licenses and permits in the PRC, Laos, and Ghana, any inability to do so for any reason could materially and adversely affect our business and results of operations.

SENSITIVITY ANALYSIS

Our results of operations is principally affected by gold price and sales volume. The tables below set forth the impact of fluctuation of gold price on our results of operations for the period indicated.

	For the year ended December 31, 2021							
	(Renminbi in millions, except for percentages)							
Hypothetical fluctuation of gold price/ sales volume	-20%	-15%	-10%	-5%	5%	10%	15%	20%
Change in gross profit	-594	-445	-297	-148	148	297	445	594
Change in gross profit margin	-12.4%	-8.9%	-5.7%	-2.7%	2.5%	4.9%	7.0%	9.1%
Change in profit from operation	-594	-445	-297	-148	148	297	445	594
Change in operating margin	-14.8%	-10.6%	-6.8%	-3.3%	3.0%	5.8%	8.4%	10.8%

	For the year ended December 31, 2022							
	(Renminbi in millions, except for percentages)							
Hypothetical fluctuation of gold price/ sales volume	-20%	-15%	-10%	-5%	5%	10%	15%	20%
Change in gross profit	-1,061	-796	-530	-265	265	530	796	1,061
Change in gross profit margin	-14.5%	-10.4%	-6.6%	-3.2%	2.9%	5.6%	8.0%	10.3%
Change in profit from operation	-1,061	-796	-530	-265	265	530	796	1,061
Change in operating margin	-17.7%	-12.6%	-8.0%	-3.8%	3.5%	6.8%	9.8%	12.6%

	For the year ended December 31, 2023							
	(Renminbi in millions, except for percentages)							
Hypothetical fluctuation of gold price/ sales volume	-20%	-15%	-10%	-5%	5%	10%	15%	20%
Change in gross profit	-1,264	-948	-632	-316	316	632	948	1,264
Change in gross profit margin	-14.3%	-10.2%	-6.5%	-3.1%	2.8%	5.4%	7.8%	10.0%
Change in profit from operation	-1,264	-948	-632	-316	316	632	948	1,264
Change in operating margin	-17.7%	-12.6%	-8.0%	-3.8%	3.5%	6.7%	9.7%	12.4%

	For the three months ended March 31, 2024							
	(Renminbi in millions, except for percentages)							
Hypothetical fluctuation of gold price/ sales volume	-20%	-15%	-10%	-5%	5%	10%	15%	20%
Change in gross profit	-336	-252	-168	-84	84	168	252	336
Change in gross profit margin	-14.8%	-10.5%	-6.6%	-3.2%	2.9%	5.5%	8.0%	10.2%
Change in profit from operation	-336	-252	-168	-84	84	168	252	336
Change in operating margin	-17.9%	-12.7%	-8.0%	-3.8%	3.5%	6.7%	9.7%	12.4%

BASIS OF PREPARATION

Our historical financial information has been prepared in accordance with IFRS, which comprise all standards and interpretations approved by the International Accounting Standards Board. All reporting standards under IFRS effective for the accounting period commencing from January 1, 2024, together with the relevant transitional provisions, have been adopted early by our Group in the preparation of the historical financial information throughout the relevant periods. The historical financial information has been prepared under the historical cost convention. All intra-group transactions and balances have been eliminated on consolidation.

Possible impact of amendments, new standards and interpretations issued but not yet effective for the Track Record Period

Our Group has not applied the following new and revised IFRS reporting standards (which have been issued but are not yet effective) in our audited consolidated financial statements:

Amendments to IAS 21	*Lack of Exchangeability*[1]
Amendments to IFRS 10 and IAS 28	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[2]
IFRS 18	*Presentation and Disclosure in Financial Statements*[3]
IFRS 19	*Subsidiaries without Public Accountability: Disclosures*[3]
Amendments to IFRS 9 and IFRS 7	*Amendments to the Classification and Measurement of Financial Instruments*[4]

Notes:

1. Effective for annual periods beginning on or after January 1, 2025.

2. No mandatory effective date yet determined but available for adoption.

3. Effective for annual periods beginning on or after January 1, 2027.

4. Effective for annual periods beginning on or after January 1, 2026.

We do not anticipate the application of the new and revised IFRS reporting standards to have a material impact on our Group's financial position and financial performance in the foreseeable future.

SIGNIFICANT ACCOUNTING POLICIES, SIGNIFICANT ACCOUNTING JUDGMENTS AND ESTIMATES

Some of our accounting policies require us to apply estimates and assumptions and complex judgments relating to accounting items. The estimates and assumptions we use and the judgments we make in applying our accounting policies have a significant impact on our financial position and operating results. Our management continually evaluates such estimates, assumptions and judgments based on past experience and other factors, including industry practices and expectations of future events that are believed to be reasonable under the circumstances. There has not been any material deviation between our management's estimates or assumptions and actual results, and we have not made any material changes to these estimates or assumptions during the Track Record Period. We do not expect any material changes in these estimates and assumptions in the foreseeable future.

When reviewing our consolidated financial statements, you should consider, amongst other things: (i) our significant accounting policies; (ii) the judgments and other uncertainties affecting the application of such policies; and (iii) the sensitivity of reported results to changes in conditions and assumptions. Our significant accounting policies, estimates and judgments, which are important for an understanding of our financial condition and results of operations, including any changes in accounting policy and disclosures, are set forth in detail in Notes 4 and 5 to the Accountants' Report in Appendix IA to this Document.

Revenue recognition

Revenue from contracts with customers

Revenue from contracts with customers is recognized when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group with a significant financial benefit for more than one year, revenue recognized under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

Sale of products

Revenue from the sale of products is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the products.

Metal streaming arrangement

There is a Metal Streaming Arrangement in GSR acquired by the Group in 2022. Under the business arrangement, GSR receives a payment in advance and the counterparty obtains a certain proportion of deliverable gold within the entire life of the designated mine. The counterparty is also required to make an additional payment based on a certain proportion of the market price when GSR delivers the goods within an agreed period in the future. The payment GSR receives in advance is considered to be part of the counterparty's prepayment for the future goods with uncertain but predictable quantity and is recognized as a contract liability upon receipt. Each unit of the delivered goods represents a separate performance obligation, and revenue is recognized at the point in time when control of the goods is transferred. Considering the timing of satisfaction of delivery obligations throughout the entire life of the mines, the contract liability above is considered to have a financing component. In addition, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mines, the management will estimate the change of total metal reserves and change of planned exploitation reserves on a regular basis and adjustments shall be made to the revenue and finance costs accordingly.

Variable consideration

In the Group's Metal Streaming Arrangement, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mine, the price allocated to goods delivered per unit is considered as variable consideration. When the estimated total metal reserves and planned exploitation reserves of the mine change, it is necessary to recalculate the price of goods delivered per unit, and in the period of changes occurred, adjust the revenue and finance costs recognized in the same period according to the updated price. The Group determines the best estimate of variable consideration by the expected value. The transaction price including variable consideration is

only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Contracts for the rendering of services

A contract for the rendering of services between the Group and the customer usually includes performance obligations of dismantling waste electrical and electronic products. The Group recognized the fund subsidy income, which was related to the dismantling volume, by multiplying the dismantling type and quantity of the scrapped electrical and electronic products by the corresponding fund subsidy price.

Revenue from other sources

Rental income is recognized on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are incurred.

Property, plant and equipment and depreciation

Property, plant and equipment are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalized in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognizes such parts as individual assets with specific useful lives and depreciates them accordingly.

Depending on the nature of the item of property, plant and equipment, depreciation is calculated on the straight-line basis to write off the cost of each asset to its residual value over its estimated useful life or it is calculated on the Units of Production ("UOP") basis to write off the cost of the asset proportionately to the extraction of the proven and probable ore reserves. The estimated useful lives and annual depreciation rates for the assets depreciated on the straight-line basis are as follows:

	Estimated useful lives	Annual depreciation rates
Buildings	20 years	4.75%
Machinery	5 to 10 years	9.50% to 19.00%
Mobile equipment	5 to 10 years	9.50% to 19.00%
Electronic equipment and others	3 to 5 years	19.00% to 31.67%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at the end of each of the Relevant Periods.

An item of property, plant and equipment including any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognized in the statement of profit or loss in the years/periods the asset is derecognized is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress is stated at cost less any impairment losses and is not depreciated. Cost comprises the direct costs of construction and capitalized borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Exploration and mining rights

Exploration and evaluation assets are stated at cost less impairment losses. Exploration and evaluation includes costs of geological prospecting for technical consultancy and costs of feasibility study for commercial development which incurred in the surroundings, outer ring and deep areas of the existing or externally acquired mineral properties, and costs of drilling, trench sampling and other associated activities. Such expenditures may be capitalized when the mineral properties are reasonably determined to be commercially available and recognized as intangible assets after obtaining mining rights or permits, which will be amortized under the units-of-production method. If any construction was abandoned in the development phase or belongs to the productive exploration, all costs shall be written off and recognized in profit or loss for the current period.

Impairment reviews of exploration and evaluation assets are undertaken if events or changes in circumstances indicate a potential impairment. The carrying value of exploration and evaluation assets is compared to the recoverable amount, which is the higher of value-in-use and the fair value less costs of disposal. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash-generating units. Exploration and evaluation assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Exploration rights are stated at cost less impairment losses. Exploration rights include the cost of acquiring exploration rights.

Mining rights are stated at cost less accumulated amortisation and any impairment losses. Mining rights include the cost of acquiring mining licences, exploration rights and exploration and evaluation assets upon determination that an exploration property is capable of commercial production, and the cost of acquiring interests in the mining reserves of existing mining properties. The mining rights are amortised in accordance with the production plans of the entities concerned and the proven and probable mineral reserves of the mines using the UOP method. Mining rights are written off to profit or loss if the mining property is abandoned.

Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined on the weighted average basis and, in the case of work in progress and finished goods, comprises direct materials, direct labor and an appropriate proportion of overheads. Net realizable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Provisions

A provision is recognized when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognized for a provision is the present value at the end of each of the Relevant Periods of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

Provisions for the Group's obligations for environmental rehabilitation and restoration of mines are based on estimates of required expenditure at the mines in accordance with the local rules and regulations where the mines are located. The Group estimates its liabilities for final reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash expenditure for the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of

money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset in the period in which the liability is incurred. The liability is accreted to the projected expenditure date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in the timing of the performance of reclamation activities), the revisions to the obligation and the asset are recognised at the appropriate discount rate.

Impairment of financial assets

The Group recognized an allowance for expected credit losses ("**ECLs**") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortized cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs;

Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs;

Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs.

Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

DESCRIPTION OF KEY STATEMENT OF PROFIT OR LOSS ITEMS

The following table sets forth a summary of our consolidated statements of profit or loss and other comprehensive income for the period indicated. Our historical results presented below are not necessarily indicative of the results that may be expected for any future period.

	Year Ended December 31,			Three months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Revenue	3,782,624	6,266,787	7,220,952	1,586,753	1,853,906
Cost of sales	(2,525,121)	(4,471,868)	(4,868,078)	(1,130,846)	(1,232,228)
Gross profit	**1,257,503**	**1,794,919**	**2,352,874**	**455,907**	**621,678**
Other income and gains	90,512	142,088	137,770	5,819	72,657
Selling and distribution expenses	(777)	(720)	(689)	(143)	(94)
Administrative expenses	(393,035)	(786,368)	(850,390)	(187,045)	(207,751)
Research and development expenses	(24,847)	(27,652)	(51,753)	(4,056)	(16,415)
Impairment losses on financial assets, net	(1,984)	(644)	(2,440)	(777)	1,472
Other expenses and losses	(142,760)	(119,022)	(173,501)	(61,934)	(71,659)
Finance costs	(14,226)	(176,485)	(215,026)	(44,690)	(54,264)
Share of (losses)/profits of associates	(11)	(4,104)	9,950	(3,671)	7,322
Profit before tax	**770,375**	**822,012**	**1,206,795**	**159,410**	**352,946**
Income tax expenses	(156,967)	(328,132)	(335,210)	(68,645)	(114,682)
Profit for the year/period	**613,408**	**493,880**	**871,585**	**90,765**	**238,264**
Attributable to:					
Owners of the parent	581,949	450,976	804,471	75,743	201,718
Non-controlling interests	31,459	42,904	67,114	15,022	36,546

Revenue

During the Track Record Period, we generated our revenue from gold mining, other mineral resources and other businesses. Please see "Business — Business Overview" for more details.

Revenue by Business Nature

The following table sets forth our revenue by business nature for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Gold mining	2,968,694	78.5%	5,304,729	84.6%	6,322,263	87.6%	1,452,086	91.5%	1,682,389	90.7%
Other mineral resources	551,278	14.6%	650,206	10.4%	495,752	6.9%	68,515	4.3%	104,444	5.6%
Others	262,652	6.9%	311,852	5.0%	402,937	5.5%	66,152	4.2%	67,073	3.7%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,586,753**	**100.0%**	**1,853,906**	**100.0%**

Revenue by Geographical Region

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
PRC	1,259,760	33.3%	1,477,471	23.5%	2,026,833	28.1%	305,245	19.2%	436,928	23.6%
Laos	2,522,864	66.7%	2,998,740	47.9%	3,054,614	42.3%	763,720	48.1%	787,600	42.5%
Ghana[1]	–	–	1,790,576	28.6%	2,139,505	29.6%	517,788	32.6%	629,378	33.9%
Total	**3,782,624**	**100.0%**	**6,266,787**	**100.0%**	**7,220,952**	**100.0%**	**1,586,753**	**100.0%**	**1,853,906**	**100.0%**

Note:

1. Our revenue in Ghana was generated from Golden Star Resources. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, the revenue of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see "— Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources."

In 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our sales volume of gold amounted to 251 koz, 447 koz, 466 koz, 113 koz and 116 koz, respectively. The increase was mainly attributable to the acquisition of Golden Star Resources in 2022 and the continued increase of gold production volume at both Sepon Gold, Copper and Rare Earth Mine and Wulong Gold Mine. For the same periods, average selling prices for our gold product was approximately RMB381 per gram, RMB383 per gram, RMB436 per gram, RMB409 per gram, and RMB467 per gram, respectively. We sell gold produced in- and outside of China at prices that move in line with the spot prices set by the Shanghai Gold Exchange and the London Bullion Market Association, respectively. The spot price of gold on the Shanghai Gold

Exchange closely follows international gold prices. Historically, international gold prices have experienced significant fluctuations. See "— Key Factors Affecting Our Results of Operations — Gold and Non-Ferrous Metal Prices and Demand in End Markets."

Sales Volume and Average Selling Price

The following table sets forth our sales volume and average selling price of gold mining business for the periods indicated.

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	Sales Vol.	Avg. Selling Price	Sales Vol.	Avg. Selling Price	Sales Vol.	Avg. Selling Price	Sales Vol.	Avg. Selling Price	Sales Vol.	Avg. Selling Price
	Ton.	*RMB/g*	*Ton.*	*RMB/g*	*Ton.*	*RMB/g*	*Ton.*	*RMB/g*	*Ton.*	*RMB/g*
Wulong Gold Mine	0.9	383.0	1.4	395.6	1.8	455.8	0.3	414.9	0.4	462.5
Jilong Gold Mine	1.1	371.4	0.9	397.3	1.4	455.8	0.3	431.1	0.2	495.9
Huatai Gold Mine	0.1	368.4	0.0	400.4	0.0	429.0	0.0	424.9	0.0	0.0
Jintai Gold Mine	0.0	0.0	0.0	0.0	0.1	470.3	0.0	0.0	0.1	488.4
PRC – Subtotal	**2.1**	**376.0**	**2.3**	**396.4**	**3.3**	**455.9**	**0.6**	**422.7**	**0.7**	**476.0**
Sepon Gold, Copper and Rare Earth Mine	5.7	382.5	6.7	389.3	6.0	443.1	1.6	416.3	1.5	474.2
Wassa Gold Mine	0.0	0.0	4.9	367.7	5.2	414.2	1.3	393.8	1.4	453.9
Overseas – Subtotal	**5.7**	**382.5**	**11.6**	**380.2**	**11.2**	**429.7**	**2.9**	**406.3**	**2.9**	**464.4**
Total	**7.8**	**380.8**	**13.9**	**382.9**	**14.5**	**435.7**	**3.5**	**408.9**	**3.6**	**466.7**

Cost of Sales

Our cost of sales primarily comprises materials expense, labor expense, electricity fees, depreciation and amortization, and others. Our cost of sales generally goes down and up in line with the decrease and increase in our revenue during the Track Record Period.

For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our cost of sales amounted to RMB2,525.1million, RMB4,471.9 million, RMB4,868.1 million, RMB1,130.8 million and RMB1,232.2 million respectively.

The following table sets forth a breakdown of our cost of sales by nature for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Materials expense	998,240	39.5%	2,122,635	47.5%	2,006,000	41.2%	508,187	44.9%	474,719	38.5%
Labor expense	398,270	15.8%	611,157	13.7%	690,984	14.2%	142,868	12.6%	183,899	14.9%
Electricity fees	151,639	6.0%	225,787	5.0%	352,709	7.2%	62,938	5.6%	80,812	6.6%
Depreciation and amortization	411,005	16.3%	1,033,836	23.1%	1,322,323	27.2%	288,406	25.5%	359,806	29.2%
Others	565,967	22.4%	478,453	10.7%	496,062	10.2%	128,447	11.4%	132,992	10.8%
Total	**2,525,121**	**100.0%**	**4,471,868**	**100.0%**	**4,868,078**	**100.0%**	**1,130,846**	**100.0%**	**1,232,228**	**100.0%**

The following table sets forth a breakdown of our cost of sales by business nature for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Gold mining	2,099,996	83.2%	3,838,923	85.8%	4,065,599	83.5%	1,020,721	90.3%	1,076,598	87.4%
Other mineral resources	215,467	8.5%	370,829	8.3%	430,841	8.9%	53,235	4.7%	92,931	7.5%
Others	209,658	8.3%	262,116	5.9%	371,638	7.6%	56,890	5.0%	62,699	5.1%
Total	**2,525,121**	**100.0%**	**4,471,868**	**100.0%**	**4,868,078**	**100.0%**	**1,130,846**	**100.0%**	**1,232,228**	**100.0%**

The following table sets forth a breakdown of our cost of sales by geographic region for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
PRC	667,950	26.5%	808,810	18.1%	994,926	20.4%	152,928	13.5%	200,597	16.3%
Laos	1,857,171	73.5%	2,446,054	54.7%	2,383,654	49.0%	621,796	55.0%	603,579	49.0%
Ghana[1]	–	–	1,217,004	27.2%	1,489,498	30.6%	356,122	31.5%	428,052	34.7%
Total	**2,525,121**	**100.0%**	**4,471,868**	**100.0%**	**4,868,078**	**100.0%**	**1,130,846**	**100.0%**	**1,232,228**	**100.0%**

Note:

1. Our cost of sales in Ghana was generated from Golden Star Resources. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, the cost of sales of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see *"— Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources"*.

Gross Profit and Gross Profit Margin

Our gross profit consists of revenue less cost of sales. Gross profit margin represents gross profit divided by total revenue, expressed as a percentage. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our gross profit amounted to RMB1,257.5 million, RMB1,794.9 million, RMB2,352.9 million, RMB455.9 million and RMB621.7 million respectively. The following table sets forth a breakdown of our gross profit and gross profit margin by business nature for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin
	(RMB'000, except percentages)									
							(unaudited)			
Gold mining	868,698	29.3%	1,465,806	27.6%	2,256,664	35.7%	431,365	29.7%	605,791	36.0%
Other mineral resources	335,811	60.9%	279,377	43.0%	64,911	13.1%	15,280	22.3%	11,513	11.0%
Others	52,994	20.2%	49,736	15.9%	31,299	7.8%	9,262	14.0%	4,374	6.5%
Total	**1,257,503**	**33.2%**	**1,794,919**	**28.6%**	**2,352,874**	**32.6%**	**455,907**	**28.7%**	**621,678**	**33.5%**

The following table sets forth a breakdown of our gross profit and gross profit margin by geographic region for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin	Gross Profit	Gross Profit Margin
	(RMB'000, except percentages)									
							(unaudited)			
PRC	591,810	47.0%	668,660	45.3%	1,031,907	50.9%	152,317	49.9%	236,331	54.1%
Laos	665,693	26.4%	552,686	18.4%	670,960	22.0%	141,924	18.6%	184,021	23.4%
Ghana[1]	–	–	573,572	32.0%	650,007	30.4%	161,666	31.2%	201,326	32.0%
Total	**1,257,503**	**33.2%**	**1,794,919**	**28.6%**	**2,352,874**	**32.6%**	**455,907**	**28.7%**	**621,678**	**33.5%**

Note:

1. Our gross profit in Ghana was generated from Golden Star Resources. In January 2022, we acquired a 62% equity interest in Golden Star Resources, which in turn indirectly holds a 90% equity interest in GSWL, and we began consolidating the accounts of Golden Star Resources from February 1, 2022. As such, the gross profit of GSWL prior to February 1, 2022 was not included in our Group. For more details, please see *"— Key Factors Affecting Our Results of Operations — Acquisitions — Acquisition of Golden Star Resources"*.

Other income and gains

Our other income and gains mainly represent government grants, gains on changes of fair value of financial assets at fair value through profit or loss, gains on changes of fair value of derivative financial instruments, gains on disposal of financial assets at fair value through profit or loss, gains on disposal of financial assets at fair value through profit or loss, finance income and others. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our other income and gains amounted to RMB90.5 million, RMB142.1 million, RMB137.8 million, RMB5.8 million and RMB72.7 million respectively. The following table sets forth a breakdown of our other income and gains for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Government grants	1,363	1.5%	4,045	2.8%	16,950	12.3%	153	2.6%	129	0.2%
Gains on changes in fair value of financial assets at fair value through profit or loss	1,415	1.6%	17,918	12.6%	–	–	–	–	–	–
Gains on changes in fair value of derivative financial instruments	–	–	584	0.4%	13,470	9.8%	721	12.4%	49,006	67.4%
Gains on disposal of derivative financial instruments	25,014	27.6%	82,913	58.4%	75,343	54.7%	–	–	15,217	20.9%
Gains on disposal of financial assets at fair value through profit or loss	–	–	–	–	4,226	3.1%	–	–	–	–
Finance income	20,439	22.6%	28,097	19.8%	26,322	19.1%	4,070	69.9%	8,044	11.1%
Gain on recognition of negative goodwill	–	–	6,371	4.5%	–	–	–	–	–	–
Others	42,281	46.7%	2,160	1.5%	1,459	1.0%	875	15.1%	261	0.4%
Total	**90,512**	**100.0%**	**142,088**	**100.0%**	**137,770**	**100.0%**	**5,819**	**100.0%**	**72,657**	**100.0%**

Finance income mainly represent interest on fixed deposits and interest on demand deposits.

Gains on changes in fair value of derivative financial instruments primarily comprise of gains and losses arising from fair value changes of gold lease hedging instruments.

Gains on changes on disposal of derivative financial instruments primarily represents investment income from the disposal of gold lease hedging instruments.

Selling and distribution expenses

Our selling and distribution expenses primarily consist of labor expenses, traveling expenses, consumption of materials, warrants and licenses, depreciation, operating expenses, and others. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our selling and distribution expenses amounted to RMB0.8 million, RMB0.7 million, RMB0.7 million, RMB0.1 million and RMB0.1 million respectively.

Administrative Expenses

Our administrative expenses primarily consist of taxes and levies on operations, labor expenses, professional service expenses, office and traveling expenses, depreciation and amortization, lease expenses, insurance premium, entertainment expenses, environmental protection expenses, consumption of materials, and others.

Taxes and levies on operations mainly represent resources tax. For the details of the taxes and royalties that we are subject to, see the section headed "Regulatory Overview" in this Document.

The following table sets forth a breakdown of our administrative expenses for the periods indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Taxes and Levies on Operations	157,753	40.1%	283,984	36.1%	389,018	45.7%	72,338	38.7%	97,360	46.9%
Labor expenses	133,998	34.1%	240,742	30.6%	253,728	29.8%	55,857	29.9%	57,429	27.6%
Professional service expenses	30,537	7.8%	98,498	12.5%	51,402	6.0%	15,372	8.2%	10,744	5.2%
Office and traveling expenses	25,797	6.6%	59,576	7.6%	56,070	6.6%	13,755	7.4%	12,599	6.1%
Depreciation and amortization	27,171	6.9%	49,498	6.3%	47,886	5.6%	10,678	5.7%	11,821	5.7%
Lease expenses	4,043	1.0%	20,766	2.6%	15,975	1.9%	3,028	1.6%	3,147	1.5%
Insurance premium	563	0.1%	16,410	2.1%	13,710	1.6%	2,220	1.2%	4,304	2.1%
Entertainment expenses	3,457	0.9%	3,901	0.5%	5,007	0.6%	1,483	0.8%	522	0.3%
Environmental protection expenses	2,546	0.6%	2,693	0.3%	747	0.1%	44	0.0%	92	0.0%

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Consumption of materials	4,950	1.3%	2,490	0.3%	3,341	0.4%	2,559	1.4%	475	0.2%
Others	2,220	0.6%	7,810	1.1%	13,506	1.6%	9,711	5.1%	9,258	4.4%
Total	**393,035**	**100.0%**	**786,368**	**100.0%**	**850,390**	**100.0%**	**187,045**	**100%**	**207,751**	**100.0%**

Research and Development Expenses

Our research and development expenses mainly include labor expenses, power expenses, materials expenses, depreciation, test fee for trial produced products, expert consulting fees, and others. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our research and development expenses amounted to RMB24.8 million, RMB27.7 million, RMB51.8 million, RMB4.1 million and RMB16.4 million respectively. The table below sets forth a breakdown of our research and development expenses by nature for the years indicated:

	Year Ended December 31,						Three Months Ended March 31,			
	2021		2022		2023		2023		2024	
	(RMB'000, except percentages)									
							(unaudited)			
Labor expenses	10,735	43.2%	9,676	35.0%	23,334	45.1%	1,945	48.0%	8,003	48.8%
Power expenses	3,916	15.8%	6,224	22.5%	12,772	24.7%	936	23.1%	3,215	19.6%
Materials expenses	2,158	8.7%	6,035	21.8%	8,372	16.2%	996	24.6%	2,323	14.2%
Depreciation	3,546	14.3%	3,056	11.1%	4,609	8.9%	126	3.1%	2,172	13.2%
Test fee for trial produced products	–	–	510	1.8%	603	1.2%	39	1.0%	285	1.7%
Expert consulting fees	2,434	9.8%	–	–	–	–	–	–	–	–
Others	2,058	8.2%	2,151	7.8%	2,063	3.9%	14	0.2%	417	2.5%
Total	**24,847**	**100.0%**	**27,652**	**100.0%**	**51,753**	**100.0%**	**4,056**	**100.0%**	**16,415**	**100.0%**

Impairment losses on financial assets, net

Our net impairment losses on financial assets mainly include impairment losses on account receivable and impairment losses on other receivable. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our net impairment losses on financial assets amounted to RMB2.0 million, RMB0.6 million, RMB2.4 million, RMB0.8 million and gain of RMB1.5 million respectively. The table below sets forth a breakdown of our net impairment losses on financial assets for the years indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
(Impairment losses)/reversal of impairment on account receivable	(778)	158	443	396	18
Impairment losses on other receivable	(1,206)	(802)	(2,883)	(1,173)	1,454
Total	**(1,984)**	**(644)**	**(2,440)**	**(777)**	**1,472**

Other expenses and losses

Our other expenses and losses mainly include donations, loss on disposal of non-current assets, loss on derecognition of financial liabilities, loss on changes in fair value of financial liabilities at fair value through profit or loss, loss on changes in fair value of financial assets at fair value through profit or loss, impairment losses/(reversal of impairment losses) on inventories, foreign exchanges and others. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our other expenses and losses amounted to RMB142.8 million, RMB119.0 million, RMB173.5 million, RMB61.9 million and RMB71.7 million respectively. The table below sets forth a breakdown of our other expenses and losses for the years indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Donations	15,100	940	222	–	270
Loss on disposal of non-current assets	3,060	2,632	1,853	2,412	–
Loss on derecognition of financial liabilities	10,856	17,249	76,018	8,843	64,904
Loss on changes in fair value of financial liabilities at fair value through profit or loss	3,111	30,416	63,428	47,492	10,329

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Loss on changes in fair value of financial assets at fair value through profit or loss	–	–	21,385	6,985	4,011
Impairment losses/(reversal of impairment) on inventories	191,615	41,723	3,516	(29,943)	5,190
Foreign exchange	(86,237)	(27,244)	(20,157)	18,391	(14,951)
Other	5,255	53,306	27,236	7,754	1,906
Total	**142,760**	**119,022**	**173,501**	**61,934**	**71,659**

Finance costs

Our finance costs primarily consist of interest on loans, interest on gold lease arrangements, interest on metal streaming arrangement, amortization of unrecognized financing expenses of mining rights, accretion of interest of provisions and interest on lease liabilities. For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our finance costs amounted to RMB14.2 million, RMB176.5 million, RMB215.0 million, RMB44.7 million and RMB54.3 million respectively. The table below sets forth a breakdown of our financial costs by nature for the years indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Interest on loans	3,870	127,797	159,621	34,144	36,485
Interest on gold lease arrangements	1,793	10,396	14,797	1,779	7,743
Interest on metal streaming arrangement	–	15,393	15,093	4,059	3,972
Amortization of unrecognized finance expenses of mining rights	–	3,793	3,766	–	882
Accretion of interest of provisions	8,393	8,895	9,409	2,303	2,313
Interest on lease liabilities	170	10,211	12,340	2,405	2,869
Total	**14,226**	**176,485**	**215,026**	**44,690**	**54,264**

Income tax expenses

For the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, our income tax expenses amounted to RMB157.0 million, RMB328.1 million, RMB335.2 million, RMB68.6 million and RMB114.7 million respectively.

Our income tax expense consists of current income tax and deferred income tax. Current income tax comprises PRC enterprise income tax ("**EIT**"), Hong Kong profit tax, Laos corporate income tax and Ghana corporate income tax. Our effective income tax rate, calculated as income tax expense divided by profit before taxation, was 20.4%, 39.9%, 27.8%, 43.1% and 32.5% for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2023 and 2024, respectively. Our effective income tax rate increased from 20.4% for the year ended December 31, 2021 to 39.9% for the year ended December 31, 2022 was due to the acquisition of Golden Star Resources in 2022.

The following table sets forth a breakdown of our income tax expense for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Current income tax expenses	118,260	279,252	480,868	88,519	152,103
Deferred income tax expenses	38,707	48,880	(145,658)	(19,874)	(37,421)
Total	**156,967**	**328,132**	**335,210**	**68,645**	**114,682**

During the Track Record Period, our Company and subsidiaries in the PRC were subject to the statutory EIT rate of 25%, in accordance with the relevant tax rules and regulations. Pursuant to the PRC Corporate Income Tax Law, certain subsidiaries of our Group, namely Jilong Mining and Wulong Mining, were certified as "High and New Technology Enterprises" by the relevant tax authorities in the PRC. Also, EIT Policies for Large-scale Development in the Western Region are applicable to Jintai Mining and Hanfeng Mining, both of which have enjoyed a preferential income tax rate of 15% during the Track Record Period.

We were not subject to any income, estate, corporation, capital gains or other tax in the Cayman Islands pursuant to the local tax rules and regulations during the Track Record Period.

Our subsidiary incorporated in Hong Kong was subject to the Hong Kong profit tax rate of 16.5% during the Track Record Period.

Our subsidiary incorporated in Laos was subject to the Laos corporate income tax rate of 33.3% during the Track Record Period.

Our subsidiary incorporated in Ghana was subject to the Ghana corporate income tax rate of 35.0% for mining and upstream petroleum companies during the Track Record Period.

During the Track Record Period, we paid all relevant taxes that were due and applicable to us and had no disputes or, to the best of our knowledge, unresolved material tax issues with relevant tax authorities.

PERIOD TO PERIOD COMPARISON OF RESULTS OF OPERATIONS

Three Months Ended March 31, 2024 Compared to the Three Months Ended March 31, 2023

Revenue

Our revenue increased by 16.8% from RMB1,586.8 million for the three months ended March 31, 2023 to RMB1,853.9 million for the three months ended March 31, 2024. This increase was mainly due to an overall increase in revenue of our gold mining business.

By business nature

The revenue of our gold mining business increased by 15.9% from RMB1,452.1 million for the three months ended March 31, 2023 to RMB1,682.4 million for the three months ended March 31, 2024. This was mainly due to the increase in average selling prices of our gold products. We experienced an increase in average selling prices for our gold product increased by 14.1% from approximately RMB408.9 per gram for the three months ended March 31, 2023 to RMB466.7 per gram for the three months ended March 31, 2024. The increase was generally in line with the increase in the gold price globally during the same period.

The revenue of our other mineral resources business increased by 52.4% from RMB68.5 million for the three months ended March 31, 2023 to RMB104.4 million for the three months ended March 31, 2024. This was mainly due to the increased production volume of zinc and copper cathodes by the Hanfeng Polymetallic Mine and Sepon Gold, Copper and Rare Earth Mine. For the three months ended March 31, 2023 and 2024, our copper cathodes business in Laos produced 1,109 tonnes and 1,259 tonnes of copper cathodes, respectively.

The revenue of other businesses increased slightly by 1.4% from RMB66.2 million for the three months ended March 31, 2023 to RMB67.1 million for the three months ended March 31, 2024. This was mainly due to the increased amount of waste electrical and electronic products we sold through Guangyuan Technology.

By geographical region

Revenue generated from our PRC operations increased by 43.1% from RMB305.2 million for the three months ended March 31, 2023 to RMB436.9 million for the three months ended March 31, 2024. This was primarily due to: (i) the increased gold sales volume of our PRC mines from 19 koz for the three months ended March 31, 2023 to 23 koz for the three months ended March 31, 2024; and (ii) the increase in average gold selling prices of our PRC mines sold their gold products for, which was in line with the overall increase in gold price during this period in China. The average selling price for our gold product in the PRC increased from approximately RMB422.7 per gram for the three months ended March 31, 2023 to RMB476.0 per gram for the three months ended March 31, 2024.

Revenue generated from our overseas operations increased by 10.6% from RMB1,281.5 million for the three months ended March 31, 2023 to RMB1,417.0 million for the three months ended March 31, 2024. This was mainly due to the increase in average selling prices for our gold product. The average selling prices for our overseas gold product increased from approximately RMB406.3 per gram for the three months ended March 31, 2023 to RMB464.4 per gram for the three months ended March 31, 2024.

Cost of sales

Our cost of sales increased by 9.0% from RMB1,130.8 million for the three months ended March 31, 2023 to RMB1,232.2 million for the three months ended March 31, 2024. This was mainly due to increases in the cost of sales of our gold mining business as a result of (i) our increase in sales volume of gold and (ii) an increase in materials expenses, which was mainly due to rising U.S. dollars and local currency exchange rate.

By business nature

The cost of sales of our gold mining business increased by 5.5% from RMB1,020.7 million for the three months ended March 31, 2023 to RMB1,076.6 million for the three months ended March 31, 2024. This was mainly due to: (i) increased gold sales volume from 113 koz for the three months ended March 31, 2023 to 116 koz for the three months ended March 31, 2024; and (ii) rising raw material expenses.

Our cost of sales of our other mineral resources business increased by 74.6% from RMB53.2 million for the three months ended March 31, 2023 to RMB93.0 million for the three months ended March 31, 2024. This was mainly due to the increased cost of producing copper cathodes resulting from the growing volume of copper ore processed, alongside a decline in average copper ore grade at the Sepon Gold, Copper and Rare Earth Mine.

The cost of sales of other business increased by 10.2% from RMB56.9 million for the three months ended March 31, 2023 to RMB62.7 million for the three months ended March 31, 2024. This was mainly due to the increased amount of sales revenue from the dismantling of waste electronic and electrical products without government subsidies through Guangyuan Technology.

By geographical region

The cost of sales of our PRC operations increased by 31.2% from RMB152.9 million for the three months ended March 31, 2023 to RMB200.6 million for the three months ended March 31, 2024. This was primarily due to: (i) increased material expenses in line with increase in sales volume of gold from 19 koz for the three months ended March 31, 2023 to 23 koz for the three months ended March 31, 2024; (ii) an increased cost of raw materials in line with the increased sales volume of zinc concentrate powder and lead concentrate powder of Hanfeng Mining due to increase in sales volume and material price; and (iii) low ore grade of Jilong Mining, which led to increased cost during processing.

The cost of sales of our overseas operations increased by 5.5% from RMB977.9 million for the three months ended March 31, 2023 to RMB1,031.6 million for the three months ended March 31, 2024. This reflected: (i) increased expenses in line with the higher U.S. dollars and local currency exchange rate and increase in copper cathodes production from 1,109 tonnes for the three months ended March 31, 2023 to 1,259 tonnes for the three months ended March 31, 2024; and (ii) increased raw materials prices globally.

Gross Profit and Gross Profit Margin

Our gross profit increased by 36.4% from RMB455.9 million for the three months ended March 31, 2023 to RMB621.7 million for the three months ended March 31, 2024. Our gross profit margin increased from 28.7% for the three months ended March 31, 2023 to 33.5% for the three months ended March 31, 2024. This was mainly due to the increase of revenue of gold mining business arising from the increase in the average selling prices for our gold product from approximately RMB408.9 per gram for the three months ended March 31, 2023 to RMB466.7 per gram for the three months ended March 31, 2024.

By business nature

The gross profit of our gold mining business increased by 40.4% from RMB431.4 million for the three months ended March 31, 2023 to RMB605.8 million for the three months ended March 31, 2024. The gross profit margin of our gold mining business increased from 29.7% for the three months ended March 31, 2023 to 36.0% for the three months ended March 31, 2024. This was mainly due to the increase in the gold selling price increased from RMB408.9 per gram for the three months ended March 31, 2023 to RMB466.7 per gram for the three months ended March 31, 2024.

The gross profit of our other mineral resources business decreased by 24.7% from RMB15.3 million for the three months ended March 31, 2023 to RMB11.5 million for the three months ended March 31, 2024. The gross profit margin of our other mineral resources business decreased from 22.3% for the three months ended March 31, 2023 to 11.0% for the three months ended March 31, 2024. This was mainly due to Guangyuan Technology operated at a low level pending of the announcement of the new recycling grant policy.

The gross profit of our other business decreased from RMB9.3 million for the three months ended March 31, 2023 to RMB4.4 million for the three months ended March 31, 2024. The gross profit margin of our resource recycling business decreased from 14.0% for the three months ended March 31, 2023 to 6.5% for the three months ended March 31, 2024. This was mainly due to the increase in dismantling of waste electronic and electrical products without government subsidies.

By geographical region

The gross profit margin of our PRC operations increased slightly from 49.9% for the three months ended March 31, 2023 to 54.1% for the three months ended March 31, 2024. This was mainly due to the gold selling price increased from approximately RMB408.9 per gram for the three months ended March 31, 2023 to RMB466.7 per gram for the three months ended March 31, 2024.

The gross profit margin of our overseas operations increased from 23.7% for the three months ended March 31, 2023 to 27.2% for the three months ended March 31, 2024. This was mainly due to the gold selling price increased from approximately RMB406.3 per gram for the three months ended March 31, 2023 to RMB464.4 per gram for the three months ended March 31, 2024.

Other income and gains

Our other income and gains increased significantly by 1,148.6% from RMB5.8 million for the three months ended March 31, 2023 to RMB72.7 million for the three months ended March 31, 2024. This was primarily due to: (i) an increase in gains on changes of fair value of derivative financial instruments of RMB48.3 million arising from the fair value change from gold lease hedging instruments of RMB49.0 million in 2024 due to the increase of the gold selling price; and (ii) an increase in gains on disposal of derivative financial instruments of RMB15.2 million.

Our gains on changes in fair value of derivative financial instruments increased significantly by 6,696.9% from RMB0.7 million for the three months ended March 31, 2023 to RMB49.0 million for the three months ended March 31, 2024. This was primarily due to the fair value change from gold lease hedging instruments of RMB49.0 million in 2024 due to the increase of the gold selling price.

Our finance income increased significantly by 97.6% from RMB4.1 million for the three months ended March 31, 2023 to RMB8.0 million for the three months ended March 31, 2024. This was primarily due to the increase in the margin for gold lease financing arising from the increase of the gold selling price.

Selling and distribution expenses

Our selling expenses and distribution expenses decreased by 34.3% from RMB0.14 million for the three months ended March 31, 2023 to RMB0.09 million the three months ended March 31, 2024. This was primarily due to the decrease of salary expenses in the sales department and inspection fees.

Administrative expenses

Our administrative expenses increased by 11.1% from RMB187.0 million for the three months ended March 31, 2023 to RMB207.8 million for the three months ended March 31, 2024. This was primarily due to an increase in resources tax levied on our mining business in Wassa Gold Mine, Sepon Gold, Copper and Rare Earth Mine, Jilong Mining and Wulong Mining of RMB18.3 million in line with the increase in sales volume of our gold and other mineral resources products.

Research and development expenses

Our research and development expenses increased by 304.7% from RMB4.1 million for the three months ended March 31, 2023, to RMB16.4 million for the three months ended March 31, 2024. This was primarily due to the increase in the number of research and development projects on Jilong Mining's new geothermal mitigation technologies, underground mining-induced ground pressure disasters, and control methodologies, leading to a corresponding increase in research and development expenses.

Impairment losses on financial assets, net

We recorded net impairment losses on financial assets of RMB0.8 million for the three months ended March 31, 2023, while we recorded net reversal of impairment on financial assets of RMB1.5 million for the three months ended March 31, 2024. This was primarily due to the reversal of credit losses that had been provided for in 2023.

Other expenses and losses

Our other expenses and losses increased by 15.7% from RMB61.9 million for the three months ended March 31, 2023 to RMB71.7 million for the three months ended March 31, 2024. This was primarily due to an increase in loss on derecognition of financial liabilities of RMB56.1 million arising from our gold leasing transactions. The increase was partially offset by the decrease of loss on changes in fair value of financial liabilities at fair value through profit or loss of RMB37.2 million and the decrease of reversal of impairment/(impairment losses) on inventories of RMB24.8 million.

Financial costs

Our financial costs increased by 21.4% from RMB44.7 million for the three months ended March 31, 2023 to RMB54.3 million for the three months ended March 31, 2024. This was primarily due to (i) an increase in interests on gold lease arrangements of RMB6.0 million arising from the new gold lease transactions for the three months ended March 31, 2024; (ii)

an increase in interest on loans of RMB2.3 million; and (iii) an increase of the interest on lease liabilities of RMB0.5 million. These increases were partially offset by the decrease of the interest on metal streaming arrangement of RMB0.09 million.

Share of (losses)/gain of associates

We recorded share of losses of associates of RMB3.7 million for the three months ended March 31, 2023, while we recorded share of profits of associates of RMB7.3 million for the three months ended March 31, 2024. This was primarily due to the previous investment of Tietto Minerals Limited where Tietto Minerals Limited commenced the operation in the second half of 2023.

Profit before tax

Our profit before tax increased by 121.4% from RMB159.4 million for the three months ended March 31, 2023 to RMB352.9 million for the three months ended March 31, 2024. This was primarily due to (i) the increase in production and sales volume of our gold mines; and (ii) the increase in selling prices of our gold products.

Income tax expenses

Our income tax expenses increased by 67.1% from RMB68.6 million for the three months ended March 31, 2023 to RMB114.7 million for the three months ended March 31, 2024. This was in line with the increase of profit before tax.

Year Ended December 31, 2023 Compared to Year Ended December 31, 2022

Revenue

Our revenue increased by 15.2% from RMB6,266.8 million for the year ended December 31, 2022 to RMB7,221.0 million for the year ended December 31, 2023. This increase was mainly due to an overall increase in revenue of our gold mining business.

By business nature

The revenue of our gold mining business increased by 19.2% from RMB5,304.7 million for the year ended December 31, 2022 to RMB6,322.3 million for the year ended December 31, 2023. This was mainly due to (i) the increase in average selling prices; and (ii) The increase in our gold sales volume from 447 koz in 2022 to 466 koz in 2023. This was primarily due to the increase in gold production of Wulong Gold Mine and Jilong Gold Mine attributable to the mine high feed grade in the period and on-schedule steady expansions. We recorded an increase in average selling prices for our gold product from approximately RMB382.9 per gram in 2022 to RMB435.7 per gram in 2023. The increase was generally in line with the increase in gold price globally during the same period.

The revenue of other mineral resources business decreased by 23.8% from RMB650.2 million for the year ended December 31, 2022 to RMB495.8 million for the year ended December 31, 2023. This was mainly due to Hanfeng Polymetallic Mine's suspension of operations in the first half of 2023 as a result of its safety improvement measures, which affected its production capacity.

The revenue of other businesses increased by 29.2% from RMB311.9 million for the year ended December 31, 2022 to RMB402.9 million for the year ended December 31, 2023. This was mainly due to the increased amount of waste electrical and electronic products we sold through Guangyuan Technology.

By geographical region

Revenue generated from our PRC operations increased by 37.2% from RMB1,477.5 million for the year ended December 31, 2022 to RMB2,026.8 million for the year ended December 31, 2023. This was primarily due to: (i) the increased gold production of Wulong Gold Mine and Jilong Gold Mine, which was attributed to their respective relatively high-level gold grades and on-schedule steady expansions; and (ii) higher average selling prices of gold, which was in line with the overall increase in gold price during this period in China. The average selling prices for our gold product in the PRC increased from approximately RMB396.4 per gram in 2022 to RMB455.9 per gram in 2023.

Revenue generated from our overseas operations increased by 8.5% from RMB4,789.3 million for the year ended December 31, 2022 to RMB5,194.1 million for the year ended December 31, 2023. This reflected: (i) an increase in the average exchange rate of the U.S. dollar against the Renminbi in 2023; (ii) the Wassa Gold Mine's increased sales volume of gold from 157 koz to 167 koz; and (iii) the higher average selling prices for our gold product in 2023. The average selling prices for our overseas gold product increased from approximately RMB380.2 per gram in 2022 to RMB429.7 per gram in 2023.

Cost of sales

Our cost of sales increased by 8.9% from RMB4,471.9 million for the year ended December 31, 2022 to RMB4,868.1 million for the year ended December 31, 2023. This was mainly due to increases in the cost of sales of our gold mining business, as a result of: (i) our increase in sales volume of gold; and (ii) an increase in materials expenses, which was mainly due to rising raw material prices and our increased consumption of materials in line with the increased production volume.

By business nature

The cost of sales of our gold mining business increased by 5.9% from RMB3,838.9 million for the year ended December 31, 2022 to RMB4,065.6 million for the year ended December 31, 2023. This was mainly due to: (i) increased gold sales volume from 447 koz in 2022 to 466 koz in 2023; and (ii) the rising raw material prices.

The cost of sales of our other mineral resources business increased by 16.2% from RMB370.8 million for the year ended December 31, 2022 to RMB430.8 million for the year ended December 31, 2023. This was mainly due to: (i) the increased cost of producing copper cathodes resulting from the growing volume of copper ore processed; and (ii) a decline in average copper ore grade at Sepon Gold, Copper and Rare Earth Mine.

The cost of sales of other business increased by 41.8% from RMB262.1 million for the year ended December 31, 2022 to RMB371.6 million for the year ended December 31, 2023. This was mainly due to the increased amount of waste home appliances we dismantled through Guangyuan Technology.

By geographical region

The cost of sales of our PRC operations increased from RMB808.8 million for the year ended December 31, 2022 to RMB994.9 million for the year ended December 31, 2023. This was primarily due to: (i) increased expenses in line with increase in sales volume of gold as the gold sales volume was up from 74 koz in 2022 to 106 koz in 2023; (ii) increased costs in line with the increased sales volume of zinc concentrate powder and lead concentrate powder of Hanfeng Mining; and (iii) low ore grade of Jilong Mining, which led to increased processing cost.

The cost of sales of our overseas operations increased from RMB3,663.1 million for the year ended December 31, 2022 to RMB3,873.2 million for the year ended December 31, 2023. This reflected the increased raw materials prices globally.

Gross Profit and Gross Profit Margin

Our gross profit increased by 31.1% from RMB1,794.9 million for the year ended December 31, 2022 to RMB2,352.9 million for the year ended December 31, 2023. Our gross profit margin increased from 28.7% for the year ended December 31, 2022 to 32.6% for the year ended December 31, 2023. This was mainly due to the increase of revenue of gold mining business arising from the increase in the average selling prices for our gold product and the cost of sales was effectively controlled in 2023.

By business nature

The gross profit of our gold mining business increased by 54.0% from RMB1,465.8 million for the year ended December 31, 2022 to RMB2,256.7 million for the year ended December 31, 2023. The gross profit margin of our gold mining business increased from 27.6% for the year ended December 31, 2022 to 35.7% for the year ended December 31, 2023. This was mainly due to the increase of revenue of gold mining business arising from the increase in the average selling prices for our gold product and the cost of sales was effectively controlled in 2023.

The gross profit of our other mineral resources business decreased by 76.8% from RMB279.4 million for the year ended December 31, 2022 to RMB64.9 million for the year ended December 31, 2023. The gross profit margin of our non-ferrous metal mining business decreased from 43.0% for the year ended December 31, 2022 to 13.1% for the year ended December 31, 2023.

This was mainly due to Hanfeng Mining's suspension of operations and a decline in average copper ore grade at Sepon Gold, Copper and Rare Earth Mine.

The gross profit of our other business decreased from RMB49.7 million for the year ended December 31, 2022 to RMB31.3 million for the year ended December 31, 2023. The gross profit margin of our resource recycling business decreased from 15.9% for the year ended December 31, 2022 to 7.8% for the year ended December 31, 2023. This was mainly due to the changes in national government subsidy standards and the decrease of the number of disassembled substandard products.

By geographical region

The gross profit margin of our PRC operations increased slightly from 45.3% for the year ended December 31, 2022 to 50.9% for the year ended December 31, 2023. This was mainly due to arising from the increase in the average selling prices for our gold product for our PRC gold product increased from approximately RMB396.4 per gram in 2022 to RMB455.9 per gram in 2023 and was offset by increase in the gold sales volume from 74 koz in 2022 to 106 koz in 2023.

The gross profit margin of our overseas operations increased from 23.5% for the year ended December 31, 2022 to 25.4% for the year ended December 31, 2023. This was mainly due to the increase in the average selling prices for our gold product for our overseas gold product increased from approximately RMB380.2 per gram in 2022 to RMB429.7 per gram in 2023 and the increase in overseas raw materials expenses.

Other income and gains

Our other income and gains decreased by 3.0% from RMB142.1 million for the year ended December 31, 2022 to RMB137.8 million for the year ended December 31, 2023. This was primarily due to a decrease in gains on changes in fair value of financial assets at fair value through profit or loss of RMB17.9 million. This was partially offset by the increase in government subsidies of RMB12.9 million.

Selling and distribution expenses

Our selling expenses for the years ended December 31, 2022 and 2023 remained stable at RMB0.7 million.

Administrative expenses

Our administrative expenses increased by 8.1% from RMB786.4 million for the year ended December 31, 2022 to RMB850.4 million for the year ended December 31, 2023. This was primarily due to an increase in resources tax levied on our mining business of RMB105.0 million in line with the increase in sales volume of our gold and other mineral resources products. This was partially offset by the decrease in professional service expenses of RMB 47.1 million.

Research and development expenses

Our research and development expenses increased by 87.2% from RMB27.7 million for the year ended December 31, 2022 to RMB51.8 million for the year ended December 31, 2023. This was primarily due to: (i) an increase in the number of research and development personnel; and (ii) increased investments in technology improvement projects to enhance efficiency and strengthen security measures at Wulong Gold Mine and Jilong Gold Mine in 2023.

Impairment losses on financial assets, net

Our net impairment losses on financial assets increased by 278.9% from RMB0.6 million for the year ended December 31, 2022 to RMB2.4 million for the year ended December 31, 2023. This was primarily due to the provision of credit losses of other receivables.

Other expenses and losses

Our other expenses and losses increased by 45.8% from RMB119.0 million for the year ended December 31, 2022 to RMB173.5 million for the year ended December 31, 2023. This was primarily due to an increase in loss on derecognition of financial liabilities at fair value through profit or loss of RMB58.8 million arising from our gold leasing transactions.

Finance costs

Our finance costs increased by 21.8% from 176.5 million for the year ended December 31, 2022 to RMB215.0 million for the year ended December 31, 2023. This was primarily due to: (i) an increase in interest on loans of RMB32.9 million as a result of we have taken on new borrowing of RMB900.0 million, GSWL has taken on new long-term borrowing in USD90.0 million, and LXML has taken on new short-term borrowing of LAK100.0 billion and USD13 million; (ii) an increase of interest on gold lease arrangements and interest on lease liabilities of RMB4.4 million arising from the gold leasing contracts with the bank; and (iii) an increase of interest on lease liabilities of RMB2.1 million. This was partially offset by (i) the decrease of the interest on mineral assets of RMB0.03 million; and (ii) the decrease of the interest on metal streaming arrangements of RMB0.3 million.

Share of (losses)/profits of associates

We recorded share of losses of associates of RMB4.1 million for the year ended December 31, 2022, while we recorded share of profits of associates of RMB10.0 million for the year ended December 31, 2023. This was primarily due to the previous investment of Tietto Minerals Limited which made a profit for the year ended December 31, 2023. As of Latest Practicable Date, we sold all equity interests in Tietto Minerals Limited to an independent third party.

Profit before tax

Our profit before tax increased by 46.8% from RMB822.0 million for the year ended December 31, 2022 to RMB1,206.8 million for the year ended December 31, 2023. This was primarily due to: (i) the increase in gold selling price from approximately RMB382.9 per gram in 2022 to RMB435.7 per gram in 2023; (ii) the effective cost reduction and control measures; (iii) the stable ore grade of the mines; and (iv) the increase of gross profit margin of the gold mining business.

Income tax expenses

Our income tax expenses increased by 2.2% from RMB328.1 million for the year ended December 31, 2022 to RMB335.2 million for the year ended December 31, 2023. This was primarily due to an increase in current income tax expenses of RMB201.6 million arising from our increase of the profit before tax. This was partially offset by a decrease in our deferred tax expenses of RMB194.5 million as a result of a decrease of deferred tax assets under Golden Star Resources.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenue

Our revenue increased by 65.7% from RMB3,782.6 million for the year ended December 31, 2021 to RMB6,266.8 million for the year ended December 31, 2022. The increase was mainly due to increases in the revenue of our gold mining business as a result of our acquisition of Golden Star Resources in January 2022.

By business nature

The revenue of our gold mining business increased by 78.7% from RMB2,968.7 million for the year ended December 31, 2021 to RMB5,304.7 million for the year ended December 31, 2022. This was mainly due to: (i) the increase in production and sales volume of our gold mines; and (ii) the increase in the average selling prices of our gold products. Our acquisition of Golden Star Resources contributed a gold production of 162 koz in 2022. The gold production volume of Sepon Gold, Copper and Rare Earth Mine increased from 193.0 koz in 2021 to 199.5 koz in 2022. This was primarily due to the increase of gold recovery rate as a result of a series of capital investments and operational improvements. Our gold production volume in China increased from 67.2 koz in 2021 to 74.6 koz of gold in 2022. This was primarily due to the completion of our technological upgrade and improvement in our mining and processing capacity and ore grade of Wulong Gold Mine. In line with the increased production volume, our total sales volume of gold increased from 251 koz in 2021 to 447 koz in 2022. We also experienced an increase in average selling prices for our gold product from approximately RMB380.8 per gram in 2021 to RMB382.9 per gram in 2022. This increase was generally in line with the increase in gold price globally during the same period.

The revenue of our other mineral resources business increased by 17.9% from RMB551.3 million for the year ended December 31, 2021 to RMB650.2 million for the year ended December 31, 2022. This was mainly due to the increased production volume of copper cathodes of the Sepon Gold, Copper and Rare Earth Mine. In 2021 and 2022, our copper business in Laos produced 5,019.7 tonnes and 6,433.2 tonnes of copper cathodes, respectively, and the sales volume increased from 5,492.4 tonnes in 2021 to 6,592.6 tonnes of copper cathodes in 2022.

The revenue of other business increased by 18.7% from RMB262.7 million for the year ended December 31, 2021 to RMB311.9 million for the year ended December 31, 2022. This was mainly due to the increased amount of waste electrical and electronic products we sold through Guangyuan Technology.

By geographical region

Revenue generated from our PRC operations increased by 17.3% from RMB1,259.8 million for the year ended December 31, 2021 to RMB1,477.5 million for the year ended December 31, 2022. This was primarily because of: (i) an increase in sales volume of gold

(mainly due to increase in gold sales volume of Wulong Mining from 29 koz in 2021 to 45 koz of gold in 2022 and partially offset by the decrease of gold sales volumes of Huatai Mining and Jilong Mining); (ii) an increase in average selling prices of gold, which was in line with the overall increase in gold price during this period in China. The average selling prices for our gold product in the PRC increased from approximately RMB376.0 per gram in 2021 to RMB396.4 per gram in 2022; and (iii) an increase in revenue from our domestic non-ferrous metal mining business (mainly attributable to increased sales volume of zinc concentrate powder from 19,932.9 tonnes in 2021 to 21,881.3 tonnes in 2022 and an increase in the average selling prices of zinc from RMB6,821 per tonne to RMB7,966 per tonne during the same period).

Revenue generated from our overseas operations increased by 89.8% from RMB2,522.9 million for the year ended December 31, 2021 to RMB4,789.3 million for the year ended December 31, 2022. First, revenue generated from the gold mining business at GSWL, which we acquired in 2022. In 2022, the revenue generated from Golden Star Resources was RMB1,790.4 million, representing 28.6% of our total revenue for the same year. The sales volume of gold at the Wassa Gold Mine was 158 koz in 2022. For details of the acquisition, see "Business — Our Gold Production Business in Ghana". Second, the increase of gold production in Sepon Gold, Copper and Rare Earth Mine in Laos. The gold production volume of the Sepon Gold, Copper and Rare Earth Mine increased from 193.0 koz in 2021 to 199.5 koz in 2022, and its sales volume of gold increased from 183 koz to 214 koz. This was primarily due to the increase of gold recovery rate as a result of a series of capital investments and operational improvements.

Cost of sales

Our cost of sales increased by 77.1% from RMB2,525.1 million for the year ended December 31, 2021 to RMB4,471.9 million for the year ended December 31, 2022. This was mainly due to increases in the cost of sales of our gold mining business, as a result of: (i) our increase in sales volume of gold; (ii) our consolidation of the accounts of Golden Star Resources from February 1, 2022; and (iii) increase in materials expenses, which was mainly attributable to the rising raw material prices.

By business nature

The cost of sales of our gold mining business increased by 82.8% from RMB2,100.0 million for the year ended December 31, 2021 to RMB3,838.9 million for the year ended December 31, 2022. This was mainly due to: (i) increased gold production volume from 260.3 koz in 2021 to 436.2 koz in 2022, mainly attributable to our acquisition of Golden Star Resources in 2022. In line with the increase in production volume, our sales volume of gold increased from 251 koz in 2021 to 445 koz in 2022; and (ii) the rising raw material prices.

The cost of sales of our other mineral resources business increased by 72.1% from RMB215.5 million for the year ended December 31, 2021 to RMB370.8 million for the year ended December 31, 2022. This was mainly due to: (i) an increase in raw material prices and electricity fees; and (ii) the increased amount of copper cathodes and other non-ferrous metals we processed and produced in 2022 through Sepon Gold, Copper and Rare Earth Mine and Hanfeng Polymetallic Mine.

The cost of sales of other business increased by 25.4% from RMB209.7 million for the year ended December 31, 2021 to RMB262.1 million for the year ended December 31, 2022. This was mainly due to the increased amount of waste home appliances we dismantled through Guangyuan Technology.

By geographical region

The cost of sales of our PRC operations increased from RMB668.0 million for the year ended December 31, 2021 to RMB808.8 million for the year ended December 31, 2022. This was primarily because of: (i) increased material expenses in line with increase in sales volume of gold. The gold sales volume of Wulong Mining was up from 28 koz in 2021 to 44 koz in 2022; (ii) an increase in the cost of raw materials in line with increased sales volume of zinc concentrate powder and lead concentrate powder of Hanfeng Mining; and (iii) low ore grade of Jilong Gold Mine, which led to increased cost.

The cost of sales of our overseas operations increased from RMB1,857.2 million for the year ended December 31, 2021 to RMB3,663.1 million for the year ended December 31, 2022. This reflects: (i) the cost of sales of Golden Star Resources, which we acquired in 2022; (ii) increased materials expenses in line with the increased sales volume of gold and copper cathodes; and (iii) increased raw material prices globally.

Gross profit and Gross profit margin

Our gross profit increased by 42.7% from RMB1,257.5 million for the year ended December 31, 2021 to RMB1,794.9 million for the year ended December 31, 2022. Our gross profit margin decreased from 33.2% for the year ended December 31, 2021 to 28.6% for the year ended December 31, 2022.

This was mainly due to the increase of the raw material price and the acquisition of Golden Star Resources in 2022.

By business nature

The gross profit of our gold mining business increased by 69.2% from RMB868.7 million for the year ended December 31, 2021 to RMB1,466.0 million for the year ended December 31, 2022. The gross profit margin of our gold mining business decreased from 29.3% for the year ended December 31, 2021 to 27.6% for the year ended December 31, 2022. This was mainly due to the increase of the cost of sales arising from the increase of the raw materials and the acquisition of Golden Star Resources in 2022.

The gross profit of our other mineral resources decreased by 15.8% from RMB335.8 million for the year ended December 31, 2021 to RMB279.4 million for the year ended December 31, 2022. The gross profit margin of our non-ferrous metal mining business decreased from 60.9% for the year ended December 31, 2021 to 43.0% for the year ended December 31, 2022. This was mainly due to the decrease in the average grade of the copper cathodes in LXML.

The gross profit of other business decreased by 7.7% from RMB53.0 million for the year ended December 31, 2021 to RMB49.7 million for the year ended December 31, 2022. The gross profit margin of our resource recycling business decreased from 33.2% for the year ended December 31, 2021 to 28.6% for the year ended December 31, 2022. This was mainly due to the decrease of dismantling volume of resources recycling business in 2022 and the change of the government subsidy standards due to the change in subsidy policies in 2022.

By geographical region

The gross profit margin of our PRC operations decreased slightly from 47.0% for the year ended December 31, 2021 to 45.3% for the year ended December 31, 2022. This was mainly due to the increase in material prices and the decline in the grade of ore mined by Jilong Mining in 2022.

The gross profit margin of our overseas operations decreased slightly from 26.4% for the year ended December 31, 2021 to 23.5% for the year ended December 31, 2022. This was mainly due to the increase in prices of raw materials in LXML and Golden Star Resources.

Other income and gains

Our other income and gains increased by 57.0% from RMB90.5 million for the year ended December 31, 2021 to RMB142.1 million for the year ended December 31, 2022. This was primarily due to: (i) an increase in gains on disposal of derivative financial instruments of RMB57.8 million; and (ii) an increase in gains on changes in fair value of financial assets at fair value through profit or loss of RMB16.5 million.

Our gains on disposal of derivative financial instruments increased by 231.5% from RMB25.0 million for the year ended December 31, 2021 to RMB82.9 million for the year ended December 31, 2022 This was primarily due to the disposal of gold lease hedging instruments resulted in an investment income of RMB41.1 million, and an investment income of RMB54.8 million arising from the disposal of gold forward sales contracts.

Our finance income increased by 37.5% from RMB20.4 million for the year ended December 31, 2021 to RMB28.1 million for the year ended December 31, 2022 This was primarily due to the increase in the interests income of RMB9.5 million arising from the acquisition of Golden Star Resources in 2022.

Selling and distribution expenses

Our selling expenses for the years ended December 31, 2021 and 2022 remained relatively stable at RMB0.8 million and RMB0.7 million, respectively.

Administrative expenses

Our administrative expenses increased by 100.1% from RMB393.0 million for the year ended December 31, 2021 to RMB786.4 million for the year ended December 31, 2022. This was primarily due to: (i) an increase in labor expenses due to our acquisition of Golden Star Resources in 2022; (ii) an increase in professional service expenses relating to our acquisition of Golden Star Resources in 2022; and (iii) an increase in taxes and levies on operation of RMB126.2 million due to an increase in resources tax levied on our mining business of RMB126.2 million associated with the increase in sales volume of our gold and other mineral resources products and acquisition of Golden Star Resources.

Research and development expenses

Our research and development expenses increased by 11.3% from RMB24.8 million for the year ended December 31, 2021 to RMB27.7 million for the year ended December 31, 2022. This was primarily due to increased investments in technology improvement projects to enhance efficiency in mining and beneficiation, mainly in relation to Wulong Mining in 2022.

Impairment losses on financial assets, net

Our net impairment losses on financial assets decreased by 67.5% from RMB2.0 million for the year ended December 31, 2021 to RMB0.6 million for the year ended December 31, 2022. This was primarily due to the reversal of credit losses that had been provided for in 2022.

Other expenses and losses

Our other expenses and losses decreased by 16.6% from RMB142.8 million for the year ended December 31, 2021 to RMB119.0 million for the year ended December 31, 2022. This was primarily due to (i) the decrease in the reversal of impairment losses on inventories of RMB149.9 million; and (ii) the decrease in the foreign exchange of RMB59.0 million. The decrease was partially offset by the increase in loss on changes in fair value of financial liabilities at fair value through profit or loss of RMB27.3 million.

Finance costs

Our finance costs increased significantly by 1,140.6% from RMB14.2 million for the year ended December 31, 2021 to RMB176.5 million for the year ended December 31, 2022. This was primarily due to: (i) an increase in interest on loans of RMB123.9 million in 2022; (ii) an increase in amortization of unrecognized financing expenses of mining right of RMB3.8 million and the interest on metal streaming arrangement of RMB15.4 million; (iii) an increase in interest on lease liabilities of RMB10.0 million; and (iv) an increase of interest on gold lease business of RMB8.6 million arising from our gold lease transaction.

Share of (losses)/profits of associates

We recorded share of losses of associates of RMB0.01 million for the year ended December 31, 2021, while we recorded share of losses of associates of RMB4.1 million for the year ended December 31, 2022. This was primarily due to the then investment in Tietto Minerals Limited by our subsidiary Chijin HK, which resulted in a loss in 2022. As of Latest Practicable Date, we sold all equity interests in Tietto Minerals Limited to an independent third party.

Profit before tax

Our profit before tax increased by 6.7% from RMB770.4 million for the year ended December 31, 2021 to RMB822.0 million for the year ended December 31, 2022. This was primarily due to (i) the increase in gold selling price from approximately RMB381 per gram in 2021 to RMB383 per gram in 2022; (ii) the effective cost reduction and control measures; (iii) the stable ore grade of the mines; and (iv) the increase of gross profit margin of the gold mining business.

Income tax expenses

Our income tax expenses increased by 109.0% from RMB157.0 million for the year ended December 31, 2021 to RMB328.1 million for the year ended December 31, 2022. This was primarily due to an increase of our current income tax expenses of RMB161.0 million arising from: (i) high statutory income tax rates in Ghana (35.0%) and Laos (33.3%) in 2022, which had significant impacts on our profits from Ghana and Laos in 2022.

LIQUIDITY AND CAPITAL RESOURCES

Our principal source of liquidity has been, and is expected to continue to be, cash generated from operating activities together with available credit facilities and bank borrowings. Our liquidity requirements primarily relate to funding our working capital requirements and our capital expenditures. We had cash and cash equivalents of RMB1,707.9 million, RMB1,052.5 million, RMB1,274.6 million and RMB1,323.9 million as of December 31, 2021, 2022, and 2023 and March 31, 2024, respectively. As of June 30, 2024, the latest practicable date for determining our indebtedness, we had cash and cash equivalents of RMB2,188.7 million.

Sufficiency of Working Capital

Taking into account the financial resources available to us, including our cash and cash equivalents, available borrowings, and the estimated [**REDACTED**] from the [**REDACTED**], our Directors are of the opinion, and the Sole Sponsor concurs, that we have sufficient working capital required for 125% of our present requirements, that is for at least the next 12 months from the date of this document. Going forward, we believe our liquidity requirements will be satisfied by using funds from a combination of our cash and cash equivalents, bank and other borrowings and [**REDACTED**] from the [**REDACTED**]. Other than the bank and other borrowings that we may obtain, we do not have any plans for material external debt financing.

Net Current Assets

As of December 31, 2021, 2022 and 2023 and March 31, 2024, we recorded net current assets of RMB2,416.6 million, RMB829.6 million, RMB1,173.0 million and RMB1,448.8 million, respectively.

The table below sets forth our current assets and current liabilities as of the dates indicated.

	As of December 31,			As of March 31,	As of June 30
	2021	2022	2023	2024	2024
			(RMB'000)		*(unaudited)*
Current assets					
Inventories	1,412,094	2,164,628	2,406,909	2,456,656	2,386,476
Trade receivables from comprehensive recycling of resources business	311,447	339,237	397,481	407,148	425,905
Trade receivables from other sales	25,260	29,637	115,732	85,088	104,267
Prepayments, other receivables and other assets	166,944	242,143	282,596	301,291	508,869
Financial assets at fair value through profit or loss	11,237	48,131	16,909	12,228	17,422
Derivative financial assets	6,436	584	13,470	63,060	–
Restricted cash	116,881	232,560	387,648	405,035	428,122
Cash and cash equivalents	1,707,868	1,052,545	1,274,635	1,323,923	2,188,661
Total current assets	**3,758,167**	**4,109,465**	**4,895,380**	**5,054,429**	**6,059,722**

	As of December 31,			As of March 31,	As of June 30
	2021	2022	2023	2024	2024
			(RMB'000)		*(unaudited)*
Current liabilities					
Trade and notes payables	440,401	851,390	552,457	430,694	504,551
Contract liabilities	4,547	62,052	73,177	71,199	80,339
Financial liabilities at fair value through profit or loss	387,683	620,250	939,996	875,189	1,165,196
Derivative financial liabilities	1,831	–	–	4,972	48,478
Other payables and accruals	191,169	695,336	697,447	497,742	497,563
Income tax payables	102,438	177,082	267,693	255,721	410,682
Short-term loans	–	488,409	850,009	1,013,196	859,655
Current portion of long-term loans	25,530	333,770	218,315	332,703	663,463
Current portion of lease liabilities	1,424	31,177	38,083	37,987	36,318
Current portion of other non-current liabilities	186,589	10,849	9,485	9,602	9,523
Current portion of provisions	–	9,567	75,747	76,657	95,109
Total current liabilities	**1,341,612**	**3,279,882**	**3,722,409**	**3,605,662**	**4,370,877**
Net current assets	**2,416,555**	**829,583**	**1,172,971**	**1,448,767**	**1,688,845**

Our net current assets increased from RMB1,448.8 million as of March 31, 2024 to RMB1,688.8 million as of June 30, 2024. This was primarily due to the increase in the bank deposits and cash of RMB864.7 million and the increase in the financial liabilities at fair value through profit or loss and this was offset by the long-term borrowings due within one year of RMB620.8 million.

Our net current assets increased from RMB1,173.0 million as of December 31, 2023 to RMB1,448.8 million as of March 31, 2024. This was mainly due to: (i) increased inventories of RMB49.7 million as a result of increase of work in progress products in Sepon Gold, Copper and Rare Earth Mine; (ii) an increase in in cash and cash equivalents of RMB49.3 million resulting from increase of free cash flow due to operation; (iii) a decrease in trade and notes payables of RMB121.8 million associated with partial reimbursement of accounts payable for materials, equipment and services in accordance with the commercial contracts; and (iv) a decrease in other payables and accruals of RMB199.7 million, mainly for construction projects and equipment. The increase was partially offset by: (i) an increase in short-term loans of RMB163.2 million; and (ii) an increase in current portion of long-term loans of RMB114.4 million associated with repayment plan.

Our net current assets increased from RMB829.6 million as of December 31, 2022 to RMB1,173.0 million as of December 31, 2023. This was primarily due to: (i) an increase in inventories of RMB242.3 million, mainly due to an increase in work in progress at Sepon Gold, Copper and Rare Earth Mine; (ii) an increase in in cash and cash equivalents of RMB222.1 million resulting from an increase in free cash flow from operations; (iii) a decrease in trade and notes payables of RMB298.9 million. The increase was partially offset by: (i) an increase in financial liabilities at fair value through profit or loss of RMB319.7 million resulting from the increase of gold leasing; and (ii) an increase in short-term loans of RMB361.6 million.

Our net current assets decreased significantly from RMB2,416.6 million as of December 31, 2021 to RMB829.6 million as of December 31, 2022. This was primarily due to: (i) a decrease in cash and cash equivalents of RMB655.3 million resulting from the acquisition of Golden Star Resources in 2022; (ii) an increase in other payables and accruals of RMB504.2 million mainly for construction projects and equipment; and (iii) an increase in short-term loans of RMB488.4 million associated with the acquisition of Golden Star Resources and a capacity expansion of Jilong Gold Mine. The decrease was partially offset by an increase in inventories resulting from our acquisition of Golden Star Resources and raw materials for Sepon Gold, Copper and Rare Earth Mine's expanded production.

Cash Flows Analysis

The table below sets forth selected cash flow statement information from our consolidated cash flow statements for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	**2022**	**2023**	**2023**	**2024**
			(RMB'000)		
				(unaudited)	
Net cash flows from operating activities	755,149	1,090,133	2,203,080	519,730	436,227
Net cash flows used in investing activities	(277,873)	(3,984,047)	(1,771,119)	(528,722)	(400,190)
Net cash flows from/(used in) financing activities	55,905	2,225,143	(228,120)	158,487	(2,898)
Effect of foreign exchange rate changes, net	(1,732)	13,448	18,249	(8,633)	16,149
Net increase/(decrease) in cash and cash equivalents	533,181	(668,771)	203,841	149,495	33,139
Cash and cash equivalents at beginning of year/period	1,176,419	1,707,868	1,052,545	1,052,545	1,274,635
Cash and cash equivalents at the end of the year/period	**1,707,868**	**1,052,545**	**1,274,635**	**1,193,407**	**1,323,923**

Net cash flows from operating activities

For the three months ended March 31, 2024, we recorded net cash inflow from operating activities of RMB436.2 million. This was primarily due to our profit before tax of RMB352.9 million, adjusted by non-cash and non-operating items, mainly comprising: (i) depreciation of property, plant and equipment of RMB240.4 million; (ii) amortization of other intangible assets of RMB149.9 million; and (iii) investment losses received from disposal of financial liabilities held for trading of RMB64.9 million. This was partially offset by: (i) an increase in inventories of RMB51.3 million; and (ii) a decrease in trade and notes payables of RMB101.8 million.

In 2023, we recorded inflow from operating activities of RMB2,203.1 million. This was primarily due to our profit before tax of RMB1,206.8 million, adjusted by non-cash and non-operating items, mainly comprising: (i) depreciation of property, plant and equipment of RMB910.8 million; (ii) amortization of other intangible assets of RMB552.4 million; and (iii) increase in other payables and accruals of RMB160.9 million. This was partially offset by: (i) decrease in trade and notes payables of RMB262.1 million; and (ii) an increase in inventories of RMB143.8 million.

In 2022, we recorded inflow from operating activities of RMB1,090.1 million. This was primarily due to our profit before tax of RMB822.0 million, adjusted by non-cash and non-operating items, which primarily included (i) depreciation of property, plant and equipment of RMB761.2 million; (ii) amortization of other intangible assets of RMB582.2 million; and (iii) decrease in trade and notes payables of RMB218.0 million. This was partially offset by: (i) an increase in inventories of RMB329.0 million; and (ii) a decrease in other payables and accruals of RMB300.2 million.

In 2021, we recorded net cash inflow from operating activities of RMB755.1 million. This was primarily due to our profit before tax of RMB770.4 million, adjusted by non-cash and non-operating items, mainly comprising: (i) depreciation of property, plant and equipment of RMB455.7 million; (ii) amortization of other intangible assets of RMB315.9 million; and (iii) increase in trade and notes payables of RMB143.4 million. This was partially offset by: (i) an increase in inventories of RMB815.7 million; and (ii) an increase in prepayments, other receivables and other assets of RMB66.0 million.

Net cash flows from investing activities

For the three months ended March 31, 2024, we recorded net cash outflow used in investing activities of RMB400.2 million. This was primarily due to: (i) purchases of property, plant and equipment, intangible assets and other non-current assets of RMB347.5 million; (ii) net cash paid for acquisition of a subsidiary of RMB51.0 million; and (iii) cash paid for futures contract of RMB191.2 million, which was partially offset by cash received from futures contract of RMB189.5 million.

In 2023, we recorded net cash outflow used in investing activities of RMB1,771.1 million. This was primarily due to: (i) purchases of property, plant and equipment, intangible assets and other non-current assets of RMB1,742.0 million; (ii) net cash paid for acquisition of a subsidiary of RMB18.1 million; and (iii) cash paid for futures contract of RMB279.8

million. This was partially offset by: (i) cash received from futures contract of RMB235.4 million; and (ii) proceeds from disposal of property, plant and equipment, intangible assets, and other non-current assets RMB19.9 million.

In 2022, we recorded net cash outflow used in investing activities of RMB3,984.0 million. This was mainly due to: (i) purchases of property, plant and equipment, intangible assets and other non-current assets of RMB1,917.6 million; (ii) net cash paid for acquisition of a subsidiary of RMB1,958.4 million; and (iii) cash paid for futures contract of RMB369.3 million. This was partially offset by: (i) cash received from futures contract of RMB592.8 million; and (ii) cash received from bank deposits and interest of RMB100.1 million.

In 2021, we recorded net cash outflow used in investing activities of RMB277.9 million. This was primarily due to: (i) purchases of property, plant and equipment, intangible assets and other non-current assets of RMB1,342.4 million; (ii) cash paid for large certificates of RMB1,740.1 million; and (iii) cash paid for equity investments of RMB14.6 million. This was partially offset by: (i) cash received from bank deposits and interest of RMB2,477.6 million; and (ii) net cash received from the disposal of a subsidiary of RMB288.8 million.

Net cash flows from financing activities

For the three months ended March 31, 2024, we recorded net cash outflow used in financing activities of RMB2.9 million. This was mainly due to: (i) repayment of gold lease business of RMB484.9 million; (ii) repayment of loans from related parties RMB128.5 million; and (iii) cash paid for margin of gold lease business of RMB131.1 million. This was partially offset by: (i) new bank borrowings of RMB197.3 million; and (ii) new gold lease business of RMB342.4 million.

In 2023, we recorded net cash outflow used in financing activities of RMB228.1 million. This was mainly due to: (i) repayment bank borrowings of RMB1,013.7 million; (ii) repayment of gold lease business of RMB560.7 million; and (iii) cash paid for margin of gold lease business of RMB384.3 million. This was partially offset by (i) new bank borrowings of RMB1,151.1 million, and (ii) new gold lease business of RMB740.0 million.

In 2022, we recorded net cash inflow from financing activities of RMB2,225.1 million. This was primarily due to (i) new bank borrowings of RMB2,443.3 million, (ii) new loans from related parties of RMB1,537.2 million, and (iii) new gold lease business of RMB496.9 million. This was partially offset by: (i) repayment of gold lease business of RMB312.0 million; and (ii) repayment of loans from related parties of RMB1,126.3 million.

In 2021, we recorded net cash inflow from financing activities of RMB55.9 million. This was primarily due to: (i) cash received from transfer of repurchased shares of RMB663.2 million; (ii) new loans from related parties of RMB620.0 million; and (iii) new gold lease business of RMB384.6 million. This was partially offset by: (i) cash paid for repurchasing shares of RMB663.2 million; and (ii) repayment of loans from related parties of RMB620.0 million.

CAPITAL EXPENDITURES

A key component of cash flows used in investing activities is capital expenditures. We calculate capital expenditures as purchases of fixed assets, construction in progress ("**CIP**"), purchase of intangible assets and others.

Our increasing capital expenditures during the Track Record Period reflected our expansion investments to fuel and support our expected future growth. The following table sets forth our capital expenditures for the periods indicated:

	Year Ended December 31,			Three Months Ended March 31,	
	2021	2022	2023	2023	2024
			(RMB'000)		
				(unaudited)	
Purchase of fixed assets	89,978	194,363	33,870	12,246	5,251
Purchase of CIP	779,987	1,118,629	1,354,306	348,993	251,771
Purchase of intangible assets	689,830	533,491	34,279	–	3,511
Others	72	56,613	64,917	650	–
Capital expenditures	**1,559,867**	**1,903,096**	**1,487,372**	**361,889**	**260,533**
Capital expenditures as % of revenue	41.2%	30.4%	20.6%	22.8%	14.1%

We may incur additional capital expenditures from time to time as we pursue new opportunities to expand our business.

CAPITAL COMMITMENTS

Our capital commitments during the Track Record Period primarily related to property, plant and equipment and investment commitment. As of December 31, 2021, 2022 and 2023 and March 31, 2024, the total amount of our outstanding capital commitments was RMB351 million, RMB552 million RMB487 million, and RMB552 million, respectively. The following table sets forth a summary of our capital commitments as of the dates indicated:

	Year Ended December 31,			Three Month Ended March 31,
	2021	2022	2023	2024
		(RMB'000)		
			(unaudited)	
Contracted, but not provided for:				
Property, plant and equipment	98,016	233,730	230,173	200,631
Investment commitment	253,000	318,064	256,864	351,043
Total	**351,016**	**551,794**	**487,037**	**551,674**

FORECASTED OPERATING COSTS

According to the Independent Technical Report, our total operating cash cost is estimated at RMB3,141 million, with an estimated unit cash operating cost of RMB510 per milled ore tonnes in 2024. Our total operating cash cost is estimated at RMB15,949 million, with an estimated unit cash operating cost of RMB535 per milled ore tonnes.

The table below sets forth a summary of the forecasted operating costs between 2024 and 2053 as stated in the Independent Technical Report:

Production Volume	Unit	LOM	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Mining																																
Total Ore Mined	kt	29,789	6,162	7,608	5,681	3,303	1,810	1,217	827	731	678	256	245	188	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	50
Processing																																
Gold	koz	2,087	339	425	408	251	138	92	61	51	35	27	23	17	10	9	11	13	12	11	13	11	16	19	17	17	14	14	13	8	8	6
Copper	kt	7	4	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Zinc	kt	152	–	19	18	19	14	24	25	18	15	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Operating Cash Cost																																
Mining	Million RMB	7,966	1,382	1,488	1,456	994	510	306	211	184	163	105	97	84	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	45
Processing	Million RMB	5,854	1,370	1,554	1,127	553	342	245	125	106	100	54	42	34	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	9
General & Administrative	Million RMB	2,130	389	463	356	215	127	87	63	56	51	32	28	24	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	11

DISCUSSION OF SELECTED ITEMS FROM THE CONSOLIDATED STATEMENTS OF FINANCIAL POSITION OF OUR GROUP

The following table sets forth our consolidated statements of financial position as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Non-current assets				
Property, plant and equipment	3,159,699	5,994,266	6,521,646	6,545,924
Right-of-use assets	43,887	278,571	332,756	323,214
Other intangible assets	856,450	6,562,718	6,323,009	6,186,825
Goodwill	41,969	41,969	41,969	41,969
Investments in associates	1,989	357,819	373,481	381,439
Deferred tax assets	5,215	53,978	17,482	39,756
Other non-current assets	186,230	145,508	212,070	285,523
Current assets				
Inventories	1,412,094	2,164,628	2,406,909	2,456,656
Trade receivables from comprehensive recycling of resources business	311,447	339,237	397,481	407,148
Trade receivables from other sales	25,260	29,637	115,732	85,088
Prepayments, other receivables and other assets	166,944	242,143	282,596	301,291
Financial assets at fair value through profit or loss	11,237	48,131	16,909	12,228
Derivative financial assets	6,436	584	13,470	63,060
Restricted cash	116,881	232,560	387,648	405,035
Cash and cash equivalents	1,707,868	1,052,545	1,274,635	1,323,923
Current liabilities				
Trade and notes payables	440,401	851,390	552,457	430,694
Contract liabilities	4,547	62,052	73,177	71,199
Financial liabilities at fair value through profit or loss	387,683	620,250	939,996	875,189
Derivative financial liabilities	1,831	–	–	4,972
Other payables and accruals	191,169	695,336	697,447	497,742
Income tax payables	102,438	177,082	267,693	255,721

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Short-term loans	–	488,409	850,009	1,013,196
Current portion of Long-term loans	25,530	333,770	218,315	332,703
Current portion of lease liabilities	1,424	31,177	38,083	37,987
Current portion of other non-current liabilities	186,589	10,849	9,485	9,602
Current portion of provisions	–	9,567	75,747	76,657
Net current assets	2,416,555	829,583	1,172,971	1,448,767
Long-term loans	–	1,513,781	1,421,974	1,316,441
Contract liabilities	–	606,298	576,999	564,297
Lease liabilities	2,975	230,805	207,219	202,287
Deferred tax liabilities	1,916	2,455,981	2,314,654	2,303,190
Provisions	1,631,259	1,984,834	1,868,099	1,847,318
Other non-current liabilities	74,813	64,410	64,231	70,316
Net assets	**5,001,031**	**7,408,303**	**8,542,208**	**8,949,568**

Property, plant and equipment

Our property, plant and equipment comprised buildings, machinery, vehicles, electronic equipment and others, mineral and construction in progress. The following table sets forth a breakdown of the net book value of our property, plant and equipment as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Buildings	292,763	390,872	594,850	585,110
Machinery	1,017,790	1,473,615	1,411,342	1,337,526
Mobile equipment	96,293	226,248	197,961	184,312
Electronic Equipment and others	16,929	23,986	27,684	26,052
Mineral assets	1,338,642	3,281,262	3,790,664	3,697,370
Construction in progress	397,282	598,283	499,145	715,554
Total	**3,159,699**	**5,994,266**	**6,521,646**	**6,545,924**

Our property, plant and equipment increased by 89.7% from RMB3,159.7 million as of December 31, 2021 to RMB5,994.3 million as of December 31, 2022. This was primarily due to: (i) an increase in mineral assets of RMB1,942.6 million, resulting from the acquisition of Golden Star Resources and our constructions in progress at Wulong Gold Mine and Wassa Gold Mine; and (ii) an increase in machinery of RMB455.8 million, resulting from constructions in progress at Wulong Gold Mine and Sepon Gold, Copper and Rare Earth Mine.

Our property, plant and equipment increased by 8.8% from RMB5,994.3 million as of December 31, 2022 to RMB6,521.6 million as of December 31, 2023. This was primarily due to: (i) an increase in mineral assets of RMB509.4 million resulting from capital expenses in relation to the construction and auxiliary facilities at the Sepon Gold, Copper and Rare Earth Mine and Wassa Gold Mine; and (ii) an increase in buildings of RMB204.0 million, mainly resulting from the increased value of real estate and buildings at the Sepon Gold, Copper and Rare Earth Mine.

Our property, plant and equipment slightly increased by 0.4% from RMB6,521.6 million as of December 31, 2023 to RMB6,545.9 million as of March 31, 2024. This was primarily due to an increase in construction in progress of RMB216.4 million, resulting from construction of mining projects at the Wassa Gold Mine and the Sepon Gold, Copper and Rare Earth Mine. This was partially offset by: (i) a decrease in mineral assets of RMB93.3 million due to depreciation; and (ii) a decrease in machinery of RMB73.8 million due to depreciation.

Right-of-use assets

Our right-of-use assets represent our entitlement to use buildings, machinery and vehicles and leasehold land. The following table sets forth a breakdown of right-of-use assets as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Buildings	298	10,789	4,571	3,269
Machinery and vehicles	–	185,835	167,836	162,024
Leasehold land	43,589	81,947	160,349	157,921
Total	**43,887**	**278,571**	**332,756**	**323,214**

Our right-of-use assets increased significantly by 534.7% from RMB43.9 million as of December 31, 2021 to RMB278.6 million as of December 31, 2022. This was primarily due to an increase in machinery and vehicles of RMB185.8 million arising from our acquisition of Golden Star Resources in 2022.

Our right-of-use assets increased by 19.5% from RMB278.6 million as of December 31, 2022 to RMB332.8 million as of December 31, 2023. This was primarily due to an increase in leasehold land of RMB78.4 million, which was mainly due to: (i) our acquisition of Xinhenghe Mining; (ii) the addition of the land use right of Wulong Mining for a lease term of 50 years; and (iii) the addition of the land use right of Jilong Mining for a lease term of 50 years.

Our right-of-use assets decreased by 2.9% from RMB332.8 million as of December 31, 2023 to RMB323.2 million as of March 31, 2024. This was primarily due to a decrease in machinery and vehicles of RMB5.8 million, resulting from accrued depreciation during 2024.

Other intangible assets

Our other intangible assets comprised exploration and mining rights, patent and others. The following table sets forth a breakdown of the net book value of our other intangible assets as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Exploration and mining rights	752,396	6,475,487	6,208,148	6,069,604
Patent	3,973	3,422	2,749	2,597
Others	100,081	83,809	112,112	114,624
Total	**856,450**	**6,562,718**	**6,323,009**	**6,186,825**

Our other intangible assets increased significantly by 666.3% from RMB856.5 million as of December 31, 2021 to RMB6,562.7 million as of December 31, 2022. This was primarily due to an increase in exploration and mining rights of RMB5,723.1 million resulting from our acquisition of Golden Star Resources in 2022.

Our other intangible assets decreased by 3.7% from RMB6,562.7 million as of December 31, 2022 to RMB6,323.0 million as of December 31, 2023. This was primarily due to a decrease in exploration and mining rights of RMB267.3 million mainly associated with the Sepon Gold, Copper and Rare Earth Mine and Wassa Gold Mine, resulting from our normal amortization.

Our other intangible assets decreased by 2.2% from RMB6,323.0 million as of December 31, 2023 to RMB6,186.8 million as of March 31, 2024. This was primarily due to a decrease in exploration and mining rights of RMB138.5 million mainly associated with Sepon Gold, Copper and Rare Earth Mine and Wassa Gold Mine, resulting from our normal amortization.

Goodwill

As of December 31, 2021, 2022 and 2023 and March 31, 2024, our book value of goodwill remained stable at RMB42.0 million, RMB42.0 million, RMB42.0 million and RMB42.0 million, respectively, which was contributed by our acquisition of Guangyuan Technology in 2015.

Investments in associates

Our investments in associates comprised share of the associates' profit for the period, investment costs and share of the associates' total comprehensive income. The following table sets forth a breakdown of our investments in associates as of the dates indicated:

Our investments in associates increased significantly by 17,889.9% from RMB2.0 million as of December 31, 2021 to RMB357.8 million as of December 31, 2022, and increased by 4.4% to RMB373.5 million as of December 31, 2023, and further increased by 2.1% to RMB381.4 million as of March 31, 2024, as a result of our previous investments in Tietto Minerals Limited. As of the Latest Practicable Date, we disposed all our equity interests in Tietto Minerals Limited during the ordinary course of business. For more details, See "History, Development and Corporate Structure — Post-Track Record Period Acquisition".

Deferred tax assets

Our deferred tax assets comprised impairment of assets, provision for bad debts on receivables, provision for inventory impairment, provision for contingent liabilities, deferred income, deductible losses, changes in fair value, lease liabilities, equity interest with taking into consideration the offsetting of balance within the same tax jurisdiction. The following table sets forth a breakdown of our deferred tax assets as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Impairment of assets	721	–	–	–
Provision for bad debts on receivables	688	829	1,124	929
Provision for inventory impairment	893	982	2,696	2,257
Provision for contingent liabilities	1,143	55,100	54,906	54,607
Deferred income	219	297	251	1,107
Deductible losses	1,084	2,448	2,659	2,659
Changes in fair value	467	5,029	14,543	16,420
Lease liabilities	–	70,052	63,732	63,080
Depreciation and amortization differences with tax	–	–	–	27,608
Mineral rights royalty	–	12,492	11,505	11,125
Total deferred income tax assets before offset	5,215	147,229	151,416	179,792

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Amount of offset between deferred income tax assets and liabilities	–	93,251	133,934	140,036
Deferred income tax assets presented net of offset	**5,215**	**53,978**	**17,482**	**39,756**

Our deferred tax assets increased significantly by 935.1% from RMB5.2 million as of December 31, 2021 to RMB54.0 million as of December 31, 2022. This was primarily due to an increase in lease liabilities of RMB70.1 million resulting from our acquisition of Golden Star Resources.

Our deferred tax assets decreased by 67.6% from RMB54.0 million as of December 31, 2022 to RMB17.5 million as of December 31, 2023. This was primarily due to the increase in fair value of Jilong Mining being offset by deferred tax liabilities.

Our deferred tax assets increased by 127.4% from RMB17.5 million as of December 31, 2023 to RMB39.8 million as of March 31, 2024. This was primarily due to an increase in depreciation and amortization differences with tax of RMB27.6 million mainly resulting from different depreciation methods used for tax and accounting basis in LXML.

Other non-current assets

Our other non-current assets comprised advance payment for engineering construction and equipment, mine geological environment treatment and restoration fund, large certificate of bank deposits and interest and others. The following table sets forth a breakdown of our other non-current assets as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Advance payment for engineering construction and equipment	26,819	56,402	105,810	127,491
Funds for land restoration and environmental rehabilitation after mine closure	98,384	83,130	102,974	104,234

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Large certificate of bank deposits and interest	42,118	42,118	–	–
Prepayment for equity acquisition	–	–	–	51,006
Others	18,909	5,976	3,286	2,792
Subtotal	**186,230**	**187,626**	**212,070**	**285,523**
Less: amount due within one year	–	42,118	–	–
Total	**186,230**	**145,508**	**212,070**	**285,523**

Our other non-current assets decreased by 21.9% from RMB186.2 million as of December 31, 2021 to RMB145.5 million as of December 31, 2022. This was primarily due to a decrease in large certificate of bank deposits and interest of RMB42.1 million, resulting from the large certificates of bank deposit maturing in 2023 are reclassified as to other non-current assets maturing within one year.

Our other non-current assets increased by 45.7% from RMB145.5 million as of December 31, 2022 to RMB212.1 million as of December 31, 2023. This was primarily due to an increase in advance payment for engineering construction and equipment of RMB49.4 million, resulting from the prepayment for the expansion of the selection plant of Shandong Changlong Sanhui Construction Engineering Co., Ltd.

Our other non-current assets increased by 34.6% from RMB212.1 million as of December 31, 2023 and RMB285.5 million as of March 31, 2024. This was primarily due to an increase in prepayment for equity acquisition of RMB51.0 million, resulting from the advance payment for the investment in China Investment Mining (Laos) Sole Co., Ltd.

Inventories

Our inventories primarily consist of raw materials, consumable materials, work in progress and finished goods with taking into consideration the impairment provision. The following table sets forth a breakdown of our inventories as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Raw materials	516,090	951,720	971,389	967,826
Consumable materials	1,486	680	610	543
Work in progress	1,112,679	1,288,300	1,457,052	1,511,200
Finished goods	80,577	174,052	168,779	173,493
Subtotal	1,710,832	2,414,752	2,597,830	2,653,062
Impairment provision				
Raw materials	(127,331)	(143,175)	(178,411)	(187,051)
Work in progress	(170,777)	(90,588)	(906)	(90)
Finished goods	(630)	(16,361)	(11,604)	(9,265)
Subtotal	(298,738)	(250,124)	(190,921)	(196,406)
Total	**1,412,094**	**2,164,628**	**2,406,909**	**2,456,656**

Our inventories increased by 53.3% from RMB1,412.1 million as of December 31, 2021 to RMB2,164.6 million as of December 31, 2022. This was primarily due to an increase in raw materials of RMB435.6 million arising from (i) our acquisition of Golden Star Resources, and (ii) an increase in raw materials at the Sepon Gold, Copper and Rare Earth Mine for its expanded ore processing and production volume.

Our inventories increased by 11.2% from RMB2,164.6 million as of December 31, 2022 to RMB2,406.9 million as of December 31, 2023. This was primarily due to an increase in work in progress of RMB168.8 million, mainly caused by an increase in work in progress at the Sepon Gold, Copper and Rare Earth Mine for its expanded mined and processing volume of gold ore.

Our inventories increased by 2.1% from RMB2,406.9 million as of December 31, 2023 to RMB2,456.7 million as of March 31, 2024. This was primarily due to an increase in work in progress of RMB54.1 million, resulting from the balance of semi-finished gold ore inventory in Laos as of March 31, 2024 increased by RMB480 million. Among this, due to the commencement of underground mining from June 2023, the gold ore volume mined has been gradually increasing, resulting in a 7.5% increase in the quantity of gold ore inventory. Additionally, the implementation of cost reduction and efficiency enhancement measures leads to a 3.8% decrease in the unit cost of gold ore inventory as of March 31, 2024 compared to December 31, 2023.

The following table sets forth an aging analysis of inventories as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Less than 1 year	1,063,523	2,009,231	1,889,009	1,293,229
1 to 2 years	237,658	60,963	392,590	939,585
2 to 3 years	77,709	37,474	30,758	127,859
Over 3 years	33,204	56,960	94,552	95,983
Total	**1,412,094**	**2,164,628**	**2,406,909**	**2,456,656**

The following table sets forth the turnover days of our inventories for the years/periods indicated:

	Year Ended December 31,			Three Months Ended March 31,
	2021	2022	2023	2024
Inventory turnover days	158	146	171	180
Total	**158**	**146**	**171**	**180**

Note:

1. Inventory turnover days are equal to the average balance of inventory at the beginning and the end of the relevant period divided by cost of sales for such period and multiplied by 365 days for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024.

Our inventory turnover days were 158 days, 146 days, 171 days, and 180 days in 2021, 2022, 2023 and for the three months ended March 31, 2024, respectively. The decrease in our inventory turnover days in 2022 was primarily attributable to (i) the acquisition of Golden Star Resources led to an increase in the inventory in 2022; (ii) the increase of the operation costs arising from the increase of gold selling volume; and (iii) the increase in demand in the gold market and the improvement in our production efficiency have led to a reduction in the inventory turnover days. The increase in our inventory turnover days in 2023 was primarily due to the new underground mining at the Sepon Gold, Copper and Rare Earth Mine resulting in the increase of the unit cost of mining. The increase in our inventory turnover days for the three months ended March 31, 2024 was mainly due to the increase of the inventory quantity of gold ore at the Sepon Gold, Copper and Rare Earth Mine.

As of June 30, 2024, RMB892.9 million or 36.3% of the inventories as of March 31, 2024 had been subsequently utilized.

Trade receivables from gold and commodities sales

Our trade receivables from gold and commodities sales refer to our trade receivables other than the comprehensive recycling of resources business conducted through Guangyuan Technology. Impairment losses in respect of trade debtors are recorded using an allowance account unless we are satisfied that recovery of the amount is remote, in which case the impairment loss is written off against trade debtors directly.

Our trade receivables from gold and commodities sales increased by 17.3% from RMB25.3 million as of December 31, 2021 to RMB29.6 million as of December 31, 2022, and further increased by 290.5% to RMB115.7 million as of December 31, 2023. This was primarily due to the receivables from customers at the end of the period, generated by our sales of gold products, copper concentrate powder, zinc concentrate powder, and copper cathodes.

Trade receivables from gold and commodities sales decreased by 26.5% from RMB115.7 million as of December 31, 2023 to RMB85.1 million as of March 31, 2024 due to Wulong Mining's receipt of payments for gold products of RMB19.5 million, Wassa Gold Mine's receipt of payments for gold products of RMB6.0 million, and the Sepon Gold, Copper and Rare Earth Mine's receipt of payments for gold products of RMB2.8 million for the sale of Trafigura copper.

We maintain strict control over our outstanding receivables. Overdue balances are reviewed regularly by senior management.

Our trade receivables from gold and commodities sales are typically due within 60 days. No interests are charged on the trade receivables from other sales. The following table sets forth an aging analysis of trade receivables from other sales, based on invoice dates as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Less than 1 year	25,210	29,637	115,732	85,088
1 to 2 years	–	–	–	–
2 to 3 years	50	–	–	–
Over 3 years	–	–	–	–
Total	**25,260**	**29,637**	**115,732**	**85,088**

The following table sets forth the turnover days of our trade receivables from gold and commodities sales for the years/periods indicated:

	Year ended December 31,			Three Months ended March 31,
	2021	2022	2023	2024
Trade receivables turnover days	2	2	4	5
Total	**2**	**2**	**4**	**5**

Note:

1. Trade receivables turnover days are equal to the average balance of trade receivables at the beginning and the end of the relevant period divided by revenue for such period and multiplied by 365 days for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024.

Trade receivables from comprehensive recycling of resources business

Our trade receivables from our comprehensive recycling of resources business conducted through Guangyuan Technology refers to our receivable government subsidies, which is generally associated with low recovery risks.

Trade receivables from our comprehensive recycling of resources business increased by 8.9% from RMB311.4 million as of December 31, 2021 to RMB339.2 million as of December 31, 2022 and further increased by 17.2% from RMB339.2 million as of December 31, 2022 to RMB397.5 million as of December 31, 2023, resulting from the delayed subsidy disbursements from PRC Government.

Trade receivables from our comprehensive recycling of resources business increased by 2.4% from RMB397.5 million as of December 31, 2023 to RMB407.1 million as of March 31, 2024, resulting from additional government subsidies.

The following table sets forth an aging analysis of trade receivables from comprehensive recycling of resources business, based on invoice dates as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Less than 1 year	69,680	74,704	92,642	82,104
1 to 2 years	83,630	69,680	74,704	76,885
2 to 3 years	158,121	83,630	69,680	77,849
Over 3 years	16	111,223	160,455	170,310
Total	**311,447**	**339,237**	**397,481**	**407,148**

The following table sets forth the turnover days of our trade receivables for the years/periods indicated:

	Year ended December 31,			Three Months ended March 31,
	2021	2022	2023	2024
Trade receivables turnover days	31	21	22	25
Total	**31**	**21**	**22**	**25**

Note:

1. Trade receivables turnover days are equal to the average balance of trade receivables at the beginning and the end of the relevant period divided by revenue for such period and multiplied by 365 days for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024.

Our trade receivables turnover days were 2 days, 11 days, 22 days and 25 days in 2021, 2022 and 2023 and for the three months ended March 31, 2024, respectively. The increase in our trade receivables turnover days during Track Record Period was primarily due to the government subsidies of Guangyuan Technology which needs certain time to process.

As of June 30, 2024, RMB8.3 million or 1.7% of the trade receivables as of March 31, 2024 had been settled.

Prepayments, other receivables, and other assets

Our prepayments, other receivables, and other assets consist of prepayments, deposits and other receivables, large certificates of bank deposits and interest and others. The following table sets forth a breakdown of our prepayments, other receivables and other assets as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Prepayments	50,037	99,560	83,944	114,683
Deposits and other receivables	120,194	58,134	180,497	152,864
Large certificates of bank deposits and interest	–	42,118	–	—
Others	51	46,471	25,177	39,312
Less: Impairment of other receivables	(3,338)	(4,140)	(7,022)	(5,568)
Total	**166,944**	**242,143**	**282,596**	**301,291**

Our prepayments, other receivables and other assets increased by 45.0% from RMB166.9 million as of December 31, 2021 to RMB242.1 million as of December 31, 2022. This was primarily due to an increase in prepayments of RMB49.5 million, which is attributed to our acquisition of Golden Star Resources.

Our prepayments, other receivables and other assets increased by 16.7% from RMB242.1 million as of December 31, 2022 to RMB282.6 million as of December 31, 2023. This was primarily due to an increase in deposits and other receivables of RMB122.4 million, resulting from (i) a decrease in prepayments of RMB15.6 million; (ii) an increase of other receivables of RMB45.0 million arising from the increase in gold selling price in 2023 and increase of funds in gold futures account at GSWL and LXML; (iii) the utilization of the futures margin; and (iv) decrease in deductible input tax of RMB21.3 million.

Our prepayments, other receivables and other assets increased by 6.6% from RMB282.6 million as of December 31, 2023 to RMB301.3 million as of March 31, 2024. This was primarily due to (i) an increase in prepayments of RMB30.7 million; (ii) an increase of other receivables of RMB33.8 million arising from the increase in gold prices in 2023 and the increase of funds in gold futures account at GSWL and LXML; and (iii) the utilization of the futures margin.

As of June 30, 2024, RMB126.6 million or 42.0% of the prepayments, deposits and other assets as of March 31, 2024 had been settled.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss refer to listed equity investments at fair value.

Our financial assets at fair value through profit or loss increased by 328.3% from RMB11.2 million as of December 31, 2021 to RMB48.1 million as of December 31, 2022. This was mainly due to an increase in equity investment in 2022, as a result of the increase in stock price of our investees.

Our financial assets at fair value through profit or loss decreased by 64.9% from RMB48.1 million as of December 31, 2022 to RMB16.9 million as of December 31, 2023, associated with our disposal of equity investments in 2023.

Our financial assets at fair value through profit or loss further decreased by 27.7% from RMB16.9 million as of December 31, 2023 to RMB12.2 million as of March 31, 2024. This resulted from a decrease in the stock price of our investee.

Derivative financial assets

Our derivative financial assets lead to hedging instruments for cash flow hedge and fair value hedge.

Our derivative financial assets decreased by 90.9% from RMB6.4 million as of December 31, 2021 to RMB0.6 million as of December 31, 2022. This was primarily due to a decrease in the fair value of futures contracts arising from the closing of zinc futures positions in Hanfeng Mining.

Our derivative financial assets increased by 2,206.5% from RMB0.6 million as of December 31, 2022 to RMB13.5 million as of December 31, 2023. This was primarily due to increase in fair value of futures contracts arising from fair value of gold futures contracts in Jilong Mining.

Our derivative financial assets increased by 368.2% from RMB13.5 million as of December 31, 2023 to RMB63.1 million as of March 31, 2024. This resulted from increase in fair value of gold futures contracts arising from increase in fair value of gold futures contracts arising from fair value of gold futures contracts in Jilong Mining due to the increase of the gold price.

Restricted cash

Our restricted cash consist of bank deposits for loans, special fund deposits for environmental rehabilitation and restoration, bank deposits for gold lease business, certificates of deposit due within one year and deposits for investment funds. The following table sets forth a breakdown of our restricted cash as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Bank deposits for loans	–	13,965	13,965	13,965
Deposits for notes payable	–	20,400	–	–
Special fund deposits for environmental rehabilitation and restoration	6,050	18,194	9,825	9,602
Bank deposits for the gold lease business	8,003	100,001	263,858	279,849
Certificates of deposit due within one year	100,095	80,000	100,000	101,619
Deposits for investment funds	2,733	–	–	–
Total	**116,881**	**232,560**	**387,648**	**405,035**

Our restricted cash increased by 99.0% from RMB116.9 million as of December 31, 2021 to RMB232.6 million as of December 31, 2022. This was primarily due to an increase in bank deposits for gold lease business of RMB92.0 million, which is attributed to in the scale of our gold leasing requiring a corresponding increase in deposits.

Our restricted cash increased by 66.7% from RMB232.6 million as of December 31, 2022 to RMB387.6 million as of December 31, 2023. This was primarily due to an increase in bank deposits for gold lease business of RMB163.9 million, which is attributed to in the scale of our gold leasing requiring a corresponding increase in deposits.

Our restricted cash increased by 4.5% from RMB387.6 million as of December 31, 2023 to RMB405.0 million as of March 31, 2024. This was primarily due to an increase in bank deposits for gold lease business of RMB16.0 million, which is attributed to in the scale of our gold leasing requiring a corresponding increase in deposits.

Trade and notes payables

Our trade and notes payables consist of trade payables and notes payables. The following table sets forth a breakdown of our trade and notes payables as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Trade payables	440,401	693,390	552,457	430,694
Notes payables	–	158,000	–	–
Total	**440,401**	**851,390**	**552,457**	**430,694**

Our trade and notes payables increased by 93.3% from RMB440.4 million as of December 31, 2021 to RMB851.4 million as of December 31, 2022. This was primarily due to an increase in trade payables of RMB253.0 million and an increase in notes payables of RMB158.0 million, resulting from: (i) our acquisition of Golden Star Resources; and (ii) a note payable issued by Wulong Mining to an independent third party to pay for certain mining and excavation project costs.

Our trade and notes payables decreased by 35.1% from RMB851.4 million as of December 31, 2022 to RMB552.5 million as of December 31, 2023 due to a decrease in trade payables of RMB140.9 million. This was primarily because: (i) Golden Star Resources entered into a revised materials procurement agreements with a lower purchase price for materials; and (ii) the Sepon Gold, Copper and Rare Earth Mine completed certain expansion projects, resulting in a substantial decrease in payables.

Our trade and notes payables decreased by 22.0% from RMB552.5 million as of December 31, 2023 to RMB430.7 million as of March 31, 2024. This was primarily due to a decrease in trade payables of RMB121.8 million, as LXML and GSWL have made payments for the materials for the year ended December 31, 2023 and the decrease in the contract price of certain material purchase agreement as a result of a re-negotiation of such agreement by GSWL.

All of our trade and notes payables are aged less than one year. The following table sets forth an aging analysis of our trade and notes payables as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Less than 1 year	440,401	851,390	552,457	430,694
Total	**440,401**	**851,390**	**552,457**	**430,694**

The following table sets forth the turnover days of our trade and notes payables for the years/periods indicated:

	Year Ended December 31,			Three Months Ended March 31,
	2021	2022	2023	2024
Trade and notes payables turnover days	50	53	53	36
Total	**50**	**53**	**53**	**36**

Note:

1. Trade and notes payables turnover days are equal to the average balance of trade and notes payables at the beginning and the end of the relevant period divided by cost of sales for such period and multiplied by 365 days for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024.

Our trade and notes payables turnover days increased from 50 days as of December 31, 2021 to 53 days as of December 31, 2022, primarily due to our acquisition of Golden Star Resources in 2022 which substantially increased our trade payable. Our trade and notes payables turnover days decreased from 53 days as of December 31, 2023 to 36 days as of March 31, 2024. This was primarily because we shortened payment period for our suppliers to fully utilize the Ghana Cedis we have on hand to manage foreign exchange risk, as Ghana Cedis depreciated.

As of June 30, 2024, RMB59.8 million or 13.9% of the trade and notes payables as of March 31, 2024 had been settled.

Contract liabilities

The contract liabilities mainly consist of metal streaming and the advance payments received for the sale of metals. We require certain customers to pay in advance of delivery. The receipts in advance are recognized as a contract liability until the products are delivered to the customer. In 2021, 2022 and 2023 and for the three months ended March 31, 2024. RMB1.4 million, RMB4.5 million, RMB1.2 million and RMB9.2 million or 100%, 100%, 100%, 100%, of the advance payments for metal sales, respectively, were subsequently settled and recognized as revenue.

The following table sets forth a breakdown of our contract liabilities as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Short-term advances received from customers				
Sale of goods	4,547	1,227	9,162	6,101
Metal Streaming Arrangement	–	60,825	64,015	65,098
Sub-total	4,547	62,052	73,177	71,199
Long-term advances received from customers				
Metal Streaming Arrangement	–	606,298	576,999	564,297
Total	**4,547**	**668,350**	**650,176**	**635,496**

Note: We acquired Golden Star Resources in January 2022. In May 2015, Golden Star Resources, through its subsidiary Caystar Finance, engaged in a gold purchase and sale agreement with RGLD Gold AG. Under this arrangement, Golden Star Resources received US$145,000,000 from RGLD Gold AG as the purchase price. Golden Star Resources is obligated to supply future gold production from its subsidiaries at a cash purchase price equivalent to 20% of the spot gold price until delivering 240,000 ounces. Subsequently, 5.5% of the gold production will be supplied at a cash purchase price of 30% of the spot gold price. As of March 31, 2024, Golden Star Resources had delivered approximately 176 koz accumulated amount of gold to RGLD Gold AG.

Our contract liabilities increased by 14,753.3% from RMB4.5 million as of December 31, 2021 to RMB668.4 million as of December 31, 2022. This was primarily due to an increase in short-term and long-term advances received from customers arising from gold streaming transactions of GSWL since our acquisition of Golden Star Resources.

Our contract liabilities decreased by 2.7% from RMB668.4 million as of December 31, 2022 to RMB650.2 million as of December 31, 2023. This was primarily due to a decrease in long-term advances received from customers arising from gold streaming transactions of GSWL. The decrease was partially offset by an increase in short-term advances received from customers arising from sales of goods at Hanfeng Mining.

Our contract liabilities decreased by 2.3% from RMB650.2 million as of December 31, 2023 to RMB635.5 million as of March 31, 2024, primarily due to the decrease in long-term and short-term advance receipts from the metal stream transaction of GSWL, as well as the decrease in advance receipts from Hanfeng Mining.

Derivative financial liabilities

Our derivative financial liabilities are related to hedging instruments for cash flow hedge arising from commodity future contracts.

Our derivative financial liabilities were RMB1.8 million, nil, nil and RMB5.0 million as of December 31, 2021, 2022 and 2023 and March 31, 2024, respectively.

Other payables and accruals

Our other payables and accruals consist of amounts due to related parties, payables to contractors, consideration payables for acquiring a subsidiary, engineering quality guarantee deposit, safety deposit, salaries, wages and benefits payables, taxes other than income tax payables and others. The following table sets forth a breakdown of our other payables and accruals as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Amounts due to related parties	–	410,981	128,568	–
Payables to contractors	2,926	6,319	85,195	75,155
Consideration payables for acquiring a subsidiary	–	–	40,800	40,800
Engineering Quality Guarantee Deposit	27,803	33,507	40,984	40,461
Salaries, wages and benefits payables	104,693	114,454	174,859	114,367
Taxes other than income tax payables	53,999	93,558	205,293	203,566
Others	1,748	36,517	21,748	23,293
Total	**191,169**	**695,336**	**697,447**	**497,742**

Our other payables and accruals increased by 263.7% from RMB191.2 million as of December 31, 2021 to RMB695.3 million as of December 31, 2022. This was primarily due to an increase in amounts due to related parties of RMB411.0 million, resulting from the financial support provided by the actual controller, Ms. Li Jinyang, which has led to an increase in the amount payable to the related party.

Our other payables and accruals increased by 0.3% from RMB695.3 million as of December 31, 2022 to RMB697.4 million as of December 31, 2023. This was primarily due to: (i) an increase in taxes other than income tax payables of RMB111.7 million, which is attributed the increase in sales revenue of gold, leading to an increase in the resource tax payable; and (ii) an increase in payable to contractors of RMB78.9 million. The increase was partially offset by a decrease in amounts due to related parties of RMB282.4 million because of the repayment of the financial support provided by the actual controller, Ms. Li Jinyang.

Our other payables and accruals decreased by 28.6% from RMB697.4 million as of December 31, 2023 to RMB497.7 million as of March 31, 2024. This was primarily due to: (i) a decrease in amounts due to related parties of RMB128.5 million for repayment of the financial funds provided by the actual controller, Ms. Li Jinyang; and (ii) a decrease in salaries, wages and benefits payables of RMB60.5 million associated with the award of bonuses.

As of June 30, 2024, RMB91.1 million or 18.3% of other payables and accruals as of March 31, 2024 had been settled.

Income tax payables

Our income tax payables increased by 72.9% from RMB102.4 million as of December 31, 2021 to RMB177.1 million as of December 31, 2022, mainly due to our acquisition of Golden Star Resources in January 2022.

Our income tax payables increased by 51.2% from RMB177.1 million as of December 31, 2022 to RMB267.7 million as of December 31, 2023, mainly due to the increase in profit before tax for the increase in gold sales volumes and unit selling prices.

Our income tax payables decreased by 4.5% from RMB267.7 million as of December 31, 2023 to RMB255.7 million as of March 31, 2024, which is attributed to the payment of the income tax.

Lease liabilities

Our lease liabilities consist of current lease liabilities and non-current liabilities. The following table sets forth a breakdown of our lease liabilities as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Current	1,424	31,177	38,083	37,987
Non-current	2,975	230,805	207,219	202,287
Total	**4,399**	**261,982**	**245,302**	**240,274**

Our current portion of lease liabilities increased by 2,089.4% from RMB1.4 million as of December 31, 2021 to RMB31.2 million as of December 31, 2022. This was mainly due to the increased lease liabilities due to the acquisition of Golden Star Resources in 2022.

Our current portion of lease liabilities increased by 22.2% from RMB31.2 million as of December 31, 2022 to RMB38.1 million as of December 31, 2023. This was mainly due to the increased lease liabilities within one year arising from the acquisition of Jintai Mining and difference of rental payment arrangements.

Our current portion of lease liabilities decreased by 0.3% from RMB38.1 million as of March 31, 2023 to RMB37.99 million as of March 31, 2024. This resulted from the rent paid by Chijin HK and GSWL in 2024.

Our non-current portion of lease liabilities increased by 7,658.2% from RMB3.0 million as of December 31, 2021 to RMB230.8 million as of December 31, 2022. This was mainly due to our acquisition of Golden Star Resources in 2022.

Our non-current portion of lease liabilities decreased by 10.2% from RMB230.8 million as of December 31, 2022 to RMB207.2 million as of December 31, 2023. This was mainly due to the increase in lease liabilities of RMB26.0 million arising from our acquisition of Xinhenghe Mining in 2023 which is offset by rent payment of RMB58.1 million for the period.

Our non-current portion of lease liabilities decreased by 2.4% from RMB207.2 million as of December 31, 2023 to RMB202.3 million as of March 31, 2024. This resulted from the rent paid by Chijin HK and GSWL in 2024.

Deferred tax liabilities

Our deferred tax liabilities consist of fair value adjustments on financial assets at fair value through profit or loss, Accelerated depreciation of property, plant and equipment, environmental rehabilitation, fair value adjustment arising from acquisition of subsidiaries, right-of-use assets and others. The following table sets forth a breakdown of our deferred tax liabilities as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Fair value adjustments on financial assets at fair value through profit or loss	966	88	2,108	9,459
Accelerated depreciation of property, plant and equipment	950	378,810	357,796	370,361
Environmental rehabilitation	–	11,045	11,869	11,662

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Fair value adjustment arising from acquisition of subsidiaries	–	2,080,068	2,004,421	1,982,273
Right-of-use assets	–	65,554	58,817	56,709
Others	–	13,667	13,577	12,762
Total deferred tax liabilities before offset	**1,916**	**2,549,232**	**2,448,588**	**2,443,226**
Amount of offset between deferred tax assets and liabilities	–	93,251	133,934	140,036
Deferred tax liabilities presented net of offset	1,916	2,455,981	2,314,654	2,303,190

Our deferred tax liabilities increased by 128,082.7% from RMB1.9 million as of December 31, 2021 to RMB2,456.0 million as of December 31, 2022. This was mainly due to an increase of RMB2,080.1 million, from assets appreciation resulting from the acquisition of Golden Star Resources in 2022.

Our deferred tax liabilities decreased by 5.8% from RMB2,456.0 million as of December 31, 2022 to RMB2,314.7 million as of December 31, 2023. This was mainly due to a decrease of RMB75.6 million, which is attributed to: (i) amortization of the assessed appreciation of GSWL's mining rights; and (ii) depreciation and amortization of fixed and intangible assets of RMB19.6 million.

Our deferred tax liabilities decreased by 0.5% from RMB2,314.7 million as of March 31, 2023 to RMB2,303.2 million as of March 31, 2024. This was primarily due to amortization of the assessed appreciation of Golden Star Resources resulting from business combinations not under common control.

Provisions

Our provisions consist of environmental rehabilitation and restoration. The following table sets forth a breakdown of our provisions as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Current	–	9,567	75,747	76,657
Non-current	1,631,259	1,984,834	1,868,099	1,847,318
Total	**1,631,259**	**1,994,401**	**1,943,846**	**1,923,975**

Our current provisions increased from nil as of December 31, 2021 to RMB9.6 million as of December 31, 2022, mainly due to the acquisition of GSWL. Our current provisions increased by 691.8% from RMB9.6 million as of December 31, 2022 to RMB75.7 million as of December 31, 2023. This was mainly due to the amendment of environmental rehabilitation and restoration plan by Sepon Gold, Copper and Rare Earth Mine in 2023.

Our current provisions slightly increased by 1.2% from RMB75.7 million as of December 31, 2023 to RMB76.7 million as of March 31, 2024. This was mainly due to the normal environmental rehabilitation and restoration expenditure.

Our non-current provisions increased by 21.7% from RMB1,631.3 million as of December 31, 2021 to RMB1,984.8 million as of December 31, 2022. This was mainly due to (i) an increase in exchange differences of RMB155.9 million, and (ii) the acquisition of GSWL. Our non-current provisions decreased by 5.9% from RMB1,984.8 million as of December 31, 2022 to RMB1,868.1 million as of December 31, 2023. This was mainly due to the expenditure on reclamation obligations. Our non-current provisions decreased by 1.1% from RMB1,868.1 million as of December 31, 2023 to RMB1,847.3 million as of March 31, 2024. This was mainly due to the normal reclamation expenditure.

Other non-current liabilities

Our other non-current liabilities of payables for mining rights, payables for equity transfer and deferred government grants. The following table sets forth a breakdown of our other non-current liabilities as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Payables for mining rights	85,716	73,186	71,960	72,841
Payables for equity transfer	173,566	–	–	–
Deferred government grants	2,120	2,073	1,756	7,077
Total	**261,402**	**75,259**	**73,716**	**79,918**
Current portion	186,589	10,849	9,485	9,602
Non-current portion	74,813	64,410	64,231	70,316

Our other non-current liabilities decreased by 13.9% from RMB74.8 million as of December 31, 2021 to RMB64.4 million as of December 31, 2022. This was mainly due to an decrease in payables for equity transfer of RMB173.6 million, resulting from the acquisition of LXML in 2018, for which payments were due to the original shareholder MMG Limited ("**MMG**"). The equity transfer payment due to MMG had been fully made in 2022.

Our other non-current liabilities decreased by 0.3% from RMB64.4 million as of December 31, 2022 to RMB64.2 million as of December 31, 2023. This was mainly due to a decrease in payables for mining rights of RMB1.2 million and a decrease in deferred government grants of RMB0.3 million, mainly resulting from: (i) the payment of mining rights transfer fees and interest expenses in 2023; and (ii) a reduction in government subsidies received in 2023.

Our other non-current liabilities increased by 9.5% from RMB64.2 million as of March 31, 2023 to RMB70.3 million as of March 31, 2024. This was mainly due to the increase in deferred government grants of RMB5.3 million, resulting from government subsidiaries received by Hanfeng Mining.

INDEBTEDNESS

During the Track Record Period, our indebtedness consisted of short-term loans, financial liabilities at fair value through profit or loss, other payables and accruals,. The following table sets forth a breakdown of our indebtedness as of the dates indicated:

	As of December 31,			As of March 31,	As of June 30,
	2021	2022	2023	2024	2024
			(RMB'000)		*(unaudited)*
Short-term					
Short-term loans	–	488,409	850,009	1,013,196	859,655
Financial liabilities at fair value through profit or loss	387,683	620,250	939,996	875,189	1,165,196
Other payables and accruals	191,169	695,336	697,447	497,742	497,563
Current portion of long-term loans	25,530	333,770	218,315	332,703	663,463
Current portion of lease liabilities	1,424	31,177	38,083	37,987	36,318
Current portion of other non-current liabilities	186,589	10,849	9,485	9,602	9,523
Long-term					
Long-term loans	–	1,513,781	1,421,974	1,316,441	834,597
Lease liabilities	2,975	230,805	207,219	202,287	197,685
Other non-current liabilities	72,693	62,337	62,475	63,240	61,638
Total	**868,063**	**3,986,714**	**4,445,003**	**4,348,387**	**4,325,638**

Short-term loans

Our short-term loans consist of unsecured and secured and short-term loans, and based on their maturity dates, they are classified as current. The following table sets forth a breakdown of our short-term loans as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
		(RMB'000)		
Short-term loans – unsecured	–	236,636	850,009	1,013,196
Short-term loans – secured	–	251,773	–	–
Total	**–**	**488,409**	**850,009**	**1,013,196**

Secured short-term loans accounted for nil, 51.6%, nil and nil of our total short-term loans as of December 31, 2021, 2022 and 2023, and March 31, 2024, respectively. All of our secured short-term loans during the Track Record Period were at fixed interest rates of 3.7% per annum.

Unsecured short-term loans accounted for nil, 48.5%, 100.0% and, 100.0% of our total short-term loans as of December 31, 2021, 2022 and 2023, and March 31, 2024, respectively, at interest rates of nil, 2.6%-3.9%, 2.5%-7.5% and 2.5%-4.5% per annum, respectively.

Our short-term loans increased by 74.0% from RMB488.4 million as of December 31, 2022 to RMB850.0 million as of December 31, 2023. This was mainly due to the increase in profit before tax arising from our acquisition of Golden Star Resources and the expansion project of Jilong Gold Mine.

Our short-term loans increased by 19.2% from RMB850.0 million as of December 31, 2023 to RMB1,013.2 million as of March 31, 2024, resulting from the increase in short-term loans of Jilong Mining and Guangyuan Technology.

Our short-term loans decreased by 15.2% from RMB1,013.2 million as of March 31, 2024 to RMB859.7 million as of June 30, 2024, resulting from repaid short-term borrowings.

As of June 30, 2024, we had unutilized short-term credit facilities of RMB2,846 million.

Long-term loans

Our long-term loans consist of unsecured and secured and long-term loans, and based on their maturity dates, they are classified as current or non-current. The following table sets forth a breakdown of our long-term loans as of the dates indicated:

	As of December 31,			As of March 31,
	2021	2022	2023	2024
	(RMB'000)			
Current				
Current portion of long-term bank loans – secured	–	245,850	129,456	241,994
Current portion of long-term bank loans – unsecured	25,530	87,920	88,859	90,709
Subtotal	25,530	333,770	218,315	332,703
Non-current				
Long-term loans – secured	–	1,386,724	1,381,994	1,276,471
Long-term loans – unsecured	–	127,057	39,980	39,970
Subtotal	–	1,513,781	1,421,974	1,316,441
Total	**25,530**	**1,847,551**	**1,640,289**	**1,649,144**

Secured long-term loans accounted for nil, 88.4%, 92.1% and 92.1% of our total long-term loans as of December 31, 2021, 2022 and 2023, and March 31, 2024, respectively, at fixed interest rates of nil, 4.1%-5.0%, 4.0%-9.2% and 4.0%-9.1% per annum, respectively.

On the other hand, unsecured long-term loans accounted for 100%, 11.6%, 7.9% and 7.9% of our total long-term loans as of December 31, 2021, 2022 and 2023, and March 31, 2024, respectively, at fixed interest rates of 3.5%, 3.5%-4.0%, 3.5%-4.1%, and 3.5%-4.1% per annum, respectively.

Our long-term loans increased by 7,136.8% from RMB25.5 million as of December 31, 2022 to RMB1,847.6 million as of December 31, 2023 mainly due to the loan for the acquisition of Golden Star Resources in 2022. The principal amount of the loan is RMB1.2 billion for a term of 5 years, with an interest rate of 4.95% in 2022, which was adjusted to 4.35% since June 2023. The repayment plan involves repaying the principal every six months, with interest accrued and paid quarterly.

Our long-term loans decreased by 11.2% from RMB1,847.6 million as of December 31, 2022 to RMB1,640.3 million as of December 31, 2023, resulting from the partial repayment of long-term loans.

As of June 30, 2024, we had no unutilized long-term credit facilities.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss comprise of gold leasing.

Our financial liabilities at fair value through profit or loss increased by 60.0% from RMB387.7 million as of December 31, 2021 to RMB620.3 million as of December 31, 2022, further increased by 51.6% to RMB940.0 million as of December 31, 2023, resulting from an increase in gold leasing.

Our financial liabilities at fair value through profit or loss decreased by 6.9% from to RMB940.0 million as of December 31, 2023 to RMB875.2 million as of March 31, 2024, resulting from a decrease in gold leasing outstanding balance.

Most of our outstanding bank borrowings are denominated in RMB and U.S. dollars. During the Track Record Period, certain of our outstanding bank loans were secured by the pledge of fixed assets and mining rights.

Except for our indebtedness as disclosed above, we did not have outstanding indebtedness or any loan capital issued and outstanding or agreed to be issued, bank overdrafts, loans or similar indebtedness, liabilities under acceptance (other than normal trade bills), acceptance credits, debentures, mortgages, charges, finance leases or hire purchase commitments, guarantees or other material contingent liabilities as of June 30, 2024, being the latest practicable date for our indebtedness statement.

RELATED PARTY TRANSACTIONS

During the Track Record Period, we had transactions with certain related parties. For details, please refer to Note 46 to the Accountants' Report included in Appendix I to this Document. Our Directors confirm that these transactions were conducted on arm's length basis and entered into in the ordinary course of business and would not distort our track record results or make our historical results not reflective of our future performance. Certain related party transactions entered into by our Group during the Track Record Period are set out below.

Loans received from Ms. Li Jinyang

	Year Ended December 31,			Three Months Ended/As of March 31
	2021	2022	2023	2024
		(RMB'000)		
Ms. Li Jinyang	620,000	1,537,240	–	–
Total	**620,000**	**1,537,240**	**–**	**–**

New loans repaid to Ms. Li Jinyang

	Year Ended December 31,			Three Months Ended/As of March 31
	2021	2022	2023	2024
		(RMB'000)		
Ms. Li Jinyang	620,000	1,126,300	300,040	128,546
Total	**620,000**	**1,126,300**	**300,040**	**128,546**

Outstanding balances with related parties:

	Year Ended December 31,			Three Months Ended/As of March 31
	2021	2022	2023	2024
		(RMB'000)		
Other payables and accruals				
Ms. Li Jinyang	–	410,940	128,546	–

KEY FINANCIAL RATIOS

The following table sets forth our key financial ratios for the periods indicated:

	Year Ended December 31,			Three Months Ended/As of March 31,
	2021	2022	2023	2024
Rates of return				
Return on assets	7.6%	2.8%	4.7%	1.3%
Return on equity	12.3%	6.7%	10.2%	2.7%
Liquidity ratios				
Current ratio	2.8	1.3	1.3	1.4
Quick ratio	1.7	0.6	0.7	0.7
Gearing ratio	0.6%	35.1%	32.0%	32.4%

Notes:

1. Return on assets ratio is calculated using net profit divided by total assets at the end of the year, multiplied by 100%.

2. Return on equity ratio is calculated using net profit divided by total equity at the end of the year, multiplied by 100%.

3. Current ratio is calculated using total current assets divided by total current liabilities.

4. Quick ratio is calculated using total current assets less inventories divided by total current liabilities.

5. Gearing ratio is calculated by dividing total debt (which includes current and non-current bank loans, lease liabilities and other borrowings) by total equity.

OFF-BALANCE SHEET ARRANGEMENTS

As of the Latest Practicable Date, we did not enter into any outstanding off-balance sheet commitments or arrangements.

FINANCIAL RISK MANAGEMENT

We are exposed to a variety of financial risks, including market risk, credit risk and liquidity risk. These risks and the manner in which we seek to mitigate them are summarized below and described in more details in Note 49 to the Accountants' Report included in Appendix I to this Document for more details. Thereto, please also see section headed "Risk Factors".

Market Risk

Interest rate risk

Our exposure to the risk of changes in market interest rates relates primarily to our debt obligations with a floating interest rate.

Exchange rate risk

We have transactional exchange rate risk exposures mainly arising from sales or purchases by operating units in currencies other than the units' functional currencies. We have subsidiaries using U.S. dollars and Renminbi as their recording currency. These subsidiaries have transactions in currencies other than their recording currency. In addition, we have exchange rate exposures arising from foreign currency borrowings. We adopt an overall management on their foreign exchange businesses and reduce their exchange rate exposures using forward foreign exchange contracts based on the market trend as necessary.

Commodity price risk

We are mainly exposed to the risk of changes in major metals' prices in the future, including gold, copper, zinc, silver and copper cathodes. The fluctuations in these products' prices may affect our operating performance.

We use commodity futures contracts to manage risk in the sale of gold, copper, zinc, silver and copper cathodes. The management keeps an eye on the changes in prices of commodity futures contracts.

Price risk of equity instrument investments

Price risk of equity instrument investments refers to the risk that the fair value of equity securities is reduced due to changes in the level of the stock index and the value of individual securities. As of March 31, 2024, we were exposed to the price risk of individual equity instrument investments due to the classification as equity instrument investments at fair value through profit or loss.

Credit Risk

We only deal with approved and reputable third parties. According to our policy, all customers who require credit transactions are subject to a credit review. In addition, we continuously monitor the balance of trade receivable to ensure that the Group is not exposed to significant bad debt risks.

Since counterparties of cash and cash equivalents and derivatives are banks with good reputation and high credit ratings, credit risk arising from these financial instruments is insignificant.

Other financial assets of the Company include equity instrument investments, trade receivable and some derivatives. The credit risk on these financial assets arises from the default of counterparties, with a maximum exposure equal to carrying amounts of these instruments.

Our maximum exposure to credit risk at each balance sheet date is the total amount charged to the customers less the amount of the provision for impairment.

Liquidity Risk

We use a revolving liquidity planning tool to manage the risk of funding shortfalls. This tool considers both the maturity of its financial instruments and the expected cash flows generated from our operations.

Our objective is to maintain a balance between continuity and flexibility of funding through the use of financing including long-term loans and short-term loans.

Financial Risk

We implement a combination of short-term financing through gold leasing contracts and we engage in hedging transactions in the futures market to transfer and mitigate price risks. Also, fluctuations in the market prices of gold and other mineral resources, which have historically exhibited considerable volatility, impact our profitability and cash follow from operations. Due to the international pricing of gold in U.S. dollars, and the fact that our operating costs of overseas mining and expenditures are denominated in various currencies, we are exposed to risks associated with exchange rate fluctuations.

UNAUDITED [REDACTED] STATEMENT OF ADJUSTED CONSOLIDATED NET TANGIBLE ASSETS

For details of our unaudited [**REDACTED**] adjusted consolidated net tangible assets, see Appendix II to this Document.

DIVIDEND

We declared and dividends to our Shareholders of nil, nil, RMB82.4 million and nil respectively, for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024.

Subject to our constitutional documents and the Company Law, we have adopted a general annual dividend policy, according to which we may declare dividend by way of cash dividends, stock dividends, or a combination of cash and stock dividends. We prioritize cash dividends. Other than under certain special circumstances, the accumulated profit distributed in cash in any three consecutive years shall not be less than 30% of the annual distributable profit realized in the same three years. The abovementioned special circumstances include: (i) the Company's net cash flow from operating activities in the year of the consolidated statement of accounts is negative; (ii) the single amount of investment projects such as proposed internal investment, external investment or assets acquisition in the current year or within the next twelve months reaches or exceeds 10% of the Company's latest audited net assets.

There is no guarantee, representation or indication that our Directors must or will recommend and that we must or will declare and pay dividends at all. The dividend distribution record in the past may not be used as a reference or basis to determine the level of dividends that may be declared or paid by us in the future.

[**REDACTED**]

[**REDACTED**] represent professional fees, [**REDACTED**] commissions and other fees incurred in connection with the [**REDACTED**]. We expect to incur [**REDACTED**] of approximately HK$[**REDACTED**] million, representing approximately [**REDACTED**]% of the [**REDACTED**] from the [**REDACTED**] (based on the mid-point of the indicative [**REDACTED**] and assuming the [**REDACTED**] is not exercised). The [**REDACTED**] we incurred in the Track Record Period and expect to incur would consist of approximately HK$[**REDACTED**] [**REDACTED**]-related fees and approximately HK$[**REDACTED**] [**REDACTED**]-related fees (including fees and expenses of legal advisors and the reporting accountant of approximately HK$[**REDACTED**] and other fees and expenses of approximately HK$[**REDACTED**]). Among the total [**REDACTED**] which we expect to incur, approximately HK$[**REDACTED**] will be directly attributable to the issue of our Shares and capitalized, and the remaining HK$[**REDACTED**] will be expensed upon [**REDACTED**]. Our Directors do not expect such expenses to materially impact our results of operations in 2024.

NO MATERIAL ADVERSE CHANGE

After due and careful consideration, our Directors confirm that, up to the date of this document, there has been no material adverse change in our financial and trading position or prospects since March 31, 2024.

DISCLOSURE REQUIRED UNDER THE HONG KONG LISTING RULES

We confirm that, as at the Latest Practicable Date, there were no circumstances that would give rise to a disclosure requirement under Rules 13.13 to 13.19 of the Hong Kong Listing Rules.

FINANCIAL INFORMATION OF GOLDEN STAR RESOURCES

This following is a discussion of Golden Star Resources' results of operation for (i) the period from January 1, 2021 to January 31, 2021, (ii) the year ended December 31, 2021, and (iii) the period from January 1, 2022 to January 31, 2022, the acquisition date.

Consolidated Income Statements

The table below sets forth the consolidated statements of profit or loss of Golden Star Resources from January 1, 2021 to January 31, 2022 (acquisition date) derived from the consolidated statements of profit or loss of Golden Star Resources set out in the Accountants' Report included in Appendix IB to this Document:

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Revenue	1,671,379	120,733	111,476
Cost of sales	(877,076)	(65,921)	(71,197)
Gross profit	794,303	54,812	40,279
Other income and gains	22,312	9,519	95
Administrative expenses	(629,067)	(19,282)	(430,078)
Other expenses	(4,412)	(829)	(15,353)
Finance costs	(64,419)	(7,954)	(5,520)
Profit/(loss) before tax	118,717	36,266	(410,577)
Income tax expenses	(224,257)	(18,475)	57,154
(Loss)/Profit for the year/period	(105,540)	17,791	(353,423)
Total comprehensive income for the year/period	(184,369)	(58,305)	(344,400)

Discussion of Certain Key Income Statements Items

Revenue

Revenue of Golden Star Resources was approximately RMB1,671.4 million, RMB120.7 million and RMB111.5 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

Revenue primarily consists of revenue from contracts with customers. The following table sets forth the components of Golden Star Resources for the period indicated.

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Revenue from contracts with customers	1,671,379	120,733	111,476
Total	**1,671,379**	**120,733**	**111,476**

Cost of Sales

Cost of sales of Golden Star Resources consist of (i) direct operating cost including salaries, fuel, electricity and consumables as well as (ii) overheads associated with the mining and processing of gold. Cost of sales of Golden Star Resources was approximately RMB877.1 million, RMB65.9 million and RMB71.2 million for the years ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

Gross profit

Gross profit represents revenue less cost of sales. Gross profit of Golden Star Resources was approximately RMB794.3 million, RMB54.8 million and RMB40.3 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

Other income and gains

Other income and gains primarily consist of gains on changes in fair value of derivative financial instruments, interest income and others. The following table sets forth the components of other income and gains for the period indicated.

Other income and gains of Golden Star Resources was approximately RMB22.3 million, RMB9.5 million and RMB0.1 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Gains on changes in fair value of derivative financial instruments	20,946	9,239	–
Interest income	1,090	175	62
Others	276	105	33
Total	**22,312**	**9,519**	**95**

Administrative expenses

Administrative expenses primarily consist of corporate office salaries, severance and other related cost due to the acquisition of Golden Star Resources in January 2022, consultancy costs, management fees and corporate overheads. Administrative expenses of Golden Star Resources was approximately RMB629.1 million, RMB19.3 million and RMB430.1 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

Other expenses

Other expenses primarily consist of loss on disposal of non-current assets and bank fees. The following table sets forth the components of other expenses and losses for the period indicated. Other expenses of Golden Star Resources was approximately RMB4.4 million, RMB0.8 million and RMB15.4 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Foreign exchange losses, net	3,777	819	1,534
Other	635	10	13,819
Total	**4,412**	**829**	**15,353**

Finance costs

Finance costs primarily represent the interest expense. The following table sets forth the components of finance costs for the period indicated.

Finance costs of Golden Star Resources was approximately RMB64.4 million, RMB8.0 million and RMB5.5 million for the year ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

An analysis of finance costs is as follows:

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Interest on loans	36,784	5,663	3,255
Interest on metal streaming arrangement	16,662	1,412	1,313
Accretion of interest of provisions	509	27	125
Interest on lease liabilities	10,464	852	827
	64,419	**7,954**	**5,520**

Income tax expenses

Income tax expenses primarily consist of: (i) current tax expenses; and (ii) deferred tax expense. The following table sets forth the components of income tax expenses for the period indicated.

Income tax expenses of Golden Star Resources was approximately RMB224.3 million, RMB18.5 million and RMB57.2 million for the years ended December 31, 2021, one month ended January 31, 2021 and one month ended January 31, 2022.

	Year ended December 31,	One month Ended January 31,	One month Ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Current	185,597	14,753	6,910
Deferred	38,660	3,722	(64,064)
Total	**224,257**	**18,475**	**(57,154)**

PERIOD TO PERIOD COMPARISON OF RESULTS OF OPERATIONS

One Months Ended January 31, 2022 Compared to One Months Ended January 31, 2021

Revenue

Revenue decreased by 7.7% from RMB120.7 million for the one month ended January 31, 2021 to RMB111.5 million for the one month ended January 31, 2022, primarily due to the decrease of 4% in average gold price recorded in January 2022.

Cost of Sales

Cost of sales increased by 8.0% from RMB65.9 million for the one month ended January 31, 2021 to RMB71.2 million for the one month ended January 31, 2022, primarily due to the increase in staff cost and change in inventory.

Gross Profit and Gross Profit Margin

Gross profit decreased by 26.5% from RMB54.8 million for the one month ended January 31, 2021 to RMB40.3 million for the one month ended January 31, 2022 due to the higher staff cost incurred in 2022.

Other income and gains

Other income and gains decreased significantly by 99.0% from RMB9.5 million for the one month ended January 31, 2021 to RMB0.1 million for the one month ended January 31, 2022, primarily due to the unrealized gain on gold hedge and the gain on fair value of derivative financial instruments of RMB9.2 million in 2021, while the gold hedge agreements was terminated in January 2022.

Administrative expenses

Administrative expenses increased significantly by 2,130.5% from RMB19.3 million for the one month ended January 31, 2021 to RMB430.1 million for the one month ended January 31, 2022, primarily due to severance and acquisition of control cost due to the acquisition of Golden Star Resources in January 2022.

Other expenses

Other expenses increased significantly by 1,752.0% from RMB0.8 million for the one month ended January 31, 2021 to RMB15.4 million for the one month ended January 31, 2022. The other expenses for the one month ended January 31, 2022 mainly represented exchange loss and the bank charge for the period.

Finance costs

Finance costs decreased by 30.6% from RMB8.0 million for the one month ended January 31, 2021 to RMB5.5 million for the one month ended January 31, 2022, primarily due to the settlement of a convertible debenture and a loan from a financial institution in August 2021 and January 2022, respectively. These settlements were partially offset by receiving a revolving loan from Chijin HK in January 2022.

Profit/(loss) before tax

Profit before tax decreased significantly by 1,232.1% from RMB36.3 million for the one month ended January 31, 2021 to approximately RMB-410.6 million for the one month ended January 31, 2022, primarily due to the severance and acquisition of control cost due to the acquisition of GSR in January 2022.

Income tax expenses

Golden Star Resources recorded income tax expenses of RMB18.5 million for the one month ended January 31, 2021 and we record income tax credit of RMB57.2 million for the one month ended January 31, 2022, primarily due to the increase of deferred tax assets related to the tax losses recognized during the acquisition of Golden Star Resources.

Profit for the year/period

Golden Star Resources recorded profit for the year/period of RMB17.8 million for the one month ended January 31, 2021 and Golden Star Resources recorded loss for the one month ended January 31, 2022 of RMB353.4 million, primarily due to severance and acquisition of control cost arising from the acquisition of Golden Star Resources in January 2022.

Discussion of Certain Key Financial Position Items

The following table sets forth Golden Star Resources' consolidated statements of financial position as of the dates indicated:

	As of December 31, 2021	As of January 31, 2022
	RMB'000	*RMB'000*
Non-current assets		
Property, plant and equipment	1,441,764	1,456,297
Right-of-use assets	193,934	192,027
Other intangible assets	28,781	28,553
Other non-current assets	14,762	14,759
Deferred tax assets	–	66,828
Current assets		
Inventories	190,444	195,531
Trade receivables	1,589	6,500
Prepayments, other receivables and other assets	87,696	92,390
Financial assets at fair value through profit or loss	158	158
Cash and cash equivalents	224,335	70,007
Current liabilities		
Trade and notes payables	146,316	172,763
Contract liabilities	50,619	50,610
Other payables and accruals	117,991	903,498
Income tax payables	5,585	10,587
Current portion of long-term loans	4,798	–
Current portion of lease liabilities	20,361	20,291
Current portion of derivative financial liabilities	188	–
Current portion of provisions	6,797	6,796
Net Current Assets/(Liabilities)	151,567	(799,959)
Total Assets less Current liabilities	1,830,808	958,505
Non-current liabilities		
Long-term loans	529,656	–
Derivative financial liabilities	11,153	–
Contract liabilities	591,866	590,143
Lease liabilities	188,832	186,845
Deferred tax liabilities	236,487	239,044
Provisions	102,348	102,004
Net Assets	170,466	(159,531)
Equity		
Equity attributable to owners of the parent		
Share capital	6,906,459	6,906,459
Reserves	(6,901,831)	(7,251,897)
Non-controlling interests	165,838	185,907

Property, plant and equipment

Property, plant and equipment consist of comprised buildings, machinery, mobile equipment, electronic equipment and others, mineral assets and construction in progress. As of January 31, 2022, Golden Star Resources recorded property, plant and equipment of RMB1,456.3 million.

Right-of-use assets

Right-of-use assets represent buildings and machinery and vehicles. As of January 31, 2022, Golden Star Resources recorded right-of-use assets of RMB192.0 million.

Other intangible assets

Other intangible assets represent exploration and mining rights and others. As of January 31, 2022, Golden Star Resources recorded intangible assets of RMB28.6 million.

Other non-current assets

Golden Star Resources' other non-current assets represent funds for land restoration and environmental rehabilitation after mine closure. As of January 31, 2022, Golden Star Resources recorded other non-current assets of RMB14.8 million.

Inventories

Golden Star Resources' inventories primarily consist of raw materials, work in progress and finished goods. As of January 31, 2022, Golden Star Resources recorded inventories of RMB195.5 million. The following table sets forth a breakdown of Golden Star Resources' inventories as of the dates indicated:

	As of December 31,	As of January 31,
	2021	2022
	(RMB'000)	
Raw materials	156,456	161,057
Work in progress	19,832	34,436
Finished goods	14,156	38
Total	**190,444**	**195,531**

Trade receivables

The trade receivables for Golden Star Resources represented trade receivables and impairment were RMB1.6 million and RMB6.5 million as of December 31, 2021 and January 31, 2022.

Prepayments, other receivables, and other assets

Golden Star Resources' prepayments, other receivables, and other assets consist of prepayments and deposits and other receivables. As of January 31, 2022, Golden Star Resources recorded inventories of RMB92.4 million. The following table sets forth a breakdown of our prepayments, other receivables and other assets as of the dates indicated:

	As of December 31, 2021	As of January 31, 2022
	(RMB'000)	
Prepayments	46,852	54,712
Deposits and other receivables	40,844	37,678
Less: Impairment of other receivables	–	–
Total	**87,696**	**92,390**

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss refer to listed equity investment. As of January 31, 2022, Golden Star Resources recorded financial assets at fair value through profit or loss of RMB0.2 million.

Cash and cash equivalents

Golden Star Resources' cash and cash equivalents consist of cash and bank balances and cash and cash equivalents. As of January 31, 2022, Golden Star Resources recorded cash and cash equivalents of RMB70.00 million.

Trade and notes payables

Golden Star Resources' trade and notes payables consist of trade payables. As of January 31, 2022, Golden Star Resources recorded trade and notes payables of RMB172.8 million.

The following table sets forth a breakdown of Golden Star Resources' trade and notes payables as of the dates indicated:

	As of December 31, 2021	As of January 31, 2022
	(RMB'000)	
Trade payables	146,316	172,763
Total	**146,316**	**172,763**

All of Golden Star Resources' trade and notes payables are aged less than one year. The following table sets forth an aging analysis of our trade and notes payables as of the dates indicated:

	As of December 31, 2021	As of January 31, 2022
	(RMB'000)	
Less than 1 year	146,316	172,763
Total	**146,316**	**172,763**

Contract liabilities

As of January 31, 2022, Golden Star Resources recorded contract liabilities of RMB640.8 million. The following table sets forth a breakdown of Golden Star Resources' contract liabilities as of the dates indicated:

	As of December 31, 2021	As of January 31, 2022
	(RMB'000)	
Short-term advances received from customers		
Metal Streaming Arrangement	50,619	50,610
Long-term advances received from customers		
Metal Streaming Arrangement	591,866	590,143
Total	**642,485**	**640,753**

Other payables and accruals

Golden Star Resources' other payables and accruals consist of retention payables to contractors, salaries, wages and benefits payables, taxes other than income tax payables and others.

	As of December 31, 2021	As of January 31, 2022
	(RMB'000)	
Payable to Chijin *(note)*	–	598,185
Payables to contractors	76,940	65,864
Salaries, wages and benefits payables	31,230	229,603
Taxes other than income tax payables	9,552	9,698
Others	269	148
Total	**117,991**	**903,498**

We recorded payable to Chijin of RMB598.2 million which represents the GSWL's outstanding balance due to Chijin HK as of January 31, 2022. This balance is unsecured, interest-free and has no fixed terms of repayment.

Income tax payables

As of January 31, 2022, Golden Star Resources recorded income tax payables of RMB10.6 million.

Long-term loans

As of January 31, 2022, Golden Star Resources recorded nil long-term loans.

Lease liabilities

As of January 31, 2022, Golden Star Resources recorded lease liabilities of RMB186.8 million.

Derivative financial liabilities

As of January 31, 2022, Golden Star Resources recorded nil derivative financial liabilities.

Provisions

As of January 31, 2022, Golden Star Resources recorded provisions of RMB102.0 million.

Discussion of Certain Key Cash Flows Items

The following table sets forth a summary of Golden Star Resources' statements of cash flow for the period indicated.

	Year ended December 31,	One month ended January 31,	One month ended January 31,
	2021	2021	2022
		(RMB'000) *(unaudited)*	
Net cash flows from operating activities	295,894	(108,796)	(111,641)
Net cash flows used in investing activities	(399,994)	(18,686)	(64,614)
Net cash flows from/(used in) financing activities	(120,978)	(2,435)	22,345
Net increase/(decrease) in cash and equivalents	(165,078)	(130,099)	(153,910)
Cash and cash equivalents at the end of the year	224,335	263,511	70,007

Net cash flows from operating activities

Net cash flows from operating activities from January 1, 2021 to January 31, 2022 was RMB155.6 million reflecting net cash inflows generated from sales of gold during the period.

Net cash flows used in investing activities

Net cash flows used in investing activities from January 1, 2021 to January 31, 2022 was RMB464.6 million reflecting exploration and acquisition of mining equipment during the period. This is primary attributable to increased underground/surface mine development and acquisition of additional property, plant and equipment.

Net cash flows from/(used in) financing activities

Net cash flows from/(used in) financing activities from January 1, 2021 to January 31, 2022 was RMB98.6 million. This is primarily due to the settlement of a convertible debenture and a loan from a financial institution in August 2021 and January 2022, respectively. These settlements were partially offset by receiving a revolving loan from Chijin HK in January 2022.

FUTURE PLANS

See "Business — Business Strategies" in this Document for a detailed description of our future plans.

[REDACTED]

Assuming that the [**REDACTED**] is not exercised, after deducting the [**REDACTED**] commissions and other estimated [**REDACTED**] expenses payable by us in connection with the [**REDACTED**], and assuming an [**REDACTED**] of HK$[**REDACTED**] per Share (being the mid-point of the indicative [**REDACTED**] of HK$[**REDACTED**] and HK$[**REDACTED**]), we estimate that we will receive [**REDACTED**] of approximately HK$[**REDACTED**] from the [**REDACTED**].

We intend to use the [**REDACTED**] from the [**REDACTED**] for the purposes and in the amounts set forth below, subject to adjustments based on our evolving business needs and changing market conditions:

(i) Approximately [**REDACTED**]% of the [**REDACTED**], or HK$[**REDACTED**], will be used for the transformation and exploration of existing mines to fully realize our growth potential. We will continue enhancing geological exploration efforts and expanding exploration activities within existing mines while exploring new mines on the outskirts of our mineralization areas. See "Business — Development and Expansion" for details of our development and expansion plan.

- [Approximately [**REDACTED**]% or HK$[**REDACTED**]] will be allocated to our operation in PRC to be used for exploration and mine development, including, but not limited, to exploration projects in the deep and peripheral areas, construction of shafts and access, purchase of equipment and machinery, technical upgrades, construction of processing plants, expansion of open-pit production, and other further expansion of mines for the years of 2025-2027. Such undertakings are expected to increase our Reserves and extend life of mines, expand ore processing capacity and production volume, further optimize our operating and capital costs, and improve our operating efficiency and productivity].

- [Approximately [**REDACTED**]% or HK$[**REDACTED**]] will be allocated to our operations in Laos and Ghana, including, but not limited, to construction of the new power generation plants, exploration projects in the deep and peripheral areas, construction of shafts, declines and access, purchase of equipment and machinery, upgrades and expansion of existing processing plants, extending open-pit mining to underground mining and other further expansions of mines for the years of 2025-2027. Such undertakings are expected to enhance our operating efficiency and productivity, to provide stable power sources to our mining facilities, increase our Reserves and extend life of mines, to reduce our carbon footprint and environmental impact, contribute to our ESG visions and goals, expand ore processing capacity and production volume, solidify our competitive advantage, achieve economies of scale, improve overall profitability].

(ii) Approximately [**REDACTED**]% of the [**REDACTED**], or HK$[**REDACTED**], will be used to acquire sizable, high-quality global mining assets preferably in countries with mature mining industries with stable political and economic landscape. For more details of our strategies of potential acquisition and criteria of identifying potential acquisition targets, see "Business — Business Strategies — Continue to obtain resources and reserves and increase production volume through domestic and overseas acquisitions of high-quality gold assets for robust and sustainable growth." We expect such acquisition would secure valuable resources, increase our revenue and enhance financial performance, diversify and reduce our concentration risk and improve our competitive edge in the market.

(iii) Approximately [**REDACTED**]% of the [**REDACTED**], or HK$[**REDACTED**], will be used for general corporate purposes.

In the event that the [**REDACTED**] is set at the maximum [**REDACTED**] or the minimum [**REDACTED**] of the indicative [**REDACTED**], the [**REDACTED**] of the [**REDACTED**] will increase by approximately HK$[**REDACTED**] or decrease by approximately HK$[**REDACTED**].

The additional [**REDACTED**] that we would receive if the [**REDACTED**] was to be exercised in full would be: (i) HK$[**REDACTED**] (assuming an [**REDACTED**] of HK$[**REDACTED**] per Share, being the maximum [**REDACTED**] of the indicative [**REDACTED**]); (ii) HK$[**REDACTED**] (assuming an [**REDACTED**] of HK$[**REDACTED**] per Share, being the mid-point of the indicative [**REDACTED**]); and (iii) HK$[**REDACTED**] (assuming an [**REDACTED**] of HK$[**REDACTED**] per Share, being the minimum [**REDACTED**] of the indicative [**REDACTED**]).

To the extent that the [**REDACTED**] from the [**REDACTED**] are either more or less than expected, we will adjust our allocation of the [**REDACTED**] for the above purposes on a pro rata basis.

To the extent that the [**REDACTED**] of the [**REDACTED**] are not immediately used for the aforementioned purposes or if we are unable to effect any part of our future development plans as intended, we may deposit such funds into short-term interest-bearing bank accounts at licensed commercial banks and/or other authorized financial institutions in Hong Kong or the PRC (as defined under the Securities and Futures Ordinance, the Law of the People's Republic of China on Commercial Banks (中華人民共和國商業銀行法) and other relevant laws in the PRC) for so long as it is deemed to be in our best interest. In such event, we will comply with the appropriate disclosure requirements under the Hong Kong Listing Rules.

If any part of our development plan does not proceed as planned for any reasons, such as changes in government policies that would hinder the development of any of our projects or the occurrence of force majeure events, the Directors will carefully evaluate the situation and may reallocate the [**REDACTED**] from the [**REDACTED**] accordingly. We will issue an appropriate announcement if there is any material change to the proposed [**REDACTED**] in accordance with the Hong Kong Listing Rules.

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[To insert the firm's letterhead]

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION TO THE DIRECTORS OF CHIFENG JILONG GOLD MINING CO., LTD. AND CITIC SECURITIES (HONG KONG) LTD.

Introduction

We report on the historical financial information of Chifeng Jilong Gold Mining Co., Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages IA-5 to IA-106, which comprises the consolidated statements of profit or loss, the consolidated statements of comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows of the Group for each of the years ended 31 December 2021, 2022 and 2023, and the three months ended 31 March 2024 (the "Relevant Periods"), and the consolidated statements of financial position of the Group and the statements of financial position of the Company as at 31 December 2021, 2022 and 2023 and 31 March 2024 and material accounting policy information and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages IA-5 to IA-106 forms an integral part of this report, which has been prepared for inclusion in the document of the Company dated 29 August 2024 (the "Document") in connection with the initial [**REDACTED**] of the shares of the Company on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting accountants' responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk assessments, the reporting accountants consider internal control relevant to the entity's

preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information, in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the financial position of the Group and the Company as at 31 December 2021, 2022 and 2023 and 31 March 2024 and of the financial performance and cash flows of the Group for each of the Relevant Periods in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information.

Review of interim comparative financial information

We have reviewed the interim comparative financial information of the Group which comprises the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the three months ended 31 March 2023 and other explanatory information (the "Interim Comparative Financial Information"). The directors of the Company are responsible for the preparation and presentation of the Interim Comparative Financial Information in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information. Our responsibility is to express a conclusion on the Interim Comparative Financial Information based on our review. We conducted our review in accordance with International Standard on Review Engagements 2410 Review of Interim Financial Information Performed by the Independent Auditor of the Entity issued by the International Auditing and Assurance Standards Board ("IAASB"). A review consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion. Based on our review, nothing has come to our attention that causes us to believe that the Interim Comparative Financial Information, for the purposes of the accountants' report, is not prepared, in all material respects, in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on the Stock Exchange and the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page IA-4 have been made.

Dividends

We refer to Note 16 to the Historical Financial Information which contains information about the dividends paid by the Company in respect of the Relevant Periods.

[●]
Certified Public Accountants
Hong Kong
[Date]

I. HISTORICAL FINANCIAL INFORMATION

Preparation of Historical Financial Information

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The financial statements of the Group for the Relevant Periods, on which the Historical Financial Information is based, were audited by Ernst & Young in accordance with International Standards on Auditing issued by the IAASB (the "Underlying Financial Statements").

The Historical Financial Information is presented in Renminbi ("RMB") and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Revenue	*7*	3,782,624	6,266,787	7,220,952	1,586,753	1,853,906
Cost of sales		(2,525,121)	(4,471,868)	(4,868,078)	(1,130,846)	(1,232,228)
Gross profit		1,257,503	1,794,919	2,352,874	455,907	621,678
Other income and gains	*10*	90,512	142,088	137,770	5,819	72,657
Selling and distribution expenses		(777)	(720)	(689)	(143)	(94)
Administrative expenses		(393,035)	(786,368)	(850,390)	(187,045)	(207,751)
Research and development expenses		(24,847)	(27,652)	(51,753)	(4,056)	(16,415)
Impairment losses on financial assets, net		(1,984)	(644)	(2,440)	(777)	1,472
Other expenses and losses	*11*	(142,760)	(119,022)	(173,501)	(61,934)	(71,659)
Finance costs	*12*	(14,226)	(176,485)	(215,026)	(44,690)	(54,264)
Share of (losses)/profits of associates		(11)	(4,104)	9,950	(3,671)	7,322
PROFIT BEFORE TAX	*13*	770,375	822,012	1,206,795	159,410	352,946
Income tax expenses	*14*	(156,967)	(328,132)	(335,210)	(68,645)	(114,682)
PROFIT FOR THE YEAR/PERIOD		613,408	493,880	871,585	90,765	238,264
Attributable to:						
Owners of the parent		581,949	450,976	804,471	75,743	201,718
Non-controlling interests		31,459	42,904	67,114	15,022	36,546
		613,408	493,880	871,585	90,765	238,264
EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT						
Basic						
– For profit for the year/period (RMB)	*15*	0.35	0.27	0.49	0.05	0.12
Diluted						
– For profit for the year/period (RMB)		0.35	0.27	0.49	0.05	0.12

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
PROFIT FOR THE YEAR/PERIOD	613,408	493,880	871,585	90,765	238,264
Other comprehensive income/(loss) that may be reclassified to profit or loss in subsequent periods, net of tax:					
Exchange differences on translation of foreign operations	(59,166)	563,016	109,453	(84,389)	12,610
Cash flow hedges: Effective portion of changes in fair value of hedging instruments	3,639	(3,639)	–	161	(10,114)
OTHER COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR/PERIOD, NET OF TAX	(55,527)	559,377	109,453	(84,228)	2,496
TOTAL COMPREHENSIVE INCOME FOR THE YEAR/PERIOD	557,881	1,053,257	981,038	6,537	240,760
Attributable to:					
Owners of the parent	532,607	867,940	883,526	14,425	203,560
Non-controlling interests	25,274	185,317	97,512	(7,888)	37,200
	557,881	1,053,257	981,038	6,537	240,760

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	Notes	31 December 2021	31 December 2022	31 December 2023	31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
NON-CURRENT ASSETS					
Property, plant and equipment	*17*	3,159,699	5,994,266	6,521,646	6,545,924
Right-of-use assets	*18(a)*	43,887	278,571	332,756	323,214
Other intangible assets	*19*	856,450	6,562,718	6,323,009	6,186,825
Goodwill	*20*	41,969	41,969	41,969	41,969
Investments in associates	*21*	1,989	357,819	373,481	381,439
Deferred tax assets	*22*	5,215	53,978	17,482	39,756
Other non-current assets	*23*	186,230	145,508	212,070	285,523
TOTAL NON-CURRENT ASSETS		4,295,439	13,434,829	13,822,413	13,804,650
CURRENT ASSETS					
Inventories	*24*	1,412,094	2,164,628	2,406,909	2,456,656
Trade receivables from the comprehensive recycling of resources business	*25*	311,447	339,237	397,481	407,148
Trade receivables from gold and commodities sales	*26*	25,260	29,637	115,732	85,088
Prepayments, other receivables and other assets	*27*	166,944	242,143	282,596	301,291
Financial assets at fair value through profit or loss	*28*	11,237	48,131	16,909	12,228
Derivative financial assets	*29*	6,436	584	13,470	63,060
Restricted cash	*30*	116,881	232,560	387,648	405,035
Cash and cash equivalents	*30*	1,707,868	1,052,545	1,274,635	1,323,923
TOTAL CURRENT ASSETS		3,758,167	4,109,465	4,895,380	5,054,429
TOTAL ASSETS		8,053,606	17,544,294	18,717,793	18,859,079
CURRENT LIABILITIES					
Trade and notes payables	*32*	440,401	851,390	552,457	430,694
Contract liabilities	*33*	4,547	62,052	73,177	71,199
Financial liabilities at fair value through profit or loss	*31*	387,683	620,250	939,996	875,189
Derivative financial liabilities	*29*	1,831	–	–	4,972
Other payables and accruals	*34*	191,169	695,336	697,447	497,742
Income tax payables		102,438	177,082	267,693	255,721
Short-term loans	*35*	–	488,409	850,009	1,013,196
Current portion of long-term loans	*36*	25,530	333,770	218,315	332,703
Current portion of lease liabilities	*18(b)*	1,424	31,177	38,083	37,987
Current portion of other non-current liabilities	*38*	186,589	10,849	9,485	9,602
Current portion of provisions	*37*	–	9,567	75,747	76,657
TOTAL CURRENT LIABILITIES		1,341,612	3,279,882	3,722,409	3,605,662
NET CURRENT ASSETS		2,416,555	829,583	1,172,971	1,448,767
TOTAL ASSETS LESS CURRENT LIABILITIES		6,711,994	14,264,412	14,995,384	15,253,417

	Notes	**31 December 2021**	**31 December 2022**	**31 December 2023**	**31 March 2024**
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
NON-CURRENT LIABILITIES					
Long-term loans	*36*	–	1,513,781	1,421,974	1,316,441
Contract liabilities	*33*	–	606,298	576,999	564,297
Lease liabilities	*18(b)*	2,975	230,805	207,219	202,287
Deferred tax liabilities	*22*	1,916	2,455,981	2,314,654	2,303,190
Provisions	*37*	1,631,259	1,984,834	1,868,099	1,847,318
Other non-current liabilities	*38*	74,813	64,410	64,231	70,316
TOTAL NON-CURRENT LIABILITIES		1,710,963	6,856,109	6,453,176	6,303,849
NET ASSETS		5,001,031	7,408,303	8,542,208	8,949,568
EQUITY					
Equity attributable to owners of the parent					
Share capital	*39*	1,663,911	1,663,911	1,663,911	1,663,911
Treasury shares		–	(300,787)	(520,803)	(520,803)
Reserves	*41*	2,956,506	3,824,446	5,008,882	5,212,442
		4,620,417	5,187,570	6,151,990	6,355,550
Non-controlling interests	*42*	380,614	2,220,733	2,390,218	2,594,018
TOTAL EQUITY		5,001,031	7,408,303	8,542,208	8,949,568

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Year ended 31 December 2021

	Attributable to owners of the parent									
	Share capital	Share premium*	Reserve fund*	Hedging reserve*	Exchange fluctuation reserve*	Safety fund surplus reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	RMB'000 (note 39)	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2021	1,663,911	626,614	48,816	–	(381,968)	1,665	2,128,772	4,087,810	355,340	4,443,150
Profit for the year	–	–	–	–	–	–	581,949	581,949	31,459	613,408
Other comprehensive income/(loss) for the year:										
Exchange differences on translation of foreign operations	–	–	–	–	(53,164)	–	–	(53,164)	(6,002)	(59,166)
Changes in fair value of the effective portion and reclassification of cash flow hedges, net of tax	–	–	–	3,822	–	–	–	3,822	(183)	3,639
Total comprehensive income for the year	–	–	–	3,822	(53,164)	–	581,949	532,607	25,274	557,881
Transfer from/(to) retained profits, net	–	–	32,610	–	–	(633)	(31,977)	–	–	–
At 31 December 2021	1,663,911	626,614	81,426	3,822	(435,132)	1,032	2,678,744	4,620,417	380,614	5,001,031

Year ended 31 December 2022

	Attributable to owners of the parent										
	Share capital	Treasury shares	Share premium*	Reserve fund*	Hedging reserve*	Exchange fluctuation reserve*	Safety fund surplus reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	RMB'000 (note 39)	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2022	1,663,911	–	626,614	81,426	3,822	(435,132)	1,032	2,678,744	4,620,417	380,614	5,001,031
Profit for the year	–	–	–	–	–	–	–	450,976	450,976	42,904	493,880
Other comprehensive income/(loss) for the year:											
Exchange differences on translation of foreign operations	–	–	–	–	–	420,786	–	–	420,786	142,230	563,016
Changes in fair value of the effective portion and reclassification of cash flow hedges, net of tax	–	–	–	–	(3,822)	–	–	–	(3,822)	183	(3,639)
Total comprehensive income for the year	–	–	–	–	(3,822)	420,786	–	450,976	867,940	185,317	1,053,257
Acquisition of a subsidiary *(Note 50)*	–	–	–	–	–	–	–	–	–	1,666,393	1,666,393
Dividends declared	–	–	–	–	–	–	–	–	–	(40,991)	(40,991)
Capital injection from non-controlling interests of a subsidiary	–	–	–	–	–	–	–	–	–	29,400	29,400
Repurchase of shares	–	(300,787)	–	–	–	–	–	–	(300,787)	–	(300,787)
Transfer from/(to) retained profits, net	–	–	–	50,698	–	–	(139)	(50,559)	–	–	–
At 31 December 2022	1,663,911	(300,787)	626,614	132,124	–	(14,346)	893	3,079,161	5,187,570	2,220,733	7,408,303

Year ended 31 December 2023

	Attributable to owners of the parent										
	Share capital	Treasury shares	Share premium*	Other capital reserve*	Reserve fund*	Exchange fluctuation reserve*	Safety fund surplus reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	RMB'000 (note 39)	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2023	1,663,911	(300,787)	626,614	–	132,124	(14,346)	893	3,079,161	5,187,570	2,220,733	7,408,303
Profit for the year	–	–	–	–	–	–	–	804,471	804,471	67,114	871,585
Other comprehensive income for the year:											
Exchange differences on translation of foreign operations	–	–	–	–	–	79,055	–	–	79,055	30,398	109,453
Total comprehensive income for the year	–	–	–	–	–	79,055	–	804,471	883,526	97,512	981,038
Acquisition of a subsidiary *(Note 50)*	–	–	–	–	–	–	–	–	–	71,973	71,973
Repurchase of shares *(note i)*	–	(220,016)	–	–	–	–	–	–	(220,016)	–	(220,016)
Other *(note ii)*	–	–	–	300,910	–	–	–	–	300,910	–	300,910
Transfer from retained profits	–	–	–	–	71,600	–	538	(72,138)	–	–	–
At 31 December 2023	1,663,911	(520,803)	626,614	300,910	203,724	64,709	1,431	3,811,494	6,151,990	2,390,218	8,542,208

Note i: During the year ended 31 December 2023, the Company repurchased a total of 15,182,600 shares, amounting to RMB220,016,000, to implement employee stock ownership plan or share incentive plan in the future.

Note ii: As of 31 December 2023, the vesting conditions for the Phase II Employee Stock Ownership Plan have been met, and the shares will be exercised after 28 April 2024. The amount prepaid by the employees for the shares is recorded in other capital reserve in the amount of RMB300,910,000.

Three months ended 31 March 2023 (unaudited)

	Attributable to owners of the parent										
	Share capital	Treasury shares	Share premium*	Reserve fund*	Hedging reserve*	Exchange fluctuation reserve*	Safety fund surplus reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	RMB'000 (note 39)	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2023	1,663,911	(300,787)	626,614	132,124	–	(14,346)	893	3,079,161	5,187,570	2,220,733	7,408,303
Profit for the period	–	–	–	–	–	–	–	75,743	75,743	15,022	90,765
Other comprehensive income for the period:											
Exchange differences on translation of foreign operations	–	–	–	–	–	(61,479)	–	–	(61,479)	(22,910)	(84,389)
Changes in fair value of the effective portion and reclassification of cash flow hedges, net of tax	–	–	–	–	161	–	–	–	161	–	161
Total comprehensive income for the period	–	–	–	–	161	(61,479)	–	75,743	14,425	(7,888)	6,537
Acquisition of a subsidiary	–	–	–	–	–	–	–	–	–	71,975	71,975
Transfer from retained profits	–	–	–	–	–	–	481	(481)	–	–	–
At 31 March 2023	1,663,911	(300,787)	626,614	132,124	161	(75,825)	1,374	3,154,423	5,201,995	2,284,820	7,486,815

Three months ended 31 March 2024

	Attributable to owners of the parent											
	Share capital	Treasury shares	Share premium*	Other capital reserve*	Reserve fund*	Hedging reserve*	Exchange fluctuation reserve*	Safety fund surplus reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	RMB'000 *(note 39)*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2024	1,663,911	(520,803)	626,614	300,910	203,724	–	64,709	1,431	3,811,494	6,151,990	2,390,218	8,542,208
Profit for the period	–	–	–	–	–	–	–	–	201,718	201,718	36,546	238,264
Other comprehensive income for the period:												
Exchange differences on translation of foreign operations	–	–	–	–	–	–	10,334	–	–	10,334	2,276	12,610
Changes in fair value of the effective portion and reclassification of cash flow hedges, net of tax	–	–	–	–	–	(8,492)	–	–	–	(8,492)	(1,622)	(10,114)
Total comprehensive income for the period	–	–	–	–	–	(8,492)	10,334	–	201,718	203,560	37,200	240,760
capital injection from non controlling interests	–	–	–	–	–	–	–	–	–	–	166,600	166,600
Transfer from retained profits	–	–	–	–	–	–	–	1,193	(1,193)	–	–	–
At 31 March 2024	1,663,911	(520,803)	626,614	300,910	203,724	(8,492)	75,043	2,624	4,012,019	6,355,550	2,594,018	8,949,568

* These reserve accounts comprise the consolidated reserves in the consolidated statements of financial position as at 31 December 2021, 2022 and 2023 and 31 March 2024.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
CASH FLOWS FROM OPERATING ACTIVITIES						
Profit before tax		770,375	822,012	1,206,795	159,410	352,946
Adjustments for:						
Impairment losses/(reversal of impairment losses) on inventories	*13*	191,615	41,723	3,516	(29,943)	5,190
Impairment losses/(gains) on financial assets, net	*13*	1,984	644	2,440	777	(1,472)
Depreciation of property, plant and equipment	*13*	455,688	761,217	910,774	192,941	240,363
Depreciation of right-of-use assets	*13*	3,607	30,180	36,973	8,880	9,835
Amortisation of other intangible assets	*13*	315,883	582,247	552,382	114,652	149,890
Amortisation of non-current assets	*13*	4,152	1,843	85	21	12
Loss on disposal of non-current assets	*11*	3,060	2,632	1,853	2,412	–
Fair value changes of financial assets and liabilities		1,696	11,914	71,343	53,756	(34,666)
Finance costs		14,226	176,485	215,026	44,690	54,264
Foreign exchange differences, net		(86,237)	(27,244)	(20,157)	18,391	(14,951)
Share of losses/(profits) of associates		11	4,104	(9,950)	3,671	(7,322)
Gains on disposal of derivative financial instruments	*10*	(25,014)	(82,913)	(75,343)	–	(15,217)
Investment gains received from listed equity investments		–	–	(4,226)	–	–
Investment losses received from disposal of financial liabilities held for trading		10,856	17,249	76,018	8,843	64,904
Gain on bargain purchase recognised in other income and gains		–	(6,371)	–	–	–
Subtotal		1,661,902	2,335,722	2,967,529	578,501	803,776

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
(Increase)/decrease in inventories		(815,667)	(328,969)	(143,830)	53,284	(51,258)
Decrease/(increase) in trade receivables		(17,216)	(38,667)	(144,339)	(41,475)	20,977
Increase in prepayments, other receivables and other assets		(66,045)	(36,409)	9,047	(46,133)	6,739
Increase/(decrease) in trade and notes payables		143,372	(217,967)	(262,103)	46,955	(101,805)
Increase/(decrease) in other payables and accruals		(18,448)	(300,173)	160,855	4,358	(76,053)
Increase/(decrease) in contract liabilities		3,125	(53,930)	11,126	8,135	(1,978)
Decrease/(increase) in restricted cash		14,532	(10,243)	(2,632)	10,066	223
Cash generated from operations		905,555	1,349,364	2,595,653	613,691	600,621
Income tax paid		(150,406)	(259,231)	(392,573)	(93,961)	(164,394)
Net cash flows from operating activities		755,149	1,090,133	2,203,080	519,730	436,227
CASH FLOWS FROM INVESTING ACTIVITIES						
Cash received from investment income		15,330	–	–	–	–
Proceeds from disposal of property, plant and equipment, intangible assets, and other non-current assets		1,902	13,993	19,877	7,773	–
Net cash received from the disposal of subsidiaries		288,783	–	–	–	–
Cash received from futures contract		–	592,835	235,405	1,305	189,484
Cash received from bank deposits and interest		2,477,600	100,095	–	–	–
Repayment of prepaid equity investment		35,528	–	–	–	–
Cash received of disposal of financial assets at fair value through profit or loss		–	–	13,434	–	–

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Purchases of property, plant and equipment, intangible assets and other non-current assets		(1,342,365)	(1,917,613)	(1,741,966)	(490,400)	(347,518)
Cash paid for equity investments		(14,556)	(365,680)	–	–	–
Net cash paid for acquisition of a subsidiary		–	(1,958,363)	(18,095)	(18,095)	(51,006)
Cash paid for futures contract		–	(369,314)	(279,774)	(29,305)	(191,150)
Cash paid for large certificates		(1,740,095)	(80,000)	–	–	–
Net cash flows used in investing activities		(277,873)	(3,984,047)	(1,771,119)	(528,722)	(400,190)
CASH FLOWS FROM FINANCING ACTIVITIES						
Cash received from Non-controlling interests		–	29,400	–	–	166,600
New bank borrowings		–	2,443,305	1,151,050	158,213	197,298
New gold lease business		384,572	496,873	739,959	419,795	342,421
New loans from related parties		620,000	1,537,240	–	–	–
Cash received from gold lease deposit		17,150	8,003	242,518	–	115,094
Cash received from eligible participants in share incentive plan		–	–	300,910	–	–
Cash received from share incentive platform of SI I	*(note 40)*	663,193	–	–	–	–
Repayment of bank borrowings		(248,866)	(210,400)	(1,013,745)	(232,358)	(34,239)
Cash paid for distribution of dividends or profit and interest expenses		(11,582)	(172,160)	(146,126)	(35,806)	(37,466)
Repayment of gold lease business		(83,816)	(311,970)	(560,674)	(143,500)	(484,864)
Cash paid for repurchasing shares for share incentive plan		(663,193)	(300,787)	(220,016)	–	–

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Repayment of loans to related parties		(620,000)	(1,126,300)	(300,040)	–	(128,546)
Repayment of lease liabilities		(1,553)	(33,696)	(58,102)	(7,857)	(8,113)
Cash paid for bank borrowings deposits		–	(13,965)	–	–	–
Cash (paid)/received for notes payable deposits		–	(20,400)	20,400	–	–
Cash paid for gold lease deposits		–	(100,000)	(384,254)	–	(131,083)
Net cash flows from/(used in) financing activities		55,905	2,225,143	(228,120)	158,487	(2,898)
NET INCREASE/ (DECREASE) IN CASH AND CASH EQUIVALENTS		533,181	(668,771)	203,841	149,495	33,139
Cash and cash equivalents at beginning of year/period		1,176,419	1,707,868	1,052,545	1,052,545	1,274,635
Effect of foreign exchange rate changes, net		(1,732)	13,448	18,249	(8,633)	16,149
CASH AND CASH EQUIVALENTS AT END OF YEAR/PERIOD	*30*	1,707,868	1,052,545	1,274,635	1,193,407	1,323,923

STATEMENTS OF FINANCIAL POSITION

	Notes	31 December 2021	31 December 2022	31 December 2023	31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
NON-CURRENT ASSETS					
Property, plant and equipment		30,499	12,322	2,815	2,829
Right-of-use assets		–	9,325	4,357	3,267
Other intangible assets		1,566	1,353	1,237	1,180
Investments in subsidiaries		4,240,871	6,134,845	6,217,346	6,390,746
Investments in associates		1,989	1,729	1,545	1,513
Other non-current assets		2,342	53	131	–
TOTAL NON-CURRENT ASSETS		4,277,267	6,159,627	6,227,431	6,399,535
CURRENT ASSETS					
Prepayments, other receivables and other assets	*27*	392,090	332,848	1,189,416	1,028,983
Restricted cash	*30*	–	–	13,965	13,965
Cash and cash equivalents	*30*	1,029,019	401,708	230,205	271,174
TOTAL CURRENT ASSETS		1,421,109	734,556	1,433,586	1,314,122
TOTAL ASSETS		5,698,376	6,894,183	7,661,017	7,713,657
CURRENT LIABILITIES					
Trade and notes payables		20	–	–	–
Other payables and accruals	*34*	969,547	751,869	624,945	674,668
Short-term loans	*35*	–	358,620	600,637	600,637
Current portion of long-term loans	*36*	–	237,831	119,251	231,229
Current portion of other non-current liabilities		173,566	–	–	–
Lease liabilities		–	4,659	4,385	4,435
TOTAL CURRENT LIABILITIES		1,143,133	1,352,979	1,349,218	1,510,969
NET CURRENT ASSETS/ (LIABILITIES)		277,976	(618,423)	84,368	(196,847)
TOTAL ASSETS LESS CURRENT LIABILITIES		4,555,243	5,541,204	6,311,799	6,202,688
NON-CURRENT LIABILITIES					
Long-term loans	*36*	–	774,895	753,470	645,699
Lease liabilities		–	4,876	–	–
TOTAL NON-CURRENT LIABILITIES		–	779,771	753,470	645,699
NET ASSETS		4,555,243	4,761,433	5,558,329	5,556,989
EQUITY					
Share capital		1,663,911	1,663,911	1,663,911	1,663,911
Treasury shares		–	(300,787)	(520,803)	(520,803)
Reserves	*51*	2,891,332	3,398,309	4,415,221	4,413,881
TOTAL EQUITY		4,555,243	4,761,433	5,558,329	5,556,989

II. NOTES TO THE HISTORICAL FINANCIAL INFORMATION

1. CORPORATE INFORMATION

The Company is a joint stock company with limited liability incorporated in the People's Republic of China (the "PRC"). The registered address of the Company is Fu Min Village, Si Dao Wan Zi Town, Ao Han County, Chifeng City, Inner Mongolia Autonomous Region, PRC and the office is located at A7-Xiaojing, Wanfeng Road, Fengtai District, Beijing. Ms. Li Jinyang and Yantai Hanfeng Zhongxing Management Consulting Center (Limited Partnership) ("Hanfeng Zhongxin") directly held 190,410,595 and 51,515,151 A Shares, accounting for approximately 11.44% and 3.10% of the issued share capital of our Company, respectively. Meanwhile, Ms. Li Jinyang is the sole limited partner of Hanfeng Zhongxin accounting for approximately 99% of the committed capital Contribution of Hanfeng Zhongxin. Ms. Li Jinyang and Hanfeng are collectively regarded as the Single Largest Shareholder Group of our Company.

During the Relevant Periods, the Company and its subsidiaries were involved in the mining of gold and non-ferrous metal and the comprehensive recycling of resources. The main products are gold, silver, electrolytic copper and other precious metals and non-ferrous metals.

As at the date of this report, the Company had direct and indirect interests in its subsidiaries, all of which are private limited liability companies, the particulars of which are set out below:

Name*	Place and date of incorporation/ registration and place of operations	Registered capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Chifeng Jilong Mining Co., Ltd. ("Jilong Mining") 赤峰吉隆礦業有限責任公司 *(note (a))**	PRC 2005-10-24	RMB175,000,000	100%	–	Mining
Chifeng Huatai Mining Co., Ltd. 赤峰華泰礦業有限責任公司 *(note (a))**	PRC 2005-01-08	RMB20,000,000	–	100%	Mining
Liaoning Wulong Gold Mining Co., Ltd. ("Wulong Mining") 遼寧五龍黃金礦業有限責任公司 *(note (a))**	PRC 2008-04-08	RMB40,000,000	–	100%	Mining
Dandong Tongxing Mineral Processing Ltd. ("TMP") 丹東同興選廠有限責任公司 *(note (b))**	PRC 2012-04-19	RMB5,000,000	–	100%	Processing
Anhui Guangyuan Technology Development Co., Ltd. ("Guangyuan Technology") 安徽廣源科技發展有限公司 *(note (a))**	PRC 2003-08-06	RMB44,776,000	55%	–	Wasted Electronic Products Recovery
Hefei Huanchuang Advanced Material Co., Ltd. 合肥環創新材料有限公司 *(note (b))**	PRC 2018-05-25	RMB10,000,000	–	55%	Wasted Electronic Products Recovery
Hefei Guangyuan Environmental Protection Technology Co., Ltd. 合肥廣源環保技術有限公司 *(note (b))**	PRC 2022-12-27	RMB10,000,000	–	55%	Wasted Electronic Products Recovery
Kunming Xinhenghe Mining Co., Ltd. ("Xinhenghe Mining")昆明新恒河礦業有限公司 *(note (c))**	PRC 2021-01-26	RMB40,000,000	51%	–	Management

Name*	Place and date of incorporation/ registration and place of operations	Registered capital	Percentage of equity attributable to the Company		Principal activities
			Direct	Indirect	
Eryuan Jintai Mining Development Co., Ltd. ("Jintai Mining") 洱源錦泰礦業開發有限責任公司*(note (b))**	PRC 2008-02-20	RMB41,710,000	–	46%	Mining
Chijin (Tianjin) Geological Exploration Technology Co., Ltd. 赤金(天津)地質勘查技術有限公司 *(note (d))**	PRC 2017-05-22	RMB1,000,000	60%	–	Geological exploration
CHIJIN LAOS Holdings Limited ("Chijin Laos") *(note (b))*	Cayman Islands 1993-05-25	USD152,100,000	100%	–	Investment Holding
Chixia Laos Holdings Limited ("Chixia Laos") *(note (b))*	Cayman Islands 2022-10-25	USD50,000	–	51%	Investment Holding
Lane Xang Minerals Limited Company ("LXML") *(note (e))*	Laos 1993-09-30	LAK1,436,516,830,000	–	90%	Mining
Chijin International (HK) Limited ("Chijin HK") *(note (f))*	Hong Kong SAR 2018-02-27	HKD1 USD291,000,000	100%	–	Investment Holding
Jilin Hanfeng Mining Technology Co., Ltd *(note (a))**	PRC 2004-09-24	RMB429,200,000	100%	–	Mining
Shanghai Chijin Fengyu Industrial Co., Ltd. 上海赤金豐餘實業有限公司 *(note (a))**	PRC 2021-03-25	RMB100,000,000	100%	–	Trading
Golden Star Resources Ltd. ("GSR") *(note (g))*	Canada 1992-05-15	USD932,928,541	–	62%	Investment Holding
Caystar Holdings *(note (b))*	Cayman Islands 1997-05-07	USD391,958,328	–	62%	Management
Caystar Finance Co. *(note (b))*	Cayman Islands 2015-04-28	USD49,942,492	–	62%	Finance
Caystar Management Holdings *(note (b))*	Cayman Islands 2003-09-01	USD45,409,069	–	62%	Management
Wasford Holdings *(note (b))*	Cayman Islands 2002-04-02	USD50,000	–	62%	Management
Golden Star (Wassa) Ltd. *(note (h))*	Ghana 2001-11-22	GHS11,000,000	–	56%	Mining
Golden Star Resources (UK) Ltd. *(note (b))*	England 2019-05-10	USD130	–	62%	Management
Shanghai Chijin Xiawu Metal Resources Limited ("Chijin Xiawu") 上海赤金廈鎢金屬資源有限公司 *(note (i))**	PRC 2022-10-18	RM400,000,000	51%	–	Investment Holding

Notes:

(a) The statutory financial statements for the year ended 31 December 2021 prepared under PRC Generally Accepted Accounting Principles ("PRC GAAP") were audited by ZhongShen ZhongHuan Certified Public Accountants LLP, certified public accountants registered in the PRC, and the statutory financial statements for the years ended 31 December 2022 and 2023 prepared under PRC GAAP were audited by Ernst & Young Hua Ming LLP.

(b) No audited financial statements have been prepared for these entities for the years ended 31 December 2021, 2022 and 2023 (or since the date of incorporation, where later than the beginning of the Relevant Periods), as the entities were not subject to any statutory audit requirements under the relevant rules and regulations in their jurisdictions of incorporation.

(c) The statutory financial statements for the year ended 31 December 2022 prepared under PRC GAAP were audited by Yunnan Xizheng Accounting Firm Co., Ltd., certified public accountants registered in the PRC, and for the year ended 31 December 2023 prepared under PRC GAAP were audited by Ernst & Young Hua Ming LLP.

(d) The statutory financial statements for the year ended 31 December 2021 prepared under PRC GAAP were audited by ZhongShen ZhongHuan Certified Public Accountants LLP, certified public accountants registered in the PRC, and the statutory financial statements for the year ended 31 December 2022 prepared under PRC GAAP were audited by Ernst & Young Hua Ming LLP. No statutory financial statements has been issued for the year ended 31 December 2023.

(e) The statutory financial statements of this entity for the year ended 31 December 2021 prepared under International Financial Reporting Standards ("IFRSs") were audited by KPMG Lao Co., Ltd., certified public accountants registered in Laos, and the statutory financial statements for the years ended 31 December 2022 and 2023 prepared under IFRSs were audited by Ernst & Young Lao Co., Ltd.

(f) The statutory financial statements of this entity for the year ended 31 December 2021 prepared under Hong Kong Financial Reporting Standards ("HKFRSs") were audited by Reanda Lau & Au Yeung (HK) CPA Limited, certified public accountants registered in Hong Kong, and the statutory financial statements for the year ended 31 December 2022 prepared under HKFRSs were audited by Ernst & Young, Hong Kong, and the statutory financial statements for the year ended 31 December 2023 prepared under HKFRSs were audited by Zhonghui Anda CPA Limited, certified public accountants registered in Hong Kong.

(g) The statutory financial statements of this entity for the years ended 31 December 2021 prepared under IFRSs were audited by PricewaterhouseCoopers LLP, certified public accountants registered in Canada. No statutory financial statements has been issued for the years ended 31 December 2022 and 2023.

(h) The statutory financial statements of this entity for the year ended 31 December 2021 prepared under IFRSs were audited by PricewaterhouseCoopers LLP, certified public accountants registered in Ghana, and the statutory financial statements for the years ended 31 December 2022 and 2023 prepared under IFRSs were audited by Ernst & Young Ghana.

(i) The statutory financial statements for the year ended 31 December 2022 and 2023 prepared under PRC GAAP were audited by Ernst & Young Hua Ming LLP.

* The English names of these entities registered in the PRC represent the best efforts made by the management of the Company to directly translate their Chinese names as they did not register any official English names.

2. BASIS OF PREPARATION

The Historical Financial Information has been prepared in accordance with International Financial Reporting Standards ("IFRSs"), which comprise all standards and interpretations approved by the International Accounting Standards Board (the "IASB"). All IFRSs effective for the accounting period commencing from 1 January 2024, together with the relevant transitional provisions, have been early adopted by the Group in the preparation of the Historical Financial Information throughout the Relevant Periods and in the period covered by the Interim Comparative Financial Information.

The Historical Financial Information has been prepared on a going concern basis.

The Historical Financial Information has been prepared under the historical cost convention, except for derivative financial instruments, financial assets and financial liabilities at fair value through profit or loss which have been measured at fair value.

Basis of consolidation

The Historical Financial Information includes the financial statements of the Company and its subsidiaries (collectively referred to as the "Group") for the Relevant Periods. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

Generally, there is a presumption that a majority of voting rights results in control. When the Company has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies. The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, any non-controlling interest and the exchange fluctuation reserve; and recognises the fair value of any investment retained and any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

3. ISSUED BUT NOT YET EFFECTIVE INTERNATIONAL FINANCIAL REPORTING STANDARDS

The standards and interpretations that have been issued but not yet effective up to the date of this report are disclosed below.

Amendments to IAS 21	*Lack of Exchangeability*[1]
Amendments to IFRS 10 and IAS 28	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[2]
IFRS 18	*Presentation and Disclosure in Financial Statements*[3]
IFRS 19	*Subsidiaries without Public Accountability: Disclosures*[3]
Amendments to IFRS 9 and IFRS 7	*Amendments to the Classification and Measurement of Financial Instruments*[4]

1 Effective for annual periods beginning on or after 1 January 2025

2 No mandatory effective date yet determined but available for adoption

3 Effective for annual periods beginning on or after 1 January 2027

4 Effective for annual periods beginning on or after 1 January 2026

The Group is in the process of making an assessment of the impact of these new and revised IFRSs upon initial application. So far, the Group considers that these new and revised IFRSs may result in changes in accounting policies but are unlikely to have a significant impact on the Group's results of operation and financial position.

4. MATERIAL ACCOUNTING POLICYS

Investments in associates

An associate is an entity in which the Group has a long term interest of generally not less than 20% of the equity voting rights and over which it has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

The Group's investments in associates are stated in the consolidated statement of financial position at the Group's share of net assets under the equity method of accounting, less any impairment losses.

The Group's share of the post-acquisition results and other comprehensive income of associates is included in the consolidated statement of profit or loss and consolidated other comprehensive income, respectively. In addition, when there has been a change recognised directly in the equity of the associate, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity. Unrealised gains and losses resulting from transactions between the Group and its associates are eliminated to the extent of the Group's investments in the associates, except where unrealised losses provide evidence of an impairment of the assets transferred. Goodwill arising from the acquisition of associates is included as part of the Group's investments in associates.

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method. In all other cases, upon loss of significant influence over the associate, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate upon loss of significant influence and the fair value of the retained investment and proceeds from disposal is recognised in profit or loss.

Business combinations and goodwill

(i) Business combinations not under common control

Business combinations are accounted for using the acquisition method. The consideration transferred is measured at the acquisition date fair value which is the sum of the acquisition date fair values of assets transferred by the Group, liabilities assumed by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. All other components of non-controlling interests are measured at fair value. Acquisition-related costs are expensed as incurred.

The Group determines that it has acquired a business when the acquired set of activities and assets includes an input and a substantive process that together significantly contribute to the ability to create outputs.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts of the acquiree.

Any contingent consideration to be transferred by the acquirer is recognised at fair value at the acquisition date. Contingent consideration classified as an asset or liability is measured at fair value with changes in fair value recognised in profit or loss. Contingent consideration that is classified as equity is not remeasured and subsequent settlement is accounted for within equity.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred, the amount recognised for non-controlling interests and any fair value of the Group's previously held equity interests in the acquiree over the identifiable assets acquired and liabilities assumed. If the sum of this consideration and other items is lower than the fair value of the net assets acquired, the difference is, after reassessment, recognised in profit or loss as a gain on bargain purchase.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is tested for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. The Group performs its annual impairment test of goodwill as at 31 December. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Impairment is determined by assessing the recoverable amount of the cash-generating unit (group of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash-generating unit (group of cash-generating units) is less than the carrying amount, an impairment loss is recognised. An impairment loss recognised for goodwill is not reversed in a subsequent period.

Where goodwill has been allocated to a cash-generating unit (or group of cash-generating units) and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on the disposal. Goodwill disposed of in these circumstances is measured based on the relative value of the operation disposed of and the portion of the cash-generating unit retained.

Fair value measurement

The Group measures certain of its financial assets and financial liabilities at fair value at the end of each of the Relevant Periods. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the Historical Financial Information are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1	–	based on quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2	–	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly
Level 3	–	based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the Historical Financial Information on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each of the Relevant Periods.

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets and financial assets), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs. In testing a cash-generating unit for impairment, a portion of the carrying amount of a corporate asset (e.g., a headquarters building) is allocated to an individual cash-generating unit if it can be allocated on a reasonable and consistent basis or, otherwise, to the smallest group of cash-generating units.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each of the Relevant Periods as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to the statement of profit or loss in the period in which it arises.

Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

  (i) has control or joint control over the Group;

  (ii) has significant influence over the Group; or

  (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

(b) the party is an entity where any of the following conditions applies:

  (i) the entity and the Group are members of the same group;

  (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

  (iii) the entity and the Group are joint ventures of the same third party;

  (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

  (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;

  (vi) the entity is controlled or jointly controlled by a person identified in (a);

(vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depending on the nature of the item of property, plant and equipment, depreciation is calculated on the straight-line basis to write off the cost of each asset to its residual value over its estimated useful life or it is calculated on the Units of Production ("UOP") basis to write off the cost of the asset proportionately to the extraction of the proven and probable mineral reserves. The estimated useful lives and annual depreciation rates for the assets depreciated on the straight-line basis are as follows:

	Estimated useful lives	Annual depreciation rates
Buildings	20 years	4.75%
Machinery	5 to 10 years	9.50% to 19.00%
Mobile equipment	5 to 10 years	9.50% to 19.00%
Electronic equipment and others	3 to 5 years	19.00% to 31.67%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at the end of each of the Relevant Periods.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in the statement of profit or loss in the years/periods the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Other intangible assets

Other intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year end.

Exploration and mining rights

Exploration and evaluation assets are stated at cost less impairment losses. Exploration and evaluation includes costs of geological prospecting for technical consultancy and costs of feasibility study for commercial development which incurred in the surroundings, outer ring and deep areas of the existing or externally acquired mineral properties, and costs of drilling, trench sampling and other associated activities. Such expenditures may be capitalized when the mineral properties are reasonably determined to be commercially available and recognized as intangible assets after obtaining mining rights or permits, which will be amortized under the units-of-production method. If any construction was abandoned in the development phase or belongs to the productive exploration, all costs shall be written off and recognized in profit or loss for the current period.

Impairment reviews of exploration and evaluation assets are undertaken if events or changes in circumstances indicate a potential impairment. The carrying value of exploration and evaluation assets is compared to the recoverable amount, which is the higher of value-in-use and the fair value less costs of disposal. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cashgenerating units. Exploration and evaluation assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Exploration rights are stated at cost less impairment losses. Exploration rights include the cost of acquiring exploration rights.

Mining rights are stated at cost less accumulated amortisation and any impairment losses. Mining rights include the cost of acquiring mining licences, exploration rights and exploration and evaluation assets upon determination that an exploration property is capable of commercial production, and the cost of acquiring interests in the mining reserves of existing mining properties. The mining rights are amortised in accordance with the production plans of the entities concerned and the proven and probable mineral reserves of the mines using the UOP method. Mining rights are written off to profit or loss if the mining property is abandoned.

Research and development expenses

All research expenses are charged to the statement of profit or loss as incurred.

Expenditure incurred on projects to develop new products is capitalised and deferred only when the Group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale, its intention to complete and its ability to use or sell the asset, how the asset will generate future economic benefits, the availability of resources to complete the project and the ability to measure reliably the expenditure during the development. Product development expenditure which does not meet these criteria is expensed when incurred.

Deferred development costs are stated at cost less any impairment losses and are amortised using the straight-line basis over the commercial lives of the underlying products not exceeding five to seven years, commencing from the date when the products are put into commercial production.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	50 years
Buildings	3 to 5 years
Machinery and vehicles	2 to 5 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate the lease. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of office premises (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office equipment and laptop computers that are considered to be of low value. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Group as a lessor

When the Group acts as a lessor, it classifies at lease inception (or when there is a lease modification) each of its leases as either an operating lease or a finance lease.

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. Rental income is accounted for on a straight-line basis over the lease terms and is included in revenue in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised over the lease term on the same basis as rental income. Contingent rents are recognised as revenue in the period in which they are earned.

Leases that transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee are accounted for as finance leases.

Investments and other financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

Purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

This category includes derivative instruments and equity investments which the Group had not irrevocably elected to classify at fair value through other comprehensive income. Dividends on the equity investments are also recognised as other income in the statement of profit or loss when the right of payment has been established.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statements of financial position) when:

- the rights to receive cash flows from the asset have expired; or
- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs;

Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs;

Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs.

Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, or payables, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and notes payables, financial liabilities at fair value through profit or loss, other payables and accruals, other non-current liabilities and loans.

Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognised in the statement of profit or loss.

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. Gains or losses on liabilities designated at fair value through profit or loss are recognised in the statement of profit or loss, except for the gains or losses arising from the Group's own credit risk which are presented in other comprehensive income with no subsequent reclassification to the statement of profit or loss. The net fair value gain or loss recognised in the statement of profit or loss does not include any interest charged on these financial liabilities.

Financial liabilities at amortised cost (trade and notes payables, other payables and accruals and loans)

After initial recognition, payables and loans are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in profit or loss.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as commodity futures, to hedge its price fluctuation risk. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in fair value of derivatives are taken directly to the statement of profit or loss, except for the effective portion of cash flow hedges, which is recognised in other comprehensive income and later reclassified to profit or loss when the hedged item affects profit or loss.

For the purpose of hedge accounting, hedges are classified as:

- fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment; or

- cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction, or a foreign currency risk in an unrecognised firm commitment.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting, the risk management objective and its strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is "an economic relationship" between the hedged item and the hedging instrument.

- The effect of credit risk does not "dominate the value changes" that result from that economic relationship.

- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges which meet all the qualifying criteria for hedge accounting are accounted for as follows:

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognised directly in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in the statement of profit or loss. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The amounts accumulated in other comprehensive income are accounted for, depending on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the amount accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and will not be recognised in other comprehensive income for the period. This also applies where the hedged forecast transaction of a non-financial asset or non-financial liability subsequently becomes a firm commitment to which fair value hedge accounting is applied.

For any other cash flow hedges, the amount accumulated in other comprehensive income is reclassified to the statement of profit or loss as a reclassification adjustment in the same period or periods during which the hedged cash flows affect the statement of profit or loss.

If cash flow hedge accounting is discontinued, the amount that has been accumulated in other comprehensive income must remain in accumulated other comprehensive income if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to the statement of profit or loss as a reclassification adjustment. After the discontinuation, once the hedged cash flow occurs, any amount remaining in accumulated other comprehensive income is accounted for depending on the nature of the underlying transaction as described above.

Treasury shares

Own equity instruments which are reacquired and held by the Company or the Group (treasury shares) are recognised directly in equity at cost. No gain or loss is recognised in the statement of profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis and, in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash on hand and at banks, and short-term highly liquid deposits with a maturity of generally within three months that are readily convertible into known amounts of cash, subject to an insignificant risk of changes in value and held for the purpose of meeting short-term cash commitments.

For the purpose of the consolidated statement of cash flows, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of each of the Relevant Periods of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

Provisions for the Group's obligations for environmental rehabilitation and restoration of mines are based on estimates of required expenditure at the mines in accordance with the local rules and regulations where the mines are located. The Group estimates its liabilities for final reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash expenditure for the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset in the period in which the liability is incurred. The liability is accreted to the projected expenditure date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in the timing of the performance of reclamation activities), the revisions to the obligation and the asset are recognised at the appropriate discount rate.

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each of the Relevant Periods, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of each of the Relevant Periods between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences; and

- in respect of taxable temporary differences associated with investments in subsidiaries and associates, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, and the carryforward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carryforward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and does not give rise to equal taxable and deductible temporary differences; and

- in respect of deductible temporary differences associated with investments in subsidiaries and associates, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each of the Relevant Periods and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each of the Relevant Periods and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each of the Relevant Periods.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the costs, for which it is intended to compensate, are expensed.

Where the grant relates to an asset, the fair value is credited to a deferred income account and is released to profit or loss over the expected useful life of the relevant asset by equal annual instalments.

Revenue recognition

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group with a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

Sale of products

Revenue from the sale of products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the products.

Metal streaming arrangement

There is a Metal Streaming Arrangement in GSR acquired by the Group in 2022. Under the business arrangement, GSR receives a payment in advance and the counterparty obtains a certain proportion of deliverable gold within the entire life of the designated mine. The counterparty is also required to make an additional payment based on a certain proportion of the market price when GSR delivers the goods within an agreed period in the future. The payment GSR receives in advance is considered to be part of the counterparty's prepayment for the future goods with uncertain but predictable quantity, and is recognised as a contract liability upon receipt. Each unit of the delivered goods represents a separate performance obligation, and revenue is recognised at the point in time when control of the goods is transferred. Considering the timing of satisfaction of delivery obligations throughout the entire life of the mines, the contract liability above is considered to have significant financing components. In addition, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mines, the management will estimate the change of total metal reserves and change of planned exploitation reserves on a regular basis and adjustments shall be made to the revenue and finance costs accordingly.

Variable consideration

In the Group's Metal Streaming Arrangement, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mines, the price allocated to goods delivered per unit is considered as variable consideration. When the estimated total metal reserves and planned mining reserves of the mine change, it is necessary to recalculate the price of goods delivered per unit, and in the current period of changes occurred, adjust the revenue and finance costs recognised in the same period according to the updated price. The Group determines the best estimate of variable consideration by the expected value. The transaction price including variable consideration is only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Contracts for the rendering of services

A contract for the rendering of services between the Group and the customer usually includes performance obligations of dismantling waste electrical and electronic products. The Group recognises the fund subsidy income as a part of revenue by multiplying the dismantling type and quantity of the scrapped electrical and electronic products by the corresponding fund subsidy standard.

Revenue from other sources

Rental income is recognised on a time proportion basis over the lease terms. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are incurred.

Other income

Interest income is recognised on an accrual basis using the effective interest method by applying the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, when appropriate, to the net carrying amount of the financial asset.

Contract liabilities

A contract liability is recognised when a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Share incentive plan

The Company operates employee stock ownership plans. Employees (including directors) of the Group receive remuneration in the form of share-based payments, whereby employees render services in exchange for equity instruments ("equity-settled transactions"). The cost of equity-settled transactions with employees is measured by reference to the fair value at the date at which they are granted. The fair value is determined by the market price of the granted shares, further details of which are given in note 40 to the Historical Financial Information.

The cost of equity-settled transactions is recognised in employee benefit expense, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled. The cumulative expense recognised for equity-settled transactions at the end of each reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the statement of profit or loss for a period represents the movement in the cumulative expense recognised as at the beginning and end of that period.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group's best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

For awards that do not ultimately vest because non-market performance and/or service conditions have not been met, no expense is recognised. Where awards include a market or non-vesting condition, the transactions are treated as vesting irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Where the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified, if the original terms of the award are met. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payments, or is otherwise beneficial to the employee as measured at the date of modification. Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately.

Other employee benefits

Pension schemes

In accordance with applicable PRC regulations, the Company and its subsidiaries operating in Chinese Mainland have currently enrolled in a series of pension schemes regulated by various provincial and municipal governments, under which each of the entities operating in Chinese Mainland is required to contribute a percentage of its employees' salaries to the pension fund. The contributions are charged to profit or loss as they become payable in accordance with the rules of the pension schemes.

Subsidiaries of the Group in Wassa and Laos operates defined contribution plans on behalf of its employees. The contributions are recognised as employee benefit expense (staff costs) when they are due.

Termination benefits

The employees of the Group participate in a pension scheme and unemployment insurance managed by the local government, and the corresponding expenses shall be included in the cost of related assets or profit or loss.

The Group recognises a liability for termination benefits and charges to profit or loss for the current period at the earlier of the following dates: when the Group can no longer withdraw the offer of those benefits resulting from the termination plan or the redundancy offer unilaterally; or when the Group recognises costs or expense for a restructuring plan which involves the payment of termination benefits.

The internal retirement plan of employees shall be treated in the same principle as the above termination benefits. The Group will include the salaries and social insurance premiums to be paid for early retirees during the period from the date when employees stop providing services to the normal retirement date into the current profit or loss (termination benefits) when the conditions for recognition of provisions are met.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting. The proposed final dividends are disclosed in the note 16 to the Historical Financial Information.

Foreign currencies

The Historical Financial Information is presented in Renminbi, which is the Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of each of the Relevant Periods. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of certain overseas subsidiaries and associates are currencies other than the RMB. As at the end of the reporting period, the assets and liabilities of these entities are translated into RMB at the exchange rates prevailing at the end of the reporting period and their statements of profit or loss are translated into RMB at the exchange rates that approximate to those prevailing at the dates of the transactions.

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve, except to the extent that the differences are attributable to non-controlling interests. On disposal of a foreign operation, the cumulative amount in the reserve relating to that particular foreign operation is recognised in the statement of profit or loss.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into RMB at the exchange rates ruling at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into RMB at the weighted average exchange rates or the year.

5. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's Historical Financial Information requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities at the end of each of the Relevant Periods. Uncertainty about these estimates and assumptions could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements which have the most significant effects on the amounts recognised in the financial statements:

Corporate income tax

As a result of the fact that certain matters relating to the corporate income taxes have not been confirmed by the local tax bureau as at the end of the Relevant Periods, objective estimates based on currently enacted tax laws, regulations and other related policies are required in determining the provision for corporate income tax expenses to be made for the reporting period. Where the final tax outcome of these matters is different from the amounts originally recorded, the differences will be accounted for in the income tax expenses in the period in which the differences are realised.

Exploration expenditures

After determining the capitalisation amount of exploration expenditures, the Group will regularly evaluate the exploration results. If the reviewed geological exploration report shows that there are no prospecting results or no economically recoverable reserves, or that the economic benefits of mining cannot be achieved and further exploration is unnecessary due to low grade and hard-to-mining, the exploration and development costs previously collected will be expensed and included in profit or loss for the current period in a lump sum.

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the future accounting periods, are described below.

Impairment of financial assets

The Group has adopted the expected credit loss model to evaluate the impairment of financial assets. The application of the expected credit loss model requires significant judgements and estimates and the consideration of all reasonable and soundly based information, including forward-looking information. In making such judgements and estimates, the Group estimates the projected movements of the debtor's credit risk according to past repayment records, economic policies, macro-economic indicators and industry risks, etc. Different estimates may affect the impairment provision, and the amount of impairment provision may not equal to the actual amount of impairment loss in the future.

Impairment of non-current assets other than financial assets (excluding goodwill)

The Group assesses whether there are any indicators of impairment for non-current assets other than financial assets at the end of the reporting period. Intangible assets with indefinite useful lives are tested for impairment annually and at other times when such an indicator exists. Other non-current assets other than financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or asset group exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use The calculation of the fair value less costs of disposal based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or asset group and choose a suitable discount rate in order to calculate the present value of those cash flows. These estimates and judgements may be significantly affected by changes in future market or economic conditions.

Impairment of goodwill

The Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from the cash-generating units and also to choose a suitable discount rate in order to calculate the present value of those cash flows. Further details are included in note 20 to the Historical Financial Information.

Proved mineral reserves

Proved mineral reserves are estimated based on professional knowledge, experience and industry practice. Generally, the mineral reserve volume estimated based on probing and estimation may not be very accurate. The estimation is updated in accordance with new technologies and new information. Any changes in estimation will have impacts on the amounts of mining assets' depreciation and mining rights' amortisation using the units-of-production method, on the stripping ratio which was used in the capitalisation of stripping costs, and on each of the transaction prices of the metal streaming arrangement, etc. This may result in changes of or impacts on the Group's development and operation plan, and hence the Group's operations and operating results.

Deferred tax assets

To the extent that it is probable that there are sufficient taxable profits to offset the deductible losses, deferred tax assets shall be recognised for all unused deductible losses. Substantial management's judgements regarding the timing, amount of future taxable profit as well as tax planning strategies are needed when estimating the amount of deferred tax assets. Further details are included in note 22 to the Historical Financial Information.

Provision for environmental rehabilitation and restoration of mines

Pursuant to the regulations of the governmental authorities in the places where the mines are located, the Group recognises provision for environmental rehabilitation and restoration of mines. The amount of provision is an estimate based upon the life of mining rights, timing of mine closure and cost of such rehabilitation. When this estimate changes, it may affect the Group's operations and performance. Further details are included in note 37 to the Historical Financial Information.

6. SEGMENT INFORMATION

The directors and certain senior managers of the Company (hereinafter referred to as "senior management") perform the functions of principal operating decision makers. Senior management reviews the internal reports of the Group to evaluate the performance of operating segments and allocate resources. The Company determines its operating segments based on such internal reporting.

The Company's operating segments include the PRC mining segment, the overseas mining segment and the other segment. The PRC mining segment conducts the mining and processing of gold and non-ferrous metals in Mainland China. The overseas mining segment conducts the mining and processing of gold and non-ferrous metals in Laos, Ghana and other countries/regions. The other segment is mainly engaged in comprehensive resource recycling and rental income in Mainland China.

The senior management monitors the results of its operating segments separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on reportable segment profit, which is a measure of adjusted operating profit before tax. The adjusted operating profit before tax is measured consistently with the Group's operating profit before tax except that head office and corporate expenses are excluded from such measurement.

Segment assets exclude cash and cash equivalents, deferred tax assets, financial assets at fair value through profit or loss, derivative financial instruments and other unallocated head office and corporate assets as these assets are managed on a group basis.

Segment liabilities exclude financial liabilities at fair value through profit or loss, derivative financial instruments, loans, deferred tax liabilities, tax payable and other unallocated head office and corporate liabilities as these liabilities are managed on a group basis.

Set out below is the disaggregation of the segment information:

Year ended 31 December 2021

Year ended 31 December 2021	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment revenue				
Sales to external customers	1,001,475	2,522,936	258,213	3,782,624
Intersegment sales	–	–	71	71
Total segment revenue	1,001,475	2,522,936	258,284	3,782,695
Reconciliation:				
Elimination of intersegment sales				(71)
Revenue				3,782,624
Segment results	363,559	324,353	33,473	721,385
Reconciliation:				
Interest income				20,439
Corporate and other unallocated gains or expenses				42,777
Finance costs				(14,226)
Profit before tax				770,375

Year ended 31 December 2021	PRC mining	Overseas mining	Other	Unallocated	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other segment information					
Share of losses of:					
Associates	–	–	–	(11)	(11)
Impairment losses on inventories	(51)	(190,948)	(616)	–	(191,615)
Impairment losses on financial assets, net	(1,802)	–	(154)	(28)	(1,984)
Depreciation and amortisation	(105,987)	(656,577)	(14,108)	(2,658)	(779,330)
Income tax expenses	(25,444)	(127,386)	(4,137)	–	(156,967)
Investments in associates	–	–	–	1,989	1,989
Capital expenditure*	617,985	935,503	4,939	1,440	1,559,867

The capital expenditure information above is based on the increase in property, plant and equipment, right-of-use assets, and other intangible assets during the relevant periods.

Year ended 31 December 2021	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment assets	2,194,683	3,513,742	418,618	6,127,043
Reconciliation:				
Corporate and other unallocated assets				78,926
Restricted cash				116,881
Cash and cash equivalents				1,707,868
Financial assets at fair value through profit or loss				11,237
Derivative financial assets				6,436
Deferred tax assets				5,215
Total assets				8,053,606
Segment liabilities	284,180	2,082,400	10,903	2,377,483
Reconciliation:				
Corporate and other unallocated liabilities				155,694
Financial liabilities at fair value through profit or loss				387,683
Derivative financial liabilities				1,831
Income tax payables				102,438
Current portion of long-term loans				25,530
Deferred tax liabilities				1,916
Total liabilities				3,052,575

Year ended 31 December 2022

Year ended 31 December 2022	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment revenue				
Sales to external customers	1,170,861	4,789,316	306,610	6,266,787
Intersegment sales			9,717	9,717
Total segment revenue	1,170,861	4,789,316	316,327	6,276,504
Reconciliation:				
Elimination of intersegment sales				(9,717)
Revenue				6,266,787
Segment results	382,772	503,129	25,509	911,410
Reconciliation:				
Interest income				28,097
Corporate and other unallocated gains or expenses				58,990
Finance costs				(176,485)
Profit before tax				822,012

Year ended 31 December 2022	PRC mining	Overseas mining	Other	Unallocated	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other segment information					
Share of losses of:					
Associates	(8)	(3,836)	–	(260)	(4,104)
Reversal of impairment/(impairment losses) on inventories	673	(40,993)	(1,403)	–	(41,723)
Impairment losses on financial assets, net	(170)	–	(494)	20	(644)
Depreciation and amortisation	(145,786)	(1,213,843)	(7,573)	(8,285)	(1,375,487)
Income tax expenses	(49,202)	(276,586)	(2,344)	–	(328,132)
Investments in associates	628	355,462	–	1,729	357,819
Capital expenditure*	486,224	1,402,366	347	14,159	1,903,096

The capital expenditure information above is based on the increase in property, plant and equipment, right-of-use assets, and other intangible assets during the Relevant Periods.

Year ended 31 December 2022	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment assets	2,467,283	13,174,760	446,758	16,088,801
Reconciliation:				
Corporate and other unallocated assets				67,695
Restricted cash				232,560
Cash and cash equivalents				1,052,545
Financial assets at fair value through profit or loss				48,131
Derivative financial assets				584
Deferred tax assets				53,978
Total assets				17,544,294
Segment liabilities	579,776	3,523,030	18,578	4,121,384
Reconciliation:				
Corporate and other unallocated liabilities				425,334
Short-term loans				488,409
Financial liabilities at fair value through profit or loss				620,250
Income tax payables				177,082
Long-term loans				1,513,781
Current portion of long-term loans				333,770
Deferred tax liabilities				2,455,981
Total liabilities				10,135,991

Year ended 31 December 2023

Year ended 31 December 2023	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment revenue				
Sales to external customers	1,627,692	5,194,119	399,141	7,220,952
Intersegment sales			56,704	56,704
Total segment revenue	1,627,692	5,194,119	455,845	7,277,656
Reconciliation:				
Elimination of intersegment sales				(56,704)
Revenue				7,220,952
Segment results	809,303	626,903	21,857	1,458,063
Reconciliation:				
Interest income				26,322
Corporate and other unallocated gains or expenses				(62,564)
Finance costs				(215,026)
Profit before tax				1,206,795

Year ended 31 December 2023	PRC mining	Overseas mining	Other	Unallocated	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other segment information					
Share of profits and (losses) of:					
Associates	–	10,134	–	(184)	9,950
Reversal of impairment/(impairment losses) on inventories	(10,185)	7,593	(924)	–	(3,516)
Reversal of impairment/(impairment losses) on financial assets, net	(3,152)	–	704	8	(2,440)
Depreciation and amortisation	(174,240)	(1,312,591)	(7,191)	(6,192)	(1,500,214)
Income tax expenses	(96,638)	(238,212)	(360)	–	(335,210)
Investments in associates	629	371,307	–	1,545	373,481
Capital expenditure*	440,333	1,046,052	242	745	1,487,372

The capital expenditure information above is based on the increase in property, plant and equipment, right-of-use assets, and other intangible assets during the Relevant Periods.

Year ended 31 December 2023	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment assets	3,117,123	13,330,740	509,403	16,957,266
Reconciliation:				
Corporate and other unallocated assets				50,383
Restricted cash				387,648
Cash and cash equivalents				1,274,635
Financial assets at fair value through profit or loss				16,909
Derivative financial assets				13,470
Deferred tax assets				17,482
Total assets				18,717,793

Year ended 31 December 2023	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment liabilities	588,289	3,351,867	14,408	3,954,564
Reconciliation:				
Corporate and other unallocated liabilities				208,380
Short-term loans				850,009
Financial liabilities at fair value through profit or loss				939,996
Income tax payables				267,693
Long-term loans				1,421,974
Current portion of long-term loans				218,315
Deferred tax liabilities				2,314,654
Total liabilities				10,175,585

Three months ended 31 March 2023 (unaudited)

Three months ended 31 March 2023 (unaudited)	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment revenue				
Sales to external customers	239,108	1,281,508	66,137	1,586,753
Intersegment sales	–	–	1,857	1,857
Total segment revenue	239,108	1,281,508	67,994	1,588,610
Reconciliation:				
Elimination of intersegment sales				(1,857)
Revenue				1,586,753
Segment results	93,261	142,999	5,546	241,806
Reconciliation:				
Interest income				4,070
Corporate and other unallocated gains or expenses				(41,776)
Finance costs				(44,690)
Profit before tax				159,410

Three months ended 31 March 2023 (unaudited)	PRC mining	Overseas mining	Other	Unallocated	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other segment information					
Share of losses of:					
Associates	–	(3,622)	–	(49)	(3,671)
Reversal of impairment on inventories	–	29,940	3	–	29,943
Reversal of impairment/ (impairment losses) on financial assets, net	(780)	–	3	–	(777)
Depreciation and amortisation	(44,481)	(268,842)	(1,843)	(1,328)	(316,494)
Income tax expenses	(6,680)	(61,962)	(3)	–	(68,645)
Investments in associates	629	347,112	–	1,679	349,420
Capital expenditure*	40,900	320,636	115	238	361,889

The capital expenditure information above is based on the increase in property, plant and equipment, right-of-use assets, and other intangible assets during the Relevant Periods.

Three months ended 31 March 2024

Three months ended 31 March 2024	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment revenue				
Sales to external customers	370,233	1,416,977	66,696	1,853,906
Intersegment sales	–	–	19,703	19,703
Total segment revenue	370,233	1,416,977	86,399	1,873,609
Reconciliation:				
Elimination of intersegment sales				(19,703)
Revenue				1,853,906
Segment results	163,170	242,387	(2,799)	402,758
Reconciliation:				
Interest income				8,044
Corporate and other unallocated gains or expenses				(3,592)
Finance costs				(54,264)
Profit before tax				352,946

Three months ended 31 March 2024	PRC mining	Overseas mining	Other	Unallocated	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Other segment information					
Share of profits and (losses) of:					
Associates	–	7,354	–	(32)	7,322
Reversal of impairment/ (impairment losses) on inventories	2,927	(8,344)	227	–	(5,190)
Reversal of impairment on financial assets, net	1,295	–	177	–	1,472
Depreciation and amortisation	(50,018)	(347,060)	(1,672)	(1,350)	(400,100)
Income tax expenses	(21,960)	(92,775)	53	–	(114,682)
Investments in associates	628	379,298	–	1,513	381,439
Capital expenditure*	41,385	218,918	11	219	260,533

The capital expenditure information above is based on the increase in property, plant and equipment, right-of-use assets, and other intangible assets during the Relevant Periods.

Three months ended 31 March 2024	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment assets	3,092,135	13,293,146	577,457	16,962,738
Reconciliation:				
Corporate and other unallocated assets				52,339
Restricted cash				405,035
Cash and cash equivalents				1,323,923
Financial assets at fair value through profit or loss				12,228
Derivative financial assets				63,060
Deferred tax assets				39,756
Total assets				18,859,079

Three months ended 31 March 2024	PRC mining	Overseas mining	Other	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Segment liabilities	545,258	3,135,978	76,430	3,757,666
Reconciliation:				
Corporate and other unallocated liabilities				50,433
Short-term loans				1,013,196
Financial liabilities at fair value through profit or loss				875,189
Derivative financial liabilities				4,972
Income tax payables				255,721
Long-term loans				1,316,441
Current portion of long-term loans				332,703
Deferred tax liabilities				2,303,190
Total liabilities				9,909,511

Geographical information

(a) Revenue from external customers

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
PRC	1,259,688	1,477,471	2,026,833	305,245	436,929
Overseas	2,522,936	4,789,316	5,194,119	1,281,508	1,416,977
	3,782,624	6,266,787	7,220,952	1,586,753	1,853,906

The revenue information above is based on the locations of the subsidiaries.

(b) Non-current assets

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Chinese Mainland	2,146,309	2,484,181	2,978,065	3,039,275
Hong Kong	–	355,462	371,349	379,342
Overseas	1,998,328	10,454,107	10,349,676	10,239,638
	4,144,637	13,293,750	13,699,090	13,658,255

The non-current asset information above is based on the locations of the assets and excludes financial assets and deferred tax assets.

Information about major customers

Revenue derived from a single customer which accounted for 10% or more of the Group's total revenue is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Overseas mining segment					
ABC Refinery (Australia) Pty Limited	2,126,600	2,602,266	2,672,102	714,153	722,585
Rand Refinery (Pty) Limited	–	1,745,894	1,841,610	507,335	583,146

7. REVENUE

An analysis of revenue is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
- Revenue from contracts with customers	3,781,944	6,265,589	7,220,054	1,586,512	1,853,184
- Rental income	680	1,198	898	241	722
	3,782,624	6,266,787	7,220,952	1,586,753	1,853,906

Revenue from contracts with customers

(a) Disaggregated revenue information

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Types of goods or services					
Gold	2,968,694	5,304,729	6,322,263	1,452,086	1,682,389
Silver	5,163	17,391	3,107	–	3,689
Copper cathodes	337,440	393,342	381,569	68,507	76,354
Copper concentrate powder	38,011	21,756	15,962	8	2,739
Lead concentrate powder	34,700	39,734	29,744	–	6,773
Zinc concentrate powder	135,964	174,303	65,370	–	14,889
Molybdenum concentrate powder	–	3,680	–	–	–
Comprehensive resource recycling and utilization	256,201	305,470	398,338	65,860	65,995
Other	5,771	5,184	3,701	51	356
	3,781,944	6,265,589	7,220,054	1,586,512	1,853,184
Geographical markets					
PRC	1,259,080	1,476,431	2,026,111	305,004	436,246
Laos	2,522,864	2,998,740	3,054,614	763,720	787,600
Ghana	–	1,790,418	2,139,329	517,788	629,338
	3,781,944	6,265,589	7,220,054	1,586,512	1,853,184
Timing of revenue recognition					
Goods and services transferred at a point in time	3,781,944	6,265,589	7,220,054	1,586,512	1,853,184
	3,781,944	6,265,589	7,220,054	1,586,512	1,853,184

The following table shows the amounts of revenue recognised in the Relevant Periods and the three months ended 31 March 2023 that were included in the contract liabilities at the beginning of the reporting period:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:					
Sale of goods	1,422	4,547	1,227	1,227	9,162
Sale of gold from Metal Streaming Arrangement (note 33)*	–	47,201	52,324	13,318	16,717
	1,422	51,748	53,551	14,545	25,879

* This amount was related to the acquisition of GSR in January, 2022.

(b) Information about the Group's performance obligations is summarised below:

Sale of goods

The Group recognises revenue when customers gain the control of goods. Prepayments received from customers before delivery of goods are recognised as contract liabilities in the consolidated financial statements. Among them, the sales arrangement related to the Metal Streaming Arrangement is detailed in note 33.

Rendering of services

The Group recognizes the fund subsidy income based on type and quantity of standardized dismantling of waste electrical and electronic products and the corresponding fund payment price.

The transaction prices allocated to remaining performance obligations (contracted but unsatisfied or partially unsatisfied) related to sales of gold are as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Within 1 year	4,547	62,052	73,177	70,186	71,199
Over 1 year	–	606,298	576,999	592,396	564,297
Total	4,547	668,350	650,176	662,582	635,496

8. DIRECTORS' REMUNERATION

Directors' remuneration is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Fees	300	800	800	200	225
Other emoluments:					
Salaries, allowances and benefits in kind	12,287	18,426	13,211	3,700	3,288
Performance related bonuses	14,302	1,116	6,941	–	–
Social insurance and housing fund	412	410	341	112	45
	27,301	20,752	21,293	4,012	3,558

Directors' remuneration for each year/period is as follows:

Year ended 31 December 2021

	Position	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Jianhua Wang *(note (i))*	Director	–	1,300	1,192	–	2,492
Xiaozhao Lv *(note (ii))*	Director	–	1,400	1,192	70	2,662
Bo Gao *(note (iii))*	Director	–	1,458	2,834	111	4,403
Xudong Zhang *(note (iv))*	Director	–	260	–	–	260
Zhiyong Chen *(note (v))*	Director	–	969	700	–	1,669
Xuesheng Fu *(note (vi))*	Director	–	1,942	2,827	–	4,769
Qiang Zhao *(note (vii))*	Director	–	1,258	1,617	111	2,986
Paul Harris *(note (viii))*	Director	–	2,000	2,557	–	4,557
Jinqian Li *(note (ix))*	Director	–	1,700	1,383	120	3,203
Yan Li *(note (x))*	Independent Director	100	–	–	–	100
Jingwen Mao *(note (xi))*	Independent Director	–	–	–	–	–
Zhengchang Shen *(note (xii))*	Independent Director	–	–	–	–	–
Nailian Hu *(note (xiii))*	Independent Director	–	–	–	–	–
Qingui Guo *(note (xiv))*	Independent Director	100	–	–	–	100
Renman Ruan *(note (xv))*	Independent Director	100	–	–	–	100
		300	12,287	14,302	412	27,301

Year ended 31 December 2022

	Position	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Jianhua Wang *(note (i))*	Director	–	1,797	50	–	1,847
Yi-fang Yang *(note (xvi))*	Director	–	630	100	–	730
Xiaozhao Lv *(note (ii))*	Director	–	1,786	80	75	1,941
Bo Gao *(note (iii))*	Director	–	2,170	100	124	2,394
Xudong Zhang *(note (iv))*	Director	–	300	–	–	300
Zhiyong Chen *(note (v))*	Director	–	2,930	100	64	3,094
Xuesheng Fu *(note (vi))*	Director	–	3,198	100	–	3,298
Qiang Zhao *(note (vii))*	Director	–	1,600	90	124	1,814
Paul Harris *(note (viii))*	Director	–	3,615	496	–	4,111
Jinqian Li *(note (ix))*	Director	–	400	–	23	423
Yan Li *(note (x))*	Independent Director	160	–	–	–	160
Jingwen Mao *(note (xi))*	Independent Director	160	–	–	–	160
Zhengchang Shen *(note (xii))*	Independent Director	160	–	–	–	160
Nailian Hu *(note (xiii))*	Independent Director	160	–	–	–	160
Qingui Guo *(note (xiv))*	Independent Director	160	–	–	–	160
		800	18,426	1,116	410	20,752

Year ended 31 December 2023

	Position	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Jianhua Wang *(note (i))*	Director	–	1,600	800	–	2,400
Yi-fang Yang *(note (xvi))*	Director	–	1,993	1,981	–	3,974
Xiaozhao Lv *(note (ii))*	Director	–	1,700	1,360	34	3,094
Bo Gao *(note (iii))*	Director	–	2,000	1,800	139	3,939
Xudong Zhang *(note (iv))*	Director	–	300	–	–	300
Zhiyong Chen *(note (v))*	Director	–	2,250	1,000	29	3,279
Xuesheng Fu *(note (vi))*	Director	–	125	–	–	125
Paul Harris *(note (viii))*	Director	–	3,143	–	–	3,143
Qiang Zhao *(note (vii))*	Director	–	100	–	139	239
Yan Li *(note (x))*	Independent Director	160	–	–	–	160
Jingwen Mao *(note (xi))*	Independent Director	160	–	–	–	160
Zhengchang Shen *(note (xii))*	Independent Director	160	–	–	–	160
Nailian Hu *(note (xiii))*	Independent Director	160	–	–	–	160
Qingui Guo *(note (xiv))*	Independent Director	160	–	–	–	160
		800	13,211	6,941	341	21,293

Three months ended 31 March 2023 (unaudited)

	Position	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Jianhua Wang *(note (i))*	Director	–	400	–	–	400
Yi-fang Yang *(note (xvi))*	Director	–	507	–	–	507
Xiaozhao Lv *(note (ii))*	Director	–	425	–	21	446
Bo Gao *(note (iii))*	Director	–	500	–	35	535
Xudong Zhang *(note (iv))*	Director	–	75	–	–	75
Zhiyong Chen *(note (v))*	Director	–	625	–	21	646
Xuesheng Fu *(note (vi))*	Director	–	125	–	–	125
Paul Harris *(note (viii))*	Director	–	943	–	–	943
Qiang Zhao *(note (vii))*	Director	–	100	–	35	135
Yan Li *(note (x))*	Independent Director	40	–	–	–	40
Jingwen Mao *(note (xi))*	Independent Director	40	–	–	–	40
Zhengchang Shen *(note (xii))*	Independent Director	40	–	–	–	40
Nailian Hu *(note (xiii))*	Independent Director	40	–	–	–	40
Qingui Guo *(note (xiv))*	Independent Director	40	–	–	–	40
		200	3,700	–	112	4,012

Three months ended 31 March 2024

	Position	Fees	Salaries, allowances and benefits in kind	Performance related bonuses	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Jianhua Wang *(note (i))*	Director	–	860	–	–	860
Yi-fang Yang *(note (xvi))*	Director	–	715	–	–	715
Xiaozhao Lv *(note (ii))*	Director	–	500	–	–	500
Bo Gao *(note (iii))*	Director	–	500	–	35	535
Xudong Zhang *(note (iv))*	Director	–	88	–	–	88
Zhiyong Chen *(note (v))*	Director	–	625	–	10	635
Yan Li *(note (x))*	Independent Director	45	–	–	–	45
Jingwen Mao *(note (xi))*	Independent Director	45	–	–	–	45
Zhengchang Shen *(note (xii))*	Independent Director	45	–	–	–	45
Nailian Hu *(note (xiii))*	Independent Director	45	–	–	–	45
Qingui Guo *(note (xiv))*	Independent Director	45	–	–	–	45
		225	3,288	–	45	3,558

(i) Jianhua Wang was appointed as a director on 17 September 2018.

(ii) Xiaozhao Lv was appointed as a director on 14 December 2012.

(iii) Bo Gao was appointed as a director on 14 December 2012.

(iv) Xudong Zhang was appointed as a director on 4 January 2022.

(v) Zhiyong Chen was appointed as a director on 4 January 2022.

(vi) Xuesheng Fu was appointed as a director on 17 September 2018, and resigned on 18 January 2023.

(vii) Qiang Zhao was appointed as a director on 14 December 2012, and resigned on 18 January 2023.

(viii) Paul Harris was appointed as a director on 27 February 2020, and resigned on 27 September 2023.

(ix) Jinqian Li was appointed as a director on 27 February 2020 and resigned on 13 March 2022.

(x) Yan Li was appointed as an independent director on 17 September 2018.

(xi) Jingwen Mao was appointed as an independent director on 4 January 2022.

(xii) Zhengchang Shen was appointed as an independent director on 4 January 2022.

(xiii) Nailian Hu was appointed as an independent director on 4 January 2022.

(xiv) Qingui Guo was appointed as an independent director on 17 September 2018.

(xv) Renman Ruan was appointed as an independent director on 17 September 2018 and resigned on 4 January 2022.

(xvi) Yi-fang Yang was appointed as a director on 26 July 2022.

9. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the years ended 31 December 2021, 2022 and 2023, and the three months ended 31 March 2023 and 2024 included five, four, four, three and four directors, respectively, details of whose remuneration are set out in note 8 above. Details of the remuneration for the remaining highest paid employees who are neither a director nor chief executive of the Company during the years ended 31 December 2021, 2022 and 2023, and the three months ended 31 March 2023 and 2024 are as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* *(unaudited)*	*RMB'000*
Salaries, allowances and benefits in kind	–	3,089	1,900	1,225	534
Performance related bonuses	–	100	1,330	–	–
Social insurance and housing fund	–	56	139	46	–
	–	3,245	3,369	1,271	534

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
				(unaudited)	
Nil to RMB2,000,000	–	–	–	2	1
RMB2,000,001 to 2,500,000	–	–	–	–	–
RMB2,500,001 to 3,000,000	–	–	–	–	–
RMB3,000,001 to 3,500,000	–	1	1	–	–
	–	1	1	2	1

10. OTHER INCOME AND GAINS

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Government grants	1,363	4,045	16,950	153	129
Gains on changes in fair value of financial assets at fair value through profit or loss	1,415	17,918	–	–	–
Gains on changes in fair value of derivative financial instruments	–	584	13,470	721	49,006
Gains on disposal of derivative financial instruments	25,014	82,913	75,343	–	15,217
Gains on disposal of financial assets at fair value through profit or loss	–	–	4,226	–	–
Finance income	20,439	28,097	26,322	4,070	8,044
Gain on recognition of negative goodwill *(note 50)*	–	6,371	–	–	–
Others	42,281	2,160	1,459	875	261
	90,512	142,088	137,770	5,819	72,657

11. OTHER EXPENSES AND LOSSES

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Donations	15,100	940	222	–	270
Loss on disposal of non-current assets	3,060	2,632	1,853	2,412	–
Loss on derecognition of financial liabilities	10,856	17,249	76,018	8,843	64,904
Loss on changes in fair value of financial liabilities at fair value through profit or loss	3,111	30,416	63,428	47,492	10,329
Loss on changes in fair value of financial assets at fair value through profit or loss	–	–	21,385	6,985	4,011
Impairment losses/(reversal of impairment) on inventories	191,615	41,723	3,516	(29,943)	5,190
Foreign exchange	(86,237)	(27,244)	(20,157)	18,391	(14,951)
Other	5,255	53,306	27,236	7,754	1,906
	142,760	119,022	173,501	61,934	71,659

12. FINANCE COSTS

An analysis of finance costs from continuing operations is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Interest on loans	3,870	127,797	159,621	34,144	36,485
Interest on gold lease business	1,793	10,396	14,797	1,779	7,743
Interest on Metal Streaming Arrangement	–	15,393	15,093	4,059	3,972
Amortisation of unrecognised finance expenses of mining rights	–	3,793	3,766	–	882
Accretion of interest of provisions	8,393	8,895	9,409	2,303	2,313
Interest on lease liabilities *(note 18(c))*	170	10,211	12,340	2,405	2,869
	14,226	176,485	215,026	44,690	54,264

13. PROFIT BEFORE TAX

The Group's profit before tax is arrived at after charging/(crediting):

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Cost of raw materials and consumables		1,005,402	2,132,246	2,113,118	334,593	352,499
Depreciation of property, plant and equipment	*17*	455,688	761,217	910,774	192,941	240,363
Depreciation of right-of-use assets	*18*	3,607	30,180	36,973	8,880	9,835
Amortisation of other intangible assets	*19*	315,883	582,247	552,382	114,652	149,890
Amortisation of other non-current assets		4,152	1,843	85	21	12
Research and development costs		24,847	27,652	51,753	4,056	16,415
Lease payments not included in the measurement of lease liabilities		3,115	20,766	15,969	3,028	3,147
Auditor's remuneration		2,751	5,414	7,041	2,940	1,448
Employee benefit expense (including directors' remuneration):						
Wages and salaries		460,712	834,768	1,071,645	213,694	284,476
Pension and other social insurances		35,594	36,365	47,045	10,834	14,002
		496,306	871,133	1,118,690	224,528	298,478

	Notes	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Foreign exchange (gains)/losses, net		(86,237)	(27,244)	(20,157)	18,391	(14,951)
Write-down/(Reversal) of inventories to net realisable value		191,615	41,723	3,516	(29,943)	5,190
(Reversal of impairment)/ impairment losses on financial assets, net		1,984	644	2,440	777	(1,472)
Gains on changes in fair value of financial assets at fair value through profit or loss		(1,415)	(17,918)	–	–	–
Gains on changes in fair value of derivative financial instruments		–	(584)	(13,470)	(721)	(49,006)
Gains on disposal of derivative financial instruments		(25,014)	(82,913)	(75,343)	–	(15,217)
Gains on disposal of financial assets at fair value through profit or loss		–	–	(4,226)	–	–
Loss on changes in fair value of financial liabilities at fair value through profit or loss		3,111	30,416	63,428	47,492	10,329
Loss on derecognition of financial liabilities		10,856	17,249	76,018	8,843	64,904
Loss on changes in financial assets at fair value through profit or loss		–	–	21,385	6,985	4,011
Loss on disposal of non-current assets		3,060	2,632	1,853	2,412	–

14. INCOME TAX EXPENSES

Under the Corporate Income Tax Law of the PRC (the "CIT"), the statutory tax rate of the Company, subsidiaries and its key associates in Chinese Mainland is 25%.

Pillar Two legislation has been enacted or substantively enacted in certain jurisdictions in which the Company and its subsidiaries operate, the Company is still in the process of assessing the potential exposure to Pillar Two income taxes. Based on the current assessment, the Pillar Two effective tax rates in most of the jurisdictions in which the Company and its subsidiaries operate are above 15%.

List of other corporate income tax rates applicable to the Group's subsidiaries:

Name	Countries and regions	Rates
Golden Star (Wassa) Limited	Ghana	35.0%
LXML	Laos	33.3%
GSR	Canada	26.5%
Chijin (Tianjin) Geological Exploration Technology Co., Ltd. *(a)*	PRC	20.0%
Chijin HK	Hong Kong	16.5%
Jilin Han Feng Mining Technologies Co., Ltd. *(b)*	PRC	15.0%
Eryuan Jintai Mining Development Co., Ltd. *(b)*	PRC	15.0%
Liaoning Wulong Gold Mining Co., Ltd. *(c)*	PRC	15.0%
Chifeng Jilong Mining Co., Ltd. *(d)*	PRC	15.0%
Hefei Guangyuan Environmental Protection Technology Co. *(e)*	PRC	2021-2022: N/A 2023-2024: 0%
Hefei Huanchuang New Material Co., Ltd. *(e)*	PRC	2021-2023: 12.5% 2024: 25.0%

(a) According to the *Announcement of the State Administration of Taxation on Issues Relating to the Implementation of Inclusive Income Tax Relief Policy for Small Thin-profit Enterprises* (State Administration of Taxation Announcement [2019] No. 2), during the period from 1 January 2019 to 31 December 2021, the portion of the annual taxable profit of a small thin-profit enterprise which does not exceed RMB1 million, the taxable profit can be reduced to 25%, and corporate income tax shall be levied at a reduced tax rate of 20%; the portion of the annual taxable profit which exceeds RMB1 million but does not exceed RMB3 million, the taxable profit can be reduced to 50%, and corporate income tax shall be levied at a reduced tax rate of 20%. From 1 January 2022 to 31 December 2024, according to the *Announcement on Further Implementing Preferential Policies for Income Tax of Small and Micro Enterprises* (Announcement [2022] No. 13 from of the Ministry of Finance and the State Administration of Taxation), for the portion of the annual taxable profit which exceeds RMB1 million but does not exceed RMB3 million, the taxable profit can be reduced to 25%, and corporate income tax shall be levied at a reduced tax rate of 20%. The subsidiary, Chijin (Tianjin) Geological Exploration Technology Co., Ltd., which is small thin-profit enterprises, adopted this policy for the period from 1 January 2021 to 31 March 2024.

(b) According to *the Announcement on Continuation of CIT Policies for Large-scale Development in the Western Region* (Announcement [2020] No. 23 of the Ministry of Finance, State Taxation Administration and National Development and Reform Commission), during the period from 1 January 2021 to 31 December 2030, CIT shall be levied at a reduced tax rate of 15% on enterprises established in the western region in encouraged industries. This policy is applicable to the subsidiaries Jilin Han Feng Mining Technologies Co., Ltd. and Eryuan Jintai Mining Development Co., Ltd.

(c) According to the High-New Technical Enterprise ("HNTE") certificate renewed in December 2020, the CIT rate of the subsidiary Liaoning Wulong Gold Mining Co., Ltd. was 15% for the years from 2020 to 2022. According to the HNTE certificate renewed in December 2023, the CIT rate of Liaoning Wulong Gold Mining Co., Ltd. was 15% for the years from 2023 to 2025.

(d) According to the High-New Technical Enterprise ("HNTE") certificate renewed in November 2020, the CIT rate of the subsidiary Chifeng Jilong Mining Co., Ltd. was 15% for the years from 2020 to 2022. According to the HNTE certificate renewed in November 2023, the CIT rate of Chifeng Jilong Mining Co., Ltd. was 15% for the years from 2023 to 2025.

(e) According to Article 27 of the *Enterprise Income Tax Law*, Article 88 of the *Implementation Regulations of the Enterprise Income Tax Law*, and Caishui (2009) No. 166, eligible environmental protection, energy conservation, and water-saving household waste treatment service projects shall enjoy the preferential policy of "three years of tax exemption followed by three years of tax reduction" of income tax. The subsidiary Hefei Huanchuang New Material Co., Ltd. has been enjoying this policy since 2018, specifically: "Tax exemption in 2018, 2019 and 2020, reduced by half in 2021, 2022 and 2023." The subsidiary Hefei Guangyuan Environmental Protection Technology Co. has been enjoying this policy since 2023, specifically: "Tax exemption in 2023, 2024 and 2025, reduced by half in 2026, 2027 and 2028."

An analysis of the Group's provision for tax is as follows:

	Note	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Current-Mainland China						
Charge for the year		62,433	53,769	105,577	15,615	16,880
Overprovision in prior years		(31,068)	(1,855)	–	–	–
Current-Overseas						
Charge for the year		86,895	176,178	353,088	72,904	135,223
Underprovision in prior years		–	51,160	22,203	–	–
Deferred	*22*	38,707	48,880	(145,658)	(19,874)	(37,421)
Total tax charge		156,967	328,132	335,210	68,645	114,682

A reconciliation of the tax expense applicable to profit before tax at the statutory rates for jurisdictions in which the Company and the majority of its subsidiaries are domiciled to the tax expense at the effective tax rates, and a reconciliation of the applicable rates (i.e., the statutory tax rates) to the effective tax rates, are as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Profit before tax	770,375	822,012	1,206,795	159,410	352,946
Tax expense calculated at the statutory tax rate of 25%	192,594	205,503	301,699	39,853	88,237
Effect of different tax rates of subsidiaries	(21,801)	59,293	24,942	16,328	24,066
Adjustments in respect of current tax of previous periods	(31,068)	9,780	–	–	–
Profits and losses attributable to associates	–	712	(1,566)	605	(1,205)
Non-taxable income	–	(6,557)	–	–	–
Non-deductible expenses	23,574	35,460	10,144	1,776	792
Tax losses utilised from previous periods	(3,993)	–	(6,591)	(1,826)	(277)
Unrecognised deductible temporary differences and tax losses	473	32,058	14,160	13,014	5,481
Effect on opening deferred tax of change in the tax rate	(327)	–	–	–	–
Tax benefit for qualifying research and development expenses and wages for disabled employees	(2,485)	(8,117)	(7,578)	(1,105)	(2,412)
Tax charge at the effective rate	156,967	328,132	335,210	68,645	114,682

15. EARNINGS PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

The calculation of the basic earnings per share amounts is based on the profit for the Relevant Periods and the three months ended 31 March 2023 attributable to ordinary equity holders of the parent, and the weighted average number of ordinary shares of 1,643,193,590, 1,662,334,305 and 1,641,398,872 during the years ended 31 December 2021, 2022 and 2023, 1,647,335,972 and 1,648,728,778 for the three months ended 31 March 2023 and 2024, respectively, as adjusted to reflect the rights issue during the year.

The calculation of the basic earnings per share amounts is based on the profit for the year attributable to ordinary equity holders of the parent.

The calculation of the diluted earnings per share amounts is based on the profit for the year attributable to ordinary equity holders of the parent.The weighted average number of ordinary shares used in the calculation is the number of ordinary shares in issue during the year, as used in the basic earnings per share calculation, and the weighted average number of ordinary shares assumed to have been issued at no consideration on the deemed exercise or conversion of all dilutive potential ordinary shares into ordinary shares.

The calculations of basic and diluted earnings per share are based on:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Earnings					
Profit attributable to ordinary equity holders of the parent, used in the basic earnings per share calculation:					
From continuing operations . . .	581,949	450,976	804,471	75,743	201,718
	581,949	450,976	804,471	75,743	201,718

	Number of shares				
	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
Shares					
Weighted average number of ordinary shares in issue during the Relevant Periods used in the basic earnings per share calculation	1,643,193,590	1,662,334,305	1,641,398,872	1,647,335,972	1,648,728,778

* The Group had no potentially dilutive ordinary shares outstanding during the years ended 31 December 2021, 2022 2023 and the three months ended 31 March 2023 and 2024.

16. DIVIDENDS

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Proposed final – RMB0.05 per ordinary share (including repurchased shares for SPI I and SPI II *(note 40)*, and excluding the 15,182,600 treasure shares repurchased in 2023) for the year ended 31 December 2023	–	–	82,436	–
	–	–	82,436	–

The proposed final dividend for the year ended 31 December 2023 were approved by the Company's shareholders in April 2024 and had been paid in May 2024.

17. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Mobile equipment	Electronic equipment and others	Mineral assets	Construction in progress	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Cost							
At 1 January 2021	811,844	4,738,512	607,662	47,121	2,549,914	250,033	9,005,086
Additions	8,794	46,280	3,497	5,016	26,391	779,987	869,965
Transfers	16,000	313,246	20,022	3,701	245,564	(598,533)	–
Exchange differences	(11,679)	(105,263)	(13,552)	(249)	(32,441)	(34,205)	(197,389)
Disposals	(1,527)	(22,671)	(5,535)	(678)	(3,361)	–	(33,772)
At 31 December 2021	823,432	4,970,104	612,094	54,911	2,786,067	397,282	9,643,890
Additions	9,320	46,688	30,066	4,471	103,818	1,118,629	1,312,992
Transfers	136,623	418,915	31,746	3,211	511,500	(1,101,995)	–
Acquisition of a subsidiary *(Note 50)*	57,259	219,950	117,720	1,757	1,459,468	48,828	1,904,982
Exchange differences	51,005	458,381	66,163	3,784	268,751	96,024	944,108
Others	(20,021)	(34,380)	(35,818)	70,219	(39,712)	39,515	(20,197)
Disposals	(22,654)	(35,529)	(3,630)	(957)	–	–	(62,770)
At 31 December 2022	1,034,964	6,044,129	818,341	137,396	5,089,892	598,283	13,723,005
Additions	31	10,317	11,659	5,617	6,246	1,354,306	1,388,176
Transfers	262,122	265,893	33,668	6,884	892,421	(1,460,988)	–
Acquisition of a subsidiary	50	106	233	26	–	–	415
Exchange differences	11,032	95,788	13,533	1,550	61,020	7,544	190,467
Disposals	(11,363)	(4,763)	(18,113)	(558)	(2,271)	–	(37,068)
At 31 December 2023	1,296,836	6,411,470	859,321	150,915	6,047,308	499,145	15,264,995
Additions	57	3,592	1,037	565	–	251,771	257,022
Transfers	4,804	1,770	–	623	28,605	(35,802)	–
Exchange differences	1,342	10,270	1,432	168	7,186	440	20,838
At 31 March 2024	1,303,039	6,427,102	861,790	152,271	6,083,099	715,554	15,542,855

	Buildings	Machinery	Mobile equipment	Electronic equipment and others	Mineral assets	Construction in progress	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Accumulated depreciation							
At 1 January 2021	487,110	3,826,581	481,935	32,238	1,357,666	–	6,185,530
Charge for the year	49,183	232,168	50,519	9,306	114,512	–	455,688
Exchange differences	(9,080)	(86,250)	(11,169)	(2,918)	(23,332)	–	(132,749)
Disposals	(1,350)	(20,185)	(5,484)	(644)	(1,421)	–	(29,084)
At 31 December 2021	525,863	3,952,314	515,801	37,982	1,447,425	–	6,479,385
Charge for the year	60,607	383,210	34,527	9,604	273,269	–	761,217
Exchange differences	40,039	359,072	47,223	3,427	103,446	–	553,207
Others	20,720	(89,058)	(2,067)	63,330	(15,510)	–	(22,585)
Disposals	(3,137)	(35,024)	(3,391)	(933)	–	–	(42,485)
At 31 December 2022	644,092	4,570,514	592,093	113,410	1,808,630	–	7,728,739
Charge for the year	51,294	356,958	67,392	8,905	426,225	–	910,774
Exchange differences	8,918	75,933	10,063	1,416	23,951	–	120,281
Disposals	(2,318)	(3,277)	(8,188)	(500)	(2,162)	–	(16,445)
At 31 December 2023	701,986	5,000,128	661,360	123,231	2,256,644	–	8,743,349
Charge for the period	14,986	81,228	15,016	2,838	126,295	–	240,363
Exchange differences	957	8,220	1,102	150	2,790	–	13,219
At 31 March 2024	717,929	5,089,576	677,478	126,219	2,385,729	–	8,996,931

	Buildings	Machinery	Mobile equipment	Electronic equipment and others	Mineral assets	Construction in progress	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Provision for impairment							
At 1 January 2021	4,806	–	–	–	–	–	4,806
At 31 December 2021	4,806	–	–	–	–	–	4,806
Disposals	(4,806)	–	–	–	–	–	(4,806)
At 31 December 2022	–	–	–	–			
At 31 December 2023	–	–	–				
At 31 March 2024	–	–	–	–	–	–	–
Carrying amounts							
At 1 January 2021	319,928	911,931	125,727	14,883	1,192,248	250,033	2,814,750
At 31 December 2021	292,763	1,017,790	96,293	16,929	1,338,642	397,282	3,159,699
At 31 December 2022	390,872	1,473,615	226,248	23,986	3,281,262	598,283	5,994,266
At 31 December 2023	594,850	1,411,342	197,961	27,684	3,790,664	499,145	6,521,646
At 31 March 2024	585,110	1,337,526	184,312	26,052	3,697,370	715,554	6,545,924

Further details of property, plant and equipment used as collateral for borrowings are included in notes 35 and 36 to the Historical Financial Information.

18. LEASES

The Group as a lessee

The Group has lease contracts for various items of leasehold land, buildings, motor vehicles, and office and other equipment. Lump sum payments were made upfront to acquire the land use right in Chinese Mainland with periods of 50 years, and no ongoing payments will be made.

(a) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements are as follows:

	Buildings	Machinery and vehicles	Leasehold land	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Year ended 31 December 2021				
Cost at 1 January 2021, net of accumulated depreciation	1,218	–	46,276	47,494
Depreciation provided during the year	(920)	–	(2,687)	(3,607)
At 31 December 2021	298	–	43,589	43,887
At 31 December 2021				
Cost	1,218	–	56,671	57,889
Accumulated depreciation	(920)	–	(13,082)	(14,002)
Net carrying amount	298	–	43,589	43,887

	Buildings	Machinery and vehicles	Leasehold land	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Year ended 31 December 2022				
Cost at 1 January 2022, net of accumulated depreciation	298	–	43,589	43,887
Additions	13,986	–	42,627	56,613
Acquisition of a subsidiary *(note 50)*	7,563	189,637	–	197,200
Depreciation provided during the year	(6,415)	(19,496)	(4,269)	(30,180)
Disposal	(5,118)	–	–	(5,118)
Exchange realignment	475	15,694	–	16,169
At 31 December 2022	10,789	185,835	81,947	278,571
At 31 December 2022				
Cost	17,818	207,189	99,297	324,304
Accumulated depreciation	(7,029)	(21,354)	(17,350)	(45,733)
Net carrying amount	10,789	185,835	81,947	278,571

	Buildings	Machinery and vehicles	Leasehold land	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Year ended 31 December 2023				
Cost at 1 January 2023, net of accumulated depreciation	10,789	185,835	81,947	278,571
Additions	–	2,550	62,367	64,917
Acquisition of a subsidiary	–	–	23,065	23,065
Depreciation provided during the year	(6,243)	(23,700)	(7,030)	(36,973)
Exchange realignment	25	3,151	–	3,176
At 31 December 2023	4,571	167,836	160,349	332,756
At 31 December 2023				
Cost	17,862	213,252	184,730	415,844
Accumulated depreciation	(13,291)	(45,416)	(24,381)	(83,088)
Net carrying amount	4,571	167,836	160,349	332,756
Three months ended 31 March 2024				
Cost at 1 January 2024, net of accumulated depreciation	4,571	167,836	160,349	332,756
Depreciation provided during the period	(1,304)	(6,103)	(2,428)	(9,835)
Exchange realignment	2	291	–	293
At 31 March 2024	3,269	162,024	157,921	323,214
At 31 March 2024				
Cost	17,866	213,622	184,730	416,218
Accumulated depreciation	(14,597)	(51,598)	(26,809)	(93,004)
Net carrying amount	3,269	162,024	157,921	323,214

(b) Lease liabilities

The carrying amount of lease liabilities and the movements are as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Carrying amount at 1 January	5,782	4,399	261,982	245,302
New leases	–	56,538	2,912	–
Acquisition of a subsidiary *(note 50)*	–	207,137	23,065	–
Accretion of interest recognised during the year/period	170	10,211	12,340	2,869
Payments	(1,553)	(33,696)	(58,102)	(8,113)
Exchange realignment	–	17,393	3,105	216
Carrying amount at end of the year/period	4,399	261,982	245,302	240,274
Analysed into:				
Current portion	1,424	31,177	38,083	37,987
Non-current portion	2,975	230,805	207,219	202,287

(c) The amounts recognised in profit or loss in relation to leases are as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Interest on lease liabilities *(note 12)*	170	10,211	12,340	2,405	2,869
Depreciation charge of right-of-use assets	3,607	30,180	36,973	8,528	9,835
Expense relating to short-term leases and leases with low-value assets	3,115	20,766	15,969	3,028	3,147

The maturity analysis of lease liabilities is disclosed in note 49 to the Historical Financial Information.

19. OTHER INTANGIBLE ASSETS

	Exploration and mining rights	Patent	Exploration and evaluation assets	Others	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Cost					
At 1 January 2021	2,451,971	6,715	58,775	48,889	2,566,350
Additions	650,268	–	38,343	1,219	689,830
Exchange differences	(46,295)	–	–	(1,743)	(48,038)
At 31 December 2021	3,055,944	6,715	97,118	48,365	3,208,142
Additions	477,846	–	40,207	15,438	533,491
Acquisition of a subsidiary *(Note 50)*	5,247,807	–	–	727	5,248,534
Exchange differences	703,523	–	–	4,834	708,357
Others	57,105	–	(72,481)	48	(15,328)
At 31 December 2022	9,542,225	6,715	64,844	69,412	9,683,196
Additions	1,364	–	32,482	433	34,279
Acquisition of a subsidiary	175,769	–	–	9	175,778
Exchange differences	146,477	–	–	1,116	147,593
At 31 December 2023	9,865,835	6,715	97,326	70,970	10,040,846
Additions	–	–	2,526	985	3,511
Exchange differences	15,255	–	–	116	15,371
Disposals	–	–	–	(104)	(104)
At 31 March 2024	9,881,090	6,715	99,852	71,967	10,059,624
Accumulated amortisation					
At 1 January 2021	1,975,579	2,069	–	45,118	2,022,766
Charge for the year	313,831	673	–	1,379	315,883
Exchange differences	(39,858)	–	–	(1,095)	(40,953)
At 31 December 2021	2,249,552	2,742	–	45,402	2,297,696
Charge for the year	578,340	551	–	3,356	582,247
Exchange differences	176,622	–	–	1,680	178,302
Other	8,228	–	–	9	8,237
At 31 December 2022	3,012,742	3,293	–	50,447	3,066,482
Charge for the year	546,834	673	–	4,875	552,382
Exchange differences	44,115	–	–	862	44,977
At 31 December 2023	3,603,691	3,966	–	56,184	3,663,841
Charge for the year	148,718	152	–	1,020	149,890
Exchange differences	5,081	–	–	95	5,176
Disposals	–	–	–	(104)	(104)
At 31 March 2024	3,757,490	4,118	–	57,195	3,818,803
Provision for impairment as at 1 January 2021, 31 December 2021, 31 December 2022, 31 December 2023 and 31 March 2024	53,996	–	–	–	53,996
Carrying amounts					
At 1 January 2021	422,396	4,646	58,775	3,771	489,588
At 31 December 2021	752,396	3,973	97,118	2,963	856,450
At 31 December 2022	6,475,487	3,422	64,844	18,965	6,562,718
At 31 December 2023	6,208,148	2,749	97,326	14,786	6,323,009
At 31 March 2024	6,069,604	2,597	99,852	14,772	6,186,825

20. GOODWILL

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Beginning and closing balances . . .	41,969	41,969	41,969	41,969

Goodwill acquired through business combinations is allocated to the recycling and utilization CGU for impairment testing.

The recoverable amount of the recycling and utilization CGU has been determined based on a value in use calculation using cash flow projections based on financial budgets covering a five-year period approved by senior management. As at 31 December 2021, 2022 and 2023 and 31 March 2024, the pre-tax discount rates applied to the cash flow projections are 13.46%, 11.89%, 9.21% and 9.17%, respectively. The growth rate used to extrapolate the cash flows of the recycling and utilization CGU beyond the five-year period is 0%.

Assumptions were used in the value in use calculation of the recycling and utilization cash-generating CGU. The following describes each key assumption on which management has based its cash flow projections to undertake impairment testing of goodwill:

The expected future sales volume — The management forecasted disassembly volume based on the disassembly volume capacity and the expected five years' production schedule of the CGU.

The price of the dismantled product — The management forecasted the price of the dismantled product based on the actual sales unit price of the previous year with its expectations on market development.

The collection period of the fund subsidy income — The management forecasted the collection period of the fund subsidy income based on the historical collection period with its expectations on market development.

Discount rate — The discount rates used are before tax and reflect specific risks relating to the relevant CGU.

Management determined these assumptions based on past performance and its expectations on market development. The discount rates used reflect specific risks relating to the individual CGU. The recoverable amount is determined based on the present value of the estimated future cash flows of the asset group portfolio. According to the 5-year financial forecast approved by the management, the growth rates of the dismantling volume of waste electrical and electronic products from 2024 to 2028 during the forecast period are projected to be 3%, 6%, 10%, 5%, and 3% respectively, and the dismantling volume of waste electrical and electronic products will remain stable from 2029 onwards.Based on the impairment assessments, there was no impairment of goodwill as at 31 December 2021, 2022 and 2023 and 31 March 2024.

For the goodwill allocated to the CGU, management has assessed that two of the most sensitive key assumptions are future sales volume and price of the dismantled product. As at 31 December 2021, 2022 and 2023 and 31 March 2024, if future sales volume had decreased by 1% from management's estimates, while other variables were held constant with the expectations, the Group would have to recognise impairment losses against goodwill by approximately nil, nil, nil and nil, respectively; if future sales volume had decreased by 5% from management's estimates, while other variables were held constant with the expectations, the Group would have to recognise impairment losses against goodwill by approximately nil, nil, nil and RMB42 million, respectively; if the price of the dismantled product had decreased by 1% from management's estimates, while other variables were held constant with the expectations, the Group would have to recognise impairment losses against goodwill by approximately nil, nil, RMB25 million and RMB21 million, respectively; if the price of the dismantled product had decreased by 5% from management's estimates, while other variables were held constant with the expectations, the Group would have to recognise impairment losses against goodwill by approximately nil, nil, RMB42 million and RMB42 million, respectively.

According to the "Announcement on Suspending the Collection of the Fund for the Dismantling of Waste Electrical and Electronic Products and Related Matters" jointly issued by the Ministry of Finance, the Ministry of Ecology and Environment, the National Development and Reform Commission, and the Ministry of Industry and Information Technology on January 17, 2024, the fund for dismantling of waste electrical and electronic products ("subsidy fund") will be suspended from January 1, 2024. For waste electrical and electronic products dismantled

before 31 December 2023, and which have not yet been subsidized in accordance with the "Measures for the Collection and Use of the Fund for the Dismantling of Waste Electrical and Electronic Products" (Cai Zong [2012] No. 34) and other regulations, the government will allocate funds to pay. Waste electrical and electronic products dismantled since January 1, 2024, will be subjected to a newly subsidy way, which has not been announced as of 31 March 2024.

On 29 March 2024, the Ministry of Finance announced "Draft Measures for the Administration of Special Funds for the Dismantling of Waste Electrical and Electronic Products". According to the announcement, the management is in the view of that the government would allocate special funds and continue to promote the comprehensive utilization and circular development of resources. As of the end of the Relevant Periods, the management made the best estimation on the forecasted fund subsidy income based on current information and will review and update this key assumption periodically.

21. INVESTMENTS IN ASSOCIATES

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Share of net assets	1,989	357,819	373,481	381,439

Chijin HK acquired equity interests in Tietto Minerals Limited ("Tietto Minerals"), a listed company in Australia, through cash subscription, open bidding and secondary market purchase in 2022. As at 31 December 2022, Chijin HK held 140,855,864 ordinary shares in Tietto Minerals, representing approximately 13.05% of its issued shares, and the Group became its largest shareholder. Pursuant to the Investment Agreement, the Group has appointed a non-executive director to Tietto Minerals to exercise significant influence over the operation and management of Tietto Minerals.

Particulars of the associates are as follows:

Name	Particulars of issued shares held	Place of incorporation/ registration and business	Percentage of ownership interest attributable to the Group	Principal activities
Shanghai Chijin Fengyu New Energy Technology Co., Ltd.*	Ordinary shares	China	51%	Generation and sale of electricity
Shanghai Chijin Enbo Technology Partnership (Limited Partnership)	Ordinary shares	China	30%	Generation and sale of electricity
Shanghai Enbo Chijin New Energy Technology Co., Ltd.	Ordinary shares	China	30%	Generation and sale of electricity
Tietto Minerals Limited** ("Tietto Minerals")	Ordinary shares	Australia	13.05%	Mining

* In accordance with the investment agreement, the Group enjoys 30% voting rights of Shanghai Chijin Fengyu New Energy Technology Co., Ltd..

** The Group's investments in the associates are accounted for under the equity method of accounting because the Group has significant influence over the entities by way of representation on the boards of directors and participation in the policy-making process, despite the fact that the Group's indirect equity interests in the associates were lower than 20%.

Aggregate information of associates that are not individually material:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Share of the associates' profit for the year/period	(11)	(4,104)	9,950	7,322
Share of the associates' total comprehensive income	(11)	(4,104)	9,950	7,322
Aggregate carrying amount of the Group's investments in the associates	1,989	357,819	373,481	381,439

22. DEFERRED TAX

For presentation purposes, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purposes:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Deferred tax assets	5,215	53,978	17,482	39,756
Deferred tax liabilities	1,916	2,455,981	2,314,654	2,303,190

Deferred tax assets have not been recognised in respect of the following items:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Deductible temporary differences	695	2,180	293	2,329
Deductible tax losses	194,357	264,141	293,140	318,902
Total	195,052	266,321	293,433	321,231

The unrecognised income tax losses, which have fixed expiry dates, will expire in the following years:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
31 December 2022	35,155	–	–	–
31 December 2023	35,327	35,327	–	–
31 December 2024	49,556	37,569	37,569	34,941
31 December 2025	46,426	46,426	48,168	48,168
31 December 2026	27,893	46,219	46,219	46,219
31 December 2027	–	98,600	98,315	98,315
31 December 2028	–	–	62,869	62,869
31 December 2029	–	–	–	28,390
Total	194,357	264,141	293,140	318,902

The movements in deferred tax assets and liabilities during the year/period, without taking into consideration the offsetting of the balance within the same tax jurisdiction, are as follows:

Deferred tax assets	Impairment of property, plant and equipment	Impairment losses on accounts receivable and other receivables, net of reversal	(Reversal of)/ provision for impairment of inventories	Environmental rehabilitation	Deferred income	Deductible tax losses	Fair value adjustments on financial liabilities at fair value through profit or loss	Lease liabilities	Accelerated depreciation of property, plant and equipment	Others	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2021	721	514	988	1,197	257	1,239	–	–	40,466	–	45,382
Credited/(charged) to the statement of profit or loss *(note 14)*	–	174	(95)	(54)	(38)	(155)	467	–	(39,541)	–	(39,242)
Exchange realignment	–	–	–	–	–	–	–	–	(925)	–	(925)
At 31 December 2021	721	688	893	1,143	219	1,084	467	–	–	–	5,215
Credited/(charged) to the statement of profit or loss *(note 14)*	(721)	141	89	26,156	78	1,364	4,562	24,743	–	12,492	68,904
Acquisition of subsidiaries	–	–	–	25,395	–	–	–	41,433	–	–	66,828
Exchange realignment	–	–	–	2,406	–	–	–	3,876	–	–	6,282
At 31 December 2022	–	829	982	55,100	297	2,448	5,029	70,052	–	12,492	147,229
Credited/(charged) to the statement of profit or loss *(note 14)*	–	295	1,714	(931)	(46)	211	9,514	(7,508)	–	(987)	2,262
Exchange realignment	–	–	–	737	–	–	–	1,188	–	–	1,925
At 31 December 2023	–	1,124	2,696	54,906	251	2,659	14,543	63,732	–	11,505	151,416
Credited/(charged) to the statement of profit or loss *(note 14)*	–	(195)	(439)	(374)	856	–	1,548	(763)	27,608	(380)	27,861
Credited to other comprehensive income	–	–	–	–	–	–	329	–	–	–	329
Exchange realignment	–	–	–	75	–	–	–	111	–	–	186
At 31 March 2024	–	929	2,257	54,607	1,107	2,659	16,420	63,080	27,608	11,125	179,792

Deferred tax liabilities	Fair value adjustments on financial assets at fair value through profit or loss	Accelerated depreciation of property, plant and equipment	Environmental rehabilitation	Fair value adjustment arising from acquisition of subsidiaries	Right-of-use assets	Others	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2021	1,485	–	–	–	–	–	1,485
Charged/(credited) to the statement of profit or loss (*note 14*)	(1,485)	950	–	–	–	–	(535)
Credited to other comprehensive income	966	–	–	–	–	–	966
At 31 December 2021	966	950	–	–	–	–	1,916
Charged/(credited) to the statement of profit or loss (*note 14*)	87	38,501	11,045	37,078	17,406	13,667	117,784
Credited to other comprehensive income	(965)	–	–	–	–	–	(965)
Acquisition of subsidiaries	–	295,189	–	1,886,451	44,523	–	2,226,163
Exchange realignment	–	44,170	–	156,539	3,625	–	204,334
At 31 December 2022	88	378,810	11,045	2,080,068	65,554	13,667	2,549,232
Charged/(credited) to the statement of profit or loss (*note 14*)	2,020	(27,381)	824	(110,919)	(7,850)	(90)	(143,396)
Exchange realignment	–	6,367	–	35,272	1,113	–	42,752
At 31 December 2023	2,108	357,796	11,869	2,004,421	58,817	13,577	2,448,588
Charged/(credited) to the statement of profit or loss (*note 14*)	7,351	11,949	(207)	(25,629)	(2,209)	(815)	(9,560)
Exchange realignment	–	616	–	3,481	101	–	4,198
At 31 March 2024	9,459	370,361	11,662	1,982,273	56,709	12,762	2,443,226

23. OTHER NON-CURRENT ASSETS

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Advance payment for engineering construction and equipment	26,819	56,402	105,810	127,491
Funds for land restoration and environmental rehabilitation after mine closure	98,384	83,130	102,974	104,234
Large certificates of bank deposits and interest	42,118	42,118	–	–
Prepayment for equity acquisition *(note 52)*	–	–	–	51,006
Others	18,909	5,976	3,286	2,792
Subtotal	186,230	187,626	212,070	285,523
Less: amount due within one year	–	(42,118)	–	–
	186,230	145,508	212,070	285,523

As at 31 December 2021, 31 December 2022 and 31 December 2023 and 31 March 2024, the Group's assets with restriction (including amounts due within one year) were RMB140,502,000, RMB125,248,000 RMB102,974,000 and RMB104,234,000, respectively, which were comprise of large certificates of bank deposits and interest and funds for land restoration and environmental rehabilitation after mine closure that cannot be withdrawn at any time.

24. INVENTORIES

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Raw materials	516,090	951,720	971,389	967,826
Consumable materials	1,486	680	610	543
Work in progress	1,112,679	1,288,300	1,457,052	1,511,200
Finished goods	80,577	174,052	168,779	173,493
	1,710,832	2,414,752	2,597,830	2,653,062
Impairment provision				
Raw materials	(127,331)	(143,175)	(178,411)	(187,051)
Work in progress	(170,777)	(90,588)	(906)	(90)
Finished goods	(630)	(16,361)	(11,604)	(9,265)
	(298,738)	(250,124)	(190,921)	(196,406)
	1,412,094	2,164,628	2,406,909	2,456,656

25. TRADE RECEIVABLES FROM THE COMPREHENSIVE RESOURCES RECYCLING AND UTILIZATION

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade receivables from the Ministry of Ecology and Environment of the People's Republic of China	311,447	339,237	397,481	407,148

The trade receivables from Anhui Guangyuan, which renders comprehensive resource recycling and utilization services to the government, are non-interest-bearing and have no fixed credit periods.

An ageing analysis of the trade receivables as at the end of each of the Relevant Periods, based on the invoice date, is as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Less than 1 year	69,680	74,704	92,642	82,104
1 to 2 years	83,630	69,680	74,704	76,885
2 to 3 years	158,121	83,630	69,680	77,849
Over 3 years	16	111,223	160,455	170,310
	311,447	339,237	397,481	407,148

In the opinion of the directors of the Company, the expected credit losses are limited because the trade receivable balances are due from the Ministry of Ecology and Environment of the PRC, which is with a high reputation and no actual loss incurred in history.

26. TRADE RECEIVABLES FROM GOLD AND COMMODITIES SALES

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade receivables	26,334	30,097	115,750	85,088
Impairment	(1,074)	(460)	(18)	–
	25,260	29,637	115,732	85,088

The credit period for receivables of other companies selling major metals such as gold, copper, zinc and electrolytic copper is generally within 60 days. Trade receivables are non-interest-bearing.

An ageing analysis of the trade receivables as at the end of each of the Relevant Periods, based on the invoice date, is as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Less than 1 year	25,210	29,637	115,732	85,088
1 to 2 years	–	–	–	–
2 to 3 years	50	–	–	–
Over 3 years	–	–	–	–
	25,260	29,637	115,732	85,088

The movements in the loss allowance for impairment of trade receivables are as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
At beginning of year/period	296	1,074	460	18
Impairment provided	778	–	18	–
Impairment reversed	–	(158)	(460)	(18)
Amount written off as uncollectible	–	(456)	–	–
At end of year/period	1,074	460	18	–

The Group applies the simplified approach in calculating ECLs for trade receivables. Trade receivables relating to customers with known financial difficulties or significant doubt on collection are assessed individually for impairment allowance. The remaining trade receivables are grouped and collectively assessed for impairment allowance. Under the collective approach, an impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing of bills for groupings of various customer segments with similar loss patterns. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

As at 31 December 2021

	Expected credit loss rate	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	*RMB'000*	*RMB'000*
Provision on collective basis				
Aged less than 1 year	2.59%	25,879	669	25,210
Aged 2 to 3 years	50.00%	100	50	50
Aged over 3 years	100.00%	355	355	–
At end of year	4.08%	26,334	1,074	25,260

As at 31 December 2022

	Expected credit loss rate	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	*RMB'000*	*RMB'000*
Provision on collective basis				
Aged less than 1 year	1.53%	30,097	460	29,637
At end of year	1.53%	30,097	460	29,637

As at 31 December 2023

	Expected credit loss rate	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	*RMB'000*	*RMB'000*
Provision on collective basis				
Aged less than 1 year	0.02%	115,750	18	115,732
At end of year	0.02%	115,750	18	115,732

As at 31 March 2024

	Expected credit loss rate	Gross carrying amount	Expected credit losses	Net carrying amount
		RMB'000	*RMB'000*	*RMB'000*
Provision on collective basis				
Aged less than 1 year	–	85,088	–	85,088
At end of period	–	85,088	–	85,088

27. PREPAYMENTS, OTHER RECEIVABLES AND OTHER ASSETS

The Group

	Note	31 December 2021	31 December 2022	31 December 2023	31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Prepayments		50,037	99,560	83,944	114,683
Deposits and other receivables		120,194	58,134	180,497	152,864
Large certificates of bank deposits and interest		–	42,118	–	–
Others		51	46,471	25,177	39,312
Less: Impairment of other receivables	*(a)*	(3,338)	(4,140)	(7,022)	(5,568)
		166,944	242,143	282,596	301,291

The amount of deposits and other receivables mainly is deposits for futures.

(a) The movements in the loss allowance for impairment of other receivables are as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
At beginning of year/period	2,132	3,338	4,140	7,022
Impairment provided	1,206	2,165	3,873	39
Impairment reversed	–	(1,363)	(991)	(1,493)
At end of year/period	3,338	4,140	7,022	5,568

The Company

	Notes	31 December 2021	31 December 2022	31 December 2023	31 March 2024
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Prepayments		6	776	–	50
Deposits and other receivables	*(a)*	392,123	332,091	589,427	628,944
Dividends receivable *(note)*		–	–	600,000	400,000
Less: Impairment of other receivables	*(b)*	(39)	(19)	(11)	(11)
		392,090	332,848	1,189,416	1,028,983

Note: Dividends receivable were from domestic subsidiaries of the Company with no collection restriction.

(a) An ageing analysis of the prepayments, other receivables and other assets as at the end of each of the Relevant Periods is as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Less than 1 year	389,811	332,848	861,251	1,028,983
1 to 2 years	2,279	–	328,165	–
	392,090	332,848	1,189,416	1,028,983

(b) The movements in the loss allowance for impairment of other receivables are as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
At beginning of year/period	11	39	19	11
Impairment provided	28	–	–	–
Impairment reversed	–	(20)	(8)	–
At end of year/period	39	19	11	11

28. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Listed equity investments, at fair value	11,237	48,131	16,909	12,228
	11,237	48,131	16,909	12,228

29. DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial asset:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Commodity derivative contracts	6,436	584	13,470	63,060
	6,436	584	13,470	63,060

Derivative financial liability:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Commodity derivative contracts	1,831	–	–	4,972
	1,831	–	–	4,972

As at 31 December 2021, 2022, 2023 and 31 March 2024, the amount of commodity derivative contracts is RMB6,436,000, RMB584,000, RMB13,470,000 and RMB63,060,000, in response to the price risk of short exposure derived from gold leasing, the Group use commodity futures contracts to manage risk in the sale of gold.

30. CASH AND CASH EQUIVALENTS, AND RESTRICTED CASH

The Group

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Cash and bank balances	1,824,749	1,285,105	1,662,283	1,728,958
Less: Restricted cash	(116,881)	(232,560)	(387,648)	(405,035)
Cash and cash equivalents	1,707,868	1,052,545	1,274,635	1,323,923
Denominated in:				
RMB	1,668,994	924,053	1,111,394	1,228,302
USD	144,718	344,993	500,385	423,531
GBP	–	554	1,728	2,368
LAK	11,009	5,460	1,369	1,816
GHC	–	5,870	45,163	69,416
Others	28	4,175	2,244	3,525
Total	1,824,749	1,285,105	1,662,283	1,728,958

As at 31 December 2021, 2022, 2023 and 31 March 2024, the Group's bank balances of approximately RMB116,881,000, RMB232,560,000, RMB387,648,000 and RMB405,035,000 were deposited for the following business and were restricted for use, respectively:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Bank deposits for loans	–	13,965	13,965	13,965
Deposits for notes payable	–	20,400	–	–
Special fund deposits for environmental rehabilitation and restoration	6,050	18,194	9,825	9,602
Bank deposits for the gold lease business	8,003	100,001	263,858	279,849
Certificates of deposit due within one year	100,095	80,000	100,000	101,619
Deposits for investment funds	2,733	–	–	–
	116,881	232,560	387,648	405,035

The Company

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Cash and bank balances	1,029,019	401,708	244,170	285,139
Less: Restricted cash	–	–	(13,965)	(13,965)
Cash and cash equivalents	1,029,019	401,708	230,205	271,174
Denominated in:				
RMB	1,029,019	401,706	243,377	284,344
USD	–	2	793	795
Total	1,029,019	401,708	244,170	285,139

As at 31 December 2021, 2022, 2023 and 31 March 2024, the Group's bank balances of approximately nil, nil, RMB13,965,000, RMB13,965,000 were deposited for loans and were restricted for use, respectively:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Bank deposits for loans	–	–	13,965	13,965

The RMB is not freely convertible into other currencies, however, under Chinese Mainland's Foreign Exchange Control Regulations and Administration of Settlement, and Sale and Payment of Foreign Exchange Regulations, the Group is permitted to exchange RMB for other currencies through banks authorised to conduct foreign exchange business.

Cash at banks earns interest at floating rates based on daily bank deposit rates. The bank balances and restricted cash are deposited with creditworthy banks with no recent history of default.

31. FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Gold lease	387,683	620,250	939,996	875,189
	387,683	620,250	939,996	875,189

The Group entered into gold lease contracts with certain banks for financing purposes, the Group leased gold from the banks and sold it through the trading system of the Shanghai Gold Exchange, the Group then purchased the same quantity and specification of gold through the aforesaid system to repay the banks before the maturity date of the gold lease contracts, and paid the agreed lease fee in accordance with the gold lease contracts (generally paid on the same date of the bank's quarterly interest payment date). The gold lease term is generally within 1 year inclusive. The liabilities to purchase and pay back the gold physically are measured at the price of the specified gold on the Shanghai Gold Exchange, the balance of the gold lease at the year end represents the fair value of the gold leased from banks at each of the balance sheet date.

32. TRADE AND NOTES PAYABLES

Trade payables do not bear interest and are usually settled within 60 days.

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Trade payables	440,401	693,390	552,457	430,694
Notes payable	–	158,000	–	–
	440,401	851,390	552,457	430,694

The trade payables are non-interest-bearing and are normally settled on 60-day terms.

An ageing analysis of trade and notes payables as at the end of each of the Relevant Periods is as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Less than 1 year	440,401	851,390	552,457	430,694

33. CONTRACT LIABILITIES

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Short-term advances received from customers				
Sale of goods	4,547	1,227	9,162	6,101
Metal Streaming Arrangement *(note)*	–	60,825	64,015	65,098
Sub-total	4,547	62,052	73,177	71,199
Long-term advances received from customers				
Metal Streaming Arrangement *(note)*	–	606,298	576,999	564,297
	4,547	668,350	650,176	635,496

Note: GSR which was acquired by the Group in 2022 has following transaction: In May 2015, one subsidiary of GSR, Caystar Finance Co. entered into a gold purchase and sale agreement (the "Metal Streaming Arrangement") with RGLD Gold AG, in which GSR obtained USD145,000,000 from RGLD Gold AG, in exchange, GSR is required to deliver 10.5% of future gold production of its two subsidiaries at a cash purchase price of 20% of the spot gold price until 240,000 ounces of gold have been delivered ("Tier One"). Thereafter, 5.5% of the gold production will be delivered at a cash purchase price of 30% of the spot gold price ("Tier Two"). As at 31 December 2022 and 2023 and 31 March 2024, GSR has delivered accumulative total 153,399 ounces and 170,096 ounces, 175,600 ounces of gold to RGLD Gold AG, respectively.

The Group expects that the delivery obligation of the Metal Streaming Arrangement will be satisfied in 2037.

The changes of contract liabilities — Metal Streaming Arrangement from 31 January 2022 (the acquisition date of GSR) to 31 December 2022, 2023 and 31 March 2024 are as follows:

	Gold delivery obligation
Balance as at 31 January 2022 *(note 50)*	640,754
Revenue recognised from delivery of goods	(47,201)
Finance expenses *(note 12)*	15,393
Exchange differences	58,177
Balance as at 31 December 2022	667,123
Including: Contract liabilities due within one year	60,825
Contract liabilities more than one year	606,298
Revenue recognised from delivery of goods	(52,324)
Finance expenses *(note 12)*	15,093
Exchange differences	11,122
Balance as at 31 December 2023	641,014
Including: Contract liabilities due within one year	64,015
Contract liabilities more than one year	576,999
Revenue recognised from delivery of goods	(16,717)
Finance expenses *(note 12)*	3,972
Exchange differences	1,126
Balance as at 31 March 2024	629,395
Including: Contract liabilities due within one year	65,098
Contract liabilities more than one year	564,297

34. OTHER PAYABLES AND ACCRUALS

The Group

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Amounts due to related parties	–	410,981	128,568	–
Payables to contractors	2,926	6,319	85,195	75,155
Consideration payables for acquiring a subsidiary	–	–	40,800	40,800
Engineering Quality Guarantee Deposit	27,803	33,507	40,984	40,461
Salaries, wages and benefits payables	104,693	114,454	174,859	114,367
Taxes other than income tax payables	53,999	93,558	205,293	203,566
Others	1,748	36,517	21,748	23,393
	191,169	695,336	697,447	497,742

The Company

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Amounts due to related parties	951,096	746,809	614,847	672,429
Salaries, wages and benefits payables	17,536	3,969	9,478	1,605
Taxes other than income tax payables	792	951	536	566
Others	123	140	84	68
	969,547	751,869	624,945	674,668

35. SHORT-TERM LOANS

The Group

	31 December 2021			31 December 2022			31 December 2023			31 March 2024		
	Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity	
	(%)		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*
Unsecured	–		–	2.61-3.90	2023	236,636	2.45-7.50	2024	850,009	2.45-4.50	2024-2025	1,013,196
Secured	–		–	3.70	2023	251,773			–			–
			–			488,409			850,009			1,013,196

The carrying amounts of borrowings are denominated in the following currencies:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
RMB	–	383,940	820,009	1,013,196
USD	–	104,469	–	–
LAK	–	–	30,000	–
Total	–	488,409	850,009	1,013,196

i. As at 31 December 2022, the Group's secured borrowings included in the short-term borrowings were approximately RMB251,773,000, which were pledged by property, plant and equipment with a book value of RMB270,931,000. As at 31 December 2023 and 31 March 2024, the Group had no secured borrowings.

ii. As at 31 December 2021, 2022 and 2023 and 31 March 2024, the Group had no short-term borrowings due but unpaid.

The Company

	31 December 2021			31 December 2022			31 December 2023			31 March 2024		
	Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity	
	(%)		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*
Unsecured	–	–	–	2.61	2023	106,847	2.45-4.50	2024	600,637	2.45-4.50	2024	600,637
Secured	–	–	–	3.70	2023	251,773	–		–			–
			–			358,620			600,637			600,637

The carrying amounts of borrowings are denominated in the following currencies:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
RMB	–	254,151	600,637	600,637
USD	–	104,469	–	–
Total	–	358,620	600,637	600,637

i. As at 31 December 2022, the Company's secured borrowings included in the short-term borrowings were approximately RMB251,773,000, which were pledged by property, plant and equipment with a book value of RMB270,931,000.

ii. As at 31 December 2021, 2022 and 2023 and 31 March 2024, the Company had no short-term borrowings due but unpaid.

36. LONG-TERM LOANS

The Group

	31 December 2021			31 December 2022			31 December 2023			31 March 2024		
	Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity	
	(%)		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*
Current portion of long-term bank loans – secured				4.10-4.95	2023	245,850	4.00-9.15	2024	129,456	4.00-9.10	2024-2025	241,994
Current portion of long-term bank loans – unsecured	3.48	2022	25,530	3.50-4.00	2023	87,920	3.50-4.10	2024	88,859	3.50-4.10	2024-2025	90,709
Total – current			25,530			333,770			218,315			332,703
Long-term loans – secured			–	4.10-4.95	2024-2027	1,386,724	4.00-9.15	2025-2027	1,381,994	4.00-9.10	2025-2027	1,276,471
Long-term loans – unsecured			–	3.50-4.00	2024-2027	127,057	3.50-4.10	2025-2027	39,980	3.50-4.10	2025-2027	39,970
Total – uncurrent			–			1,513,781			1,421,974			1,316,441
			25,530			1,847,551			1,640,289			1,649,144

The carrying amounts of borrowings are denominated in the following currencies:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
RMB	–	1,046,622	914,312	916,939
USD	25,530	800,929	725,977	732,205
Total	25,530	1,847,551	1,640,289	1,649,144

i. Certain of the Group's long-term loans are pledged by:

a. Total equity interests in Wulong Mining, Jilong Mining and Chijin HK as of 31 December 2022 and 2023 and 31 March 2024;

b. Property, plant and equipment (mineral assets) with carrying amounts of approximately nil, RMB279,388,000 and RMB270,178,000 as of 31 December 2022, 2023 and 31 March 2024.

c. Other intangible asset with carrying amounts of approximately RMB5,562,378,000, RMB5,426,490,000 and RMB5,395,391,000 as of 31 December 2022 and 2023 and 31 March 2024.

ii. Certain of the Group's long-term loans amounting to RMB25,530,000, RMB87,920,000, RMB88,859,000 and RMB90,709,000 as of 31 December 2022 and 2023 and 31 March 2024 were guaranteed by the Company.

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Analysed into:				
Long-term loans:				
Within one year	25,530	333,770	218,315	332,703
After 1 year but within 2 years	–	306,969	987,758	992,398
After 2 years but within 5 years	–	1,206,812	434,216	324,043
After 5 years	–	–	–	–
Total	25,530	1,847,551	1,640,289	1,649,144

The Company

	31 December 2021			31 December 2022			31 December 2023			31 March 2024		
	Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity		Effective interest rate	Maturity	
	(%)		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*	*(%)*		*RMB'000*
Current portion of long-term bank loans – secured	–	–	–	4.95	2023	237,831	4.00-4.35	2024	119,251	4.00-4.35	2024-2025	231,229
Long-term loans – secured	–	–	–	4.95	2024-2027	774,895	4.00-4.35	2025-2027	753,470	4.00-4.35	2025-2027	645,699
			–			1,012,726			872,721			876,928

i. Certain of the Company's long-term loans are pledged by:

a. Total equity interests of Wulong Mining, Jilong Mining and Chijin HK as of 31 December 2022 and 2023 and 31 March 2024;

b. Property, plant and equipment with a carrying amount of approximately RMB67,986,000, RMB338,495,000 and RMB327,594,000 as of 31 December 2022, 2023 and 31 March 2024.

ii. As at 31 December 2021, 2022 and 2023 and 31 March 2024, all the long-term borrowings were denominated in RMB.

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Analysed into:				
Long-term loans:				
Within one year	–	237,831	119,251	231,229
After 1 year but within 2 years	–	219,871	319,254	321,656
After 2 years but within 5 years	–	555,024	434,216	324,043
After 5 years	–	–	–	–
Total	–	1,012,726	872,721	876,928

37. PROVISIONS

Pursuant to the regulations of the governmental authorities in the places where the mines are located, the Group recognises provision for environmental rehabilitation and restoration of mines. The amount of provision is an estimate based upon the life of mining tenements, timing of mine closure and cost of such rehabilitation. The management will update the estimation basis annually.

The movement in the present value of the provision for rehabilitation are as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Beginning balance	1,652,620	1,631,259	1,994,401	1,943,846
Acquisition of a subsidiary *(note 50)*	–	108,800	–	–
Additions	12,550	101,174	4,953	–
Accretion of interest recognized during the year/period *(note 12)*	8,393	8,895	9,409	2,313
Payment during the year/period	(4,554)	(11,583)	(97,102)	(25,457)
Exchange differences	(37,750)	155,856	32,185	3,273
Ending balance	1,631,259	1,994,401	1,943,846	1,923,975
Current	–	9,567	75,747	76,657
Non-current	1,631,259	1,984,834	1,868,099	1,847,318

38. OTHER NON-CURRENT LIABILITIES

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Payables for mining rights *(note i)*	85,716	73,186	71,960	72,841
Payables for equity transfer *(note ii)*	173,566	–	–	–
Deferred government grants	2,120	2,073	1,756	7,077
Total	261,402	75,259	73,716	79,918
Current portion	186,589	10,849	9,485	9,602
Non-current portion	74,813	64,410	64,231	70,316

Note i: Payables for mining rights were comparise of the long-term payables to local regulators of Liaoning Wulong Gold Mining Co., Ltd., Eryuan Jintai Mining Development Co., Ltd. and Chifeng Huatai Mining Co., Ltd., the subsidiaries of the Company, to obtain certain ming rights.

Note ii: The payables for equity transfer referred to the payments that the Company should made to the former shareholder, MMG Finance Limited ("MMG"), for the acquisition of the subsidiary, Lane Xang Minerals Limited Company ("LXML") in 2018. According to the acquisition agreement, the final payment should be made in 2021. In 2021, the two parties agreed to extend the final payment to 2022 after negotiation. Therefore, as at 31 December 2021, the equity transfer payable to MMG amounting to RMB173,566,000 was presented as the current portion of non-current liabilities. The payment was made in full in 2022.

39. SHARE CAPITAL

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Issued and fully paid:.	1,663,911	1,663,911	1,663,911	1,663,911
	1,663,911	1,663,911	1,663,911	1,663,911

A summary of movements in the Company's share capital is as follows:

	Number of shares in issue	Share capital
		RMB'000
At 1 January 2021.	1,663,911,378	1,663,911
At 31 December 2021 and 1 January 2022.	1,663,911,378	1,663,911
At 31 December 2022 and 1 January 2023.	1,663,911,378	1,663,911
At 31 December 2023 and 1 January 2024.	1,663,911,378	1,663,911
At 31 March 2024.	1,663,911,378	1,663,911

40. SHARE INCENTIVE PLAN

Employee Stock Ownership Plan

i. Phase I Employee Stock Ownership Plan

The Company operates a share incentive plan (the "SIP I"), namely "Phase I Employee Stock Ownership Plan", for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Eligible participants of the SIP I include the directors, supervisors, senior management and other key employees of the Group. The SIP I became effective on 17 August 2021 and, unless otherwise cancelled or amended, will remain in force for three years from that date.

In order to implement the SIP I, Beijing Pan Geng Capital Management Co., Ltd. ("Pan Geng Capital") was established and designated as the share incentive platform to hold the shares specially awarded to the eligible participants as the ultimate beneficial owners.

Up to 30 April 2021, the Company repurchased a total of 41,597,732 shares, amounting to RMB663,387,000, with an average price of RMB15.96 per share to implement the SIP I.

On 17 August 2021, all the 41,597,732 shares were transferred to the share incentive platform with the price of RMB15.96 per share. As a result, a consideration of RMB663,387,000 has been received by the Company. At the same day, 117 participants were granted 41,597,732 shares at a subscribed price of RMB15.96 per share. Due to the Group can not control the share incentive platform, the share incentive platform was not consolidated in the consolidated financial statement.

The SIP I became effective on 17 August 2021 and, unless otherwise cancelled or amended, will remain in force for 36 months from the Grant date.

All of the shares granted to the participants shall be subject to a performance-based condition (the "Performance Condition"). The Performance Condition would be satisfied that the cumulative production of the Group from 2022 to 2024 is not less than 43 tons.

On 17 August 2021, as the market price of shares was RMB15.18 per share, lower than the exercise price of RMB15.96 per share, the fair value of the shares granted under the SIP I during the Relevant Periods was nil, and the Group recognised no expenses during the Relevant Periods.

The movements of shares under the SIP I during the year are as follows:

	2021		2022		2023		For the three months ended 31 March 2024	
	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares
	RMB per share	*'000*	*RMB per share*	*'000*	*RMB per share*	*'000*	*RMB per share*	*'000*
At 1 January	–	–	15.96	41,598	15.96	41,598	15.96	41,598
Granted during the year/period	15.96	41,598	–	–	–	–	–	–
At 31 December/31 March	15.96	41,598	15.96	41,598	15.96	41,598	15.96	41,598

ii. Phase II Employee Stock Ownership Plan

The Company operates a share incentive plan (the "SIP II"), namely "Phase II Employee Stock Ownership Plan", for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Eligible participants of the SIP II include the directors, supervisors, senior management and other key employees of the Group. The SIP II became effective on 28 April 2023 and, unless otherwise cancelled or amended, will remain in force for two years from that date.

Up to 16 January 2023, the Company repurchased a total of 16,575,406 shares, amounting to RMB300,910,000, with an average price of RMB18.15 per share to implement the SIP II.

On 28 April 2023, 101 participants were granted 16,575,406 shares at a subscribed price of RMB18.15 per share. On 28 April 2023, the Company received the whole repurchase fee of RMB300,910,000 from all the participants.

The SIP II became effective on 28 April 2023 and, unless otherwise cancelled or amended, will remain in force for 24 months from that date.

All of the shares granted to the participants shall be subject to a performance-based condition (the "Performance Condition"). The Performance Condition would be satisfied that the net profit attributable to shareholders of Company in 2023 increases by more than 30% (inclusive) over the same period of last year. As of 31 December 2023, all shares of the SIP II were vested as the Performance Condition was satisfied, but not exercised yet till 31 March 2024.

On 28 April 2023, as the market price of shares was RMB16.57 per share, lower than the exercise price of RMB18.15 per share, the fair value of the shares granted under the SIP II during the Relevant Periods was nil, and the Group recognised no expenses during the Relevant Periods.

The movements of shares under the SIP II during the year are as follows:

	2023		For the three months ended 31 March 2024	
	Weighted average exercise price	Number of shares	Weighted average exercise price	Number of shares
	RMB per share	*'000*	*RMB per share*	*'000*
At 1 January	–	–	18.15	16,575
Granted during the year/period	18.15	16,575	–	–
Vested during the year/period	–	–	(18.15)	(16,575)
At 31 December/31 March	18.15	16,575	–	–

iii. Stock Appreciation Rights

The Company operates a share incentive plan (the "SIP III"), namely "Stock Appreciation Rights", for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Eligible participants of the SIP III include the directors and senior management of the Group. The SIP III became effective on 28 November 2022 and, unless otherwise cancelled or amended, will remain in force for four years from that date.

On 28 November 2022, 7 participants were granted 1,800,000 phantom stock options at a subscribed price of RMB16.00. These phantom stock options will be settled by cash.

All of the options granted to the participants shall be subject to a service-based condition (the "Service Condition"). The Performance Condition would be satisfied that the cumulative production of the Group of 2022 is not less than 16 tons ("Phase I") and the cumulative production of the Group from 2022 to 2023 is not less than 35 tons ("Phase II"). Under Phase I, the participants could exercise a maximum of 50% of the options from 28 November 2023 to 27 November 2024. Under Phase II, the participants could exercise a maximum of 50% of the options from 28 November 2024 to 27 November 2025.

On 30 March 2024, since the Service Condition was not met, the SIP III were forfeited and no expenses were recognised during the Relevant Periods.

41. RESERVES

The amounts of the Group's reserves and the movements therein for the Relevant Periods are presented in the consolidated statements of changes in equity of the Historical Financial Information.

Pursuant to the relevant laws and regulations and the articles of association of the Company, the Company is required to transfer 10% of its profit after income tax, as determined under PRC GAAP, to the reserve fund until the reserve balance reaches 50% of its registered capital. The transfer to this reserve must be made before the distribution of dividends to equity owners. Upon the approval from the relevant authorities, this reserve can be used to make up any losses incurred or to increase share capital. Except for offsetting against losses, this reserve cannot fall below 25% of the registered share capital after being used to increase share capital. The reserves available for distribution to shareholders are the retained profits.

42. PARTLY-OWNED SUBSIDIARIES WITH MATERIAL NON-CONTROLLING INTERESTS

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2024
Percentage of equity interest held by non-controlling interests:				
Anhui Guangyuan	45%	45%	45%	45%
LXML	10%	10%	10%	10%
GSR	NA	38%	38%	38%

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Profit for the year allocated to non-controlling interests:				
Anhui Guangyuan	13,045	10,811	9,859	79
LXML	18,570	23,106	28,655	8,252
GSR	NA	9,124	21,857	17,842
Dividends paid to non-controlling interests				
Anhui Guangyuan	–	1,350	–	–
LXML	–	39,641	–	–

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Accumulated balances of non-controlling interests at Relevant Periods:				
Anhui Guangyuan	130,920	140,381	150,240	150,161
LXML	249,573	255,440	288,670	296,944
GSR	NA	1,795,527	1,843,184	1,861,659

Year ended 31 December 2021

	Anhui Guangyuan	LXML
	RMB'000	*RMB'000*
Revenue	257,555	2,522,934
Total expenses	228,566	2,337,236
Profit for the year	28,989	185,698
Total comprehensive income for the year	28,989	123,844
Current assets	331,166	2,609,974
Non-current assets	93,723	2,080,832
Current liabilities	133,296	572,667
Non-current liabilities	661	1,622,407
Net cash flows from operating activities	21,073	343,364
Net cash flows from/(used in) investing activities	(4,079)	(192,776)
Net cash flows used in financing activities	(15,412)	(86,820)
Effect of foreign exchange rate changes, net	–	(2,589)
Net increase/(decrease) in cash and cash equivalents	1,582	61,179

Year ended 31 December 2022

	Anhui Guangyuan	LXML	GSR
	RMB'000	*RMB'000*	*RMB'000*
Revenue	306,510	2,998,740	1,790,576
Total expenses	282,484	2,767,677	1,796,047
Profit for the year	24,026	231,063	(5,471)
Total comprehensive income for the year	24,026	455,093	152,691
Current assets	366,450	3,006,190	583,937
Non-current assets	86,630	2,516,493	8,058,618
Current liabilities	100,554	1,028,503	870,138
Non-current liabilities	40,568	1,939,781	3,914,861
Net cash flows from operating activities	16,602	820,568	326,213
Net cash flows used in investing activities	(10,234)	(904,879)	(441,816)
Net cash flows used in financing activities	(7,234)	92,326	231,900
Effect of foreign exchange rate changes, net	–	10,203	79,269
Net increase/(decrease) in cash and cash equivalents	(866)	18,218	195,566

Year ended 31 December 2023

	Anhui Guangyuan	LXML	GSR
	RMB'000	*RMB'000*	*RMB'000*
Revenue	399,141	3,054,614	2,139,329
Total expenses	377,232	2,768,062	2,126,959
Profit for the year	21,909	286,552	12,370
Total comprehensive income for the year	21,909	332,302	77,183
Current assets	421,789	2,979,605	692,240
Non-current assets	79,540	2,399,421	8,034,857
Current liabilities	127,007	802,841	1,001,405
Non-current liabilities	40,455	1,689,484	3,790,954
Net cash flows from/(used in) operating activities	(40,953)	649,058	645,563
Net cash flows from/(used in) investing activities	10,379	(123,993)	(488,388)
Net cash flows from/(used in) financing activities	32,254	(401,935)	(106,262)
Effect of foreign exchange rate changes, net	–	2,828	9,567
Net increase in cash and cash equivalents	1,680	125,958	60,480

Three months ended 31 March 2024

	Anhui Guangyuan	LXML	GSR
	RMB'000	*RMB'000*	*RMB'000*
Revenue	66,696	787,600	629,377
Total expenses	66,520	705,081	597,574
Profit for the year	176	82,519	31,803
Total comprehensive income for the year	176	82,717	36,039
Current assets	428,599	3,074,160	738,247
Non-current assets	77,934	2,345,979	8,006,522
Current liabilities	132,420	782,168	1,009,567
Non-current liabilities	40,421	1,668,532	3,764,425
Net cash flows from/(used in) operating activities	(10,595)	102,722	142,892
Net cash flows used in investing activities	–	(155,914)	(124,914)
Net cash flows from/(used in) financing activities	7,278	(16,253)	(17,619)
Effect of foreign exchange rate changes, net	–	742	5,470
Net increase/(decrease) in cash and cash equivalents	(3,317)	(68,703)	5,829

43. NOTES TO THE CONSOLIDATED STATEMENTS OF CASH FLOWS

(a) Major non-cash transactions

During the Revelant Periods, the Group had non-cash additions to the right-of-use assets and lease liabilities of nil, RMB56,538,000 and RMB25,977,000 for the years ended 31 December 2021, 2022 and 2023, and nil (unaudited) and nil for the three months ended 31 March 2023 and 2024, respectively, in respect of lease arrangements.

(b) Changes in liabilities arising from financing activities

	Short-term loans	Financial liabilities at fair value through profit or loss	Long-term loans	Lease liabilities	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
As at 1 January 2021	165,020	113,161	111,044	5,782	395,007
Changes from financing cash flows	(165,020)	300,756	(83,846)	(1,553)	50,337
Cash paid for interest expenses	(3,477)	–	(6,312)	–	(9,789)
Interest expenses	3,477	–	393	170	4,040
Exchange realignment	–	–	4,251	–	4,251
Changes on fair value	–	(26,234)	–	–	(26,234)
As at 31 December 2021	–	387,683	25,530	4,399	417,612
As at 1 January 2022	–	387,683	25,530	4,399	417,612
Changes from financing cash flows	474,801	184,903	1,758,104	(33,696)	2,384,112
Cash paid for interest expenses	(23,982)	–	(99,574)	–	(123,556)
Interest expenses	28,223	–	99,574	10,211	138,008
Exchange realignment	9,367	–	63,917	17,393	90,677
Acquisition of a subsidiary *(note 50)*	–	–	–	207,137	207,137
New leases	–	–	–	56,538	56,538
Changes on fair value	–	47,664	–	–	47,664
As at 31 December 2022	488,409	620,250	1,847,551	261,982	3,218,192
As at 1 January 2023	488,409	620,250	1,847,551	261,982	3,218,192
Changes from financing cash flows	366,881	179,285	(229,576)	(58,102)	258,488
Cash paid for interest expenses	(25,897)	–	(105,432)	–	(131,329)
Interest expenses	22,498	–	137,123	12,340	171,961
Exchange realignment	(1,882)	–	(9,377)	3,105	(8,154)
New leases	–	–	–	2,912	2,912
Acquisition of a subsidiary *(note 50)*	–	–	–	23,065	23,065
Changes on fair value	–	140,461	–	–	140,461
As at 31 December 2023	850,009	939,996	1,640,289	245,302	3,675,596

	Short-term loans	Financial liabilities at fair value through profit or loss	Long-term loans	Lease liabilities	Total
	RMB'000 (Unaudited)	*RMB'000 (Unaudited)*	*RMB'000 (Unaudited)*	*RMB'000 (Unaudited)*	*RMB'000 (Unaudited)*
As at 1 January 2023	488,409	620,250	1,847,551	261,982	3,218,192
Changes from financing cash flows	45,501	296,695	(119,646)	(7,857)	214,693
Cash paid for interest expenses	(9,077)	–	(25,384)	–	(34,461)
Interest expenses	4,561	–	29,583	2,405	36,549
Exchange realignment	–	–	–	(2,924)	(2,924)
Changes on fair value	–	35,935	–	–	35,935
As at 31 March 2023 (unaudited)	529,394	952,880	1,732,104	253,606	3,467,984

	Short-term loans	Financial liabilities at fair value through profit or loss	Long-term loans	Lease liabilities	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
As at 1 January 2024	850,009	939,996	1,640,289	245,302	3,675,596
Changes from financing cash flows	163,069	(142,443)	(10)	(8,113)	12,503
Cash paid for interest expenses	(6,957)	–	(22,766)	–	(29,723)
Interest expenses	7,075	–	29,410	2,869	39,354
Exchange realignment	–	–	2,221	216	2,437
Changes on fair value	–	77,636	–	–	77,636
As at 31 March 2024	1,013,196	875,189	1,649,144	240,274	3,777,803

(c) Total cash outflow for leases

The total cash outflow for leases included in the statements of cash flows is as follows:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Within operating activities	(3,115)	(20,766)	(15,969)	(3,028)	(3,147)
Within financing activities *(note)*	(1,553)	(33,696)	(58,102)	(7,857)	(8,113)
	(4,668)	(54,462)	(74,071)	(10,885)	(11,260)

Note: The cash outflow for leases in financing activities includes the principal portion of lease payments and related interests.

44. PLEDGE OF ASSETS

Details of the Group's assets pledged for the Group's interest-bearing bank loans are included in notes 35 and 36 to the Historical Financial Information.

45. COMMITMENTS AND CONTINGENCIES

The Group had the following capital commitments at the end of each of the Relevant Periods:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Contracted, but not provided for:				
Property, plant and equipment	98,016	233,730	230,173	200,631
Investment commitment	253,000	318,064	256,864	351,043
	351,016	551,794	487,037	551,674

46. RELATED PARTY TRANSACTIONS

(a) The Group had the following related parties during the Relevant Periods:

Name of related parties	Relationship between related parties and the Company
Li Jinyang*	the Single Largest Shareholder
Beijing Eagleleap Technology Co., Ltd. ("Eagleleap")	Entity under common control of the Single Largest Shareholder

(b) In addition to the transactions detailed elsewhere in the Historical Financial Information, the Group had the following transactions with related parties during the Relevant Periods:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000* (unaudited)	*RMB'000*
Service rendering from a subsidiary of the Company's controlling shareholder					
Eagleleap	189	338	731	–	–
	189	338	731	–	–

(c) Rental charge paid

Year ended 31 December 2021

	Category of leased assets	Rental expenses of short-term leases and low-value asset leases of low-value assets lease with simplified treatment	Variable lease payments not included in the measurement of lease liabilities	Rental payments	Interest expenses of lease liabilities	Increase in right-of-use assets
Eagleleap	Buildings	2,369	–	2,369	–	–

Year ended 31 December 2022

	Category of leased assets	Rental expenses of short-term leases and low-value asset leases of low-value assets lease with simplified treatment	Variable lease payments not included in the measurement of lease liabilities	Rental payments	Interest expenses of lease liabilities	Increase in right-of-use assets
Eagleleap	Buildings	571	–	4,876	424	9,325

Year ended 31 December 2023

	Category of leased assets	Rental expenses of short-term leases and low-value asset leases of low-value assets lease with simplified treatment	Variable lease payments not included in the measurement of lease liabilities	Rental payments	Interest expenses of lease liabilities	Increase in right-of-use assets
Eagleleap	Buildings	170	–	4,469	236	–

Three months ended 31 March 2023

	Category of leased assets	Rental expenses of short-term leases and low-value asset leases of low-value assets lease with simplified treatment	Variable lease payments not included in the measurement of lease liabilities	Rental payments	Interest expenses of lease liabilities	Increase in right-of-use assets
Eagleleap	Buildings	–	–	–	–	–

Three months ended 31 March 2024

	Category of leased assets	Rental expenses of short-term leases and low-value asset leases of low-value assets lease with simplified treatment	Variable lease payments not included in the measurement of lease liabilities	Rental payments	Interest expenses of lease liabilities	Increase in right-of-use assets
Eagleleap	Buildings	–	–	–	50	–

(d) New loans received from

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Li Jinyang	620,000	1,537,240	–	–	–

(e) New loans repaid to

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Li Jinyang	620,000	1,126,300	300,040	–	128,546

(f) Outstanding balances with related parties:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Other payables and accruals				
Eagleleap	–	41	22	–
Li Jinyang	–	410,940	128,546	–
	–	410,981	128,568	–
Lease liabilities				
Eagleleap	–	9,535	4,469	–
	–	9,535	4,469	–

(g) Compensation of key management personnel of the Group:

	Year ended 31 December 2021	Year ended 31 December 2022	Year ended 31 December 2023	Three months ended 31 March 2023	Three months ended 31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000 (unaudited)*	*RMB'000*
Compensation for key management personnel	36,036	29,326	31,028	5,892	4,991
	36,036	29,326	31,028	5,892	4,991

Further details of directors' emoluments are included in note 8 to the Historical Financial Information.

47. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at the end of each of the Relevant Periods are as follows:

31 December 2021

Financial assets

	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables from other sales	25,260	–	25,260
Trade receivables from the comprehensive recycling of resources business	311,447	–	311,447
Financial assets included in prepayments, other receivables and other assets	116,856	–	116,856
Financial assets at fair value through profit or loss	–	11,237	11,237
Derivative financial instruments	–	6,436	6,436
Cash and cash equivalents	1,824,749	–	1,824,749
Other non-current assets	145,587	–	145,587
	2,423,899	17,673	2,441,572

Financial liabilities

	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade and notes payables	440,401	–	440,401
Financial liabilities at fair value through profit or loss	–	387,683	387,683
Derivative financial liabilities	–	1,831	1,831
Financial liabilities included in other payables and accruals	31,413	–	31,413
Current portion of long-term loans	25,530	–	25,530
Current portion of other non-current liabilities	186,589	–	186,589
Other non-current liabilities	72,693	–	72,693
	756,626	389,514	1,146,140

31 December 2022

Financial assets

	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables from other sales	29,637	–	29,637
Trade receivables from the comprehensive recycling of resources business	339,237	–	339,237
Financial assets included in prepayments, other receivables and other assets	96,112	–	96,112
Financial assets at fair value through profit or loss	–	48,131	48,131
Derivative financial instruments	–	584	584
Cash and cash equivalents	1,285,105	–	1,285,105
Other non-current assets	87,101	–	87,101
	1,837,192	48,715	1,885,907

Financial liabilities

	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade and notes payables	851,390	–	851,390
Financial liabilities at fair value through profit or loss	–	620,250	620,250
Financial liabilities included in other payables and accruals	452,962	–	452,962
Short-term loans	488,409	–	488,409
Current portion of long-term loans	344,619	–	344,619
Long-term loans	1,513,781	–	1,513,781
Other non-current liabilities	62,337	–	62,337
	3,713,498	620,250	4,333,748

31 December 2023

Financial assets

	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables from other sales	115,732	–	115,732
Trade receivables from the comprehensive recycling of resources business	397,481	–	397,481
Financial assets included in prepayments, other receivables and other assets	173,475	–	173,475
Financial assets at fair value through profit or loss	–	16,909	16,909
Derivative financial instruments	–	13,470	13,470
Cash and cash equivalents	1,662,283	–	1,662,283
Other non-current assets	105,840	–	105,840
	2,454,811	30,379	2,485,190

Financial liabilities

	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade and notes payables	552,457	–	552,457
Financial liabilities at fair value through profit or loss	–	939,996	939,996
Financial liabilities included in other payables and accruals	301,089	–	301,089
Short-term loans	866,064	–	866,064
Current portion of long-term loans	227,801	–	227,801
Long-term loans	1,421,974	–	1,421,974
Other non-current liabilities	62,475	–	62,475
	3,431,860	939,996	4,371,856

31 March 2024

Financial assets

	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables from other sales	85,088	–	85,088
Trade receivables from the comprehensive recycling of resources business	407,148	–	407,148
Financial assets included in prepayments, other receivables and other assets	147,296	–	147,296
Financial assets at fair value through profit or loss	–	12,228	12,228
Derivative financial instruments	–	63,060	63,060
Cash and cash equivalents	1,728,958	–	1,728,958
Other non-current assets	106,639	–	106,639
	2,475,129	75,288	2,550,417

Financial liabilities

	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade and notes payables	430,694	–	430,694
Financial liabilities at fair value through profit or loss	–	875,189	875,189
Derivative financial liabilities	–	4,972	4,972
Financial liabilities included in other payables and accruals	161,078	–	161,078
Short-term loans	1,026,039	–	1,026,039
Current portion of long-term loans	342,304	–	342,304
Long-term loans	1,316,441	–	1,316,441
Other non-current liabilities	63,239	–	63,239
	3,339,795	880,161	4,219,956

48. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

Management has assessed that the fair values of cash and cash equivalents, trade receivables from comprehensive recycling of resources business, financial assets included in prepayments, other receivables and other assets, trade and notes payables, financial liabilities included in other payables and accruals, and other non-current liabilities due within one year approximate to their carrying amounts largely due to the short-term maturities of these instruments.

The fair values of financial assets included in other non-current assets, short-term and long-term loans, lease liabilities and financial liabilities included in other non-current liabilities were determined by discounting the expected future cash flows using market rates of return currently available for other financial instruments with similar terms, credit risk and remaining maturities or incremental borrowing rate. The Group's own non-performance risk for short-term and long-term loans was assessed to be insignificant. The futures contracts and listed equity investments is determined based on the settlement price of the gold futures contracts held in the Shanghai Futures Exchange on the balance sheet date and quoted market prices. The outstanding gold lease financing market value is determined based on the closing price of the gold lease products on the Shanghai Gold Exchange on the balance sheet date.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance manager reports directly to the chief financial officer and the audit committee. At the end of each of the Relevant Periods, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer. The valuation process and results are discussed with the audit committee twice a year for interim and annual financial reporting.

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value:

As at 31 December 2021

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial assets at fair value through profit or loss				
Including: Equity investment . .	11,237	–	–	11,237
(II) Derivative financial assets				
Including: Hedging instruments.	6,436	–	–	6,436
	17,673	–	–	17,673

As at 31 December 2022

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial assets at fair value through profit or loss				
Including: Equity investment . .	48,131	–	–	48,131
(II) Derivative financial assets				
Including: Hedging instruments.	584	–	–	584
	48,715	–	–	48,715

As at 31 December 2023

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial assets at fair value through profit or loss				
Including: Equity investment . .	16,909	–	–	16,909
(II) Derivative financial assets				
Including: Hedging instruments.	13,470	–	–	13,470
	30,379	–	–	30,379

As at 31 March 2024

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial assets at fair value through profit or loss				
Including: Equity investment . .	12,228	–	–	12,228
(II) Derivative financial assets				
Including: Hedging instruments.	63,060	–	–	63,060
	75,288	–	–	75,288

Liabilities measured at fair value:

As at 31 December 2021

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial liabilities at fair value through profit or loss				
Including: Gold lease	387,683	–	–	387,683
(II) Derivative financial liabilities				
Including: Hedging instruments.	1,831	–	–	1,831
	389,514	–	–	389,514

As at 31 December 2022

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial liabilities at fair value through profit or loss				
Including: Gold lease	620,250	–	–	620,250
	620,250	–	–	620,250

As at 31 December 2023

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial liabilities at fair value through profit or loss				
Including: Gold lease	939,996	–	–	939,996
	939,996	–	–	939,996

As at 31 March 2024

	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
(I) Financial liabilities at fair value through profit or loss				
Including: Gold lease	875,189	–	–	875,189
(II) Derivative financial liabilities				
Including: Hedging instruments	4,972	–	–	4,972
	880,161	–	–	880,161

During the Relevant Periods, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3 for both financial assets and financial liabilities. The Group's policy is to recognise transfers between levels of the fair value hierarchy as at the end of each of the Relevant Periods in which they occur.

49. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group is exposed to various risks in relation to financial instruments in its daily operations, mainly credit risk, liquidity risk and market risk (including interest rate risk, exchange rate risk, and commodity price risk). The Group's major financial instruments include cash and cash equivalents, financial assets at fair value through profit or loss, derivative financial assets, trade receivables, other non-current assets, short-term and long-term loans, financial liabilities at fair value through profit or loss, trade and notes payables, other payables and accruals, etc. The Group also enters into certain derivative transactions, including interest rate swaps, commodity future contracts and forward exchange contracts. The purpose is to manage the interest rate risk, commodity price risk and currency risks arising from the Group's operations and its sources of finance. The Group manages the market risks of derivatives based on the difference between the metal price in the market and the target metal price pre-determined by management. Risks in connection with such financial instruments, and the risk management strategies adopted by the Group to mitigate such risks are summarised as follows.

Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with a floating interest rate.

The following table demonstrates the sensitivity to a reasonably possible change in interest rates, with all other variables held constant, of the Group's profit after tax (through the impact on floating rate borrowings) and the Group's equity.

	Increase/(decrease) in basis points	Increase/(decrease) in profit after tax	Increase/(decrease) in total shareholders' equity
	RMB'000	*RMB'000*	*RMB'000*
2021			
Loans denominated in USD	100	(172)	(172)
Loans denominated in USD	(100)	172	172
2022			
Loans denominated in RMB	100	(9,416)	(9,416)
Loans denominated in RMB	(100)	9,416	9,416
Loans denominated in USD	100	(5,052)	(5,052)
Loans denominated in USD	(100)	5,052	5,052

	Increase/(decrease) in basis points	Increase/(decrease) in profit after tax	Increase/(decrease) in total shareholders' equity
	RMB'000	*RMB'000*	*RMB'000*
2023			
Loans denominated in RMB	100	(4,800)	(4,800)
Loans denominated in RMB	(100)	4,800	4,800
Loans denominated in USD	100	(4,707)	(4,707)
Loans denominated in USD	(100)	4,707	4,707
First quarter of 2024			
Loans denominated in RMB	100	(1,200)	(1,200)
Loans denominated in RMB	(100)	1,200	1,200
Loans denominated in USD	100	(1,187)	(1,187)
Loans denominated in USD	(100)	1,187	1,187

Foreign currency risk

The Group has transactional exchange rate risk exposures mainly arising from sales or purchases by subsidiaries in currencies other than the subsidiaries' functional currencies. The Group has subsidiaries using USD and RMB as their functional currencies. These subsidiaries have transactions in currencies other than their functional currencies. In addition, the Group has exchange rate exposures arising from foreign currency borrowings. The Group adopts an overall management on its foreign exchange business, and reduces its exchange rate exposures using forward foreign exchange contracts based on the market trend as necessary.

The following tables present a sensitivity analysis of exchange rate risk, reflecting the impact that a reasonable and probable change in the exchange rates of USD, GHC, GBP, CAD, AUD, LAK, THB, EUR and ZAR, with all other variables remain constant, would have on net profit or loss and other comprehensive income, net of tax.

	Increase/(decrease) in exchange rate	Increase/(decrease) in profit after tax	Increase/(decrease) in total shareholders' equity
	RMB'000	*RMB'000*	*RMB'000*
2021			
If the RMB weakens against the USD	5%	42,140	42,140
If the RMB strengthens against the USD	(5%)	(42,140)	(42,140)
If the USD weakens against the LAK	5%	1,425	1,425
If the USD strengthens against the LAK	(5%)	(1,425)	(1,425)
2022			
If the RMB weakens against the USD	5%	7,692	7,692
If the RMB strengthens against the USD	(5%)	(7,692)	(7,692)
If the USD weakens against the GHC	5%	377	377
If the USD strengthens against the GHC	(5%)	(377)	(377)
If the USD weakens against the LAK	5%	100	100
If the USD strengthens against the LAK	(5%)	(100)	(100)
2023			
If the RMB weakens against the USD	5%	18,093	18,093
If the RMB strengthens against the USD	(5%)	(18,093)	(18,093)
If the USD weakens against the GHC	5%	624	624
If the USD strengthens against the GHC	(5%)	(624)	(624)
If the USD weakens against the LAK	5%	(1,249)	(1,249)
If the USD strengthens against the LAK	(5%)	1,249	1,249
If the USD weakens against the EUR	5%	1,295	1,295
If the USD strengthens against the EUR	(5%)	(1,295)	(1,295)

	Increase/(decrease) in exchange rate	Increase/(decrease) in profit after tax	Increase/(decrease) in total shareholders' equity
	RMB'000	*RMB'000*	*RMB'000*
As at 31 March 2024			
If the RMB weakens against the USD	5%	1,993	1,993
If the RMB strengthens against the USD	(5%)	(1,993)	(1,993)
If the USD weakens against the GHC	5%	1,559	1,559
If the USD strengthens against the GHC	(5%)	(1,559)	(1,559)
If the USD weakens against the LAK	5%	9	9
If the USD strengthens against the LAK	(5%)	(9)	(9)
If the USD weakens against the EUR	5%	1,322	1,322
If the USD strengthens against the EUR	(5%)	(1,322)	(1,322)

Price risk of equity instrument investments

Price risk of equity instrument investments refers to the risk that the fair value of equity securities was reduced due to changes in the level of the stock index and the value of individual securities. As at 31 December 2021, 2022, and 2023 and as at 31 March 2024, the Group was exposed to the price risk of individual equity instrument investments due to the classification as equity instrument investments at fair value through profit or loss.

The listed equity instrument investment was listed on the Australian Stock Exchange and the Canadian Securities Exchange, and was measured at quoted market price at balance sheet date.

The following tables demonstrate the sensitivity of the Group's net profit and loss and other comprehensive income net of tax to every 5% change in the fair value of equity instrument investments, under the assumption that all other variables are held constant. Management considered that the percentage of 5% reasonably reflects the reasonable range of possible change in fair value in the following year.

	Equity instrument investments	Net gains and losses	Total shareholders' equity
	Book value	*Increase/ (decrease)*	*Increase/ (decrease)*
As at December 2021			
Equity instrument investments			
Australia – Equity instrument investments at fair value through profit or loss	11,237	474/(474)	474/(474)
As at December 2022			
Equity instrument investments			
Australia – Equity instrument investments at fair value through profit or loss	47,959	1,930/(1,930)	1,930/(1,930)
Canada – Equity instrument investments at fair value through profit or loss	172	6/(6)	6/(6)
As at December 2023			
Equity instrument investments			
Australia – Equity instrument investments at fair value through profit or loss	16,734	695/(695)	695/(695)
Canada – Equity instrument investments at fair value through profit or loss	175	6/(6)	6/(6)
As at March 2024			
Equity instrument investments			
Australia – Equity instrument investments at fair value through profit or loss	12,052	504/(504)	504/(504)
Canada – Equity instrument investments at fair value through profit or loss	176	6/(6)	6/(6)

Credit risk

The Group only deals with approved and reputable third parties. According to the Group's policy, all customers who require credit transactions are subject to credit review. In addition, the Group continuously monitors the balance of trade receivables to ensure that the Group is not exposed to significant bad debt risks.

Since counterparties of cash and bank balances are banks with good reputation and high credit ratings, credit risk arising from these financial instruments is insignificant.

Other financial assets of the Group include receivables and some derivatives. The credit risk on these financial assets arises from the default of counterparties, with a maximum exposure equal to the carrying amounts of these instruments.

The Group only deals with approved and reputable third parties, so no need for collateral. Credit risk is managed centrally based on customers/counterparties, geographic regions and industries. As at 31 December 2021, 2022 and 2023 and 31 March 2024, the Group had a specific concentration of credit risk. 41.70%, 46.27% 63.41%, and 68.17% of the Group's trade receivables were from the largest customers in terms of trade receivable balances. 92.74%, 85.11%, 98.38% and 96.48% of the Group's trade receivables were from the top five customers in terms of trade receivable balances. The balance of trade receivables of the Group did not hold any collateral or other credit enhancements.

As at 31 December 2021, 2022 and 2023 and 31 March 2024, trade receivables from the comprehensive recycling of resources business balances were government dismantling tariffs provided by the PRC government for the treatment of certain waste electric and electronic products. In the opinion of the directors of the Company, the expected credit losses are low because the trade receivable balances are due from the Ministry of Ecology and Environment of the PRC which is with high reputation and no actual loss was incurred in history.

Determination of significant increase in credit risk

At each balance sheet date, the Group assesses whether the credit risk on the relevant financial instruments has increased significantly since initial recognition. When determining whether the credit risk has increased significantly since initial recognition, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort, including qualitative and quantitative analysis based on historical data of the Group, external credit risk ratings and forward-looking information. The Group, based on individual financial instruments or financial instrument groupings with similar credit risk characteristics, determines changes in the risk of default in the estimated lifetime of financial instruments by comparing the risk of default of financial instruments at the balance sheet date with that at the initial recognition.

The credit quality of the financial assets is considered to be "normal" when they are not past due and there is no information indicating that the financial assets had a significant increase in credit risk since initial recognition. Otherwise, the credit quality of the financial assets is considered to be "doubtful".

Definition of credit-impaired financial assets

In order to determine whether credit impairment occurs, the defined criteria adopted by the Group are consistent with the internal credit risk management objectives for relevant financial instruments, both of which incorporate quantitative and qualitative indicators. When assessing whether a debtor has suffered a credit impairment, the Group usually considers the following factors:

(1) significant financial difficulty of the issuer or the debtor;

(2) breach of contract by the debtor, such as default or overdue payment in interest or principal repayment;

(3) a concession granted by the creditor to the debtor due to economic or contractual considerations related to the debtor's financial difficulty, which will not be granted under any other circumstances;

(4) possible bankruptcy or other financial reorganization of the debtor;

(5) disappearance of an active market for the financial asset due to financial difficulty of the issuer or the debtor;

(6) financial assets purchased or sourced at large discounts indicating credit losses have occurred.

Financial assets may be credit-impaired due to the joint effects of multiple events rather than separately identifiable events.

Liquidity risk

The Group monitors its risk to a shortage of funds using a recurring liquidity planning tool. This tool considers both the maturity of its financial instruments and financial assets (e.g., trade receivables) and projected cash flows from operations.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of loans and bank borrowings.

The maturity profile of the Group's financial liabilities as at the end of each of the Relevant Periods, based on the contractual undiscounted payments, is as follows:

	As at 31 December 2021				
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Financial liabilities at fair value through profit or loss	387,683	–	–	–	387,683
Derivative financial liabilities	1,831	–	–	–	1,831
Lease liabilities	1,553	1,553	1,553	–	4,659
Current portion of long-term loans	26,417	–	–	–	26,417
Trade and notes payables	440,401	–	–	–	440,401
Financial liabilities included in other payables and accruals	31,413	–	–	–	31,413
Other non-current liabilities	188,006	14,440	27,799	51,516	281,761
	1,077,304	15,993	29,352	51,516	1,174,165

	As at 31 December 2022				
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Short-term loans	498,897	–	–	–	498,897
Financial liabilities at fair value through profit or loss	620,250	–	–	–	620,250
Lease liabilities	42,775	42,382	103,884	131,255	320,296
Long-term loans	414,466	371,090	1,266,114	–	2,051,670
Trade and notes payables	851,390	–	–	–	851,390
Financial liabilities included in other payables and accruals	452,962	–	–	–	452,962
Other non-current liabilities	14,440	14,920	19,319	45,077	93,756
	2,895,180	428,392	1,389,317	176,332	4,889,221

	As at 31 December 2023				
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Short-term loans	866,064	–	–	–	866,064
Financial liabilities at fair value through profit or loss	939,996	–	–	–	939,996
Lease liabilities	48,342	39,917	105,359	101,791	295,409
Long-term loans	287,943	1,041,525	446,913	–	1,776,381
Trade and notes payables	552,457	–	–	–	552,457
Financial liabilities included in other payables and accruals	304,915	–	–	–	304,915
Other non-current liabilities	10,510	8,790	26,368	45,687	91,355
	3,010,227	1,090,232	578,640	147,478	4,826,577

	As at 31 December 2024				
	Within 1 year	1 to 2 years	2 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Short-term loans	1,026,039	–	–	–	1,026,039
Financial liabilities at fair value through profit or loss	875,189	–	–	–	875,189
Derivative financial liabilities	4,972	–	–	–	4,972
Lease liabilities	48,413	145,041	–	94,113	287,567
Long-term loans	400,244	1,042,338	332,291	–	1,774,873
Trade and notes payables	430,694	–	–	–	430,694
Financial liabilities included in other payables and accruals	169,922	–	–	–	169,922
Other non-current liabilities	10,510	8,790	26,368	45,687	91,355
	2,965,983	1,196,169	358,659	139,800	4,660,611

Capital management

The primary objective of the Group's capital management is to ensure that it maintains strong credit rating and healthy capital ratios in order to support its business and maximise shareholders' value.

The Group regards total equity as its capital and manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies and processes during the Relevant Periods.

During the Relevant Periods, the Group's strategy was to maintain the gearing ratio at a healthy level in order to monitor capital. The principal strategies adopted by the Group include, but are not limited to, reviewing future cash flow requirements and the ability to meet debt repayment schedules when they fall due, maintaining a reasonable level of available banking facilities and adjusting investment plans and financing plans, if necessary, to ensure that the Group has a reasonable level of capital to support its business. Gearing ratio is total liabilities divided by total assets.

The gearing ratios at the end of each of the Relevant Periods were as follows:

	31 December 2021	31 December 2022	31 December 2023	31 March 2024
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Total assets	8,053,606	17,544,294	18,717,793	18,859,079
Total liabilities	3,052,575	10,135,991	10,175,585	9,909,511
Gearing ratio	38%	58%	54%	53%

50. ACQUISITIONS

(a) Acquisitions of Golden Star Resources

On 31 October 2021, Chijin HK entered into an agreement to acquire 62% of all issued and outstanding common shares of GSR at a price of $3.91 per share, for a total consideration of approximately USD291 million. On 28 January 2022, the acquisition was completed.

The fair values of the identifiable assets and liabilities of GSR as at the date of acquisition were as follows:

	Notes	**Fair value recognised on acquisition**
		RMB'000
Property, plant and equipment	*17*	1,904,982
Right-of-use assets	*18*	197,200
Other intangible assets	*19*	5,248,534
Deferred tax assets	*22*	66,828
Other non-current assets		14,759
Cash and cash equivalents		70,007
Financial assets at fair value through profit or loss		158
Trade receivables		6,500
Prepayments, deposits and other receivables		92,390
Inventories		195,913
Provisions	*37*	(108,800)
Contract liabilities	*33*	(640,754)
Lease liabilities	*18*	(207,137)
Deferred tax liabilities	*22*	(2,226,163)
Trade and notes payables		(172,763)
Other payables and accrued charges		(903,498)
Tax payable		(10,588)
Total identifiable net assets at fair value		3,527,568
Non-controlling interests		(1,666,393)
Net assets acquired		1,861,175
Gain on recognition of negative goodwill		(6,371)
Satisfied by cash		1,854,804

An analysis of the cash flows in respect of the acquisition of a subsidiary is as follows:

	2022
	RMB'000
Cash consideration	(1,854,804)
Cash and bank balances acquired	70,007
Total net cash outflow	(1,784,797)

Since the acquisition, GSR contributed RMB1,790,576,000 to the Group's revenue and a loss of RMB5,471,000 to the Group's consolidated profit for the year ended 31 December 2022.

Had the combination taken place at the beginning of the year, the revenue from continuing operations of the Group and the profit of the Group for the year would have been RMB6,378,263,000 and RMB140,457,000, respectively.

(b) Acquisition of Xinhenghe Mining

On 30 December 2022, the Group entered into an Equity Transfer Agreement with Liu Xin, Li Yuanyuan, Wang Zhonghua, Yunnan Yuanhao Mining Co., Ltd. and Kunming Xinhenghe Mining Co., Ltd. ("Xinhenghe Mining") to subscribe for a 51% equity interest in Xinhenghe Mining by way of cash at a subscription price of RMB61,200,000. The transaction was completed on 9 January 2023 and the Group holds a 51% equity interest in Xinhenghe Mining upon the completion of the transaction. The management of the Company believes that Xinhenghe Mining and its subsidiaries do not constitute a business, and the acquisition is treated as an asset acquisition for accounting purposes. As of 31 March 2024, there was an outstanding amount of RMB40,800,000 for the acquisition that has not been paid, which will be paid after an exploration right be transferred into mining right.

51. NOTES TO THE STATEMENTS OF FINANCIAL POSITION OF THE COMPANY

A summary of the Company's reserves is as follows:

	Share premium	Share incentive reserve*	Reserve fund*	Retained profits*	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 1 January 2021	2,048,631	–	66,835	449,757	2,565,223
Total comprehensive income for the year	–	–	–	326,109	326,109
Transfer from retained profits	–	–	32,610	(32,610)	–
At 31 December 2021 and 1 January 2022	2,048,631	–	99,445	743,256	2,891,332
Total comprehensive income for the year	–	–	–	506,977	506,977
Transfer from retained profits	–	–	50,698	(50,698)	–
At 31 December 2022 and 1 January 2023	2,048,631	–	150,143	1,199,535	3,398,309
Total comprehensive income for the year	–	–	–	716,002	716,002
Exercise	–	300,910	–	–	300,910
Transfer from retained profits	–	–	71,600	(71,600)	–
At 31 December 2023	2,048,631	300,910	221,743	1,843,937	4,415,221

	Share premium*	Share incentive reserve*	Reserve fund*	Retained profits*	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 31 December 2022 and 1 January 2023	2,048,631	–	150,143	1,199,535	3,398,309
Profit for the period (Unaudited)	–	–	–	(90,284)	(90,284)
Total comprehensive income for the period (Unaudited)	–	–	–	(90,284)	(90,284)
At 31 March 2023 (Unaudited)	2,048,631	–	150,143	1,109,251	3,308,025

	Share premium*	Share incentive reserve*	Reserve fund*	Retained profits*	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
At 31 December 2023 and 1 January 2024	2,048,631	300,910	221,743	1,843,937	4,415,221.00
Profit for the period	–	–	–	(1,340)	(1,340)
Total comprehensive income for the period	–	–	–	(1,340)	(1,340)
At 31 March 2024	2,048,631	300,910	221,743	1,842,597	4,413,881

52. EVENTS AFTER THE RELEVANT PERIODS

(1) On March 4, 2024, China Investment (Property) Limited ("China Investment") (as seller, and an Independent Third Party), Chixia Laos (as purchaser) and Chijin Xiawu (as guarantor) entered into an equity transfer agreement, pursuant to which Chixia Laos shall acquire from China Investment 90% equity interest in China Investment Mining (Laos) Sole Co., Ltd, which was wholly owned by China Investment, at a total consideration of approximately USD19 million. As at 31 March 2024, the Group's prepayment for equity acquisition is RMB51,006,000. Up to the date of this report, the Company was still in the process of preparing the relevant filings with the development and reform commission and foreign exchange administration authority in the PRC. Accordingly, the proposed acquisition was yet to have been completed.

(2) On October 30, 2023, Zhaojin Capital (Hong Kong) Limited ("Zhaojin Capital") and an Independent Third Party, lodged a bidder statement to Tietto Minerals, pursuant to which it made a conditional offer to acquire all the outstanding issued shares of Tietto Minerals at an offer price of AUD0.58 per share (and subsequently increased to AUD0.68 per share on April 15, 2024). Upon resolution by the Board, Chijin HK accepted the above offer and transferred all the 140,855,864 shares of Tietto Minerals to Zhaojin Capital at a total consideration of AUD95.782 million which was settled on June 28, 2024. Upon completion of the transfer, our Group no longer held any interest in Tietto Minerals.

53. SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared by the Company, the Group or any of its subsidiaries in respect of any period subsequent to 31 March 2024.

[To insert the firm's letter head]

ACCOUNTANTS' REPORT ON HISTORICAL FINANCIAL INFORMATION OF GOLDEN STAR RESOURCES LTD. TO THE DIRECTORS OF CHIFENG JILONG GOLD MINING CO., LTD AND CITIC SECURITIES (HONG KONG) LTD.

Introduction

We report on the historical financial information of Golden Star Resources Ltd. (the "Company") and its subsidiaries (together, the "Group") set out on pages IB-5 to IB-50, which comprises the consolidated statements of profit or loss, the consolidated statements of comprehensive income, the consolidated statements of changes in equity and the consolidated statements of cash flows of the Group for the year ended 31 December 2021 and the one month ended 31 January 2022 (the "Relevant Periods"), and the consolidated statements of financial position of the Group as at 31 December 2021 and 31 January 2022 and material accounting policy information and other explanatory information (together, the "Historical Financial Information"). The Historical Financial Information set out on pages IB-5 to IB-50 forms an integral part of this report, which has been prepared for inclusion in the document of Chifeng Jilong Gold Mining Co., Ltd. dated 29 August 2024 (the "Document") in connection with the initial [**REDACTED**] of the shares of Chifeng Jilong Gold Mining Co., Ltd. on the Main Board of The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

Directors' responsibility for the Historical Financial Information

The directors of the Company are responsible for the preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information, and for such internal control as the directors determine is necessary to enable the preparation of the Historical Financial Information that is free from material misstatement, whether due to fraud or error.

Reporting accountants' responsibility

Our responsibility is to express an opinion on the Historical Financial Information and to report our opinion to you. We conducted our work in accordance with Hong Kong Standard on Investment Circular Reporting Engagements 200 *Accountants' Reports on Historical Financial Information in Investment Circulars* issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). This standard requires that we comply with ethical standards and plan and perform our work to obtain reasonable assurance about whether the Historical Financial Information is free from material misstatement.

Our work involved performing procedures to obtain evidence about the amounts and disclosures in the Historical Financial Information. The procedures selected depend on the reporting accountants' judgement, including the assessment of risks of material misstatement of the Historical Financial Information, whether due to fraud or error. In making those risk

assessments, the reporting accountants consider internal control relevant to the entity's preparation of the Historical Financial Information that gives a true and fair view in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information, in order to design procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Our work also included evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the Historical Financial Information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the Historical Financial Information gives, for the purposes of the accountants' report, a true and fair view of the financial position of the Group as at 31 December 2021 and 31 January 2022 and of the financial performance and cash flows of the Group for each of the Relevant Periods in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information.

Review of interim comparative financial information

We have reviewed the interim comparative financial information of the Group which comprises the consolidated statement of profit or loss, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the one month ended 31 January 2021 and other explanatory information (the "Interim Comparative Financial Information"). The directors of the Company are responsible for the preparation and presentation of the Interim Comparative Financial Information in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information. Our responsibility is to express a conclusion on the Interim Comparative Financial Information based on our review. We conducted our review in accordance with International Standard on Review Engagements 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* issued by the International Auditing and Assurance Standards Board ("IAASB"). A review consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion. Based on our review, nothing has come to our attention that causes us to believe that the Interim Comparative Financial Information, for the purposes of the accountants' report, is not prepared, in all material respects, in accordance with the basis of preparation set out in Note 2 to the Historical Financial Information.

Report on matters under the Rules Governing the Listing of Securities on the Stock Exchange and the Companies (Winding Up and Miscellaneous Provisions) Ordinance

Adjustments

In preparing the Historical Financial Information, no adjustments to the Underlying Financial Statements as defined on page IB-4 have been made.

Dividends

We refer to Note 15 to the Historical Financial Information which states that no dividends have been paid by the Company in respect of the Relevant Periods.

[●]
Certified Public Accountants
Hong Kong
[Date]

I. HISTORICAL FINANCIAL INFORMATION

Preparation of Historical Financial Information

Set out below is the Historical Financial Information which forms an integral part of this accountants' report.

The financial statements of the Group for the Relevant Periods, on which the Historical Financial Information is based, were audited by Ernst & Young in accordance with International Standards on Auditing issued by the IAASB (the "Underlying Financial Statements").

The Historical Financial Information is presented in Renminbi ("RMB") and all values are rounded to the nearest thousand (RMB'000) except when otherwise indicated.

CONSOLIDATED STATEMENTS OF PROFIT OR LOSS

	Notes	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
		RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Revenue	*7*	1,671,379	120,733	111,476
Cost of sales		(877,076)	(65,921)	(71,197)
Gross profit		794,303	54,812	40,279
Other income and gains	*10*	22,312	9,519	95
Administrative expenses		(629,067)	(19,282)	(430,078)
Other expenses	*11*	(4,412)	(829)	(15,353)
Finance costs	*12*	(64,419)	(7,954)	(5,520)
PROFIT/(LOSS) BEFORE TAX	*13*	118,717	36,266	(410,577)
Income tax expenses	*14*	(224,257)	(18,475)	57,154
(LOSS)/PROFIT FOR THE YEAR/PERIOD		(105,540)	17,791	(353,423)
Attributable to:				
Owners of the parent		(144,904)	14,464	(333,408)
Non-controlling interests		39,364	3,327	(20,015)
		(105,540)	17,791	(353,423)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
(LOSS)/PROFIT FOR THE YEAR/PERIOD	(105,540)	17,791	(353,423)
Other comprehensive income/(loss) that may not be reclassified to profit or loss in subsequent periods, net of tax:			
Exchange differences on translation of foreign operations	(73,147)	(74,912)	7,503
Other comprehensive income that may be reclassified to profit or loss in subsequent periods, net of tax:			
Exchange differences on translation of foreign operations	(5,682)	(1,184)	1,520
OTHER COMPREHENSIVE(LOSS)/INCOME FOR THE YEAR/PERIOD, NET OF TAX	(78,829)	(76,096)	9,023
TOTAL COMPREHENSIVE LOSS FOR THE YEAR/PERIOD	(184,369)	(58,305)	(344,400)
Attributable to:			
Owners of the parent	(215,850)	(54,022)	(364,469)
Non-controlling interests	31,481	(4,283)	20,069
	(184,369)	(58,305)	(344,400)

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	Notes	31 December 2021	31 January 2022
		RMB'000	*RMB'000*
NON-CURRENT ASSETS			
Property, plant and equipment	*17*	1,441,764	1,456,297
Right-of-use assets	*18(a)*	193,934	192,027
Other intangible assets	*19*	28,781	28,553
Deferred tax assets	*20*	–	66,828
Other non-current assets	*21*	14,762	14,759
TOTAL NON-CURRENT ASSETS		1,679,241	1,758,464
CURRENT ASSETS			
Inventories	*22*	190,444	195,531
Trade receivables	*23*	1,589	6,500
Prepayments, other receivables and other assets	*24*	87,696	92,390
Financial assets at fair value through profit or loss	*25*	158	158
Cash and cash equivalents	*26*	224,335	70,007
TOTAL CURRENT ASSETS		504,222	364,586
TOTAL ASSETS		2,183,463	2,123,050
CURRENT LIABILITIES			
Trade and notes payables	*28*	146,316	172,763
Contract liabilities	*29*	50,619	50,610
Other payables and accruals	*30*	117,991	903,498
Income tax payables		5,585	10,587
Current portion of long-term loans	*31*	4,798	–
Current portion of lease liabilities	*18(b)*	20,361	20,291
Current portion of derivative financial liabilities	*27*	188	–
Current portion of provisions	*32*	6,797	6,796
TOTAL CURRENT LIABILITIES		352,655	1,164,545
NET CURRENT ASSETS/(LIABILITIES)		151,567	(799,959)
TOTAL ASSETS LESS CURRENT LIABILITIES		1,830,808	958,505

	Notes	**31 December 2021**	**31 January 2022**
		RMB'000	*RMB'000*
NON-CURRENT LIABILITIES			
Long-term loans	*31*	529,656	–
Derivative financial liabilities	*27*	11,153	–
Contract liabilities	*29*	591,866	590,143
Lease liabilities	*18(b)*	188,832	186,845
Deferred tax liabilities	*20*	236,487	239,044
Provisions	*32*	102,348	102,004
TOTAL NON-CURRENT LIABILITIES		1,660,342	1,118,036
NET ASSETS		170,466	(159,531)
EQUITY			
Equity attributable to owners of the parent			
Share capital	*33*	6,906,459	6,906,459
Reserves		(6,901,831)	(7,251,897)
		4,628	(345,438)
Non-controlling interests		165,838	185,907
TOTAL EQUITY		170,466	(159,531)

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Year ended 31 December 2021

	Attributable to owners of the parent						
	Share capital	Share premium*	Exchange fluctuation reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	(note 33)						
At 1 January 2021	6,810,170	308,309	(805,571)	(6,204,657)	108,251	134,357	242,608
(Loss)/Profit for the year	–	–	–	(144,904)	(144,904)	39,364	(105,540)
Exchange differences on translation of foreign operations	–	–	(70,946)	–	(70,946)	(7,883)	(78,829)
Total comprehensive (Loss)/income for the year	–	–	(70,946)	(144,904)	(215,850)	31,481	(184,369)
Common stock invested by shareholders	89,356	–	–	–	89,356	–	89,356
The amount of share-based payment capitalized into shareholder's equity	6,933	15,938	–	–	22,871	–	22,871
At 31 December 2021	6,906,459	324,247	(876,517)	(6,349,561)	4,628	165,838	170,466

One month ended 31 January 2021 (unaudited)

	Attributable to owners of the parent						
	Share capital	Share premium*	Exchange fluctuation reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	(note 33)						
At 1 January 2021	6,810,170	308,309	(805,571)	(6,204,657)	108,251	134,357	242,608
Profit for the year	–	–	–	14,464	14,464	3,327	17,791
Exchange differences on translation of foreign operations	–	–	(68,486)	–	(68,486)	(7,610)	(76,096)
Total comprehensive (Loss)/income for the year	–	–	(68,486)	14,464	(54,022)	(4,283)	(58,305)
The amount of share-based payment capitalized into shareholder's equity	–	1,920	–	–	1,920	–	1,920
At 31 January 2021	6,810,170	310,229	(874,057)	(6,190,193)	56,149	130,074	186,223

One month ended 31 January 2022

	Attributable to owners of the parent						
	Share capital	Share premium*	Exchange fluctuation reserve*	Retained profits*	Total	Non-controlling interests	Total equity
	(note 33)						
At 1 January 2022	6,906,459	324,247	(876,517)	(6,349,561)	4,628	165,838	170,466
Loss for the year	–	–	–	(333,408)	(333,408)	(20,015)	(353,423)
Exchange differences on translation of foreign operations	–	–	(31,061)	–	(31,061)	40,084	9,023
Total comprehensive income/(Loss) for the year	–	–	(31,061)	(333,408)	(364,469)	20,069	(344,400)
The amount of share-based payment capitalized into shareholder's equity	–	14,403	–	–	14,403	–	14,403
At 31 January 2022	6,906,459	338,650	(907,578)	(6,682,969)	(345,438)	185,907	(159,531)

* These reserve accounts comprise the consolidated reserves in the consolidated statements of financial positions as at 31 December 2021 and 31 January 2022.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Notes	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
		RMB'000	*RMB'000 (unaudited)*	*RMB'000*
CASH FLOWS FROM OPERATING ACTIVITIES				
Profit/(loss) before tax:		118,717	36,266	(410,577)
Adjustments for:				
Depreciation and amortization	*13*	200,286	17,857	12,899
Fair value changes of financial assets and liabilities		(20,946)	(9,239)	–
Finance costs		64,419	7,954	5,520
Foreign exchange losses, net		3,777	819	1,534
Share based compensation		15,938	1,920	14,403
Decrease/(increase) in inventories		4,709	(6,273)	(5,106)
Decrease/(increase) in trade receivables		(450)	(1,127)	(4,899)
Decrease/(increase) in prepayments, other receivables and other assets		109,433	(74,086)	245
Increase/(decrease) in trade and notes payables		16,980	(2,805)	26,407
Increase/(decrease) in other payables and accruals		46,390	5,059	247,933
Cash generated from operations		559,253	(23,655)	(111,641)
Income tax paid		(263,359)	(85,323)	–
Net cash flows from operating activities		295,894	(108,978)	(111,641)

	Notes	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
		RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Net cash flows from operating activities		295,894	(108,978)	(111,641)
CASH FLOWS FROM INVESTING ACTIVITIES				
Cash paid for margin of fair value hedging		–	–	(23,617)
Purchases of property, plant and equipment, intangible assets and other non-current assets		(339,994)	(18,686)	(40,997)
Net cash flows used in investing activities		(339,994)	(18,686)	(64,614)
CASH FLOWS FROM FINANCING ACTIVITIES				
Cash received from investors		89,356	–	–
New bank borrowings		188,610	–	–
Cash received from Chijin HK		–	–	598,185
Repayment of bank borrowings		(332,240)	–	(529,646)
Cash paid for distribution of dividends or profit and interest expenses		(42,580)	–	(4,782)
Non cash losses on extinguishment of Macquiarie RCF		–	–	(38,598)
Repayment of lease liabilities		(24,124)	(2,435)	(2,814)
Net cash flows (used in)/from financing activities		(120,978)	(2,435)	22,345
DECREASE IN CASH AND CASH EQUIVALENTS		(165,078)	(130,099)	(153,910)
Cash and cash equivalents at beginning of year/period		396,776	396,776	224,335
Effect of foreign exchange rate changes, net		(7,363)	(3,166)	(418)
CASH AND CASH EQUIVALENTS AT END OF YEAR/PERIOD		224,335	263,511	70,007

II. NOTES TO THE HISTORICAL FINANCIAL INFORMATION

1. CORPORATE INFORMATION

Golden Star Resources Ltd. ("Golden Star" or "the Company") is an international gold mining and exploration company incorporated under the Canada Business Corporations Act. The Company's registered office is located at 333 Bay Street, Suite 2400, Toronto, Ontario, M5H 2T6 Canada, and the Company has corporate offices in London, United Kingdom and Accra, Ghana.

Through our 90% owned subsidiary, Golden Star (Wassa) Limited, the Company own and operate the Wassa underground mine and a carbon-in-leach processing plant (collectively "Wassa"), located northeast of the town of Tarkwa, Ghana.

As at the date of this report, the Company had direct and indirect interests in its subsidiaries, all of which are private limited liability companies, the particulars of which are set out below:

Name*	Place and date of incorporation/ registration and place of operations	Percentage of equity attributable to the Company		Principal activities
		% Direct	% Indirect	
Caystar Holdings	Cayman 7 May, 1997	100%	–	Management
Caystar Finance Co.	Cayman 28 April, 2015	–	100%	Finance
Caystar Management Holdings . . .	Cayman 1 September, 2003	–	100%	Management
Wasford Holdings	Cayman 2, April, 2002	–	100%	Management
Golden Star (Wassa) Limited	Ghana 22 November, 2001	–	90%	Mining
Golden Star Resources (UK) Ltd. .	The United Kingdom 10 May, 2019	–	100%	Management

2. BASIS OF PREPARATION

The Historical Financial Information has been prepared in accordance with International Financial Reporting Standards ("IFRSs"), which comprise all standards and interpretations approved by the International Accounting Standards Board (the "IASB"). All IFRSs effective for the accounting period commencing from 1 January 2021, together with the relevant transitional provisions, have been early adopted by the Group in the preparation of the Historical Financial Information throughout the Relevant Periods and in the period covered by the Interim Comparative Financial Information.

The Historical Financial Information has been prepared under the historical cost convention, except for derivative financial instruments and financial assets at fair value through profit or loss which have been measured at fair value.

Going concern basis

As at 31 January 2022,the Group had net current liabilities of RMB799,960,000. The directors of the Group have given consideration to the future liquidity and performance of the Group and its available sources of finance in assessing whether the Group will have sufficient financial resources to continue as a going concern. In order to improve the Group's liquidity and cash flows to sustain the Group's operation for the next twelve months from 31 January 2022, the shareholders of the Company has undertaken to provide adequate financial support to enable the Group to meet its liabilities as and when they fall due. Accordingly, the Historical Financial Information of the Group has been prepared on a going concern basis.

Basis of consolidation

The Historical Financial Information include the financial statements of the Company and its subsidiaries (collectively referred to as the "Group") for the Relevant Periods. A subsidiary is an entity (including a structured entity), directly or indirectly, controlled by the Company. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e., existing rights that give the Group the current ability to direct the relevant activities of the investee).

Generally, there is a presumption that a majority of voting rights results in control. When the Company has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

(a) the contractual arrangement with the other vote holders of the investee;

(b) rights arising from other contractual arrangements; and

(c) the Group's voting rights and potential voting rights.

The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies.The results of subsidiaries are consolidated from the date on which the Group obtains control, and continue to be consolidated until the date that such control ceases.

Profit or loss and each component of other comprehensive income are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control described above. A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, any non-controlling interest and the exchange fluctuation reserve; and recognises the fair value of any investment retained and any resulting surplus or deficit in profit or loss. The Group's share of components previously recognised in other comprehensive income is reclassified to profit or loss or retained profits, as appropriate, on the same basis as would be required if the Group had directly disposed of the related assets or liabilities.

3. ISSUED BUT NOT YET EFFECTIVE INTERNATIONAL FINANCIAL REPORTING STANDARDS

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective, in the Historical Financial Information.

Amendments to IFRS 10 and IAS 28	*Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*[3]
Amendments to IFRS 16	*Lease Liability in a Sale and Leaseback*[2]
Amendment to IFRS 17	*Initial Application of IFRS 17 and IFRS 9 — Comparative Information*[5]
Amendments to IAS 1	*Classification of Liabilities as Current or Non-current* (the "2020 Amendments")[2, 4]
Amendments to IAS 1	*Non-current Liabilities with Covenants* (the "2022 Amendments")[2]
Amendments to IAS 1 and IFRS Practice Statement 2	*Disclosure of Accounting Policies*[1]
Amendments to IAS 8	*Definition of Accounting Estimates*[1]
Amendments to IAS 12	*Deferred Tax related to Assets and Liabilities arising from a Single Transaction*[1]
Amendments to IAS 21	*Lack of Exchangeability*[6]
IFRS 18	*Presentation and Disclosure in Financial Statements*[7]
IFRS 19	*Subsidiaries without Public Accountability: Disclosures*[7]
Amendments to IFRS 9 and IFRS 7	*Amendments to the Classification and Measurement of Financial Instruments*[8]

1 Effective for annual periods beginning on or after 1 January 2023

2 Effective for annual periods beginning on or after 1 January 2024

3 No mandatory effective date yet determined but available for adoption

4 As a consequence of the 2022 Amendments, the effective date of the 2020 Amendments was deferred to annual periods beginning on or after 1 January 2024. In addition, as a consequence of the 2020 Amendments and 2022 Amendments, Hong Kong Interpretation 5 *Presentation of Financial Statements — Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause* was revised to align the corresponding wording with no change in conclusion

5 An entity that chooses to apply the transition option relating to the classification overlay set out in this amendment shall apply it on initial application of HKFRS 17

6 Effective for annual periods beginning on or after 1 January 2025

7 Effective for annual periods beginning on or after 1 January 2027

8 Effective for annual periods beginning on or after 1 January 2026

The Group is in the process of making an assessment of the impact of these new and revised IFRSs upon initial application. So far, the Group considers that these new and revised IFRSs may result in changes in accounting policies but are unlikely to have a significant impact on the Group's result of operation and financial position.

4. MATERIAL ACCOUNTING POLICY INFORMATION

Fair value measurement

The Group measures certain of its financial assets and financial liabilities at fair value at the end of each of the Relevant Periods. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability, or in the absence of a principal market, in the most advantageous market for the asset or liability. The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the Historical Financial Information are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

Level 1 – based on quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is observable, either directly or indirectly

Level 3 – based on valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

For assets and liabilities that are recognised in the Historical Financial Information on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by reassessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each of the Relevant Periods.

Impairment of non-financial assets

Where an indication of impairment exists, or when annual impairment testing for an asset is required (other than inventories, deferred tax assets and financial assets), the asset's recoverable amount is estimated. An asset's recoverable amount is the higher of the asset's or cash-generating unit's value in use and its fair value less costs of disposal, and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets, in which case the recoverable amount is determined for the cash-generating unit to which the asset belongs. In testing a cash-generating unit for impairment, a portion of the carrying amount of a corporate asset (e.g., a headquarters building) is allocated to an individual cash-generating unit if it can be allocated on a reasonable and consistent basis or, otherwise, to the smallest group of cash-generating units.

An impairment loss is recognised only if the carrying amount of an asset exceeds its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. An impairment loss is charged to the statement of profit or loss in the period in which it arises in those expense categories consistent with the function of the impaired asset.

An assessment is made at the end of each of the Relevant Periods as to whether there is an indication that previously recognised impairment losses may no longer exist or may have decreased. If such an indication exists, the recoverable amount is estimated. A previously recognised impairment loss of an asset other than goodwill is reversed only if there has been a change in the estimates used to determine the recoverable amount of that asset, but not to an amount higher than the carrying amount that would have been determined (net of any depreciation/amortisation) had no impairment loss been recognised for the asset in prior years. A reversal of such an impairment loss is credited to the statement of profit or loss in the period in which it arises.

Related parties

A party is considered to be related to the Group if:

(a) the party is a person or a close member of that person's family and that person:

  (i) has control or joint control over the Group;

  (ii) has significant influence over the Group; or

  (iii) is a member of the key management personnel of the Group or of a parent of the Group;

or

(b) the party is an entity where any of the following conditions applies:

  (i) the entity and the Group are members of the same group;

  (ii) one entity is an associate or joint venture of the other entity (or of a parent, subsidiary or fellow subsidiary of the other entity);

  (iii) the entity and the Group are joint ventures of the same third party;

  (iv) one entity is a joint venture of a third entity and the other entity is an associate of the third entity;

  (v) the entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group;

  (vi) the entity is controlled or jointly controlled by a person identified in (a);

(vii) a person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity); and

(viii) the entity, or any member of a group of which it is a part, provides key management personnel services to the Group or to the parent of the Group.

Property, plant and equipment and depreciation

Property, plant and equipment, other than construction in progress, are stated at cost less accumulated depreciation and any impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any directly attributable costs of bringing the asset to its working condition and location for its intended use.

Expenditure incurred after items of property, plant and equipment have been put into operation, such as repairs and maintenance, is normally charged to profit or loss in the period in which it is incurred. In situations where the recognition criteria are satisfied, the expenditure for a major inspection is capitalised in the carrying amount of the asset as a replacement. Where significant parts of property, plant and equipment are required to be replaced at intervals, the Group recognises such parts as individual assets with specific useful lives and depreciates them accordingly.

Depreciation for mobile equipment and other assets having estimated lives shorter than the estimated life of the ore reserves is calculated using the straight-line method at rates which depreciate the cost of the assets, less their anticipated residual values, if any, over their estimated useful lives as follows:

	Estimated useful lives	Annual depreciation rates
Buildings	20 years	4.75%
Machinery	5 to 10 years	9.5% to 19%
Mobile equipment	5 to 10 years	9.5% to 19%
Electronic equipment and others	3 to 5 years	19% to 31.67%

Where parts of an item of property, plant and equipment have different useful lives, the cost of that item is allocated on a reasonable basis among the parts and each part is depreciated separately. Residual values, useful lives and the depreciation method are reviewed, and adjusted if appropriate, at least at the end of each of the Relevant Periods.

An item of property, plant and equipment including any significant part initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss on disposal or retirement recognised in the statement of profit or loss in the years/periods the asset is derecognised is the difference between the net sales proceeds and the carrying amount of the relevant asset.

Construction in progress is stated at cost less any impairment losses, and is not depreciated. Cost comprises the direct costs of construction and capitalised borrowing costs on related borrowed funds during the period of construction. Construction in progress is reclassified to the appropriate category of property, plant and equipment when completed and ready for use.

Other Intangible assets

Other intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are subsequently amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. Other intangible assets are amortized over the life of the proven and probable reserves to which they relate, using a units-of production amortization method. At open pit mines the costs of removing overburden from an ore body in order to expose ore during its initial development period are capitalized.

Exploration rights and assets

Exploration and evaluation assets are stated at cost less impairment losses. Exploration and evaluation includes costs of geological prospecting for technical consultancy and costs of feasibility study for commercial development which incurred in the surroundings, outer ring and deep areas of the existing or externally acquired mineral properties, and costs of drilling, trench sampling and other associated activities. Such expenditures may be capitalized when the mineral properties are reasonably determined to be commercially available and recognized as intangible assets after obtaining mining rights or permits, which will be amortized under the units-of-production method. If any construction was abandoned in the development phase or belongs to the productive exploration, all costs shall be written off and recognized in profit or loss for the current period.

Impairment reviews of exploration and evaluation assets are undertaken if events or changes in circumstances indicate a potential impairment. The carrying value of exploration and evaluation assets is compared to the recoverable amount, which is the higher of value-in-use and the fair value less costs of disposal. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash-generating units. Exploration and evaluation assets that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

Exploration rights are stated at cost less impairment losses. Exploration rights include the cost of acquiring exploration rights.

Mining rights are stated at cost less accumulated amortisation and any impairment losses. Mining rights include the cost of acquiring mining licences, exploration rights and exploration and evaluation assets upon determination that an exploration property is capable of commercial production, and the cost of acquiring interests in the mining reserves of existing mining properties. The mining rights are amortised in accordance with the production plans of the entities concerned and the proven and probable mineral reserves of the mines using the UOP method. Mining rights are written off to profit or loss if the mining property is abandoned.

Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(a) Right-of-use assets

Right-of-use assets are recognised at the commencement date of the lease (that is the date the underlying asset is available for use). Right-of-use assets are measured at cost, less accumulated depreciation and any impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease terms and the estimated useful lives of the assets as follows:

Leasehold land	50 years
Buildings	3 to 5 years
Machinery and vehicles	2 to 5 years

If ownership of the leased asset transfers to the Group by the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

(b) Lease liabilities

Lease liabilities are recognised at the commencement date of the lease at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for termination of a lease, if the lease term reflects the Group exercising the option to terminate the lease. The variable lease payments that do not depend on an index or a rate are recognised as an expense in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in lease payments (e.g., a change to future lease payments resulting from a change in an index or rate) or a change in assessment of an option to purchase the underlying asset.

(c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of office premises (that is those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the recognition exemption for leases of low-value assets to leases of office equipment and laptop computers that are considered to be of low value. Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term.

Investments and other financial assets

Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income, and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient of not adjusting the effect of a significant financing component, the Group initially measures a financial asset at its fair value, plus in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15 in accordance with the policies set out for "Revenue recognition" below.

In order for a financial asset to be classified and measured at amortised cost or fair value through other comprehensive income, it needs to give rise to cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding. Financial assets with cash flows that are not SPPI are classified and measured at fair value through profit or loss, irrespective of the business model.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both. Financial assets classified and measured at amortised cost are held within a business model with the objective to hold financial assets in order to collect contractual cash flows, while financial assets classified and measured at fair value through other comprehensive income are held within a business model with the objective of both holding to collect contractual cash flows and selling. Financial assets which are not held within the aforementioned business models are classified and measured at fair value through profit or loss.

Purchases or sales of financial assets that require delivery of assets within the period generally established by regulation or convention in the marketplace are recognised on the trade date, that is, the date that the Group commits to purchase or sell the asset.

Subsequent measurement

The subsequent measurement of financial assets depends on their classification as follows:

Financial assets at amortised cost (debt instruments)

Financial assets at amortised cost are subsequently measured using the effective interest method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss.

This category includes derivative instruments and equity investments which the Group had not irrevocably elected to classify at fair value through other comprehensive income. Dividends on the equity investments are also recognised as other income in the statement of profit or loss when the right of payment has been established.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in the statement of profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statements of financial position) when:

- the rights to receive cash flows from the asset have expired; or

- the Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risk and rewards of ownership of the asset. When it has neither transferred nor retained substantially all the risks and rewards of the asset nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

General approach

ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

At each reporting date, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information that is available without undue cost or effort, including historical and forward-looking information.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

Financial assets at amortised cost are subject to impairment under the general approach and they are classified within the following stages for measurement of ECLs except for trade receivables which apply the simplified approach as detailed below.

Stage 1 – Financial instruments for which credit risk has not increased significantly since initial recognition and for which the loss allowance is measured at an amount equal to 12-month ECLs;

Stage 2 – Financial instruments for which credit risk has increased significantly since initial recognition but that are not credit-impaired financial assets and for which the loss allowance is measured at an amount equal to lifetime ECLs;

Stage 3 – Financial assets that are credit-impaired at the reporting date (but that are not purchased or originated credit-impaired) and for which the loss allowance is measured at an amount equal to lifetime ECLs.

Simplified approach

For trade receivables that do not contain a significant financing component or when the Group applies the practical expedient of not adjusting the effect of a significant financing component, the Group applies the simplified approach in calculating ECLs. Under the simplified approach, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

Financial liabilities

Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, or payables, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and notes payables, financial liabilities at fair value through profit or loss, other payables and accruals, other non-current liabilities and loans.

Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as follows:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IFRS 9. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Financial liabilities designated upon initial recognition as at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IFRS 9 are satisfied. Gains or losses on liabilities designated at fair value through profit or loss are recognised in the statement of profit or loss, except for the gains or losses arising from the Group's own credit risk which are presented in other comprehensive income with no subsequent reclassification to the statement of profit or loss. The net fair value gain or loss recognised in the statement of profit or loss does not include any interest charged on these financial liabilities.

Financial liabilities at amortised cost (trade and notes payables, other payables and accruals and loans)

After initial recognition, payables and loans are subsequently measured at amortised cost, using the effective interest rate method unless the effect of discounting would be immaterial, in which case they are stated at cost. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the effective interest rate amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included in finance costs in profit or loss.

Derecognition of financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled, or expires.

When an existing financial liability is replaced by another from the same lender on substantially different terms,or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and a recognition of a new liability, and the difference between the respective carrying amounts is recognised in profit or loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

Derivative financial instruments

Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as non-hedge derivative contracts, to hedge its price fluctuation risk, respectively. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in fair value of derivatives are taken directly to the statement of profit or loss, except for the effective portion of cash flow hedges, which is recognised in other comprehensive income and later reclassified to profit or loss when the hedged item affects profit or loss.

For the purpose of hedge accounting, hedges are classified as:

- fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability or an unrecognised firm commitment; or

- cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction, or a foreign currency risk in an unrecognised firm commitment.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting, the risk management objective and its strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is "an economic relationship" between the hedged item and the hedging instrument.

- The effect of credit risk does not "dominate the value changes" that result from that economic relationship.

- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined on the weighted average basis and, in the case of work in progress and finished goods, comprises direct materials, direct labour and an appropriate proportion of overheads. Net realisable value is based on estimated selling prices less any estimated costs to be incurred to completion and disposal.

Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash on hand and at banks, and short-term highly liquid deposits with a maturity of generally within three months that are readily convertible into known amounts of cash, subject to an insignificant risk of changes in value and held for the purpose of meeting short-term cash commitments.

For the purpose of the consolidated statements of financial position, cash and cash equivalents comprise cash on hand and at banks, including term deposits, and assets similar in nature to cash, which are not restricted as to use.

Provisions

A provision is recognised when a present obligation (legal or constructive) has arisen as a result of a past event and it is probable that a future outflow of resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation.

When the effect of discounting is material, the amount recognised for a provision is the present value at the end of each of the Relevant Periods of the future expenditures expected to be required to settle the obligation. The increase in the discounted present value amount arising from the passage of time is included in finance costs in profit or loss.

Provisions for the Group's obligations for environmental rehabilitation and restoration of mines are based on estimates of required expenditure at the mines in accordance with the local rules and regulations where the mines are located. The Group estimates its liabilities for final reclamation and mine closure based upon detailed calculations of the amount and timing of the future cash expenditure for the required work. Spending estimates are escalated for inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset in the period in which the liability is incurred. The liability is accreted to the projected expenditure date. As changes in estimates occur (such as mine plan revisions, changes in estimated costs, or changes in the timing of the performance of reclamation activities), the revisions to the obligation and the asset are recognised at the appropriate discount rate.

Income tax

Income tax comprises current and deferred tax. Income tax relating to items recognised outside profit or loss is recognised outside profit or loss, either in other comprehensive income or directly in equity.

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each of the Relevant Periods, taking into consideration interpretations and practices prevailing in the countries in which the Group operates.

Deferred tax is provided, using the liability method, on all temporary differences at the end of each of the Relevant Periods between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognised for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and does not give rise to equal taxable; and

- in respect of taxable temporary differences associated with investments in subsidiaries and associates, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences, and the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilised, except:

- when the deferred tax asset relating to the deductible temporary differences arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss and deductible temporary differences; and

- in respect of deductible temporary differences associated with investments in subsidiaries and associates, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amount of deferred tax assets is reviewed at the end of each of the Relevant Periods and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognised deferred tax assets are reassessed at the end of each of the Relevant Periods and are recognised to the extent that it has become probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of each of the Relevant Periods.

Deferred tax assets and deferred tax liabilities are offset if and only if the Group has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Revenue recognition

Revenue from contracts with customers

Revenue from contracts with customers is recognised when control of goods or services is transferred to the customers at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services.

When the contract contains a financing component which provides the customer with a significant benefit of financing the transfer of goods or services to the customer for more than one year, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. When the contract contains a financing component which provides the Group with a significant financial benefit for more than one year, revenue recognised under the contract includes the interest expense accreted on the contract liability under the effective interest method. For a contract where the period between the payment by the customer and the transfer of the promised goods or services is one year or less, the transaction price is not adjusted for the effects of a significant financing component, using the practical expedient in IFRS 15.

Sale of products

Revenue from the sale of products is recognised at the point in time when control of the asset is transferred to the customer, generally on delivery of the products.

Gold streaming arrangement

Under the Metal Streaming Arrangement, the Group receives a payment in advance and the counterparty obtains a certain proportion of deliverable gold within the entire life of the designated mine. The counterparty is also required to pay an additional payment based on a certain proportion of the market price when the Group delivers the goods within an agreed period in the future. The payment the Group receives in advance is considered to be part of the counterparty's prepayment for the future goods with uncertain but predictable quantity, and is recognized as a contract liability upon receipt. Each unit of the delivered goods represents a separate performance obligation, and revenue is recognized at the point in time when control of the goods is transferred. Considering the timing of satisfaction of delivery obligations throughout the entire life of the mines, the contract liability above is considered to have significant financing components. In addition, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mines, the management will estimate the change of total metal reserves and change of planned exploitation reserves on a regular basis and adjustments shall be made to the revenue and finance costs accordingly.

Variable consideration

In the Group's Metal Streaming Arrangement, because the quantity of all delivered goods available to the counterparty depends on the mining reserves of the metals throughout the entire life of the mines, the price allocated to goods delivered per unit is considered as variable consideration. When the estimated total metal reserves and planned exploration reserves of the mine change, it is necessary to recalculate the price of goods delivered per unit, and in the period of changes occurred, adjust the revenue and finance costs recognised in the period according to the updated price. The Group determines the best estimate of variable consideration by the expected value. The

transaction price including variable consideration is only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Contract liabilities

A contract liability is recognised when a payment is received or a payment is due (whichever is earlier) from a customer before the Group transfers the related goods or services. Contract liabilities are recognised as revenue when the Group performs under the contract (i.e., transfers control of the related goods or services to the customer).

Share Incentive Plan

Under the Company's Fourth Amended and Restated 1997 Stock Option Plan, common share options may be granted to executives, employees, consultants and non-employee directors. Compensation expense for such grants is recorded in the consolidated statements of profit or loss, with a corresponding increase recorded in the reserves in the consolidated statements of financial position. The expense is based on the fair value of the option at the time of grant, measured by reference to the fair value determined using a Black-Scholes valuation model, and is recognized over the vesting periods of the respective options on a graded basis. Consideration paid to the Company on exercise of options is credited to share capital.

Under the Company's Deferred Share Unit ("DSU") plan, DSUs may be granted to executive officers and directors. Compensation expense for such grants is recorded in the consolidated statements of profit or loss with a corresponding increase recorded in the reserves in the consolidated statements of financial position. The expense is based on the fair values at the time of grant and is recognized over the vesting periods of the respective DSUs. Upon exercise the Company's compensation committee may, at its discretion, issue cash, shares or a combination thereof.

The Company's Share Appreciation Rights ("SARs") plan allows SARs to be issued to executives, employees and directors. These awards are settled in cash on the exercise date equal to the Company's stock price less the strike price. Since these awards are settled in cash, the Company marks-to-market the associated expense for each award at the end of each reporting period using a Black-Scholes model. The Company accounts for these as liability awards and marks-to-market the fair value of the award until final settlement.

Under the Company's Performance Share Units ("PSU") plan, PSUs may be granted to executives, employees and non-employee directors. Each PSU represents one notional common share that is redeemed for cash based on the value of a common share at the end of the three-year performance period, to the extent performance and vesting criteria have been met. The PSUs vest at the end of a three-year performance. The cash award is determined by multiplying the number of units by the performance adjusting factor, which ranges from 0% to 200%. The performance factor is determined by comparing the Company's share price performance to the share price performance of a peer group of companies as listed in the PSU plan. As the Company was required to settle these awards in cash, they were accounted for as liability awards with corresponding compensation expense recognized. The final PSU grant vested on 31 December 2018.

Under the Company's 2017 performance and restricted share unit plan (the "2017 PRSU Plan"), performance share units ("2017 PSUs") and restricted share units ("2017 RSUs" and, together with the 2017 PSUs, the "Share Units") may be issued to any employee or officer of the Company or its designated affiliates. Share Units may be redeemed for: (i) common shares issued from treasury; (ii) common shares purchased in the secondary market; (iii) a cash payment; or (iv) a combination of (i), (ii) and (iii).

Each PRSU represents one notional common share that is redeemed for common shares or common shares plus cash subject to the consent of the Company based on the value of a common share at the end of the three-year performance period, to the extent performance and vesting criteria have been met. The PRSUs vest at the end of a three-year performance period. The award is determined by multiplying the number of Share Units by the performance adjustment factor, which ranges from 0% to 200%. The performance adjustment factor is determined by comparing the Company's share price performance to the share price performance of a peer group of companies as listed in the 2017 PRSU Plan. As the Company has a practice of settling these awards in common shares, they are accounted for as equity awards with corresponding compensation expense recognized.

Under the UK Performance Share Unit Plan ("UK PSU Plan"), performance share units ("UK PSUs") may be issued to UK resident employees of the Company or its designated affiliates. UK PSUs may be redeemed for: (i) common shares issued from treasury; (ii) common shares purchased in the secondary market at the election of the participant and subject to consent of the Company; (iii) a cash payment at the election of the participant and subject to consent of the Company; or (iv) a combination of (i), (ii) and (iii).

Each UK PSU represents one notional common share that is redeemed for common shares or common shares and/or cash subject to the consent of the Company based on the value of a common share at the end of the three-year performance period, to the extent performance and vesting criteria have been met. UK PSUs vest at the end of a three-year performance period. The award is determined by multiplying the number of UK PSUs by the performance adjustment factor, which ranges from 0% to 200%.

The performance adjustment factor is determined by comparing the Company's share price performance to the share price performance of a peer group of companies determined by the Compensation Committee of the Board of Directors. The Company plans to settle these awards in common shares of the Company and so they are accounted for as equity awards with corresponding compensation expense recognized.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, i.e., assets that necessarily take a substantial period of time to get ready for their intended use or sale, are capitalised as part of the cost of those assets. The capitalisation of such borrowing costs ceases when the assets are substantially ready for their intended use or sale. All other borrowing costs are expensed in the period in which they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

Dividends

Final dividends are recognised as a liability when they are approved by the shareholders in a general meeting.

Foreign currencies

The Historical Financial Information is presented in Renminbi, which is the functional currency of Chifeng Jilong Gold Mining Co., Ltd., the indirect parent company of the Company. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Foreign currency transactions recorded by the entities in the Group are initially recorded using their respective functional currency rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency rates of exchange ruling at the end of each of the Relevant Periods. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was measured. The gain or loss arising on translation of a non-monetary item measured at fair value is treated in line with the recognition of the gain or loss on change in fair value of the item (i.e., translation difference on the item whose fair value gain or loss is recognised in other comprehensive income or profit or loss is also recognised in other comprehensive income or profit or loss, respectively).

In determining the exchange rate on initial recognition of the related asset, expense or income on the derecognition of a non-monetary asset or non-monetary liability relating to an advance consideration, the date of initial transaction is the date on which the Group initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of the advance consideration.

The functional currencies of the Company and its subsidiaries are US Dollar. As at the end of the reporting period, the assets and liabilities of these entities are translated into RMB at the exchange rates prevailing at the end of the reporting period and their statements of profit or loss are translated into RMB at the exchange rates that approximate to those prevailing at the dates of the transactions.

The resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange fluctuation reserve, except to the extent that the differences are attributable to non-controlling interests. On disposal of a foreign operation, the cumulative amount in the reserve relating to that particular foreign operation is recognised in the statement of profit or loss.

For the purpose of the consolidated statement of cash flows, the cash flows of overseas subsidiaries are translated into RMB at the exchange rates ruling at the dates of the cash flows. Frequently recurring cash flows of overseas subsidiaries which arise throughout the year are translated into RMB at the weighted average exchange rates or the year.

5. SIGNIFICANT ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of the Group's Historical Financial Information requires management to make judgements, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities at the end of each of the Relevant Periods. Uncertainty about these estimates and assumptions could result in outcomes that could require a material adjustment to the carrying amount of the asset or liability affected in the future.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements which have the most significant effects on the amounts recognized in the financial statements:

Corporate income tax

As a result of the fact that certain matters relating to the corporate income taxes have not been confirmed by the local tax bureau as at the end of the reporting period, objective estimates based on currently enacted tax laws, regulations and other related policies are required in determining the provision for corporate income tax expenses to be made for the reporting period. Where the final tax outcome of these matters is different from the amounts originally recorded, the differences will be accounted for in the income tax expenses in the period in which the differences are realized.

Exploration expenditures

After determining the capitalization amount of exploration expenditures, the Group will regularly evaluate the exploration results. If the reviewed geological exploration report shows that there are no prospecting results or no economically recoverable reserves, or that the economic benefits of mining cannot be achieved and further exploration is unnecessary due to low grade and hard-to-mining, the exploration and development costs previously collected will be expensed and included in the profit and loss for the current period in a lump sum.

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the future accounting periods, are described below.

Impairment of non-current assets other than financial assets (excluding goodwill)

The Group assesses whether there are any indicators of impairment for non-current assets other than financial assets at the end of the reporting period. Intangible assets with indefinite useful lives are tested for impairment annually and at other times when such an indicator exists. Other non-current assets other than financial assets are tested for impairment when there are indicators that the carrying amounts may not be recoverable. An impairment exists when the carrying value of an asset or asset group exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use The calculation of the fair value less costs of disposal based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. When value in use calculations are undertaken, management must estimate the expected future cash flows from the asset or asset group and choose a suitable discount rate in order to calculate the present value of those cash flows.

Proved mineral reserves

Proved mineral reserves are estimated based on professional knowledge, experience and industry practice. Generally, the mineral reserve volume estimated based on probing and estimation may not be very accurate. The estimation is updated in accordance with new technologies and new information. Any changes in estimation will have impacts on amounts of mining assets' depreciation and mining rights' amortization using the units-of-production method, on the stripping ratio which was used in the capitalization of stripping costs, and on each of transaction prices of the gold streaming arrangement, etc. This may result in changes of or impacts on the Group's development and operation plan, and hence the Group's operation and operating results.

Deferred tax assets

To the extent that it is probable that there are sufficient taxable profits to offset the deductible losses, deferred tax assets shall be recognized for all unused deductible losses. Substantial management's judgements regarding the timing, amount of future taxable profit as well as tax planning strategies are needed when estimating the amount of deferred tax assets.

Provision for environmental rehabilitation and restoration of mines

Pursuant to the regulations of the governmental authorities in the places where the mines are located, the Group recognizes provision for environmental rehabilitation and restoration of mines. The amount of provision is an estimate based upon the life of mining tenements, timing of mine closure and cost of such rehabilitation. When this estimate changes, it may affect the Group's operations and performance.

6. SEGMENT INFORMATION

The Group is principally engaged in gold mining and exploration. Information reported to the Group's chief operating decision maker, for the purpose of resource allocation and performance assessment, focuses on the operating results of the Group as a whole as the Group's resources are integrated and no discrete operating segment information is available. Accordingly, no further operating segment information is presented.

Geographical information

During the Relevant Periods and the one month ended 31 January 2021, the Group operated in the same geographical location, as all its revenue was generated in Ghana, and all its long-term assets and capital expenditures were also located and incurred in Ghana. Therefore, no information on other regions is presented.

As at 31 December 2021, 31 January 2021, and 31 January 2022, revenue from contracts with a single customer amounted to approximately RMB1,593,512,000, RMB114,649,000, and RMB106,001,000 respectively, which were derived from sales of good by the group and contributing more than 10% of the Group's total revenue.

7. REVENUE

An analysis of revenue is as follows:

	Year ended 31 January 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Revenue from contracts with customers.	1,671,379	120,733	111,476
	1,671,379	120,733	111,476

Revenue from contracts with customers

(a) Disaggregated revenue information

	Year ended 31 January 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Type of goods			
Gold	1,671,379	120,733	111,476
	1,671,379	120,733	111,476
Geographical markets			
Ghana	1,671,379	120,733	111,476
	1,671,379	120,733	111,476
Timing of revenue recognition			
Goods transferred at a point in time	1,671,379	120,733	111,476
	1,671,379	120,733	111,476

The following table shows the amounts of revenue recognised in the Relevant Periods and the one month ended 31 January 2021 that were included in the contract liabilities at the beginning of the reporting period:

	Year ended 31 January 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Revenue recognised that was included in contract liabilities at the beginning of the reporting period:			
Sale of gold from Metal Streaming from arrangement (note 29)	44,236	3,230	2,934
	44,236	3,230	2,934

(b) Information about the Group's performance obligations is summarised below:

Sale of goods

The Group recognizes revenue when customers gain the control of goods. Prepayments received from customers before delivery of goods are recognized as contract liabilities in the consolidated financial statements. Among them, the sales arrangement related to Metal Streaming Arrangement is detailed in note 29.

The transaction prices allocated to remaining performance obligations (unsatisfied or partially unsatisfied) related to sales of gold are as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Within 1 year	50,619	57,149	50,610
Over 1 year	591,866	617,640	590,143
Total	642,485	674,789	640,753

8. DIRECTORS' REMUNERATION

Directors' remuneration is as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Fees	6,135	(212)	830
Other emoluments:			
Salaries, allowances and benefits in kind	3,543	299	470
Social insurance and housing fund	486	41	360
Share based compensation	7,578	1,033	36,301
	17,742	1,161	37,961

Directors' remuneration for each year/period is as follows:

Year ended 31 December 2021

	Position	Fees	Salaries, allowances and benefits in kind	Share based compensation	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Andrew Wray	Director	–	3,543	2,235	486	6,264
Ani Markova	Independent Director	614	–	522	–	1,136
Anu Dhir	Independent Director	514	–	716	–	1,230
Craig Nelsen	Independent Director	756	–	480	–	1,236
Gilmour Clausen	Independent Director	610	–	585	–	1,195
Karim Nasr	Independent Director	292	–	899	–	1,191
Mona Quartey	Independent Director	749	–	663	–	1,412
Karen Akiwumi-Tanoh	Independent Director	328	–	191	–	519
Gerard De Hert	Independent Director	344	–	191	–	535
Tim Baker	Independent Director	1,021	–	792	–	1,813
Robert Doyle	Independent Director	312	–	304	–	616
Alexander Nsiah	Independent Director	186	–	–	–	186
Amadeus Yusef Kwasi Disu	Independent Director	116	–	–	–	116
Daniel Owiredu	Independent Director	293	–	–	–	293
		6,135	3,543	7,578	486	17,742

Directors' remuneration for each year/period is as follows:

Year ended 31 January 2021

	Position	Fees	Salaries, allowances and benefits in kind	Share based compensation	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Andrew Wray	Director	–	299	111	41	451
Ani Markova	Independent Director	(30)	–	93	–	63
Anu Dhir	Independent Director	(34)	–	81	–	47
Craig Nelsen	Independent Director	(37)	–	81	–	44
Gilmour Clausen	Independent Director	(30)	–	111	–	81
Karim Nasr	Independent Director	(12)	–	202	–	190
Mona Quartey	Independent Director	(12)	–	111	–	99
Tim Baker	Independent Director	(53)	–	162	–	109
Robert Doyle	Independent Director	(36)	–	81	–	45
Alexander Nsiah	Independent Director	16	–	–	–	16
Amadeus Yusef Kwasi Disu	Independent Director	16	–	–	–	16
		(212)	299	1,033	41	1,161

Directors' remuneration for each year/period is as follows:

Year ended 31 January 2022

	Position	Fees	Salaries, allowances and benefits in kind	Share based compensation	Social insurance and housing fund	Total
		RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Andrew Wray	Director	–	470	36,301	360	37,131
Ani Markova	Independent Director	80	–	–	–	80
Anu Dhir	Independent Director	80	–	–	–	80
Craig Nelsen	Independent Director	80	–	–	–	80
Gilmour Clausen	Independent Director	80	–	–	–	80
Karim Nasr	Independent Director	80	–	–	–	80
Mona Quartey	Independent Director	95	–	–	–	95
Karen Akiwumi-Tanoh	Independent Director	80	–	–	–	80
Gerard De Hert	Independent Director	80	–	–	–	80
Tim Baker	Independent Director	160	–	–	–	160
Alexander Nsiah	Independent Director	15	–	–	–	15
		830	470	36,301	360	37,961

9. FIVE HIGHEST PAID EMPLOYEES

The five highest paid employees during the years ended 31 December 2021, and one month ended 31 January 2021 and 2022 each included one director, details of whose remuneration are set out in note 7 above. Details of the remuneration for the Relevant Periods of the remaining highest paid employees who are neither a director nor chief executive of the Company are as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Salaries, allowances and benefits in kind	5,300	410	589
Share based compensation	1,972	–	352
	7,272	410	941

The number of non-director and non-chief executive highest paid employees whose remuneration fell within the following bands is as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
		(unaudited)	
Nil to 200,000	–	4	3
200,001 to 1,000,000	–	–	1
1,000,001 to 2,000,000	3	–	–
2,000,001 to 3,000,000	1	–	–
	4	4	4

10. OTHER INCOME AND GAINS

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Gains on changes in fair value of derivative financial instruments	20,946	9,239	–
Interest income	1,090	175	62
Others	276	105	33
	22,312	9,519	95

11. OTHER EXPENSES

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Foreign exchange losses, net	3,777	819	1,534
Other	635	10	13,819
	4,412	829	15,353

12. FINANCE COSTS

An analysis of finance costs is as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Interest on loans	36,784	5,663	3,255
Interest on metal streaming arrangement	16,662	1,412	1,313
Accretion of interest of provisions	509	27	125
Interest on lease liabilities	10,464	852	827
	64,419	7,954	5,520

13. PROFIT/(LOSS) BEFORE TAX

The Group's profit/loss before tax is arrived at after charging/(crediting):

	Notes	Year ended 31 December 2021	One month ended 31 Jan 2021	One month ended 31 Jan 2022
		RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Cost of raw materials and consumables		271,534	25,974	24,018
Depreciation and amortisation		200,286	17,857	12,899
Foreign exchange losses, net	*10*	3,777	819	1,534
Gains on changes of derivative financial instruments of fair value	*9*	(20,946)	(9,239)	–
Employee benefit expense		228,779	19,467	19,914
Expense relating to short-term leases and leases with low-value assets	*18*	1,519	127	141
Share based compensation		22,871	1,920	14,403

14. INCOME TAX EXPENSES

The Group is subject to income tax on an entity basis on the profits arising in or derived from the tax jurisdictions in which the Group's subsidiaries are domiciled and operate.

List of main corporate income tax rates applicable to the Group's subsidiaries:

Name	Countries and regions	Rates
Golden Star (Wassa) Limited	Ghana	35%
Golden Star Resources (UK) Ltd.	The United Kingdom	19%
Golden Star Exploration (Ghana) Limited	Ghana	35%
Caystar Holdings	Cayman	0%
Caystar Finance Co.	Cayman	0%
Caystar Management Holdings	Cayman	0%
Wasford Holdings	Cayman	0%

An analysis of the Group's provision for tax is as follows:

		Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
		RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Current		185,597	14,753	6,910
Deferred	*20*	38,660	3,722	(64,064)
Total tax charge		224,257	18,475	(57,154)

A reconciliation of the tax expense applicable to profit/(loss) before tax at the statutory rates for jurisdictions in which the Company is domiciled to the tax expense at the effective tax rates, and a reconciliation of the applicable rates (i.e., the statutory tax rates) to the effective tax rates, are as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Profit/(loss) before tax	118,717	36,266	(410,577)
Tax expense calculated at the statutory tax rate of 35%	41,551	12,693	(143,702)
Effect of different tax rates of subsidiaries	130,392	3,853	20,930
Non-deductible expenses	11,513	346	9,509
Unrecognised deductible temporary differences and tax losses	40,801	1,583	56,109
Tax charge at the effective rate	224,257	18,475	(57,154)

15. DIVIDENDS

No dividend has been declared or paid by the Company during the Relevant Periods.

16. EARNINGS/(LOSS) PER SHARE ATTRIBUTABLE TO ORDINARY EQUITY HOLDERS OF THE PARENT

Earnings/(loss) per share information is not presented as its inclusion, for the purpose of this report, is not considered meaningful.

17. PROPERTY, PLANT AND EQUIPMENT

	Buildings	Machinery	Mobile equipment	Electronic Equipment and others	Mineral assets	Construction in progress	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*	*RMB'000*
Cost							
At 1 January 2021	74,531	586,380	426,296	1,275	1,917,162	24,043	3,029,687
Additions	–	–	–	–	4,196	325,600	329,796
Transfers	16,365	34,273	4,522	–	271,149	(326,309)	–
Exchange differences	(1,896)	(13,811)	(9,801)	(29)	(47,074)	(541)	(73,152)
At 31 December 2021	89,000	606,842	421,017	1,246	2,145,433	22,793	3,286,331
Additions	–	–	–	–	–	25,975	25,975
Exchange differences	(15)	(105)	(73)	–	(370)	61	(502)
At 31 January 2022	88,985	606,737	420,944	1,246	2,145,063	48,829	3,311,804
Accumulated depreciation							
At 1 January 2021	51,257	470,000	326,440	267	861,667	–	1,709,631
Charge for the period	2,949	56,826	32,050	269	84,004	–	176,098
Exchange differences	(1,207)	(11,415)	(7,841)	(9)	(20,690)	–	(41,162)
At 31 December 2021	52,999	515,411	350,649	527	924,981	–	1,844,567
Charge for the period	286	4,075	2,262	22	4,586	–	11,231
Exchange differences	(9)	(79)	(55)	–	(148)	–	(291)
At 31 January 2022	53,276	519,407	352,856	549	929,419	–	1,855,507
Net book value							
At 1 January 2021	23,274	116,380	99,856	1,008	1,055,495	24,043	1,320,056
At 31 December 2021	36,001	91,431	70,368	719	1,220,452	22,793	1,441,764
At 31 January 2022	35,709	87,330	68,088	697	1,215,644	48,829	1,456,297

18. LEASES

The Group has lease contracts for various items of buildings and machinery and vehicles.

(a) Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements are as follows:

	Buildings	Machinery and Vehicles	Total
	RMB'000	*RMB'000*	*RMB'000*
Year ended 31 December 2021			
Cost at 1 January 2021, net of accumulated depreciation	1,960	286	2,246
Additions	–	215,786	215,786
Depreciation provided during the year	(85)	(21,720)	(21,805)
Exchange differences	(201)	(2,092)	(2,293)
At 31 December 2021	1,674	192,260	193,934
At 31 December 2021			
Cost	3,442	213,604	217,046
Accumulated depreciation	(1,768)	(21,344)	(23,112)
Net carrying amount	1,674	192,260	193,934

	Buildings	Machinery and Vehicles	Total
	RMB'000	*RMB'000*	*RMB'000*
Year ended 31 January 2022			
Cost at 1 January 2022, net of accumulated depreciation	1,674	192,260	193,934
Depreciation provided during the period	(18)	(1,428)	(1,446)
Exchange differences	(435)	(26)	(461)
At 31 January 2022	1,221	190,806	192,027
At 31 January 2022			
Cost	3,442	213,604	217,046
Accumulated depreciation	(2,221)	(22,798)	(25,019)
Net carrying amount	1,221	190,806	192,027

(b) Lease liabilities

The carrying amount of lease liabilities and the movements are as follows:

	Year ended 31 December 2021	One month ended 31 January 2022
	RMB'000	*RMB'000*
Carrying amount at 1 January	9,442	209,193
New leases	215,786	–
Accretion of interest recognised during the year/period	10,464	827
Payments	(24,124)	(2,814)
Exchange differences	(2,375)	(70)
Carrying amount at end of the year/period	209,193	207,136
Analysed into:		
Current portion	20,361	20,291
Non-current portion	188,832	186,845

The amounts recognised in profit or loss in relation to leases are as follows:

	Year ended 31 December 2021	One month ended 31 January 2022
	RMB'000	*RMB'000*
Interest on lease liabilities	10,464	827
Depreciation charge of right-of-use assets	21,805	1,446
Expense relating to short-term leases and leases with low-value assets	1,519	141

The maturity analysis of lease liabilities is disclosed in note 39 to the Historical Financial Information.

19. OTHER INTANGIBLE ASSETS

	Exploration and mining rights	Others	Total
	RMB'000	*RMB'000*	*RMB'000*
Cost			
At 1 January 2021	706,890	–	706,890
Additions	–	816	816
Exchange differences	(16,164)	(10)	(16,174)
At 31 December 2021	690,726	806	691,532
Exchange differences	(120)	–	(120)
At 31 January 2022	690,606	806	691,412
Accumulated amortisation			
At 1 January 2021	675,850	–	675,850
Charge for the year	2,357	26	2,383
Exchange differences	(15,482)	–	(15,482)
At 31 December 2021	662,725	26	662,751
Charge for the period	209	13	222
Exchange differences	(114)	–	(114)
At 31 January 2022	662,820	39	662,859
Net book value			
At 1 January 2021	31,040	–	31,040
At 31 December 2021	28,001	780	28,781
At 31 January 2022	27,786	767	28,553

20. DEFERRED TAX

For presentation purposes, certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances for financial reporting purposes:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Deferred tax assets	–	66,828
Deferred tax liabilities	236,487	239,044

Deferred tax assets have not been recognised in respect of the following items:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Deductible temporary differences	147,339	32,494
Deductible tax losses	1,988,955	2,198,056
	2,136,294	2,230,550

The unrecognised income tax losses, which have fixed expiry dates, will expire in the following years:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
31 December 2026	55,830	55,830
31 December 2027	84,665	84,665
31 December 2028	76,414	76,414
31 December 2029	115,868	115,868
31 December 2030 and beyond	1,656,178	1,865,279
Total	1,988,955	2,198,056

The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balance within the same tax jurisdiction, is as follows:

Deferred tax assets	Environmental rehabilitation	Deductible tax losses	Total
	RMB'000	*RMB'000*	*RMB'000*
At 1 January 2021	36,592	–	36,592
Charged to profit or loss	(5,043)	–	(5,043)
Exchange differences	(837)	–	(837)
At 31 December 2021	30,712	–	30,712
Credited to profit or loss	7,373	66,663	74,036
Exchange differences	(5)	165	160
At 31 January 2022	38,080	66,828	104,908

Deferred tax liabilities	Accelerated depreciation of property, plant and equipment	Total
	RMB'000	*RMB'000*
At 1 January 2021	239,505	239,505
Credited to profit or loss	33,617	33,617
Exchange differences	(5,923)	(5,923)
At 31 December 2021	267,199	267,199
Credited to profit or loss	9,972	9,972
Exchange differences	(47)	(47)
At 31 January 2022	277,124	277,124

21. OTHER NON-CURRENT ASSETS

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Funds for land restoration and environmental rehabilitation after mine closure	14,762	14,759
	14,762	14,759

22. INVENTORIES

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Raw materials	156,456	161,057
Work in progress	19,832	34,436
Finished goods	14,156	38
	190,444	195,531

23. TRADE RECEIVABLES

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Trade receivables	1,589	6,500
Impairment	–	–
	1,589	6,500

An ageing analysis of the trade receivables as at the end of each of the Relevant Periods, based on the invoice date, is as follows:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Less than 1 year	1,589	6,500
	1,589	6,500

The Group applies the simplified approach in calculating ECLs for trade receivables. Trade receivables relating to customers with known financial difficulties or significant doubt on collection are assessed individually for impairment allowance. The remaining trade receivables are grouped and collectively assessed for impairment allowance. Under the collective approach, an impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on ageing of bills for groupings of various customer segments with similar loss patterns. The calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and forecasts of future economic conditions.

24. PREPAYMENTS, OTHER RECEIVABLES AND OTHER ASSETS

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Prepayments	46,852	54,712
Deposits and other receivables	40,844	37,678
Less: Impairment of other receivables	–	–
	87,696	92,390

25. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Listed equity investment Columbus Gold	158	158
	158	158

26. CASH AND CASH EQUIVALENTS

	31 December 2022	31 January 2021
	RMB'000	*RMB'000*
Cash and bank balances	224,335	70,007
Cash and cash equivalents	224,335	70,007
Denominated in:		
USD	201,561	53,051
GBP	–	841
CAD	3,175	16,115
GHC	19,599	–
Total	224,335	70,007

27. DERIVATIVE FINANCIAL LIABILITIES

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Non-hedge derivative contract liability:		
Maturing within one year	188	–
Maturing in more than one year	11,153	–
	11,341	–

For the year ended 31 December 2021, in relation to these positions, the Company recognized an unrealized gain of $0.6 million.

28. TRADE PAYABLES

Trade payables do not bear interest and are usually settled within 60 days.

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Trade payables	146,316	172,763
	146,316	172,763

An ageing analysis of trade and notes payables as at the end of each of the Relevant Periods is as follows:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Less than 1 year	146,316	172,763
	146,316	172,763

29. CONTRACT LIABILITIES

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Short-term advances received from customers		
Metal Streaming Arrangement *(Note)*	50,619	50,610
Long-term advances received from customers		
Metal Streaming Arrangement *(Note)*	591,866	590,143
	642,485	640,753

Note: In May 2015, one subsidiary of GSR, Caystar Finance Co. entered into a gold purchase and sale agreement (the "Metal Streaming Arrangement") with RGLD Gold AG, in which GSR obtained USD145,000,000 from RGLD Gold AG, in exchange, GSR is required to deliver 10.5% of future gold production of its two subsidiaries at a cash purchase price of 20% of the spot gold price until 240,000 ounces of gold have been delivered ("Tier One"). Thereafter, 5.5% of the gold production will be delivered at a cash purchase price of 30% of the spot gold price ("Tier Two"). As at December 31, 2021 and 31 January 2022, the Company had delivered a total of 136,040 ounces and 137,130 ounces of gold to RGLD Gold AG since the inception of the Streaming Agreement.

The changes of contract liabilities — Metal Streaming Arrangement from 1 January 2021 to 31 January 2022 are as follows:

	Gold delivery obligation
Balance as at 1 January 2021	681,891
Revenue recognized from delivery of goods	(44,236)
Financial expenses	16,662
Exchange differences	(11,832)
Balance as at 31 December 2021	642,485
Including: Contract liabilities due within one year	50,619
Contract liabilities more than one year	591,866
Balance as at 1 January 2022	642,485
Revenue recognized from delivery of goods	(2,934)
Financial expenses	1,313
Exchange differences	(111)
Balance as at 31 January 2022	640,753
Including: Contract liabilities due within one year	50,610
Contract liabilities more than one year	590,143

30. OTHER PAYABLES AND ACCRUALS

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Payable to Chijin *(Note)*	–	598,185
Payables to contractors	76,940	65,864
Salaries, wages and benefits payables	31,230	229,603
Taxes other than income tax payables	9,552	9,698
Others	269	148
	117,991	903,498

Note: The Group had an outstanding balance due to Chijin International (Hong Kong) Limited ("Chijin") of RMB598,185,000 (31 December 2021: nil) as at 31 January 2022. This balance is unsecured, interest-free and has no fix term of repayment.

31. LONG-TERM LOANS

	31 December 2021			31 January 2022		
	Effective interest rate	Maturity		Effective interest rate	Maturity	
	(%)		*RMB'000*	*(%)*		*RMB'000*
Current portion of long-term loans – unsecured	4.5+USD LIBOR	2022	4,798	–	–	–
Long-term loans – unsecured	4.5+USD LIBOR	2024	529,656	–	–	–
			534,454			–

The carrying amounts of borrowings are denominated in the following currencies:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
USD	534,454	–
Total	534,454	–

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Analysed into:		
Long-term loans:		
Within one year	4,798	–
After 1 year but within 2 years	248,290	–
After 2 years but within 5 years	281,366	–
After 5 years	–	–
Total	534,454	–

32. PROVISIONS

Pursuant to the regulations of the governmental authorities in the places where the mines are located, the Group recognises provision for environmental rehabilitation and restoration of mines. The amount of provision is an estimate based upon the life of mining tenements, timing of mine closure and cost of such rehabilitation. The management will update the estimation basis annually.

The movement in the present value of the provision for rehabilitation are as follows:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Beginning balance	114,630	109,145
Accretion of interest recognized during the year/period	509	125
Payment during the year/period	(7,602)	(451)
Effect on recalculation of the model	4,196	–
Exchange differences	(2,588)	(19)
Ending balance	109,145	108,800
Current	6,797	6,796
Non-current	102,348	102,004

33. SHARE CAPITAL

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Issued and fully paid:	6,906,459	6,906,459
	6,906,459	6,906,459

A summary of movements in the Company's share capital is as follows:

	Number of shares in issue	Share capital
		RMB'000
At 1 January 2021	111,313,595	6,810,170
Issue of shares	4,220,213	89,356
Share-base payment	289,477	6,933
At 31 December 2021	115,823,285	6,906,459
At 31 January 2022	115,823,285	6,906,459

On 28 October, 2020, the Company entered into a $50 million "at-the-market" sales agreement. The use of proceeds from the "at-the-market" sales agreement is for discretionary growth capital at Wassa, exploration, general corporate purposes and working capital.

During the year ended 31 December, 2021, 4,220,213 new shares were issued under the "at-the-market" sales agreement. The net proceeds from shares issued under the "at-the-market" sales agreement of RMB92,656,912 for the period ended 31 December, 2021 is net of share issuance costs of RMB3,300,618.

During the year 2021, the number of share options exercised by was 98,238, the number of restricted shares under the deferred share units plan was 20,660, the number of performance and restricted shares under the 2017 Performance and restricted share units plan was nil, and the number of performance shares under the UK performance share units plan was 170,579. After deducting the tax impact, the Company's common share capital increased by 289,478 shares, and the common share capital increased by RMB6,932,598.

34. SHARE-BASED COMPENSATION

The Company operates Stock options, Deferred share units, Share appreciation rights, 2017 Performance and restricted share units and UK performance share units. Share-based compensation expenses recognized in the consolidated statements of profit or loss are as follows:

	Year ended 31 December 2021	One month ended 31 January 2021	One month ended 31 January 2022
	RMB'000	*RMB'000 (unaudited)*	*RMB'000*
Share-based compensation expense	22,871	1,920	14,403

Following Chifeng Jilong Gold Mining Co. Ltd.'s acquisition of the Company on January 28, 2022, all Deferred share units, 2017 Performance and restricted share units, UK performance share units were deemed unconditionally vested and cancelled by Golden Star in consideration for a cash payment equal to USD3.91 per unit. In addition, each in-the-money stock option and Share appreciation rights was cancelled by Golden Star in consideration for a cash payment equal to the excess of USD3.91 and the exercise price per stock option/unit.

35. NOTES TO THE CONSOLIDATED STATEMENTS OF CASH FLOWS

(a) Changes in liabilities arising from financing activities

	Long-term loans	Lease liabilities	Total
	RMB'000	*RMB'000*	*RMB'000*
As at 1 January 2021	680,430	9,442	689,872
Changes from financing cash flows	(143,630)	(24,124)	(167,754)
Cash paid for interest expenses	(42,580)	–	(42,580)
Interest expenses	25,407	10,464	35,871
New leases	–	215,786	215,786
Exchange differences	14,827	(2,375)	12,452
As at 31 December 2021	534,454	209,193	743,647

	Long-term loans	Lease liabilities	Total
	RMB'000	*RMB'000*	*RMB'000*
As at 1 January 2021	680,430	9,442	689,872
Changes from financing cash flows	–	(2,435)	(2,435)
Interest expenses	4,241	900	5,141
New leases	–	216,698	216,698
Exchange differences	(7,476)	(62)	(7,538)
As at 31 January 2021 (unaudited)	677,195	224,543	901,738

	Long-term loans	Lease liabilities	Payable to Chijin	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
As at 1 January 2022	534,454	209,193	–	743,647
Changes from financing cash flows	(529,646)	(2,814)	598,185	65,725
Cash paid for interest expenses	(4,782)	–	–	(4,782)
Interest expenses	3,255	827	–	4,082
Exchange differences	(3,281)	(70)	–	(3,351)
As at 31 January 2022	–	207,136	598,185	805,321

36. COMMITMENTS AND CONTINGENCIES

(a) The Group had the following capital commitments at the end of each of the Relevant Periods:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Contracted, but not provided for:		
Property, plant and equipment	31,241	46,072
Investment commitment	22,315	29,951
	53,556	76,023

(b) Contingencies

Due to the nature of the Company's operations, various legal matters from time to time arise in the ordinary course of business. The Company accrues for such items when a liability is both probable and the amount can be reasonably estimated. In the opinion of Management, these matters will not have a material effect on the consolidated financial statements of the Company.

37. RELATED PARTY TRANSACTIONS

There were no material related party transactions for the period ended 31 December, 2021 other than the items disclosed below.

Concurrent with the Chifeng Jilong Gold Mining Co., Ltd. acquisition of the Golden Star on January 28, 2022, Chijin International (HK) Limited advanced to Golden Star USD93.8 million which was used for the full repayment of the outstanding principal on the Revolving Credit Facility ("RCF") of USD90 million, accrued interest of USD0.1 million and termination of the hedging program of USD3.7 million.

(a) Compensation of key management personnel

	Year ended 31 December 2021	One month ended 31 March 2022
	RMB'000	*RMB'000*
Salaries, wages, bonuses and other benefits	5,453	817
Share based compensation	8,782	46,945
	14,235	47,762

38. FINANCIAL INSTRUMENTS BY CATEGORY

The carrying amounts of each of the categories of financial instruments as at the end of each of the Relevant Periods are as follows:

31 December 2021

Financial assets	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables	1,589	–	1,589
Financial assets included in prepayments, other receivables and other assets	27,053	–	27,053
Financial assets at fair value through profit or loss	–	158	158
Cash and cash equivalents	224,335	–	224,335
Other non-current assets	14,762	–	14,762
	267,739	158	267,897

Financial liabilities	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade payables	146,316	–	146,316
Current portion of derivative financial liabilities	–	188	188
Derivative financial liabilities	–	11,153	11,153
Long-term loans	529,656	–	529,656
Other payables and accruals	76,940	–	76,940
Current portion of long-term loans	4,798	–	4,798
	757,710	11,341	769,051

31 January 2022

Financial assets	Financial assets at amortised cost	Financial assets at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade receivables	673	–	673
Financial assets included in prepayments, other receivables and other assets	18,934	–	18,934
Financial assets at fair value through profit or loss	–	158	158
Cash and cash equivalents	70,007	–	70,007
Other non-current assets	14,759	–	14,759
	104,373	158	104,531

Financial liabilities	Financial liabilities at amortised cost	Financial liabilities at fair value	Total
	RMB'000	*RMB'000*	*RMB'000*
Trade payables	172,763	–	172,763
Financial liabilities included in other payables and accruals	882,710	–	882,710
	1,055,473	–	1,055,473

39. FAIR VALUE AND FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS

Management has assessed that the fair values of cash and cash equivalents, trade receivables, trade payables, other payables and accruals, other non-current liabilities due within one year and financial assets included in prepayments, other receivables and other assets approximate to their carrying amounts largely due to the short-term maturities of these instruments.

The fair values of other non-current assets, long-term loans, lease liabilities and other non-current liabilities were determined by discounting the expected future cash flows using market rates of return currently available for other financial instruments with similar terms, credit risk and remaining maturities or incremental borrowing rate. The Group's own non-performance risk for long-term loans was assessed to be insignificant. The fair values of listed equity investments are based on quoted market prices.

The Group's finance department headed by the finance manager is responsible for determining the policies and procedures for the fair value measurement of financial instruments. The finance manager reports directly to the chief financial officer and the audit committee. At the end of each of the Relevant Periods, the finance department analyses the movements in the values of financial instruments and determines the major inputs applied in the valuation. The valuation is reviewed and approved by the chief financial officer.

Fair value hierarchy

The following tables illustrate the fair value measurement hierarchy of the Group's financial instruments:

Assets measured at fair value:

As at 31 December 2021	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial assets at fair value through profit or loss				
Including: Equity investment	158	–	–	158
	158	–	–	158

As at 31 January 2022	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Financial assets at fair value through profit or loss				
Including: Equity investment	158	–	–	158
	158	–	–	158

Liabilities measured at fair value:

As at 31 December 2021	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Derivative financial liabilities				
Non-hedge derivative contract liability	–	11,341	–	11,341
	–	11,341	–	11,341

As at 31 January 2022	Fair value measurement using			
	Quoted prices in active markets (Level 1)	Significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Derivative financial liabilities				
Non-hedge derivative contract liability	–	–	–	–
	–	–	–	–

During the year ended 31 December 2021 and one month ended 31 January 2022, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3 for both financial assets and financial liabilities. The Group's policy is to recognise transfers between levels of the fair value hierarchy as at the end of each of the Relevant Periods in which they occur.

40. FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group is exposed to various risks in relation to financial instruments in its daily operations, mainly, credit risk, liquidity risk and market risk (including interest rate risk, exchange rate risk, and commodity price risk). The Group's major financial instruments include cash and cash equivalents, financial assets at fair value through profit or loss, derivative financial assets, trade receivables, other non-current assets, long-term loans, financial liabilities at fair value through profit or loss, trade payables, other payables and accruals, etc. The Group also carries out derivatives transactions, mainly involving commodity futures contracts, aiming at managing the market risks of the Group's operation. The Group manages the market risks of derivatives based on the difference between metal price in the market and the target metal price pre-determined by the management. Risks in connection with such financial instruments, and the risk management strategies adopted by the Group to mitigate such risks are summarized as follows.

Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long term debt obligations with a floating interest rate.

Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. As at 31 December 2021, the RCF with Macquarie Bank Limited incurs interest at 4.5% plus the applicable USD LIBOR rate per annum. Based on our current RMB529,656,000 outstanding balance, a 50 basis point change in the USD LIBOR rate would result in a change in interest expense of RMB2,869,000. As at 31 January 2022, there's no floating rate loan balances left. We have not entered into any agreements to hedge against unfavorable changes in interest rates but may do so in the future to actively manage our exposure to interest rate risk.

Foreign currency risk

The Group's primary operations are located in Ghana, with its main business transactions settled in US dollars. The foreign currency risks associated with the Group's identified foreign currency assets and liabilities, as well as future foreign currency transactions (where the pricing currencies for foreign currency assets, liabilities, and transactions are primarily Ghanaian cedis), are minimal.

The Group continuously monitors the scale of its foreign currency transactions, assets, and liabilities to minimize the foreign currency risks it faces.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Group's credit risk is primarily associated with liquid financial assets and derivatives.

The Group limits exposure to credit risk on liquid financial assets by holding our cash, cash equivalents, restricted cash and deposits at highly-rated financial institutions. In addition, the Group continuously monitors the balance of trade receivables to ensure that the Group is not exposed to significant bad debt risks. Risks associated with gold trade receivables is considered minimal as the Group sells gold to a credit-worthy buyers via an agent who settles promptly within two days of receipt of gold bullion.

Other financial assets of the Group include receivables and some derivatives. The credit risk on these financial assets arises from the default of counterparties, with a maximum exposure equal to the carrying amounts of these instruments.

Liquidity risk

The Group monitors its risk to a shortage of funds using a recurring liquidity planning tool. This tool considers both the maturity of its financial instruments and financial assets (e.g., trade receivables) and projected cash flows from operations.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of loans and bank borrowings.

The maturity profile of the Group's financial liabilities as at the end of each of the Relevant Periods, based on the contractual undiscounted payments, is as follows:

	As at 31 December 2021			
	Within 1 year	1 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Derivative financial liabilities	188	11,153	–	11,341
Lease liabilities	29,891	143,775	82,629	256,295
Long-term loans	24,151	603,345	–	627,496
Trade payables	146,316	–	–	146,316
Financial liabilities included in other payables and accruals	76,940	–	–	76,940
	277,486	758,273	82,629	1,118,388

	As at 31 January 2022			
	Within 1 year	1 to 5 years	Over 5 years	Total
	RMB'000	*RMB'000*	*RMB'000*	*RMB'000*
Lease liabilities	29,271	142,003	80,320	251,594
Trade and notes payables	172,763	–	–	172,763
Financial liabilities included in other payables and accruals	882,710	–	–	882,710
	1,084,744	142,003	80,320	1,307,067

Capital management

The primary objective of the Group's capital management is to ensure that it maintains strong credit rating and healthy capital ratios in order to support its business and maximise shareholders' value.

The Group regards total equity as its capital and manages its capital structure and makes adjustments to it, in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies and processes during the Relevant Periods.

During the Relevant Periods, the Group's strategy was to maintain the gearing ratio at a healthy level in order to monitor capital. The principal strategies adopted by the Group include, but are not limited to, reviewing future cash flow requirements and the ability to meet debt repayment schedules when they fall due, maintaining a reasonable level of available banking facilities and adjusting investment plans and financing plans, if necessary, to ensure that the Group has a reasonable level of capital to support its business. Gearing ratio is total liabilities divided by total assets.

The gearing ratios at the end of each of the Relevant Periods were as follows:

	31 December 2021	31 January 2022
	RMB'000	*RMB'000*
Total assets	2,183,463	2,123,050
Total liabilities	2,012,997	2,282,581
Gearing ratio	92%	108%

41. SUBSEQUENT FINANCIAL STATEMENTS

No audited financial statements have been prepared by the Group in respect of any period subsequent to 31 January 2022.

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[**REDACTED**]

Final

Competent Person's Report on the Spring Rain Gold and Lead-Zinc Projects in the People's Republic of China

Spring Rain, Gold and Lead-Zinc Projects, Chifeng, Dandong and Yanbian, Inner Mongolia, Liaoning, Jilin and Yunnan Provinces, P.R. China,

Chifeng Jilong Gold Mining Co., Ltd.

SRK Consulting China Ltd. ▪ SCN849A ▪ 27 August 2024

srk consulting

Final

Competent Person's Report on the Spring Rain Gold and Lead-Zinc Projects in the People's Republic of China

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Cover Image(s):
A picture showing the Jinlong Project layout

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Contents

Tables

Figures

Appendices

Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

3D	three dimensional
%	percent
°	degree, either temperature or angle of inclination
°C	degree, Celsius temperature
′	Minute
″	Second
×	Multiply by
AISC	All-in sustaining cost
Au	element symbol for gold
asl	above sea level
AusIMM	Australasian Institute of Mining and Metallurgy
BFA	Bench face angles
CIM	the Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimetre
cm^3	cubic centimetre
CNY	Chinese Yuan currency
COG	Cut-off grade
CPR	Competent Person's Report
CRMs	Certified reference materials.
Cu	element symbol for copper
E	East.
Exchange	The Stock Exchange of Hongkong Ltd., a wholly owned subsidiary of Hong Kong Exchanges and Clearing Ltd ("HKEx")
FEL	Front end loader
g	gram(s)
g/cm^3	gram per cubic centimetre
g/t	gram per tonne
GOCOM	Gocom Engineering Design Company
Hanfeng Mining	Jilin Hanfeng Mining Science and Technology Co., Ltd.
HKEx	Hong Kong Exchanges of Clearing Ltd.
Huatai Mining	Chifeng Huatai Mining Co., Ltd.
Indicated Mineral Resource	that part of a resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as

	outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	that part of a resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
Inner Mongolia	Inner Mongolia Autonomous Region
Jilong Mining	Chifeng Jilong Mining Co., Ltd.
Jintai/Jintai Mining	Eryuan Jintai Mining Development Co., Ltd.
k	Kilo or thousand
kg	Kilogram, equivalent to 1,000 grams
km	Kilometre, equivalent to 1,000 metres
km^2	square kilometre
kt	Kiloton
kV	Kilovolts, equivalent to 1,000 volts
kW	Kilowatt, equivalent to 1,000 watts
LoM	Life of mine
m	metre
m^2	square metre
m^3	cubic metre
Measured Mineral Resource	that part of a resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes
M	million
mm	millimetre
MLR	Ministry of Land and Resources
m asl	relevant elevation to sea level in meter
m/s	Meters per second.
Mt	million tonnes
Mtpa	million tonnes per year
MW	megawatt, equivalent to 1,000,000 watts
N	north, also the element symbol for nitrogen
NE	northeast
NEE	northeast east
NQ size core	47.6mm diameter
NW	northwest

NI43-101	the Canadian Securities Administrators' National Instrument
Oz.	troy ounce, equivalent to 31.1035 grams
Pb	element symbol for lead
pH	a measure of the acidity or alkalinity of a solution, numerically equal to 7 for neutral solutions, increasing with increasing alkalinity and decreasing with increasing acidity. The pH scale commonly in use ranges from 0 to 14
ppb	part per billion
PPE	personal protective equipment
ppm	parts per million, equivalent to grams per tonne (g/t)
PQ size core	85mm diameter
P.R. China	the People's Republic of China
Probable Ore Reserve	the economically mineable part of an indicated, and in some circumstances measured, resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and government factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Proved Ore Reserve	the economically mineable part of a measured resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and government factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Also referred to as recoverable proved reserve
QA/QC	quality assurance and quality control
QPR	Qualified Person's Report
QTY	quantity
S	south, also the element symbol for sulphur
SE	southeast
SG	Specific gravity.
SRK	SRK Consulting (China) Ltd.
t	tonne (metric ton)
Te	Element symbol for tellurium
TMM	Total material movement
tpa	tonne per year
tpd	tonne per day
Valmin Code	the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports
Yanbian	Yanbian Korean Autonomous Prefecture
Zn	element symbol for zinc

Executive Summary

Introduction

Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**", the "**Company**" or the "**Client**") commissioned SRK Consulting China Limited ("SRK') to undertake an independent technical assessment of all relevant aspects of its five subsidiaries' operating gold and polymetallic mines and associated processing and metallurgical plants (hereafter referred to as the "**Chifeng Gold Project**" or the "**Project**") in Inner Mongolia Autonomous Region ("Inner Mongolia"), Liaoning, Jilin and Yunnan Provinces of the People's Republic of China ("**China**').

SRK understands that the independent technical assessment was required to be included in a Competent Person's Report ("**CPR**", the "**Report**" or this "**Report**") to provide Chifeng Gold and potential [**REDACTED**] as well as possible [**REDACTED**] with SRK's technical opinions on the Project.

The Report was prepared following the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "**JORC Code**") and in accordance with the rules governing the listing of securities on the Stock Exchange of Hong Kong Ltd (the "**Exchange**") including the Chapter 18 requirements (Appendix B), Chapter 2.6 of the Guide for New Listing Applicants (Appendix C) and other relevant regulations of the Exchange and Hong Kong Exchanges and Clearing Ltd ("**HKEx**").

This Report does not express an opinion as to the value of mineral or other assets involved.

Summary of Principal Objectives

The principal objective of this Report is to provide the Company and potential [**REDACTED**] and [**REDACTED**] of the Company with an independent technical assessment of the geology and exploration, Mineral Resources and Ore Reserve, Mining methods and processing and metallurgical technologies, technical and economic analysis, and environmental and social aspects of the reviewed Project base on all available technical data. The aim has been to produce a CPR suitable for inclusion in documents that the Company plans to use for the proposed [**REDACTED**] on the Main Board of the Exchange.

Outline of Work Program

The work program of this Project included:

- review of all relevant information and documents provided by Chifeng Gold as of 31 March 2024;
- site inspection to each of mines, processing and metallurgical plants and supporting facilities in December 2022, January and March 2023, and May and June 2024;
- data verification conducted by SRK in December 2022 and May 2024;
- discussion with the Company management and technical personnel;
- analysis of the data provided by the Company and generated by SRK;

- construct the geological solids, prepare data for statistical, established the block model, estimate grades, tabulate Mineral Resources;
- preparation of a draft report in accordance with the JORC Code and the rules governing the listing of securities on the Exchange including the Chapter 18 requirements and other relevant regulations of the Exchange and HKEx (the declaration date of Mineral Resources and Ore Reserves is 30 March 2024); and
- submission of the draft to Chifeng Gold and the related third parties for comments and finalization of the draft based on feedback.

Results

Overall

The reviewed Chifeng Gold Project includes four (4) gold projects and one (1) polymetallic project; they are owned and operated by Chifeng Gold's five subsidiaries.

Jilong Project is an operatingl gold project. It is wholly owned and operated by Chifeng Jilong Mining Co., Ltd. ("**Jilong Mining**"). The project consists of the Zhuanshanzi gold mine ("**Zhuanshanzi Mine**") and two processing and metallurgical plants (hereafter refer to as **#1 Jilong Plant** and **#2 Jilong Plant**, respectively). These properties are located in Aohanqi (敖汉旗), inner Mongolia. The Zhuanshanzi mining license covers an area of 6.24 square kilometres ("km^2") with a permitted mining capacity of 120,000tpa.

Huatai Project is an operating gold project. It is wholly owned and operated by the Chifeng Huatai Mining Co., Ltd. ("**Huatai Mining**"). The Huatai project includes three mining licenses for #26, #3&7 gold veins and #5 mining area in Lianhuashan gold mine ("**Lianhuashan Mine**"), two mining licenses for #86 gold vein and #1 mining area in Honghuagou gold mine ("**Honghuagou Mine**") and one is for Pengjiagou gold mine ("**Pengjiagou Mine**"), and one processing and metallurgical plant (i.e., "**Huatai Plant**"). These properties are located in Songshan District (松山区), Chifeng City, Inner Mongolia. The six mining licenses cover a total area of 10.517km^2, with a total permitted mining capacity of 218,900tpa.

Wulong Project is an operatingl gold project. It is wholly owned and operated by Liaoning Wulong Gold Mining Co., Ltd. ("**Wulong Mining**"). The Wulong project consists of the Wulong gold mine ("**Wulong Mine**") and one processing plant (i.e., "**Wulong Plant**"), and two (2) exploration permits of the Ligunzi and Haojingou-Ligunzi gold deposits. These properties are located in Dandong, Liaoning Province. The mining license (No.: C2100002011084140116558) for Wulong Gold Mine covers an area of 6.2732km^2, with a permitted mining capacity of 100,000tpa. The exploration permits cover a total area of 4.70km^2.

Jintai Project is an operating gold project. It is wholly owned and operated by Eryuan Jintai Mining Development Co., Ltd. ("**Jintai Mining**"). The project consists of the Xidengping gold mine ("**Xidengping Mine**") and associated the heap leaching plant ("**Heap Leaching Plant**"), located in Eryuan County (洱源县), Dali Bai Autonomous Prefecture (大理白族自治州), Yunnan Province. The Xidengping mining license covers an area of 1.0920 km^2, with a permitted mining capacity of 140,000tpa.

Hanfeng Project is an operating polymetallic project. It is wholly owned and operated by Jilin

Hanfeng Mining Science and Technology Co., Ltd. ("**Hanfeng Mining**"). The project consists of one Lishan lead-zinc polymetallic mine ("Lishan Mine") and associated processing plant ("**Lishan Plant'**) and the Dongfeng molybdenum mine ("**Dongfeng Mine**") and associated processing plant ("**Dongfeng Plant**"), located in Longjing City, Yanbian Korean Autonomous Prefecture ("**Yanbian**"), Jilin Province.

Details of the reviewed mines and plants are shown in Table ES- 1.

Table ES- 1: Detailed Information on Chifeng Gold's Mines and Plants

Company	Mines and Plants	Products	Designed Capacity (tpa) ROM	2023 Production	Status
Chifeng Jilong Mining Co., Ltd					
	Zhuanshanzi Mine	Raw Ore	120,000	152,600	Production
	#1 Jilong Plant [1]	Gold Ingot	120,000	1,390	Production
	#2 Jilong Plant	Gold Ingot	180,000		Under Construction
Chifeng Huatai Mining Co., Ltd					
	#26 Vein, Lianhuashan Mine	Raw Ore	30,000		Production
	#3&#7 Vein, Lianhuashan Mine	Raw Ore	30,000		Production
	5th Mining Area, Lianhuashan Mine	Raw Ore	60,000	1,620	Production
	#86 Vein, Honghuagou Mine	Raw Ore	30,000		Production
	1st Mining Area, Honghuagou Mine	Raw Ore	38,900		Production
	Pengjiagou Mine	Raw Ore	30,000		Production
	Huatai Plant	Gold Ingot	60,000	3.65	Construction
Liaoning Wulong Gold Mining Co., Ltd					
	Wulong Mine	Raw Ore	100,000	579,300	Production
	Processing Plant	Concentrate	900,000	33,080	Production
Eryuan Jintai Mining Development Co., Ltd					
	Xidengping Mine	Raw Ore	140,000		Production
	Heap Leaching Plant	Au-loaded Carbon	140,000	98.83	Production
Jilin Hanfeng Mining Science and Technology Co., Ltd					
	Lishan Mine	Raw Ore	600,000	351,110	Production
	Lishan Plant	Cu Concentrate		1,439	
		Pb Concentrate		2,716	
		Zn Concentrate		11,287	
	Dongfeng Mine	Raw Ore	99,000	82,110	Production
	Dongfeng Plant	Mo Concentrate		206	Production

Note:

[1] #1 Jilong Plant is currently under capacity expansion and is expected to commence production in June 2024

The Jilong Mining, Huatai Mining, Wulong Mining, Jintai Mining and Hanfeng Mining's properties, including mines and plants can be easily accessed by national highways and/or provincial and local concrete-paved roads from their administrative jurisdictions or country towns.

The mines and plants operated the subsidiaries of Chifeng Gold are relatively well integrated and well managed operations. The operating standards at all sites generally follow the Chinese national mining industrial practices.

Based on a reasonable cut-off grade of gold, zinc or molybdenum, SRK has estimated the Mineral Resources and Ore Reserves for the Jilong, Huatai, Wulong, Jintai, and Hanfeng projects. As 31

March 2024, the Mineral Resources and Ore Reserves of the Chifeng Gold Project, as per the JORC Code guidelines were list in Table ES- 2.

Table ES- 2: Summary of Mineral Resources and Ore Reserves, as of 31 March 2024

Mineral Resources					Ore Reserves				
Category	**Cut-off Grade**	**Tonnage (kt)**	**Au Grade (g/t)**	**Au Metal (t)**	**Category**	**Cut-off Grade**	**Tonnage (kt)**	**Au Grade (g/t)**	**Au Metal (t)**
				Jilong Project					
MES	1.5g/t Au	510	11.92	6.00	Prov	2.76g/t Au	537	9.66	5.18
IND		440	9.22	4.10	Prob		431	7.27	3.13
MES + IND		***950***	***10.66***	***10.10***	**Prov + Prob**		**968**	**8.59**	**8.31**
INF		530	9.23	4.90					
				Huatai Project					
MES	1.5g/t Au	385	5.88	2.26	Prov	2.93g/t Au	226	5.21	1.18
IND		2,146	7.27	15.60	Prob		1,468	6.35	9.32
MES + IND		***2,531***	***7.06***	17.87	**Prov + Prob**		**1,694**	**6.20**	**10.50**
INF		1,249	6.90	8.62					
				Wulong Project					
MES	1.5g/t Au	-	-	-	Prov	2.05g/t Au	-	-	-
IND		1,309	8.22	10.75	Prob		1,028	7.34	7.55
MES + IND		***1,309***	***8.22***	***10.75***	**Prov + Prob**		**1,028**	**7.34**	**7.55**
INF		1,754	7.21	12.65					
				Jintai Project					
MES	0.17g/t Au	3,363	1.68	5.64	Prov	0.25g/t Au	-	-	-
IND		4,800	1.01	4.83	Prob		1,563	0.74	1.15
MES + IND		***8,163***	***1.28***	***10.47***	**Prov + Prob**		**1,563**	**0.74**	**1.15**
INF		2,710	1.29	3.50					

Mineral Resources					Ore Reserves				
Category	**Cut-off Grade**	**Tonnage (kt)**	**Zn Grade (%)**	**Zn Metal (kt)**	**Category**	**Cut-off Grade**	**Tonnage (kt)**	**Zn Grade (%)**	**Zn Metal (kt)**
				Hanfeng Project – Lishan Mine					
MES	0.5% Zn	750	2.36	18	Prov	1.42% Zn	390	2.26	9
IND		8,580	2.66	229	Prob		2,920	2.47	72
MES + IND		**9,330**	**2.64**	**246**	**Prov + Prob**		**3,310**	**2.45**	**81**
INF		10,620	2.9	308					

Mineral Resources					Ore Reserves				
Category	**Cut-off Grade**	**Tonnage (kt)**	**Mo Grade (%)**	**Mo Metal (kt)**	**Category**	**Cut-off Grade**	**Tonnage (kt)**	**Mo Grade (%)**	**Mo Metal (kt)**
				Hanfeng Project – Dongfeng Mine					
MES	0.03% Mo	1,820	0.11	2	Prov				
IND		26,490	0.12	32	Prob				
MES + IND		**28,310**	**0.12**	**34**	**Prov + Prob**				
INF		37,050	0.12	45					

Source: SRK

Except for the Jintai Mining's Xidengping Mine, which is an open pit mine and is proposed surface mining via free dig – transportation – heap leaching methodology, all other operating mines are

developed as underground mines. Details of mine development and mining methodology adopted by each project are summarised in Table ES- 3.

Table ES- 3: Details of Mine Development and Mining Method Adopted by Each Project

Project	Mine Development	Mining Methodology
Jilong	Zhuanshanzi Mine has three stand-alone development systems	Resuing stoping method
	Access via shafts or adits	Mining dilution: 20%; Ore loss: 5%
Huatai	Six gold mines, each with an independent development system	A modified resuing stoping method, named slice and fill with rock is adopted
	Access via adit & shaft or incline shaft	Mining dilution: 20%; Ore loss: 15%
Wulong	Wulong Mine has three stand-alone underground operating systems (Zones 2, 3 and 4), Zone 4 is further separated into the main shaft zone and the service shaft zone	Overhand cut and fill mining for relatively thicker orebodies; Resuing method for steep and thin orebodies
	Access via shafts and blind shafts	Mining dilution: 20%; Ore loss: 8%
Jintai	Xidengping Mine is an open it mine	A conventional open pit mining methodology is used, comprising free dig & loading, and haulage by truck.
		Mining dilution: 5%; Ore loss: 5%
Hanfeng	Both Lishan and Dongfeng mines are underground mines	Shrinkage stoping method is adopted
	Access via adits and blind shafts	Mining dilution: 32%; Ore loss: 19%

Source: SRK

Based on the production schedule for each project over its remaining life of mine ("**LoM**"), the capital expenditures ("**Capex**") and the forecasted operating expenses ("**Opex**") for each project, and the gold price of US dollar ("US$) 2,050 per ounce ("**oz**") and other principal assumptions, SRK has estimated each project's net present values ("**NPV**") using the discount cashflow method.

At a discount rate of 10%, the NPVs are US$129 million ("**mln**") for the Jilong Project, US$11 mln for the Huatai Project, US$56 mln for the Wulong Project, US$10 mln for the Hanfeng Project and US$10 mln for the Jintai Project.

The positive NPVs for each project indicate they are technically feasible and economically viable.

Operational Licenses and Permits

SRK sighted key operational licenses and permits for Chifeng Gold's each subsidiary mining project, including business license; mining license, safety operational permits for mining, processing plant and TSF; water use permit; and site discharge permit, as shown in Table ES- 4.

Table ES- 4: Key Operational Licenses and Permits for the Project, as of 31 March 2024

Subsidiary/Project	Business License	Mining License	Safety Production Permit	Water Use Permit	Site Discharge Permit
Jilong Mining	Y	Y	Y	Y	Y
Huatai Mining	Y	Y	Y	Y	Y
Wulong Mining	Y	Y	Y [1]	Y	Y
Jintai Mining	Y	Y	Y [2]	Y	Y
Hanfeng Mining	Y	Y	Y	Y	Y

Note:

[1] The safety production permit for Zhoujiagou TSF has expired (expiry date: 28 October 2023), which is to be renewed.
2. The application for the safety production permit is in process.

Geology and Exploration

Jilong Project

Geology and Mineralogy: Jilong project is situated within the Lianhuashan fault block, Inner Mongolia platform uplift of North China platform. The outcropped strata in the project region are the Palaeoarchean Wulashan Group, which is lithologically composed of plagioclase hornblende gneiss, hornblende plagioclase gneiss, biotite plagioclase hornblende gneiss and migmatite. Overlying rock sequences are the Early Cretaceous Jiufotang Formation, consisting of tuffaceous sandstone and shale, and the Quaternary sediments. The Palaeoarchean Wulashan Group is the main strata hosting the gold Mineralisation.

Structures of the Zhuanshanzi gold deposit area are well developed, in which the Variscan period is dominated by folds and the Yanshan period is dominated by faults. The faults are divided into four (4) groups, nearly north-south, nearly east west, northwest and northeast trending faults. The northwest trending fault is the main structure hosting and controlling the gold Mineralisation.

Intrusive rocks are developed at the project area, they include the Early Cretaceous granite, the Late Cretaceous granite porphyry, the Jurassic diorite and the Permian diorite. Dykes include Felsite porphyry, trachyte and quartz vein, which strike northwest, northeast or nearly east west.

The Zhuanshanzi gold deposit is a typical of medium-low temperature hydrothermal gold deposit. It consists of several gold Mineralisation zones. The wall rock alterations include pyritization, carbonation, silicification, chloritization, sericitization, and epidote. The Mineralisation type is mainly gold-bearing quartz vein type. Two (2) gold Mineralised blocks/zones in the Zhuanshanzi gold deposit are included in this report, namely Zhuanshanzi 1#2#3#&depth Block and Zhuanshanzi 4#5#6#&7# Block.

The ore minerals include native gold and silver, pyrite, sphalerite, galena, chalcopyrite magnetite, hematite, and chalcocite. Gangue minerals include quartz, sericite, chlorite, calcite, feldspar hornblende. Ore textures include crystalline texture, cataclastic texture, metasomatic residual texture, solid melt decomposition texture, structures include disseminated structure, vein-like structure, brecciated structure, banded structure.

Exploration and Quality Control: The regional geological and mineral exploration began in the 1980s and from then, several phases of exploration work were carried out. The resource and reserve verification of Zhuanshanzi Mineralisation block was undertaken from 2010, and the detailed exploration work of Zhuanshanzi 4-5-6-7# Block are conducted during the period from 2010 to 2012.

SRK was provided with the quality control ("**QC**") data of Zhuanshanzi 1#2#3#&depth Block and Zhuanshanzi 4#5#6#&7# Block. The sampling preparation, security, and analytical procedures of the two gold mineralised blocks are acceptable. The pass rates of both internal and external check samples are acceptable.

SRK has performed data verification by taking duplicate samples during or after site visit. A total of 154 verification samples were chosen randomly to ensure the representation and were sent to SGS Mineral Laboratory ("**SGS Lab**"), located in Tianjin China by commercial logistic company for

analysis. Large bias was observed between original assay and check results, SRK has checked with both main laboratory and SGS staff, found that the sample preparation and sample assay methods are different, the sample preparation protocol which the original main laboratory adopted is relatively conservative, they use sieve to remove potential visible gold and then for assay to minimize the nugget effect, which may lead to a system lower bias compared to SGS Lab using screen fire assay method. A general co-relationship can be observed, SRK advised to send the samples to umpire laboratory for further verification, the samples have been sent to Intertek laboratory, general trend can be observed although larger bias are found in the higher-grade samples, which may be caused by the nugget effect of visible gold.

Huatai Project

Geology and Mineralogy: Tectonically, the Huatai project is also situated within the Lianhuashan fault block, Inner Mongolia platform uplift of in the North China Platform. The outcropped strata are the Paleoarchean Wulashan Group, the Early Cretaceous Jiufotang Formation, and the Quaternary sediments. The Paleoarchean Wulashan Group is the main strata hosting the gold Mineralisation.

Structures in the project region are well developed and faults are divided into three (3) groups: north-northeast, northeast and northwest (or west-northwest) trending faults. The northwest trending faults are the main structures holding and controlling the gold mineralisation.

The Huatai project area is characterized by the extensive magmatic intrusion with multiple stages and complex types. Magmatic intrusive rocks include Jurassic granite-porphyry, Jurassic monzo-granite and Alkali-Feldspar Granite.

The Huatai Project consists of several medium-low temperature hydrothermal gold deposits of Honghuagou-Lianhuashan gold Mineralisation belt. The wall rock alteration is mainly silicified pyritization and sericitization, followed by chloritization and carbonation. The Mineralisation type is mainly gold-bearing quartz vein type.

A total of 6 Mineralised gold zones/blocks are included in this report; they are the #1 Mining Zone and #86 Vein in Honghuagou gold mine, the Pengjiagou Zone in Pengjiagou gold mine, and the #5 Mining Zone, #26 Vein and #3&#7 Vein in Lianhuashan gold mine. After many years of mining, resources of the Mineralised bodies above both #1 Mining Zone of the Honghuagou gold mine and #5 Mining Zone of the Lianhuashan gold mine have been depleted.

The ore minerals include natural gold, pyrite, chalcopyrite, magnetite, and minor of sphalerite, galena, chalcocite, bornite, limonite. Gangue minerals include quartz, sericite, chlorite, potassium feldspar, plagioclase, Hornblende, calcite, kaolin. Ore textures include fragmented structure, metasomatic filling, fine idiomorphic crystal structure and metasomatic residue. Structures include massive structure, strip structure, disseminated structure, and breccia structure.

Exploration and Quality Control: The region geological and mineral exploration began in the 1950s and from then, several phases of exploration work were carried out. The resource and reserve verification work of Honghuagou-Lianhuashan Mineralisation zone was undertaken from 2011, the detailed exploration work on #1 Mining Zone and #86 Vein in Honghuagou gold mine, Pengjiagou gold mine, and #26 Vein and #3&#7 Vein in Lianhuashan gold mine are conducted during the period from 2011 to 2018.

SRK was provided with the QC data of the #1 Mining Zone, #86 Vein, #5 Mining Zone, #3&#7 Vein, and Pengjiagou. The sampling preparation, security, and analytical procedures of these mineralised gold zones/blocks are acceptable. The pass rates of both internal and external check samples are acceptable.

SRK's data verification of Huatai project is divided into two parts: one part is Honghuagou gold mine including #1 mining zone, #86 Vein and Pengjiagou Deposit; the other part is Lianhuashan gold mine including #3-7 Vein, #26 Vein and #5 mining zone.

For Huatai Honghuagou gold mine, SRK has performed data verification by taking duplicate samples during or after site visit. A total of 50 verification samples were chosen randomly to ensure the representation and were sent to SGS Lab for analysis. Large bias was observed between original assay and check results, SRK has checked with both main laboratory and SGS staff, found that the sample preparation and sample assay methods are different, the sample preparation protocol which the original main laboratory adopted is relatively conservative, they use sieve to remove potential visible gold and then for assay to minimize the nugget effect, which may lead to a system lower bias compared to SGS using screen fire assay method. A general co-relationship can be observed, SRK advised to send the samples to umpire laboratory for further verification, the samples have been sent to Intertek laboratory, general trend can be observed although larger bias are found in the higher-grade samples, which may be caused by the nugget effect of visible gold.

For Huatai Lianhuashan gold mine, SRK used the cut-off grade of 1 g/t Au to select verification samples, a total of 55 samples have been taken. The samples were re-numbered and sent to SGS Mineral Laboratory located in Tianjin, China for verification assay. Currently, SRK has not received the results of external assay.

Wulong Project

Geology and Mineralogy: The Wulong project is located in the eastern part of Liaoning province. The strata in the project region are mainly the Paleoproterozoic Liaohe Group layered metamorphic rocks, which are sporadically outcropped, mostly in the form of xenoliths remaining in the Mesozoic granites and migmatites distributed over a large area. The stratigraphy of these metamorphic rocks is composed of Lieryu Formation, Gaojiayu Formation, Dashiqiao Formation, Gaixian Formation and Quaternary, from the oldest to the newest. Lithologically, these rocks consist of various types of marble, schist and granulite.

The structure in this area is mainly fault structure, and then fold structure. The Yalu River Fault is the largest fracture zone in the region, which is located at the edge of the region and extends in the northeast direction of 50°-60° and dips to southeast. It is formed by multiple extrusion and shearing. This fault zone controls the distribution of copper and gold deposits in the region.

The Wulong project area is characterized by intrusions of the Paleoproterozoic biotite granite and granitelle, early Yanshanian diorite, granodiorite, granite, and many dykes accompanying the intrusions. In the west of the Wulong gold mine, it is the Paleoproterozoic Hongshi biotite granite. In the south, it is the Yanshanian (i.e., 126 million years ago ("Ma")) Sanguliu granodiorite. And in the north, it is the Yanshanian (112Ma) Dingqishan biotite granite. They are closely related to gold Mineralisation.

The Project consists of Wulong gold mine, Ligunzi and Haojingou-Ligunzi gold deposits. The Wulong gold mine is a large quartz vein type gold deposit. The wall rock is biotite granitite and monzogranite

and the Mineralised body is strictly controlled by two groups of faults, the northwest trending and north-northeast trending faults, consisting of rhombic lattice structure. The Mineralised body is within the nearly north-south, northwest trending compressive torsional faults and associated with fine-grained diorite. The Mineralisation type is mainly gold-bearing quartz vein type, and the useful components are natural gold and silver-gold.

A total of 449 gold-bearing geological bodies were found in the field, including 382 gold-bearing quartz veins and 67 silicified alteration zones. Due to years of mining, only 18 main Mineralised bodies can be mined at present, which can be spatially divided into three ore-forming belts, namely A, B and C. The Mineralised bodies in A and B belts are nearly extending north–south, which are controlled by granite porphyry veins. The shallow part of the Mineralised body is far from the granite porphyry, the deep part is closer to the granite porphyry, even directly in the granite porphyry. The main Mineralised body in A belt is the Vein #32, and the main Mineralised bodies are the Veins #2-3, #2-6, #4-1 and #4-2 in B belt. The Mineralised bodies in C belt trend northwest and the main body is Vein #163.

In the Ligunzi deposit, the Mineralised body is vein-like, which is controlled by two group faults, the nearly north-south trending fault, and the northwest trending fault. Generally, the down-dip length is longer than the strike length. The single vein is stable and has the characteristic of balk reappear, compound of branch. They are right-sided oblique in the plane and slightly forefront in the section. The maximum extension of Mineralised body along strike is up to 600m and the dip length is over 800m, with thickness varying generally from 0.2m to 3.0m.

In the Haojingou-Ligunzi deposit, a total of 20 gold Mineralised bodies and 1 gold low-grade Mineralised body are outlined in Haojingou-Ligunzi area. The strike of Mineralised body is northwest, northeast, or nearly north south and dips to southwest, northwest, southeast, or west with dip angles from 45° to 80°. They are in the central or edge part of the diorite dyke, granite porphyry, and sometimes in migmatite. Generally, the Mineralised bodies are 37-317m long and 20-225m downdip, with a width of 0.3-2.46m. The gold grade varies from 1.22 to 40.06g/t.

Exploration and Quality Control: The regional geological and mineral exploration began in the 1960s and from then, several phases of exploration work were carried out. The resource and reserve verification work of Wulong mine was undertaken in 2019, the detailed exploration work of Ligunzi deposit was completed in 2011, and the detailed exploration of Haojingou-Liguzni deposit was conducted during the period from 2012 to 2017. Table ES- 5 summaries the engineering's details in the three explorations. There is no new geology exploration work since then.

Table ES- 5: Summary of Trenching, Drilling and Tunnelling

Item	Wulong	Ligunzi	Haojingou-Ligunzi
Trenching/m^3	/	506	28,974.53
Surface Drilling/m	/	1,097.8	20,026
Underground Drilling/m	/	/	1,021.9
Tunnelling/m	3,650	308	1,619
Sampling	2,229	400	2,334

We have not received the QC data for Ligunzi deposit, but according to the client's description, the Haojingou-Ligunzi mining areas are located close to Ligunzi mining area, suggesting they may be an

extension of the same vein. Therefore, we believe the QC data from Haogou mining area is somewhat representative of the data quality for Ligunzi, the sampling preparation, security, and analytical procedures of Wulong gold mine and Haojingou-Ligunzi deposit are acceptable. The pass rates of both internal and external check samples are acceptable.

SRK's data verification of Wulong project is divided into two parts: one part is Wulong Mineralised zone; the other part is Haojingou-Ligunzi Mineralised zone including Haojingou Deposit and Ligunzi Deposit.

For Wulong Mineralised zone, SRK has performed data verification by taking duplicate samples during or after site visit. A total of 129 verification samples were chosen randomly to ensure the representation. The samples were sent to SGS Mineral Laboratory located in Tianjin China by commercial logistic company. The results show that most samples returned relative deviations between the original samples and SRK checks of within 20%, which are acceptable.

Jintai Project

Geology and Mineralogy: The Jintai project is located in the eastern edge of the Changdu-Lanping-Simao block of the Qiangtang-Sanjiang orogenic system and is adjacent to east of the Diancang – Yuanlao Mountain metamorphic basement complex of the upper Yangtse paleo platform. Gold Mineralisation in this area is closely related to Himalayan tectonics and alkaline magmatic activities.

The strata outcropped in the project area are Huanglongyan Formation and Shimenguan Formation of Paleoproterozoic, Jingxing Formation of Cretaceous, Yunlong Formation of Paleogene, Sanying Formation of Neogene and Quaternary. Bed 3 of Member 2 of Sanying Formation are the most important gold-bearing strata in the area.

The general structure in the area is a syncline fold. It is a subgrade of the Changyi compound syncline in the region. The core stratigraphy of the syncline is the Member 3 of Sanying Formation, and the orientation of the axis is about 325°. And it turns to about 350° at the West Mountain, and at about 700m northwest of Xidengping village, the direction turns to about 320°. The faults in the mine area are divided into two groups, one is northwest ("NW") trending fault, and the other is northeast ("NE") trending fault. According to relationship between the two groups of faults, it can be determined that the NE trending fault is newer than the NW trending fault.

The magmatic rocks in the mining area are mainly in the form of dikes, including diabase dikes, diorite dikes and syenite porphyry dikes.

There are regional metamorphism and dynamic metamorphism in the mining area.

Wallrock alteration types mainly include silicification, pyrite, and kaolinization. There is no obvious zonation of the alteration. When a variety of hydrothermal alteration is superimposed, the gold grade is usually higher, and vice versa.

Two Mineralised domains within the mining licence area and eight Mineralised domains in the exploration permit area are found. The main domains are V1 in the mining licence area and V4, V10 in the exploration permit area.

The gold Mineralised domain V1 is distributed in the northwest of mining licence. It strikes to the northwest of about 325~340°, dips to the southwest of about 235~250° with a dip angle of 6~15°, has a known strike length of 307m and down-dip extension of 539m. The thickness of the domain

ranges from 2.00 to 25.43m, with an average of 8.90m. The gold grade is 0.31 ~ 1.84g/t, with an average of 0.90g/t.

The gold Mineralised domain V4 is distributed in the Tangzibian zone, southern part of the exploration permit area. It strikes to the northwest of about 330°, dips to the southwest of 240° with a dip angle of 2~40°, has a known strike length of about 550m and the down-dip extensions range from 40m to 560m. The thickness of the domain V4 ranges from 0.79 m to 86.76 m, with an average of 22.87m. Most of the gold grade range from 0.2g/t to 10 g/t (the maximum is up to 113g/t), with an average of 1.69 g/t.

The Mineralised domain V10 is distributed in the Xidengping zone, northern part of the exploration permit area. It strikes to the northwest of about 330°, dips to the southwest of about 245° with a dip angle of 2~12°, has a known strike length of 268m and the down-dip extensions range from 120~410m. The gold grade in V10 gold domain ranges from 0.11g/t to 25g/t, with an average grade of 2.69g/t.

Exploration and Quality Control: In the mining licence area, the geological exploration has gone through three phases, the general exploration was conducted by Shanghai Fuduo from 2007 to 2010, the exploration for the domain V2 was completed by Shanghai Fuduo from 2012 to 2013 and the Mineral Resources verification was carried out Yunnan Yuanhao from 2020 to 2021.

In the exploration licence area, the geological exploration has included two phases, the exploration was conducted by Shanghai Fuduo from 2011 to 2017, and the advanced exploration was conducted by Yunnan Yuanhao from 2020 to 2022. The summary of the exploration workloads is listed in Table ES- 6

Table ES- 6: Summary Characteristics of Trenching and Drilling

Item	Mining area	Exploration area
Trenching/m^3	8,158	3,781.6
Drilling/m	2,917.9	11,699.5
Sampling	1,650	9,629

Shanghai Fuduo and Yunnan Yuanhao did the sampling in each exploration phase respectively. Samples were prepared and analysed by the laboratory of Kunming Mineral Resources Supervision and Testing Centre, the 3rd Geological Brigade of Yunnan Bureau of Geology and Mineral Resources Exploration and Development according to the Specification of Testing Quality Management for Geological Laboratories (DZ/T0130-2006).

SRK considers that the sampling preparation, security and analytical procedures used by Jintai Mining for Xidengping deposit are acceptable. The pass rates of both internal and external check sample are acceptable, while CRMs, duplicate and blank sample were not used in the project.

Hanfeng Project

Geology and Mineralogy: Tectonically, both the Lishan-Xinxing Mining Zone of Tianbaoshan Lead-Zinc Mine and the Dongfeng Mining Zone of Tianbaoshan Molybdedum-Zinc Mine are located at the junction of the western edge of Yanbian eugeosyncline fold belt and Dunhua uplift of Jilin Eugeosynclinal fold belt. The strata in this project area are mainly the Palaeozoic Ordovician -

Permian marine carbonate and volcano-sedimentary rock series, and the Mesozoic Jurassic continental volcaniclastic rocks.

The magmatic activity in the project area is strong, mainly showing the Hercynian and Yanshan granites. The area is dominated by fault structures, showing three groups of faults in northwest, north-northwest and northeast directions.

Lishan - Lishan-Xinxing Mining Area contains three polymetallic deposits, namely Lishan, Xinxing and Lishan Plant-Houshan.

The Lishan deposit (below -92m ASL) is a zinc-polymetallic deposit dominated by zinc ore, associated with some copper and lead. The orebodies are lenticular and lenticular like shaped forms. The main types of wall rock alteration are skarnization, horn faction, kaolinization, sericitization, silicification, chloritization, epidote, and pyritization. There are 128 zinc-lead-copper Mineralised bodies.

The ore minerals are mainly sphalerite and galena, followed by chalcopyrite, pyrite, pyrrhotite, magnetite, chalcocite, bornite and arsenopyrite. Gangue minerals are diopside, garnet, epidote, quartz, calcite, sericite, actinolite and chlorite.

Dongfeng - Dongfeng lead-zinc Mineralisation belt/deposit is mainly located in the skarn Mineralisation zone formed at or nearby fault zone. The Mineralised bodies have been identified in Dongfeng lead-zinc deposit, all of which belong to polymetallic Mineralisation type. The boundary between the Mineralised body and the surrounding wall rock is unclear and shows a gradual transition relationship.

The molybdenum orebodies (below 250m ASL) of the Dongfeng Mine are located within the contact zones of Early Jurassic diorite granite, Late Triassic quartz diorite, and fine-grained diorite, as well as along the surrounding fracture zones of the rock masses. These orebodies are controlled by the underlying concealed rock bodies and northwest-trending fault structures, resulting in two sets of northwest-trending molybdenum-bearing quartz vein zones with steep and gentle dips. The orebodies appear vein-like or kidney-shaped, arranged parallel to each other, sometimes exhibiting local contraction and dilation phenomena. The boundaries of the orebodies are defined by samples collected near the rock walls. Through deep-level tunnels and drilling engineering control, a total of 178 molybdenum orebodies of varying sizes have been discovered.

The ore minerals are mainly molybdenite, followed by a small amount of chalcopyrite, sphalerite, galena, arsenopyrite, and pyrite. Gangue minerals are quartz, diopside, chlorite, epidote, zeolite, calcite, feldspar, biotite.

Exploration and Quality Control: There is no new geology exploration work of Lishan lead-zinc mine (above-92m asl) and Dongfeng Mine (above 250m asl) since 2011, only the annual consumption and remaining reports of resources and reserves.

Lishan - The deep exploration of Lishan lead-zinc mine (below -92m asl) lasted nine years and one month from August 2011 to August 2020. The working methods include tunnel geological log, tunnel hydrogeology, engineering geology, environmental geology survey, tunnel exploration, and drilling. The basic sampling, infilled sampling, engineering test and experimental research are carried out. By August 20, 2020, a total of 46,351.96 m of drilling and 6,384.80 m of tunnel exploration has been completed.

Drill holes survey starts from 25m and then every 50m. Spot check of survey results are conducted regularly at each hole. The maximum deviation distance of borehole bending degree from the design coordinate is 7.78m. Hole depth is verified every 100m and before drilling completed. The exploration density of major Mineralised bodies is 20 ~ 135m × 8 ~ 126m. For other Mineralised bodies, the exploration density is 22 ~ 114m × 14 ~ 136m.

The sampling preparation, security and analytical procedures used by Hanfeng Mining are acceptable. The pass rates of both internal and external check sample are acceptable, while CRMs samples, duplicates and blank samples were not used in the project.

SRK has performed data verification by taking duplicate samples during or after site visit. A total of 152 verification samples were chosen randomly to ensure the representation. The samples were sent to SGS Mineral Laboratory located in Tianjin China by commercial logistic company. The results show that most Cu and a majority of Lead and Zinc samples returned relative deviations between the original samples and SRK checks of within 20%, which are acceptable.

Dongfeng - The exploration programme of the Dongfeng Molybdenum Mine (below 250m ASL) was conducted from December 2013 to February 28, 2023, including geological mapping in tunnels, as well as tunnel exploration and drilling. The exploration depth ranged from 250 meters to -600 meters. A total of 3611.9m drilling and 3499.54m of tunnel exploration from 2013 to 2017 and totalling 82,101.16 m drilling and 1207.80m of tunnel exploration from 2019 to 2023 were conducted.

The sampling preparation, security and analytical procedures used by Hanfeng Mining are acceptable. The pass rates of both internal and external check sample are acceptable, while CRMs samples, duplicates and blank samples were not used in the project.

SRK has performed data verification by taking duplicate samples during or after site visit. A total of 189 verification samples were chosen randomly to ensure the representation. The samples were sent to SGS Mineral Laboratory located in Tianjin China by commercial logistic company. The results show that most Mo samples returned relative deviations between the original samples and SRK checks of within 20%, which are acceptable.

Mineral Resources Estimation

The Mineral Resource Statement presented herein represents the Mineral Resource estimation prepared for the Chifeng Gold Project in accordance with the JORC Code. The effective date of the Mineral Resource statement is 31 March 2024.

The database used to estimate the **Jilong, Huatai and Wulong Projects** Mineral Resources was audited by SRK. Surpac 2020 software was used by SRK to create the grade solids, prepare assay data for analysis, construct the block model, estimate gold grades, and tabulate Mineral Resources. The final model was prepared by SRK using conventional 3D modelling and ID2 estimation techniques.

Table ES- 7 presents a summary of the estimated Mineral Resources in compliance with the JORC Code for the Jilong Project, as of 31 March 2024 and using a gold cut-off grade of 1.5g/t.

Table ES- 7: Mineral Resource Statement for the Jilong Project, as of March 31, 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Grade (Au g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Zhuanshanzi1# 2#3#&depth	MES	320	9.00	2.90	93
	IND	300	7.33	2.20	71
	MES + IND	**630**	**8.19**	**5.10**	**165**
	INF	450	8.58	3.90	125
Zhuanshanzi 4#5#6#&7#	MES	180	17.04	3.10	101
	IND	140	13.27	1.90	61
	MES + IND	**330**	**15.40**	**5.00**	**161**
	INF	80	13.16	1.00	32
Total	**MES**	**510**	**11.92**	**6.00**	**194**
	IND	**440**	**9.22**	**4.10**	**132**
	MES + IND	**950**	**10.66**	**10.10**	**326**
	INF	**530**	**9.23**	**4.90**	**157**

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate;

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Mingyan Wang and Dr Yiefei Jia who are full time employees of SRK Consulting China, Dr Jia is a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). Dr Jia and Mr Wang have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Dr Jia and Mr Wang consent to the reporting of this information in the form and context in which it appears; and

[3] The cut-off grade is 1.5g/t Au.

Table ES- 8 presents a summary of the estimated Mineral Resources in compliance with the JORC Code for the Huatai Project, as of 31 March 2024 and using a gold cut-off grade of 1.5g/t.

Table ES- 8: Mineral Resources Statement for the Huatai Project, as of March 31, 2024

Mineralized Zone/Block	Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Honghuagou #1 Mining Zone	Measured	251	6.21	1.56	50
	Indicated	759	6.48	4.92	158
	Measured + Indicated	**1010**	**6.41**	**6.47**	**208**
	Inferred	419	5.87	2.46	79
Honghuagou #86 Vein	Measured				
	Indicated	315	5.30	1.67	54
	Measured + Indicated	**315**	**5.30**	**1.67**	**54**
	Inferred	103	5.34	0.55	18
Honghuagou Pengjiagou mine	Measured				
	Indicated	338	5.36	1.81	58
	Measured + Indicated	**338**	**5.36**	**1.81**	**58**
	Inferred	148	5.88	0.87	28
Lianhuashan #5 Mining Zone	Measured	134	5.28	0.71	23
	Indicated	109	8.00	0.87	28
	Measured + Indicated	**243**	**6.50**	**1.58**	**51**
	Inferred	116	7.52	0.87	28

Lianhuashan #26 Vein	Measured				
	Indicated	217	9.54	2.07	67
	Measured + Indicated	**217**	**9.54**	**2.07**	**67**
	Inferred	135	9.34	1.26	41
Lianhuashan #3-7 Vein	Measured				
	Indicated	408	10.46	4.27	137
	Measured + Indicated	**408**	**10.46**	**4.27**	**137**
	Inferred	328	8.61	2.82	91
Total	Measured	**385**	**5.88**	**2.26**	**73**
	Indicated	**2146**	**7.27**	**15.60**	**502**
	Measured + Indicated	**2531**	**7.06**	**17.87**	**575**
	Inferred	**1249**	**6.90**	**8.62**	**284**

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate;

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li, Ms. Yanfang Zhao and Dr Yiefei Jia who are full time employees of SRK Consulting China, Mr Li is member of AIG, Ms Zhao is member of AusIMM and Dr Jia is a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). They have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. They consent to the reporting of this information in the form and context in which it appears; and

[3] The cut-off grad is 1.5g/t Au.

Table ES- 9 presents a summary of the estimated Mineral Resources in compliance with the JORC Code for the Wulong Project, as of 31 March 2024 and using a gold cut-off grade of 1.5g/t.

Table ES- 9: Mineral Resource Statement for the Wulong Project, as of March 31, 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Wulong	MES	-	-	-	-
	IND	1,042	8.92	9.30	299
	MES + IND	**1,042**	**8.92**	**9.30**	**299**
	INF	1,376	7.41	10.27	330
Ligunzi	MES				
	IND	126	5.16	0.65	21
	MES + IND	**126**	**5.16**	**0.65**	**21**
	INF	99	5.36	0.53	17
Haojingou-Ligunzi	MES	-	-	-	-
	IND	138	5.74	0.80	26
	MES + IND	**138**	**5.74**	**0.80**	**26**
	INF	268	6.73	1.85	59
Total	**MES**				
	IND	**1,309**	**8.22**	**10.75**	**346**
	MES + IND	**1,309**	**8.22**	**10.75**	**346**
	INF	**1,754**	**7.21**	**12.65**	**407**

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li, Mr Shaobo Dai and Dr Yiefei Jia who are full time employees of SRK Consulting China, Mr Li is a member of AIG and Dr Jia is

a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). They have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Li and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[3] The cut-off grad is 1.5 g/t Au.

The database used to estimate the **Jintai Project** Mineral Resources was audited by SRK. Surpac 2020 software was used by SRK to create the grade solids, prepare assay data for analysis, construct the block model, estimate gold grades, and tabulate Mineral Resources.

Table ES- 10 presents a summary of the estimated Mineral Resources in compliance with the JORC Code for the Jintai Project, as of 31 March 2024 and using a gold cut-off grade of 0.17g/t.

Table ES- 10: Mineral Resource Statement for the Jintai project, as of 31 March 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Xidengping	MES	3,363	1.68	5.64	181
	IND	4,800	1.01	4.83	155
	MES + IND	**8,160**	**1.28**	**10.47**	**337**
	INF	2,710	1.29	3.50	112

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li, Mr. Shaobo Dai and Dr Yiefei Jia who are full time employees of SRK Consulting China, Mr Li is a member of AIG and Dr Jia is a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). They have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. They consent to the reporting of this information in the form and context in which it appears.

[3] The cut-off grad is 0.17g/t Au.

For the **Hanfeng Project**, both Lishan and Dongfeng mines have long mining history, and SRK has only been provided the detailed data of the deep area (below -92m asl) of Lishan Mine and deep area of Dongfeng Molybdenum Deposit (below 250m asl), which means that only the Mineral Resources in deep areas can be reported.

According to a conceptual calculation, SRK considers that the blocks not below a cut-off grade of 0.50% Zn show "reasonable prospects for economic extraction" for the deep area of Lishan underground mine and can be reported as Mineral Resource, and that the blocks not below a cut-off grade of 0.03% Mo show "reasonable prospects for economic extraction" for the deep area of Dongfeng underground mine and can be reported as Mineral Resource.

As of 31 March 20244, of the estimated Mineral Resources of Lisha Mine in compliance with the JORC Code for the Hanfeng Project are shown in Table ES- 11.

Table ES- 11: Mineral Resource Statement for the Lishan Mine, as of March 31, 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Zn Grade (%)	Zn Metal Contained (kt)	Cu Grade (%)	Cu Metal Contained (kt)	Pb Grade (%)	Pb Metal Contained (kt)
Lishan	MES	750	2.36	18	0.01	0	0.12	1

Mineralised Zone/Block	Category	Tonnage (kt)	Zn Grade (%)	Zn Metal Contained (kt)	Cu Grade (%)	Cu Metal Contained (kt)	Pb Grade (%)	Pb Metal Contained (kt)
	IND	8,580	2.66	229	0.07	6	0.12	10
	MES + IND	**9,330**	**2.64**	**246**	**0.06**	**6**	**0.12**	**11**
	INF	10,620	2.90	308	0.09	10	0.13	14

Note:

[1] All figures are rounded to reflect the relative accuracy of the estimate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Ms Yanfang (Bonnie) Zhao and Dr Yiefei Jia who are both full time employees of SRK Consulting China, Ms Zhao is a member of AusIMM and Dr Jia is a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). Dr Jia and Ms Zhao have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Zhao and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[3] Within mining license area and below -92m asl.

As of 31 March 20244, of the estimated Mineral Resources of Dongfeng Mine in compliance with the JORC Code for the Hanfeng Project is shown in Table ES- 12.

Table ES- 12: Mineral Resource Statement for the Dongfeng Mine, as of March 31, 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Mo Grade (%)	Mo Metal Contained (kt)
Dongfeng	MES	1,820	0.11	2
	IND	26,490	0.12	32
	MES + IND	**28,310**	**0.12**	**34**
	INF	37,050	0.12	45

Note:

[1] All figures are rounded to reflect the relative accuracy of the estimate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Ms Yanfang (Bonnie) Zhao and Dr Yiefei Jia who are both full time employees of SRK Consulting China, Ms Zhao is a member of AusIMM and Dr Jia is a Fellow of AusIMM (No. 230607) and a Chartered Professional in Geology (*CP Geo*). Dr Jia and Ms Zhao have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Zhao and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[3] Within mining license area and below 250m asl.

Ore Reserves Estimation

SRK estimated the Ore Reserves for the Chifeng Gold's mines in accordance with the JORC Code guidelines and based on each mine's mining recovery rate and dilution rate as well as other modifying factors cited either from the historical mining records, the prefeasibility or feasibility study, and/ or mine designs. The following table summarises the estimated Ore Reserves of the Jilong, Huatai, Wulong, Jintai and Hanfeng projects, with an effective date 31 March 2024.

As of 31 March 2024, the **Jilong Project** contains a total Ore Reserves of 968kt at an average grade of 8.59g/t Au, containing 8.31t of gold. which includes Proved Ore Reserves of 537kt at an average grade of 9.66 g/t Au, containing 5.18 t of gold, and Probable ore Reserves of 431kt at an average grade of 7.27g/t Au, containing 3.13 t of gold (see Table ES- 13).

Table ES- 13: Ore Reserve Statement for the Jilong Project, as of March 31, 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	537	9.66	5.18	167
Probable	431	7.27	3.13	101
Total	**968**	**8.59**	**8.31**	**267**

Sources: SRK

Notes:

[1] The information relates to Orel Reserve conversion is based on information compiled by Ms. Tzuhsuan Chuang, *MAusIMM* and Dr Yiefei Jia, *FAusIMM* (CP Geo), who are full time employees of SRK Consulting China Ltd. Both Ms Chuang and Dr Jia have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Chuang and Dr Jia consent to the reporting of this information in the form and context in which it appears;

[2] Orel Reserve are estimated at a cut-off grade of 2.76g/t Au; and

[3] Number was rounded to the second significant digit, and total may not add due to rounding discrepancies.

As of 31 March 2024, the **Huatai Project** contains a total Ore Reserves of 1,694kt at an average grade of 6.20g/t Au, containing 10.50t of gold, which includes Proved Ore Reserves of 226kt at an average grade of 5.21g/t Au, containing 1.18t of gold, and Probable Ore Reserves of 1,468kt at an average grade of 6.35g/t Au, containing 9.32t of gold (see Table ES- 14).

Table ES- 14: Huatai Project Underground Ore Reserve Statement, as of March 31, 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	226	5.21	1.18	38
Probable	1,468	6.35	9.32	300
Total [3]	**1,694**	**6.20**	**10.50**	**338**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Dr Yiefei Jia, *FAusIMM* (CP Geo), who are full time employees of SRK Consulting China Ltd. Both Dr Jia and Mr Lu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Lu and Dr Jia consent to the reporting of this information in the form and context in which it appears;

[2] Ore Reserve are estimated at a cut-off grade of 2.93g/t Au; and

[3] Number was rounded to the second significant digit and total may not add due to rounding discrepancies.

As of 31 March 2024, the **Wulong Project** contains Probable Ore Reserves of 1,028kt at an average grade of 7.34g/t Au, containing 7.55t of gold (see Table ES- 15).

Table ES- 15: Ore Reserve Statement for the Wulong Project, as of March 31, 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	-	-	-	-
Probable	1,028	7.34	7.55	243
Total [3]	**1,028**	**7.34**	**7.55**	**243**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Ms. Tzuhsuan Chuang, *MAusIMM* and Dr Yiefei Jia, *FAusIMM* (CP Geo), who are full time employees of SRK Consulting China Ltd. Both Ms Chuang and Dr Jia have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Chuang and Dr Jia consent to the reporting of this information in the form and context in which it appears;

[2] Ore Reserve are estimated at a cut-off grade of 3/t Au; and

[3] Number was rounded to the second significant digit and total may not add due to rounding discrepancies.

As of 31 March 2024, the **Jintai Project** (V1&V2) contains Probable Ore Reserves of 1,563kt at an average grade of 0.74g/t Au, containing 1.15t of gold (see Table ES- 16).

Table ES- 16: Ore Reserve Statement for the Jintai Project, as of 31 March 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	-	-	-	-
Probable	1,563	0.74	1.15	37
Total	**1,563**	**0.74**	**1.15**	**37**

Sources: SRK

Notes:

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Mr Falong Hu, FAusIMM, who are full time employees of SRK Consulting China Ltd. Both Mr Lu and Mr Hu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Lu and Mr Hu consent to the reporting of this information in the form and context in which it appears.

[2] Ore Reserve are estimated at a cut-off grade of 0.25g/t Au; and

[3] Number was rounded to the second significant digit and total may not add due to rounding discrepancies.

As of 31 March 2024, the **Hanfeng Project** (Lishan Lower Part - Stage1) contains a total Ore Reserves of 3,310kt at an average grade of 2.45% Zn, containing 81kt of Zn, which includes Proved Ore Reserves estimated of 390 kt at an average grade of 2.26% Zn, containing 9kt of Zn, and Probable Ore Reserves of 2920 kt at an average grade of 2.47% Zn, containing 72 kt of Zn (see Table ES- 17).

Table ES- 17: Ore Reserve Statement for the Hanfeng Project, as of 31 March 2024

Reserve Category	Tonnage (kt)	Zn Grade (%)	Zn Metal Contained (kt)
Proved	390	2.26	9
Probable	2,920	2.47	72
Total	**3,310**	**2.45**	**81**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Dr Yiefei Jia, FAusIMM (CP Geo), who are full time employees of SRK Consulting China Ltd. Both Dr Jia and Mr Lu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Lu and Dr Jia consent to the reporting of this information in the form and context in which it appears;

[2] Ore Reserve are estimated at a cut-off grade of 1.4% Zn; and

[3] Number was rounded to the second significant digit and total may not add due to rounding discrepancies.

Mining Assessment

Jilong Project

Zhuanshanzi Mine currently has three stand-alone underground operating systems: Zone 1, Zone 2 and Zone 3. Zone 1 is located on the southwest side of the mine, including No. 27 area and Yangpo area. Zone 2 is located on the north side of Zone 1. Zone 3 is located on the east side of Zone 1. The Zhuanshanzi Mine intends to increase its production capacity by developing peripheral Zones 4, 5, 6, and 7. This expansion is projected to commence operations in 2027, with an expected production rate of 60 thousand tonnes per annum ("**ktpa**"). The LoM is expected to be 9 years.

All of these zones are utilizing an underground mining method, accessing the ore bodies via shafts or adits.

The resuing mining method is used in the Zhuanshanzi Mine, where the ore bodies are very steep and thin with solid surrounding rocks. This mining method enables the separation of the ore and surrounding rocks, with the ore being transported and extracted while the waste is kept in the stope for backfilling. The mining dilution is 20% and the ore loss is 5%.

The stope's length is 50m and its height is 40-45m. Wooden hopper is used, and the ore is transported manually. The distance between hoppers is 10m, the sill pillar is 3m, and no other pillar is left. There are raises beside the stope, and the section of the raise is 2.0m x 1.5m. The drift is about 2.4m x 2.5m depending on the ore body.

Huatai Project

Huatai Project includes six (6) gold mines, each with an independent development system. They are all utilizing or planning conventional underground mining methodologies, access via adit & shaft or incline shaft, resuing stoping method, railway ore car transportation. Huatai Project operation and plan status are described as follows:

- Pengjiagou Mine: the mining license (30ktpa) was obtained in 2015. The client conducted a preliminary design on this mine, decided to commend its production in 2028.
- Honghuagou #86 Vein: the mining license limits capacity of 30ktpa as the same as Pengjiagou, the client decided to delay construction on this mine.
- Honghuagou #1 Mining Zone: this mine contained 4 sub-zones with their own mining license, which are #1 vein, #3 sub-zone, #1 sub-zone, and Longtoushan. The client conducted a preliminary design on these sub-zones, decided to commend its production in 2027.
- Lianhuashan #26 Vein: the mining license limits capacity of 30ktpa as similar as the Pengjiagou and #86. The client conducted a preliminary design on this mine, decided to commend its production in 2028.
- Lianhuashan #3&#7 Vein: the mining license is also 30ktpa capacity. The client conducted a scoping studies and preliminary design on this mine, decided to commend its production in 2027.
- Lianhuagou #5 Mining Zone: this mine has also decided to modify mining system to achieve the capacity of 60ktpa from the previous 30ktpa. The client conducted a preliminary design on this mine, decided to commend its production in 2026.

A modified resuing stoping method, named slice and fill with rock is adopted by Huatai Mining. The stoping method is suitable for the veins horizontal thickness being less than 0.8m. The modifying point from traditional resuing is the rock sourced out of stope partly, not all from surrounding rock mined down. The dilution and mining loss records for the past 3 years from the Client are about 15% and 3%, respectively. Those rates are lower than practical as a rule of thumb.

The stope length is about 50 to 100m and the height is the same as level interval. There are no crown pillar or rib pillar planned, and the sill pillar is proposed for draw point installation and separation stopes. The square-set raise for manway is planned at each end of stope. The draw points interval is about 10m from centre to centre.

The average mining dilution rate is 20% and the ore loss is 15%. The LoM is expected to be 28 years.

Wulong Project

Wulong Mine currently has three stand-alone underground operating systems: Zone 2, Zone 3, and Zone 4. Zone 4 is further separated into the main shaft zone and the service shaft zone, and the latter is also known as Zone 5.

The development system is shafts and blind shafts. Shafts are being used for transporting ore and waste and personnel. Development to access these stope blocks is designed years in advance.

For steep and thin orebody with solid surrounding wall rocks, the resuing method is adopted to separate the ore and surrounding rocks, with the ore being transported and extracted while the waste is kept in the stope for backfilling.

For relatively thicker orebody, the overhand cut and fill mining is adopted. The cut and fill mining allows selective mining, separate recovery of high-grade portions, and stope retention of low-grade rock. Excavated voids are backfilled with waste rock once the stope has been mined out. This method provides a relatively inexpensive and convenient way to advance a working platform in order to keep access to the ore for drilling, blasting, and mucking.

The average mining dilution rate is 20% and the ore loss is 8%. The LoM is estimated to be 12 years with an expected production rate of 100ktpa.

Jintai Project

Jintai Mining obtains one mining license and one exploration license for the Xidengping Mine. Based on the geological characteristics, a total of nine (9) mineralised bodies, named V1, V2 (V2-1 and V2-2), V4, V5, V6, V7, V8, V9 and V10, were delineated, but only V1, V2, V4 and V10 contain the Measured and Indicated Mineral Resources.

Several technical studies on the mineralised bodies V1 and V2 within the mining license have been conducted since they obtained the mining license in 2012. Therefore, only V1 and V2 have the Ore Reserves. SRK has received and reviewed the following studies:

- Preliminary Design for Xidengping Mine with a capacity of 140ktpa conducted by JinJian Engineering Design Co., Ltd ("**GOCOM**") in February 2022 (hereafter referred to as "**FS 2022**"), and

- Mineral Resources Development and Utilisation Scheme for Xidengping Mine with a capacity of 650Ktpa conducted by Yunnan Shangli Mining Co., Ltd. ("**Shangli**") in March 2024 (hereafter referred to as "**FS 2024**").

They initialled mine and plant construction for the V1 and V2 at the beginning of 2023. The designed mining and processing capacity is 140ktpa. The mine is proposed for surface mining via free dig – transportation – heap leaching methodology. The LoM is about 12 years including one-year mine construction period, as the FS 2022 proposed.

The average mining dilution rate is 5% and the ore loss is 5%.

After review FS 2022 and discussed with mine management, SRK opines that the mine is well studied, and the mining method is technically reasonable and feasible. The risk on mining operation is low, as the method employed is common and practical. However, the pit optimization along with pit design, as well as cut-off grade definition could be updated when considering the JORC Code estimates.

Also, the Client is applying for another one mining licence for the exploitation of V4 and V10 with a capacity of 650Ktpa based on the FS 2024 and the application is in process.

Hanfeng Project

Hanfeng Mining operate 2 established mines, the Lishan Mine and Dongfeng Mine. They are both utilizing conventional underground mining methodologies, access via adit & shaft, shrinkage stoping method, railway ore car transportation. There are 2 processing plants which located in Lishan and Dongfeng, respectively. The Lishan Plant deals with zinc, lead, and copper resources and the Dongfeng Plant processes molybdenum feeds. The infrastructure at both mines is established and the risk of shortage of power, water, fuel and other materials is low.

The operating status of the Hanfeng Project is described as followings:

Lishan Mine

- Lishan Mine is divided into 2 parts in vertical.
- The upper part which is above -92m asl, is operated at a nominated capacity of 165 ktpa run of mine ("ROM") containing zinc, lead, and copper elements, feeding the Lishan plant. The upper part is currently in operation to mine the historically residual inventory. The upper part is not within the scope of the Ore Reserve estimation.
- The lower part, which is from -92m asl to -700m asl, is planned to construct in 2 stages.
- Stage I is targeting the Mineral Resource from -92m asl down to -373m asl. Stage I is proposed at a capacity of 435ktpa, operating with upper part together to achieve 600ktpa capacity. The construction of Stage I is currently on progress (as of March 2024). The main shaft has been developed but not equipped due to ventilation shaft and return air drift is on development.
- Stage II will focus on the Mineral Resource under -373m asl, downwards to -700m asl. The Client aims to achieve 600ktpa capacity. However, the technical studies and/or design on this stage has not initiated yet.

Dongfeng Mine

- Dongfeng Mine is also divided into two parts in vertical, and the intersection elevation is 250m asl.

- The upper part is on operating at the south section and north section
- South section contains the mineralisation veins of zinc, lead, and copper. The mined ore of this section is trucked to the Lishan Plant for treatment. It is expected that this section resource would maintain a mining plan of 60ktpa for the next three years.
- North section contains veins of moly element. This section was on care and maintenance before 2022. In 2022 this section was re-operated at 6 ktpa ROM. The Dongfeng Plant was also re-operated to treat this 6 ktpa ROM and 9k ore from surface stockpile, which was stored for nearly 10 years.
- The lower part is for the North section which is moly resources. The lower part Mineral Resources have been estimated but have not converted them into Ore Reserves yet due to a lack of a technical study currently.

Based on the historical mining production records in 2021, the mining dilution rate of 32% and ore loss of 19% on average, which is considered the comparation of resource depletion against run of mine.

Based on the remaining Ore Reserves of the Lishan Mine, the LoM is estimated to be 8 years. The peak mining rate is 450ktpa.

Metallurgical and Processing Assessment

Jilong Metallurgical Plant

Jilin Institute of Geological Sciences conducted a laboratory processing testwork on the Zhuanshanzi ore in 2018.

The gold grade of the composite sample is 10.20g/t and the silver grade is 45.32g/t. After grinding to -0.074 mm accounting for 70.0% (P_{70}=74μm), the sample is subjected to flotation tests. The test flowsheet is a closed circuit of "one roughing, two cleanings and two scavengings" to obtain gold concentrate. The final concentrate has a gold grade of 147.78g/t and a gold recovery of 95.05%, and a silver grade of 554.34g/t and a silver recovery of 80.25%. The test shows that the flotation process can be used to obtain desirable indexes for the ore of Zhuanshanzi gold mine. Nevertheless, Jilong Metallurgical Plant has not adopted the flotation method but whole ore cyanidation, as the whole ore cyanidation can produce gold bullion on site.

The existing Jilong Metallurgical Plant adopts whole ore cyanidation method to process the ROM for gold extraction. The plant has a processing capacity of 400tpd ROM. Table ES- 18 shows the historical production indexes of the Jilong Metallurgical Plant.

Table ES- 18: Historical Production Index of Jilong Metallurgical Plant

Items	Unit	2021	2022	2023	2024 Q1
ROM throughput	kt	143.67	152.74	152.58	33.27
Feed grade	g/t	7.51	6.23	9.33	6.56
Gold recovery	%	97.08	96.61	97.66	96.67
Gold in ingot	kg	1,048	919	1,390	211

The metallurgical plant is currently undergoing expansion. The original 400 tonnes per day ("tpd") processing plant remains unchanged, and a new 600tpd plant with the same metallurgical method is being built to achieve a final production capacity of 1,000tpd (or 300,000tpa). The entire expansion project is expected to be put into production by June 2024.

Huatai Metallurgical Plant

Huatai Mining commissioned the mineral experimental research institute of Inner Mongolia Autonomous Region to conduct a laboratory process test study on ore processing in 2017.

The gold grade of test sample is 6.22g/t, after grinding to -0.074mm accounted for 85% (P_{85}=74μm), a closed flotation circuit of "one roughing, two cleanings and two scavengins" was adopted to obtain gold concentrate. The final concentrate has a gold grade of 149.31g/t and gold recovery of 95.06%, indicating the ore is ameable to flotation. However, Huatai Metallurgical Plant did not adopt flotation but carbon-in-pulp ("CIP") method for obtaining gold bullion on site.

The Huatai Metallurgical Plant with a processing capacity of 200tpd (60ktpa) was built in 1987. A traditional CIP process was adopted to produce gold mud as the final product, which is then sent to the metallurgical plant of Jilong Mining to produce gold ingots for sale. Table ES- 19 shows the historical production indexes of the Huatai Metallurgical Plant. The ore supply has been seriously reduced due to mining renovation in 2022 and 2023, resulting in the plant out of running frequently. Until now, the processing plant is out of operation so there is no production record in 2024.

Table ES- 19: Historical Production Index of Huatai Metallurgical Plant

Items	Unit	2021	2022	2023
Processing throughput	kt	58.51	19.12	1.62
Feed grade	g/t	2.42	2.69	2.43
Gold recovery	%	93.75	93.41	92.80
Gold output in ingot	kg	132.75	48.02	3.65

Wulong Processing Plant

In 2021, Wulong Mining commissioned BGRIMM Technology Group to carry out a mineral processing test on the Wulong gold ore.

The closed-circuit comparative tests were carried out on three flotation processes: "on-site process" (one roughing, three scavengings and three cleanings), "two roughings, two scavengings and three cleanings" and "stage flotation (two products) process". The gold grade of the composite sample is 3.51g/t.

The test results showed that the gold concentrate with gold grade of 61.38g/t and gold recovery rate of 89.73% can be achieved by "on-site process" flotation. The gold concentrate with gold grade of 64.25g/t and gold recovery rate of 90.57% can be achieved by the process of "two roughings, two scavengings and three cleanings". The mixed gold concentrate with a mixed gold grade of 66.80g/t and the total gold recovery rate is 91.73% by "stage flotation process". After comparative analysis of processing flowsheet indexes, it is recommended to adopt "staged flotation process".

A new Wulong processing plant with a capacity of 3,000tpd was bult in 2020, and it was put into operation in January 2021. The old processing plant has ceased production. Grinding and separation are divided into two series. The production capacity of the first series is 1800tpd, and that of the second series is 1200tpd.The flotation process of "three roughings, two scavengings and three cleanings" is adopted for gold separation. The grade of ROM is 2.5-3.5g/t Au and the final concentrate is 51-60 g/t Au. The recovery rate fluctuates between 89% and 93% due to the variance of ROM grade and ore properties. Table ES- 20 shows the historical production indexes of the Wulong processing plant.

Table ES- 20: Historical Production Index of Wulong Processing Plant

Items	Unit	2021	2022	2023	2024Q1
ROM throughput	kt	382.1	418.6	579.3	138.93
Feed grade	g/t	2.48	3.42	3.53	3.17
Concentrate output	kt	14.62	25.13	33.08	6.68
Concentrate grade	g/t	57.93	51.5	57.01	60.6
Gold recovery	%	89.37	90.39	92.23	91.97
Gold in concentrate	kg	847	1,294	1,886	405

Jintai Heap Leaching Plant

The main factor affecting the gold leaching rate is the ore particle size according to the results of column leaching test from laboratory, SRK recommends that the particle size of the stacked ore be 100% less than 25mm, which is also a reasonable particle size that can be achieved by conventional crushing system. The permeability of ore heap is a key factor affecting the success or failure of heap leaching. The high content of "slime" (-200 mesh) in ore is very likely to cause the permeability problem of ore heap. SRK suggests the use of pelleting heap leaching process to avoid the permeability problem.

In order to verify the feasibility of gold extraction by heap leaching, Jintai Mining conducted industrial tests of heap leaching at the mine site from January 2014 to February 2015. The industrial test was carried out in three phases, with the test stacked ore grade ranging from 0.3 to 2.0g/t, with an average of 1.06g/t. The total amount of heap leached ore was about 160,000 t. A crushing process with two open circuit sections and pre-screening before fine crushing was used to crush the ore to less than 50mm, which was transported by car to the leach pad for stacking, with the initial test ore stacking height ranging from 1 to 2.5m and the later ore stacking height ranging from 5 to 15m. Leaching by sodium cyanide solution spraying. The leaching period was about 3 months, and the dosage of sodium cyanide was stabilized at about 150g/t and the dosage of lime was stabilized at about 4.2kg/t, which was much lower than the dosage of column leaching in the laboratory. The overall gold leaching rate was about 80%, and the leaching result of the test was good, which confirmed that heap leaching method for gold extraction was feasible in Xidengping mine.

GOCOM Engineering Design Co., Ltd. completed the *Preliminary Design of Eryuan Jintai Mining Development Co. Ltd. For 140,000t/a Open Pit Mining Project at Xidengping Gold Mine in Eryuan County* in October 2022, which was designed maximum size of stacked ore is 35mm and the heap was constructed by truck and then bulldozer. The ore heap is constructed in multiple layers, each layer is 7m high, and when the previous layer of leaching is finished, the next layer is directly

constructed without unloading the first one, until 6 layers. The heap was leached by spraying with 0.15%~0.20% Jinchan gold leaching agent. Design leaching rate of 85%, the final product is gold-loaded carbon, with the heap leaching comprehensive recovery rate of 85%. The GOCOM Preliminary Design is the basis of the current heap leach plant construction at mine, and also the design basis for this report.

The heap leaching plant was completed in October 2023. As of January 14, 2024, a total of 122,924 tonnes of ore had been heap leached (D1 and D2 heaps), with an average grade of 0.83g/t, yielding 83.06 kg of gold (carbon-loaded gold) and a gold recovery rate of 81.56%. The ore currently being leached amounts to 222,213 tonnes (D3 and D4 heaps), with 91.16 kg of gold recovered. The D5 heap, which is currently being built, has 35,940 tonnes of ore piled up.

Hanfeng Processing Plants

Hanfeng Mining commissioned Changchun Gold Design Institute to carry out two laboratory processing test study on deep molybdenum ore and refractory molybdenum ore respectively in December 2023. The deep molybdenum grade of the processing test sample is 0.115%, and the closed-circuit process can obtain the molybdenum concentrate with molybdenum grade of 46.96% and recovery of 88.05%. The refractory molybdenum grade of the processing test sample is 0.126%, and the closed-circuit process can obtain the molybdenum concentrate with molybdenum grade of 46.26% and recovery of 74.72%.

Hanfeng Mining has two processing plants, Lishan plant and Dongfeng plant. The Lishan plant processes Cu-Pb-Zn polymetallic ore, which sources from Lishan and Dongfeng mining areas. It adopts flotation process, and the main products are copper concentrate, lead concentrate and zinc concentrate. The designed production capacity of Lishan plant is 1,500tpd, and the current production capacity has reached 2,000tpd through technical renovation.

The Dongfeng plant processes molybdenum ore and the existing processing capacity is 700tpd. It adopts flotation process, and the processing product is molybdenum concentrate. The plant is put into production in July 2022. Table ES- 21 shows the historical production indexes of the two plants.

Table ES- 21: Historical Production Index of Hanfeng Processing Plants

Items	Unit	2021	2022	2023	2024 Q1
Lishan processing plant					
Ore Milled	kt	505.89	578.98	351.11	81.30
Feed Grade (Cu)	%	0.19	0.13	0.13	0.09
Feed Grade (Pb)	%	0.68	0.63	0.73	0.60
Feed Grade (Zn)	%	2.12	2.02	1.71	1.42
Cu Concentrate Output	t	2,932.03	2,014.82	1,438.74	287.63
Concentrate Garde (Cu)	%	20.16	18.62	17.47	13.83
Cu Recovery	%	61.23	49.84	54.35	51.80
Pb Concentrate Output	t	3,477.51	3,257.23	2,716.15	520.98
Pb Concentrate Garde	%	63.65	66.75	68.00	61.54
Pb Recovery	%	64.47	59.60	71.69	65.95
Zn Concentrate Output	t	19,905.29	21,882.40	11,287.29	2,186.28

Zn Concentrate Garde	%	47.18	47.12	47.40	46.89
Zn Recovery	%	87.45	88.31	89.17	88.67
Dongfeng processing plant					
Ore Milled (Mo)	kt	-	15.02	82.11	50.37
Feed Grade (Mo)	%	-	0.17	0.14	0.13
Mo Concentrate Output	t	-	41.71	206.48	111.91
Concentrate Garde (Mo)	%	-	43.45	40.64	42.87
Mo Recovery	%	-	71.69	67.57	73.27

Source: SRK

Capital Expenditures and Operating Expenses

The Capex and Opex are based on the historical operating data provided by each subsidiary company.

Jilong Project

Capex

Sunk Capex: The client has provided the sunk costs from 2018 to 2022 for future expansion of existing mine zones, and the total sunk costs are Chinese Yuan ("**CNY**") 8.61 mln.

Sustaining Capex: Sustaining capital includes capital development, and all costs related to the acquisition, replacement, or major overhaul of assets during the mine life required to sustain operations. According to the data provided by Jilong Mining, the capital expenditures for the last three year from 2021 to 2023 are CNY44.43 mln, CNY85.61 mln and CNY158.52 mln, respectively.

Expansion Capex: Jilong Mining has completed new preliminary design study for expansion zone (zone 5, zone 6 and zone7). The construction period is three years with the total capital cost of CNY13.78 mln.

Opex

According to the data provided by Jilong Mining, the historical Opex from 2021 to 2023 for the Jilong Project is presented in Table ES- 22). The Opex consists of the mining and ore processing plant operation costs and administration and management expenditure. The average Opex are CNY1,155 per tonne of ore ("**CNY/t**") in 2021, CNY1,133 /t in 2022 and CNY951/t in 2023.

Table ES- 22: Historical Operating Costs from 2020 to 2022

Item		Unit	2021	2022	2023
Mining					
	Ore Mined	T	138,313	157,064	151,605
	Total Cost	M CNY	105.16	123.86	108.25
	Unit Cost	CNY/t	760	789	714
Processing					
	Ore Milled	T	132,643	152,739	155,483
	Total Cost	M CNY	20.46	20.19	20.82
	Unit Cost	CNY/t	154	132	134

Item	Unit	2021	2022	2023
Administration and Management				
Total Cost	M CNY	31.92	32.30	45.23
Unit Cost	CNY/t	241	211	103
Total Unit Cost	CNY/t	**1,155**	**1,133**	**951**

Note:

[1] There is a certain deviation between the ore milled amount in the mineral processing section and the cost section, which is normal, due to the inconsistency of inventory and time nodes.

[2] The amount of ore mined and ore milled is not much different; therefore, the total unit cost is obtained by directly adding the mining unit cost, processing unit cost and administration and management unit cost.

Huatai Project

Capex

Huatai Gold Mine has no production in 2023. SRK only summarized historical data from 2020 to 2022. According to the data provided by Huatai Mining, the fixed and intangible assets invested for the last three years from 2020 to 2022 are shown in Table ES- 23. However, SRK does not obtain the detailed expenditures data but only the equipment purchasing plan and construction plan.

Table ES- 23: Historical Investments from 2020 to 2022

Year	Unit	2020	2021	2022
Fixed Assets	CNY mln	228.68	236.25	218.89
Intangible assets	CNY mln	10.32	43.45	38.73
Construction in progress	CNY mln	29.94	45.29	46.67

Opex

SRK only summarized historical data from 2020 to 2022. According to the data provided by Huatai Mining, the historical operating costs ("Opex") from 2020 to 2022 for the Huatai Project is presented in Table ES- 24. The Opex consists of the mining and ore processing plant operation costs and administration and management expenditure. The average Opex were CNY1,460/t in 2020, CNY1,407/t in 2021 and CNY3,649/t in 2022.

Table ES- 24: Historical Operating Costs from 2020 to 2022

Item	Unit	2020	2021	2022
Mining				
Ore Mined	t	59,844	55,822	15,310
Total Cost	CNY mln	46.41	47.56	24.97
Unit Cost	CNY/t	775	852	1,631
Processing				
Ore Milled	t	55,513	53,784	18,415
Total Cost	CNY mln	8.68	9.13	5.98
Unit Cost	CNY/t	156	170	325
Administration and Management				
Total Cost	CNY mln	29.38	20.73	31.18
Unit Cost	CNY/t	529	385	1,693
Total Unit Cost	CNY/t	**1,460**	**1,407**	**3,649**

Note

[1] There is a certain deviation between the ore milled amount in the mineral processing section and the cost section, which is normal, due to the inconsistency of inventory and time nodes.

[2] The amount of ore mined and ore milled is not much different; therefore, the total unit cost is obtained by directly adding the mining unit cost, processing unit cost and administration and management unit cost.

Wulong Project

Capex

The capital expenditures of the Wulong Project from the last three years from 2021, 2022 and 2023 are CNY316.40 mln, CNY211.47 mln and CNY137.29 mln, respectively.

The Wulong Mine intends to expand zone 2's current development and increase its capacity to 700,000t. After two exploration rights are converted to mining rights, the lifting capacity will be increased to 1 million tonnes per year or 3,000t/d.

Opex

According to the data provided by Wulong Mining, the historical operating costs ("Opex") from 2021 to 2023 for the Wulong Project is presented in Table ES- 25. The Opex consists of the mining and ore processing plant operation costs and administration and management expenditure. The average Opex were, CNY897/t in 2021 CNY1,121/t in 2022, and CNY1,227/t in 2023.

Table ES- 25: Historical Operating Costs from 2021 to 2023

Item		Unit	2021	2022	2023
Mining					
	Ore Mined	t	355,713	386,235	514,492
	Total Cost	CNY mln	133.44	190.76	259
	Unit Cost	CNY/t	375	494	503
Processing					
	Ore Milled	t	382,814	423,235	578,302
	Total Cost	CNY mln	169.34	238.01	351
	Unit Cost	CNY/t	442	562	607
Administration and Management					
	Total Cost	CNY mln	24.74	49.62	49.62
	Unit Cost	CNY/t	80	65	117
Total Unit Cost		CNY/t	**897**	**1,121**	**1,227**

Note

[1] There is a certain deviation between the ore milled amount in the mineral processing section and the cost section, which is normal, due to the inconsistency of inventory and time nodes.

[2] The amount of ore mined and ore milled is not much different; therefore, the total unit cost is obtained by directly adding the mining unit cost, processing unit cost and administration and management unit cost.

Jintai Project

Capex

Jintai Mining has started operation since 2023. The historical Capex of 2021, 2022, 2023 and 2024 Q1 are CNY5.65 mln, CNY18.04 mln, CNY56.20 mln and CNY2.72 mln, respectively.

Opex

The total unit Opex in 2023 was CNY109.57 per tonne of ore, including 37.42 CNY/t for G&A, 30.34 CNY/t for mining and 41.81 CNY/t for processing.

Hanfeng Project

Capex

Hanfeng Mining has no production in 2023, so SRK only summarized historical data from 2020 to 2022. According to the data provided by Hanfeng Mining, the fixed and intangible assets invested for the last three years from 2020 to 2022 are shown in Table ES- 26. The Hanfeng Mining intends to invest capital expenditures of CNY123 mln 2023, CNY59 mln in 2024 and CNY95 mln in 2025, as the sustaining capitals for expansion of mine development for both Lishan and Dongfeng mines.

Table ES- 26: Historical Investments from 2020 to 2022

Year	Unit	2022	2021	2020
Fixed Assets	M CNY	90.48	85.56	83.90
Intangible assets	M CNY	120.29	122.26	76.06
Construction in progress	M CNY	36.04	11.02	0.68

Opex

Hanfeng Mining has no production in 2023, so SRK only summarized historical data from 2020 to 2022. According to the data provided by Hanfeng Mining, the historical operating costs ("Opex") from 2020 to 2022 for the Hanfeng Project is presented in Table ES- 27. The Opex consists of the mining and ore processing plant operation costs and administration and management expenditure. The average Opex were CNY158/t in 2020, CNY156/t in 2021 and CNY164/t in 2022.

Table ES- 27: Historical Operating Costs from 2020 to 2022

Item		Unit	2020	2021	2022
Mining					
	Ore Mined	T	426,447	465,542	466,769
	Total Cost	CNY mln	25	29	35
	Unit Cost	CNY/t	53	63	82
Processing					
	Ore Milled	T	456,684	505,891	578,981
	Total Cost	CNY mln	29	30	37
	Unit Cost	CNY/t	72	66	63
Administration and Management					
	Total Cost	CNY mln	14.96	9.45	11.19
	Unit Cost	CNY/t	33	27	19
Total Unit Cost		CNY/t	**158**	**156**	**164**

Note

[1] There is a certain deviation between the ore milled amount in the mineral processing section and the cost section, which is normal, due to the inconsistency of inventory and time nodes.

[2] The amount of ore mined and ore milled is not much different; therefore, the total unit cost is obtained by directly adding the mining unit cost, processing unit cost and administration and management unit cost.

Economic Analysis

The economic analysis presented here is based on the results of the technical review. Some key assumptions are made for technical evaluation and Ore Reserve estimation purposes only. The Project economic analysis was conducted using the discount cash flow ("DCF") method and is based on assumptions of technical and economic parameters from actual historical production data and the feasibility study and/or mine design of each mine with some adjustments by SRK.

The following Table ES- 28 shows the forecasted Capex over the LoM and the forecasted unit Opex for the Chifeng Gold each project.

Table ES- 28: Forecasted Capex over the LoM and Forecasted Unit Opex for Each Project

Capex	Unit	Over LoM				
		Jilong [1]	Huatai [2]	Wulong	Jintai	Hanfeng [3]
Expansion	US$'000	19,079	35,942			15,145
Sustaining	US$'000	87,724	118,380	68,461	3,185	9,989
Closure	US$'000	2,081	5,058	5,514	848	2,121
Opex	**Unit**	**Unit Cost**				
		Jilong	Huatai	Wulong	Jintai	Hanfeng
Mining	US$'000	104.51	125.78	96.41	1.52	9.07
Processing	US$'000	19.31	25.80	76.33	6.70	9.31
G&A	US$'000	20.87	30.62	30.62	4.32	3.49
Total Opex	US$'000	144.69	182.19	203.35	12.55	21.87

Source: SRK

Note:

[1] Expansion for zones 5, 6 and 7;

[2] Expansion initial; and

[3] Expansion initial for zones 1, 2 and 3

The following Table ES- 29 shows the total cash flow over the LoM for each of the Chifeng Gold's project.

Table ES- 29: Total Cash Flow over the LoM for Each Project (unit: USD mln)

Item	Total Cash Flow over the LoM				
	Jilong	Huatai	Wulong	Jintai	Hanfeng
Revenue	531	646	417	57	161
Opex	140	308	209	24	72
Capex	107	154	68	3	25
Tax & other fees	68	54	41	10	38
After tax cash-flow	1,056	124	93	20	26

Source: SRK

The estimated NPV of each project with different discount rates are shown in Table ES- 30. The NPVs at 10% discount rate, as a base case are US$129 mln for the Jilong Project, US$11 mln for the Huatai Project, US$56 mln for the Wulong Project, US$10 mln for the Jintai Project, and US$10 mln for the Hanfeng Project.

Table ES- 30: NPV with Different Discount Rates for Each Project (unit: US$ mln)

Discount Rate	NPV				
	Jilong	Huatai	Wulong	Jintai	Hanfeng
5%	168	40.5	71	14	16
6%	161	32.1	67	13	15
7%	154	25.2	64	12	14
8%	147	19.6	61	12	12
9%	141	15.0	58	11	11
10%	**135**	**11.3**	**56**	**10**	**10**
11%	130	8.2	53	10	9
12%	125	5.6	51	9	8
13%	120	3.5	49	9	7
14%	115	1.7	47	8	6
15%	111	0.3	45	8	5

Source: SRK

Environmental approvals and status

Jilong Project

Three EIA reports have been completed and approved for the Jilong Project, covering the current main production facilities, the expanded processing plant and the new tailings storage facility. No rare plants and wild animals under state have been found around the project. Mine water is sedimented underground and discharged into the upper sump and reused in the processing plant. During the winter, the project may have a small amount of mine water discharging outside. During this site visit, SRK noticed that there are waste rock dumps in each mining area of the project. At present, the tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. The accident and collection ponds were built at the foot of the tailings dam. During the time of SRK's site visit, SRK did not observe any evidence of leaching or ARD impacts. SRK sighted that dust removers were installed in the processing plant. SRK did not note the obvious dust emission in the open area of the project during the time of this site visit.

Huatai Project

The EIA report for Chifeng Huatai Mining Ltd. Gold Mine Mining and Processing Expansion Project (60 ktpa) was prepared by Chifeng City Environmental Science Institute in May 2007. The EIA report was approved by Chifeng City Environmental Protection Bureau on June 6, 2007. In addition, SRK has sighted other six EIA reports and approvals which cover the whole mining sections.

The EIA report states that there are no sensitive targets such as natural reserves within 10 km of the project area. There are no rare, endangered and protected flora and fauna species within the scope of the project. The mine water is generally collected by water tank and reused for underground production. The processing wastewater is fully recycled, and the tailings filter wastewater is reused for processing as well. At present, waste rock from the project is mainly used for underground backfilling or sold for road building. During the site visit, SRK noticed that there are past-generated waste dumps at the portal of shafts in each mining area. During the time of SRK's site visit, SRK did not observe any evidence of leaching or ARD impacts.

Wulong Project

The EIA report for Liaoning Wulong Gold Mine Development Project (0.15Mtpa) was prepared by Dandong City Environmental Protection Science Institute in October 2006. The EIA report was approved by Dandong City Environmental Protection Bureau on November 6, 2006.

The EIA report for Liaoning Wulong Zhoujiagou TSF Treatment and Processing Plant (800t/d) Decommissioning Project was produced by China Coal Technology & Engineering Group Shenyang Design & Research Institute Ltd. in December 2013. The EIA report was approved by Dandong City Environmental Protection Bureau on April 8, 2014.

SRK noted that the EIA reports for the Liaoning Wulong Gold Mine Development Project (0.15Mtpa) and Liaoning Wulong Zhoujiagou TSF Treatment and Processing Plant (800 tpd) Decommissioning Project does not include the new processing plant. Wulong Mining stated that the EIA report for the new processing plant had been submitted to the environmental protection bureau and was under review.

The EIA report states that there were no rare or endangered flora and fauna in the project area. The project has a water treatment plant to treat mine water. The treated mine water is reused for production and heating, and the excess water is discharged into the Banshi River. SRK noted that the project's TSF is approximately 7 km from the downstream reservoir. SRK recommends that quality monitoring be undertaken of the groundwater and surface water resources within the project area (including upstream and downstream of the project area), and also any site water discharges. During this site visit, SRK noticed that the waste rocks were temporarily dumped at the portal of shafts in each mining area. Liaoning Wulong stated that the waste rock from the project is mainly used for underground backfilling or sold for construction. At present, the tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. The accident and leakage collection ponds were built at the foot of the tailings dam. During the time of SRK's site visit, SRK did not observe any evidence of leaching or ARD impacts.

Jintai Project

The EIA report for Xidengping Gold Mine Mining, Processing and Tailings Project (0.14Mtpa) was conducted by Kunming Nonferrous Metallurgy Design & Research Institute Led in December 2013. The EIA report was approved by Yunnan Province Environmental Protection Bureau on February 17, 2014.

During the EIA baseline study, some National second-class protected plants and animals were found in the project's survey area. The EIA concluded that with better management, the operation of the project would not have a significant impact on the diversity and distribution pattern of vegetation in this area and would have a lesser impact on wildlife. During this site visit, SRK observed the drainage ditch was well constructed around the leaching heap. Emergency pond and rainwater collection pond were constructed downstream of the leaching heap. The leach heap was paved with HDPE membrane and bentonite to prevent seepage. SRK sighted groundwater monitoring boreholes were utilized around the leaching heap. SRK noted the exceedance of arsenic levels in soil at the mine site during the environmental baseline study. The EIA report opines that this is related to the co-occurrence of arsenic in the gold ore formation process and that the project is located in an area where the background value of arsenic is high. The waste rock was discharged into the waste rock dump on site and the topsoil was collected for the future reclamation.

Hanfeng Project

The EIA report for Longjing Hanfeng Mining Ltd. Tianbaoshan Mine Area Residual Resources Recovery and Utilization Project was prepared by Yanbian Environmental Protection Science Institute in March 2005. The EIA report was approved by Yanbian Environmental Protection Bureau on March 14, 2005.

The EIA report for Lishan-xinxing Mine Area Lead-Zinc Mining Expansion Project (0.18Mtpa) was prepared by Jilin Metallurgical Research Institute Jilin Linchang Environmental Technology Service Ltd. in May 2013. The EIA report was approved by Jilin Province Environmental Protection Bureau on June 9, 2013.

The EIA report for Jilin Hanfeng Lishan Processing Plant Technical Transformation Project was produced by Jilin Northeast Coal Industry Environmental Protection Research Ltd. in February 2017.The EIA report was approved by Yanbian Environmental Protection Bureau on February 20, 2020. The EIA report for Jilin Hanfeng Lishan Mining Area Expansion Project (0.6Mtpa) was prepared by Jilin Linchang Environmental Service Ltd. Jilin Province Ecology and Environmental Bureau issued EIA approval on August 31, 2021.No endangered or protected flora and fauna in the project area were reported in the EIAs. Surface water bodies near the project include the Baoshan River and the Burhaton River. SRK recommends the company develop an emergency response plan for water supply to cope with problems caused by changes in groundwater table and pollution accident. Alternative water sources can be provided if the development affects the surrounding community's access to water. During this site visit, SRK noticed that the waste rocks from the project were temporarily dumped near the portal of shaft in the mining area and processing plant. Jilin Hanfeng stated that the waste rock is mainly used for underground backfilling. SRK has sighted some former waste rock dumps on site and one of them has been rehabilitated. At present, the tailings of the project are discharged into the TSF. SRK has sighted minor dust generation in the TSF during the site visit.

Risk Assessment

SRK completed a risk assessment of the risks identified for the Chifeng Gold Project in relation to their likelihood of occurrence and consequence in accordance with the Exchange to the Listing Rules.

SRK considers various technical aspects which may affect the feasibility and future cash flow of each operating mine and conducts risk assessments for the Chifeng Gold Project based on similar techno-economic conditions among the three mines, which have been summarized in Table ES- 31.

Table ES- 31: Risk Assessment for Chifeng Gold Project

Risk Source/Issue	Likelihood	Consequence	Risk
Jilong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Miner Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium

Risk Source/Issue	Likelihood	Consequence	Risk
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Processing and Metallurgy			
Poor Plant Reliability	Unlikely	Moderate	Low
Lower Throughput	Unlikely	Moderate	Low
Lower Smelting Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Possible	Moderate	Medium
Waste Rock and Tailings Management	Possible	Moderate	Medium
Hazardous Materials Management	Unlikely	Moderate	Low
Social Aspects	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Huatai Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing and smelting			
Poor Plant Reliability	Possible	Moderate	Medium
Lower Throughput	Possible	Moderate	Medium
Lower Smelting Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Major	Medium
Waste Rock and Tailings Management	Possible	Moderate	Medium
Hazardous Materials Management	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Likely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Likely	Moderate	High
Wulong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium

Risk Source/Issue	Likelihood	Consequence	Risk
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing			
Poor Plant Reliability	Unlikely	Moderate	Low
Lower Throughput	Unlikely	Moderate	Low
Lower Processing Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Possible	Moderate	Medium
Waste Rock and Tailings Management	Unlikely	Moderate	Low
Environmental Approval	Possible	Moderate	Medium
Social Aspects	Possible	Minor	Low
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Jintai Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Unlikely	Moderate	Low
Poor Mine Technical Management	Unlikely	Moderate	Low
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Processing and Metallurgy			
Poor Process Reliability	Unlikely	Moderate	Low
Lower Ore Throughput	Unlikely	Moderate	Low
Poor Permeability of Ore Heap	Possible	Moderate	Medium
Lower Gold Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Major	Medium
Waste Rock and Tailings Management	Unlikely	Moderate	Low
Social Aspects	Possible	Moderate	Medium
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Hanfeng Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Possible	Major	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			

Risk Source/Issue	Likelihood	Consequence	Risk
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing			
Poor Plant Reliability	Possible	Moderate	Medium
Lower Throughput	Possible	Moderate	Medium
Lower Processing Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Moderate	Low
Waste Rock and Tailings Management	Possible	Moderate	Medium
Environmental Approval	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium

Recommendations

SRK Offers the following recommendations:

Jilong Project

The current equipment at Jilong metallurgical and processing plant for crushing is far from perfect, resulting that the crushing product grain-size is larger. SRK recommends the proposed processing plant to choose new crushing equipment with a large reduction ratio, high efficiency, and low consumption to reduce the grain size of ore that to be fed and to achieve more crushing and less grinding, to reduce the energy consumption of grinding and to improve economic efficiency.

The capacity of the existing TSF is close to the design of closure and SRK recommends that the construction progress of new TSF shall be accelerated as soon as possible.

Huatai Project

In general, mine of Huatai Project were operated at small scale capacity for a long time. The geotechnical and hydrogeological conditions are not complex to deal with. Therefore, the underground access method, stoping method, and related service systems & machinery are suitable for the mine operations.

In order to ensure normal mining production in the future, the existing operation system and the design needs further supplementation and improvement, which include mainly the following aspects:

- The reconciliation study is recommended in the future. The reconciliation study would help the operation to compare the estimates against production, then improve the estimation getting a higher-level confidence of resource estimates and improve mining operation outcomes.

Wulong Project

The actual dilution rate and recovery rate seem to be incompatible with the planned ones as the mining grade is incredibly lower than the geological grade. It is recommended to conduct a reconciliation study for a better understanding of gaps and improve future production.

As the ore comes from different mining areas, and the ROM properties are obviously different and fluctuating, SRK suggests that the reagent regime in the process of actual production should be adjusted according to the production situation to obtain the optimal separating indexes.

SRK identified some environmental risks, i.e., the project's TSF is approximately 7 km from the downstream reservoir, which may have some impact on the quality of the groundwater and surface water resources within the project area. SRK recommends that quality monitoring be undertaken on these waters. Therefore, SRK considers that the risks are generally manageable.

Jintai Project

SRK has conducted Mineral Resource and Ore Reserve Estimates under the JORC Code. It is recommended to improve the quality of grade control model and incorporate it into resource/reserve model.

SRK considers the mining and stripping method adopted to be mature mining technology commonly used in open pit mining practices, and it is technically reasonable and feasible. The designed bench height and bench slope angle are considered reasonable, as well as the small-scale excavator is suitable for selective mining. However, the truck payload (7.8t) might not so popular as practice. Some larger truck (30t payload) is on site standing by, during site visit. The loading round would be increased then the haulage round would be reduced. But the excavator and truck matching each other would not be a material risk for operation, as the total volume of mining is small

For the heap leaching plant, SRK recommends that the particle size of the stacked ore be 100% less than 25mm, which is also a reasonable particle size that can be achieved by conventional crushing system. The permeability of ore heap is a key factor affecting the success or failure of heap leaching operation. The high content of "slime" (-200 mesh) in Xidengping ore is very likely to cause the permeability problem of ore heap. SRK suggests the use of pelleting heap leaching process to avoid the permeability problem. SRK believes that the designed recovery rate can be achieved under the condition of ensuring the ore size and the heap permeability. Heap leaching has the characteristics of flexible scale, low Capex and Opex, and rapid benefit. The discovery of V4 Mineralised body makes it possible to further expand the scale of heap leaching. SRK suggests that the possibility of future expansion of production scale should be considered when the heap leaching facilities are designed and constructed.

The final product of the mine is designed to be gold-loaded carbon, Jintai Mining sold the gold-loaded carbon directly, SRK suggests that a smelting workshop should be built in the mine to use a processing device of "high-temperature elution and homo-thermal electrowinning " to produce gold bullion, or gold ingot. The gold stripped carbon will be returned to the adsorption system after regeneration.

Hanfeng Project

SRK recommends Hanfeng Mining to carry out in-fill drilling exploration and/or underground exploration for resource category upgrade to meet life of mine plan for lower parts of both Lishan and Dongfeng mines.

In order to ensure normal mining production in the future, the existing operation system and the design needs further supplementation and improvement, which may include mainly the following aspects:

- The management is recommended to well study and document their own LoM plan to get a higher confidence of future operation for both Lishan and Dongfeng upper parts.
- Resources estimates update is recommended. The remained resource as stated in the Annual Resource/Reserve Report are 707kt (all category) of Dongfeng upper zinc resources. However, the management states that remained mining is ongoing as the resources are nearly depleted. The uncertainty of Mineral Resources makes the LoM plan uncertain.
- The reconciliation study is recommended in future when Mineral Resource model is established. The reconciliation study would help the operation to compare the estimates against production, then improve the estimation with a higher-level confidence of resource estimates.

1 Introduction

Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**", the "**Company**" or the "**Client**") commissioned SRK Consulting China Limited ("SRK') to undertake an independent technical assessment of all relevant aspects of its five subsidiaries' operating gold and polymetallic mines and associated processing and metallurgical plants (hereafter referred to as the "**Chifeng Gold Project**" or the "**Project**"), located in the People's Republic of China ("**China**').

The Chifeng Gold Project consists of the following mining projects:

- Jilong Project: it includes the Zhuanshanzi gold mine ("**Zhuanshanzi Mine**"), Jilong metallurgical and processing plant and other supporting facilities, located in Inner Mongolia Autonomous Region ('Inner Mongolia"). The Jilong Project is wholly owned and operated by Chifeng Jilong Mining Co., Ltd. ("**Jilong Mining**")
- Huatai Project: it consists of six (6) operating gold mines, #26 Vein, #3&7 Vein, #86 Vein, #1 Mining Zone, #5 Mining Zone and Pengjiagou mines, Huatai processing and metallurgical plant and other supporting facilities, located in Chifeng City, Inner Mongolia. The Huatai Project is wholly owned and operated by Chifeng Jilong Mining Co., Ltd. ("**Jilong Mining**").
- Wulong Project: it includes the Wulong gold mine ("**Wulong Mine**"), Wulong processing plant, and two exploration gold properties, namely the Ligunzi deposit and the Haojingou-Ligunzi deposit, which are all located in Dandong City, Liaoning Province. The Wulong Project is wholly owned and operated by Liaoning Wulong Gold Mining Co., Ltd. ("**Wulong Mining**").
- Jintai Project: it consists of the Xidengping gold mine ("**Xidengping Mine")** and Jintai heap leaching plant, located in Eryuan County, Yunnan Province. The Jintai Project is owned and operated by Eryuan Jintai Mining Development Co., Ltd. ("**Jintai Mining**").
- Hanfeng Project: it includes two lead and zinc polymetallic mines (i.e., Lishan Mine and Dongfeng Mine), two ore processing plants and one Dongfeng exploration molybdenum deposit. They are all located in Yanbian Korean Autonomous Prefecture ("**Yanbian**"), Jilin Province. The Hanfeng Project is wholly owned and operated by Jilin Hanfeng Mining Science and Technology Co., Ltd. (**Hanfeng Mining**").

SRK understands that the independent technical assessment was required to be included in a Competent Person's Report ("**CPR**", the "**Report**" or this "**Report**") to provide Chifeng Gold and potential [**REDACTED**] as well as possible [**REDACTED**] with SRK's technical opinions on the Project.

The Report was prepared following the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "**JORC Code**") and in accordance with the rules governing the listing of securities on the Stock Exchange of Hong Kong Ltd (the "**Exchange**") including the Chapter 18 requirements (Appendix B), Chapter 2.6 of the Guide for New Listing Applicants (Appendix C) and other relevant regulations of the Exchange and Hong Kong Exchanges and Clearing Ltd ("**HKEx**").

This Report does not express an opinion as to the value of mineral or other assets involved.

2 Program Objectives and Work Program

2.1 Purpose of the Report

The purpose of this Report is to provide both existing Chifeng Gold shareholders and potential [**REDACTED**] with a CPR of the Chifeng Gold Project located in Inner Mongolia, Liaoning, Jilin and Yunnan provinces of China. The SRK's report is proposed to provide an unbiased technical assessment of the risk and opportunities associated with the Project.

2.2 Reporting Standard

This Report has been prepared to the standard of, and is considered by SRK to be, a Technical Assessment Report under the guidelines of the 2015 edition of the *Code for Technical Assessment and Valuation of Mineral Petroleum Assets and Securities for Independent Expert Reports* (the "**Valmin Code**"). The Valmin Code incorporates The JORC Code for the reporting of Mineral Resources and Ore Reserves and is binding upon all the Australasian Institute of Mining and Metallurgy ("**AusIMM**") members.

This Report is not a Valuation Report and does not express an opinion as to the value of mineral assets. Aspects reviewed in this Report do include product prices, socio-political issues and environmental considerations; however, SRK does not express an opinion regarding the specific value of the assets and tenements involved.

In this Report, identified Mineral Resources and Ore Reserves are quoted using categorisation in accordance with the JORC Code. However, it should not be assumed that these Mineral Resource and Ore Reserve Estimates have necessarily been carried out in accordance with the guidelines and recommendations laid out in the JORC Code, at least until further documentation can be obtained on the estimates and they have been formally endorsed by a "Competent Person" in accordance with the JORC Code.

2.3 Limitations Statement

SRK is not professionally qualified to opine upon and/ or confirm that the Client has 100% ownership of its underlying tenement and/ or has any unresolved legal matters relating to any transfer of ownership or associated fees and royalties. SRK has therefore assumed that there are no legal impediments regarding the existence of the relevant tenements and that the Client has legal right to all underlying tenements as purported. Assessing the legal tenures and rights to the prospects of the Client and or any of its subsidiary companies are the responsibility of legal due diligence conducted by entities other than SRK.

2.4 Effective Date

The effective date for this CPR is deemed to be 31 March 2024 (the "Effective Date"). The Mineral Resource and Ore Reserve statements set out in this CPR are reported as of 31 March 2024 and represent the Mineral Resources and Ore Reserves at the Effective Date as audited by SRK.

The life of mine (the "**LoM**") plans and associated technical and economic parameters included in the LoM plans and technical and economic models all commence on 1 April 2024.

2.5 Work Program

The work program of this Project included:

- review of all relevant information and documents provided by Chifeng Gold as of 31 March 2024;
- site inspection to each of mines, processing and metallurgical plants and supporting facilities in December 2022, January and March 2023, and May and June 2024;
- data verification conducted by SRK in December 2022 and May 2024;
- discussion with the Company management and technical personnel;
- analysis of the data provided by the Company and generated by SRK;
- construct the geological solids, prepare data for statistical, established the block model, estimate grades, tabulate Mineral Resources;
- preparation of a draft report in accordance with the JORC Code and the rules governing the listing of securities on the Exchange including the Chapter 18 requirements and other relevant regulations of the Exchange and HKEx (the declaration date of Mineral Resources and Ore Reserves is 30 March 2024); and
- submission of the draft to Chifeng Gold and the related third parties for comments and finalization of the draft based on feedback.

2.6 SRK Experience

The SRK Consulting Group ("SRK Consulting") is an independent, international consulting practice that provides focused advice and solutions to clients, mainly from earth and water resource industries. For mining projects, SRK Consulting offers services from exploration through feasibility, mine planning, and production to mine closure.

Among the company's more than 1,500 clients are most of the world's major and medium-sized metal and industrial mineral mining houses, exploration companies, banks, petroleum exploration.

Formed in 1974 in Johannesburg, South Africa, SRK Consulting now employs more than 1,800 professionals internationally in 42 permanent offices across 20 countries on six continents. A broad range of internationally recognised associate consultants complements the core staff.

SRK Consulting employs leading specialists in each field of science and engineering. Its seamless integration of services, along with its global base, has made the company a world leader in due diligence, feasibility studies, and confidential internal reviews.

SRK Consulting's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This enables the company to provide its clients with objective, conflict-free recommendations on crucial judgement issues.

SRK China was established in 2005 and has three offices located in Beijing, Nanchang and Kunming. Either independently or together with other SRK Consulting offices—especially SRK Australasia,

SRK has been providing independent technical services for the Chinese mining companies. SRK has considerable experience at providing Independent Expert Reports for mining companies who have successfully listed on the stock exchanges in Hong Kong, Australia, United Kingdom, Canada, South Africa and the United States.

SRK has provided dozens of independent technical reports for the Chinese mining companies who have completed successfully listed and/or acquired on the Stock Exchange of Hong Kong Ltd., as shown in Table 2-1.

Table 2-1: SRK's Reports for Listing on the HKEx

Company	Year	Nature of Transaction
Yanzhou Coal Limited (listed in HKEx)	2000	Sale of Jining III coal mine to the listed operating company
Chalco (Aluminium Corporation of China)	2001	Listing on HKEx and New York Stock Exchange
Fujian Zijin Gold Mining Group	2004	IPO Listing on HKEx
Lingbao Gold Limited	2005	IPO Listing on HKEx
Yue Da Holdings Limited (listed in HKEx)	2006	Acquisition of shareholding in mining projects in Yunnan, China
China Coal Energy Company Ltd (China Coal)	2006	IPO Listing on HKEx
Sino Gold Mining Limited	2007	Dual Listing on HKEx
Xinjiang Xinxin Mining Industry Co., Ltd	2007	IPO Listing on HKEx
Kiu Hung International Holding Limited	2008	Acquisition of shareholding in coal projects in Inner Mongolia, China
Hao Tian Resource Group Limited	2009	Very Substantial Acquisition of two coal mines in Inner Mongolia, China
Green Global Resources Holdings Ltd	2009	Very Substantial Acquisition of shareholding in one iron project in Mongolia
Ming Fung Jewellery Group Holdings Ltd	2009	Acquisition of shareholding in gold project in Inner Mongolia, China
Continental Holdings Limited	2009	Acquisition of a gold project in Henan, China
North Mining Shares Company Limited	2009	Acquisition of a molybdenum mining project in Shaanxi, China
CNNC International Ltd	2010	Acquisition of a uranium mine in Africa
Sino Prosper Mineral Products Ltd	2010	Acquisition of shareholdings in one gold project in Inner Mongolia, China
New Times Energy Corporation Ltd	2010	Acquisition of shareholding in gold projects in Hebei, China
United Company RUSAL Limited	2010	IPO Listing on HKEx
Citic Dameng Holdings Limited	2010	IPO Listing on HKEx
China Hanking Holdings Limited	2011	IPO Listing on HKEx
China Daye Non-Ferrous Metal Mining Limited	2012	Very Substantial Acquisition on HKEx
China Nonferrous Mining Corporation Limited	2012	IPO Listing on HKEx
Hengshi Mining Investments Limited	2013	IPO Listing on HKEx
Future Bright Mining Holdings Limited	2014	IPO Listing on HKEx

Company	Year	Nature of Transaction
King Stone Energy Group Limited	2014	Acquisition of Shareholding in silver mines in Fujian, China
Agritrade International Pte LTD	2015	Acquisition of Shareholding in one coal mine in Indonesia
China Unienergy Group Limited	2016	IPO Listing on HKEx
Pizu Investment Co. Ltd	2020	Acquisition of Shareholding in a polymetallic project in China
China Qinfa Group Limited	2021	Annual disclosure of coal mines in Shanxi, China
China Graphite Group Limited	2022	IPO Listing on HKEx
Kinetic Development Group	2022	Major transaction of equity interest in Ningxia Sunshine
Persistence Resources Group Ltd	2023	IPO Listing on HKEx

2.7 Project Team

The SRK project team and responsibilities are shown in Table 2-2.

Table 2-2: SRK Project Team

Consultant	Title	Discipline and Task
Dr. Yiefei Jia	Principal Consultant (Geology)	Project Manager, whole report, CP
Yanfang (Bonnie) Zhao	Principal Consultant (Geology)	Geology, Mineral Resource Estimation
Feng (Frank) Li	Principal Consultant (Geology)	Data Verification and QA/QC
Mingyan Wang	Consultant (Geology)	Geology, Mineral Resource Estimation
Huaixiang (Hubert) Li	Senior Consultant (Geology)	Geology, Mineral Resource Estimation
Shaobo Dai	Senior Consultant (Geology)	Geology, Mineral Resource Estimation
Falong Hu	Principal Consultant (Mining)	Mining and Ore Reserve Review
Tzuhsuan Chuang	Senior Consultant (Mining)	Mining, Ore Reserve Estimation
Erwei Lu	Consultant (Mining)	Mining, Ore Reserve Estimation
Alexander Thin	Principal Consultant (Mining)	Mining and Ore Reserve Review
Xiangfeng Yang	Senior Consultant (Processing)	Processing and Metallurgical Review
Chao Ding	Consultant (Processing)	Processing Review
Lanliang Niu	Principal Consultant (Processing)	Processing and Metallurgical Review
Nan Xue	Principal Consultant (Environment)	Environment, Social, and Permitting
Meining (Ivy) Dai	HSQ and Project Coordinator	Project Coordination and Translation
Pengfei Xiao	Principal Consultant (Geology)	Internal Peer Review and Quality Control
Dr Yonglian Sun	Corporate Consultant (Mining)	Internal Peer Review and Quality Control

Yiefei Jia, *PhD, FAusIMM (CP Geo),* is a Principal Consultant (geology) with a specialty of exploration of mineral deposits. He has more than 25 years' experience in the field of exploration, development, and Mineral Resources estimate of precious metal (gold, silver, and PGE), non-ferrous metal (lithium, lead, zinc, copper, vanadium, titanium, cobalt and nickel), and black metal (iron and manganese) as well as non-metallic metal (potash, fluorite and graphite) and decorative stone (marble) ore deposits in different geological settings in Australia, Africa, China, and North and Central America. He also has over five years' experience in coal deposits exploration and due diligence in China, Indonesia and Mongolia. He has extensive experience in project management, exploration

design and Mineral Resource assessment. In recent years, he, as Competent Person, has led and coordinated dozens of due diligence projects with technical reports either for fund raising or listing on overseas stock exchanges, such as the Stock Exchange of Hong Kong Limited. *Dr Jia is responsible for the whole report. Dr. Jia is qualified as a Competent Person with regard to the type of deposit and the activity undertaken.*

Yanfang Zhao (Bonnie), *MEng, MAusIMM*; Senior Consultant (Geology). Before joining SRK, she worked in Silvercorp Metals Inc. and was mainly responsible for data processing, resource modeling and reserve estimation for operational mines and exploration projects. Bonnie joined SRK China in 2012 and has been involved in more than 50 mining projects in the aspect of data verification, resource modeling and reserve estimation, due diligence and preparing Qualified Person Report in China, Mongolia, Indonesia, Zambia, DRC, Angola and Australia with minerals including Au, Ag, Cu, Fe, Pb, Zn, and Coal. At SRK, she participated in several successful cases in recent years, and most of them have completed acquisition or public listings in stock exchanges, including China Unienergy IPO Listing on HKEx, Agritrade Resource major acquisition of a coal mine in Indonesia, and CNMC African project. Bonnie is expertized in data processing, resource modeling, reserve estimation and independent technical reporting. She is proficient in using mining software, including Surpac, Minex, Leapfrog, Arcgis, and AutoCAD. *Ms. Zhao is responsible for the geology and Mineral Resource estimation Review*

Huaixiang（Hubert) Li, *MEng, MAIG,* is a senior consultant (geology) with SRK China. He graduated from the China University of Geosciences (Beijing) and used to work in a geological exploration company for more than 6 years and gained lots of experiences and expertise in geological and Mineral Resources exploration. As a consulting geologist, he has participated a number of metal mineral projects, including exploration design review, data verification, due diligence reviews and Mineral Resource estimation. He is familiar with the principles and methods for metal ore deposits prospecting and exploration including lithium, gold, silver, PGE, REE, copper, lead, zinc, molybdenum, bauxite, etc. He is proficient in geological modelling, Mineral Resources estimation, data processing and GIS/RS application. *Mr. Li is responsible for the geology and Mineral Resource estimation Review.*

Mingyan Wang, BMgt, is a Consultant (Geology) with SRK China, Prior to joining SRK in 2022, he was employed it China Geo-Engineering Corporation., where he focused on ecological restoration design and comprehensive land management. At SRK, his main responsibilities include Mineral Resource modelling and estimation, data processing and map drafting. He has also served as an onsite geologist for exploration projects, overseeing geological logging, sampling, and quality control. Mingyan is proficient in software such as GIS/RS, Surpac, Leapfrog, and AutoCAD. *Mr. Wang is responsible for the geology and exploration review, data processing, Modelling and Mineral Resource estimation.*

TzuHsuan (Shan) Chuang, *M.Eng.*, *MAusIMM,* is a Senior Consultant (Mining) at SRK China. She has experience in consulting and operation management. After graduating from Colorado School of Mines, she conducted scoping studies, pre-feasibility, feasibility studies, and project valuation in Zijin mining design company, with projects in China, Serbia, Tajikistan, Australia, Colombia, and Guyana. She then worked at Buritica underground gold mine of Continental Gold in Colombia, and was responsible for LOM plan, production operation, and grade control optimization. Her expertise includes pit optimization, mine design, and scheduling in metal mine, and is skilled in using Deswik, Whittle, Surpac, Minesched, and AutoCAD. *Ms Chuang is responsible for mining review and Ore Reserve estimation.*

Erwei Lu, *M.Eng.;* Consultant (Mining) at SRK China***,*** he obtained his bachelor's degree and master's degree in mining engineering from Central South University. He has over five years of practice of underground operation, and about one year's mineral project evaluation experience. He worked as an on-site mining engineer in Zambia for China Nonferrous Metal Mining (Group) Co., Ltd. after graduation in 2017. He also worked for an autonomous driving application and mineral project investment companies since 2022. He is familiar with large scale underground mobile equipment operation and training, long-hole blasting, mine design and scheduling, and production management, as well as autonomous driving application in open pit mine, and project evaluation. *Ms Chuang is responsible for mining review and Ore Reserve estimation.*

Falong Hu, MBA, B.Eng, FAusIMM, *Chinese Certified Mine Constructor, Chinese Certified Mineral Right Value, Chinese Certified Consulting Engineer (Investment)*, is a Principal Consultant (Mining). He obtained his bachelor's degree in mining engineering from Central South University and Master of Business Administration (MBA) in China University of Geosciences (Beijing). Before joining SRK he worked as an on-site and head office mining engineer in 2 different international mining companies which were called Sino Gold Mining Limited (later merged with Eldorado Gold Corp.) and Silvercorp Metals Inc. He is familiar with underground and open pit mines' production systems and has been involved in mining engineering and development design, scheduling, long-hole blasting and production operation, rock mechanics, ventilation, back-fill; and cost accounting. After take part in SRK, he accumulated extensive experience in ore reserve estimation, economic analysis, project valuation, mining assessment, scoping/pre-feasibility/feasibility studies and so on. Minerals include gold, silver, lead, zinc, copper, iron, bauxite, laterite-nickel, sylvine, phosphate and graphite, as well as quartzite, marble, bentonite and so on. He is a modeler on both technical and economic and also proficient in digital modeling by using Surpac, Whittle, Minesched, Datamine and AutoCAD. *Mr Hu provided a review on mining and Ore Reserve Estimates*.

Xiangfeng Yang, MEng; *MAusIMM, Chinese Certified Constructor (Mining Engineering and Mechanical and Electrical Engineering), Registered Cost Engineer, Chinese Certified Mineral Right Value*, is a senior consultant (processing) at SRK China. She graduated from Wuhan University of Technology in 2010. During her undergraduate and master's studies, she systematically learned the relevant knowledge of non-ferrous metal ore and non-metal ore separation process and mineral processing plant design. She has been engaged in feasibility research, preliminary design and construction drawing design at Bluestar Lehigh Engineering Institute and NMS. She has published several journal papers and utility models and has led and participated in many medium and large phosphate mines, potassium salt, sulphide ore and other processing projects. She has rich experience in the design of processing programs such as salt and sulphide ore and has rich experience in the selection of mineral processing equipment, bidding and procurement, the design of mineral processing technology plans, as well as the configuration of processing workshops. *Ms Yang is responsible for processing and Metallurgical review*

Nan Xue, *M.Sc, MAusIMM,* is a Principal Environmental Consultant with SRK Consulting China Ltd. He holds a master's degree in environmental sciences from Nankai University in Tianjin. He has four years' experience in environmental impact assessment, environmental planning, and environmental management. He has been involved in a number of large EIA projects and pollution source surveys for SINOPEC, as well as the environmental planning project funded by UNDP. He has particular expertise in construction project engineering analysis, pollution source calculations, and impact predictions. In recent years after he joined SRK, Nan Xue has been involved in a number of due

diligence projects, such as the Fuguiniao Mining project in China. *Mr. Xue has reviewed the environment, permits and approvals.*

Pengfei Xiao, *MSc, MAusIMM, MAIG,* is the Managing Director of SRK China. He is a Principal Consultant (Geology) with a specialty in mineral exploration applying comprehensive geological and geophysical methods; and his expertise also includes resource modelling and estimation. He is familiar with both theory and practice in sampling, sample preparation and chemical analysis. As a consulting geoscientist, he has been active in mining projects including due diligence reviews, exploration design, data verification and resource estimation in China, Mongolia, Africa, America, Southeast and Central Asia. His experience relates precious metal (Au, Ag, PGE), base metal (Cu, Ni, Pb, Zn) and other metal deposits (Fe, Mn, V, Mo, Co), and also includes a few non-metal projects (phosphorite, potash, gypsum). In the past ten years he has been working in geology and resource assessment with SRK, and co-authored dozens of technical reports aiding clients in successful property transactions; and more than half of them are published in stock exchanges. *Mr Xiao is responsible for the internal peer review to ensure the quality of the Report meeting the required standard.*

Dr Yonglian Sun, *BEng, PhD, FAusIMM, FIEAust, CPEng*, is a Corporate Consultant (Geotech) with over 25 years' experience in geotechnical and mining engineering in five countries across four continents. He has extensive international mining experience with an emphasis on site investigation, analysis, and modelling of geotechnical issues in open pits, underground mines, and civil tunnels. He also possesses considerable experience in evaluating mining projects. In recent years, Yonglian has coordinated and led dozens of due diligence projects, most of which have been successfully listed in the Stock Exchange of Hong Kong Limited. *Dr Sun provided internal peer review to ensure the quality the report meets the required standard.*

2.8 Warranties

Chifeng Gold has warranted to SRK that full disclosure has been made of all material information and that, to the best of their knowledge and understanding, such information is complete, accurate and true. SRK has no reason to doubt these warranties.

2.9 Compliance Statement

The information in this report that relates to Mineral Resources/Ore Reserves is based on information compiled by Dr. Yiefei Jia, a Competent Person who is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo), and Mr Falong Hu, a Competent Person who is a Fellow of the AusIMM. Both are full-time employees of SRK.

This Report is a Competent Person's Report in line with the Listing Rules of the Exchange and HKEX.

Dr. Yiefei Jia and Mr Falong Hu have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code".

Dr. Yiefei Jia and Mr Falong Hu consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Peer review and quality control of the Report were conducted by Mr Pengfei Xiao, *MAusIMM*, a Principal Consultant (Geology) and Dr Yonglian Sun, *FAusIMM (CP Eng*), a Corporate Consultant (Mining).

2.10 Independence Statement

Neither SRK nor any of the authors of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK's fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

SRK has no prior association with Chifeng Gold or Chifeng Gold's employees or in regard to the mineral assets that are the subject of this Report. SRK has no beneficial interest in the outcome of the technical assessment being capable of affecting its independence. SRK is independent of Chifeng Gold applying all of the tests in 18.21 and 18.22 of the Listing Rules of the Exchange and HKEX.

2.11 Consent

SRK consents to this Report being included, in full, in documents that Chifeng Gold proposes to submit to the HKEX and/ or disclosure to the public markets, in the form and context in which the technical assessment is provided, and not for any other purpose.

SRK provides this consent on the basis that the technical assessments expressed in the Executive Summary and in the individual sections of this Report are considered with, and not independently of, the information set out in the complete Report and the Cover Letter.

2.12 Forward Looking Statement

Estimates of Mineral Resources, Ore Reserves, and mine production are inherently forward-looking statements, which being projections of future performance will necessarily differ from the actual performance. The errors in such projections result from the inherent uncertainties in the interpretation of geologic data, in variations in the execution of mining and processing plans, in the inability to meet construction and production schedules due to many factors including weather, availability of necessary equipment and supplies, fluctuating prices, ability of the workforce to maintain equipment, and changes in regulations or the regulatory climate.

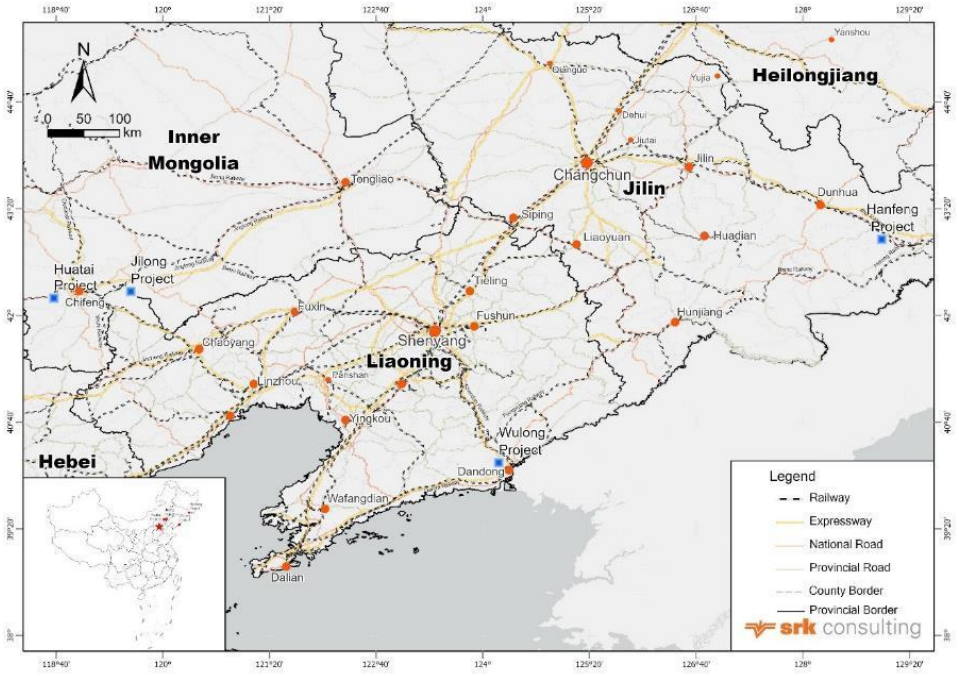
The possible sources of error in the forward-looking statements are addressed in more detail in the appropriate sections of this report. Also provided in the report are comments on the areas of concern inherent in the different areas of the mining and processing operations.

3 Property Description and Location

3.1 Property Location

The Jilong, Huatai, Wulong and Hanfeng projects are operating gold and/or polymetallic mines with associated ore processing and metallurgical plants and exploration tenements, which are located in Inner Mongolia, Liaoning and Jilin provinces, northeast part of China (see Figure 3-1).

Figure 3-1: General Location Map of the Project (northeast part)



The property of Jintai Project is located in Yunnan province, southwestern part of China (Figure 3-2).

Figure 3-2: General Location Map of the Project (southwestern part)

3.1.1 Jilong Project

The Jilong gold project is located about 21km west of Aohanqi or 58km west of Chifeng City, Inner Mongolia. Chifeng City has extensive networks of railway line and well paved highways and is also about 400km northeast of Beijing. The Zhuanshanzi operating gold mine and exploration permits are administered by Sidaowan Township (四道湾镇) of Aohanqi. The central geographical coordinates of the Jilong Project are longitude 119° 36′ 5.02587″ E and latitude 42° 18′ 19.94458″ N (2000 National Geographic Coordinate System).

3.1.2 Huatai Project

The Huatai gold project is located approximately 33~38km west of Chifeng City, Inner Mongolia. Three operating mines of the Lianhuashan gold mine, Honghuagou gold mine and Pengjiagou gold mine, and exploration permits are administratively under the jurisdiction of Wangfu Township (王府镇), Songshan District of Chifeng City. The project's central geographical coordinates are longitude 118° 35′ 12″ E and latitude 42° 14′ 23″ N (1980 Xi'an Geographic Coordinate System).

3.1.3 Wulong Project

The Wulong gold project is located about 15km west of Dandong City, Liaoning Province. The Wulong operating gold mine and the Haojingou-Ligunzi exploration permit are administered by Zhenxing District of Dandong City. The project's central geographical coordinates are longitude 124° 11′ 53″ E and latitude 40° 09′ 44″ N (1980 Xi'an Geographic Coordinate System).

3.1.4 Hanfeng Project

The Hanfeng polymetallic project is located approximately 42km of northwest of Longjing City, Jilin Province. The Hanfeng polymetallic project consists of two mining areas (i.e., the Lishan-Xinxing and Dongfeng mining areas). Administratively, the Tianbaoshan lead-zinc mine and the Dongfeng exploration permit are under the jurisdiction of Laotougou Township (老头沟镇), Longjing City, Yanbian Korean Autonomous Prefecture. The project's central geographical coordinates are longitude 128º58′30″E and latitude 42º56′25″N (1980 Xi'an Geographic Coordinate System).

3.1.5 Jintai Project

The Xidengping gold mine, located southwest of Eryuan County, is administered by Liantie Township (炼铁乡) of Eryuan County (洱源县), Dali Bai Autonomous Prefecture (大理白族自治州). The project's central geographical coordinates are about longitude 99º48′12″E and latitude 25º59′58″N (2000 National Geographic Coordinate System).

3.2 Mineral Tenure

SRK relies on the information provided by the Company, and SRK did not conduct a legal due diligence review of the Project since such work is outside the scope of SRK's technical review.

3.2.1 Jilong Project

Two mining license and two exploration permits are currently held by Jilong Mining. Details of the mining license and exploration permits for the Project are presented in Table 3-1 and Table 3-2, respectively.

Table 3-1: Information of Mining License, Jilong Mining

Company	**Chifeng Jilong Mining Co., Ltd.**
Project Name	Zhuanshanzi Gold Mine, Chifeng Jilong Mining Co., Ltd
License No.	C1500002009114120054250
Issued To	Chifeng Jilong Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Sep. 28, 2023 – Sep. 29, 2026
Area (km^2)	6.2400
Mining Type	Underground
Mining Depth	From 700m to -155m
Production Rate (tpa)	120,000
Project Name	Aohanqi zhuanshanzi Gold Mine, Chifeng Jilong Mining Co., Ltd
License No.	C1500002023124210156146
Issued To	Chifeng Jilong Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Dec. 27, 2023 – Mar. 27, 2032
Area (km^2)	9.1340

Company	Chifeng Jilong Mining Co., Ltd.
Mining Type	Underground
Mining Depth	From 737m to 373m
Production Rate (tpa)	60000

Table 3-2: Information of Exploration Tenements, Jilong Mining

Company	Chifeng Jilong Mining Co., Ltd.
Company	**Chifeng Jilong Mining Co., Ltd.**
Project Name	Exploration surrounding Zhuanshanzi Gold Mine, Aohanqi, Inner Mongolia
Permit No.	T150000200804401006035
Issued To	Chifeng Jilong Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Mar. 25, 2021 - Mar. 24, 2026
Area (km²)	3.83
Company	**Chifeng Jilong Mining Co., Ltd.**
Project Name	Detailed investigation of rock gold mine in Fumin Village, Sidaowanzi Town, Aohan Banner, Inner Mongolia
Permit No.	T150000202010404005972
Issued To	Chifeng Jilong Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Oct.19, 2023 – Oct. 18, 2025
Area (km²)	8.61

3.2.2 Huatai Project

Six mining licenses and five exploration permits are currently held by Huatai Mining. Details of the mining license and exploration permits for the Project are presented in Table 3-3 and Table 3-4, respectively.

Table 3-3: Information of Mining Licenses, Huatai Mining

Company	Chifeng Huatai Mining Co., Ltd.
Project Name	#26 Vein in Lianhuashan Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C150000201511421014045 1
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Nov. 17, 2015 - Nov. 17, 2024
Area (km²)	0.3199
Mining Type	Underground
Mining Depth	From 815m to 467m
Production Rate (tpa)	30,000
Company	**Chifeng Huatai Mining Co., Ltd.**
Project Name	#3 &7 Vein in Lianhuashan Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C150000201309421013135 3
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Mar. 11, 2024 - Sep. 5, 2025
Area (km²)	1.0160

Company	Chifeng Huatai Mining Co., Ltd.
Mining Type	Underground
Mining Depth	From 942m to 206m
Production Rate (tpa)	60,000
Company	Chifeng Huatai Mining Co., Ltd.
Project Name	#5 Mining Area in Lianhuashan Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C1500002011014140119663
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Sep. 14, 2022 - Sep. 14, 2024
Area (km^2)	0.8138
Mining Type	Underground
Mining Depth	From 750m to -325m
Production Rate (tpa)	60,000
Company	Chifeng Huatai Mining Co., Ltd.
Project Name	#86 Vein in Honghuagou Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C1500002015114210140450
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Nov. 17, 2015 - Nov. 17, 2025
Area (km^2)	1.8332
Mining Type	Underground
Mining Depth	From 753m to 334m
Production Rate (tpa)	30,000
Company	Chifeng Huatai Mining Co., Ltd.
Project Name	#1 Mining Area in Honghuagou Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C1500002009064120021513
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity [1]	Jun. 05, 2022 - Jun. 05, 2024
Area (km^2)	2.7978
Mining Type	Underground
Mining Depth	From 900m to 280m
Production Rate (tpa)	38,900
Company	Chifeng Huatai Mining Co., Ltd.
Project Name	Pengjiagou Gold Mine, Chifeng Huatai Mining Co., Ltd.
License No.	C1500002015114210140449
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity [1]	Nov. 18, 2023 - Nov. 17, 2025
Area (km^2)	3.7362
Mining Type	Underground
Mining Depth	From 829m to 260m
Production Rate (tpa)	30,000

Notes: The Fumincun exploration permit has now expired and is now being subject to a renewal process

Table 3-4: Information of Exploration Tenements, Huatai Mining

Company	Chifeng Huatai Mining Co., Ltd.
Project Name	Deep Exploration of #3&#7 Veins in Lianhuashan Gold Mine

Company	Chifeng Huatai Mining Co., Ltd.
Permit No.	T150000201601405005215 5
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Jan. 14, 2021 - Jan. 14, 2026
Area (km^2)	1.02
Company	**Chifeng Huatai Mining Co., Ltd.**
Project Name	Deep Exploration of Longtoushan Area of #1 Mining Area in Honghuagou Gold Mine
Permit No.	T150000201601405005215 7
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Jan. 14, 2021 - Jan. 14, 2026
Area (km^2)	0.24
Company	**Chifeng Huatai Mining Co., Ltd.**
Project Name	Deep Exploration of #3 Vein Area of #1 Mining Area in Honghuagou Gold Mine
Permit No.	T150000201601405005215 8
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Jan. 14, 2021 - Jan. 14, 2026
Area (km^2)	0.23
Company	**Chifeng Huatai Mining Co., Ltd.**
Project Name	Deep Exploration of #1 Mining Area of #1 Mining Area in Honghuagou Gold Mine
Permit No.	T150000201601405005215 9
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Jan. 14, 2021 - Jan. 14, 2026
Area (km^2)	1.6
Company	**Chifeng Huatai Mining Co., Ltd.**
Project Name	Deep Exploration of #3 Mining Area of #1 Mining Area in Honghuagou Gold Mine
Permit No.	T150000201601405005217 5
Issued To	Chifeng Huatai Mining Co., Ltd.
Issued By	Inner Mongolia Bureau of Land and Resources
Period of Validity	Jan. 14, 2021 - Jan. 14, 2026
Area (km^2)	0.7

3.2.3 Wulong Project

One mining license and two exploration permits are currently held by Wulong Mining. Details of the mining license and exploration permits for the Project are presented in Table 3-5 and Table 3-6 , respectively.

Table 3-5: Information of Mining License, Wulong Mining

Company	Liaoning Wulong Mining Co., Ltd..
Project Name	Wulong Gold Mine, Liaoning Wulong Mining Co., Ltd..

Company	Liaoning Wulong Mining Co., Ltd..
License No.	C2100002011084140116558
Issued To	Liaoning Wulong Mining Co., Ltd.
Issued By	Liaoning Provincial Bureau of Land and Resources
Period of Validity	Dec. 04, 2021 - Aug. 04, 2035
Area (km^2)	6.2732
Mining Type	Underground
Mining Depth	From the surface to -750m
Production Rate (tpa)	100,000

Table 3-6: Information of Exploration Tenement, Wulong Mining

Company	Liaoning Wulong Mining Co., Ltd.
Project Name	Exploration of Haojingou-Ligunzi Gold Deposit in Dandong City, Liaoning Province
Permit No.	T2100002008044010006347
Issued To	Liaoning Wulong Mining Co., Ltd.
Issued By	Liaoning Provincial Bureau of Land and Resources
Period of Validity	Dec. 31, 2021 - Mar. 08, 2023
Area (km^2)	3.8800
Company	**Liaoning Wulong Mining Co., Ltd.**
Project Name	Exploration of Ligunzi Gold Deposit in Dandong City, Liaoning Province
Permit No.	T2100002008044010005662
Issued To	Liaoning Wulong Mining Co., Ltd.
Issued By	Liaoning Provincial Bureau of Land and Resources
Period of Validity	Jun. 2, 2023 - Jun. 2, 2028
Area (km^2)	0.6112

Note: The Haojingou-Ligunzi exploration permit has now expired and is now being subject to a renewal process.

3.2.4 Hanfeng Project

Two mining license and one exploration permits are currently held by Hanfeng Mining. Details of the mining license and exploration permits for the Project are presented in Table 3-7 and Table 3-8, respectively.

Table 3-7: Information of Mining Licenses, Hanfeng Mining

Company	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Project Name	Lishan Mining Area in Tianbaoshan Lead-Zinc Mine, Hanfeng Mining
Mining License No.	C2224002021083210152512
Issued To	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Issued By	Jilin Provincial Bureau of Land and Resources
Period of Validity	Aug. 27, 2021 - Aug. 27, 2050
Area (km^2)	2.2250
Mining Type	Underground
Mining Depth	From 564m to -700m
Production Rate (tpa)	600,000
Company	**Jilin Hanfeng Mining Science and Technology Co., Ltd.**
Project Name	Dongfeng Mining Area in Tianbaoshan Lead-Zinc Mine, Hanfeng Mining

Company	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Mining License No.	C2200002010123120093830
Issued To	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Issued By	Jilin Provincial Bureau of Land and Resources
Period of Validity	Apr. 28, 2019 - Feb. 24, 2025
Area (km^2)	2.4207
Mining Type	Underground
Mining Depth	From 580m to 250m
Production Rate (tpa)	99,000

Table 3-8: Information of Exploration Tenement, Hanfeng Mining

Company	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Project Name	Deep Exploration of Dongfeng Molybdenum Deposit in Tianbaoshan Lead-Zinc Mine
Permit No.	T10000020210330280000361
Issued To	Jilin Hanfeng Mining Science and Technology Co., Ltd.
Issued By	Ministry of Natural Resources
Period of Validity	Dec. 20, 2020 - Dec. 20, 2025
Area (km^2)	2.3191

3.2.5 Jintai Project

One mining license and one exploration permit are currently held by Jintai Mining (Figure 3-3). Details of the mining license and exploration permit for the project are listed in Table 3-9 and Table 3-10, respectively.

Figure 3-3: Locations of the Mining and Exploration Licences

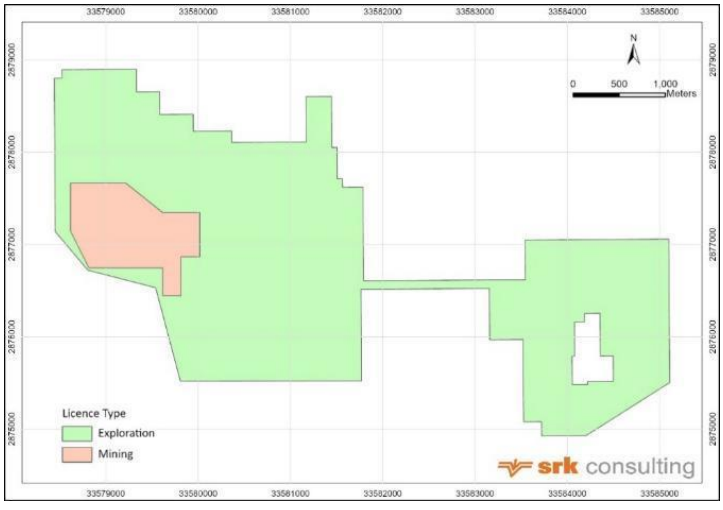


Table 3-9: Information of Mining License, Jintai Mining

Company	Eryuan Jintai Mining Development Co., Ltd.
Project Name	Xidengping Gold Mine, Eryuan Jintai Mining Development Co., Ltd.
License No.	C5300002012054110124688
Issued To	Eryuan Jintai Mining Development Co., Ltd.
Issued By	Dali Bai Autonomous Prefecture Bureau of Natural Resources and Planning
Period of Validity	June 7, 2022 – June 6, 2032
Area (km^2)	1.0920
Mining Type	Open Pit
Mining Depth	2060m -1900m
Production Rate (tpa)	140,000

Table 3-10: Information of Exploration Tenement, Jintai Mining

Company	Eryuan Jintai Mining Development Co., Ltd.
Project Name	Advanced Exploration of Xidengping Gold Deposit in Eryuan County, Yunnan Province
Permit No.	T5300002009034010026977
Issued To	Eryuan Jintai Mining Development Co., Ltd.
Issued By	Dali Bai Autonomous Prefecture Bureau of Natural Resources and Planning
Period of Validity	June 3, 2021 – June 3, 2026
Area (km^2)	10.28

3.3 Underlying Agreements

SRK is not aware of any underlying agreements other than those disclosed in this Report.

3.4 Permits and Authorization

A list of licenses and permits and authorization in Section 3.2 for each of the five subsidiary mining companies, i.e., Jilong Mining, Huatai Mining, Wulong Mining, Hanfeng Mining and Jintai Mining, to undertake legal exploration, exploitation, and production in China has been sighted by SRK.

Apart from the mining license, other operational permits are required for the Project according to the relevant Chinese laws and regulations. These operational permits include:

- Business License,
- Safety Production License,
- Land/forest Use Permit,
- Water Use Permit, and
- Site Discharge Permit

The safety production licenses, water use permits, and site discharge permits for the five projects are presented in Section 13.4.

3.5 Environmental Considerations

Environmental liabilities associated with the project operation are mainly from underground mining, waste rock dumps, processing plant, tailings storage facilities and other auxiliary facilities. The

significant inherent environmental risks for the project consist of environmental approvals, water management and tailings management. Additional details on environmental approvals, water management and tailings management are provided in Sections 19 of this Technical Report.

4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Accessibility

4.1.1 Jilong and Huatai Projects

As shown in Figure 3-1, both Jilong and Huatai projects are located in Inner Mongolia, approximately 58km away from Chifeng City in the west and 33-38km away from Chifeng in the east, respectively. Chifeng City has extensive networks of railway line and well paved highways and is also about 400km northeast of Beijing. There is a daily flight between Beijing and Chifeng.

Access to both projects is excellent. Jilong Project is only 15km away from the Xiaohe (小河) Station of Beijing – Tongliao Railway in the north, and Huatai Project's properties are all within 3 to 10km away from the Honghuagou (红花沟) Station of Beijing – Tongliao Railway. There are gravel roads connecting both projects' properties to the railway station and main paved roads.

4.1.2 Wulong Project

The Wulong project is located in Liaoning Province, about 15km west of Dandong City. Access to the Wulong gold mine is very convenient. The Dandong-Dalian highway is 11km away from the mine in the southeast. There are gravel roads connecting the mine to the main paved roads.

4.1.3 Hanfeng Project

The Hanfeng project is located in Jilin Province, approximately 42km of northwest of Longjing City. Access to the project area is excellent. The Changchun-Tumen Railway and National Highway G302 pass through Laotougou Township in the southeast of Tianbaoshan mine area. Laotougou Town is just 15km southeast of the project's properties and there is a cement road connecting Laotougou Town and the project site.

4.1.4 Jintai Project

As shown in Figure 3 2, access to the project is convenient. The project is in Dali Bai Autonomous Prefecture of Yunnan province, approximately 3 km away from Liantie Township. Liantie Township is about 51 km away from Eryuan County in the southwest by asphalt road. And Eryuan County is about 408 km from Kunming, the capital of Yunnan province.

Liantie Township is about 106 km away from Dali going pass Yangbi County. The nearest railway station is Shangguan Station of Dali-Lijiang Railway. The Xidengping mine is about 78 km to the Shangguan Station going pass Liantie Township and Eryuan County. There are daily buses between Eryuan County and Dali going pass Liantie Township. There are gravel roads connecting the mine to the main paved roads.

4.2 Local Resources and Infrastructure

4.2.1 Jilong and Huatai Projects

The region is a typical habitation for Han nationality and minorities as Mongolian, Hui and others. The population is not dense but seems enough for mining and other industrial activities. The basic economic activity is dominated by farming, while animal husbandry, handicraft manufacture as well as mining are secondary industrial activities. The power and coal supplies are quite convenient for local mining industry.

Jilong Mining has built a 4,000kVA and 6,300kVA general step-down substation in the #1 mining area of the Zhuanshanzi Gold Mine. The power supply comes from the secondary substation (66kV) of Yuanbaoshan. The power supply with 10kV is sourced from Jilong Mining's general step-down substation and can meet the production needs. Water for production and domestic use is sourced from underground water with a water volume of 70 cubic meters per day ("m3/d") per water well. The wired telephone and mobile communication cover the mining area.

The power supply for the Huatai project is sourced from the Northeast Power Grid, and the industrial 10kv high-voltage line has been connected to the Lianhuashan and Honghuagou gold mining areas, which can meet both production needs. Water for production and domestic use is sourced from underground water (electromechanical wells), and the water volume is relatively sufficient. The China Mobile communication network and China Unicom network have covered the mining area.

4.2.2 Wulong Project

Wulong operating gold mine is an old mining area with complete power supply facilities. The Northeast Power Grid runs through the whole area, and the power supply is sufficient. The water for mine production and surrounding residents is taken from the special water intake area of the mining area, and water resources are relatively sufficient.

4.2.3 Hanfeng Project

Residents in the region are mainly Han and Korean, each accounting approximately for nearly 50%. The local economy is dominated by agriculture and mining industry. Agriculture is mainly based on corn, rice, and soybean planting. Mining development is a pillar industry in the local area. Hanfeng Mining's Tianbaoshan Lead-Zinc Mine is a large profit and tax household in Longjing City and has played a positive role in promoting the development of the local economy. There is a 110KV high-voltage dedicated line for Tianbaoshan operating mine, and the power supply can fully meet the production needs.

4.2.4 Jintai Project

The region is a typical habitation for Bai and the others are Yi, Han, Naxi and Hui. The basic economic activity is dominated by agriculture and husbandry. Agriculture is mainly based on rice, wheat, corn, and buckwheat planting. Economic crops include walnuts, roasted tobacco, chestnuts, etc. More than 95% of the population is engaged in agriculture, and the economy and culture are relatively backward.

The Puping hydropower station has been built on the Heihui River in the south of Xidengping mine and has been incorporated into the Stage grid. The national high-voltage transmission line passes through the southern part of the project. The power supply can fully meet the production needs.

The surface water system is relatively developed, which can be introduced by diversion pipe, and the water quantity and quality can meet the needs of production and living.

4.3 Climate Physiography

4.3.1 Jilong and Huatai Projects

Both Jilong and Huatai projects areas are located in Nuluerhu mountainous area. The topography is characterised by low to middle mountains or hills, with an elevation ranging from 660 to 844m above sea level ("ASL") in Jilong project area, and 1,024 to 730m ASL in Huatai project area. Climate type in the region belongs to arid and semi-arid continental climate zone, which is characterized by cold winter, hot summer and windy in spring and autumn.

Generally, the weather in the project site is cold with a yearly average temperature at approximately 7.0 degree Celsius (°C). The lowest temperature in winter could be minus 30.7°C, and the highest temperature in summer can reach 38.7°C. The extremely cold and hot weather usually appears in December and July, respectively.

The annual precipitation is from 217.6 to 595.1 millimetres (mm), whereas the annual evaporation in the region is about several times more than the amount of precipitation, which is from 1.956.0 to 2,836.6mm, with an average of 2.513.5mm. The frost period in the mine area is from late October to March of the next year, the maximum thickness of frozen earth could reach around 1.5 to 2.0 meter (m). The annual average wind speed is 2.4m per second ("m/s"), and the maximum wind speed is 17/s.

There is a northwest direction river valley in the west of the Zhuanshanzi gold mine area. Except for the temporary running water in summer, the river is usually dry. It contains rich groundwater, which is the main water source of the mine.

There is no surface water body in the Huatai project area. About 3km away from the Lianhuashan gold mine in the south, there is a river (i.e., Seluga River), its water volume is small, and the flow is basically cut off in summer.

According to the Seismic Intensity Parameter Zoning Map of China, the seismic peak acceleration in both project areas is 0.10 to 0.15g, which is VII degree. No geological disasters, such as landslide and debris flow are found.

4.3.2 Wulong Project

The topography in the Wulong project area is characterized by mountains and hills with an elevation ranging from 120m to 606m ASL. The terrain is high in the north and low in the south. The terrain undulates greatly, and the V-shaped valleys cut deeply.

The water system in the Wulong gold mine area is relatively developed, and most of them are seasonal gullies. The mine area is located in the southeast of the Liaodong Peninsula, belonging to

the northern temperate marine climate zone, with four distinct seasons. The annual average temperature is at the range from 8.3 to 10.3°C. The lowest extreme temperature in winter is -25.1°C, and the highest extreme temperature is 34.1°C in summer. The average annual precipitation is 656 mm, mostly concentrated in July and August. There are more north or northwest winds in winter, and more south or southeast winds in summer. The maximum thickness of frozen earth is 1.07m, and the frost-free period is 185 days.

4.3.3 Hanfeng Project

The Hanfeng project area is located in the northern extension of the Yingering Mountains in the Changbai Mountains. The terrain is high in the northwest and low in the southeast. The mountains are generally north-northwest direction, with many peaks, steep mountains, and narrow "V"-shaped valleys. Generally, the altitude of mountain peaks ranges from 500m to 800m ASL, with a relief of about 300-500m. The main peak in the area is Tianbao Mountain, with an altitude of 1073m ASL, and the lowest erosion datum is about 350m.

The Tianbaoshan lead-zinc mine area has a temperate continental climate, with large seasonal temperature differences. The annual highest temperature is concentrated in July to August, with an average temperature above 20°C, and the lowest temperature in January can reach below -30°C. July to August is the rainy season, with an average annual precipitation of 800-900mm. The freezing period is from late November to mid-April of the next year, and the thickness of the frozen soil layer can reach 1.5m.

The rivers in the project area belong to the Buerhatong River basin of the Tumen River system. The rivers mainly include Tianbaoshan River, Jiuhudong River, and Chencaigou River, which originate in Tianbaoshan, flow southeasterly into the Burhatong River at the Huxiantang area. The drainage area of Tianbaoshan River is 8.7km2, with a general flow rate of 301.1 liters per second ("l/s"), and a flow rate of 585-641l/s in wet season, which can meet the mine production and domestic water needs.

4.3.4 Jintai Project

The project area is located in the west of the Luoping-Diancang Mountains (trending north-south) in Hengduan Mountain, western Yunnan, and in the east bank of Heihui River. The terrain is high in the northeast and low in the southwest. Generally, the terrain is a gentle slope, with an elevation of 1,800 ~ 2,300 m ASL. The erosion landform is generally gently sloping to the west (Heihui River), and the average slope is about 10°. The terraces can be roughly divided into 5 levels, the slope of the steps is about 25°, the steps are flat, and most of them are cultivated land. The slope of the left bank of Heihui River is about 35° ~ 45°. The west slope of Luoping Mountain is a steep slope with an elevation of 2,300 ~ 2,900 m ASL, among which the area with an elevation of 2,300 ~2,500 m is the remaining terrace landform, with a lot of tongue strip protruding ridges.

The project area has a north subtropical plateau monsoon climate, the highest temperature is 30ºC, the lowest temperature is -5ºC, the average annual temperature is 13.9ºC. The average annual rainfall is 1,200 mm, the maximum rainfall is 1,440.5mm, and the maximum rainfall in 24 hours is 89 mm. May to October is the rainy season, the precipitation accounts for more than 80% of the year. Annual average evaporation of 1,405.7 mm, frost-free period for about 280 days, occasional heavy snow, as well as local areas of hail, is the main disastrous climate in the area. The wind direction in

the area is mainly northwest with an average speed of 2 ~ 8 m/s, and the maximum wind speed at Luoping Mountain is 35 m/s.

According to Code for Seismic Design of Buildings (GB50011-2001) of China, the seismic peak acceleration in the area is 0.20 g, which is VIII degree. The characteristic period of ground motion response spectrum is 0.45 s, which belongs to unstable region. No geological disasters, such as landslide and debris flow are found.

5 Geological Setting and Mineralisation

5.1 Regional Geology

5.1.1 Jilong and Huatai Projects

Tectonically, the Honghuagou-Lianhuashan and Zhuanshanzi gold deposits are situated at Lianhuashan fault block in Inner Mongolia platform uplift of North China platform. Regional structures and magmatic activity are frequent, which provide the source and conduit for the gold-bearing hydrothermal fluid, and the secondary structure provides the site for the formation of gold deposits. The development of tectonic processes and magmatic activities are very favourable for the formation of gold Mineralisation.

The Paleozoic strata of Honghuagou-Lianhuashan and Zhuanshanzi gold deposits belong to Chifeng stratigraphic unit of the Inner Mongolia grassland stratigraphic zone in North China stratigraphic region. The Mesozoic and Cenozoic strata belong to Ulanhot-Chifeng stratigraphic unit of the Greater Khingan-Yanshan stratigraphic zone in the Coastal Pacific stratigraphic region.

The outcropped strata are Palaeoarchean Wulashan Group, Proterozoic Great Wall System, Xinmin Formation of Middle Jurassic of Mesozoic, Baiyingaolao Formation of Upper Jurassic of Mesozoic, Jiufotang Formation of Lower Cretaceous, Neogene Miocene Hannuoba Formation, Quaternary Pleistocene and Holocene. The Palaeoarchean Wulashan Group is the main strata hosting the Mineralisation.

Fault structures in the project area are developed, the faults are divided into 4 groups: nearly east-west, nearly north-south, northwest and northeast trending faults. The northwest trending is the main faults controlling the gold mineralisation.

Magmatic intrusion is extensive, with multiple stages and complex types. Magmatic intrusive rocks include Jurassic granite-porphyry, monzo-granite and Alkali-Feldspar Granite.

5.1.2 Wulong Project

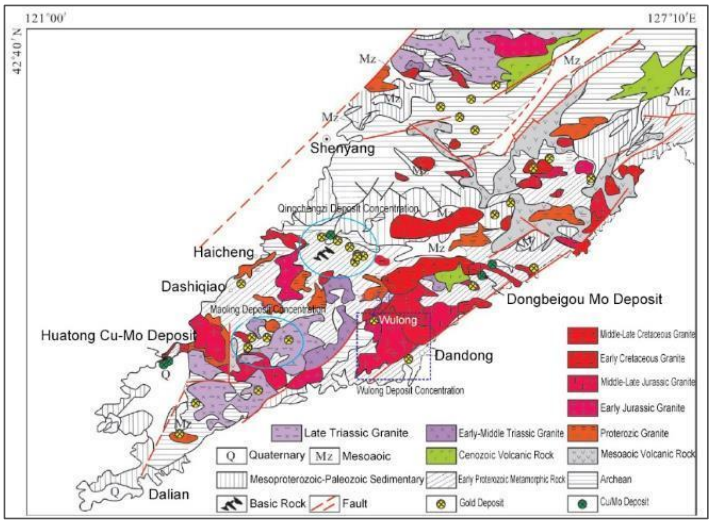
Geotectonically, the Wulong project is located in the eastern margin of North China Block. The eastern part of the North China Block is comprised of Longgang block, Shandong-Liaoning-Jilin orogenic belt and Langlin block (Figure 5-1). There are a number of large and super-large deposits distributed in eastern area of Shandong, eastern area of Liaoning, western area of Henan, northern and eastern area of Hebei, and southern area of Jilin (Zhu et al., 2015).

The strata in the eastern area of Liaoning are mainly composed of Precambrian metamorphic rocks and Mesozoic volcanic and intrusive rocks (Yang et al., 2003). The Precambrian rocks mainly consist of the Paleoarchean diorite, quartz diorite, and granodiorite and the Paleoproterozoic Liaohe Group, mainly composed of intermediate and low-grade metamorphic rocks, including various types of schist, gneiss, dacite and amphibolite. The Neoproterozoic and Mesozoic thick sedimentary rocks are sporadically outcropped in the area.

In the Mesozoic, the eastern area of Liaoning became an important part of the circum-Pacific tectonic-magmatic belt, producing a large area (2,000 km^2) of granite and volcanic rocks, which intruded into the Precambrian metamorphic rocks. The Mesozoic magmatism of the eastern area of

Liaoning was divided into three phases: the Triassic (210~231 Ma) alkaline rocks, diorite and monzonitic granite; the Jurassic (153-180 Ma) quartz diorite, diorite, and gneissic monzogranite; and the Cretaceous (120-131 Ma) diorite, granodiorite, monzonite and lamprophyre, dolerite dykes. The Early Cretaceous magmatism occurred in the context of regional extensional disruption of the North China Block, which led to the formation of large-scale gold Mineralisation in the region (Zhai Mingguo et al., 2003).

Figure 5-1: Regional Geology Setting of Wulong Project

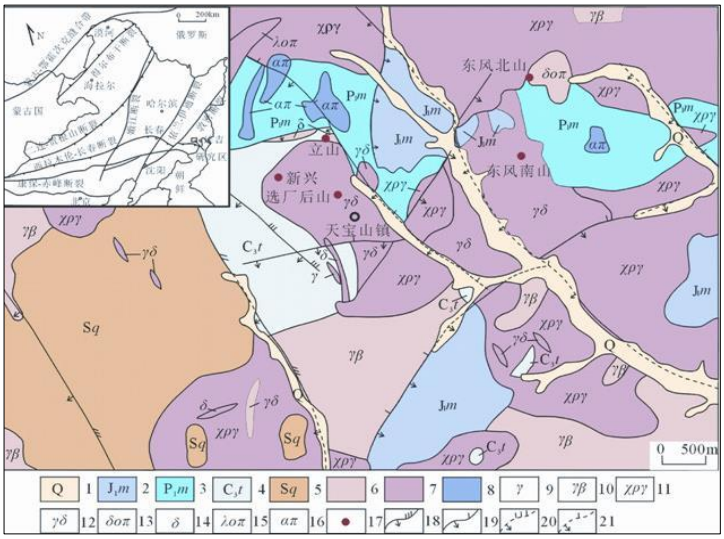


Sources: Modified after Zhang et al. (2015).

5.1.3 Hanfeng Project

The large-scale Tianbaoshan metallogenic region, with over one hundred years of mining history, is located in eastern Yanbian area, north-eastern China. There are abundant nonferrous metal resources and diverse deposit types, metallogenic theory and ore-prospecting in the Tianbaoshan region. According to the recent research data, the Yanbian area belongs to the Paleo-Asian Ocean tectonic region during the Paleozoic Era and to the Paleo-Pacific Ocean tectonic region since the Jurassic period. Evolution and superimposition of the two tectonic regions resulted in multi-cyclic tectonic-magmatic activities and provided a beneficial ore-forming geological condition to the intensive nonferrous and precious metal Mineralisation in this area. Up to now, at least four types of deposits have been discovered, including skarn lead-zinc deposit (i.e., Lishan deposit and Xuanchanghoushan deposit), crypto-explosive breccia lead-zinc-silver deposit (i.e., Xinxing deposit), sedimentary metamorphic-hydrothermal copper-lead-zinc deposit (i.e., Dongfengnanshan deposit) and lode (-porphyry) molybdenum deposit (i.e., Dongfengbeishan deposit). The regional geology setting is shown as Figure 5-2.

Figure 5-2: Regional Geology Setting of Hanfeng Project



1-Quaternary; 2-Lower Jurassic Mingyuegou Formation; 3-Permian Miaoling Formation; 4-Carboniferous Tianbaoshan Group; 5-Silurian Qinglongcun Group; 6-Hercynian intrusive rocks; 7-Indosinian intrusive rocks; 8-Yanshanian intrusive rocks; 9-granite; 10-biotite granite; 11-alkali-feldspar granite; 12-granite diorite; 13-quartz diorite porphyry; 14-diorite; 15-quartz porphyry; 16-sub and site; 17-deposit; 18-compresso-shear fault; 19-transtensional fault; 20-inferred compressor-shear fault; 21-inferred trans tensional fault

Sources: Superimposed Mineralisation of the Tianbaoshan metallogenic region in Yanbian area (eastern Jilin Province), north-eastern China: Indicated by the isotopic dating. Acta Petrologica Sinica,30(7): 2081-2091 (in Chinese with English abstract)

5.1.4 Jintai Project

The Jintai Project is located in the eastern edge of the Changdu-Lanping-Simao block of the Qiangtang-Sanjiang orogenic system and is adjacent to east of the Diancang – Yuanlao Mountain metamorphic basement complex of the upper Yangtse paleo platform. The project is in the combination area of two primary tectonic units, Qiangtang-Sanjiang orogenic system and Yangtse platform. The regional metallogenic zone belongs to the coastal Pacific metallogenic domain, the upper Yangtse platform metallogenic province, the middle part of the Lijiang-Dali-Jinping Au-Cu-Ni-Pt-Pd-Mo-Mn-Fe-Pb-Zn mineral belt. With complex geological structure, frequent magmatic activity and strong Mineralisation, the area is a favourable location for searching for gold polymetallic deposits related to the tectono-magmatic activity in the Himalayan period.

The outcropped strata in the east part of the Qiaohou - Yangbi Fault are the Paleoproterozoic Huanglongtan Formation and Shimengguan Formation, the Neoproterozoic Luopingshan Formatin, and the Permian Maokou Formation and Wulongba Formation. The outcropped strata in the west part of the Qiaohou - Yangbi Fault are the Cretaceous Jingxing Formation, Nanxing Formation and Hutousi Formation, the Paleogene Yunlong Formation and Baoxiangsi Formation and the Neogene Sanying Formation. The Quaternary is commonly seen in rivers slopes and gullies in the region.

The regional tectonic structure is roughly separated by the Qiaohou-Yangbi Fault, with the Mesozoic depressional basin of Lanping to the west, the Cenozoic slip pulling basin of Qiaohou-Liantie superimposed on the eastern edge of the basin, and the crystalline metamorphic basement (orogenic belt) of the Luoping Moutain Goutoujing Group to the east. The tectonics in the region is

characterized by multi-period inherited activities, and the regional tectonic structure is generally north-northwest trending.

There are two sets of faults in the region, one is trending northwest-southeast, and the other is trending northeast-southwest. The northwest-southeast fault is the main fault in the region, which controls the whole regional tectonic structure and controls the regional geohistorical evolution. The eastern northwest-southeast fault is mainly developed in the ancient metamorphic rocks of the metasedimentary boundary, characterized by multi-stage activity, ductile in the first stage and brittle rupture in the later stage; the western northwest-southeast fault is mainly developed in the Mesozoic strata, characterized by low angle and brittle rupture, mostly positive faults with torsion. From the intersection relationship, the northwest-southeast faults are cut and staggered by the northeast-southwest faults; the northeast-southwest fault is obviously new. The northeast-southwest faults cut through the stratigraphy of the Sanying Formation of Pliocene, indicating that the last activity of the faults was later than the Pliocene.

The regional folding is divided into two parts, east and west. The western part is a fold composed of Mesozoic and Cenozoic strata and the eastern part is an anticline and monoclinal fold composed of schist in ancient metamorphic rocks. The western part of the folds is, the Changyi compound syncline and its subordinate anticline and syncline, the Heihui River compound syncline and its subordinate anticline and syncline. The Heihui River compound syncline is the norther extension of the Cahngyi compound syncline. The eastern fold is composed of the Lujiacun metamorphic-tectonic schist antiform and the Dayeping monoclinal fold.

The intrusive rock in the region is the Variscan gabbro outcropped in the north part of Dayeping, intruding into Wulongba Formation (P2wl). The gabbro is trending northwest - southeast and generally consistent with the regional tectonic structure. It is cut off by the north-east fault to the northwest and covered by the Quaternary to the southeast. The rock outcrop is about 2,300m long and 250m wide, and it is a rock wall. The lithology is norite gabbro. The rocks have semi-automorphic granular texture and blocky structure. Near the Qiaohou-Yangbi Fault, there are vein rocks such as granite porphyry, diabase, monzonite porphyry.

There are three types of metamorphic rocks, regional metamorphic rocks, dynamic metamorphic rocks, mixed rocks, and hydrothermal metamorphism (alteration). Metamorphism is more complex.

Soil geochemical surveys at scales of 1:200,000 and 1:50,000 have been carried out in this area. The results show that most of the gold anomaly are in the distribution area of sand, gravel and mudstone of the Sanying Formation.

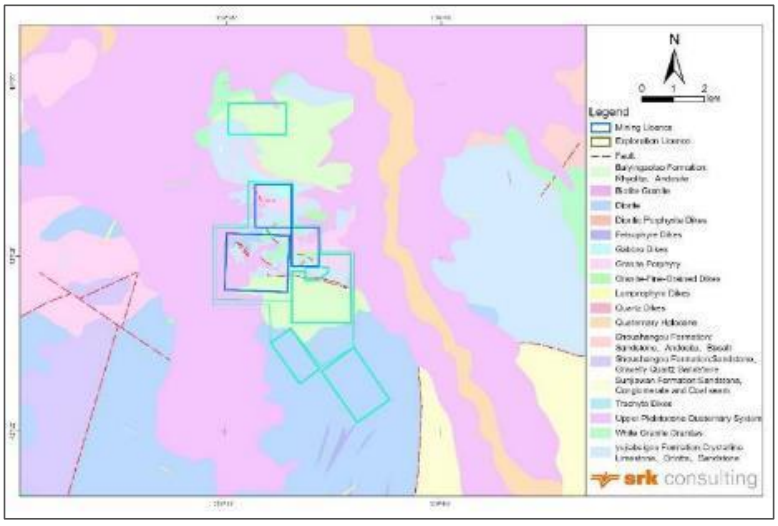
Gold Mineralisation in the metallogenic zone is closely related to Himalayan tectonics and alkaline magmatic activities, and there are mainly two types of deposits, porphyry, and shear zone. Porphyry gold deposit is represented by Heging Beiya, Xiangyun Machangjing and Jinping Chang'an, and shear zone gold deposit is represented by Yuanyang Daping.

5.2 Property Geology

5.2.1 Jilong Project

The outcropped strata in the Zhuanshanzi Mine, including both Zhuanshanzi Block and Zhuanshanzi 4#5#6#7# Block areas are the Lower Permian Yujiabeigou Formation, the Upper Jurassic Baiyingaolao Formation and the Quarternary sediments. Figure 5-3 shows the local geology setting of the Zhaunshanzi Mine.

Figure 5-3: Local Geology Map of Zhuanshanzi Mine



The Lower Permian Yujiabeigou Formation strikes northeast (30º-70º) and dips to southeast with a dip angle of between10° and 90°. The thickness of this formation is 500m. This formation is divided into three members: the lower member is at the central south, and consists of crystalline limestone and layered marble, which is the wall rock of Mineralisation. The middle member is composed of crystalline limestone and marble, and the lower member includes slate and siltstone.

The Upper Jurassic Baiyingaolao Formation is a set of continental intermediate-felsic volcanic lava and pyroclastic rocks, including rhyolite, andesite, amygdaloid andesite, rhyolitic tuff, and andesitic tuff. The formation strikes northeast and dips to southeast with a dip angle of 50° -70° . The thickness of this formation is 700m.

The Quaternary sedimentary series include loess-like loamy soil, loamy soil containing calcareous nodules.

The structure in project area is developed and dominated by fault structure. The faults are developed at the Yanshan period and can be divided into three groups: northwest, nearly east west, northeast trending faults. The northwest trending faults host the gold Mineralisation.

The Intrusive rocks are well developed at the deposit area, they include early Cretaceous granite, late Cretaceous granite porphyry, Jurassic and Permian diorites. Dykes include felsite porphyry, trachyte and quartz vein, which strike northwest, northeast or most east-west.

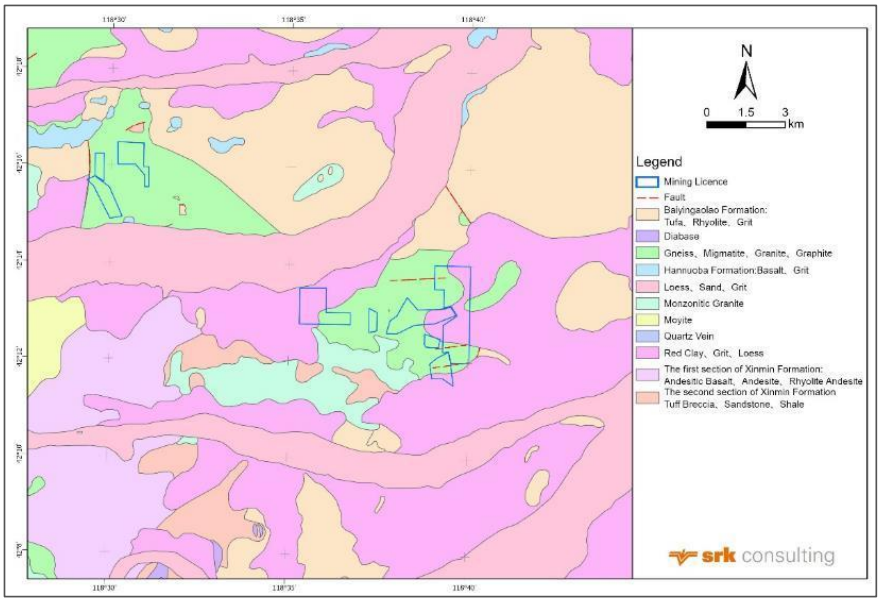
Wall rock alteration includes pyritization, carbonation, silicification, chloritization, sericitization, epidotization.

5.2.2 Huatai Project

Honghuagou #1 Mining Zone

At the Honghuagou #1 Mining Zone area, the outcropped strata include the Archean Wulashan Group, the Lower Cretaceous Jiufotang Formation, and the Quaternary sediments. Figure 5-4 is the local geology setting.

Figure 5-4: Local Geology Map



Source: SRK

The Archean Wulashan Group is widely outcropped at the #1 Mining Zone, which is main mineralisation hosting strata. Lithologically, the Wulashan Group is composed of amphibole plagioclase gneiss, amphibolite, migmatite granite, amphibolite gneiss.

The Lower Cretaceous Jiufotang Formation partially occurs at the middle west of the #3 Mining Zone, the lithology is mostly tuffaceous sandstone, discontinuous overlies above the Archean Wulashan Group.

The Quaternary sedimentary rocks are widely outcropped at the mining area, and lithologically they are primarily red clay, variegated gravel layer, yellow sub-sandy soil and loess, the thickness is 20~50m.

Fault structures in the #1 Mining Zone area can be divided into four groups: nearly east-west, nearly north-south, northwest and northeast trending faults. The nearly north-south trending faults are branches of the regional faults F8 and F9, which host gold Mineralisation. The north-south trending fault dips to east with a dip angle of 70-80º and controls the #82 Vein. The length and width of this vein is about 330m and 0.5-2.0m, respectively.

Magmatic intrusion doesn't outcrop at the #1 Mining Zone area, only dykes outcrop as granite porphyry and diorite porphyrite veins.

Wall rock alteration includes facial and linear shapes. Facial wall rock alterations include potassium feldspar, albitization, silicification, albite-epidotization, albite-zoisitization, sericitization, pyrite sericitization and carbonation. Linear wall rock alteration develops with hydrothermal replacement, at the breccia around the gold veins, and the linear wall rock alterations include sericitization, chloritization, silicification, pyritization, carbonation.

Gold mineralisation bodies develop at the structural breccia as veins. Mineralisation includes pyrite, pyrrhotine, galena, and sphalerite, which show as disseminated, veined or reticulated widespread. The contact between the wall rock and Mineralised bodies is clear.

Honghuagou #86 Vein

The strata include the Xiaotazigou Formation of Archean Jianping Group, composed of plagioclase hornblende gneiss, hornblende plagioclase gneiss with magnetite quartz lenticle and marble lens; the Baiyingaolao Formation of Late Jurassic, consisting of rhyolite and andesite; and the Quaternary sediments. The fault structures well developed in the property area, they consist of nearly east west, northeast, northwest, and nearly north south trending faults.

The magmatic activity in the area is strong and frequents at different stages and types. The intrusive rocks primarily consist of the Honghuagou granite porphyry dykes.

Wall rock is the Xiaotazigou Formation plagioclase hornblende gneiss. Wall rock alterations include silicification, pyritization, sericitization, chloritization, and carbonation.

Pengjiagou Mine

The strata include the Xiaotazigou Formation of Archea Jianping Group and the Quaternary sediments. The fault structures include northeast and northwest trending faults.

The magmatic intrusive is not developed, only Yanshanian syenite porphyry and dykes is revealed.

Wall rock alterations include pyritization, sericitization, chloritization, and carbonation.

Lianhuashan #5 Mining Zone

At the Lianhuashan #5 Mining Zone area, the outcropped strata include the Archean Wulashan Group, and the Pleistocene and Holocene Series of sediments.

The Archean Wulashan Group is widely outcropped at the #5 Mining Zone area, which is main strata hosting the gold Mineralisation. The lithology of the Archean Wulashan Group includes amphibole plagioclase gneiss, amphibolite, migmatite granite, and amphibolite gneiss.

The Quaternary sediments are mainly red clay, variegated gravel layer, yellow sub-sandy soil and loess. The thickness is 60~130m.

Structures in the #5 Mining Zone area can be divided into most east-west, nearly north-south, northwest trending faults. The nearly north-south trend faults are the branch of regional faults F8 and F9, which host mineralisation, and they occur at the central south of the #5 Mining Zone area and control the occurrence of mineralised bodies of 51-1#, 51-6#, 51-8#, 51-9#, 51-10#.

Magmatic intrusion doesn't expose at the #5 Mining Zone area, only dykes expose as granite porphyry and diorite porphyrite vein. The dykes do not destroy the mineralisation.

Wall rock alteration includes facial and linear shape. Facial wall rock alterations include potassium feldspar, albitization, silicification, albite-epidotization, albite-zoisitization, sericitization, pyrite sericitization and carbonation. Linear wall rock alteration develops with hydrothermal replacement, at the breccia around the gold veins, and linear wall rock alterations include sericitization, chloritization, silicification, pyritization, and carbonation.

Gold mineralised bodies develop at the structural breccia as veins. Mineralisation includes pyrite, pyrrhotine, galena, and sphalerite, which show as disseminated, veined or reticulated widespread. The contact between the wall rock and Mineralised bodies is clear.

Lianhuashan #26 Vein

The outcropped strata include the Xiaotazigou Formation of Archean Jianping Group and the Baiyingaolao Formation of Upper Jurassic. Structures mainly include northwest and nearly north-south trending faults, and the nearly north south trending faults host the gold Mineralisation. Magmatic intrusive is not developed, only dykes occur.

Wall rock alterations include pyritization, sericitization, chloritization, and carbonation.

Lianhuashan #3&#7 Vein

The outcropped strata include the Xiaotazigou Formation of Archea Jianping Group, composed of plagioclase hornblende gneiss and the Quaternary sediments. Magmatic intrusive is not developed and only small dykes occur.

Structures mainly include faults at small scale, which host the gold Mineralisation.

Wallrock alterations include potassium feldspar, albitization, quartzitization, Albite~epidote, and albite~zoisite.

5.2.3 Wulong Project

As showed in Figure 5-5, the characteristics of the stratigraphy, structures and igneous rocks are detailed as following.

The Paleoproterozoic Liaohe Group rocks, layered metamorphic rocks, are sporadically outcropped, mostly in the form of xenoliths in the Mesozoic granites and mixed granites distributed over a large area. The stratigraphy of the area is composed of Lieryu Formation, Gaojiayu Formation, Dashiqiao Formation, Gaixian Formation and Quaternary, from the oldest to the newest. These rocks consist of various types of marble, schist and leptynite. The metamorphic rocks have a high background of

gold abundance. The gold grade in marble is about 5.36~21.0 part per billion ("**ppb**"), and in schist and leptynite the grade is 3.88~11.0 ppb. These are the initial gold sources, and they contribute the basis for the formation of the gold deposit.

The Lieryu Formation rocks are located mainly around Sanguliu, southeast of the region. They dip to northeastwith a dip angle of 35° - 65°. They are composed of biotite leptynite, biotite amphibole leptynite, and tourmaline leptynite.

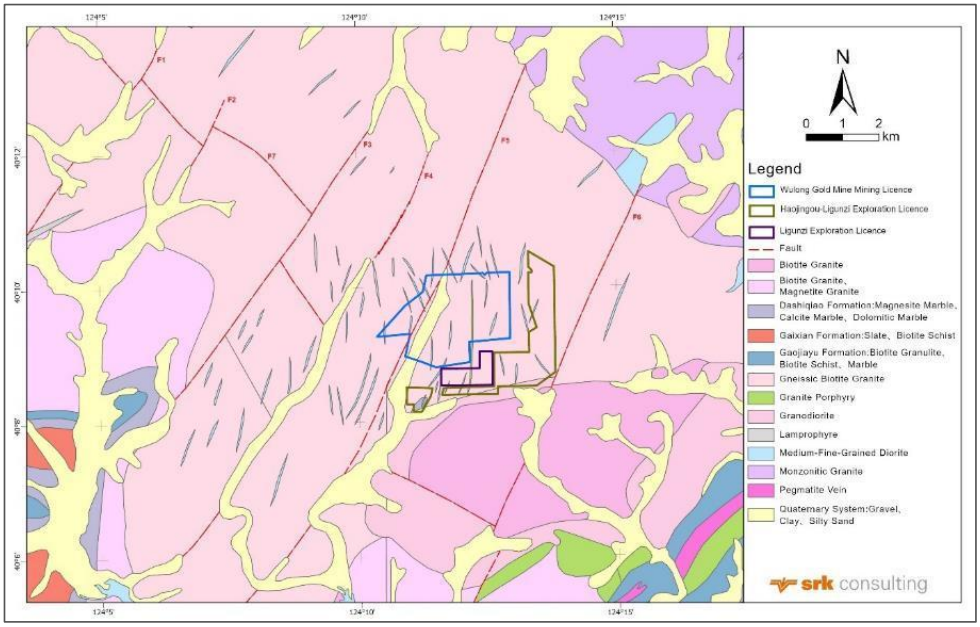
The Gaojiayu Formation rocks are in the western part of the region around Yemofang and in the southeast part around Sanguliu. They dip to northeast with a dip angle of 35° - 65°. They are composed of graphite leptynite, graphite biotite leptynite, biotite schist, and biotite gneiss with marble.

The Dashiqiao Formation rocks are in the southwestern part of the region around Songjiapu. They dip to northeast with a dip angle of 35° - 65°. The are composed of magnesite marble, calcite marble and dolomitic marble.

The Gaixian Formation rocks are in the southwestern part of the region around Songjiapu. They dip to northeast with a dip angle of 35° - 65°. They are composed of slate, biotite schist and biotite gneiss.

The Quaternary is the eluvium and diluvian sediments. They are composed of silty clay and sandy gravel. The thickness is about 0.3-2.7m.

Figure 5-5: Property Geology Map



Sources: Resource & Reserve Verification Report of the Wulong Mine in Zhen'an District, Dandong City, Liaoning Province, 2019.

The structure in this area is mainly fault structure and then fold structure. The Yalu River Fault is the largest fracture zone in the region, which is located at the edge of the region and extends northeast

and dips to southeast. It is formed by multiple extrusion and shearing. This fault zone controls the spreading of copper and gold Mineralisation in the region.

The fault structure in the region is mainly the product of the Mesozoic Yanshan tectonic movement, which can be divided into northeast trending faults and northwest trending faults. Extensions of the faults are more than 10 km and the spacing is 2-4 km and 4-6 km respectively. The two groups of faults form a diamond-shaped lattice structure, controlling the distribution of the gold-bearing Mineralised bodies.

The faults can be divided into five groups: the east-west ("**EW**") trending, north-northeast ("**NNE**") trending, northwest ("**NW**") trending, northeast ("**NE**") trending, and north-south ("**SN**") trending faults, according to their characteristics. The faults are characterized by multi-phase activities and are mostly filled by various types of vein rocks.

The NW-trending fault is an ore-bearing, tension-torsional fault, which extends about 10 km along the direction of 320°. It dips to SW and the dip angle is from 50° to 70°. It is filled by fine diorite veins and lamprophyre, whose thickness are about 3 to 7 m and up to 25 m sometimes.

The NNE-trending faults are compressive-twisting faults and parallel distributed between each other. They dip west-northwest ("**NWW**") with dip angles of about 56° - 85°. The extension of the faults is ranging from 4 km to 10 km with a width of 2-30 m. The fault zone is strongly fragmented, and is characterized by strong silicification and pyritization alterations, in which there are extrusion lenses of different scales, and the silicification is very strong, and the lenses are mostly interspersed within cleavage zone, and quartz veins can be seen, and the fracture is characterized by multi-phase development, which is the main ore-bearing structure of the area.

The NE-trending fault is a compressive fault, with an extension of 45° and dip NW at dip angles ranging from 30° to 50°. The NS-trending fault is a tension-torsional fault, with an extension of 350°-0° and nearly vertical. It is filled by granite porphyry veins. The EW-trending fault (F8) is a compressive fault, with an extension of 75°-85° and dip SE at dip angles ranging from 50° to 70°. It is filled by fine diorite and quartz veins.

The fold structure is namely the Wulong anticline, with an extension of 85°. The axial surface of the fold is nearly vertical and the dip angle of the schanks is about 50°-60°. This fold structure controls the distribution of the Hegou-Wulong-Hongshi Mineralised zones, which is the earliest fold in the area.

The tectonic activity of the area is mainly of Yanshan period, according to the characteristics of the fold and fault structures on the stratigraphy and their internal fillings.

The area is characterized by the intrusion of Paleoproterozoic biotite granite and granitelle, early Yanshanian diorite, granodiorite, granite, and many dykes accompanying the intrusion. In the west of the Wulong gold mine, it is the Paleoproterozoic Hongshi biotite granite. In the south, it is the Yanshanian (126 Ma) Sanguliu granodiorite. And in the north, it is the Yanshanian (112 Ma) Dingqishan biotite granite. They are closely related to gold Mineralisation.

Intermediate-acid and mafic dykes develop in the area, which are detailed described as follows.

The diorite porphyrite and the fine diorite are almost the same and can't be identified clearly, with a slight difference of crystallization. They are gray and pink, and are composed of fine plagioclase, amphibole, and little quartz. Then are nearly north-south trending, and dip to east or west with dip

angles mostly 80°. They extend dozens to hundreds of meters, mainly around the tectonic zone, accompanying the gold-bearing quartz veins.

The lamprophyre is located near the upper and lower plates of the quartz orthoclase porphyry. They are nearly NS trending, dip to east with the dip angles of 55°-70°. They can be divided into two groups, the odinite and the garganite. They extend dozens of meters with a width ranging from 1 to 10m.

The diorite porphyry and the fine-grained diorite are in the wall rock near the Mineralised body. They are characteristic of silicified, chlorite, sericite, carbonatite, and potassium. The quartz orthoclase can also be seen in some parts of the alteration phenomenon. It can be considered that these three vein rocks are of the Mineralisation period, mainly formed before Mineralisation. The lamprophyre, according to its cutting relationship of vein rock and no alteration, should be of post-mining period.

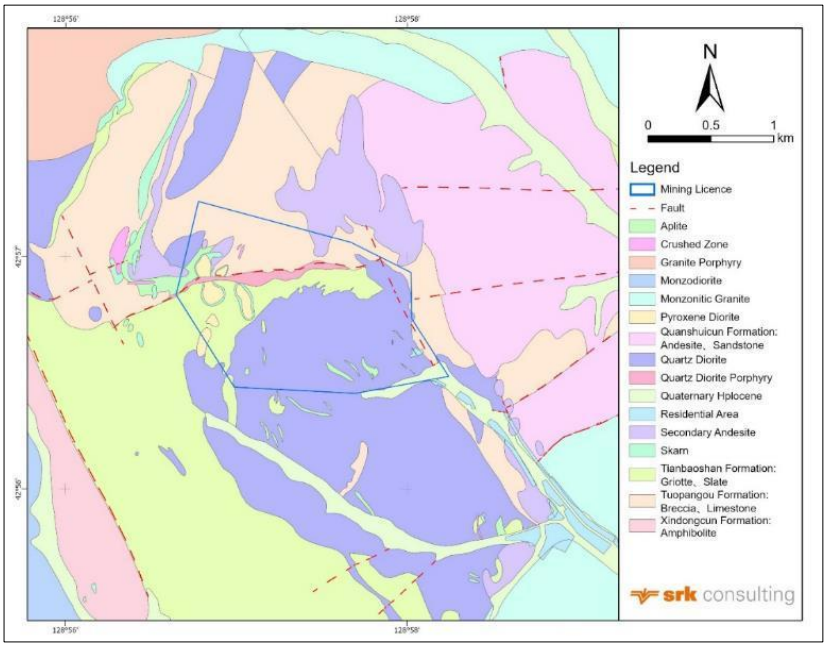
5.2.4 Hanfeng Project

Lishan Mine

Tianbaoshan Lishan-Xinxing mines are located at the intersection of Jihei fold system, Yanbian Eugeosynclinal fold belt and Dunhua uplift of Jilin Eugeosynclinal fold belt. The strata in this area are mainly the Paleozoic Ordovician - Permian marine carbonate and volcanic sedimentary rock series, and the Mesozoic Jurassic continental pyroclastic rocks. Intense magmatic activity occurred and Hercynian and the Yanshan granites developed.

Fold structure and fault structure are developed in the area and were intersect with each other to form complex structural system, which provides migration channel and ore storage space for Mineralisation. In short, the metallogenic geological conditions are superior, and it is an important polymetallic Mineralisation concentration area in Jilin Province. The geology map of Tianbaoshan-Lishan mine is shown in Figure 5-6.

Figure 5-6: Geology Map of Lishan Mine



Source: SRK

6.2.4.2 Dongfeng Mine

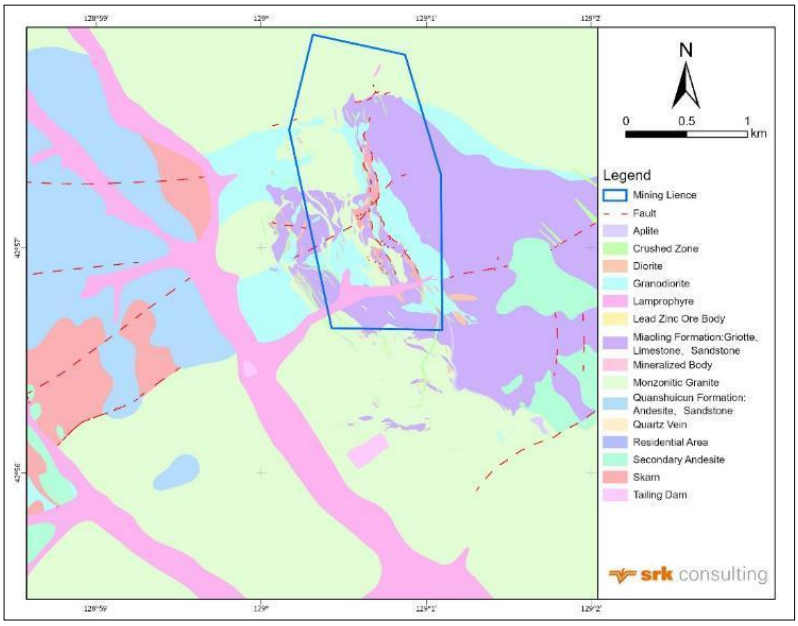
Tianbaoshan Dongfeng Mine is located at the intersection of the west margin of Yanbian Eugeosynclinal fold belt and Dunhua uplift of Jilin Eugeosynclinal fold belt. The strata in this area are mainly the Paleozoic Ordovician - Permian Marine carbonate and volcanic sedimentary rock series, and the Mesozoic Jurassic continental pyroclastic rocks. There are strong magmatic activities, showing the Hercynian and Yanshan granites. Fold structure and fault structure are developed in the area, and they intersect each other to form complex structural system, which provides favourable migration channel and ore storage space for Mineralisation. The geology map of Dongfeng mine is shown in Figure 5-7.

The strata in the area are mainly the Late Paleozoic Permian Miaoling Formation, and locally the Early Paleozoic Ordovician Qinglongcun Group and the Mesozoic Jurassic Tuntianying Formation.

Magmatic activity is intense and widely distributed in the area, accounting for about 70% of the whole area. They are mainly the Hercynian, Indosinian and Yanshanian, among which the Indosinian and Yanshanian magmatic activities are particularly strong and closely related to Mineralisation.

The structure in this area is mainly fault structure, which can be divided into three groups of NW-trending, NNW trending and NE trending according to the characteristics of faults. In the molybdenum mine area, there is also a group of near east-west trending structure and east-west contact zone structure.

Figure 5-7: Geology Map of Dongfeng Mine

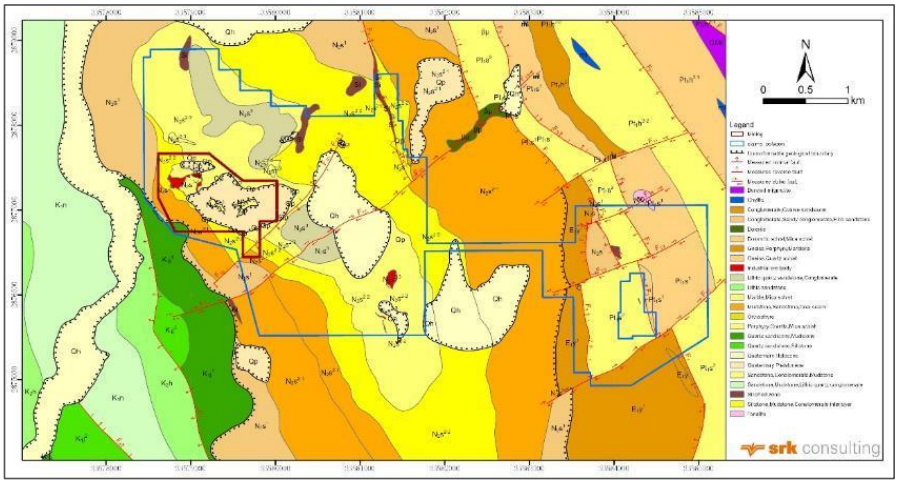


Source: SRK

5.2.5 Jintai Project

The strata outcropped in the project area are the Paleoproterozoic Huanglongyan Formation and Shimenguan Formation, the Cretaceous Jingxing Formation, the Paleogene Yunlong Formation, the Neogene Sanying Formation and the Quaternary sediments (Figure 5-8).

Figure 5-8: Local Geology Setting



Sources: Geological (Advanced Exploration) Report of the Xidengping Gold Deposit, Eryuan County, Yunnan Province, 2022

The Paleoproterozoic Huanglongtan Formation can be subdivided into two Members: the first Member of Huanglongtan Formation is composed of gneiss and is distributed in the eastern part of the region. The second Member of Huanglongtan Formation is composed of light-yellow amphibolite gneiss, light gay biotite plagioclastic granulite, and biotite plagioclastic gneiss and is distributed in the northeast part of the region.

The strata of the Paleoproterozoic Shimenguan Formation are distributed in the middle east of the mining area and lithologically, they are composed of light-gray dolomitic marble with phlogopite, light gray sandy microcrystalline marble, and dolomitic marble.

The strata of the Cretaceous Jingxing Formation are mainly distributed in the west of the region on both banks of the Heihui River. It is parallel unconformity contact or fault contact with the overlying and underlying strata.

The strata of the Paleogene Yunlong Formation are composed of mudstone and siltstone; they are mainly located near the Qiaohou-Yangbi Fault on the eastern part of the region.

The Neogene Sanying Formation is subdivided into three members: Member 3, Member 2 and Member 1. The. strata of the Member 3 are distributed in the middle of the mining area, which are covered by the Quaternary alluvial-diluvium and slop-deposit.

Member 2 is subdivided into three beds, Bed 3, Bed 2 and Bed 1. The strata of Bed 3 are distributed on the east and west sides of Member 3 and are composed of cataclastic sandstone with silty, coarse sandstone, silty breccia with thin layers of silty mudstone. The Bed 3 is the most important gold-bearing strata in the mining area.

The strata of Bed 2 are distributed on the east and west sides of Bed 3 and are mainly composed of cataclastic argillaceous siltstone with black mudstone, locally composed of fine sandstone, coarse sandstone, and conglomerate interlayer.

The strata of Bed 1 are distributed on the east and west sides of Bed 2 and are composed of gray-white carbonaceous silty mudstone, carbonaceous mudstone, and argillaceous siltstone, with coal line or thin coal seam in some parts.

Member 1 is distributed in the western and eastern part of the mining area. Affected by faults and Quaternary, the width of outcrop varies greatly. The strata exposed in the west of the mining area tend to the northeast, and the strata exposed in the east of the mining area tend to the southwest.

The Quaternary residual slope sediments in the mining area are distributed in the gentle slopes of the regional slopes, ranging from 3 to 20m thick. The lithology is mainly sand and clay, and there are also trans blocks of fine sandstone, siltstone, mudstone, medium-grained sandstone, coarse sandstone, conglomerate, siliceous rock, and siliceous conglomerate.

The general structure in the area is a syncline fold. The faults in the mine area are divided into two sets: the NW-trending fault and the NE-trending fault.

The magmatic rocks in the mining area are mainly in the form of dykes, including diabase dykes, diorite dykes and syenite porphyry dykes.

Quartz-mica-diorite dykes cover an area of about 0.03 km^2 in Shiqiaogou – Niugui at the northeast corner of the mine. The analytical results of sample analysis show that gold grade is 0.01 g/t, which is not closely related to gold mineralisation.

Diabase dykes are distributed in Gaoluoxi area in the eastern part of the mining area. The sandstone surrounding the diabase dykes has obvious keratosis, silicification and pyritization. The highest grade of samples was 0.92g/t Au, generally between 0.2g/t and 0.30g/t Au. The diabase dykes are closely related to gold mineralisation. It provides both heat and mineral sources.

Orthophyre dykes are outcropped in the eastern part of the mine area. The wallrock of the dykes is conglomerate, and pyritization and carbonation are seen in the conglomerate; it shows pyrite and calcite veins filling the conglomerate or sandstone in a network of veins. The sample of the rocks was taken and analysed with a gold grade of 0.051g/t, which is low in gold grade and is not clear that the dykes have a closely relationship to gold mineralisation.

5.3 Characteristics of Mineralised Bodies

5.3.1 Jilong Project

A total of 18 mineralised bodies in the Zhuanshanzi Block are discovered: namely 4#, 5#, 6#, 6-1#, 27-1#, 27-2#, 27-3#, 27-4#, 28# and 72# in the No. 1 Mining Zone, 100#, 100-1# and 104# in the No. 2 Mining Zone, and 26#, 26-1#, 26-2#, 26-3# and 26-4# in the No. 3 Mining Zone.

Mineralised body 4# strikes northwest and dips to southwest with a dip angle of 78º. Mineralised body 5# strikes northwest and dips to southwest with a dip angle of 80º. This Mineralised body is about 900 m long and 345 m downdip.

Mineralised body 6# strikes northwest and dips to southwest with a dip angle of 80º. It is approximately 467m long and 369m downdip. Mineralised body 6-1# strikes northwest and dips to southwest with a dip angle of 80º. It is about 207 m long and 416 m downdip.

Mineralised body 27-1# strikes northwest and dips to southwest with a dip angle of 79º. It is 792 m long and 416 m downdip. Mineralisation body 27-2# strikes northwest and dips to southwest with a dip angle of 79º. It is 388 m long and 496 m downdip.

Mineralised body 72# strikes northwest and dips to northeast with a dip angle of 72°. It is 530 m long and 297 m downdip.

Totally 9 mineralised bodies are discovered in the Zhuanshanzi 4#-5#-6#-7# Block, 4 of them are the main Mineralised bodies: namely Nos. 300#、310#、320# and 330#. These mineralised bodies are about 80m to 282m long and 84m to 344m downdip. They strike northwest and dips to southwest with a dip angle of 61°-80°.

Ore minerals include native gold and silver, pyrite, sphalerite, galena, chalcopyrite, magnetite, hematite, and chalcocite. Gangue minerals include quartz, sericite, chlorite, calcite, epidote, feldspar, and hornblende.

Textures include crystalline texture, cataclastic texture, metasomatic residual texture, and solid melt decomposition texture. Structures include disseminated structure, vein-like structure, brecciated structure, and banded structure.

5.3.2 Huatai Project

Honghuagou #1 Mining Zone

Honghuagou #1 Mining Zone is divided into four sub-areas: Sub-area 1#, Sub-area 3#, Vein 3#, and Longtoushan sub-area. The Sub-area 1# includes three mineralised veins, namely Vein 2#, Vein 82# and Vein 14#, which are controlled by either northwest, nearly north south or northeast trending faults.

Vein 2# is situated at the northwest and host by the contact of mixed granite and hornblende plagioclase gneiss. The Mineralised body is vein-like, strikes northwest and dips northeast with a dip angle of 59-85°. Vein 14# is situated at the east and host by hornblende plagioclase gneiss. The Mineralised body of Vein 14# strikes northeast and dips to southeast with a dip angle of 59-71°. Vein 82# is situated at the southwest and host by hornblende plagioclase gneiss.

Sub-area 3# is situated at the southeast, with slope landform, which is divide into Mineralised body 15# and 15-3#.

Vein 3# is at the south of #1 Mining Zone, includes Mineralised bodies 3# and 3-1#, which strike northwest, with the dip angle of 62-80°. The mineralised body is host by gneiss of Archean medium-deep metamorphic rock series. The shape of mineralised body is irregular.

Longshantou sub-area contains three mineralised bodies, including 23-2#, 23-4# and 23-5#. The Mineralised body is host by plagioclase hornblende gneiss, migmatite, plagioclase hornblende, partially hosted by K-feldspar granite. The three mineralised bodies echelon at the cross-section.

The ore minerals include natural gold, pyrite, chalcopyrite, magnetite, and minor of sphalerite, galena, chalcocite, bornite, and limonite. Gangue minerals include quartz, sericite, chlorite, potassium feldspar, plagioclase, Hornblende, calcite, and kaolin.

Textures include fragmented structure, metasomatic filling, fine idiomorphic crystal structure and metasomatic residue. Structures include massive structure, strip structure, disseminated structure, and breccia structure.

Honghuagou #86 Vein

Five mineralised bodies are defined, they are 86#, 86-1#, 86-2#, 86-3#, and 86-4#. The 86#, 86-3#, 86-4# are main mineralised bodies.

Mineralised body 86# is situated at the center of the mining area and occurs as gold-bearing quartz vein. It strikes northwest and dips to northeast with a dip angle of 75º.

The structures include fragmented spot structure, fine grain replacement filling structure, self-shaped grain structure. The textures include dense block structure, strip structure, disseminated structure, breccia structure.

Ore minerals include pyrite, and natural gold and silver. Gangue minerals include quartz, sericite and chlorite.

Pengjiagou Mine

A total of seven mineralised bodies are delineated at the Pengjiagou mining area: they include 1#, 1-1#, 2#, 19-1#, 19-2#, 65-2# and 65-3#.

Ore minerals include native gold, pyrite, chalcopyrite, galena, sphalerite, tetrahedrite, Arsenopyrite, goethite, hematite, magnetite, and bornite. Gangue minerals include quartz, sericite, chlorite, calcite, feldspar and hornblende.

Textures include crushed texture, crystalline texture, Dissolution texture, enveloping metasomatic texture, including texture. Structures include massive structure, disseminated structure, vein, fine vein and network vein structure.

Lianhuashan #5 Mining Zone

At Lianhuashan #5 Mining Zone area, six main mineralised bodies are defined, including 1#, 51-1#, 51-6#, 51-8#, 51-9#, and 51-10#. The structurally controlled mineralised bodies, shown as gold-bearing quartz veins, strike nearly north-south and/or northwest. Wall alteration includes silicification, sericitization and chloritization.

Mineralised body 51-1# is situated at the central south, strikes most north-south, dips to west with a dip angle of 79-81°.

Mineralised body 51-10# is situated at the central south, strikes most north-south, dips to west with a dip angle of 78-81°.

Mineralised body 1# is situated at the northwest, strikes northwest, dips to northeast with a dip angle of 65°.

Ore minerals include natural gold, pyrite, chalcopyrite, magnetite, and minor of sphalerite, galena, chalcocite, bornite, and limonite. Gangue minerals include quartz, sericite, chlorite, potassium feldspar, plagioclase, Hornblende, calcite, and kaolin.

Textures include fragmented structure, metasomatic filling, fine idiomorphic crystal structure and metasomatic residue. Structures include massive structure, strip structure, disseminated structure, and breccia structure.

Lianhuashan #26 Vein

Two mineralized bodies are discovered: 1# and 2#. The mineralized body 1# is situated at the central, strikes nearly north south and dips to southwest with a dip angle of 65º-68º. The mineralized body 2# also strikes nearly north south and dips to southwest with a dip angle of 65º-70º.

Textures include heteromorphic granular texture, and metasomatic dissolution texture, semi-idiomorphic granular texture, mosaic, crushing, and package metasomatic texture. Structures include dense massive structure, reticulated vein, banded, brecciated, and disseminated.

Ore minerals include natural gold, natural silver, pyrite, chalcopyrite, galena, magnetite, and hematite. Gangue minerals include quartz, sericite, calcite, and chlorite.

Lianhuashan #3&#7 Vein

A total of 7 mineralised bodies are discovered: 3#, 3-1#, 3-2#, 7#, 7-1#, 8# and 8-1#. The 3#, 8#, and 8-2# are the main mineralised bodies.

Mineralised body 3-2# is situated at the northeast, strikes northwest and dips to northeast, with a dip angle of 55º-63º. Mineralised body 8-2# is situated at the northwest, strikes northwest and dips to northeast with a dip angle of 43º-75º. Mineralised body 8# is situated at the northwest, strikes northwest and dips to northeast with a dip angle of 58º-87º.

Ore minerals include natural gold, pyrite, magnetite, chalcopyrite, galena, sphalerite, argentite, and chalcocite. Gangue minerals include quartz, sericite chlorite, potassium feldspar, plagioclase, hornblende, calcite, and kaolin.

Textures include heteromorphic granular texture, semi-idiomorphic granular texture, mosaic texture, crushing texture. Structures include massive structure, disseminated structure, followed by strip and network vein.

5.3.3 Wulong Project

Wulong Mine

The Wulong Mine is a large quartz vein type gold deposit. The wall rock is biotite granitite and monzogranite and the mineralised bodies are strictly controlled by two groups of faults, the northwest trending faults and north-northeast trending faults, consisting of rhombic lattice structure. The Mineralised body is in the north-south, northwest trending compressive-twisted faults, and fine-grained diorite associated. The ore type is mainly quartz vein type, and the useful components are natural gold and silver-gold.

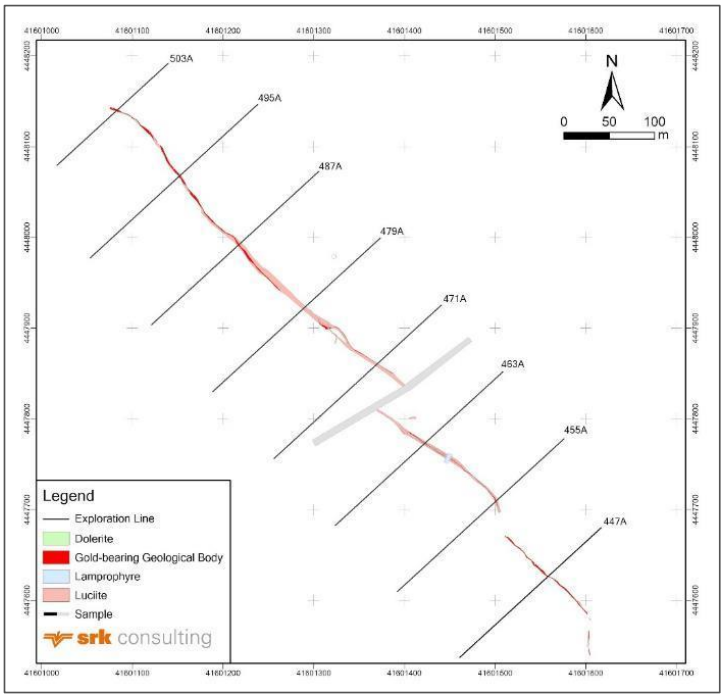
A total of 449 gold-bearing bodies were found in the field, including 382 gold-bearing quartz veins and 67 silicified alteration zones. Due to years of mining, only 18 main mineralised bodies can be mined at present, which can be spatially divided into three ore-forming belts, namely A, B and C.

The mineralised bodies in A and B belts are nearly extending north–south, which are controlled by granite porphyry veins, fine-grained sphalerite distribution in both sides of the granite porphyry. The gold mineralised bodies are in the fine-grained diorite. The lateral trending direction is southeast, with dip angles of about 40°-60°. The shallow part of the mineralised body is far from the granite porphyry, the deep part is closer to the granite porphyry, even directly in the granite porphyry. The main mineralised body in A belt is the Vein 32#, and the main mineralised bodies are the Vein 2# (Vein 2-3#, Vein 2-6#), Vein 4# (Vein 4-1#, Vein 4-2#, Vein 4-5#) in B belt.

The mineralised bodies in C belt trend northwest and the main body is Vein 163 (Vein 3-163, Vein 4-163, Vein F163). Vein 163 is divided into two parts, the north, and the south. The north zone has a high mineralisation elevation, while the south zone has a low mineralisation elevation.

The gold-bearing quartz veins are enriched in the deep part in a stepwise manner, with the thickness of the fine-grained diorite veins in an inverse elongation relationship, with a right-sided diagonal pattern in the plane. The gold mineralisation is scattered in the upper part of the profile, which is characterized by more veins and smaller scale, while the gold mineralisation is concentrated in the lower part, which is characterized by fewer veins and larger scale (Figure 5-9).

Figure 5-9: Geological Map of Level 20 of Vein 163#



Sources: Resource and Reserve Verification Report of Wulong Mine in Zhen'an District, Dandong City, Liaoning Province, 2019.

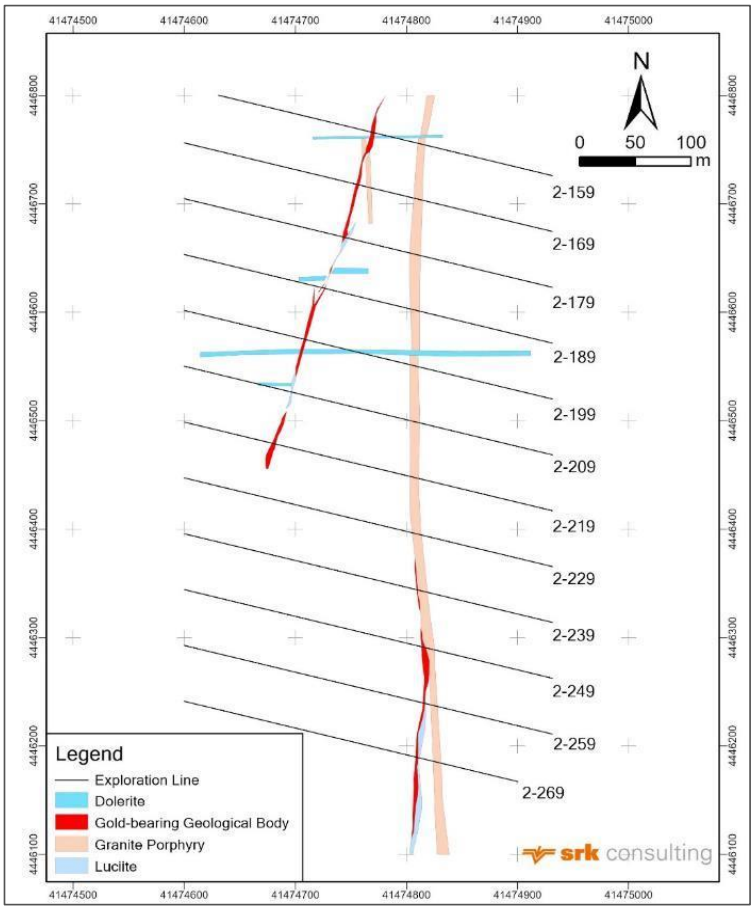
Ligunzi Gold Deposit

The Ligunzi gold mineralised body is vein-like, which is controlled by two group faults, the north-south trending fault, and the northwest trending fault. Generally, the dip length is longer than the strike length. The single vein is stable and has the characteristic of balk reappear, compound of branch (Figure 5-10). They are right-sided oblique in the plane and slightly forefront in the section.

The scale of the mineralised body is highly variable, with general extension depth of 200-300m. The max extension along strike length is up to 600m and the dip length is over 800m. The thickness of the veins varies, generally 0.2-3.0m, with maximum thickness of 10m. The north-south trending veins are nearly upright. The northwest trending veins are generally smaller in size, and dip to SW, with a dip angle of 60° to 80°, and the mineralised body is obviously expanded.

The mineralised bodies in Ligunzi are Vein 4-6#, Vein 10-3#, Vein 82#, Vein 83#, Vein 84# and Vein 85#.

Figure 5-10: The Geological Map of Mining Level #16



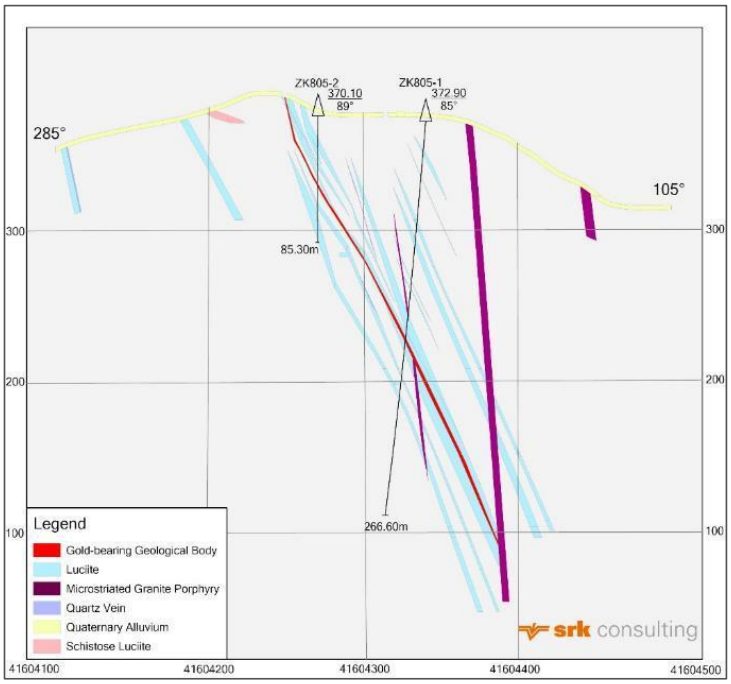
Sources: The General Exploration Report of the Ligunzi Deposit in Dandong City, Liaoning Province, 2011.

Haojingou-Ligunzi Gold Deposit

A total of 20 gold Mineralised bodies and 1 gold low-grade Mineralised body are outlined in Haojingou-Ligunzi area. The strike of Mineralised body is northwest, northeast, or nearly north south and dips to southwest, northwest, southeast, or west with dip angles from 45° to 80°. They are in the central or edge part of the diorite dyke, granite porphyry, sometimes in mixed granite. Generally, the mineralised bodies are 37-317m long, 20-225m downdip, with a width of 0.3-2.5m. The grade varies from 1.22 to 40.06g/t. Most of the mineralised bodies are thin.

The work area is in the east and south of the Wulong gold mine area, according to the distribution of veins, the detailed exploration area is divided into three parts, respectively, the Haojingou area, the Dahudengzi area, and the Ligunzi area. The Haojingou area is in the north-east of the region, with 8 gold mineralised bodies and 1 low-grade Mineralised body (Figure 5-11). The Dahudengzi area is in the central and south-eastern part, with 5 gold mineralised bodies. The Ligunzi area is in the southwest, and with 7 gold mineralised bodies.

Figure 5-11: The Line 805 Section Map in Haojingou Area



Sources: The detailed Exploration Report of the Haojingou-Ligunzi Gold Mine in Dandong City, Liaoning Province, 2017.

5.3.4 Hanfeng Project

Lishan Mine

Lishan mining area contains three polymetallic deposits, namely Lishan, Xinxing and Lishan Plant-Houshan. Xinxing deposit and Lishan Plant-Houshan deposit has not been exploited due to the difficulty in separating lead and zinc in concentrate. According to previous exploration reports, there are 961 mineralised bodies in Lishan deposit (above -92m asl), one Mineralised body in Xinxing deposit, and 12 mineralised bodies in Lishan Plant-Houshan deposit.

Lishan deposit (above -92m asl) consists of three Mineralisation zones, with a total of 961 ore bodies, which are divided into Xinglong mineralisation zone, Lishan mineralisation zone and Taisheng mineralisation zone from north to south. Among them, there is one surface exposed Mineralised body and 4 underground mineralised bodies in Xinglong mineralisation zone. One surface mineralised body and 636 underground mineralised bodies were interpolated in Lishan mineralisation belt. One surface mineralised body and 318 underground mineralised bodies have been interpolated in Taisheng mineralisation belt.

The Lishan mineralised zone is 700m long, 500m wide and nearly 800m downdip. The Xinglong mineralised zone is about 420 m long and 10-40 m wide, extending from the surface to level 15m. Generally, the strike of mineralised bodies is northwest with a dip Angle of about 65°. The mineralised bodies orientation of Taisheng mineralisation zone is relatively complex, the mineralised body strikes

generally northwest, most of the mineralised bodies dip to southwest, and some dip to northeast or south, with a dip Angle of 65°. The morphology of Lishan deposit is complex, and the shallow mineralised bodies are mainly lentil, wedge-shaped and vein shaped. In the central part of the deposit, the mineralised bodies are mainly lenticular and vein-shaped, and there are also small, mineralised bodies in the shape of nests, lentils and wedges. The mineralised bodies in the deep part of the deposit are stratiform or wedge-like, nest-like, with branch compound, pinch-out recurrence, shrinkage and enlargement.

The ore minerals are mainly sphalerite and galena, followed by chalcopyrite, pyrite, pyrrhotite, magnetite, chalcocite, bornite and arsenopyrite. Gangue minerals are diopside, garnet, epidote, quartz, calcite, sericite, actinolite and chlorite.

Lishan Pb-Zn Deposit (Below the -92m asl) is a zinc polymetallic deposit dominated by zinc ore, with some copper and lead. The mineralised bodies are nervation, lenticular and lentil shaped. There are 128 zinc-lead-copper mineralised bodies were defined.

Zinc ore is metal sulfide sphalerite, and other metal minerals with relatively less content are zincite, franklinite, pyrite, siderite, galena, boulangerite, cerusite, chalcopyrite, etc. The main metal minerals of copper-zinc ore are sphalerite, chalcopyrite, magnetite, pyrite, and pyrrhotite.

According to the ore structure, the composition, content and symbiotic association of metallic minerals and non-metallic minerals, the natural type of ore is sphalerite-bearing galena skarn type.

Dongfeng Mine

Dongfeng lead-zinc ore is mainly located in the skarn mineralisation zone formed at and or nearby fault zone, mostly located between 280m ~ 600m asl. The Mineralised belt generally extended in the direction of NW -- NW, with a length of about 1800m, a width of about 150m. It dips to the south-west with a dip Angle of 40°-75°. A total of 123 mineralised bodies have been identified in Dongfeng lead-zinc deposit, all of which belong to polymetallic mineralisation type. The mineralised bodies are stratiform, dendritic, vein-like, lenticular-like and lentil-like, with a general length of 5-90m and a maximum of 380m. The thickness is generally 3-10m, the maximum is 35m, and the maximum depth is 450m. The surrounding rock near the mine is mineralised skarn or mineralised skarn rock, and the boundary between the Mineralised body and the surrounding rock is unclear and shows a gradual transition relationship.

Dongfeng molybdenum deposit (above 250m asl) mainly occurs in the porphyritic monzogranite, contact zone of granodiorite and volcanic rock and schistosity zone of quartz diorite porphyry, which are mostly composed of quartz veins and altered breccia. The schistosity zone is generally NW - NW extend, with the length about 1200m, the bandwidth of each slice about 50m - 100m, the strike 310¬ 350° ~350°, the general trend is southwest, dip to west-south with the dip Angle of 30°-70°. The ore bodies are mostly vein-like and locally lentil-like, and the mineralisation is enhanced from surface to depth. Ore minerals are mainly molybdenite, followed by a small amount of chalcopyrite, sphalerite, galena, arsenopyrite, and pyrite. Gangue minerals are quartz, diopside, chlorite, epidote, zeolite, calcite, feldspar and biotite.

At present, the upper part of Dongfeng Mine is mainly engaged in the exploitation of remnant mining and primary Mineralised body, and the ore is primary ore without oxidation.

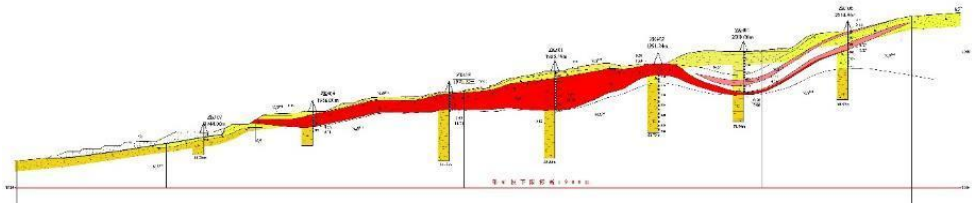
The molybdenum mineralised bodies (below 250m asl) of the Dongfeng Mine are located within the contact zones of Early Jurassic diorite granite, Late Triassic quartz diorite, and fine-grained diorite, as well as along the surrounding fracture zones of the rock masses. These orebodies are controlled by the underlying concealed rock bodies and northwest-trending fault structures, resulting in two sets of northwest-trending molybdenum-bearing quartz vein zones with steep and gentle dips. The orebodies appear vein-like or kidney-shaped, arranged parallel to each other, sometimes exhibiting local contraction and dilation phenomena. The boundaries of the orebodies are defined by samples collected near the rock walls. Through deep-level tunnels and drilling engineering control, a total of 178 molybdenum orebodies of varying sizes have been discovered.

5.3.5 Jintai Project

Two mineralised domains in the mining licence and eight mineralised domains in the exploration permit are found. The main domains are V1 in the mining licence area and V4, V10 in the exploration permit area.

Mineralised Domain V1 is distributed in the northwest of mining licence, between line 0 and line 16. It strikes to the northwest of about 325~340°, dips to the southwest of about 235~250° with a dip angle of 6~15°, has a known strike length of 307m and down-dip extension of 539m. The thickness of the domain ranges from 2.00 to 25.43m, with an average of 8.90m. The gold grade is 0.31 ~ 1.84g/t, with an average of 0.90g/t. It is pinched out between lines 7 and 9 in the northwest, and between lines 8 and 16 in the southeast. It appears to be layered surface or near-surface. The domain is controlled by 15 trenches and 30 drillholes. The ore-bearing rocks is ferritization siltstone and silicified siltstone, and the hanging wall is mainly sandstone and siltstone. The foot wall is mainly carbonaceous silty mudstone, and mudstone and argillaceous siltstone, with coal line or thin coal seam (See Figure 5-12).

Figure 5-12: Section Map of Line 4 for Mineralised Domain V1

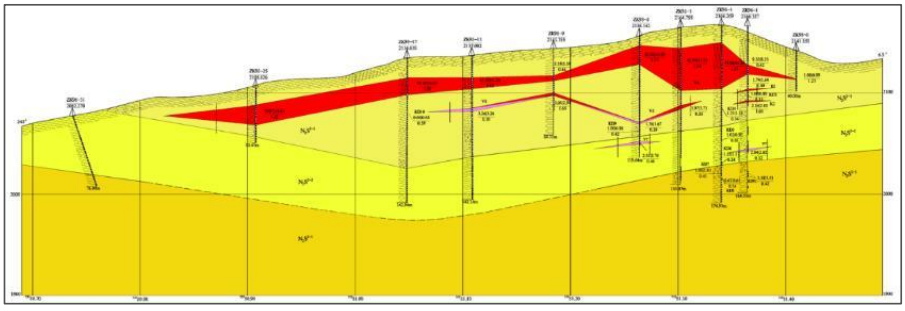


Sources: Geological (Resource Verification) Report of the Xidengping Gold Deposit, Eryuan County, Yunnan Province, 2021

Mineralised Domain V4 is distributed in the Tangzibian zone, southern part of the exploration permit area, between line 88 and line 122. It is the main and largest domain of the project. It is controlled by 76 drillholes and 10 trenches. It strikes to the northwest of about 330°, dips to the southwest of 240° with a dip angle of 2~40°, has a known strike length of about 550m and the down-dip extensions range from 40m to 560m. The thickness of the domain V4 ranges from 0.79 m to 86.76 m, with an average of 22.87m. The thickness is large in the east side and becomes thinner in the west side (see Figure 5-13 and Figure 5-14). The thickness variation coefficient is 111.58%, indicating that the thickness variation of the domain is relatively stable. Most of the gold grade range from 0.2g/t to 10 g/t (the maximum is up to 113g/t), with an average of 1.69g/t. By combination analysis, the silver grade of the V4 domain ranges from 0.50g/t to 11.80g/t, and the average is 4.58g/t.

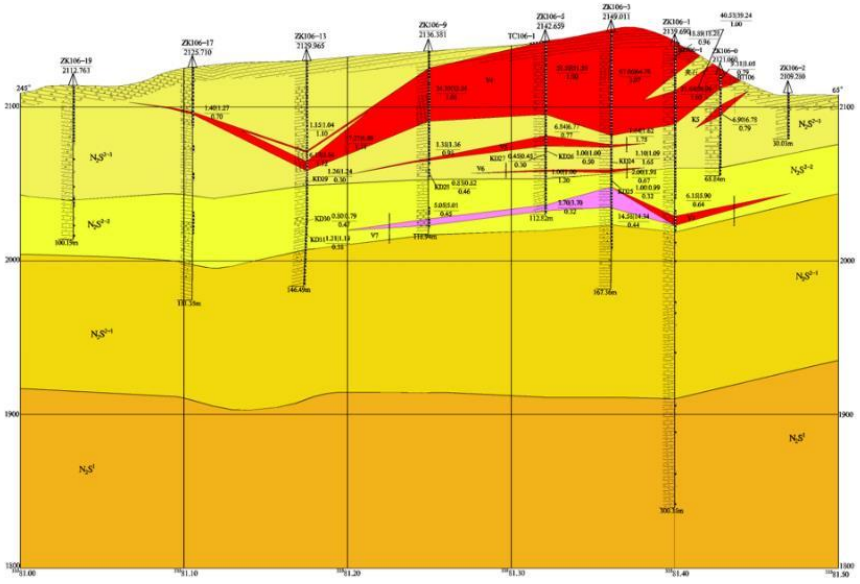
The mineralised domain V4 occurs in siliceous breccia, cataclastic siliceous rock, cataclastic siltstone and siltstone in the interlayer fracture zones of Sanying Formation. The occurrence of the domain is basically consistent with the stratigraphy.

Figure 5-13: Section Map of Line 98 for Mineralised Domain V4



Sources: Geological (Advanced Exploration) Report of the Xidengping Gold Deposit, Eryuan County, Yunnan Province, 2022

Figure 5-14: Section Map of Line 106 for Mineralised Domain V4

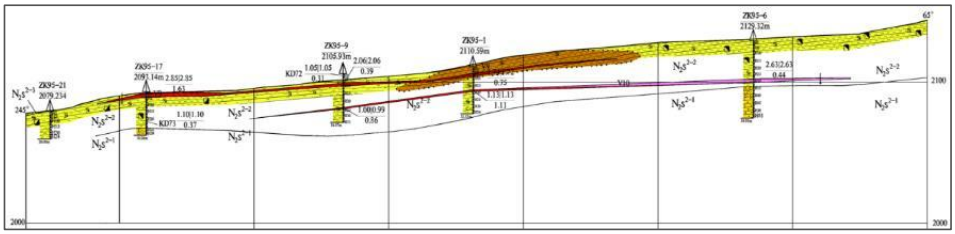


Sources: Geological (Advanced Exploration) Report of the Xidengping Gold Deposit, Eryuan County, Yunnan Province, 2022

Mineralised Domain V10 is distributed in the Xidengping zone, northern part of the exploration permit area, between line 87 and line 99. It is controlled by 31 drillholes. It strikes to the northwest of about 330°, dips to the southwest of about 245° with a dip angle of 2~12°, has a known strike length of 268m and the down-dip extensions range from 120~410m (Figure 5-15). The gold grade in V10 gold domain ranges from 0.11g/t to 25g/t, with an average grade of 2.69g/t. By combination analysis, the silver grade of the V10 domain ranges from 0.35 g/t to 2.87g/t, and the average is 1.15g/t.

The mineralised domain V10 occurs in cataclastic siliceous siltstone in the interlayer fracture zones of Sanying Formation. The occurrence of the domain is basically consistent with the stratigraphy.

Figure 5-15: Section Map of Line 95 for Mineralised Domain V10



Sources: Geological (Advanced Exploration) Report of the Xidengping Gold Deposit, Eryuan County, Yunnan Province, 2022

6 Exploration, Sampling, Analytical Procedures and Quality Assurance and Quality Control

6.1 Exploration

6.1.1 Jilong Project

Jilong Mining was established in October 2005, formerly known as the state-owned Chifeng Zhuanshanzi Mine.

From 1982 to 1984, No. 108 Geological Brigade of Inner Mongolia Nonferrous Geological Exploration Bureau ("**Brigade 108**") carried out general prospecting work, compiled the "Prospecting Evaluation Report for the Jianshanzi Gold Mine in Aohanqi, Chifeng City, Inner Mongolia" .

From April to October 1993, Shenyang Gold Institute revised and surveyed the 1:10000 scale topographic and geological map and compiled the "1:10000 Scale Geological Mapping Report of Zhuanshanzi Mine in Aohanqi, Inner Mongolia".

From 1992 to 1993, Changchun Metallurgical Geology College conducted basic geological research in this area and compiled the "Research on the Metallogenic Structure and Metallogenic Prediction of the Jianshanzi deposit in Aohanqi, Inner Mongolia".

In 2005, Inner Mongolia Wuhua Tianbao Mineral Resources Co., Ltd. ("**Tianbao**") was commissioned by Aohanqi Zhuanshanzi Mine to verify the gold resource and reserves within the mining license and compiled the "Resource and Reserve Verification Report on the Zhuanshanzi Mine in Aohanqi, Inner Mongolia" in December 2005.

In 2010, Inner Mongolia Tianxin Geological Exploration and Development Co., Ltd. ("**Tianxin**") was commissioned by Jilong Mining to verify and compile the "Resource and Reserve Verification Report of the Zhuanshanzi Mine in Aaohanqi, Inner Mongolia".

In May 2011 Tianxin compiled three reports including "Resource and Reserve Verification Report of #1 Mining Area (Below 150m asl) in the Zhuanshanzi Mine, Aohanqi, Inner Mongolia", "Resource and Reserve Verification Report of #2 Mining Area (Below 520m asl) in the Zhuanshanzi Mine, Aohanqi, Inner Mongolia" and "Resource and Reserve Verification Report of #3 Mining Area (Below 520m asl) in the Zhuanshanzi Mine, Aohanqi, Inner Mongolia".

In February 2012, Jilong Mining entrusted Tianxin to verify and compile the Resource and Reserve Verification Report of the Zhuanshanzi Mine in Aaohanqi, Inner Mongolia".

On March 3, 2012, after re-integration and delimitation of the mining area of the Zhuanshanzi Mine, Jilong Mining obtained a new mining license with a certificate number C1500002009114120054250. The mining right covers an area of 6.2614km^2.

Table 6-1 lists a summary of exploration workloads completed in both 1#2#3#&depth mineralised block from 2003 to 2018 and 4#5#6#7# mineralised block between 2013 and 2018 at the Zhuanshanzi Mine.

A 1:2,000 scale geological mapping was conducted to reveal the geology boundary. The profile of channelling sample is 10cm wide by 5cm deep by 0.8-2m long. A topographic survey was conducted and Xi'an 1980 coordinator system (3º for one zone and zone meridian is 117º) and 1985 Elevation reference was adopted. RTK surveying was used for 1:2,000 scale geology and topographic mapping.

Table 6-1: Completed Exploration Workload at Zhuanshanzi Mine

No.	Exploration work	Unit	Completed
	1#2#3#&Depth Mineralised Block (2003-2018)		
1	1:10000 hydro-geology investigation	km^2	36
2	1:10000 geology investigation	km^2	36
3	1:2000 geology mapping	km^2	6.28
4	Core drilling	m	19,078.3
5	Tunnel exploration	m	5,989.9
6	Analysis and test		
	Basic analysis	sample	14,930
	SG test	sample	227
7	Other geological work		
	Tunnel hydrogeology and engineering geology logging	m	5,989.9
	Tunnel radioactivity measurement	m	2,050
	Channel sampling	sample	13,341
	4#5#6#7# Mineralised Block (2013-2018)		
1	1:10000 hydro-geology investigation	km^2	59.75
2	1:10000 geology investigation	km^2	59.75
3	1:2000 geology mapping	km^2	9.37
4	Core drilling	m/holes	10,925.3/64
5	Tunnel exploration	m	302
6	Analysis and test		
	Basic analysis	sample	580
	SG test	sample	60

6.1.2 Huatai Project

From 1957 to 1970, Hebei regional Geological Survey and the No. 2 Geological Birgade of Liaoning Regional Geological Survey ("**Brigade 2**") conduct regional geological mapping at Honghuagou Mine and Lianhuashan Mine.

In 2006 and 2008, Huatai Mining entrusted Tianxin to conduct a detailed geological exploration and a complementary exploration, respectively at both Honghuagou and Lianhuashan mines.

Between October 2006 and December 2007, Huatai Mining commissioned Chifeng Boyuan Mineral Exploration Co. Ltd. ("**Boyun**") to conduct detailed geological exploration at Honghuagou #86 Vein, Pengjiagou and Lianhuashan #26 Vein and #3&#7 Vein.

From April 2011 to December 2012, Huatai Mining commissioned Chifeng Shengyuan Mineral Exploration Co. Ltd. ("**Shengyuan**") to conduct complementary detailed geological exploration and prepare report at Honghuagou #86 Vein, Pengjiagou and Lianhuashan #26 Vein and #3&#7 Vein.

Table 6-2 lists a summary of exploration workloads completed at Honghuagou #1Mining Zone and Lianhuashan #5 Mining Zone between 2003 and 2018, and Honghuagou #86 Vein, Pengjiagou Mine, Lianhuashan #26 Vein and Lianhuashan #3&#7 Vein between 2008 and 202012, respectively.

A topographic survey was conducted, and Xi'an 1980 coordinator system (3º for one zone and zone meridian is 117º) and 1985 Elevation reference was adopted.

RTK surveying was used for 1:10,000 scale and 1:2,000 scale geological and topographic mapping. The channelling samples were collected perpendicular to the strike of mineralised bodies along the underground exploration-level adits. The profile of the channelling sample is 10cm wide by 5cm deep by 0.8-1.2m long. The weight of each channelling sample is 9.45-12.38kg.

Table 6-2: Completed Exploration workload at Honghuagou and Lianhuashan Mines

No.	Exploration work	Unit	Completed
	Honghuagou #1 Mining Zone (2003-2018)		
1	**1:10000 hydro-geology investigation**	km^2	103.44
2	**1:10000 geology investigation**	km^2	103.44
3	**1:2000 geology mapping**	km^2	9.41
4	**Core drilling**	m/holes	34,746.5/110
5	**Tunnel exploration**	m	17,143.2
6	**Analysis and test**		
	Basic analysis	sample	3,638
	SG test	sample	256
7	**Other geological work**		
	Tunnel hydrogeology and engineering geology logging	m	17,143.2
	Tunnel radioactivity measurement		40.98
	Honghuagou #86 Vein (2008-2012)		
1	1:10000 hydro-geology investigation	km^2	7.5
2	1:10000 geology investigation	km^2	7.5
3	1:2000 geology mapping	km^2	2.38
4	Core drilling	m/holes	5,739.4/22
5	Tunnel exploration	m	1,076
6	Analysis and test		
	Basic analysis	sample	497
	SG test	sample	65
	Pengjiagou Mine (2008-2012)		
1	1:10000 hydro-geology investigation	km^2	15
2	1:10000 geology investigation	km^2	15
3	1:2000 geology mapping	km^2	3.79
4	Core drilling	m/holes	7,227.8/44
5	Tunnel exploration	m	357
6	Analysis and test		
	Basic analysis	sample	473
	SG test	sample	75
	Lianhuashan #5 Mining Zone (2003-2018)		
1	1:10000 hydro-geology investigation	km^2	15
2	1:10000 geology investigation	km^2	15
3	1:2000 geology mapping	km^2	0.82
4	Core drilling	m/holes	4,565.4/22
5	Tunnel exploration	m	9381.5
6	Analysis and test		
	Basic analysis	sample	1,330
	SG test	sample	96
7	Other geological work		
	Tunnel hydrogeology and engineering geology logging	m	9,381.5

No.	Exploration work	Unit	Completed
	Tunnel radioactivity measurement		3,550
	Lianhuashan #26 Vein (2008-2012)		
1	1:10000 hydro-geology investigation	km^2	380
2	1:10000 geology investigation	km^2	380
3	1:2000 geology mapping	km^2	0.33
4	Core drilling	m/holes	2,787.4/13
5	Tunnel exploration	m	1,578.6
6	Analysis and test		
	Basic analysis	sample	266
	SG test	sample	30
	Lianhuashan #3&#7 Vein (2008-2012)		
1	1:10000 hydro-geology investigation	km^2	8.71
2	1:10000 geology investigation	km^2	18.715
3	1:2000 geology mapping	km^2	3.03
4	Core drilling	m/holes	5,879.4/50
5	Underground Drilling	m/holes	882.2/11
6	Tunnel exploration	m	5,113.7
7	Analysis and test		
	Basic analysis	sample	2,385
	SG test	sample	110

6.1.3 Wulong Project

Wulong and Ligunzi Gold Deposits

From 1960 to 1987, the Brigade 103 of Liaoning Non-ferrous Geology Bureau ("**Brigade 103**", the former Brigade 107 of the Liaoning Metallurgical Geology Bureau) undertook exploration work in the Wulong mine with a total drillhole length of 185,000m and a total trenching of 230,000m^3.

From 2001 to 2002, Brigade 103 carried out a national land and resources investigation work in the adjacent area of the Wulong Mine.

From June 2006 to December 2009, Brigade 103 undertook a drilling and tunnelling campaign in the Wulong Mine, with a total drillhole length of 7,128.7m and a total tunnel length of 5,006.8m.

From 2010 to 2011, General Exploration Institute of Liaoning Non-ferrous Geology Bureau undertook the detailed exploration work in Ligunzi area, with a total drillhole length of 1,097.8m, a total tunnel length of 308m and a total trenching of 506m^3.

In 2016 and 2019, the Brigade 7 of Liaoning Geological Bureau ("**Brigade 7**") conducted resource and reserve verification work of the Wulong Mine, respectively.

Haojingou-Ligunzi Gold Deposit

In 1982, the Brigade 107 of the Liaoning Metallurgical Geology Bureau ("**Brigade 107**") undertook the general and advanced exploration in the Banshi Sandui and Dahudingzi area.

In 1993, Brigade 103 undertook a general exploration in the adjacent area of Wulong Mine and Sidaogou Mine.

In 2000, the exploration license was set up and the Brigade 103 undertook the geological, geophysical, and geochemical survey.

From 2005 to 2011, Brigade 103 undertook the general exploration in the Haojingou-Ligunzi area.

From 2012 to 2017, Brigade 103 undertook the detailed exploration, with a total surface drillhole length of 20,026m, a total underground drillhole length of 1,021.9m, a total tunnel length of 1,619m and a total trenching of 28,974.5m^3.

Geophysical Survey

The geophysical survey, including a 1:50,000 scale aerial magnetic survey and a 1:200,000 gravity survey in Dandong region was conducted from 1958 to 1964, and according to the characteristics of the aerial magnetic anomaly, the Wulong Mine and its adjacent are divided into four magnetic anomaly zones, all trending northeast. In the west it is the high anomaly zone and the transitional anomaly zone (+50 to -50nt), negative anomaly zone (<-50nt) and transitional anomaly zone (+50 to -50nt) is in the east. Comparing with the 1:50,000 scale geological map, it shows that all known gold deposits in the area are distributed in the gradient zone of the transition anomaly zone. That is, the transition area of the concentrated distribution of the aerial magnetic anomaly zone in the area is the edge of the major geological bodies or contact zone area in the area, which coincides well with the geological conditions of gold deposits.

Gechemical Survey

In 1989, Brigade 103 carried out the geochemical stream sediment survey in the Wulong Mine covering an area of 900 km^2, and indicated 17 elements including Cu, Pb, Zn, Ni, Cr, Co, Mn, Mo, Ag, Au, Hg, V, Ti, As, Cd, Be and Bi as the indicator elements. A total of 4 comprehensive anomalies of class I, 6 comprehensive anomalies of class II and 4 comprehensive anomalies of class III were obtained. These anomalies have obvious concentration centres and good elemental combination. The Wulong gold deposit is located on the I -1 anomaly, and the discovery of these anomalies provides a solid basis for further gold exploration in the area.

Remote Sensing Geological Survey

From March 1991 to March 1994, the Geology Institute of Liaoning Geological Survey undertook a remote sensing survey. Four sets of lineal images, northeast, north-northeast, northwest, and east-west trending, are clearly developed. The ring images are mainly round and oval, with closed rings and semi-rings, and their sizes vary. The combined image is a composite of four sets of linear images with an incomplete concentric ring image superimposed. The Wulong gold deposit is in this combination image.

6.1.4 Hanfeng Project

Lishan Mine

In 1950, Northeast Geological and Mineral Survey-YanjiHelong Team conducted a mineral survey.

From 1953 to 1954, Northeast Branch 107 of Ministry of Heavy Industry of China ("**Branch 107**") took a deep exploration below level 6# in Lishan Deposit of Tianbaoshan Mine.

From 1958 to 1965, Jilin Metallurgical Geological Exploration Company carried out survey a detailed investigation and exploration work in Erdaogou-Lishankeng area of Tianbaoshan Mine.

In August 2011, Hanfeng Mining obtained the exploration right (below -92m asl) of Lishan lead-zinc deposit in Tianbaoshan Mine.

The deep exploration of Lishan lead-zinc mine (below -92m asl) lasted nine years and one month from August 2011 to August 2020.

Table 6-3 lists a summary of key completed exploration between 2011 and 2020 at the Lishan Mine below -92m asl.

Table 6-3: Completed Exploration Workload at Lishan Mine (below -92m asl)

No.	Exploration Work	Unit	Completed
1	Control survey GPS	Point	7
2	1:10000 hydro-geology investigation	km^2	15
3	1:10000 geology investigation	km^2	15
4	Core drilling	m	46,351.96
5	Tunnelling exploration	m	6,384.0
6	Analysis and test		
	Basic analysis	sample	9,916
	SG test	sample	466
	Processing test	sample	1
7	**Other geological work**		
	Geologic engineering point survey	Point	389
	Drilling hydrogeology and engineering geology logging	m	21,172.7
	Tunnel hydrogeology and engineering geology logging	m	909.6
	Tunnel radioactivity measurement		153

Dongfeng Mine

From 1958 to 1965, Jilin Metallurgical Geological Exploration Company carried out exploration work.

Between 1975 and 1990, the No. 605 Geological Brigade of Jilin Metallurgical Geological Exploration Company ("**Brigade 605**") and Tianbaoshan Mine carried out a lot of geological exploration work in the mining area and its periphery.

Table 6-4 lists a summary of key completed exploration from December 2013 to February 2023 at the Dongfeng Mine below 250m asl.

Table 6-4: Completed Exploration Workload at Dongfeng Mine (below 250m asl)

No.	Exploration Work	Unit	Completed
1	Control survey GPS	Point	4
2	1:10000 hydro-geology investigation	km^2	15
3	1:10000 geology investigation	km^2	15
4	Core drilling	m	93,391.36
5	Tunnelling exploration	m	4,707.34
6	Analysis and test		
	Basic analysis	sample	33,909

No.	Exploration Work	Unit	Completed
	SG test	sample	300
	Processing test		1
7	Other geological work		
	Geologic engineering point survey	point	423
	Drilling hydrogeology and engineering geology logging	m	85,713.06
	Tunnel hydrogeology and engineering geology logging	m	694.3
	Tunnel radioactivity measurement		208

6.1.5 Jintai Project

From 2007 to 2009, the Yunnan Yuxi Maite Industrial Co. Ltd. ("**Yuxi Maite**") carried out a geological exploration with a total drillhole of 200m, a total exploration pit of 150m and a total excavated trenching of 4,500m^3.

Between 2009 and 2010, Shanghai Fuduo Mining Exploration Technology Co., Ltd. ("**Fuduo**") conducted the topographic survey, the geological survey, and the geochemical survey in the mining licence area. A total of 27 drillholes with an aggregate length of 1,410.9m were drilled. A total of 24 trenches with 8,000m^3 were carried out. The general geological exploration report was submitted.

From 2012 to 2016, Fuduo conducted the geological and geochemical survey in the exploration licence area with a total length of 3,361.9m drillholes and a total volume of 1,581.7m^3 trenches.

Between 2017 and 2018, Fuduo conducted the geological exploration in the exploration licence area with a total length of 997.2m drillholes and a total volume of 891.2m^3 trenches.

From October 2020 to October 2021, Yunnan Yuanhao Mining Co., Ltd. ("**Yuanhao**") carried out the resource verification work in the mining licence area with a total length of 597.2m drillholes. The resource verification report for Xidengping Mine was submitted.

From March 2021 to September 2022, Yuanhao conducted the advanced exploration campain in the exploration licence area with a total length of 7,386.6m boreholes and a total volume of 1,309.9m^3 trenches. The advanced geological exploration report for the exploration licence area was submitted.

Table 6-5 lists the main completed exploration work in the Xidengping mining license area. The geological exploration consists of mainly three phases: the general exploration conducted by Fuduo from 2007 to 2010, the exploration for Mineralised Domain V2 conducted by Fuduo from 2012 to 2013 and the Mineral Resource verification conducted by Yuanhao from 2020 to 2021.

Table 6-5: Completed Exploration Workload in the Mining Licence Area

No.	Exploration work	Unit	Completed
1	1:10000 hydrogeology & environmental geology investigation	km^2	10.28
2	1:2000 geological survey	km^2	1.092
3	Core drilling	m	2,917.91
4	Tunnelling exploration	m^3	8,158
5	Analysis and test		
	Basic analysis	sample	1,650
	SG (piece) test	sample	30
	SG (lump) test	sample	2
	Processing test	sample	1
6	Other geological work		

No.	Exploration work	Unit	Completed
	Geologic engineering point survey	Point	67
	Geology logging of drilling	m	2,917.91
	Geology logging of tunnel	m^3	8,158

Table 6-6 lists the main completed exploration work in the Xidengping exploration permit area. The geological exploration is mainly composed of two phases: the exploration conducted by Fuduo from 2011 to 2017 and the advanced exploration conducted by Yuanhao from 2020 to 2022.

Table 6-6: Completed Exploration Workload in the Exploration Permit Area

No.	Exploration work	Unit	Completed
1	1:10000 hydrogeology & environmental geology investigation	km^2	35
2	1:2000 hydrogeology & environmental geology investigation	km^2	3.48
3	1:10000 geological survey	km^2	10.28
4	1:2000 geological survey	km^2	3.48
5	1:2000 topographic survey	km^2	3.48
6	Core drilling	m	11,699.47
7	Tunnelling exploration	m^3	3,781.57
8	Analysis and test		
	Basic analysis		9,629
	SG (piece) test		103
	SG (lump) test		4
	Processing test		1
9	Other geological work		
	Geologic engineering point survey	Point	182
	Geology logging of drilling	m	11,699.47
	Geology logging of tunnel	m	1,223.38

6.2 Drilling and Trenching

6.2.1 Jilong Project

A total of 81 drillholes with an aggregate length of approximately 19,078.3m were conducted at the Zhuanshanzi 1#2#3#&depth Block, and a total of 64 drill holes with an aggregate length of 10,925.3m were drilled at the exploration of Zhuanshanzi 4#-5#-6#-7# Block.

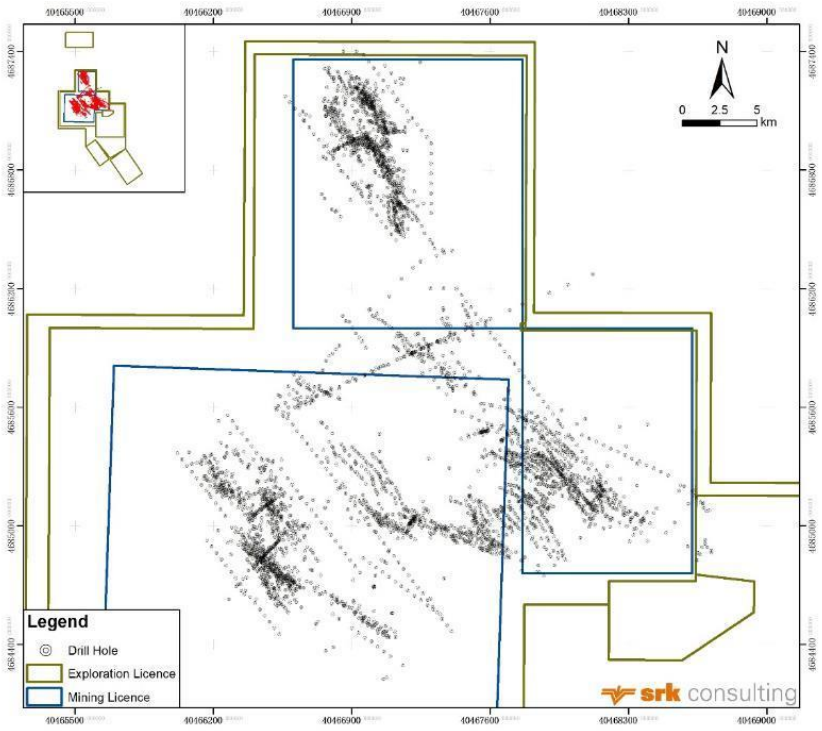
The holes were drilled by XY-4 drill rigs, with a starting diameter of 110mm. After passing through the Quaternary loose sedimentary layer, the diameter of the drill bit was changed to 75 mm until termination of the hole. Figure 6-1 shows the drillhole locations at the Zhuanshanzi Mine.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m deep after the commencement. The down-hole surveys were conducted with YT-1 little calibre compass clinometer for the boreholes in the 1#2#3#&depth Block and with BZM-R-B little calibre compass clinometer for the boreholes in the 4#5#6#7# Block, respectively.

The rock core recovery for all 81 drill cores varied from 86% to 100%, and the average recovery rate for mineralised core intervals was 100%. The rock core recovery for all 64 drill cores varied from 92% to 100%, and the recovery rates for mineralised core intervals were between 93% and 100%.

As design cementation collar seal was conduct, and the 425# cement was used for collar seal.

Figure 6-1: Distribution of Drillholes in the Zhuanshanzi 1#2#3#&depth Block



A total of 5,989.89m underground tunnels were conducted in the 1#2#3#&depth Block, and a total of 45,586.20m underground tunnels were completed in the 4#5#6#7# Block. The profile of tunnel was 2.0m × 2.0m.

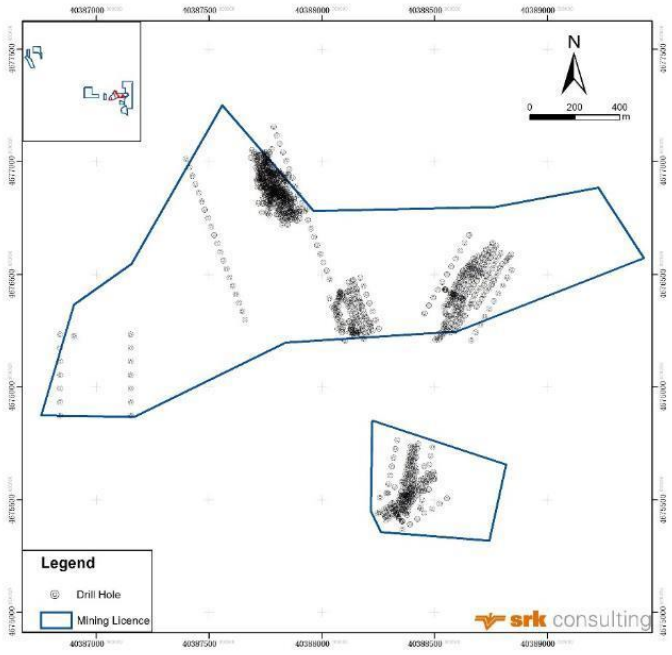
6.2.2 Huatai Project

Honghuagou #1 Mining Zone

A total of 75 drillholes with an aggregate of 27,760.05m were conducted at the 2017 resource verification program, of which 22 were surface holes, total length of 13,435.16m and 53 underground holes, total length of 14,324.89m. A total of 35 historical drillholes with an aggregate length of 6,986.43m are entered into the database. Figure 6-2 shows the distribution of the drillholes.

The surface holes were conducted by XY-4 drill rigs, with a starting diameter of 110mm. After passing through the Quaternary loose sedimentary layers, the diameter of the drill bit was changed to 75mm. The underground holes were conducted by modified XY-2 and XY-4 drill rigs, with a starting diameter of 75mm until terminate.

Figure 6-2: Borehole Location Map



Sources: SRK

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. The down-hole survey was conducted with KXP-2 little calibre compass clinometer.

The recovery rates for Mineralised intervals of the 75 drill holes were 100%, and all rock core recovery rates varied from 99.28% to 100%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 17,143.24m underground tunnels were conducted and used for resource estimate. The profile of the tunnels was 2.0m × 2.0m.

Honghuagou #86 Vein

A total of 22 drillholes with an aggregate length of 5,739.44m were conducted at the Honghuagou #86 Vein. The holes were drilled by XY-4 drill rigs, with a starting diameter of 91 mm. After passing through the Quaternary loose segmentary layers, the diameter of the drill bit was changed to 75 mm until termination.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. The down-hole survey was conducted with CX-6B little calibre compass clinometer.

The recovery rates for Mineralised intervals on 22 drill holes were 100%, and all rock core recovery rates varied from 75% to 100%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 1,076m long underground tunnels were conducted and used for resource estimate. The profile the adits was 2.0m × 2.0 m.

Pengjiagou Deposit

A total of 44 drill holes with aa aggregate length of 7227.79m were conducted at the Pengjiagou deposit. The holes were drilled by XY-4 drill rigs, with a starting diameter of 91 mm. After passing through the Quaternary loose sedimentary layers, the drill bit with a diameter 75 mm was used until termination.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. The down-hole survey was conducted with CX-6B little calibre compass clinometer.

The Mineralised core recoveries for the 22 drill holes were between 98% and 100%, and all rock core recoveries varied from 93% to 100%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 357m underground adits were used for resource estimate. The profile of the adits was 2.0m × 2.0m.

Lianhuashan #5 Mining Zone

A total of 22 underground drill holes, with an aggregate length of 4,565.42m were conducted at the Lianhuashan #5 Mining Zone. Among these boreholes, three holes are horizontal holes, and the other are inclined holes. The underground holes were conducted by modified XY-5 drill rigs, with a starting diameter of 75 mm until terminate of the holes.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. The down-hole survey was conducted with S42 little calibre compass clinometer.

The recovery rates for all Mineralised drill cores were 100%, and for all rock cores were 99%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 9381.5 m underground adits were used for resource estimate. The profile of the adits was 2.0m × 2.0m.

Lianhuashan #26 Vein

A total of 13 drillholes with a total length of 2,787.39m were conducted at the Lianhuashan #26 Vein. The holes were drilled by XY-4 drill rigs, with a starting diameter of 110 mm. After passing through the Quaternary loose sediments, the drill bit with a diameter of 75 mm was used until termination of the hole.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. The down-hole survey was conducted with CX-6B little calibre compass clinometer.

The recoveries for all Mineralised cores varied from 94% to 100%, and for all rock cored varied from 93% to 100%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 1,578.60m underground adits were used for resource estimate. The profile of the adits was 2.0m × 2.0m.

Lianhuashan #3&7 Vein

Fifty drill holes, with a total length of 5,879.44m were conduct at the Lianhuashan #3&7 Vein. All holes were drilled by XY-4 drill rigs, with a starting diameter of 91 mm. After passing through the Quaternary loose sedimentary layers, the drill bit with a diameter of 75 mm was used until termination of the hole.

The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 22 m after commencement. The down-hole survey was conduct with S42 little calibre compass clinometer.

The recoveries for all Mineralised cores varied from 94% to 100%, and for all rock cores varied from 93% to 100%. As design cementation collar seal was conducted and the 425# cement was used for collar seal.

A total of 5,113.66m underground tunnels were used for resource estimate. The profile of the tunnels was 2.0m × 2.0m.

6.2.3 Wulong Project

As described in section 5.1.3, the region geological and mineral exploration began in the 1960s and several phases of exploration work had been carried out since then. SRK was not provided with the former data. Only the resource and reserve verification work at Wulong Mine in 2019, the detailed exploration word at Ligunzi deposit in 2011, and the detailed exploration work at Haojingou-Ligunzi deposit from 2012 to 2017 are discussed in this section. A summary of the exploration workloads is listed in Table 6-7.

Table 6-7: Summary Characteristics of Trenching, Drilling and Tunnelling

Item	Wulong	Ligunzi	Haojingou-Ligunzi
Trenching/m^3	/	506	28,974.53
Surface Drilling/m	/	1,097.8	20,026
Underground Drilling/m	/	/	1,021.9
Tunnelling/m	3,650	308	1,619
Sampling	2,229	400	2334

Wulong Mine

A total of 3,650m underground tunnels were excavated by Wulong Mining. The profile of drift was 1.8-2.0m × 2.0-2.2m, and the slope of drift was 0.3%-0.7%. The sketch map of the tunnels was drawn at a scale of 1:100.

Ligunzi Gold Deposit

The purpose of trenching was to reveal gold mineralised body exposed at surface and the trench was perpendicular or roughly perpendicular to the mineralised body strike with a spacing of 100-160 m. The bottom width is 0.6-0.8 m and the top width varied depending on the looseness of the soil and the depth of the trench. At least 0.3 m of the bedrock should be excavated. All the trenches were named regularly and were surveyed by the total station or GPS. The sketch map of the trenches was drawn at a scale of 1:100.

In 2010, two drillholes were drilled by the diamond wire line core drilling technique with the XY-4 drilling rig. The diameter is 75 mm. The boreholes surveys were done with the XJL compass clinograph. The depth was verified. The rock recovery was over 90% while the Mineralised core was over 98%. The bores were sealed with clay and cement mortar.

Haojingou-Ligunzi Gold Deposit

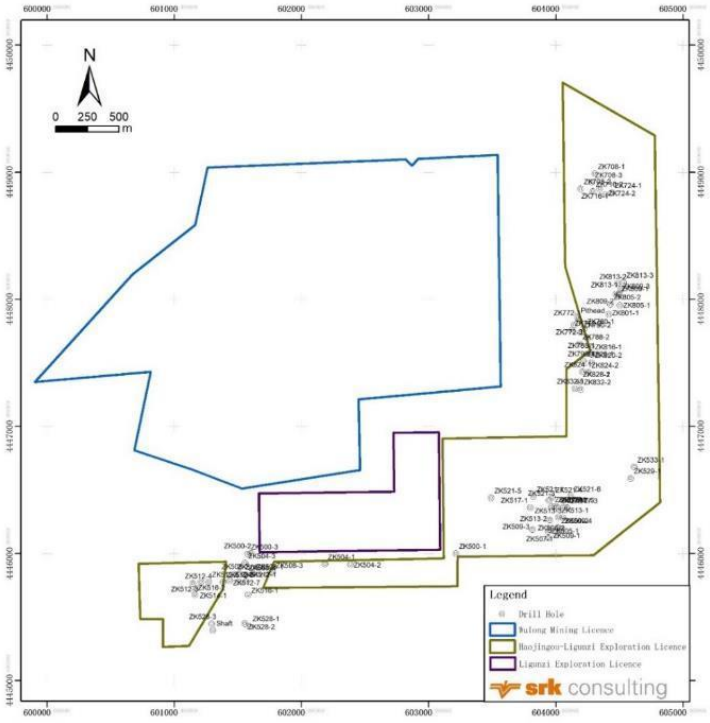
A total of 559 trenches with a total of approximately 28,712.33m^3 were completed. The width of trench was 1-1.2 m on the top and 0.6-08 m at the bottom. The depth was 0-3 m and at least 0.3 m of the bedrock should be excavated. After completion of the trenches, geological logging and sampling were performed in a timely, correct, and objective way and sketched the trenching at 1: 100 scale. The wall was sketched in its natural form and the bottom was mapped at 1.0m wide. The trench logging provided detailed text description of the lithology, structure, Mineralisation, and alteration.

Six trenches with a total of 262.3 m3 were rehandled. The width at the bottom was 0.8-1.0 m. The depth was 0-3 m and at least 0.3-0.5 m of the bedrock should be excavated.

A total of 73 surface boreholes with an aggregate length of 20,026m were drilled during the detailed exploration period in the exploration license area (Figure 6-3). The types of the drilling rigs were XY-4, XY-44 and XY-B6. The hole's diameter is 75 mm, and the core diameter is 53 mm.

The cores were cleaned, labelled, and placed regularly. The recovery rates for all rock cores varied from 88% to 100% and for all Mineralised cores varied from 80% to 100%. The hanging wall and footwall recoveries were between 92% and 100%. The collars of holes were surveyed properly, and down hole survey was undertaken at 50 m intervals. Hole depth was verified at the interval of 50 m and after the bore was finished. The maximum error of hole depth correction is 0.1 m. Initial record on site included shift reports, ore/rock core cards, ore/rock recovery, and depth verification record, were orderly and reliable. The bores were sealed with clay and cement mortar and the collars were marked.

Figure 6-3: Distribution Map of Drillholes



A total of 14 underground boreholes with an aggregate length of 1,021.9m were drilled with the hole diameter of 47 mm and the core diameter of 35 mm. Hole depth was verified at the interval of 50 meters and after the bore was finished. Hole depth was verified after the bore was finished.

A total of 1,619m tunnels were excavated at the Haojingou-Ligunzi gold deposit. The profile of the tunnels was 2.0-2.2m × 1.8-2.5m, and the slope was less than 0.3-0.5%.

SRK was not provided with the whole phase of exploration work data. The exploration or mineral work including the resource and reserve verification work of Wulong mine in 2019, the detailed exploration work of Ligunzi deposit in 2011, and the detailed exploration work of Haojingou-Ligunzi deposit from 2012 to 2017 was checked and accepted by the mine. All the three reports were reviewed by the local geological authorities.

6.2.4 Hanfeng Project

The deep exploration of Lishan Mine (below -92m asl) lasted nine years and one month from August 2011 to August 2020. As of 20 August 2020, a total of 46,351.96 m of drilling and 6,384.80 m of tunnelling exploration were completed at the Lishan Mine below -92m asl (see Table 6-8).

The deep exploration programme of the Dongfeng Molybdenum Mine (below 250m asl) was conducted from December 2013 to February 28, 2023, including geological mapping in tunnels, as well as tunnel exploration and drilling. The exploration depth ranged from 250 m to -600 m. A total of

3611.9m of drilling and 3499.54m of tunnel exploration were completed from 2013 to 2017 and totalling 82101.16 m of drilling and 1207.80m of tunnel exploration were conducted from 2019 to 2023.

A summary of the exploration work of Hanfeng Project is listed in Table 6-8

Table 6-8: Drilling and Tunnelling Summary of Hanfeng Project

Item	Lishan	Dongfeng
Surface Drilling/m	3,573.1	23,828.38
Underground Drilling/m	42,778.86	73,525.42
Tunnelling/m	6,384.8	14,707.34
Drilling Sample	9,127	33,207
Tunnelling Sample	789	702

6.2.5 Jintai Project

As described in Section 6.1.2, a summary of the exploration workloads is listed in Table 6-9.

Table 6-9: A Summary of Characteristics of Trenching and Drilling

Item	Mining area	Exploration area
Trenching/m^3	8,158	3,781.57
Drilling/m	2,917.91	11,699.47
Sampling	1,650	9,629

The purpose of trenching was to reveal gold mineralised body exposed at surface and the trench was perpendicular or roughly perpendicular to the mineralised body trend. The bottom width is 0.6-1.0 m and the top width varied from 2.2 m to 2.5 m. At least 0.3 m of the bedrock should be excavated. All the trenches were named regularly.

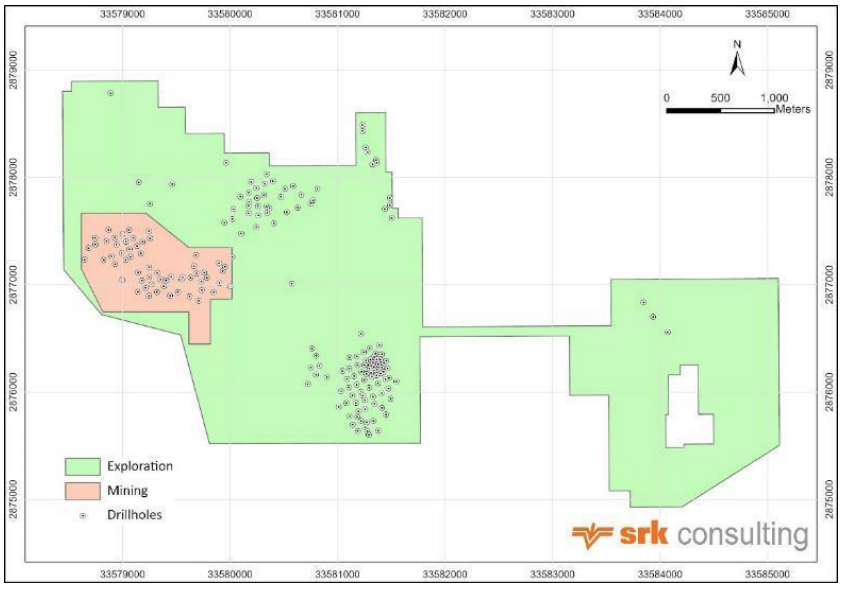
The geological logging and sampling were carried out in time to avoid rain collapse.

Most of the trenches were not included in the Mineral Resource estimate, just for the purpose of gold domain exploration.

A total of 192 surface drillholes with an aggregate length of 14,617.38 m were drilled in both mining and exploration licence areas from 2007 to 2022 (see Figure 6-4).

The hole's diameter is greater than 75 mm, and the core diameter is 55 mm. The cores were cleaned, labelled, and placed regularly. The recovery rates for all rock cores varied from 82% to 100% and for all Mineralised cores varied from 81% to 99%. The collars of holes were surveyed properly, and down hole survey was undertaken at 50 m or 100 m intervals. Hole depth was verified at the interval of 50 m or 100 m and after the bore was finished. The maximum error of hole depth correction is 0.1 m. Initial record on site included shift reports, ore/rock core cards, ore/rock recovery, and depth verification record, were orderly and reliable. The bores were sealed with clay and cement mortar and the collars were marked.

Figure 6-4: Map Showing the Distribution of Drilling



Source: Arcgis Mapping

6.2.6 SRK Comments

SRK has reviewed the drilling spacing and quality for all the five projects. SRK is confident that the drilling is sufficient for the Mineral Resource estimation.

6.3 Sampling, Sample Preparation, Analysis and Quality Control

6.3.1 Jilong Project

Sampling

Samples were taken from drillcores by splitting along the core axis. The sample length ranges from 0.8m to 1.0m. The weight of samples was between 9.45 kilograms ("kg") and 12.38kg.

All tunnel samples were sampled using channelling method. The samples positions were determined by the geologists and were sampled by the other workers. The sample channel was perpendicular or roughly perpendicular to the strike of Mineralised body. The section of channel was 10 cm × 5 cm, and the sample length ranges from 0.1 to 1.2m. The sample intervals were 6 m in ore drift 6 m and 40 m in transverse drift.

Sample Preparation and Analysis

The sample preparation was according to the Chechott formula: $Q=Kd^2$, K=0.8. The core sample preparation was conducted in the following procedures:

- the original samples were crushed passing a mesh of 30 screen.
- sub-sample with 700 grams ("g") was collected from a riffle splitter, and
- the sub-sample was pulverized passing a mesh of 200 screen; and about 20g of pulp sample was bagged and labelled for analysis. The rest was stored as a pulp reject.

Spectrum and chemical analysis were employed for sample analyses. The basic item for chemical analysis is gold, which was assayed by atomic absorption spectrophotometer ("**AAS**") method at Chifeng Geology and Exploration Laboratory ("**Chifeng Laboratory**") according to the *Geology and Mineral Laboratory Testing Quality Management Specification DZ/T0130.3-2006*.

Specific Gravity Data

A total of 227 samples for specific gravity ("**SG**") measurement were collected from underground channelling samples at the Zhuanshanzi 1#2#3#&depth Block and drilling cores for specific gravity analyses. The average specific gravity for is 2.80g/cm^3.

A total of 110 sample for the SG measurement were collected from underground channelling samples and drilling cores at the Zhuanshanzi 4#5#6#7# Block for specific gravity analyses. The average specific gravity for is 2.81g/cm^3.

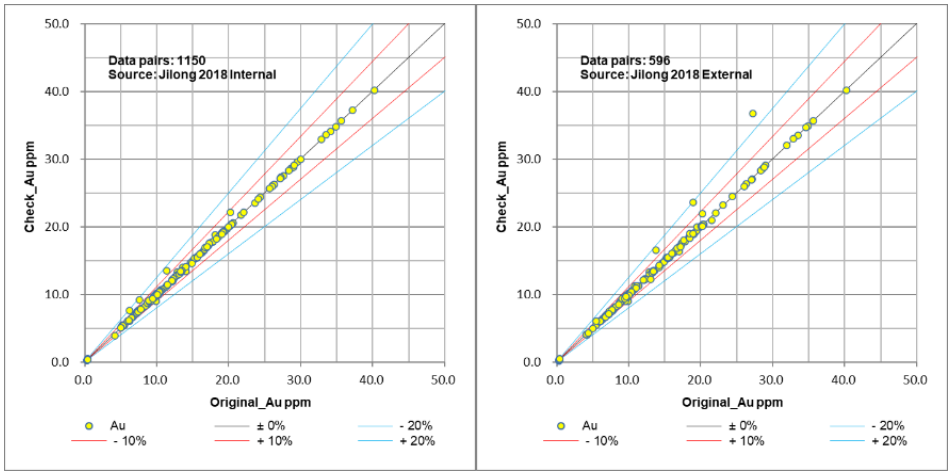
Quality Assurance and Quality Control Programs

Before 2018, for the Zhuanshanzi 1#2#3#&depth Block, a total of 853 samples were randomly selected for internal check, which represented 10.3% of the original analytical samples (i.e., 8,276 samples). The results show that 840 samples are qualified, with a qualification rate of 98.48%. A total of 447 samples were selected for external check and were couriered to the Laboratory of the 10th Geology and Mineral Exploration Institute of Inner Mongolia ("**Laboratory 10**") for analyses. The results indicate that 441 samples are qualified, with a qualification rate of 98.66%.

For the Zhuanshanzi 4#5#6#7# Block, a total of 50 samples were selected for internal check, which represented 24.5% of the original analytical samples (i.e., 204 pieces). The results show that 48 pieces are qualified, with a qualification rate of 96%. A total of 30 samples were selected and couriered to the Laboratory 10 for external check. The results show that 29 samples are qualified, with a qualification rate of 96.67%.

In 2018, a total of 1,150 samples were selected as internal duplicates, taking 10% of total, the qualification rate is 98.32%; a total of 596 samples were selected and sent to Chengde No. 514 Geological Assay Co., Ltd. ("**Chengde 514**") for external check, taking 5% of total, the qualification rate is 97.32%. All duplicate gold grades versus original sample gold grades have been plotted into the scatter charts to check the performance as shown in Figure 6-5. Assay results of internal and external check samples display good correlations with the majority of original assay results.

Figure 6-5: Performance of Internal and External Samples from 2018 Production Exploration by Jilong Mining



Source: SRK

6.3.2 Huatai Project

Sampling

Samples were taken from drill cores by splitting along the core axis. The sample length ranges from 0.8m to 1.0m. The weight of samples was between 9.45 and 12.38kg.

The tunnel samples were collected using channelling method. The samples positions were determined by the geologists and were sampled by the other workers. The sample channel was perpendicular or roughly perpendicular to the strike of Mineralised body. The section of channel was 10cm × 5cm, and the sample length ranges from 0.1m to 1.5m. The sample intervals were 6 m in ore drift and 40 m in transverse drift.

Sample Preparation and Analysis

The sample preparation was based on the Chechott formula: $Q=Kd^2$, K=0.8. The core sample preparation was conducted in the following procedures:

- the original samples were crushed passing a mesh of 30 screen.
- sub-sample with 700 g was collected from a riffle splitter, and
- the sub-sample was pulverized passing a mesh of 200 screen; and about 20g of pulp sample was bagged and labelled for analysis. The rest was stored as a pulp reject.

Spectrum and chemical analysis were employed for sample analyses. The basic item for chemical analysis is gold, which was assayed by AAS method at Chifeng Laboratory according to the *Geology and Mineral Laboratory Testing Quality Management Specification DZ/T0130.3-2006*.

Specific Gravity Data

All samples used for the SG measurement were collected from underground channelling samples and drilling cores at the Lianhuashan #5 Mining Zone, Lianhuashan #26 Vein, Lainhuashan #3&#7 Vein, Honghuagou #1 Mining Zone, Honghuagou #86 Vein and Pengjiajia Mine. for specific gravity analyses. The average results of specific gravity measurement for the Huatai Project are listed in Table 6-10.

Table 6-10: Results of Specific Gravity Measurement for Huatai Project

Mine	Sample Count.	Average SG Value (g/cm^3)
Lianhuashan #5 Mining Zone	96	2.80
Lianhuashan #26 Vein	30	2.86
Lianhuashan #3&#7 Vein	35	2.80
Honghuagou #1 Mining Zone		
Mineralised Body 2#, Sub-area 1#		3.10
Mineralised Body 14#, Sub-area 1#		2.88
Mineralised Body 82#, Sub-area 1#	256	2.81
Sub-area 3#		2.82
Vein 3#		2.80
Longtoushan		2.88
Honghuagou #86 Vein	35	2.80
Pengjiagou Mine	30	2.70

Quality Assurance and Quality Control Programs

During the deep exploration of the Lianhuashan #5 Mining Zone in 2018, a total of 54 samples were selected for internal check, which represented 12% of the total number of samples analysed (449 samples). The return results show that the qualification rate is 96.30%. Totalling 30 pieces samples were selected and couriered to the Laboratory of 514th Geology Brigade ("**Laboratory 514**") for external check. The analytical results indicate that the qualification rate is 96.67%.

For the Lianhuashan #26 Vein, a total of 30 samples were selected for internal check, which represented 8.8% of the total number of samples analysed (342 samples), and the results show that 30 pieces are qualified, with a qualification rate of 100%. A total of 31 samples were selected and couriered to the Laboratory 10 for external check, and the results show that 29 pieces are qualified, with a qualification rate of 96.67%.

A total of 82 samples were selected from the Lianhuashan #3&#7 Vein for internal check, which represented 22.5% of the total number of samples analysed (264 samples). The results show that 79 pieces are qualified, with a qualification rate of 86.64%. Totalling 63 samples were selected and couriered to the Laboratory 10 for external check. The results show that 61 pieces are qualified, with a qualification rate of 96.82%.

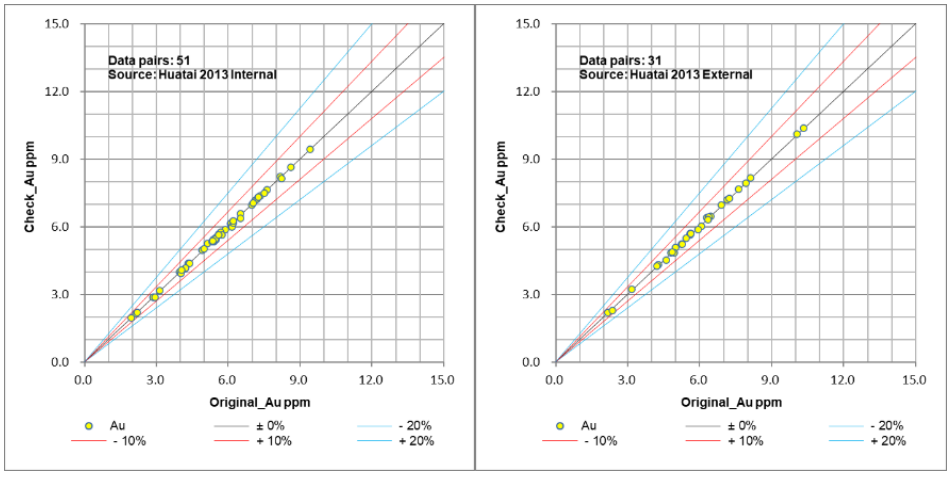
During the resource and reserve verification program at the Honghuagou #1 Mining Zone in 2010, a total of 312 samples were selected for internal check, which represented approximately 11.3% of the total number of samples analysed (2,786 samples). The results show that 304 pieces are qualified, with a qualification rate of 97.44%. A total of 166 samples were selected and couriered to the Laboratory 10 for external check, and the results show 160 pieces are qualified, with a qualification rate of 96.39%. During the resource and reserve verification program in 2017, a total of 70 samples

were selected for internal check, which represented about 13.4% of the total number of samples analysed (524 samples) and the results show that 69 pieces are qualified, with a qualification rate of 98.57%. Totalling 38 samples were selected and couriered to the Laboratory 514 for external check, and the results show that 37 pieces are qualified, with a qualification rate of 97.37%.

For the Honghuagou #86 Vein, a total of 30 samples were selected for internal check, which represented about 9% of the total number of samples analysed (334 samples). The results show that 30 pieces are qualified, with a qualification rate of 100%. A total of 30 samples were selected and couriered to the Laboratory 10 for external check, and the results show that 29 pieces are qualified, with a qualification rate of 96.67%.

For the Pengjiagou Mine, a total of 51 samples were selected for internal check, which represented about 14.9% of the total number of samples analysed (342 samples). The results show that 30 pieces are qualified, with a qualification rate of 96.58%. Totalling 30 samples were selected and couriered to the Laboratory 10 for external check, and the results show that 29 pieces are qualified, with a qualification rate of 95.26%. Figure 6-8 shows the internal and external checks performance of the Pengjiagou Mine.

Figure 6-6: Internal and External Samples Performance of the Pengjiagou Mine



6.3.3 Wulong Project

Sampling

The drilling core samples were sampled by 1/2 split core method. The sample length was 1.0 m. The maximum length was 1.5 m, and the minimum length was 0.2 m.

All tunnel samples were taken by channelling method. The samples positions were determined by the geologists and were sampled by the other workers. The sample channel was perpendicular or roughly perpendicular to the strike of Mineralised body. The profile of channel was 10cm × 5cm, and the length was 1m. The maximum length was less than 1.5m. The sample intervals were 6m in ore drift and 40m in transverse drift.

The trench samples were taken by channelling method. The section of channel was 10cm × 3cm, and the length was less than 1.5 m.

A total of 229 samples, 400 samples and 2,334 samples were respectively collected from the Wulong Mine during the resource and reserve verification program in 2019 the Ligunzi gold deposit during the detailed exploration in 2011 and the Haojingou-Ligunzi gold deposit during the detailed exploration from 2012 to 2017.

Sample Preparation and Analysis

The sample preparation was according to the Chechott formula: $Q=Kd^2$, K=0.8. The sample preparation was conducted in the following procedures:

- the original samples were firstly coarse crushed by the jaw crusher and were crushed to 10mm.
- the samples were then medium crushed to 0.25 mm (60 mesh) by rod mill.
- the sub-sample with 350-450g was collected as duplicate from a riffle.
- the sub-sample with 150-500g was collected from a riffle, was then pulverized passing a mesh of 200 screen, and then was packed and labelled for analysis.

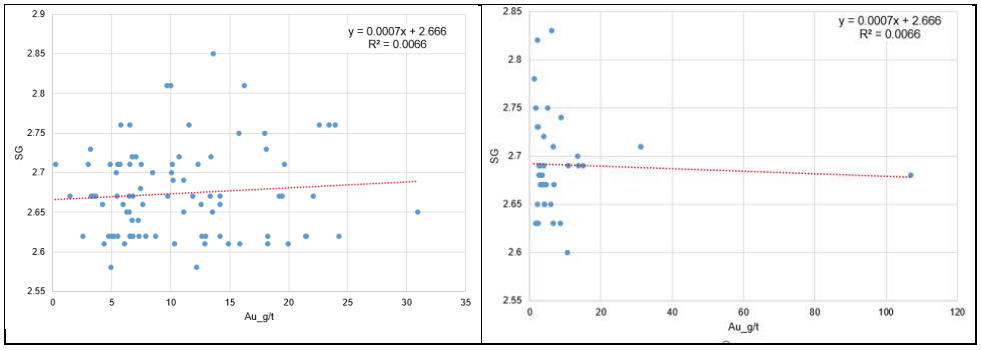
Samples from the Wulong Mine were analysed by the laboratory of Liaoning 7th Geological Brigade Co., Ltd. ("**Laboratory 7**"). Samples from the Ligunzi and Haojingou-Ligunzi gold deposits were assayed by the laboratory of the Brigade 103 of Liaoning Non-ferrous Geology Bureau ("**Laboratory 103**"). The basic item for chemical analysis is gold using AAS method at these laboratories according to the *Specification of Testing Quality Management for Geological Laboratories (DZ/T0130)*.

Specific Gravity Data

A total of 90 SG ore samples were collected from the tunnels at the Wulong Mine and a total of 48 SG samples were collected from drilling cores at Haojingou-Ligunzi gold deposit according to the different grade resulted from the basic analyses. The samples size was 5cm × 5cm × 5cm. They were sealed and sent to the Laboratory for both gold and SG analysis.

Figure 6-7 is scatter plots of the specific gravity against gold content. The results show that the SG has no significant correlation against the gold grade for Wulong Mine and Haojingou-Ligunzi gold deposit. The average results of SG samples are 2.67g/cm^3 for Wulong Mine and 2.69g/cm^3 for Ligunzi and Haojingou-Ligunzi deposits, which can be applied in the resource estimation.

Figure 6-7: Scatter Plots of SG against gold Grade



Source: SRK

Note: Wulong Mine (left) and Haojingou-Ligunzi Gold Deposit (right)

Quality Assurance and Quality Control Programs

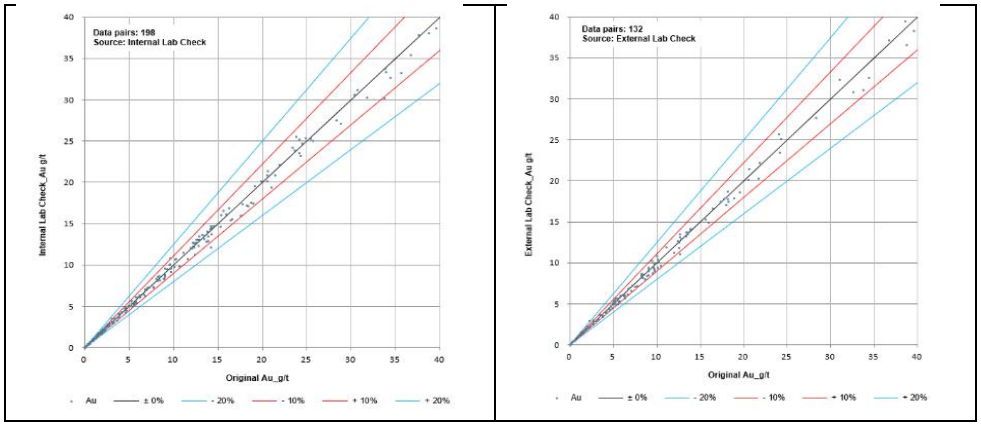
In the Wulong Mine, a total 198 samples, accounting for 8.9% of the total number of samples assayed (2,230 sample) were selected and reanalysed in the Laboratory 103 for internal checking, while 132 samples, accounting for 5.9% of the total number of analysed samples, were sent to the laboratory of Liaoning Nuclear Geological Survey ("**Liaoning Lab**") for external lab checking.

The quality control samples summary is shown in Table 6-11, and the performances of the internal and external lab checks are shown in Figure 6-8.

Table 6-11: Summary of Wulong QA/QC data

Category	Data Pairs	Coverage	Relative Difference					
			<10%		10%-20%		>20%	
Internal	198	8.88%	172	86.87%	22	11.11%	4	2.02%
External	132	5.92%	117	88.64%	12	9.09%	3	2.27%

Figure 6-8: Internal and External Performance of Wulong Mine



Source: SRK

In the Ligunzi gold deposit, a total of 30 samples were re-analysed in the Laboratory 103 for internal checking and a total of 15 samples were sent to Liaoning Lab for external lab checking. The pass rates were 97% for internal checks and 100% for external checks.

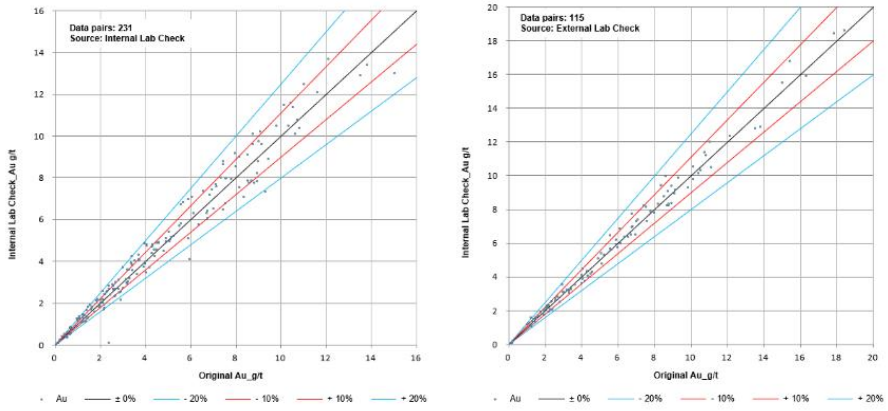
In the Haojingou-Ligunzi gold deposit, a total of 233 samples were re-assayed in the Laboratory 103 for internal checking, with a proportion of 10% and a total of 115 samples were sent to Liaoning Lab for external checking, with a proportion of 4.9%.

The QC samples summary is shown in Table 6-12 and the performance of the internal and external lab check are shown in Figure 6-9.

Table 6-12: Summary of Haojingou-Ligunzi QC data

Category	Data Pairs	Coverage	Relative Difference					
			<10%		10%-20%		>20%	
Internal	231	9.90%	118	51.08%	83	35.93%	30	12.99%
External	115	4.93%	98	85.22%	13	11.30%	4	3.48%

Figure 6-9: Internal and External Performance of Haojingou-Ligunzi Gold Deposit



Source: SRK

6.3.4 Hanfeng Project

Lishan Mine

A resource and reserve verification program for both Lishan and Dongfeng mines was carried out from 2010 to 2011. A deep exploration of Lishan Mine (-92m asl) was executed during 2011 to 2020.

Tunnel Sampling

Tunnel sampling was carried out using a channelling method. The section of channel was 10cm×3cm, and most of the sample length was less than 2m. The sampling work was conducted using chisel and hammer. The samples representation met the needs of mineralised body evaluation.

A total of 2,853 channel samples of Lishan Mine were taken separately based on different mineralisation types.

During the deep exploration at Lishan Mine (-92m asl) from 2011 to 2020, the tunnel samples were sampled at the waistline of tunnel continuously based on different rock type and grade rank using channelling method. The samples were marked with red paint after sample division. The section size of the channel sample was 10cm × 3cm, and the sample length is generally 1.0-1.5m. The sample weight was generally 9.5-10.5kg. A total of 789 samples were collected.

Drilling Core Sampling

A total of 194 boreholes were drilled. The hole diameter of the drilling is 75mm with wire-line coring method. The cores were kept the original structural characteristics and integrity without ore core crushing, dilution and leakage during drilling.

The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of Mineralised body and Mineralisation. The core was split along the core axis into two halves by the YPK-1 type core splitter. One half was retained as the core, and the other half was bagged and weighed before being sent to the laboratory for analysis. The sample length generally ranged from 1.00m to 1.50m, with a few samples ranging from 0.30m to 0.80m and the longest being 1.90m. A total of 9,127 borehole samples were collected during this stage. The average recovery rate was 99%. The sample weight was between 0.80kg and 4.40kg.

Sample Preparation and Analysis

The sample preparation included coarse crushing (jaw crusher), medium crushing (disc mill) and fine crushing (disc mill). Each stage was divided into crushing, screening, mixing and shrinkage. The samples analyses were undertaken by the 6th laboratory of Jilin geology and survey Institute. According to DZG93-09 analysis procedures, the analysis instrument for Pb, Zn, Cu is GGX-600 atomic absorption spectrophotometer, the analysis method is AAS method.

During the deep exploration of Lishan Mine (-92m asl) from 2011 to 2020, the sample preparation followed drying, crushing, screening, mixing and splitting procedures. After crushing, the samples were pulverised to 200 mesh and then about 400g was taken for assay and the remains of the pulverised material were stored in the laboratory as pulp rejects.

Specific Gravity Data

From 2011 to 2020, the samples were collected from cores and tunnels from the Mineralised bodies with various grades and positions. The wax method was used for the SG test.

A total of 466 SG samples were collected, including 326 core samples and 140 channel samples, among which the samples of copper-zinc ores accounts for 36%, lead- zinc ores account for 12%, zinc ores account for 46%, and copper ores account for 6%.

Quality Assurance and Quality Control Programs

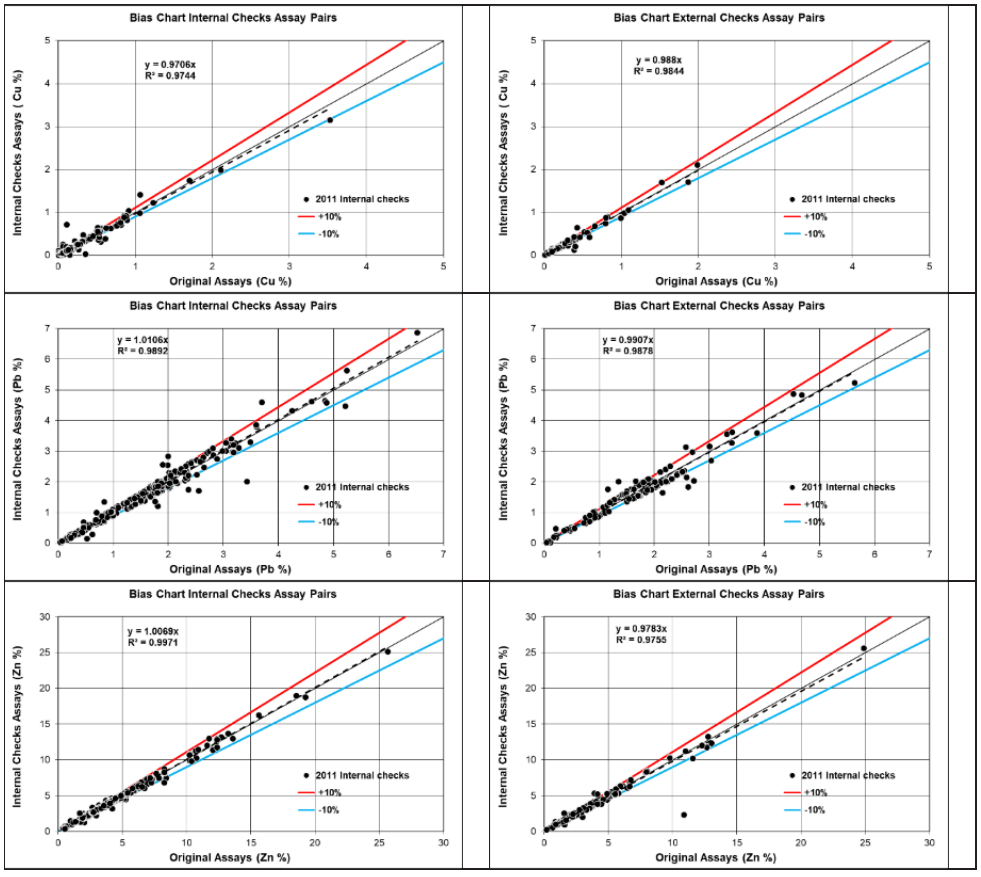
From 2010 to 2011, a total of 2,853 channel samples were taken, and 288 samples were taken for internal check, with a proportion of 10.09%, and 144 samples for external check, accounting for 5.05% of the total samples, were sent to the 4th Laboratory of Chemical Geology and Mining

("**Laboratory 4**") for analyses. The sample summary is shown in Table 6-13, and the performance of the internal and external checks are shown in Figure 6-10.

Table 6-13: QA/QC Data Summary of Lishan Mine from 2010 to 2011

Sample	Sample Number		Assay result					
			Cu		Pb		Zn	
	Count	Percent (%)	Samples Above 10x Det. Lim.	Pairs ≤ 10% HARD (%)	Samples Above 10x Det. Lim.	Pairs ≤ 10% HARD (%)	Samples Above 10x Det. Lim.	Pairs ≤ 10% HARD (%)
Internal Checks	288	10.09	31	89.24	35	87.85	25	91.32
External Checks	144	5.05	11	92.36	13	90.97	12	91.67

Figure 6-10: Internal and External Checks of Lishan Mine from 2020-2011



Note: Internal checks on the left and External checks on the right

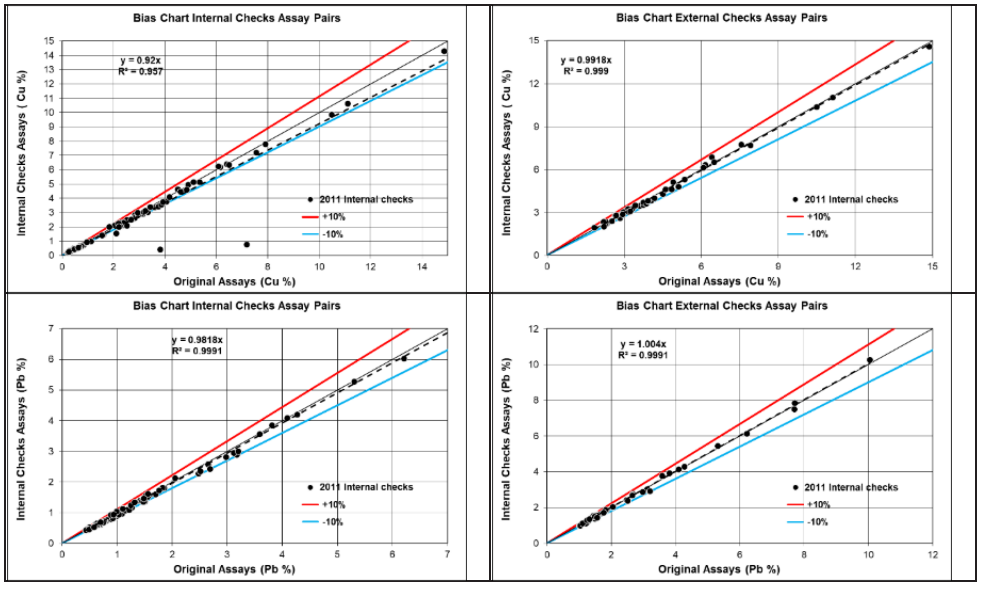
From 2011 to 2020, a total of 9,916 basic analysis samples, 116 combination analysis samples and 26 phase analysis samples of the Lishan deposit (below -92m asl) were collected. there are 1,208 internal check samples and 710 external check samples for zinc, 80 internal check samples and 40

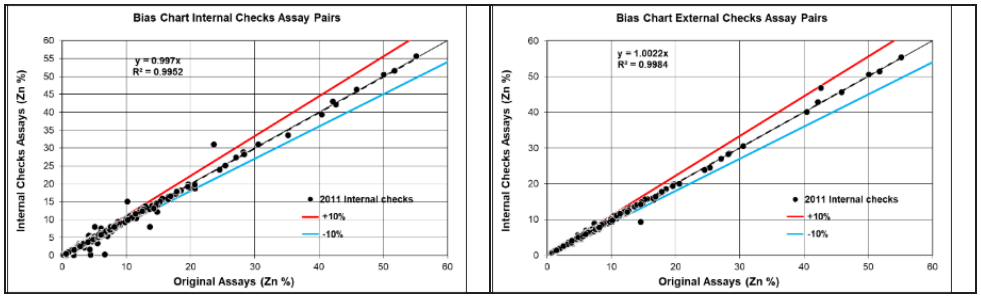
external samples for copper, 80 internal check samples and 12 external samples for lead. The pass rates of internal and external samples are list in Table 6-14 and the performance of the internal and external checks are shown in Figure 6-11.

Table 6-14: QA/QC Data Summary of Lishan Mine (below -92m asl) from 2011 to 2020

Item		Year	Samples number	Qualified	Pass rate（%）
Basic analysis (Zn)	Internal check	2018	308	298	97
		2019	510	489	96
		2020	390	374	96
	Sub total		1,208	1,160	96
	External check	2018	150	141	94
		2019	360	349	97
	External check	2020	200	199	100
	Sub total		710	689	97
Basic analysis (Cu)	Internal check	2020	80	76	95
	External check	2020	40	40	100
Basic analysis (Pb)	Internal check	2020	80	79	99
	External check	2020	40	40	100
Combination analysis (Zn)	Internal check	2020	12	12	100
	External check	2020	5	5	100
Combination analysis (Cu)	Internal check	2020	4	4	100
	External check	2020	2	2	100
Combination analysis (Pb)	Internal check	2020	1	1	100
	External check	2020	1	1	100

Figure 6-11: Internal Check of Lishan Deposit（bellow -92m asl） from 2011 to 2020





Note: Internal checks on the left and External checks on the right

Dongfeng Mine

Tunnel Sampling

Tunnel sampling was carried out using channelling method for newly discovered mineralised bodies, residual mineralised bodies and mineralised bodies missing previous laboratory data. The samples are arranged as vertically as possible to the direction of mineralised bodies. The section of channel size is 10cm × 3cm, and the most sample length is less than 2 m. A total of 1,216 channel samples were taken from different mineralisation types in 2010 to 2011.

During the deep exploration of Dongfeng deposit (-250m asl) from 2013 to 2023, the tunnel samples were sampled at the waistline of tunnel continuously based on different rock type and grade rank using channelling method. The section size of the channel sample was 10cm × 3cm, and the sample length is generally 1.0-1.5m. The sample weight was generally 7.5-8.5kg. A total of 702 samples were collected.

Core Drilling Sampling

A total of 252 boreholes were drilled from 2013 to 2023. The hole diameter of the drilling is 75mm with wire-line coring method. The cores were kept the original structural characteristics and integrity without ore core crushing, dilution and leakage during drilling.

The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of Mineralised body and Mineralisation. The core was split along the core axis into two halves by the YPK-1 type core splitter One half was retained as the core, and the other half was bagged and weighed before being sent to the laboratory for analysis. The sample length generally ranged from 1.00m to 1.50m, with a few samples ranging from 0.3m to 0.8m and the longest being 2.0 m. A total of 33,207 borehole samples were collected during this stage. The average recovery rate was 99.87%. The sample weight was between 0.63kg and 3.86kg.

Sample Preparation and Analysis

The sample preparation included coarse crushing (jaw crusher), medium crushing (disc mill) and fine crushing (disc mill). Each stage was divided into crushing, screening, mixing and shrinkage. The sample testing work was undertaken by the 6th laboratory of Jilin geology and survey Institute. According to DZG93-09 analysis procedures, the analysis instrument for Pb, Zn, Cu is GGX-600 atomic absorption spectrophotometer, the analysis method is AAS method.

Specific Gravity Data

In 1987, the Brigade 650 of Jilin Nonferrous Metal Geological Exploration Company collected 175 SG samples from different levels of Dongfeng Pb-Zn Mine. The average SG is 3.26g/cm^3, and there was no significant difference between the different mining levels.

A total of 310 SG samples were taken from orebodies in the deep area of Dongfeng Mine (-250m asl), of which 227 from drillings and 83 samples form tunnels.

Quality Assurance and Quality Control Programs

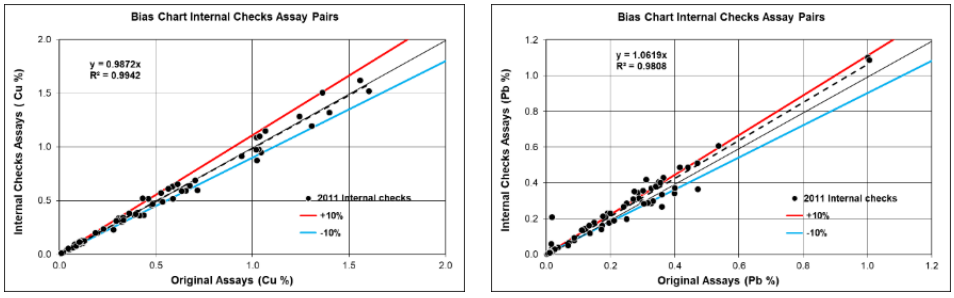
From 2010 to 2011, resource and reserves verification of Dongfeng Deposit was carried out. A total of 1,216 channel samples were taken from Dongfeng lead-zinc deposit, including 705 Pb, Zn, Cu samples, of which 71 samples was taken for internal check and 35 samples was taken for external check. A total of 511 channel samples were taken from Mo sample, of which 52 samples was taken for internal check and 26 samples was taken for external check.

The Chemical Geology and Mining Laboratory 4# carried out external analysis. The pass rates of internal and external samples are list in Table 6-15 and the performance of the internal and external checks are shown in Figure 6-12 and Figure 6-13.

Table 6-15: QC Data Summary of Dongfeng Deposit in 2011

Item	Sample Count	Percent (%)	Pass rate Cu (%)	Pb (%)	Zn (%)	Mo (%)
Internal check	Cu Pb Zn：71	10.07	92.96	85.92	88.73	92.31
	Mo：52	10.17				
External check	Cu Pb Zn：35	4.96	91.43	94.29	91.43	93.21
	Mo：26	5.09				

Figure 6-12: Internal check of Dongfeng Deposit in 2011



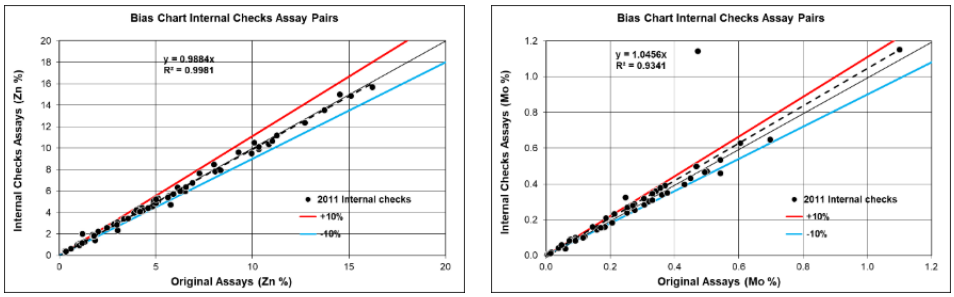
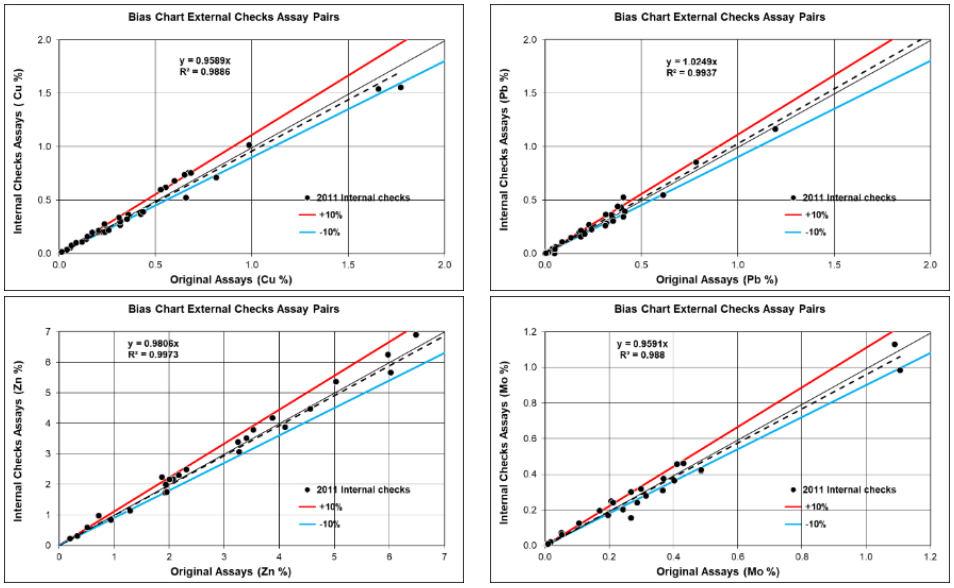


Figure 6-13: External check of Dongfeng Deposit in 2011

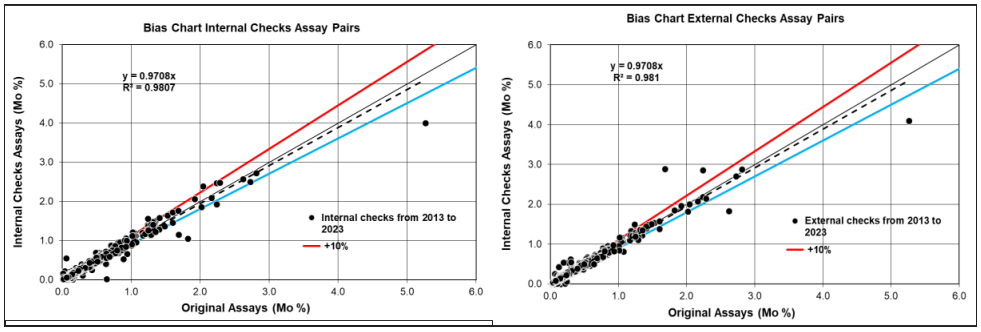


From 2013 to 2023, a total of 33,909 basic analysis samples, 141 combination analysis samples and 114 phase analysis samples of the Dongfeng deposit (below 250m asl) were collected. and there are 3,832 internal check samples and 2,431 external check samples for Mo. The pass rates of internal and external samples are list in Table 6-16 and the performance of the internal and external checks are shown in Figure 6-14.

Table 6-16: QA/QC Data Summary of Dongfeng Deposit from 2013 to 2023

Item	Sample Count	Percent (%)	Pass rate
Internal check	3,832	11.3	96.41
External check	2,431	7.17	97

Figure 6-14: Mo Internal check of Dongfeng Deposit from 2013 to 2023



6.3.5 Jintai Project

Trench Sampling

In the mining licence area, a total of 618 channel samples were taken separately based on different mineralisation types. The section of channel was 10 cm × 5 cm, and most of the sample length was 1.2 m.

In the exploration licence area, a total of 540 channel samples were collected separately based on different mineralisation types. The section of channel was 10 cm × 3 cm, and the length ranged from 1.0 m to 1.5 m.

The samples representation met the needs of mineralised body evaluation.

Core Drilling Sampling

In the mining licence area, samples were collected separately based on different mineralisation types. The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of mineralised body and Mineralisation, ranging from 0.5 m to 1.5 m.

In the exploration licence area, a total of 9,089 samples were collected separately based on different Mineralisation types. The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of Mineralised body and Mineralisation, ranging from 1 m to 1.5 m. The samples were collected by manual in the loose rock area, while hard rock with core splitter.

The samples representation met the needs of mineralised body evaluation.

Sample Preparation and Analyses

From 2007 to 2010, a general exploration for Xidengping deposit was carried out. The sample preparation included coarse crushing, medium crushing and fine crushing. Each stage was divided into crushing, screening, mixing and shrinkage. The samples analyses were undertaken by the lab of Kunming Mineral Resources Supervision and Testing Centre and Yunnan 3rd Geological Brigade ("**Kunming Laboratory**"). The basic analysis item was gold. Both internal and external lab check

samples were according to the Specification of Testing Quality Management for Geological Laboratories.

From 2020 to 2021, Mineral Resource verification was conducted. The sample preparation included coarse crushing, medium crushing and fine crushing. Each stage was divided into crushing, screening, mixing and shrinkage. The total loss rate was less than 5%. The K value was set to 0.5 in the formulation $Q = Kd^2$ and the sample was crushed to 0.074 mm (200 mesh). Samples were analysed by the central laboratory of Yunnan Bureau of Geology and Mineral Resources Exploration and Development ("**Central Laboratory**"). External check samples were sent to Henan Rock and Mineral Testing Center ("**Henan Laboratory**"). The basic analysis item was gold. Both internal and external lab check samples were according to the Specification of Testing Quality Management for Geological Laboratories (DZ/T0130-2006).

From 2020 to 2022, advanced exploration was conducted. The sample preparation included coarse crushing, medium crushing and fine crushing. Each stage was divided into crushing, screening, mixing and shrinkage. The samples were firstly coarse crushed by the jaw crusher and were crushed to 4 mm. Then the samples were medium crushed by the disc mill and were crushed to 1 mm. After that, there were the mixing and splitting procedures. The K value was set to 0.8 in the formulation $Q = Kd^2$ and the sample was crushed to 0.074 mm (200 mesh). Samples were analysed by the Central Laboratory. External check samples were sent to Henan Laboratory. The basic analysis item was gold. Both internal and external lab check samples were according to the Specification of Testing Quality Management for Geological Laboratories (DZ/T0130-2006).

Specific Gravity Data

From 2007 to 2010, a total of 30 SG piece samples were collected from the mineralised bodies with various grades and positions. The wax method was used for the SG test. The average SG was 2.14 g/cm^3. And 2 bulk samples were collected, and the result was 1.76g/cm^3. The SG samples were more representative, so the SG value of 2.14g/cm^3 was applied in the Mineral Resource estimate.

From 2020 to 2022, a total of 103 SG piece samples were collected from the mineralised bodies with various grades and positions. The wax method was used for the SG test. 40 samples were collected for domain V4, 31 samples were collected in the Xidengping area, and 32 samples were collected for domain V8. The samples representation met the needs of Mineralised body evaluation. 4 bulk samples were collected, and the result was consistent with piece samples. The SG values were 2.15g/cm^3 for domain V9 and V10, 2.29g/cm^3 for domain V8, and 2.24g/cm^3 for domain V4, V5, V6 and V7.

Quality Assurance and Quality Control Programs

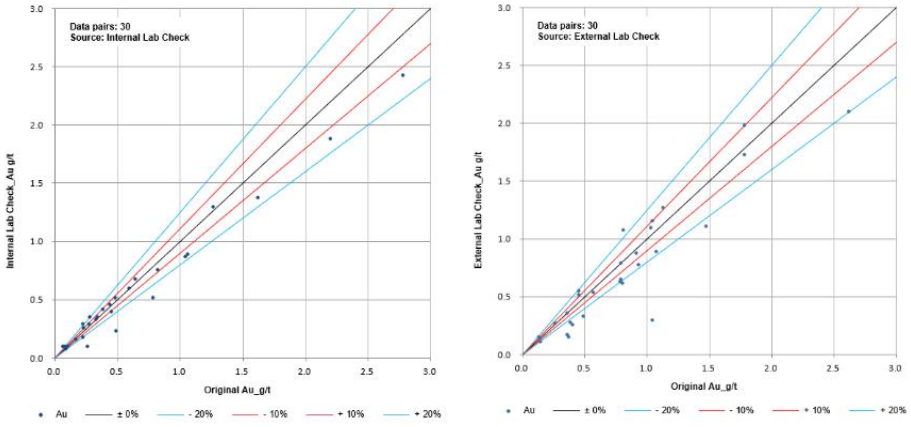
From 2007 to 2010, general exploration for Xidengping deposit was carried out. A total of 1,506 samples were sent to labs for gold grade. A total of 30 samples were taken for internal lab check with a proportion of 1.99%. 30 samples were taken for external lab check with a proportion of 1.99%. The qualification rate was 70% for internal check and 56.67% for external check.

The QA/QC samples summary is shown in **Table** 6-17, and the performance of the internal and external lab check are shown in Figure 6-15.

Table 6-17: Summary of General Exploration QA/QC data

Category	Data Pairs	Coverage	Relative Difference					
			<10%		10%-20%		>20%	
Internal	30	1.99%	12	40.00%	9	30.00%	9	30.00%
External	30	1.99%	9	30.00%	8	26.67%	13	43.33%

Figure 6-15: Performance of Internal and External Checks for General Exploration



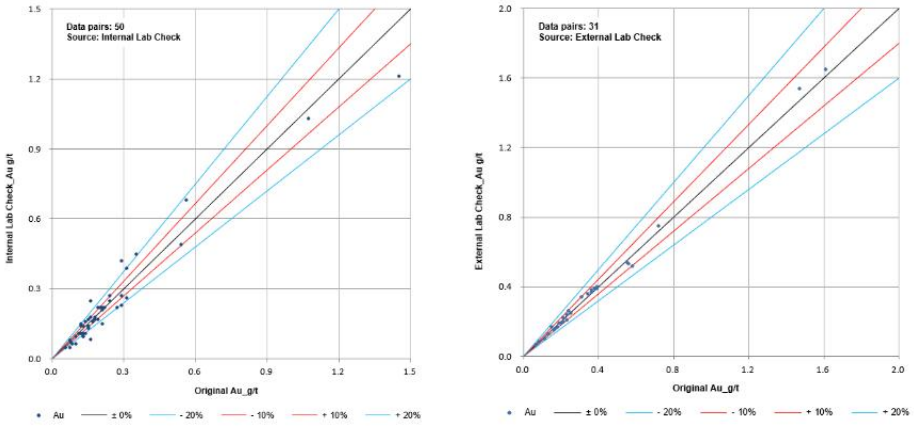
From 2020 to 2021, Mineral Resource verification for Xidengping deposit was carried out. A total of 563 samples were sent to labs for gold grade. A total of 50 samples were taken for internal lab check with a proportion of 8.91%. 31 samples were taken for external lab check with a proportion of 5.51%. The qualification rate was 70% for internal check and 100% for external check.

The QA/QC samples summary is shown in **Table** 6-18 and the performance of the internal and external lab check are shown in Figure 6-16.

Table 6-18: Summary of Resource Verification QA/QC data

Category	Data Pairs	Coverage	Relative Difference					
			<10%		10%-20%		>20%	
Internal	50	8.91%	21	42.00%	14	28.00%	15	30.00%
External	31	5.51%	29	93.55%	2	6.45%	-	-

Figure 6-16: Performance of Internal and External Checks for Resource Verification



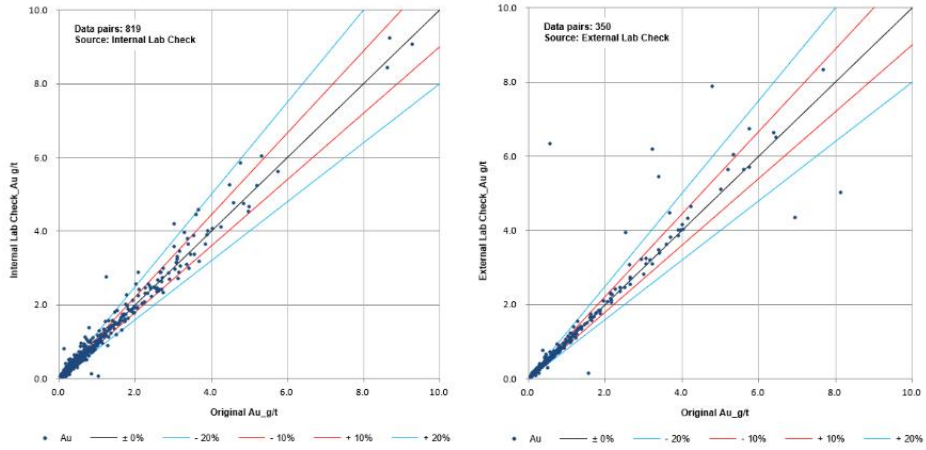
From 2012 to 2022, in the exploration licence area, a total of 9,629 samples were sent to labs for gold grade. A total of 819 samples were taken for internal lab check with a proportion of 8.51%. 350 samples were taken for external lab check with a proportion of 3.63%. The qualification rate was 68.62% for internal check and 89.71% for external check.

The QA/QC samples summary is shown in **Table** 6-19, and the performance of the internal and external lab check are shown in Figure 6-17.

Table 6-19: Summary of Advanced Exploration QA/QC data

Category	Data Pairs	Coverage	Relative Difference					
			<10%		10%-20%		>20%	
Internal	819	8.51%	369	45.05%	193	23.57%	257	31.38%
External	350	3.63%	278	79.43%	36	10.29%	36	10.29%

Figure 6-17: Performance of Internal and External Checks for Advanced Exploration



6.3.6 SRK Comments

In the opinion of SRK, the sampling, sample preparation and analytical procedures used for Jilong, Huatai, Wulong, Hanfeng and Jintai projects are acceptable. The pass rates of both internal and external check samples for these projects are acceptable, while blank sample were not used in these projects.

7 SRK Data Verification

7.1 Introduction

In accordance with the JORC Code guidelines, SRK team conducted multiple site visits of the Chifeng Gold's five subsidiaries' mining projects, including the Jilong, Huatai and Wulong projects from 22 to 26 December 2022, the Hanfeng project between 9 and 10 January 2023, and the Jintai project on 8 March 2023 in the first round; the Jilong, Huatai, Wulong and Hanfeng project from 14 to 19 May 2024 and the Jitai project from 21 to 23 May 2024 in the second round, and the Jilong and Wulong projects from 28 May 2024 to 1 June 2024 in the third round. During the site visit, SRK conducted the following verification procedures:

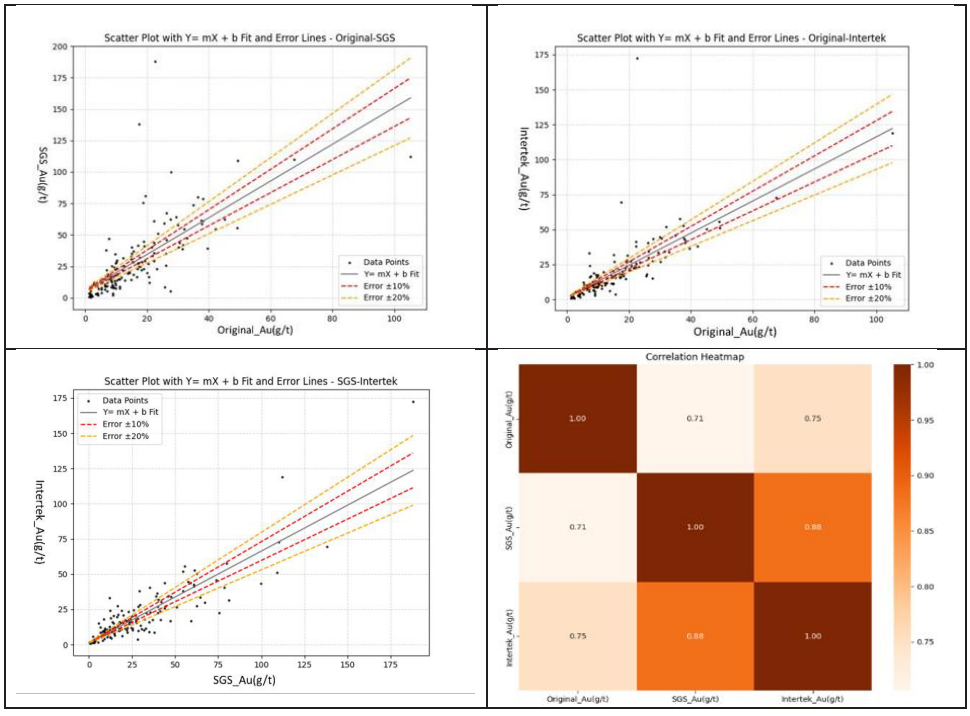
- Site inspection of each project area by SRK's competent persons and senior geologists.
- Met with Company representatives.
- Discussed with the technical personnels.
- Checked the historical exploration work.
- Borehole coordinates verification by handheld GPS.
- Inspection of the core warehouse.
- Witnessed underground channel sampling.
- Witnessed the underground and/ or open pit mining development, and
- Re-sampled historical pulp samples from the five projects.

7.2 Jilong Project

SRK used the cut-off grade of 1.0g/t Au to select verification samples, based on the exploration report on the Zhuanshanzi Mine in 2018, a total of 154 samples have been taken. The samples were re-numbered and sent to SGS Mineral Laboratory located in Tianjin, China ("**SGS Lab**") for verification assay.

The assay results are listed in Appendix B and the scatter plots are shown in Figure 7-1. A large bias was observed between original assay and check results, SRK has checked with both main laboratory and SGS Lab staff, found that the sample preparation and sample assay methods are different, the sample preparation protocol which the original main laboratory adopted is relatively conservative, they use sieve to remove potential visible gold and then for assay to minimize the nugget effect, which may lead to a system lower bias compared to SGS Lab using screen fire assay method. SRK advised to send the samples to the Intertek laboratory in Beijing ("**Intertek Lab**"), for further verification, the assay results are listed in Appendix B and plotted in Figure 7-1, general trend can be observed although larger bias are found in the higher grade samples, which may be led by the nugget effect of visible gold .

Figure 7-1: Performance of SRK Verification Samples from Zhuanshanzi Mine



Source: SRK

7.3 Huatai Project

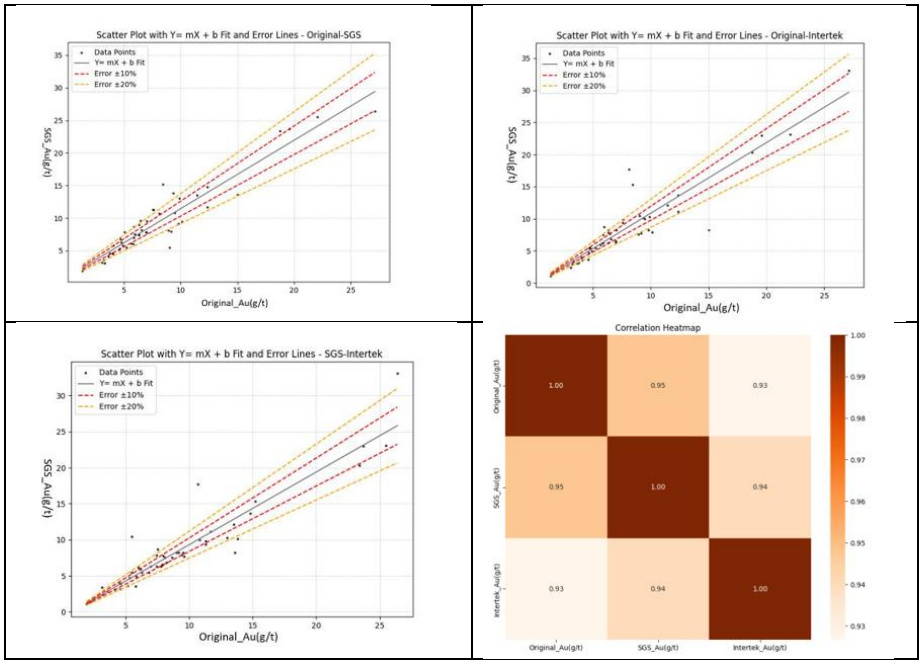
The data verification of Huatai project is divided into two parts: one part is from the Honghuagou Mine including #1 mining zone, #86 Vein and Pengjiagou Deposit; the other part is from the Lianhuashan Mine including #3&#7 Vein, #26 Vein and #5 mining zone.

SRK used the cut-off grade of 1.0g/t Au to select verification samples, a total of 50 pulp duplicate samples are from the Honghuagou Mine and a total of 55 pulp samples are from the Lianhuashan Mine. All samples were re-numbered and sent to SGS Lab for re-analysis.

The assay results from Honghuagou Mine are listed in Appendix B and plotted in Figure 7-2. A large bias was observed between original assay and check results, SRK has checked with both main laboratory and SGS Lab staff, found that the sample preparation and sample assay methods are different, the sample preparation protocol which the original main laboratory adopted is relatively conservative, they use sieve to remove potential visible gold and then for assay to minimize the nugget effect, which may lead to a system lower bias compared to SGS Lab using screen fire assay method. The samples have been sent to Intertek Lab for further verification, the assay results are listed in Appendix B and plotted in Figure 7-2, and a general trend can be observed although larger bias are found in the higher grade samples, which may be caused by the nugget effect of visible gold

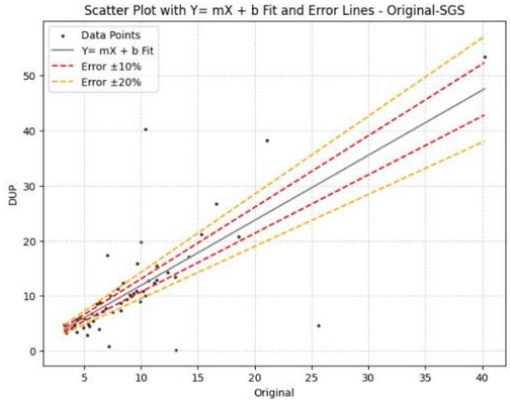
For the verification samples from the Lianhuashan Mine, a large bias was also observed between original assay and check results. About 60% plotting pairs are within ±20%. About 40% pairs are out of ±20%, which may be caused by the nugget effect. The assay results are listed in Appendix B and plotted in Figure 7-3.

Figure 7-2: Performance of SRK Verification Samples from Honghuagou Mine



Source: SRK

Figure 7-3: Performance of SRK Verification Samples from Lianhuashan Mine



Source: SRK

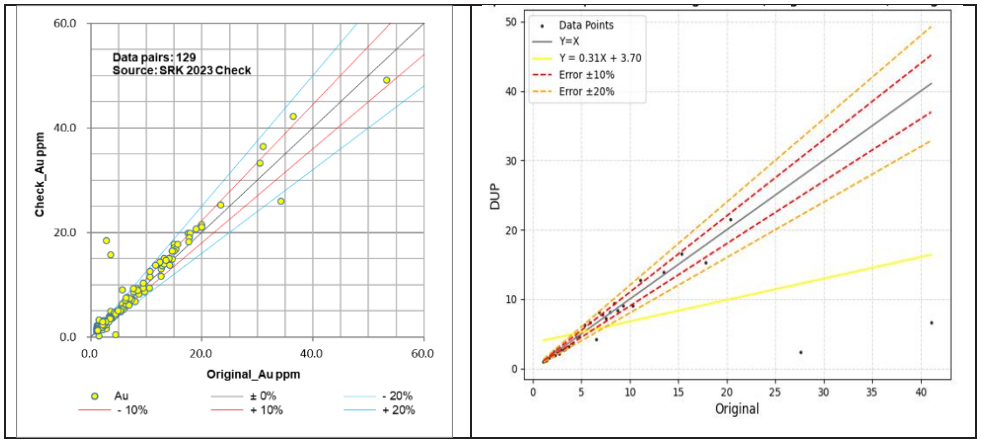
7.4 Wulong Project

The data verification of Wulong Project is divided into two parts: one part is from the Wulong Mine and the other part is from the Haojingou gold deposit and Haojingou-Ligunzi gold deposit.

SRK used the cut-off grade of 1.0g/t Au to select verification samples based on the Wulong Resource and Reserve Verification report 2019, a total of 129 pulp samples are from the Wulong Mine and a total of 36 pulps from the Haojingou and Haojingou-Ligunzi gold deposits. All samples were re-numbered and sent to SGS Lab for re-analysis.

The scatter plots are shown in Figure 7-4. The comparison of assay results between the original samples and SRK check samples show that the relative differences between them are mostly within 20%, with only a few pairs exceeded 20%, but is still acceptable considering this type of gold mineralisation.

Figure 7-4: Performance of SRK Verification for Wulong Project



Source: SRK

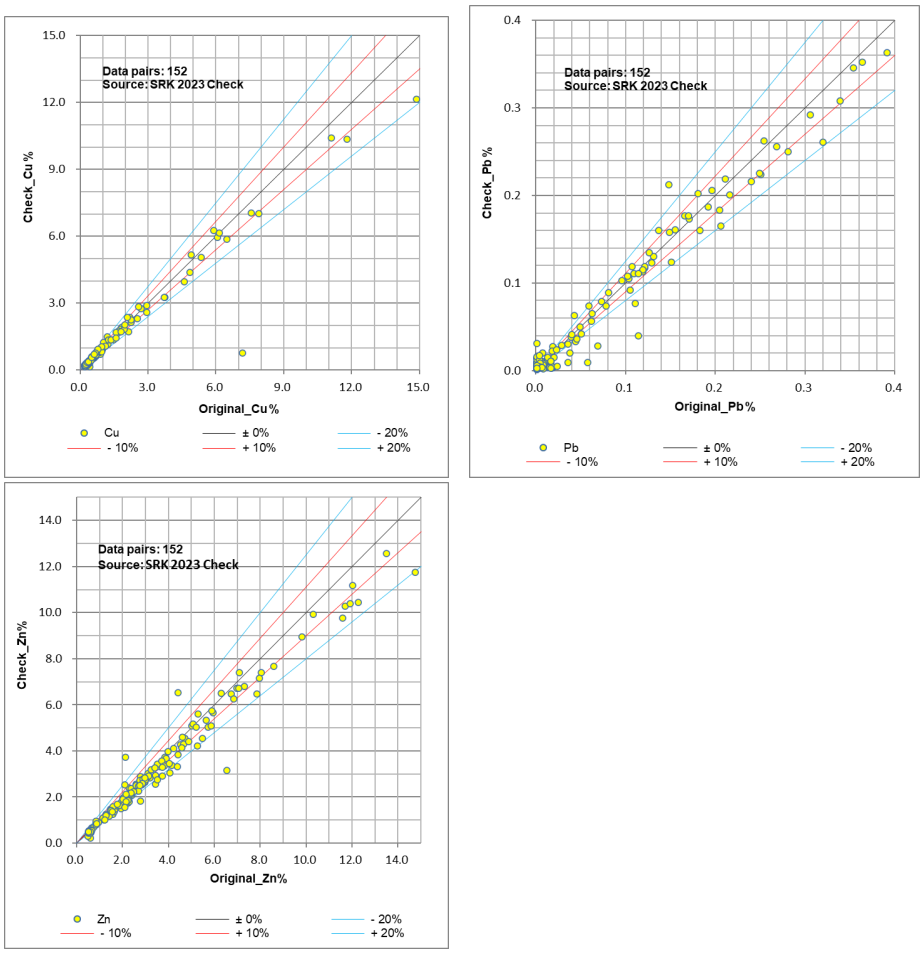
Note: Wulong Mine on the left and Haojingou and Haojingou-Ligunzi deposits on the right

7.5 Hanfeng Project

Lishan Project

SRK used the cut-off grade of 0.5% Zn to select verification samples. A total of 152 pulp samples are taken from the Lishan Mine (based on the Lishan Exploration Report 2020). The verification samples were re-numbered and sent to SGS Lab for re-analysis. The assay results are listed in Appendix B and plotted in Figure 7-6. The scatter diagrams show that most of the returned analysis results for Cu and Zn are within ±20%, the Pb have returned poorer performance, however, most of which are in the very low grade, and therefore the results are considered acceptable.

Figure 7-5: Performance of SRK 2023 Verification Samples from Lishan Mine

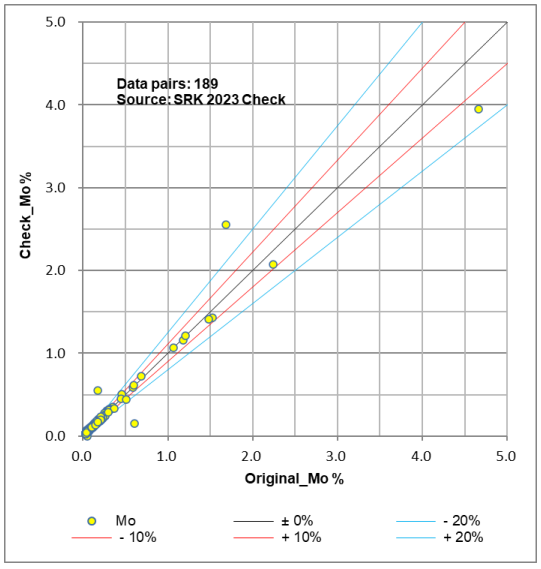


Source: SRK

Dongfeng Project

SRK used the cut-off grade of 0.03% Mo to select verification samples. A total of 189 samples have been taken from the Dongfeng Mine and were sent to SGS Lab for verification assay. The assay results are listed in Appendix B and plotted in Figure 7-6. The scatter diagrams show that all of the returned analysis results for Mo are within ±20%, which are acceptable.

Figure 7-6: Performance of SRK 2023 Verification Samples from Dongfeng Mine



Source: SRK

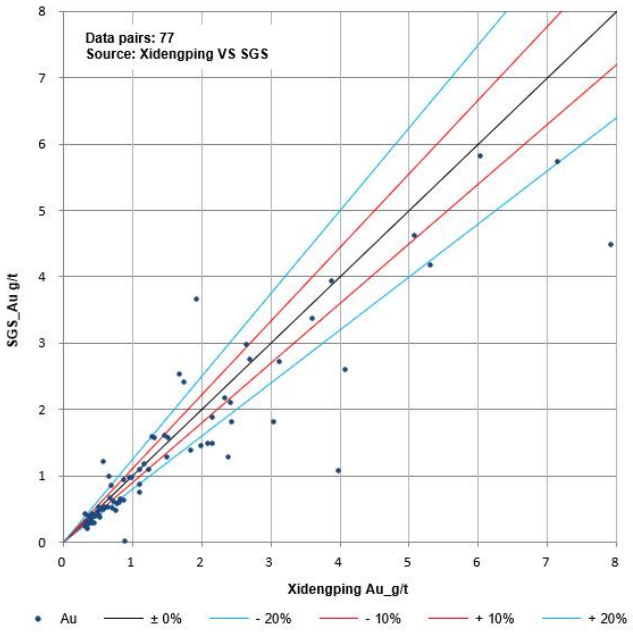
7.6 Jintai Project

SRK used the cut-off grade of 0.17g/t Au to select verification samples. A total of 77 pulp samples from different exploration phases are collected and are sent to SGS Lab for analysis. Details of the verification samples are presented in Appendix B, are summarised in Table 7-1 and are plotted in Figure 7-7. The scatter diagrams show that about 52% results for Au are within ±20%. About 48% results are outside ±20%, which may be caused by the nugget effect.

Table 7-1: Summary of SRK Verification Samples

Phase	Samples	Samples Au≥0.17	Verification Samples	Percentage Au≥0.17
General Exploration	684	256	13	5.08%
Mineral Resource Verification	880	50	2	4.00%
Advanced Exploration	9,629	1,505	62	4.12%
Total	**11,193**	**1,811**	**77**	**4.25%**

Figure 7-7: SRK 2023 Verification on Xidengping Gold Mine



Source: SRK

7.7 SRK Comments

Overall, SRK is satisfied with the quality and result of the sample preparation and assay conducted by related analytical laboratories. The analytical procedures are consistent with generally accepted industry practices and the primary sample results are therefore suitably reliable for use in Mineral Resource estimation.

8 Mineral Resource Estimates

8.1 Introduction

The Mineral Resource Statement presented herein represents Mineral Resource estimation prepared for the Chifeng Gold Project in accordance with the JORC Code.

The effective date of the Mineral Resource Statement is March 31, 2024.

This section describes the Mineral Resource estimation methodology and summarizes the key assumptions considered by SRK. In the opinion of SRK, the Mineral Resource estimation reported herein is a reasonable representation of the global Mineral Resources found in Jilong, Huatai, Wulong, Hanfeng and Jintai projects at the current level of sampling. The Mineral Resources are reported in accordance with the JORC Code. The Mineral Resources are not Ore Reserves and there is no certainty that all or any part of the Mineral Resource will be converted into Ore Reserve.

The database used to estimate the Chifeng Gold Project Mineral Resources was audited by SRK. SRK is of the opinion that the current drilling, tunnelling and trenching information is sufficiently reliable to interpret with confidence the boundaries for gold, lead-zinc and molybdenum mineralisation and that the assay data are sufficiently reliable to support Mineral Resource estimation.

The Surpac 2020.1 ("**Surpac**") software was used to construct the grade solids, prepare assay data for analysis, construct the block model, estimate gold grades, and tabulate Mineral Resources.

8.2 Mineral Resource Estimation Procedures

The Mineral Resource estimation methodology involved the following procedures:

- Database compilation and verification;
- Construction of wireframe models for the boundaries of the gold Mineralisation;
- Definition of resource domains;
- Data conditioning (compositing and capping) for analysis;
- Block modelling and grade interpolation;
- Resource classification and validation;
- Assessment of "reasonable prospects for eventual economic extraction ("**RPEEE**")" and selection of appropriate cut-off grades; and
- Preparation of the Mineral Resource Statement.

8.3 Mineral Resource Database

8.3.1 Jilong Project

Jilong Project is composed of the Zhuanshanzi Mine including two mineralised blocks of the 1#2#3#&depth Blocks and the 4#5#6#7# Block.

SRK was provided with geological exploration reports and maps, topography, database, QAQC data, and SG data. The coordinate system of Jilong Project is CGCS 2000. SRK undertook a thorough review for the database, followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

Based on the data, SRK constructed a Mineral Resource database, composed of borehole collar, survey, lithology, assay, and SG data. Table 8-1 summaries the database covering the entire project area. The boundary of the estimation is the Zhuanshanzi mining licence.

Table 8-1: Mineral Resource Database Statistics of Jilong Project

Mine/Deposit	Type	Counts	Length（m）	Assay Samples
Zhuanshanzi Mine (1#2#3#&depth Block)	Drillholes	81	1,9078.32	602
	Tunnels	6,240	5,989.89	14,328
	Total	**6,321**	**25064.21**	**14,930**
Zhuanshanzi Mine (4#5#6#7# Block)	Drillholes	64	10,810.47	339
	Trenches	55	90.69	106
	Tunnels	12	45.94	87
	Total	**131**	**10,947.1**	**532**

8.3.2 Huatai Project

Huatai Project consists of the Honghuagou Mine including #1 Mining Zone and #86 Vein, the Pengjiagou Mine and the Lianhuashan Mine including #5 Mining Zone, #26 Vein and #3-7 Vein.

The resource database included all the samples both from drillholes and mining levels. SRK was provided with geological exploration reports and maps, topography, database, QA/QC data, and SG data. The coordinate system of Huatai Project is CGCS 2000. SRK undertook a thorough review for the database, followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

Based on the data, SRK constructed a Mineral Resource database, composed of borehole collar, survey, lithology, assay, and SG data. Table 8-2 summaries the database covering the entire project area. The boundary of the estimation is the Honghuagou, Pengjiagou and Lianhuashan mining licenses.

Table 8-2: Mineral Resource Database Statistics of Huatai Project

Mine/Deposit	Type	Counts	Length（m）	Assay Samples
Honghuagou mine	Drillholes	96	33,424.71	478
	Tunnels	764	2,031.80	2,652
	Total	**860**	**35,456.51**	**3,130**
Pengjiagou deposit	Drillholes	44	9,438.6	92
	Tunnels	112	282.85	292
	Total	**156**	**9,721.45**	**384**
Lianhuashan deposit	Drillholes	96	14,179.76	188
	Tunnels	1,153	2,159.86	3,271
	Total	**1,249**	**16,339.62**	**3,459**

8.3.3 Wulong Project

Wulong Project is composed of the Wulong Mine, and the Ligunzi gold deposit and the Haojingou-Ligunzi deposit.

SRK was provided with geological exploration reports and maps, topography, database, QA/QC data and SG data. The coordinate system of Wulong Mine and Ligunzi deposit is Beijing 54 while Haojingou-Ligunzi deposit is Xi'an 80. SRK undertook a thorough review for the database, followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

Based on the data, SRK constructed a Mineral Resource database, composed of borehole collar, survey, lithology, assay, and SG data. Table 8-3 summaries the database covering the entire project area. The boundary of the estimation is the Wulong mining licence, and the Ligunzi and Haojingou-Ligunzi exploration permits.

Table 8-3: Mineral Resource Database Statistics of Wulong Project

Mine/Deposit	Type	Counts	Length（m）	Assay Samples
Wulong Mine	Drillholes	38	15,135.9	1,164
	Tunnels	5,167	8,809.7	13,123
	Total	**5,205**	**23,945.6**	**14,287**
Ligunzi Deposit	Drillholes	2	1,077.8	104
	Tunnels	303	537.4	303
	Trenches	3	2.0	3
	Total	**308**	**1,617.2**	**410**
Haojingou-Ligunzi Deposit	Surface Drillholes	88	21,158.4	1,935
	UG Drillholes	11	787.7	74
	Tunnels	131	195.0	231
	Trenches	279	169.2	452
	Total	**509**	**22,310.2**	**2,692**

8.3.4 Hanfeng Project

Hanfeng Project consists of two mining rights, the Lishan Mine and the Dongfeng Mine. The Mineral Resources are reported in the deep area of below -92m asl of for the Lishan Mine and in the deep area of below 250m asl for Dongfeng Molybdenum Deposit.

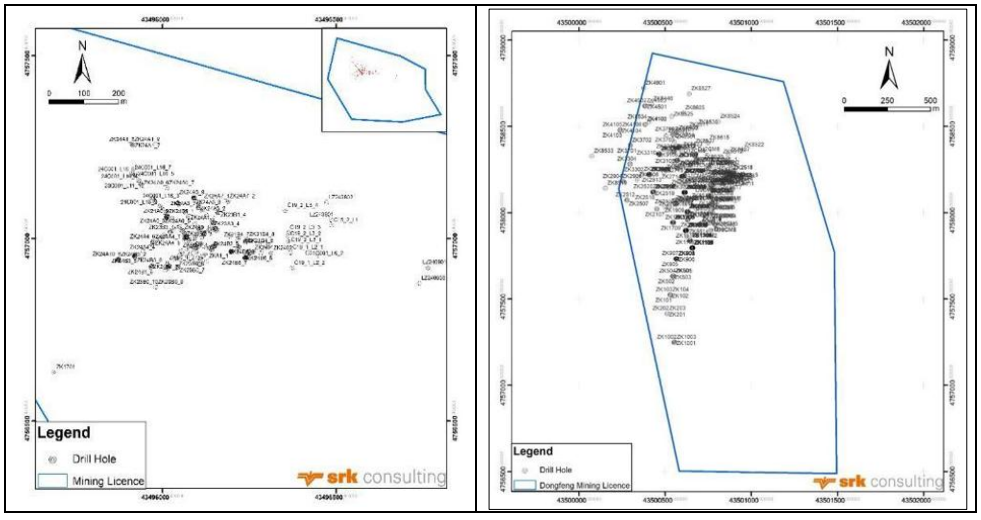
The solid models were prepared using vein tool by Leapfrog 2021.1 and IDW estimation techniques by GEOVIA Surpac 2020.1. The entire estimate procedure, consisting of database compilation, mineralised domains construction, the grade interpolation as well as the resources classification, were completed by SRK.

The data SRK received from the client include collar, assay, survey, density and lithologies in excel format, internal and external checks data, and geology maps. Detail information is as shown in Table 8-4, and the drillhole location is shown in Figure 8-1.

Table 8-4: Resource Database Statistics of Hanfeng Project

Mine	Type	Counts	Profiles(m)	Assay records
Lishan	Drillholes	194	46,352	9,556
	Tunnels	102	477	487
Dongfeng	Drillholes	252	88,402	31,949
	Tunnels	63	431	417

Figure 8-1: Hole location of Lishan and Dongfeng Mines



Note: Lishan Mine on the left and Dongfeng Mine on the right

8.3.5 Jintai Project

SRK was provided with geological exploration reports and maps, topography, database, QAQC data, and SG data. The coordinate system is CGCS2000. SRK undertook a thorough review for the database, followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

Based on the data, SRK constructed a Mineral Resource database, composed of borehole collar, survey, lithology, assay, and SG data. Table 8-5 summaries the database covering the entire project area.

Table 8-5: Mineral Resource Database Statistics for Jintai Project

Mine/Deposit	Type	Counts	Length（m）	Assay Samples
Xidengping Mine	Drillholes	196	14,615.38	10,653
	Trenches	12	105.30	102
	Total	**208**	**14,720.68**	**10,755**

8.4 Solid Body Modelling

SRK was provided with section maps and mining level maps of all mineralised domains. SRK has constructed and reviewed the sold models according to the maps provided by the client and they are acceptable for the estimation.

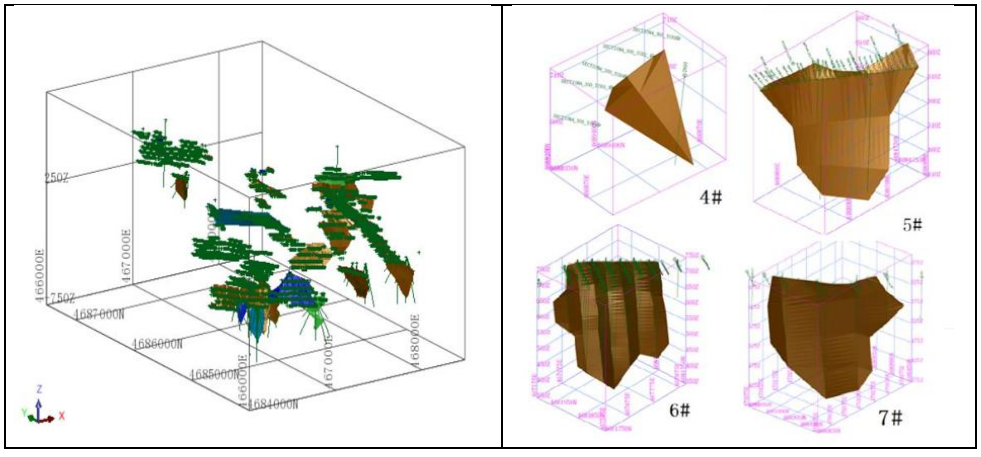
For the Jilong, Huatai and Wulong and Jintai projects, the mineralisation is dominated by gold. The mineralised domains for the Jilong, Huatai and Wulong projects were interpreted by samples collected based on a cut-off grade of 1.0g/t Au, and the mineralised domains for Jintai Project were interpreted by samples collected based on a cut-off grade of 0.17g/t Au.

For the Hanfeng Project, the zinc mineralised domains were interpreted by samples collected based on a cut-off grade of 0.5% Zn, and the molybdenum mineralised domains were interpreted by samples collected based on a cut-off grade of 0.03% Mo.

8.4.1 Jilong Project

A total of 44 mineralised domains for the 1#2#3#&depth Block and 4 mineralised domains for the 4#5#6#7# Block were constructed in the Zhuanshanzi Mine (see Figure 8-2).

Figure 8-2: Mineralised Domains in the Zhuanshanzi Mine

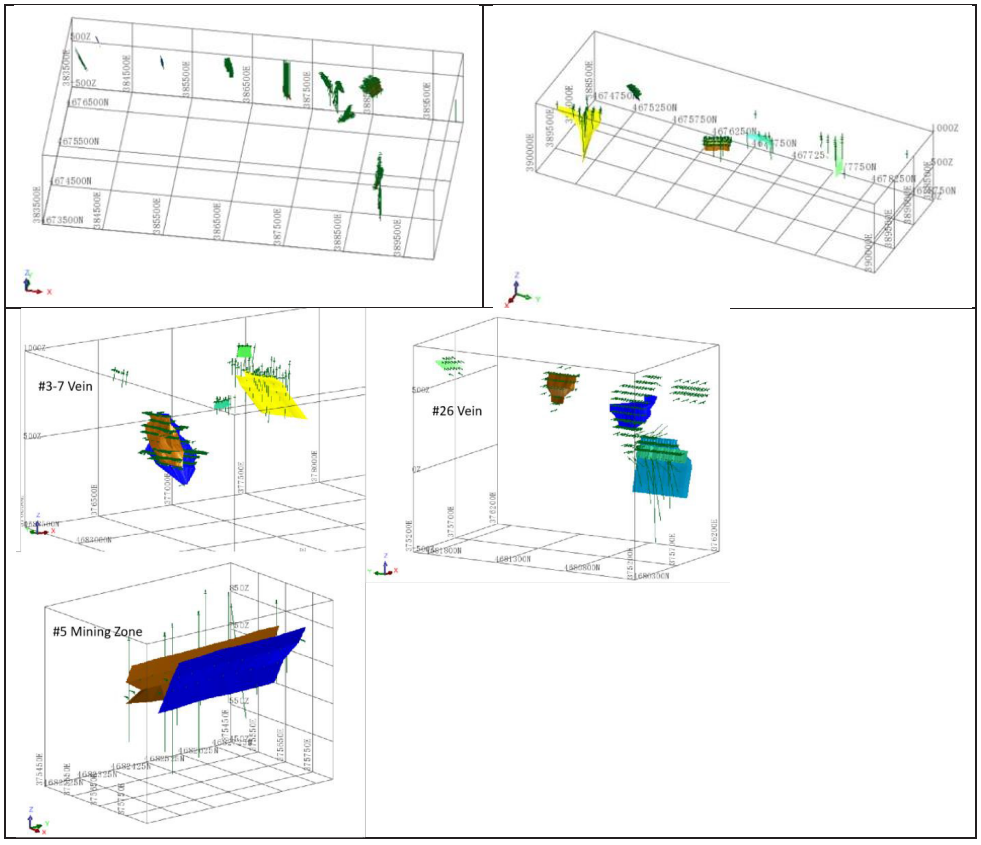


Note: Solid bodies of 1#2#3#&depth block on the left and 4#5#6#7# block on the right

8.4.2 Huatai Project

As showed in Figure 8-3, a total of 16 mineralised domains for the Honghuagou Mine, 6 mineralised domains for the Pengjiagou Mine and a total of 12 mineralised domains for the Lianhuashan Mine were constructed.

Figure 8-3: Mineralised Domains of Honghuagou, Pengjiagou and Lianhuashan Mines

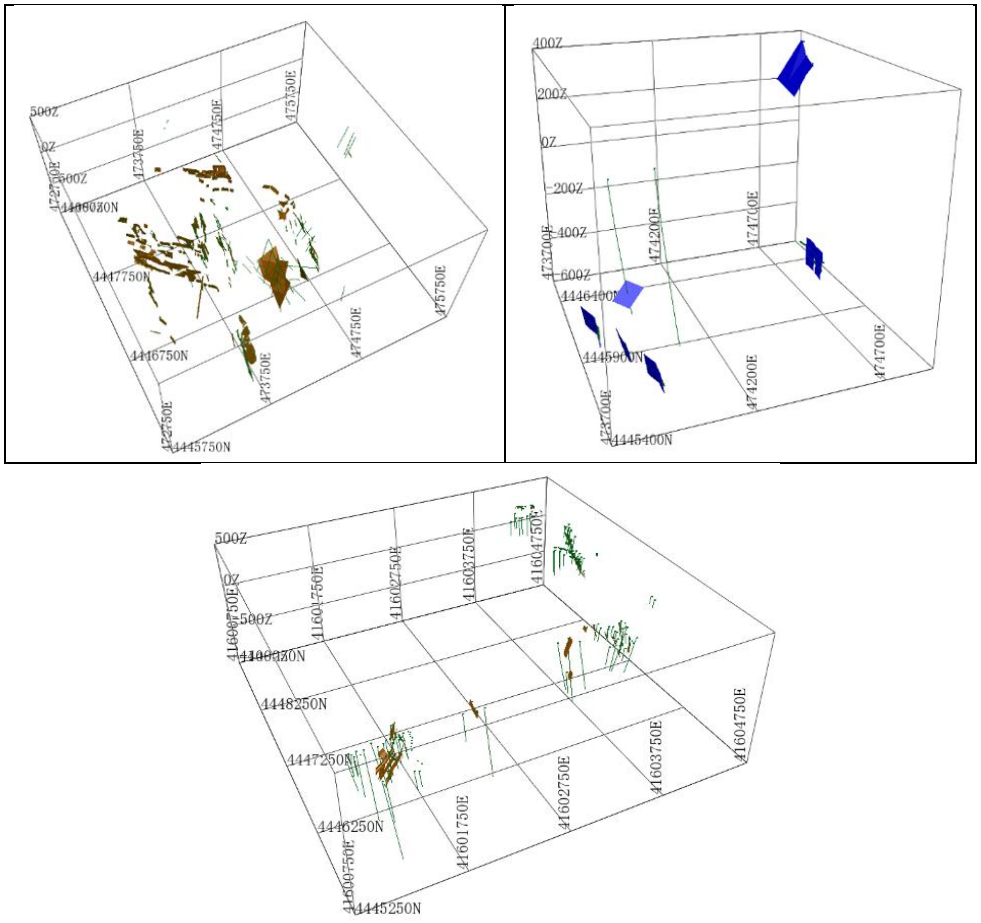


Note: Solid bodies of Honghuagou Mine on the upper left, Pengjiagou Mine on the upper right and Lianhuashan Mine on the bottom.

8.4.3 Wulong Project

A total of 33 mineralised domains for the Wulong Mine, 6 mineralised domains for the Ligunzi deposit and a total of 17 mineralised domains for the Haojingou-Ligunzi deposit were constructed (Figure 8-4).

Figure 8-4: Mineralised Domains of Wulong Mine and Ligunzi and Haojingou-Ligunzi Deposits

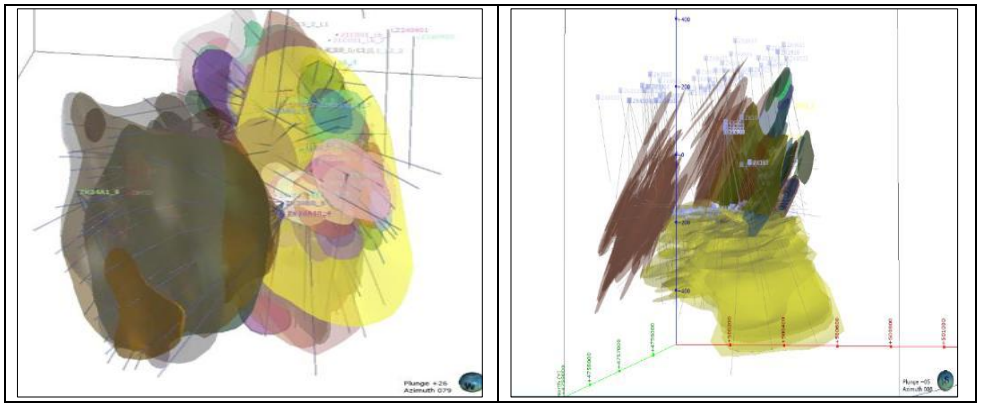


Note: Solid bodies of Wulong Mine on the upper left, Ligunzi deposit on the upper right and Haojingou-Ligunzi deposit on the bottom.

8.4.4 Hanfeng Project

A total of 128 lead-zinc mineralised domains for the Lishan Mine (below-92m asl) and a total of 178 molybdenum mineralised domains the Dongfeng Mine were constructed (see Figure 8-5).

Figure 8-5: Mineralisation Domains of Lishan and Dongfeng Mines

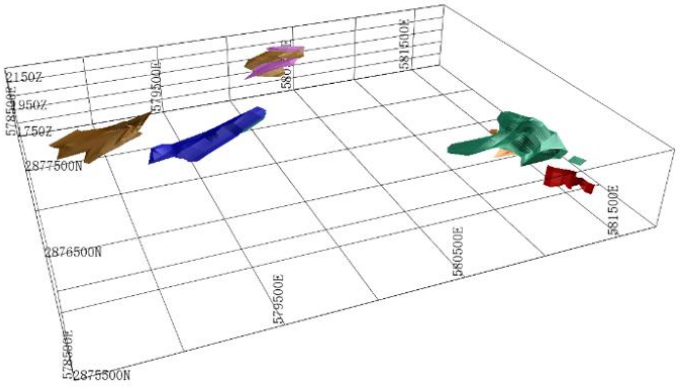


Note: Solid bodies of Lishan Mine (below -92m asl) on the left and Dongfeng Mine (below 250m asl) on the right.

8.4.5 Jintai Project

A total of 11 mineralised domains were constructed in Xidengping Mine (see Figure 8-6).

Figure 8-6: Mineralised Domains of Xidengping Mine



Source: SRK

8.5 Compositing

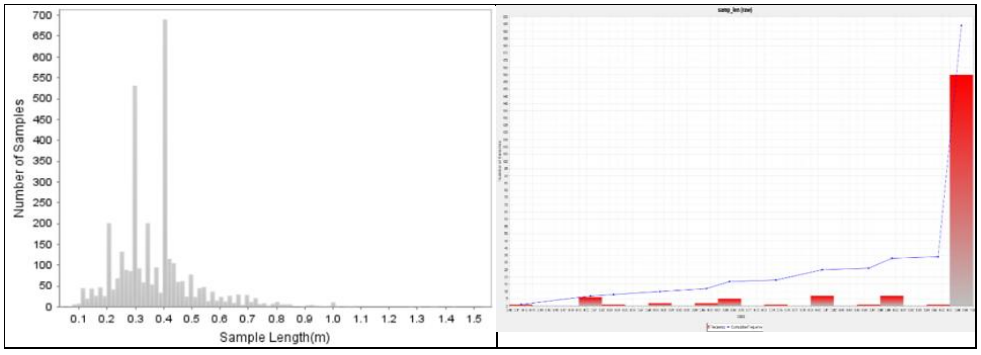
8.5.1 Jilong Project

The database of the 1#2#3# depth block in the Zhuanshanzi Mine indicates that most of the sample intervals are 0.4 m, and a 0.4 m interval composite length was selected for compositing. All raw samples were composited to 0.4 m downhole lengths, with a minimum of 0.75 m for each composite

sample. A 0.4 m interval composite length was applied by SRK for subsequent statistic and grade interpolation. The distribution of sample lengths is shown in Figure 8-7.

The database of the 4#5#6#7# block in the Zhuanshanzi Mine indicates that most of the sample intervals are 1.0 m, and a 1.0 m interval composite length was selected for compositing. A 1.0 m interval composite length was applied by SRK for subsequent statistic and grade interpolation. The distribution of sample lengths is shown in Figure 8-7.

Figure 8-7: Histograms of Sample Length of Zhuanshanzi Mine



Note: Histograms of sample legnth for the 1#2#3#&depth block on the left and for 4#5#6#7# block on the right.

The calculated univeriate statistics for gold within the 1#2#3#&depth block and 4#5#6#7# block of Zhuanshanzi Mine are is presented In Table 8-6.

Table 8-6: Composites Statistics of Zhuanshanzi Mine

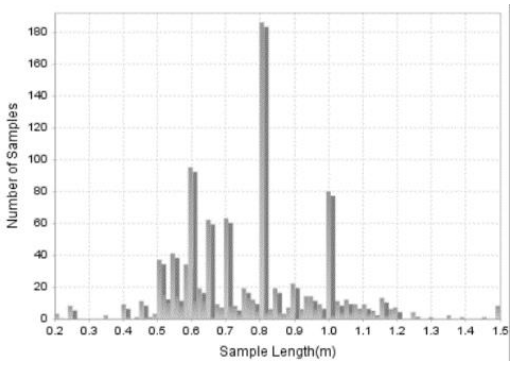
Mine/Deposit	Samples	Min	Max	Mean	Median	SD
1#2#3#&depth block, Zhuanshanzi Mine	2502	0.30	0.40	0.39	0.40	0.03
4#5#6#7# block, Zhuanshanzi Mine	194	0.4	1	0.95	1	0.13

8.5.2 Huatai Project

The database of the #1 Mining Zone in the Honghuagou Mine indicates that most of the sample intervals are 0.8 m, and a 0.8 m interval composite length was selected for compositing. All raw samples were composited to 0.8 m downhole lengths, with a minimum of 0.75 m for each composite sample. A 0.8 m interval composite length was applied by SRK for subsequent statistic and grade interpolation. The distribution of sample lengths of the #1 Mining Zone is shown in Figure 8-8.

For the #86 Vein of Honghuagou Mine, #26 Vein, #3&7# Vein and #5 Mining Zone of the Lianhuashan Mine, and Pengjiagou Mine, a 0.5 m interval composite length was selected for compositing. All raw samples were composited to 0.5 m downhole lengths, with a minimum of 0.75 m for each composite sample. A 0.5 m interval composite length was applied by SRK for subsequent statistic and grade interpolation.

Figure 8-8: Histogram of Sample Length of #1 Mining Zone of Honghuagou mine



The statistical results of the composited gold data from Huatai Project are presented in Table 8-7.

Table 8-7: Composites Statistics of Huatai project

Mine/Deposit	Ore block	Samples	Min	Max	Mean	Median	SD	CoV.
Honghuagou	#86 Vein	355	0.02	0.5	0.45	0.5	0.01	0.23
	#1 Mining Zone	764	0.60	0.80	0.79	0.80	0.04	0.05
Lianhuashan	#3-7 Vein	821	0.01	0.5	0.40	0.47	0.03	0.47
	#26 Vein	91	0.2	0.5	0.41	0.5	0.01	0.29
	#5 Mining Zone	698	0.01	0.50	0.40	0.50	0.03	0.41
Pengjiagou	Pengjiagou	323	0.01	0.50	0.45	0.50	0.01	0.27

8.5.3 Wulong Project

Prior to the statistical analysis, the samples were generally combined to the length of each sample was basically equivalent. The basic statistics of geological sampling length of original samples are carried out by SRK, as showed in Table 8-8.

Table 8-8: Statistics of Sample Length of Each Deposit

Mine/Deposit	Samples	Min	Max	Mean	Median	SD	Kurtosis	Skewness
Wulong	6,705	0.10	18.38	0.98	1.00	0.65	92.83	4.80
Ligunzi	268	0.30	3.10	1.83	2.00	0.70	-1.03	-0.17
Haojingou-Ligunzi	308	0.03	1.50	0.72	0.70	0.34	-0.43	0.26

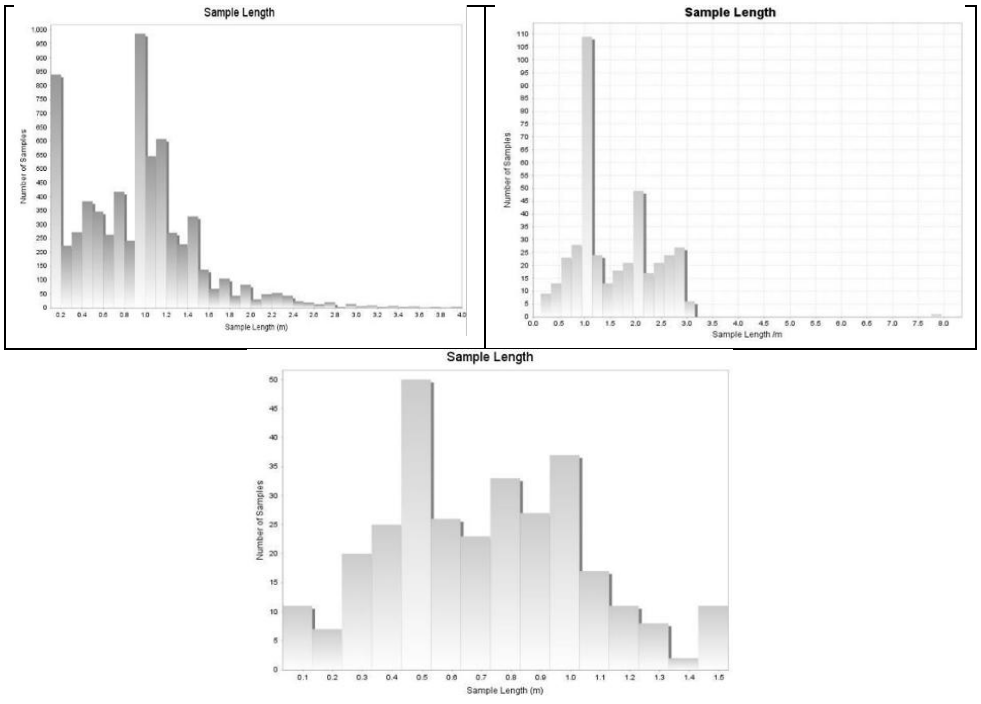
The database of the Wulong Mine indicates that most of the sample intervals are 1 m, and a 1 m interval composite length was selected for compositing. All raw samples were composited to 1 m downhole lengths, with a minimum of 0.75 m for each composite sample. A 1 m interval composite length was applied by SRK for subsequent statistic and grade interpolation.

The database of the Ligunzi deposit indicates that most of the sample intervals are 2 m, and a 2 m interval composite length was selected for compositing. All raw samples were composited to 2 m downhole lengths, with a minimum of 1.5 m for each composite sample. A 2 m interval composite length was applied by SRK for subsequent statistic and grade interpolation.

The database of the Haojingou-Ligunzi deposit indicates that most of the sample intervals are 1 m, and a 1 m interval composite length was selected for compositing. All raw samples were composited to 1 m downhole lengths, with a minimum of 0.75 m for each composite sample. A 1 m interval composite length was applied by SRK for subsequent statistic and grade interpolation.

The distributions of sample lengths of the Wulong Mine, and the Ligunzi and Haojingou-Ligunzi deposits are shown in Figure 8-9.

Figure 8-9: Histograms of Sample Length for Wulong Mine, Ligunzi and Haojingou-Ligunzi Deposits



Note: Histograms of sample length for Wulong Mine on the upper left, Ligunzi deposit on the upper right and Haojingou-Ligunzi deposit on the bottom.

Table 8-9 lists the summarised statistics of composites against raw samples for each mine and deposit. No material errors were found.

Table 8-9: Summary Statistic of Composites against Raws of Each Deposit

Deposit	Type	Counts	Min	Max	Mean	Variance	SD	Cov
Wulong	Raw	6705	0.00	172.00	8.36	92.25	9.60	1.15
	Composite	6674	0.00	172.00	9.01	86.45	9.30	1.03
	Difference (%)	-0.46	0.00	0.00	7.67	-6.29	-3.20	-10.09
Ligunzi	Raw	268	0.30	41.00	5.34	18.56	4.31	0.81
	Composite	233	0.30	41.00	5.46	18.22	4.27	0.78

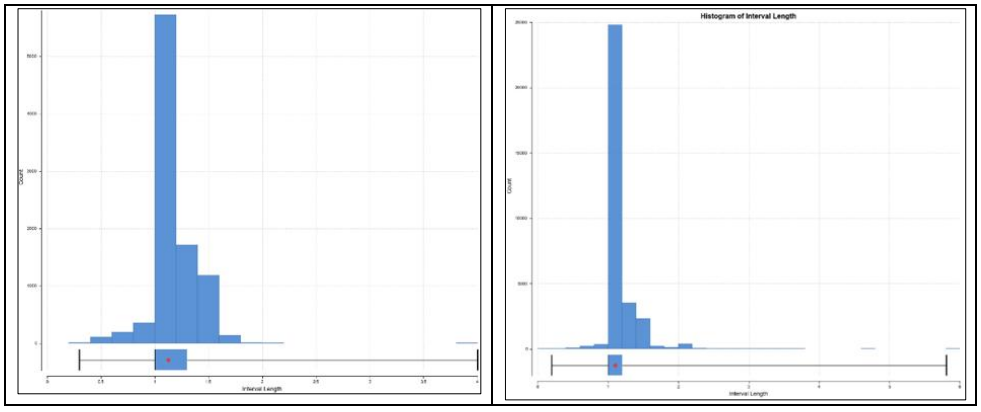
Deposit	Type	Counts	Min	Max	Mean	Variance	SD	Cov
	Difference (%)	-13.06	0.00	0.00	2.22	-1.85	-0.90	-3.05
Haojingou-Ligunzi	Raw	308	0.05	107.00	6.25	96.93	9.85	1.57
	Composite	254	0.05	46.75	6.52	54.93	7.41	1.14
	Difference (%)	-17.53	0.00	-56.30	4.29	-43.33	-24.74	-27.83

8.5.4 Hanfeng Project

The compositing interval was selected by reviewing sample length histograms. A mineralised sample length histogram from the Lishan Mine (below-92m asl) and Dongfeng Mine (below 250m asl) are displayed in Figure 8-10.

A composite length of 1 m was chosen for both Lishan and Dongfeng Mine as it does not distort the grade distribution for the mine when compared to the length-weighted raw grade statistics.

Figure 8-10: Histogram of Sample Length for Lishan and Dongfeng Mines



Note: Histograms of sample length for Lishan Mine (below -92m asl) on the left and Dongfeng Mine (below 250m asl) on the right.

The statistical results of the composited Zn, Pb and Cu data from Lishan Mine is presented in Table 8-10, and the statistical results of the composited Mo data from Dongfeng Mine is presented in Table 8-11.

Table 8-10: Composites Statistics of Lishan Mine (below-92m asl)

Item	Cu Composites	Pb Composites	Zn Composites
Number of samples	1,818	1,818	1,818
Minimum value	0	0	0.001
Maximum value	6.41	9.04	43.73
Mean	0.056	0.13	2.47
Variance	0.12	0.33	8.78
Standard Deviation	0.34	0.58	2.96
Coefficient of variation	6.18	4.30	1.20

Table 8-11: Composites Statistics of Dongfeng Mine (below 250m asl)

Item	Mo Composites
Number of samples	8,988
Minimum value	0.001
Maximum value	5.265
Mean	0.11
Variance	0.04
Standard Deviation	0.19
Coefficient of variation	1.69

8.5.5 Jintai Project

Prior to the statistical analysis, the samples were generally combined to the length of each sample was basically equivalent. The basic statistics of geological sampling length of original samples are carried out by SRK, as showed in Table 8-12.

Table 8-12: Statistics of Sample Length of Xidengping Mine

Mineralised Domain	Samples	Min	Max	Mean	Median	SD	Kurtosis	Skewness
V1	215	0.57	1.65	1.01	1.00	0.12	9.90	1.55
V2	79	0.67	1.42	1.02	1.00	0.14	2.15	1.14
V2_1	6	1.00	1.50	1.19	1.15	0.22	-1.83	0.45
V2_2	18	0.80	1.50	1.14	1.00	0.24	-1.18	0.66
V4	1,145	0.20	1.50	0.99	1.00	0.19	1.46	-0.80
V5	47	0.60	1.38	0.99	1.00	0.16	0.57	-0.41
V6	3	1.00	1.00	1.00	1.00	0.00	/	/
V7	79	0.51	1.38	1.00	1.00	0.16	1.66	-0.70
V8	122	0.40	2.70	1.01	1.00	0.29	8.73	1.47
V9	30	0.38	1.49	1.03	1.01	0.21	2.21	-0.61
V10	42	0.64	1.55	1.03	1.01	0.18	0.99	0.00
Total	1,786	0.20	2.70	1.00	1.00	0.19	5.10	-0.11

As shown in Figure 8-11, the result indicates that most of the sample intervals at the Xindengping Mine are 1 m, and a 1 m interval composite length was selected for compositing. All raw samples were composited to 1 m downhole lengths, with a minimum of 0.75 m for each composite sample. A 1 m interval composite length was applied by SRK for subsequent statistic and grade interpolation.

The statistical results of the composited gold data from Jintai Project are presented in Table 8-13.

Figure 8-11: Histogram of the Sample Length of Xidengping Mine

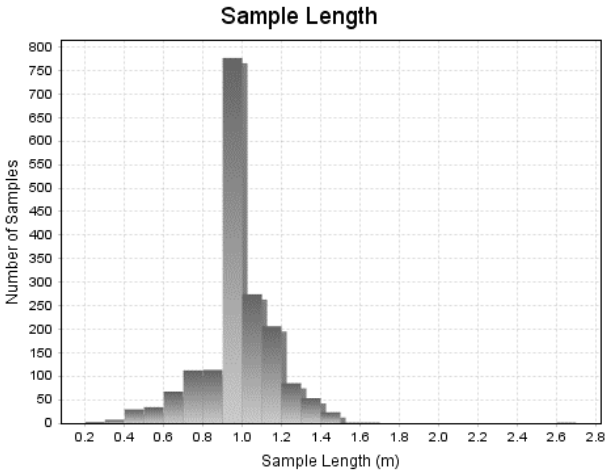


Table 8-13: Summary Statistic of Composites against Raws of Each Domain

Type	Item	V1	V2	V2_1	V2_2	V4	V5	V6	V7	V8	V9	V10
Composite	Counts	215	75	7	19	1,120	45	3	74	124	28	41
	Min	0.09	0.12	0.30	0.09	0.06	0.14	0.44	0.18	0.07	0.14	0.18
	Max	4.40	21.40	0.41	0.90	107.48	5.19	1.20	37.67	4.99	4.66	20.88
	Mean	0.78	1.65	0.34	0.41	1.72	0.83	0.84	0.93	0.83	1.45	2.90
	Variance	0.41	12.31	0.00	0.04	16.17	0.96	0.15	18.80	0.61	1.52	25.02
	SD	0.64	3.51	0.04	0.20	4.02	0.98	0.38	4.34	0.78	1.23	5.00
	Cov	0.83	2.12	0.11	0.50	2.34	1.19	0.45	4.67	0.94	0.85	1.73
Raw	Counts	215	79	6	18	1,145	47	3	79	122	30	42
	Min	0.09	0.10	0.30	0.06	0.06	0.07	0.44	0.09	0.06	0.06	0.11
	Max	4.43	21.40	0.45	1.04	113.00	5.19	1.20	47.00	4.99	6.13	25.00
	Mean	0.78	1.59	0.34	0.41	1.71	0.82	0.84	1.01	0.79	1.36	2.86
	Variance	0.42	12.98	0.00	0.05	17.37	1.08	0.15	27.52	0.59	2.00	33.36
	SD	0.65	3.60	0.05	0.23	4.17	1.04	0.38	5.25	0.77	1.42	5.78
	Cov	0.84	2.26	0.16	0.56	2.43	1.26	0.45	5.18	0.97	1.04	2.02
Au Mean Difference (%)		-0.23	3.66	-1.24	0.11	0.26	0.30	0.00	-8.20	5.30	6.55	1.27

8.6 Evaluation of Outliers

Top cut analysis is undertaken to assess the influence extreme grade outliers have on the sample population of each data type. Although the extreme grades are real, these outliers are not representative of the domain assay population and so may overstate the block grades in some parts of the deposit if left uncut.

8.6.1 Jilong Project

In order to avoid any disproportionate influence of random, anomalously high-grade assays on the resource average grade, assay capping for gold was applied for the 1#2#3#&depth block of Zhuanshanzi Mine. The histogram and cumulative probability plot are presented in Figure 8-12 and the capping values of the 1#2#3#&depth block are listed in Table 8-14.

Figure 8-12: Cumulative Probability Plot and Histogram for the 1#2#3#&depth Blocks

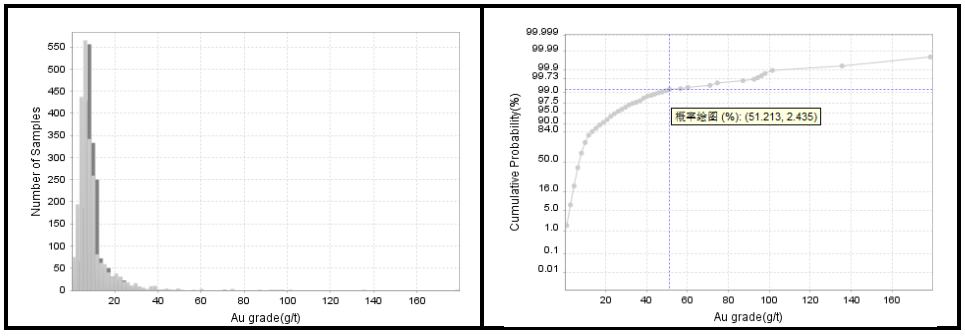


Table 8-14: Capping Values Statistics of 1#2#3#&depth Block of Zhuanshanzi Mine

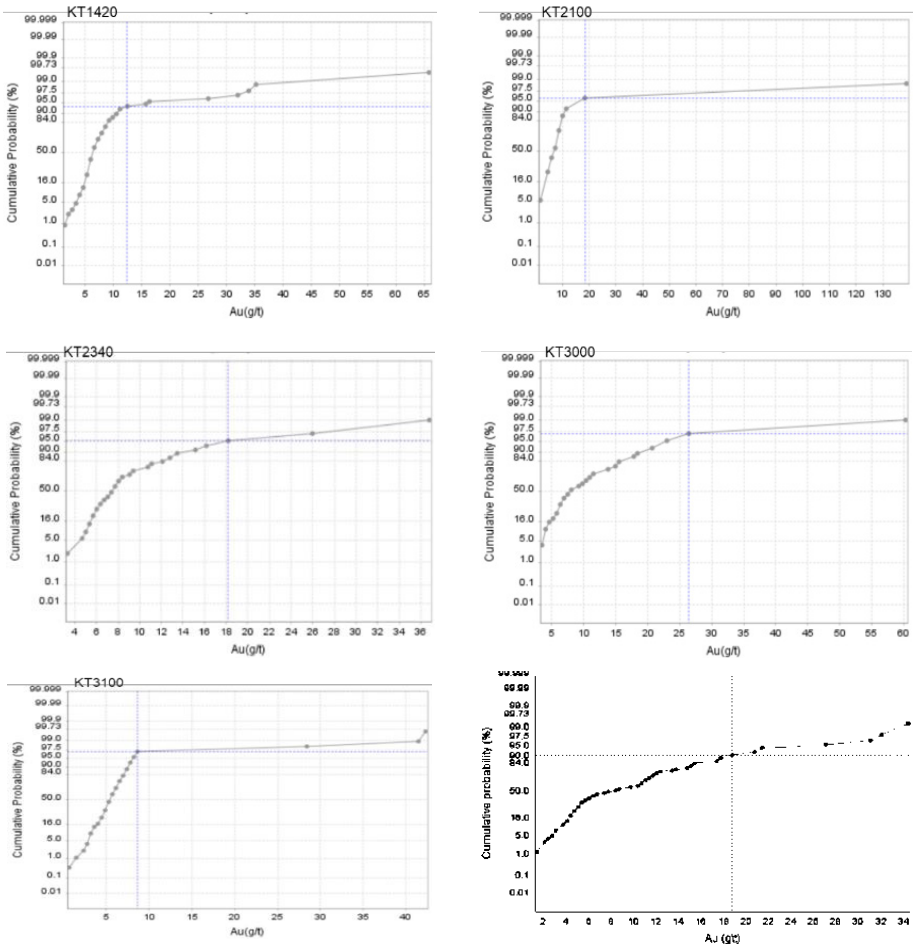
Mine\Deposit	Assay Cap	Number of Replaced Samples	Capped Ratio (%)	Mean	
				Before Capping	After Capping
Zhuanshanzi Mine (1#2#3#&depth block)	52	74	1.71%	9.31	9.07

SRK have conducted corresponding statistical analysis for the gold composited data of the 4#5#6#7# Block of Zhuanshanzi Mine. The grade variation coefficient of the gold mineralised body in the mining area is between 39.35-65.90%, which is less than 100%. Capping grade should be 82.62g/t, which is six times of the average grade (13.77g/t) and larger than the highest grade (45.03g/t). Since all the sample grades are lower than the capping grade, no capping was applied.

8.6.2 Huatai Project

In order to avoid any disproportionate influence of random, anomalously high-grade assays on the resource average grade, assay capping for gold was applied for the Huatai Project. The cumulative-probability plots and the capping values for the #1 Mining Zone and #26 Vein are presented in Figure 8-13 and Table 8-15.

Figure 8-13: Cumulative Probability Plots for #1 Mining Zone and #26 Vein



Note: 5 plots of KT2100, KT1420, KT3000, KT3100 and KT2300 from #1 Mining Zone and the last plot on bottom right from #26 Vein.

Table 8-15: Capping Values Statistics of Huatai Project

Mine\Deposit	Assay Cap	Number of Replaced Samples	Capped Ratio (%)	Mean	
				Before Capping	After Capping
Honghuagou #1 Mining Zone kt2100	15.26	4	0.11	10.41	6.86
Honghuagou #1 Mining Zone kt1420	15.96	7	0.06	7.92	6.94
Honghuagou #1 Mining Zone kt3000	25.00	4	0.08	10.61	9.89
Honghuagou #1 Mining Zone kt3100	8.30	6	0.04	6.04	5.41
Honghuagou #1 Mining Zone kt2340	17.13	5	0.10	8.93	8.35
Lianhuashan #26 Vein	19.54	2	0.04	8.29	8.16

8.6.3 Wulong Project

The composite grade distributions of each deposit were examined via histograms and cumulative probability plots to determine if capping was required and if so at what level. Figure 8-14, Figure 8-15 and Figure 8-16 show the histogram and cumulative probability curve of the composite gold for each mine and deposit.

Figure 8-14: Au Histogram and Cumulative Probability Curve of Wulong Mine

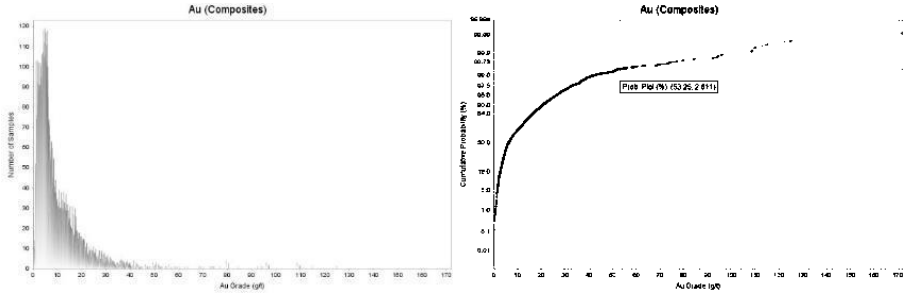


Figure 8-15: Au Histogram and Cumulative Probability Curve of Ligunzi Deposit

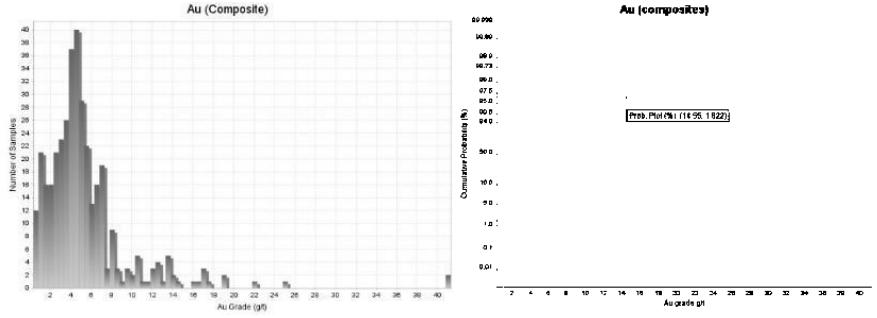
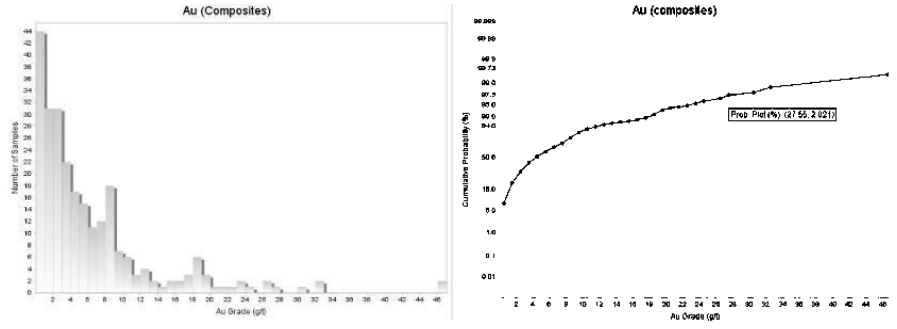


Figure 8-16: Au Histogram and Cumulative Probability Curve of Haojingou-Ligunzi Deposit



The composite samples statistics are listed in Table 8-9 and are showed in figures from Figure 8-14 to Figure 8-16, indicating that grades are defined as outlier value samples. Table 8-16 contains the outlier value details.

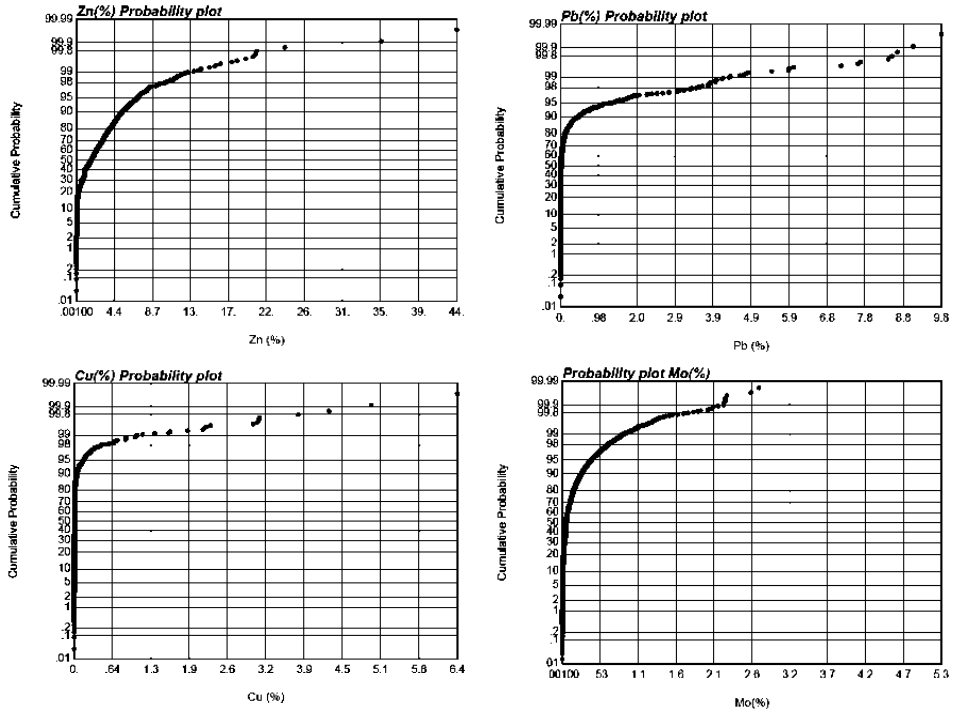
Table 8-16: Capping Values Statistics of Wulong Project

Mine/Deposit	Assay Cap Au (g/t)	Number of Replaced Samples	Capped Ratio (%)	Au Mean (g/t) Before Capping	Au Mean (g/t) After Capping	Difference (%)
Wulong	54	29	0.43	9.01	8.88	-1.44
Ligunzi	15	8	5.15	5.46	5.26	-3.66
Haojingou-Ligunzi	28	5	1.97	6.52	6.32	-3.07

8.6.4 Hanfeng Project

In order to avoid any disproportionate influence of random, anomalously high-grade assays on the resource average grade, Assay capping for Pb, Zn and Cu was applied for the Mineralised domains of Lishan Mine and Assay capping for Mo for Dongfeng Mine. The cumulative-probability plots and Capping Values of Lishan and Dongfeng are presented in Figure 8-17 and Table 8-17.

Figure 8-17: Cumulative-probability plots for Lishan and Dongfeng Mines



Note: Lishan Mine (below -92m asl) on the top and bottom left and Dongfeng Mine (below 250m asl) on the bottom right.

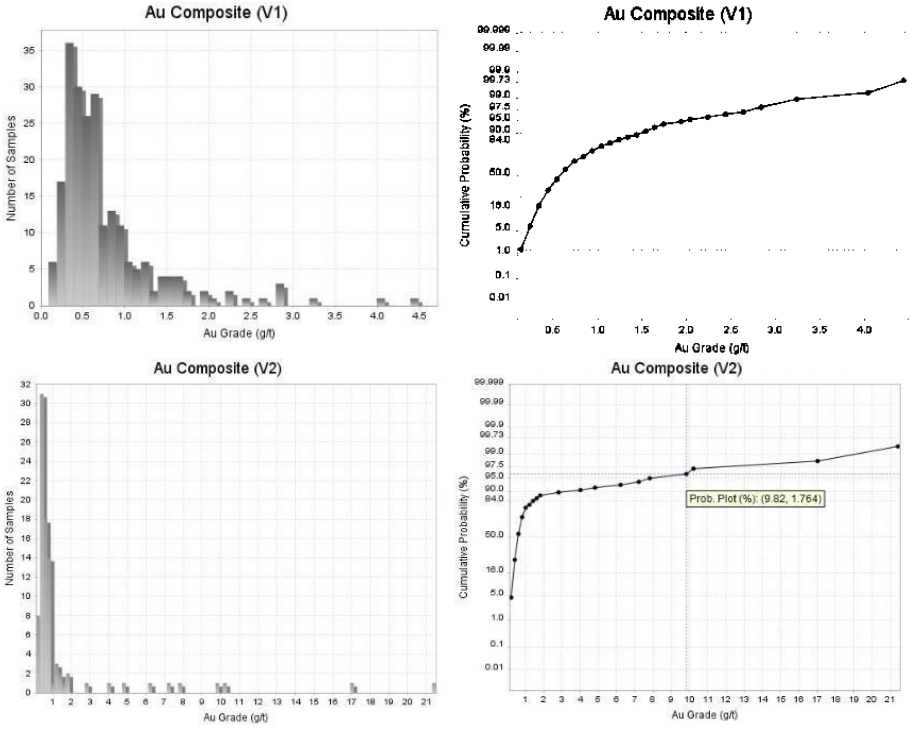
Table 8-17: Outliers Treatment of Hanfeng Project

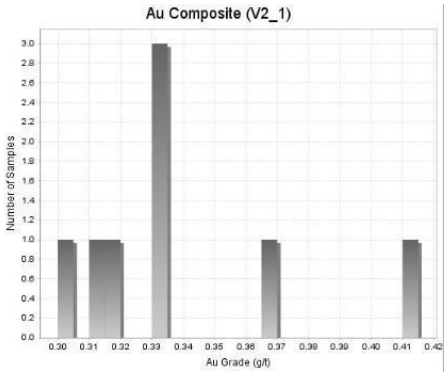
Mine	Element	Assay Cap	Number of Replaced Samples	Capped Ratio (%)	Mean	
					Before Capping	After Capping
Lishan	Zn（%）	20.69	4	0.22	2.47	2.45
	Pb （%）	4.60	7	0.39	0.13	0.12
	Cu （%）	1.35	19	1.05	0.05	0.04
Dongfeng	Mo（%）	2.28	4	0.04	0.11	0.11

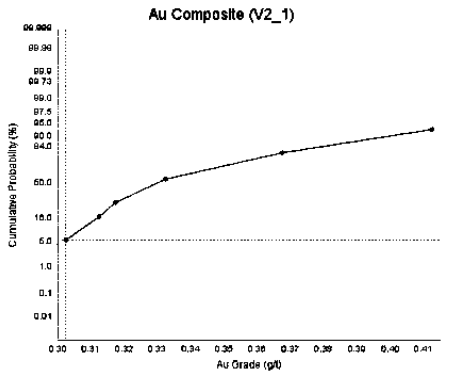
8.6.5 Jintai Project

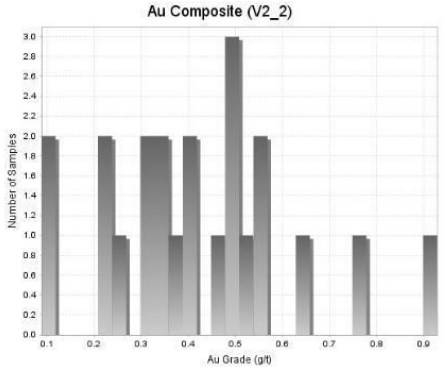
The composite grade distributions of each domain were examined via histograms and cumulative probability plots to determine if capping was required and if so at what level. Figure 8-18 below show the histograms and cumulative probability curves of the composites Au for the domains V1, V2, V2_1, V2_2, V4, V5, V7, V8, V9 and V10, respectively.

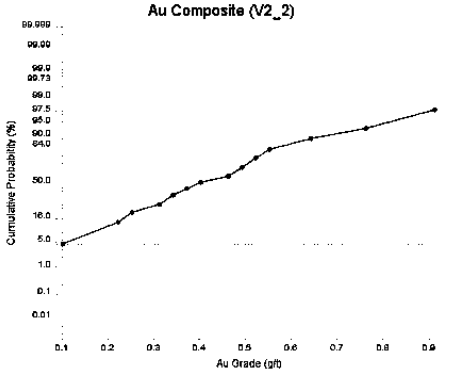
Figure 8-18: Histograms and Cumulative Probability Curves of Gold Mineralised Domains

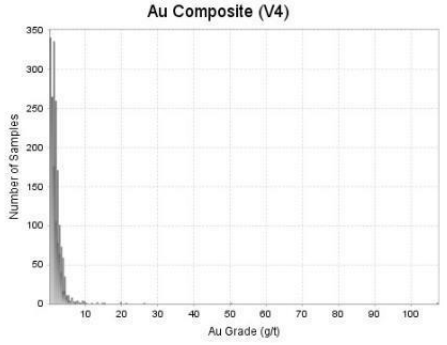


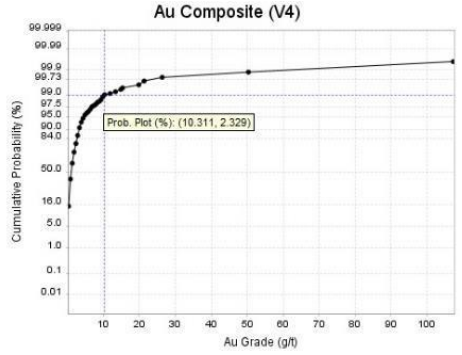

Au Composite (V2_1)
Number of Samples
Au Grade (g/t)

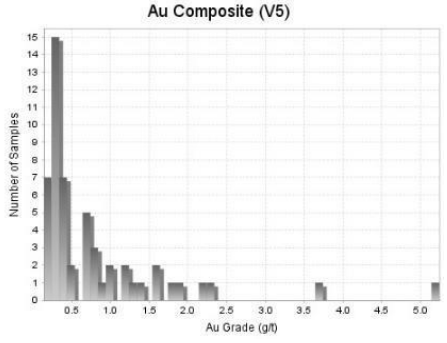

Au Composite (V2_1)
Cumulative Probability (%)
Au Grade (g/t)

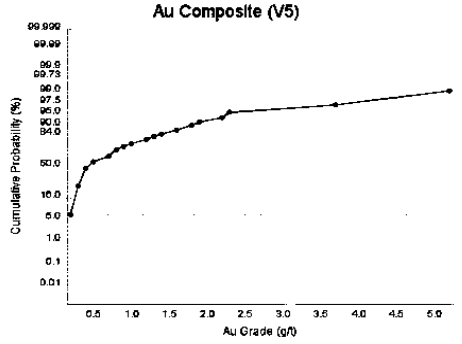

Au Composite (V2_2)
Number of Samples
Au Grade (g/t)

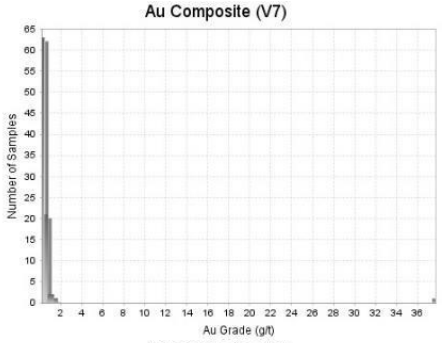

Au Composite (V2_2)
Cumulative Probability (%)
Au Grade (g/t)

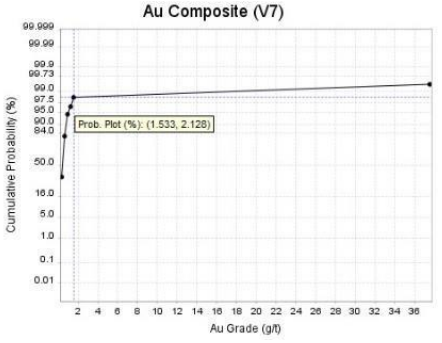

Au Composite (V4)
Number of Samples
Au Grade (g/t)

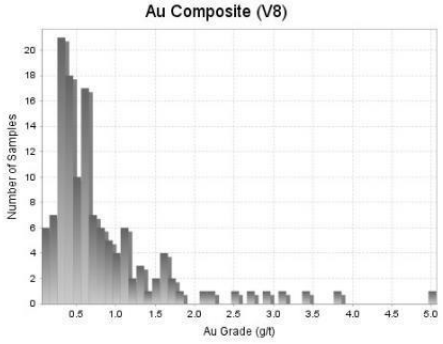

Au Composite (V4)
Prob. Plot (%): (10.311, 2.329)
Cumulative Probability (%)
Au Grade (g/t)

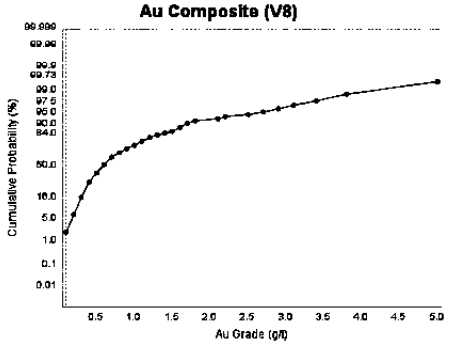

Au Composite (V5)
Number of Samples
Au Grade (g/t)

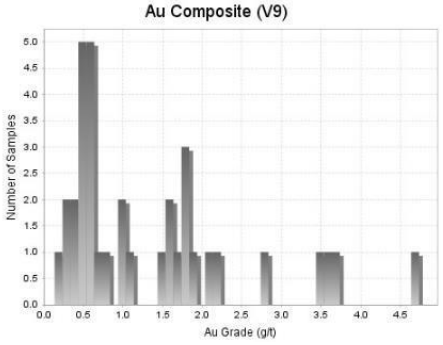

Au Composite (V5)
Cumulative Probability (%)
Au Grade (g/t)

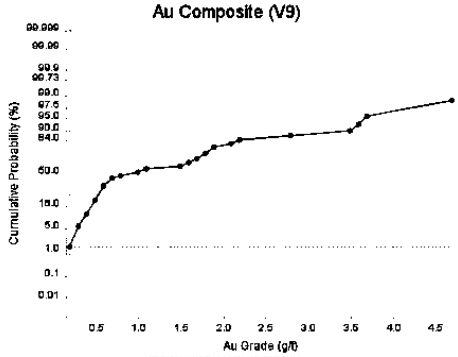

Au Composite (V7)
Number of Samples
Au Grade (g/t)

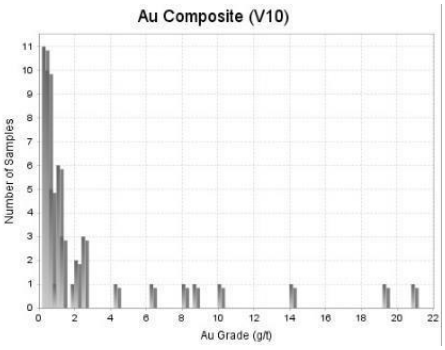

Au Composite (V7)
Cumulative Probability (%)
Prob. Plot (%): (1.533, 2.128)
Au Grade (g/t)

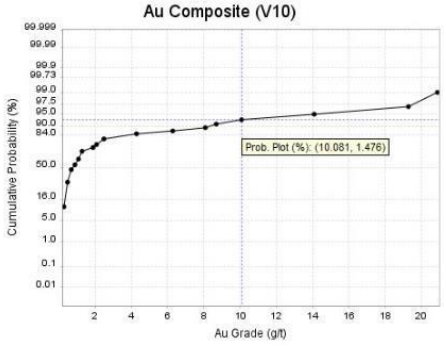

Au Composite (V8)
Number of Samples
Au Grade (g/t)


Au Composite (V8)
Cumulative Probability (%)
Au Grade (g/t)


Au Composite (V9)
Number of Samples
Au Grade (g/t)


Au Composite (V9)
Cumulative Probability (%)
Au Grade (g/t)


Au Composite (V10)
Number of Samples
Au Grade (g/t)


Au Composite (V10)
Cumulative Probability (%)
Prob. Plot (%): (10.081, 1.476)
Au Grade (g/t)

The composite samples statistics are listed in Table 8-13 and are showed in Figure 8-18 indicating that grades are defined as outlier value samples. Table 8-18 contains the outlier value details.

Table 8-18: Capping Values Statistics of Xidengping Mine

Domain	Assay Cap Au (g/t)	Number of Replaced Samples	Capped Ratio (%)	Au Mean (g/t)		Difference (%)
				Before Capping	After Capping	
V2	10	3	4.00	1.65	1.40	-15.15
V4	11	10	0.89	1.72	1.55	-9.82
V7	2	1	1.35	0.93	0.45	-51.56
V10	11	3	7.32	2.90	2.37	-18.16

8.7 Block Model and Grade Estimation

8.7.1 Jilong Project

For the 1#2#3#&depth Block of Zhuanshanzi Mine, a block size of 4 m easting by 4 m northing by 4 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-19.

Table 8-19: Block Model Specifications of 1#2#3#&depth Block of Zhuanshanzi Mine

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Zhuanshanzi Mine (1#2#3#&depth block)	N	4684100	4687252	4	1	0
	E	466100	468500	4	1	0
	Z	-400	652	4	1	0

The Inverse Distance Weighting Square ("**IDW**") method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table 8-20 and Table 8-21. According to the general dipping trend, different dip angles were adopted. The domain, category, SG and depletion attributes were assigned directly using the solid models.

Table 8-20: Search Parameters Used in 1#2#3#&depth Block of Zhuanshanzi Mine

Domian	major/semi-major	major/minor	Azimuth	Plunge	Dip
KT540, KT2714, KT2851, KT10800	1.2	4	130	0	80
KT2821, KT2820, KT2830, KT7220	1.2	4	120	0	70
KT5730, KT5720, KT5710, KT2702, KT2701, KT512, KT521, KT530, KT2710, KT2720	1.2	4	130	0	-80
KT2810, KT2812, KT2814	1.2	4	130	0	-50
KT2501, KT2502	1.2	4	150	0	-90
KT930	1.2	4	100	0	90
KT1100	1.2	4	133	0	80
KT1110	1.2	4	96	0	90

Domian	major/semi-major	major/minor	Azimuth	Plunge	Dip
KT1212	1.2	4	140	0	40
KT2510	1.2	4	160	0	-90
KT2840	1.2	4	140	0	50
KT2860	1.2	4	160	0	50
KT5220	1.2	4	150	0	70
KT7230, KT7250	1.2	4	140	0	-80
KT7251	1.2	4	140	0	-90
KT10490, KT10481, KT10482	1.2	4	174	0	70
KT10410	1.2	4	160	0	-60
KT10400	1.2	4	170	0	-50
KT1044	1.2	4	110	0	-90
KT2604, KT2703, KT2704, KT10010	1.2	4	140	0	10

Table 8-21: Search distance and Samples Used in 1#2#3#&depth Block of Zhuanshanzi Mine

Pass	Max Radius(m)	Min samples	Max samples
1	40	5	45
2	80	3	45
3	160	1	45

For the 4#5#6#7# Block of Zhuanshanzi Mine, 4 block models were created, with size of 4 m easting by 4 m northing by 4 m elevation. The block models used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-22.

Table 8-22: Block Model Specifications of 4#5#6#7# Block of Zhuanshanzi Mine

Block	Coords	Min	Max	Block Size	Sub Block Size	Rotation
4#	N	4689340	4689900	4	0.5	60
	E	466400	466892	4	0.5	0
	Z	500	900	4	0.5	0
5#	N	4684400	4685100	4	0.5	30
	E	468300	469200	4	0.5	0
	Z	300	900	4	0.5	0
6#	N	4681770	4682202	4	0.5	30
	E	467300	467920	4	0.5	0
	Z	200	900	4	0.5	0
7#	N	4680640	4681232	4	0.5	30
	E	469800	470600	4	0.5	0
	Z	200	900	4	0.5	0

The IDW method was used for grade estimation via Surpac in the block models. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table

8-23. According to the general dipping trend, different parameters were adopted for each model. The domain, category and SG attribute were assigned directly using the solid models.

Table 8-23: Distance and Samples Used in 4#5#6#7# Block of Zhuanshanzi Mine

Block	Pass	Search Distance	Min num of Samples	Max num of Samples	Bearing	Plunge	Dip	Major/Semi-major	Major/Minor
4#	1	40	13	45	150	0	60	1.2	4
	2	80	7	45	150	0	60	1.2	4
	3	160	3	45	150	0	60	1.2	4
5#	1	50	13	45	125	0	80	1.2	4
	2	80	7	45	125	0	80	1.2	4
	3	160	3	45	125	0	80	1.2	4
6#	1	40	13	45	120	0	-75	1.2	4
	2	80	7	45	120	0	-75	1.2	4
	3	160	3	45	120	0	-75	1.2	4
7#	1	50	13	45	120	0	-75	1.2	4
	2	80	7	45	120	0	-75	1.2	4
	3	160	3	45	120	0	-75	1.2	4

8.7.2 Huatai Project

For the #1 Mining Zone, a block size of 4 m easting by 4 m northing by 4 m elevation was used. For the #86 Vein, #26 Vein, #3&#7 Vein, #5 Mining Zone, and Pengjiagou Mine, a block size of 2 m easting by 2 m northing by 2 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-24.

Table 8-24: Block Model Specifications of Huatai Project

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Honghuagou #1 Mining Zone	N	4674000	4676980	4	1	0
	E	386050	389102	4	1	0
	Z	-400	800	4	1	0
Honghuagou #86 Vein	N	4676200	4677000	2	1	0
	E	383550	385160	2	1	0
	Z	250	810	2	1	0
Lianhuashan #3-7 Vein	N	4682360	4683220	2	1	0
	E	376450	377310	2	1	0
	Z	210	980	2	1	0
Lianhuashan #26 Vein	N	4682200	4682770	2	1	0
	E	375620	375840	2	1	0
	Z	660	880	2	1	0
Lianhuashan #5 Mining Zone	N	4680300	4681800	2	1	0
	E	375290	376190	2	1	0
	Z	-200	730	2	1	0
Pengjiagou	N	4674800	4678140	2	1	0
	E	388730	389840	2	1	0
	Z	120	880	2	1	0

The IDW method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table 8-25 and Table 8-26. According to the general dipping trend, different dip angle was adopted. The domain, category, SG and depletion attribute were assigned directly using the solid models.

Table 8-25: Parameters Used in #1 and #5 Mining Zones, #86, #3&#7, #26 Veins, Pengjiagou

Domian	major/semi-major	major/minor	Azimuth	Plunge	Dip
Honghuagou #1 Mining Zone					
kt_1420	2.5	10	170	0	65
kt_1501	2.5	10	170	0	-75
kt_1502	2.5	10	170	-60	85
kt_2100	2.5	10	170	0	60
kt_2340	2.5	10	170	0	75
kt_2350	2.5	10	170	0	75
kt_2801	2.5	10	170	0	70
kt_2802	2.5	10	170	0	70
kt_3000	2.5	10	170	0	-70
kt_3100	2.5	10	170	0	-75
kt_8210	2.5	10	170	0	70
Honghuagou #86 Vein	2.5	10	160	0	70
Lianhuashan #3&#7 Vein	2.5	10	160	0	70
Lianhuashan #26 Vein	2.5	10	175	0	-65
Lianhuashan #5 Mining Zone	2.5	10	180	0	-70
Pengjiagou	2.5	10	160	0	70

Table 8-26: Distance and Samples Used in Huatai project

Pass	Max Radius (m)	Min samples	Max samples
1	40	5	45
2	80	3	45
3	160	1	45

8.7.3 Wulong Project

For the Wulong Mine, a block size of 4 m easting by 4 m northing by 4 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-27. The attributes and descriptions are presented in Table 8-28.

Table 8-27: Block Model Specifications of Wulong Mine

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Wulong	N	4445900	4448400	4	1	0
	E	47200	475600	4	1	0
	Z	-800	200	4	1	0

Table 8-28: Attributes and Descriptions of Wulong Mine

Attribute	Description
domain	V2-3, V4-1, V4-2, V4-4, V4-5, V6, V6-1, V6-2, V7, V9, V9-1, V10, V32, V32-1, V33, V40, V42, V65, V68, V76, V76-1, V80, V80-5, V100, V107, V109, V162, V163, V163-1, V163-3, V164, V500, V500-1
au_gpt_capped	Gold grade, capped
category	1=Mea, 2=Ind, 3=Inf
sg	Specific gravity
deplition	0=unmined, 1=mined

The Inverse Distance Weighting Square ("**IDW2**") method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarised in Table 8-29 and Table 8-30. According to the general dipping trend, different dip angles were adopted. The domain, category, SG and depletion attribute were assigned directly using the solid models.

Table 8-29: Search Parameters Used in Wulong Mine

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
V2-3	10	0	-80	1	5
V4-1	0	0	70	1	5
V4-2, V4-4	10	0	-75	1	5
V4-5	350	0	60	1	5
V6, V6-1, V6-2	300	0	80	1	5
V7	320	0	80	1	5
V9, V9-1	10	0	-80	1	5
V10, V32, V32-1, V33, V40, V42	10	0	-75	1	5
V65	10	0	80	1	5
V68	350	0	60	1	5
V76	300	0	50	2	5
V76-1	300	0	70	2	5
V80	10	0	-80	2	5
V80-5	310	0	-70	1.3	5
V100	10	0	-70	1	5
V107	10	0	75	1.5	5
V109	350	0	75	2	5
V162	320	0	50	1	5
V163	320	0	70	1	5
V163-1	345	0	80	1	5
V163-3, V164	310	0	65	1	5
V500	10	0	-70	1.2	5
V500-1	10	0	50	1	5

Table 8-30: Distance and Samples Used in Wulong Mine

Domain	Pass	Search Distance (m)	Min Samples	Max Samples
V4-1, V4-2, V6-1, V7, V9, V10, V33, V40, V76-1, V100, V109, V164	1	45	3	15
V2-3, V4-4, V4-5, V6, V6-2, V9-1, V32, V32-1, V42, V65, V68, V76, V80, V80-5, V107, V162, V163, V163-1, V163-3, V500	1	45	3	15
	2	90	1	15
V500-1	1	45	3	15

Domain	Pass	Search Distance (m)	Min Samples	Max Samples
	2	90	3	15
	3	180	1	15

For the Ligunzi deposit, a block size of 4 m easting by 4 m northing by 4 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-31. The attributes and descriptions are presented in Table 8-32.

Table 8-31: Block Model Specifications of Ligunzi Deposit

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Ligunzi	N	4445400	4446600	4	1	0
	E	473700	474900	4	1	0
	Z	-600	400	4	1	0

Table 8-32: Attributes and Descriptions of Ligunzi Deposit

Attribute	Description
domain	V10_3, V4_6, V82, V83, V84, V85
au_gpt_capped	Gold grade, capped
category	1=Mea, 2=Ind, 3=Inf
sg	Specific gravity, 0=air
partial_percent	Partial percent
boundary	0=Outside licence, 1=Inside licence

The IDW2 method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table 8-33 and Table 8-34. According to the general dipping trend, different dip angles were adopted. The Domain, Category, SG and Boundary attribute were assigned directly using the solid models.

Table 8-33: Search Parameters Used in Ligunzi Deposit

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
V10-3	0	0	-77	1.6	10
V4-6	2	0	80	1.5	10
V82	350	0	-78	1.75	10
V83	350	0	-78	2.4	10
V84	330	0	52	1	10
V85	11	0	40	1	10

Table 8-34: Distance and Samples Used in Ligunzi Deposit

Domain	Pass	Search distance (m)	Min Samples	Max Samples	Max Samples of per Hole
Others	1	40	6	25	3
	2	80	3	25	3
V85	1	80	6	25	3
	2	160	3	25	3
	3	200	1	25	3

Domain	Pass	Search distance (m)	Min Samples	Max Samples	Max Samples of per Hole
V84	1	40	1	25	3

For the Haojingou-Ligunzi deposit, a block size of 4 m easting by 4 m northing by 4 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-35. The attributes and descriptions are presented in Table 8-36.

Table 8-35: Block Model Specifications of Haojingou-Ligunzi Deposit

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Haojingou-Ligunzi	N	4445600	4449100	4	1	0
	E	41600900	41604500	4	1	0
	Z	-350	502	4	1	0

Table 8-36: Attributes and Descriptions of Haojingou-Ligunzi Deposit

Attribute	Description
domain	v225,v230,v231,v232,v255,v497,v500_2,v547,v549,v550,v551,v551_1,v702,v703,v703_2,v711_2,v711_3
au_gpt_capped	Gold grade, capped
category	1=Mea, 2=Ind, 3=Inf
sg	Specific gravity, 0=air
partial_percent	Partial percent
boundary	0=Outside licence, 1=Inside licence

The IDW2 method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table 8-37 and Table 8-38. According to the general dipping trend, different dip angles were adopted. The domain, category, SG and boundary attribute were assigned directly using the solid models.

Table 8-37: Search Parameters Used in Haojingou-Ligunzi Deposit

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
V225	330	0	70	1	5
V230, V231, V232, V497	20	0	-60	2	5
V255	0	0	80	1	5
V500_2	8	0	75	3	5
V547, V549, V550, V551, V551_1	25	0	50	1	5
V702, V703_2, V711_2	10	0	-70	1	5
V711_3	10	0	70	1	5
V703	35	0	70	1	5

Table 8-38: Distance and Samples Used in Haojingou-Ligunzi Deposit

Domain	Pass	Search distance (m)	Min Samples	Max Samples
V225, V230, V497, V255, V547,V550, V551, V551_1, V702, V703_2, V711_2, V711_3, V703	1	45	3	15
	2	90	1	15
V231,V232, V500_2, V549	1	45	3	15
	2	90	3	15
	3	180	1	25

8.7.4 Hanfeng Project

SRK generated the non-rotational model for Lishan Mine (below-92m asl) and Dongfeng Molybdenum Mine (below 250m asl) by Surpac software for grade and tonnage estimation. Suitable block interval and unit size was adopted to build a block model which was able to contain the Mineralised zones. The block model used the same coordinate system as data collection. The block model summary of Lishan and Dongfeng mines are presented in Table 8-39.

Table 8-39: Block Model Parameters for Lishan and Dongfeng Mines

Mine	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Lishan	N	4756770	4757350	20	10	0
	E	43495640	43496460	20	10	0
	Z	-620	0	2	1	0
Dongfeng	N	4757100	4758800	20	5	0
	E	500000	501100	20	5	0
	Z	-500	760	20	5	0

The IDW method was applied for grade estimation in the Mineralised domains for Lishan and Dongfeng Mine.The three progressively more relaxed search criteria used are presented in Table 8-40. For a small local un-estimated area, interpolation was performed with a larger search radius. Three different search ellipsoids (see Table 8-41 and Table 8-42) were aligned with the different mineralisation orientations for both Lishan and Dongfeng mines.

Table 8-40: Specific Search Parameters for Hanfeng Project

Mine	Pass	Search Distance	Minimum of Samples	Maximum of Samples
Lishan	1	40	3	15
	2	80	3	15
	3	160	3	15
Dongfeng	1	50	3	15
	2	100	3	15
	3	200	3	15

Table 8-41: Ellipsoid Parameters for Lishan Mine (below-92m asl)

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
X1-X5 series, X31-36 series	56	10	70	1	3
X6-10 series	76	60	-70	2	5
X11-X23 series, X37-43 series	93	37	-58	1.2	6

Table 8-42: Ellipsoid Parameters for Dongfeng Mine (below 250m asl)

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
DM series	0	16	67	2	5
D series	17	40	73	2	5
H series	163	-13	-19	2	5

8.7.5 Jintai Project

The block model of Xidengping Mine was created using Surpac, and it was used to estimate tonnage and grade. Appropriate block cell size was selected for the deposits.

A block size of 10 m easting by 10 m northing by 5 m elevation was used. The block model used the same coordinate system as that was used in data collection. A summary of the block model specifications is listed in Table 8-43. The attributes and descriptions are presented in Table 8-44.

Table 8-43: Block Model Specifications of Xidengping Mine

Deposit	Coords	Min	Max	Block Size	Sub Block Size	Rotation
Xidengping	N	2875400	2879000	10	2.5	0
	E	578500	581600	10	2.5	0
	Z	1900	2200	5	1.25	0

Table 8-44: Attributes and Descriptions of Xidengping Mine

Attribute	Description
domain	V1,V2, V2_1, V2_2,V4,V5,V6,V7,V8,V9,V10
au_gpt_capped	Gold grade, capped
classification	1=Mea, 2=Ind, 3=Inf
sg	Specific gravity, 0=air
partial_percent	Partial percent
depletion	1=after depletion, 0=air

The IDW2 method was used for grade estimation via Surpac in the block model. The parameters of the searching ellipsoid were thus manually optimized, and the parameters are summarized in Table 8-45 and Table 8-46. According to the general dipping trend, different dip angles were adopted. The domain, classification, SG and depletion attribute were assigned directly using the solid models.

Table 8-45: Search Parameters Used in Xidengping Mine

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
V1	335	0	8	1	10
V2	335	0	8	1.6	10
V2_1	335	0	4	1.6	10
V2_2	335	0	10	1	10

Domian	Bearing	Plunge	Dip	major/semi-major	major/minor
V4	335	0	6	1	10
V5	335	0	0	1.3	10
V6	335	0	0	1.4	10
V7	335	0	0	1.1	10
V8	335	0	50	3	7
V9	300	0	3	1	10
V10	335	0	0	1	10

Table 8-46: Distance and Samples Used in Xidengping Mine

Domain	Pass	Search distance (m)	Min Samples	Max Samples	Max Samples of per Hole
V1,V2, V2_1, V2_2	1	80	3	15	2
	2	160	3	15	2
	3	160	1	15	2
V4, V5, V7	1	40	3	15	2
	2	80	3	15	2
	3	160	1	10	2
V6	1	80	1	15	2
V8	1	40	3	15	2
	2	40	1	15	2
	3	80	1	15	2
V9	1	80	3	15	2
	2	80	1	15	2
	3	160	1	15	2
V10	1	80	3	15	2
	2	160	3	15	2
	3	160	1	15	2

8.8 Model Validation and Sensitivity

Model validation is a common approach for determining whether grade estimation has performed as expected. SRK has undertaken a through validation of the resultant interpolated model, including visual inspection, and swath plot validation as well.

Visual inspection provides a validation of the interpolated block model on a local block scale, using visual assessments of sample grades versus estimated block grades.

8.8.1 Jilong Project

The details of swath plot validation for each domain can be seen in Figure 8-19 to Figure 8-22**.** There is no swath plot for 4# block because there are too few samples for a valid swath plot. These data indicate that the block models constructed by SRK is reliable.

Figure 8-19: Au Swath Plot of 1#2#3#&depth Block of Zhuanshanzi Mine

Figure 8-20: Au Swath Plot of 5# block of Zhuanshanzi Mine

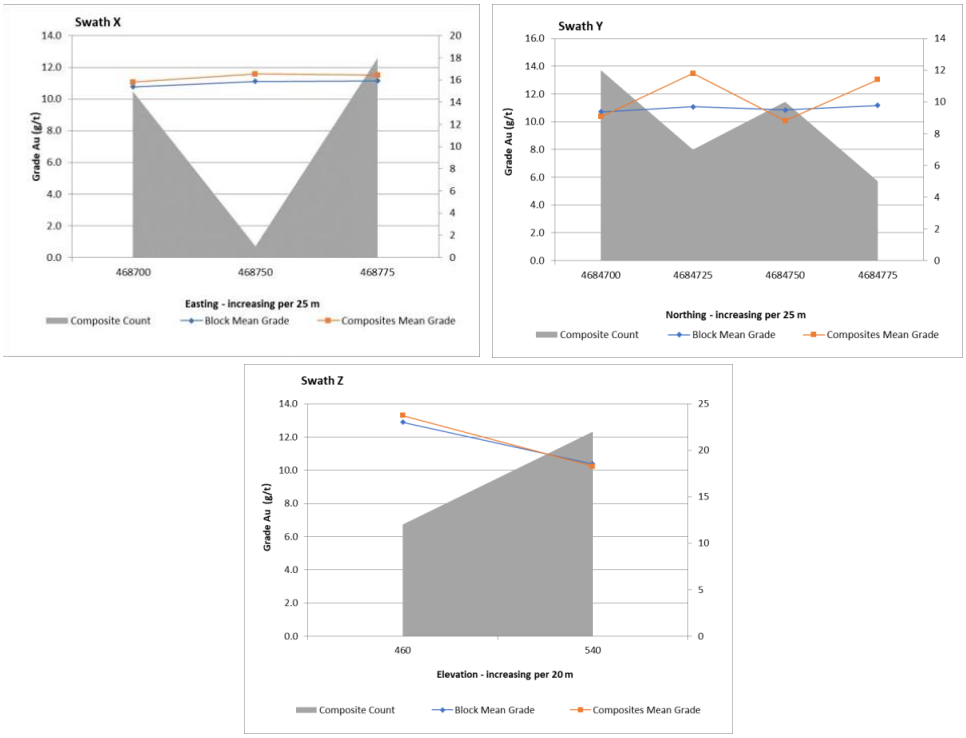


Figure 8-21: Au Swath Plot of 6# block of Zhuanshanzi Mine

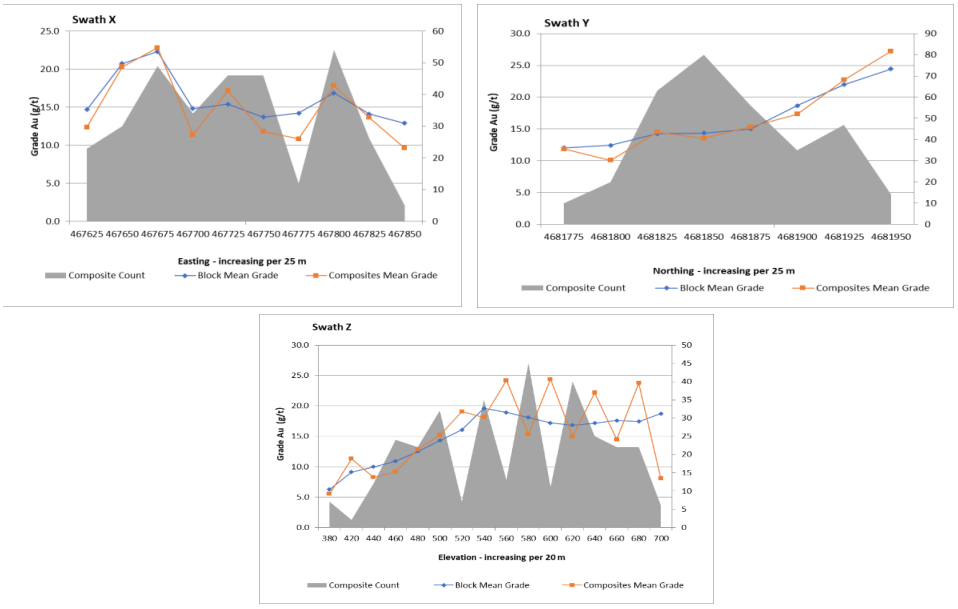
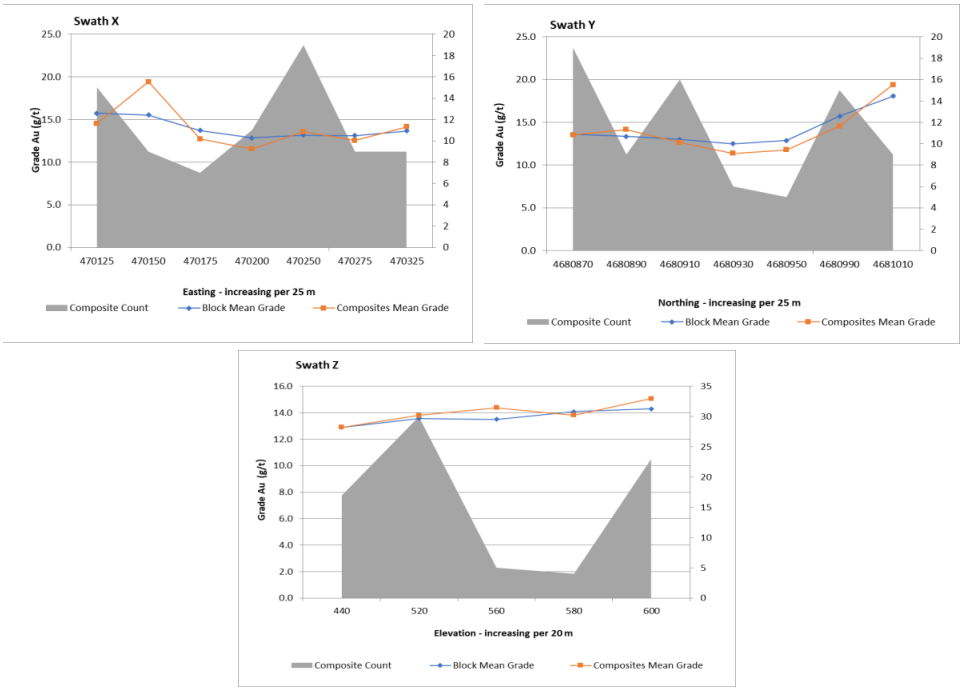


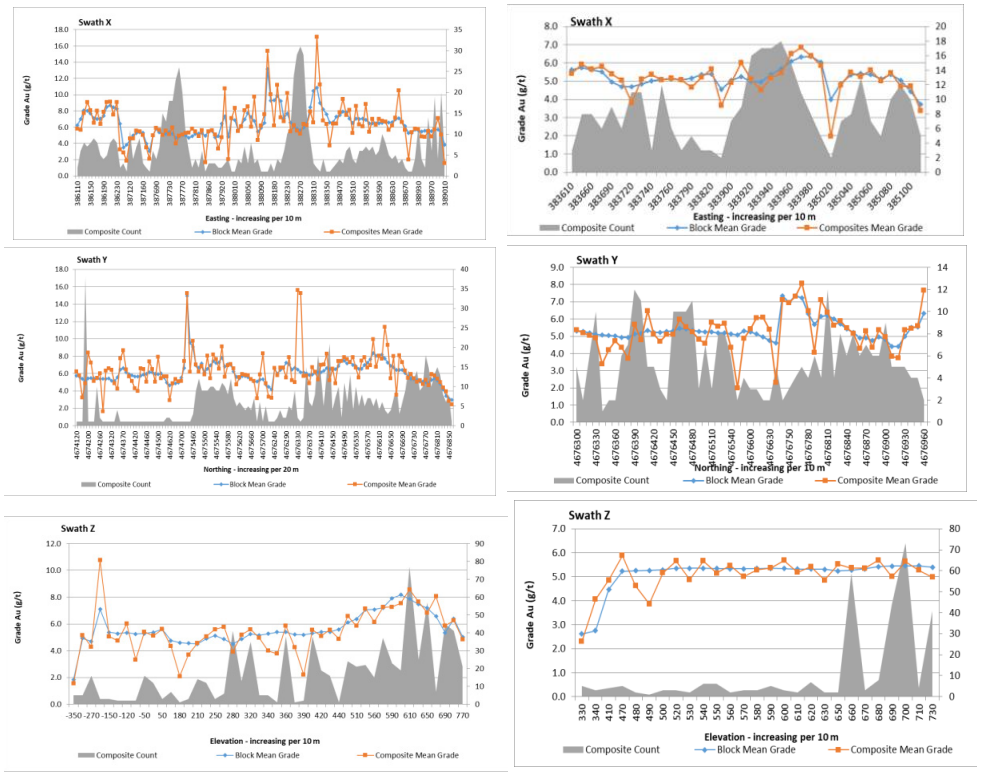
Figure 8-22: Au Swath Plot of 7# block of Zhuanshanzi Mine



8.8.2 Huatai Project

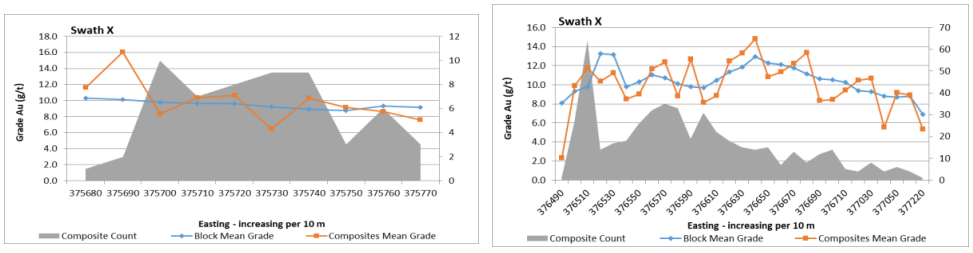
For the #1 Mining Zone and #86 Vein, the details of swath plots validation can be seen in Figure 8-23, for the #26 Vein and #3&#7 Vein, the details of swath plots validation can be seen in Figure 8-24 and for the #5 Mining Zone and Pengjiagou Mine, the details of swath plots validation can be seen in Figure 8-25. These data indicate that the block models constructed by SRK is reliable.

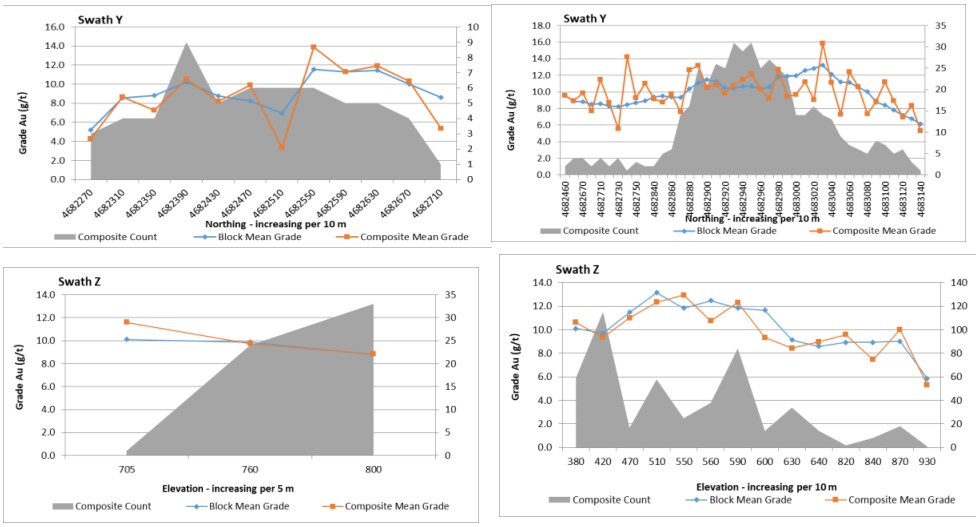
Figure 8-23: Au Swath Plots of #1 Mining Zone and #86 Vein



Note: #1 Mining Zone on the left and #86 Vein on the right.

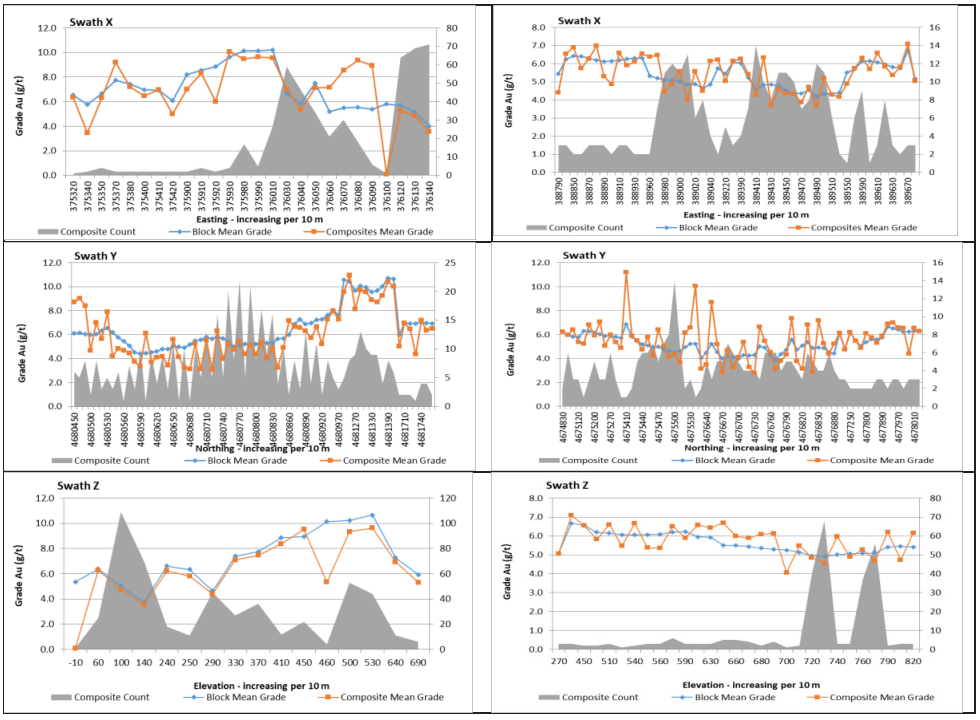
Figure 8-24: Au Swath Plots of #26 Vein and #3&#7 Vein





Note: #26 Vein on the left and #3&#7 Vein on the right.

Figure 8-25: Au Swath Plots of #5 Mining Zone and Pengjiagou Mine



Note: #5 Mining Zone on the left and Pengjiagou Mine on the right.

8.8.3 Wulong Project

For the Wulong Mine, the details of swath plot validation for each domain can be seen in figures from Figure 8-26 and for the Ligunzi and Haojingou-Ligunzi deposits, the details of swath plots validation can be seen in Figure 8-27. These data indicate that the block models constructed by SRK is reliable.

Figure 8-26: Au Swtch Plot of Wulong Mine

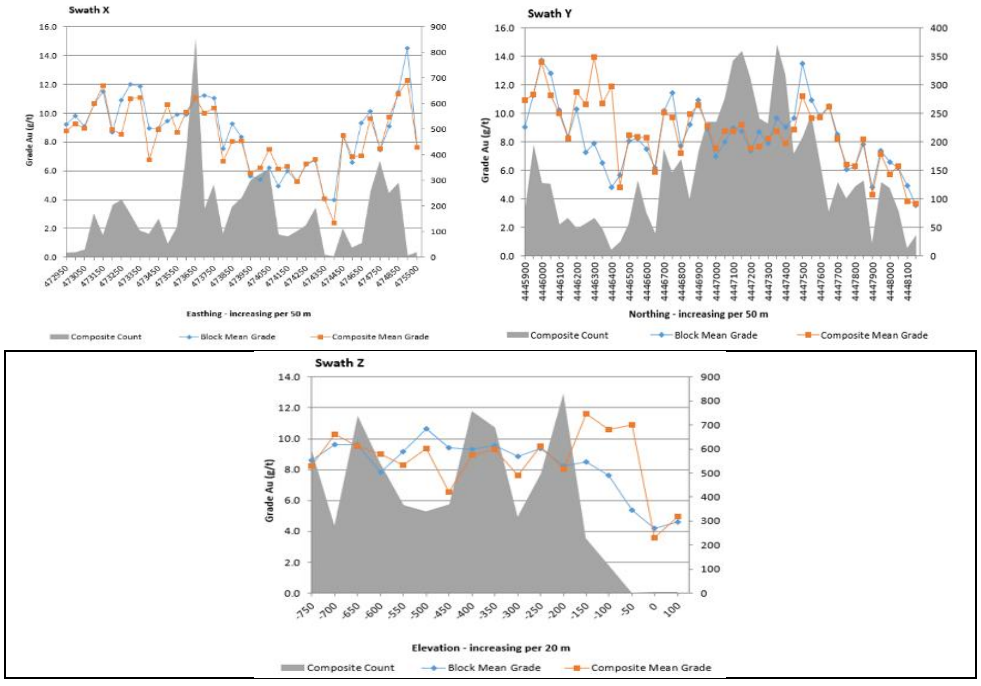
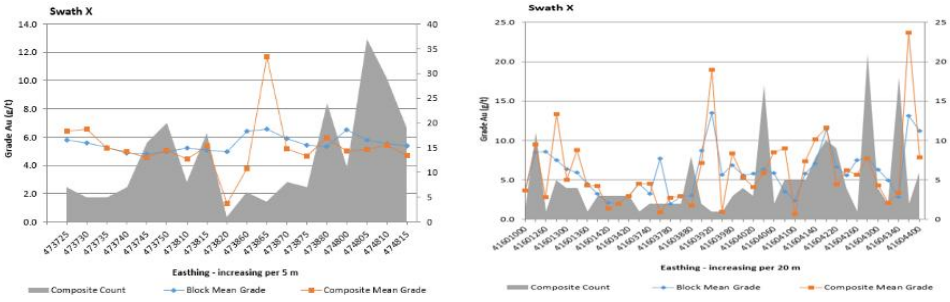
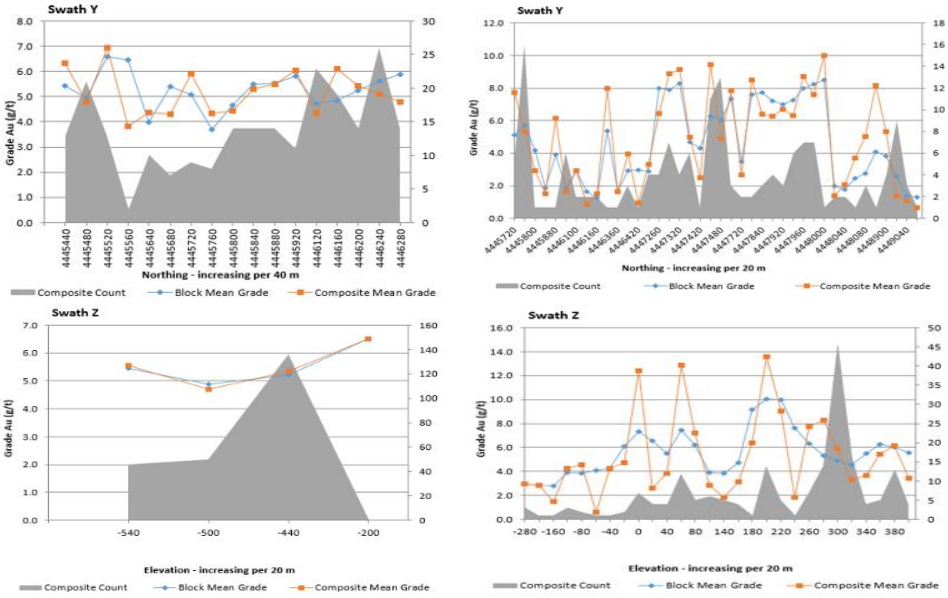


Figure 8-27: Au Swtch Plots of Ligunzi and Haojingou-Ligunzi Deposits



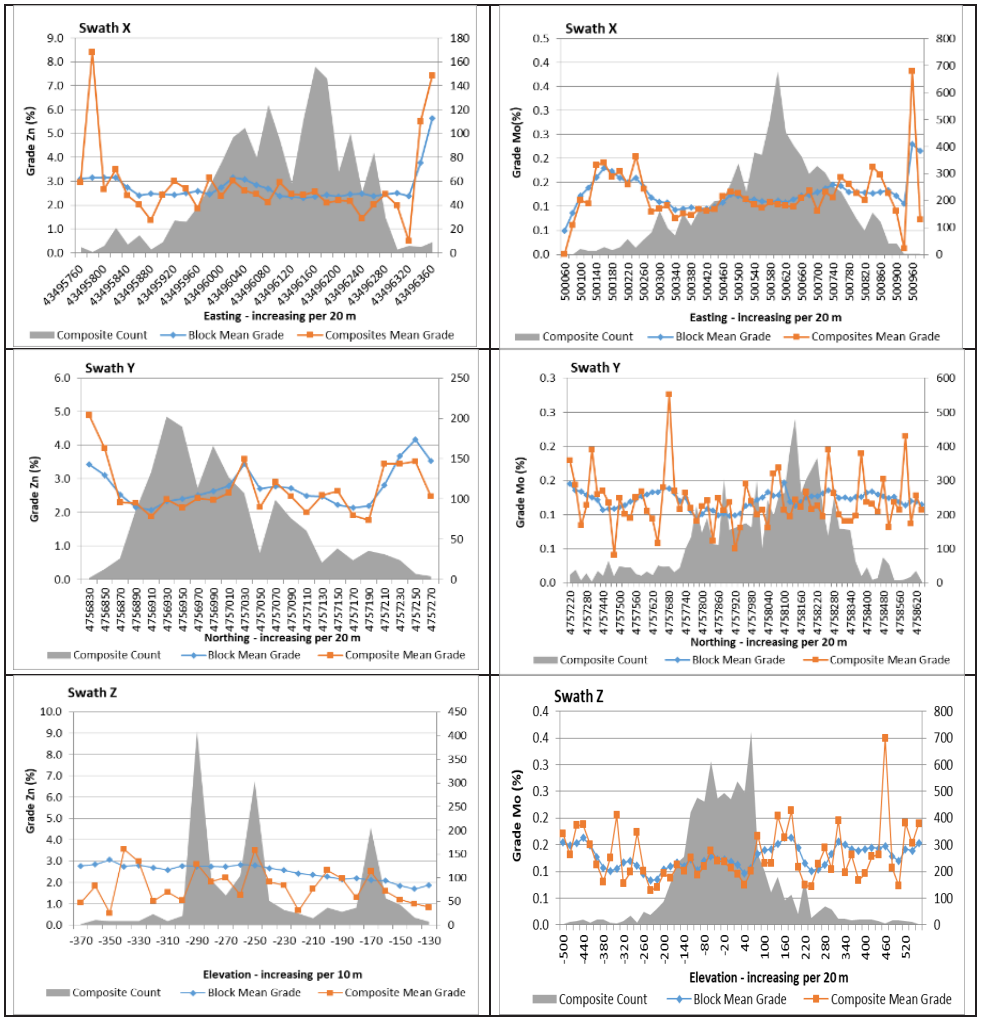


Note: Ligunzi deposit on the left and Haojingou-Ligunzi deposit on the right.

8.8.4 Hanfeng Project

Swath plots of Zn grade were created in three orthogonal directions for Lishan and Mo grade for Dongfeng Mine (easting, northing, and vertical, as X, Y, and Z) in particular slice thicknesses in each direction to validate the resultant block models. As shown in Figure 8-28, the block models and composites match reasonably well in all orthogonal directions. This comparison shows close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location.

Figure 8-28: Zn Swath Plot of Lishan Mine and Mo Swath Plot for Dongfeng Mine

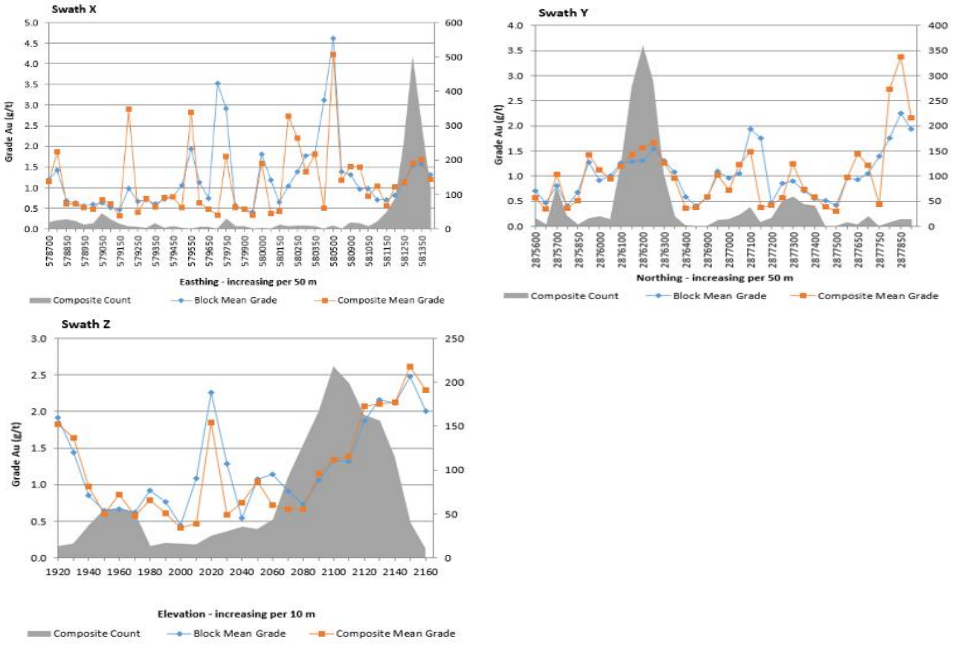


Note: Lishan Mine on the left and Dongfeng Mine on the right.

8.8.5 Jintai Project

The details of swath plot validation of the Xindengping Mine can be seen in Figure 8-29. The data indicate that the block models constructed by SRK is reliable.

Figure 8-29: Au Swtch Plot of Xidengping Mine



8.9 Mineral Resource Classification

Block model quantities and grade estimates for the Jilong, Huatai, Wulong, Hanfeng and Jintai projects were classified according to the JORC Code by Mr Mingyan Wang, Mr Huaixiang (Hubert) Li, Ms Yanfang (Bonnie) Zhao and Mr Shaobo Dai, under the supervision of Yiefei Jia, PhD, a Principal Consultant and a Fellow of the AusIMM (No. 230607) and a chartered professional in geology (CP Geo). They are appropriate Competent Persons for the purpose of JORC Code.

Mineral Resource classification is typically a subjective concept. Industry best practices suggest that Mineral Resource classification should consider both the confidence in the geological continuity of the mineralised structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar Mineral Resource classification.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support Mineral Resource evaluation.

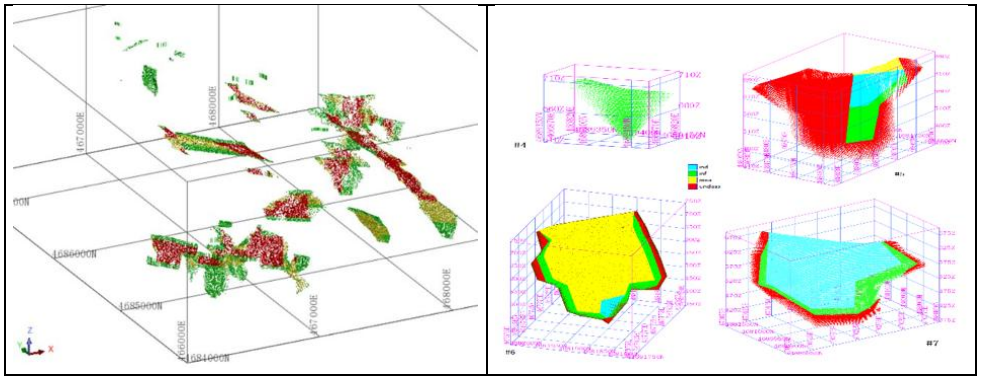
Generally, for mineralization exhibiting good geological continuity investigated at an adequate spacing with reliable sampling information accurately located, SRK considers that blocks estimated during the first estimation run (pass) can be classified in the Measured Mineral Resource category,

the second estimation run can be classified in the Indicated Mineral Resource category within the meaning of the JORC Code.

8.9.1 Jilong Project

For all the blocks of the Zhuanshanzi Mine, the Mineral Resource with a mean sample distance of 40m are classified as Measured Mineral Resource; the Mineral Resource with a mean sample distance of 80m are classified as Indicated Mineral Resource; and the Mineral Resource with a mean sample distance of 160m are classified as Inferred Mineral Resource. Figure 8-30 shows the Mineral Resource classification of the Zhuanshanzi Mine.

Figure 8-30: Mineral Resource Category Distribution of Zhuanshanzi Mine

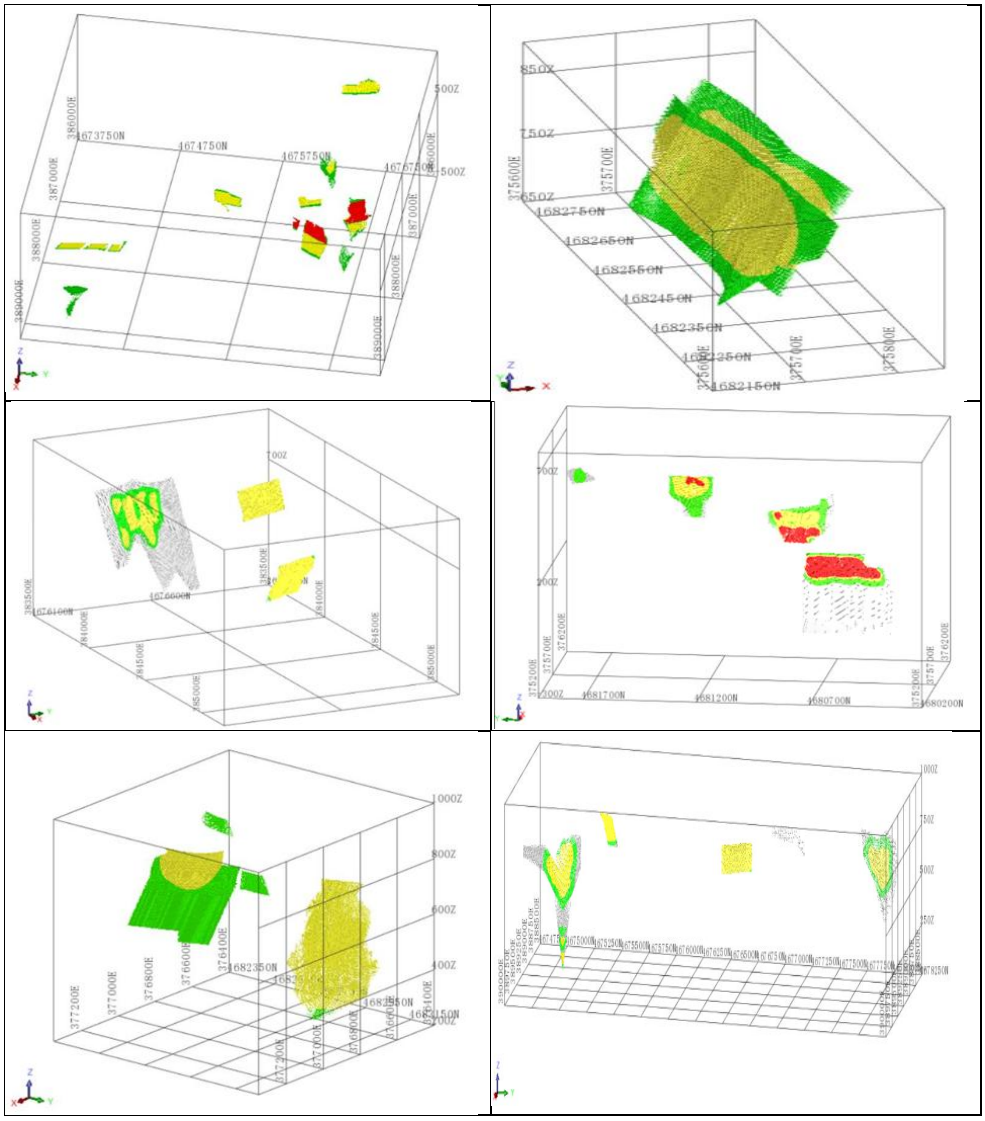


Note: 1#2#3#&depth Block (dark red: Measured, blown: Indicated and green: Inferred) on the left and 4#5#6#7# Block on the right.

8.9.2 Huatai Project

For the Huatai project, the Mineral Resource with a mean sample distance of 40m are classified as Measured Mineral Resource; the Mineral Resource with a mean sample distance of 80m are classified as Indicated Mineral Resource, and the blocks excluded by Measured and Indicated categories and within the mineralised domains should be appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability. Figure 8-31 shows the Mineral Resource classification of the Huatai Project.

Figure 8-31: Mineral Resource Category Distribution of Huatai Project



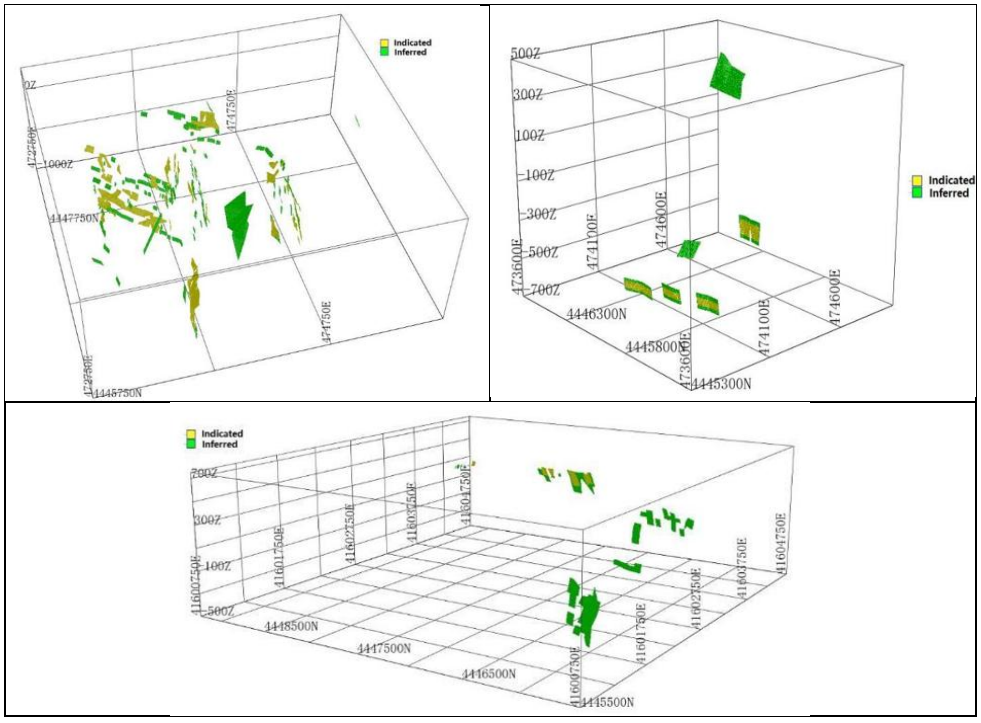
Note: #1 Mining Zone of Honghuagou Mine on the top left; #86 Vein of Honghuagou Mine on the middle left; #3&#7 Vein of Lianhuashan Mine on the bottom left; #26 Vein of Lianhuashan Mine on the top right; #5 Mining Zone of Lianhuashan Mine on the middle right; and Pengjiagou Mine on the bottom right (dark red: Measured, blown: Indicated and green: Inferred) on the left and 4#5#6#7# Block on the right.

8.9.3 Wulong Project

SRK considers that blocks estimated with an average drillhole spacing of less than 40 m can be classified in the Indicated Mineral Resource, and the blocks excluded by Indicated category and within the mineralised domains should be appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and

economic parameters or to enable an evaluation of economic viability. Figure 8-32Figure 8-31 shows the Mineral Resource classification of the Wulong Project.

Figure 8-32: Mineral Resource Category Distribution of Wulong Project



Note: Wulong Mine on the top left, Ligunzi Deposit on the top right and Haojingou-Ligunzi Deposit on the bottom.

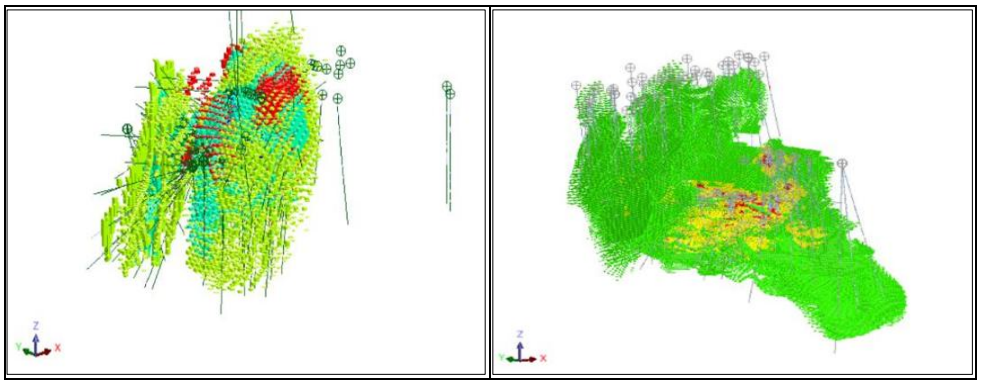
8.9.4 Hanfeng Project

For the Lishan Mine, the resources with a mean sample distance of 40m are classified as Measured Mineral Resource; Resource with a mean sample distance of 80m are classified as Indicated resources; the resources with a mean sample distance of 160m are classified as Inferred Mineral Resource.

For the Dongfeng Mine, the resource with a mean sample distance of 50m are classified as Measured Mineral Resource; the resource with a mean sample distance of 100m are classified as Indicated Mineral Resource; and the resources with a mean sample distance of 200m are classified as Inferred Mineral Resource.

For the spotty dog phenomenon caused by some samples with the sampling interval out of set range, SRK adjusted it by considering the geological continuity, data quality and geologist's confidence in the models of both mines (Figure 8-33).

Figure 8-33: Mineral Resource Category Distributions of Lishan and Dongfeng Mines



Note:

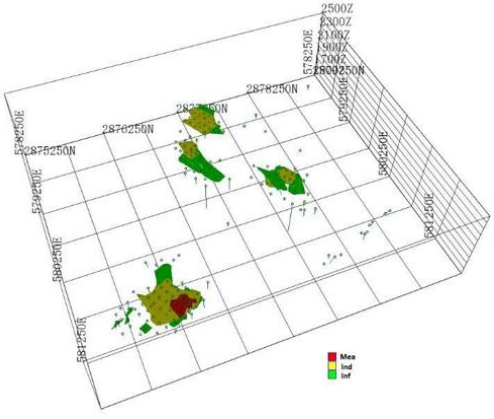
Lishan Mine (below -92m asl) on the left and Dongfeng Mine (below 250m asl) on the right.

Mineral Resource category: Measured in red, Indicated in blue and Inferred in green.

8.9.5 Jintai Project

SRK considers that the blocks estimated with an average drillhole spacing of less than 40 m for both strike and dip directions can be classified in the Measured Mineral Resource category, the blocks estimated with an average drillhole spacing of less than 80 m for both strike and dip directions can be classified in the Indicated Mineral Resource category, and the blocks excluded by Measured and Indicated categories and within the mineralised domains should be appropriately classified in the Inferred Mineral Resource category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability. Figure 8-34 shows the Mineral Resource classification of the Jintai Project

Figure 8-34: Mineral Resource Category Distribution of Xidengping Mine



8.10 Mineral Resource Statement

The JORC Code defines a Mineral Resource as:

"a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories."

The RPEEE requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SRK considers that major portions of the Jilong Project, Huatai Project, Wulong Project and Hanfeng Project are amenable for underground mining and that major portions of the Jintai Project are amenable for open it extraction.

The conceptual parameters used in the Chifeng Gold Project are summarised in Table 8-47. The reader is cautioned that the results of the estimate are used solely for the purpose of testing the RPEEE by underground mining and do not represent an attempt to estimate Ore reserves. The results are to be used as a guide for assisting in the preparation of a Mineral Resource Statement and for selecting an appropriate Mineral Resource-reporting cut-off grade.

Table 8-47: Conceptual Assumptions Considered for Chifeng Gold Project

Parameter	Unit	Jilong	Huatai	Wulong	Hanfeng	Jintai
Gold Metal Price	US$ per ounce	2,150	2,150	2,150		2,150
Zinc Metal Price	US$ per ton				2,550	
Molybdenum	US$ per ton				29,500	
Mining Cost	US$ per ton ore	104.51	125.78	96.41	9.07	1.52
Processing Cost	US$ per ton ore	19.31	25.80	76.33	9.31	6.70
G&A Cost	US$ per ton ore	30.62	30.62	30.62	3.49	4.32
Mining Dilution	percent	20	20	20	32	5
Processing Recovery	percent	97% Au	93% Au	91% Au	88% Zn; 70% Mo	78% Au
Gold cut-off Grade	Grams per tonne	1.5g/t Au	1.5g/t Au	1.5g/t Au	0.5% Zn; 0.03% Mo	0.17g/t Au

SRK considers that the blocks not below a cut-off grade of 1.5g/t Au show "reasonable prospects for economic extraction" from an underground mine for the Jilong, Huatai and Wulong projects can be reported as a Mineral Resource, that the blocks not below a cut-off grade of 0.5% Zn for the Lishan Mine and 0.03% Mo for the Dongfeng Mine show "reasonable prospects for economic extraction" from an underground mine for the Hanfeng Project can be reported as a Mineral Resource, and that the blocks not below a cut-off grade of 0.17g/t Au show "reasonable prospects for economic extraction" from an open pit mine for the Jintai Project can be reported as a Mineral Resource.

8.10.1 Jilong Project

As of 31 March 2024, the Jilong Project is estimated to contain 510 kilotonnes ("**kt**") of Measured Mineral Resources with an average grade of 11.92g/t Au, 440 kt of Indicated Mineral Resources with

an average grade of 9.22g/t Au, and 530 kt of Inferred Mineral Resources with an average grade of 9.23g/t Au (see Table 8-48).

Table 8-48: Mineral Resource Statement of Jilong Project, as of 31 March 2024

Mineralised Zone/Block	Category	Tonnage kt	Grade (g/t Au)	Contained Au (t)	Contained Au (koz)
Zhuanshanzi 1# 2#3#&depth	MES	320	9.00	2.90	93
	IND	300	7.33	2.20	71
	MES+IND	**630**	**8.19**	**5.10**	**165**
	INF	450	8.58	3.90	125
Zhuanshanzi 4#5#6#7#	MES	180	17.04	3.10	101
	IND	140	13.27	1.90	61
	MES+IND	**330**	**15.40**	**5.00**	**161**
	INF	80	13.16	1.00	32
Total	**MES**	510	11.92	6.00	194
	IND	440	9.22	4.10	132
	MES+IND	**950**	**10.66**	**10.10**	**326**
	INF	**530**	**9.23**	4.90	157

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Mingyan wang and Dr Yiefei Jia who are both full time employees of SRK Consulting China. Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). Both have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Dr Jia consents to the reporting of this information in the form and context in which it appears.

[3] The cut-off grad is 1.5g/t.

8.10.2 Huatai Project

As of 31 March 2024, the Huatai Project is estimated to contain 385 kt of Measured Mineral Resources with an average grade of 5.88g/t Au, 2,146 kt of Indicated Mineral Resources with an average grade of 7.27g/t Au, and 1,249 kt of Inferred Mineral Resources with an average grade of 6.90g/t Au (see Table 8-49).

Table 8-49: Mineral Resource Statement of Huatai Project, as of 31 March 2024

Mineralized Zone/Block	Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Honghuagou #1 Mining Zone	Measured	251	6.21	1.56	50
	Indicated	759	6.48	4.92	158
	Measured + Indicated	**1010**	**6.41**	**6.47**	**208**
	Inferred	419	5.87	2.46	79
Honghuagou #86 Vein	Measured				
	Indicated	315	5.3	**1.67**	54
	Measured + Indicated	**315**	**5.3**	0.55	**54**
	Inferred	103	5.34	1.67	18
Honghuagou Pengjiagou mine	Measured				
	Indicated	338	5.36	1.81	58

	Measured + Indicated	**338**	**5.36**	**1.81**	**58**
	Inferred	148	5.88	0.87	28
Lianhuashan #5 Mining Zone	Measured	134	5.28	0.71	23
	Indicated	109	8	0.87	28
	Measured + Indicated	**243**	**6.5**	**1.58**	**51**
	Inferred	116	7.52	0.87	28
Lianhuashan #26 Vein	Measured				
	Indicated	217	9.54	2.07	67
	Measured + Indicated	**217**	**9.54**	**2.07**	**67**
	Inferred	135	9.34	1.26	41
Lianhuashan #3-7 Vein	Measured				
	Indicated	408	10.46	4.27	137
	Measured + Indicated	**408**	**10.46**	**4.27**	**137**
	Inferred	328	8.61	2.82	91
Total	Measured	**385**	**5.88**	**2.26**	**73**
	Indicated	**2146**	**7.27**	**15.60**	**502**
	Measured + Indicated	**2531**	**7.06**	**17.87**	**575**
	Inferred	**1249**	**6.90**	**8.62**	**284**

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang (Hubert) Li, Mr Mingyan wang and Dr Yiefei Jia who are full time employees of SRK Consulting China. Mr Li is a Member of AIG and Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). They have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Li, Mr Wang and Dr Jia consents to the reporting of this information in the form and context in which it appears.

[3] The cut-off grad is 1.5g/t Au.

8.10.3 Wulong Project

As of 31 March 2024, the Wulong Project is estimated to contain 1,309 kt of Indicated Mineral Resources with an average grade of 8.22g/t Au, and 1,754 kt of Inferred Mineral Resources with an average grade of 7.21g/t Au (see Table 8-50).

Table 8-50: Mineral Resource Statement, Wulong Project, as of 31 March 2024

Mineralized Zone/Block	Category	Tonnage (Kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Wulong	Measured				
	Indicated	1,042	8.92	9.30	299
	Measured + Indicated	**1,042**	**8.92**	**9.30**	**299**
	Inferred	1,376	7.41	10.27	330
Ligunzi	Measured				
	Indicated	126	5.16	0.65	21

	Measured + Indicated	**126**	**5.16**	**0.65**	**21**
	Inferred	99	5.36	0.53	17
Haojingou-Ligunzi	Measured				
	Indicated	138	5.74	0.80	26
	Measured + Indicated	**138**	**5.74**	**0.80**	**26**
	Inferred	268	6.73	1.85	59
Total	Measured				
	Indicated	**1,309**	**8.22**	**10.75**	**346**
	Measured + Indicated	**1,309**	**8.22**	**10.75**	**346**
	Inferred	**1,754**	**7.21**	**12.65**	**407**

Notes:

[1] All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang (Hubert) Li and Dr Yiefei Jia who are full time employees of SRK Consulting China. Mr Li is a Member of AIG and Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). Both have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Li and Dr Jia consents to the reporting of this information in the form and context in which it appears.

[3] The cut-off grad is 1.5g/t Au.

8.10.4 Hanfeng Project

Within the current mining License area and permitted elevation range, as of 31 March 2024, the Lishan Mine (below-92m asl) contains 750 kt of Measured Mineral Resources at an average grade of 2.36% Zn, 0.01% Cu and 0.12% Pb; 8,580 kt of Indicated Mineral Resources at an average grade of 2.66% Zn, 0.07% Cu and 0.12% Pb, and 10,620 kt of Inferred Mineral Resources at an average grade of 2.90% Zn, 0.09% Cu, 0.13%Pb. Details of estimated Mineral Resources are shown in Table 8-51.

Table 8-51: Mineral Resource Statement of Lishan Mine, as of 31 March 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Zn Grade (%)	Zn Metal Contained (Kt)	Cu Grade (%)	Cu Metal Contained (Kt)	Pb Grade (%)	Pb Metal Contained (Kt)
Lishan	MES	750	2.36	18	0.01	0	0.12	1
	IND	8,580	2.66	229	0.07	6	0.12	10
	MES+IND	**9,330**	**2.64**	**246**	**0.06**	**6**	**0.12**	**11**
	INF	10,620	2.90	308	0.09	10	0.13	14

Notes:

[1] Differences may occur in totals due to rounding.

[2] All figures are rounded to reflect the relative accuracy of the estimate.

[3] The information in this report which relates to Mineral Resource is based on information compiled by Ms Yanfang (Bonnie) Zhao and Dr Yiefei Jia who are both full time employees of SRK Consulting China, Ms Zhao is a Member of AusIMM, and Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). Dr Yiefei Jia have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting

of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Zhao and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[4] The cut-off grade is 0.5% Zn.

As of 31 March 2024, the Dongfeng Mine (below 250m asl) contains 1,830 kt of Measured Mineral Resources at an average grade of 0.11% Mo, 26,490 kt of Indicated Mineral Resources at an average grade of 0.12% Mo, and 37,050 kt of Inferred Mineral Resources at an average grade of 0.12% Mo. Details of estimated resources are shown in Table 8-52.

Table 8-52: Mineral Resource Statement of Dongfeng Mine, as of 31 March 2024

Mineralised Zone/Block	Category	Tonnage (kt)	Mo Grade (%)	Mo Metal Contained (kt)
Dongfeng	MES	1,820	0.11	2
	IND	26,490	0.12	32
	MES+IND	**28,310**	**0.12**	**34**
	INF	37,050	0.12	45

Notes:

[1] Differences may occur in totals due to rounding.

[2] All figures are rounded to reflect the relative accuracy of the estimate.

[3] The information in this report which relates to Mineral Resource is based on information compiled by Ms Yanfang (Bonnie) Zhao and Dr Yiefei Jia who are both full time employees of SRK Consulting China, Ms Zhao is a Member of AusIMM, and Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). Dr Yiefei Jia have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Ms Zhao and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[4] The cut-off grade is 0.03% Mo

8.10.5 Jintai Project

As of 31 March 2024, the Jintai Project contains 3,363 kt of Measured Mineral Resources at an average grade of 1.68g/t Au, 4,800 kt of Indicated Mineral Resources at an average grade of 1.01g/t Au, and 2,710 kt of Inferred Mineral Resources at an average grade of 1.29g/t Au. Details of estimated resources are shown in Table 8-53.

Table 8-53: Mineral Resource Statement, Jintai Project, as of 31 March 2024

Domain	Category	Quantity (kt)	Au Grade (g/t)	Contained Au Metal (t)	Contained Au Metal (koz)
V1	MES				
	IND	1,932	0.74	1.43	46
	MES+IND	**1,932**	**0.74**	1.43	46
	INF	176	0.48	0.09	3
V2	MES				
	IND	266	0.96	0.26	8
	MES+IND	**266**	**0.96**	0.26	8
	INF	605	2.17	1.31	42
V2_1	MES				
	IND				
	MES+IND				
	INF	36	0.34	0.01	0.4
V2_2	MES				
	IND				
	MES+IND				

Domain	Category	Quantity (kt)	Au Grade (g/t)	Contained Au Metal (t)	Contained Au Metal (koz)
	INF	125	0.44	0.05	2
V4	MES	3,363	1.68	5.64	181
	IND	2,270	1.19	2.71	87
	MES+IND	**5,633**	**1.48**	8.34	268
	INF	592	1.22	0.72	23
V5	MES				
	IND				
	MES+IND				
	INF	211	0.68	0.14	5
V6	MES				
	IND				
	MES+IND				
	INF	7	0.86	0.01	0.2
V7	MES				
	IND				
	MES+IND				
	INF	336	0.46	0.15	5
V8	MES				
	IND				
	MES+IND				
	INF	173	0.87	0.15	5
V9	MES				
	IND				
	MES+IND				
	INF	255	1.39	0.36	11
V10	MES				
	IND	331	1.34	0.44	14
	MES+IND	**331**	**1.34**	0.44	14
	INF	193	2.60	0.50	16
Total	**MES**	**3,363**	**1.68**	5.64	181
	IND	**4,800**	**1.01**	4.83	155
	MES+IND	**8,160**	**1.28**	10.47	337
	INF	**2,710**	**1.29**	3.50	112

Notes:

[5] Differences may occur in totals due to rounding.

[6] All figures are rounded to reflect the relative accuracy of the estimate.

[7] The information in this report which relates to Mineral Resource is based on information compiled by Mr Shaobo Dai, Mr Huaixiang (Hubert) Li and Dr Yiefei Jia who are full time employees of SRK Consulting China, Mr Li is a Member of AIG, and Dr Jia is a Fellow of AusIMM and a Chartered Professional in Geology (CP Geo). Dr Yiefei Jia have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration results, Mineral Resources and Ore Reserves", the JORC Code. Mr Li and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[8] The cut-off grad is 0.17g/t Au.

8.11 Grade Sensitivity Analysis

8.11.1 Jilong Project

The Mineral Resources of the Jilong Project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates of the 1#2#3#&depth Block of the Zhuanshanzi Mine are presented in Table 8-54 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block

model estimates to the selection of cut-off grade. Figure 8-35 present this sensitivity as grade tonnage curves of the 1#2#3#&depth Block of the Zhuanshanzi Mine.

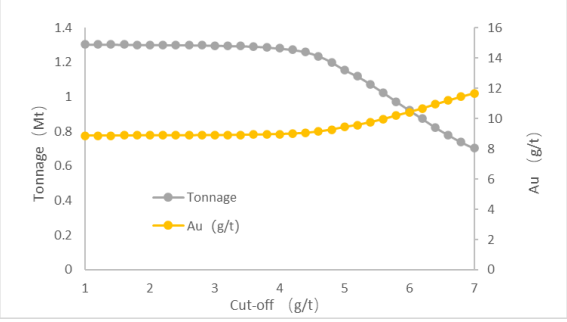
Table 8-54: Global Block Model Quantities and Grade Estimates[1], 1#2#3#&depth Block of Zhuanshanzi Mine

Cut-off Grade Au (g/t)	Quantity (Mt)	Au Grade (g/t)
1.40	1.30	8.87
1.60	1.30	8.88
1.80	1.30	8.88
2.00	1.30	8.89
2.20	1.30	8.89
2.40	1.30	8.89
2.60	1.30	8.89
2.80	1.30	8.90
3.00	1.30	8.90
3.20	1.30	8.91
3.40	1.29	8.92
3.60	1.29	8.93
3.80	1.29	8.95
4.00	1.28	8.97
4.20	1.27	9.00
4.40	1.26	9.05
4.60	1.24	9.14
4.80	1.20	9.27
5.00	1.16	9.44
5.20	1.12	9.58
5.40	1.07	9.76
5.60	1.02	9.97

Notes:

[1] The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

Figure 8-35: Grade Tonnage Curves of 1#2#3#&depth Block of Zhuanshanzi Mine



8.11.2 Huatai Project

The Mineral Resources of the Huatai Project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates of the #1 Mining Zone, #86 Vein, #3&#7 Vein, #26 Vein, #5 Mining Zone and Pengjiagou Mine are presented in Table 8-54 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 8-36 present this sensitivity as grade tonnage curves of the #1 Mining Zone, #86 Vein, #3&#7 Vein, #26 Vein, #5 Mining Zone and Pengjiagou Mine.

Table 8-55: Global Block Model Quantities and Grade Estimates[1], Huatai Project

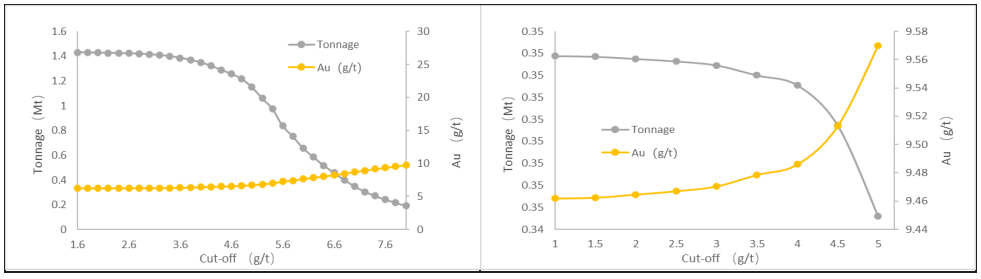
Mine	Cut-off Grade Au (g/t)	Quantity (Mt)	Au Grade (g/t)
Honghuagou #1 Mining Zone	1.6	1.43	6.25
	1.8	1.43	6.25
	2.0	1.43	6.26
	2.2	1.43	6.26
	2.4	1.42	6.27
	2.6	1.42	6.27
	2.8	1.42	6.28
	3.0	1.41	6.29
	3.2	1.41	6.30
	3.4	1.40	6.32
	3.6	1.39	6.35
	3.8	1.37	6.38
	4.0	1.35	6.42
	4.2	1.32	6.47
	4.4	1.29	6.52
	4.6	1.26	6.58
	4.8	1.22	6.64
	5.0	1.15	6.74
	5.2	1.06	6.88
Honghuagou #86 Vein	1.0	0.67	5.18
	1.5	0.67	5.18
	2.0	0.67	5.19
	2.5	0.66	5.21
	3.0	0.65	5.27
	3.5	0.64	5.30
	4.0	0.63	5.32
	4.5	0.60	5.38
	5.0	0.52	5.46
Lianhuashan #3&#7 Vein	1.0	0.59	6.29
	1.5	0.59	6.31
	2.0	0.58	6.34
	2.5	0.58	6.39
	3.0	0.57	6.43
	3.5	0.55	6.55
	4.0	0.51	6.78
	4.5	0.48	6.95
	5.0	0.42	7.25
Lianhuashan #26 Vein	1.0	0.35	9.46

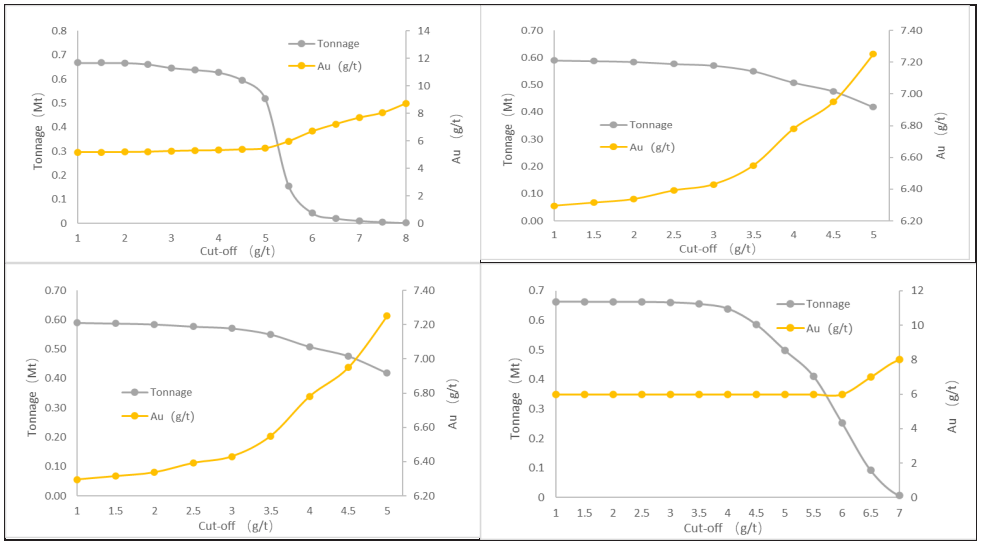
Mine	Cut-off Grade Au (g/t)	Quantity (Mt)	Au Grade (g/t)
	1.5	0.35	9.46
	2.0	0.35	9.46
	2.5	0.35	9.47
	3.0	0.35	9.47
	3.5	0.35	9.48
	4.0	0.35	9.49
	4.5	0.35	9.51
	5.0	0.34	9.57
Lianhuashan #5 Mining Zone	1.0	0.59	6.29
	1.5	0.59	6.31
	2.0	0.58	6.34
	2.5	0.58	6.39
	3.0	0.57	6.43
	3.5	0.55	6.55
	4.0	0.51	6.78
	4.5	0.48	6.95
	5.0	0.42	7.25
Pengjiagou Mine	1.6	1.43	6.25
	1.8	1.43	6.25
	2.0	1.43	6.26
	2.2	1.43	6.26
	2.4	1.42	6.27
	2.6	1.42	6.27
	2.8	1.42	6.28
	3.0	1.41	6.29
	3.2	1.41	6.30
	3.4	1.40	6.32
	3.6	1.39	6.35
	3.8	1.37	6.38
	4.0	1.35	6.42
	4.2	1.32	6.47
	4.4	1.29	6.52
	4.6	1.26	6.58
	4.8	1.22	6.64
	5.0	1.15	6.74

Notes:

[1] The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

Figure 8-36: Grade Tonnage Curves of Huatai Project





Note:

Honghuagou #1 Mining Zone on the top left, Honghuagou #86 Vein on the middle left and Lianhuashan #3&#7 Vein on the bottom left Lianhuashan #26 Vein on the top right, Lianhuashan #5 Mining Zone on the middle right and Pengjiagou Mine on the bottom right.

8.11.3 Wulong Project

The Mineral Resources of the Wulong project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 8-56 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 8-37 presents the sensitivity as grade tonnage curves of the Wulong Project.

Table 8-56: Global Block Model Quantities and Grade Estimates[1], Wulong Project

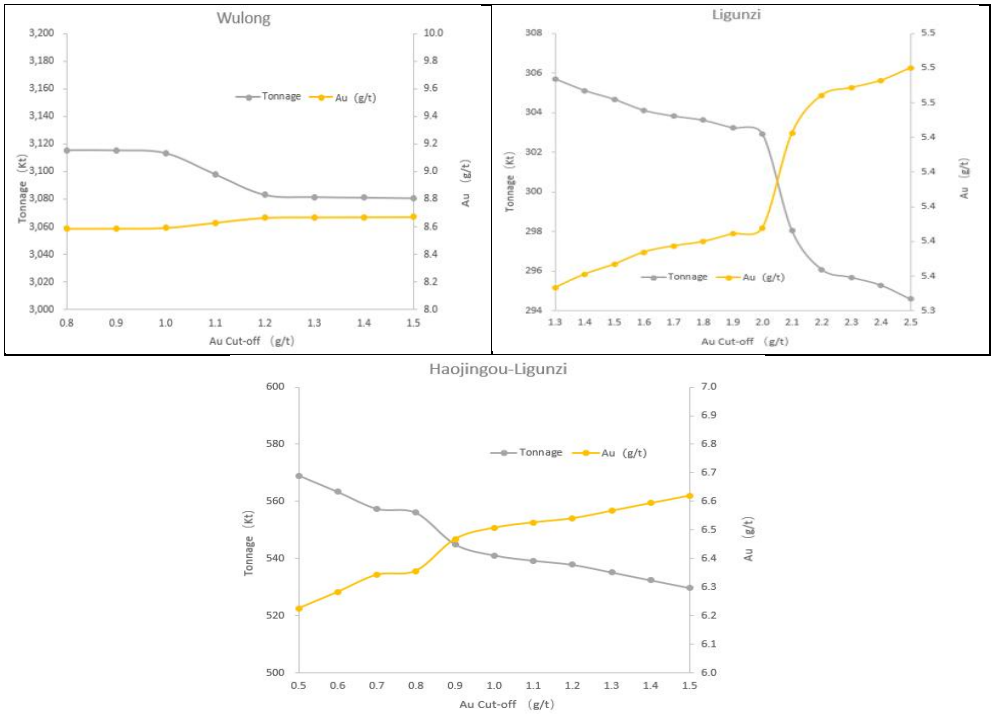
Mine/Deposit	Cut-off Grade Au (g/t)	Quantity (Mt)	Au Grade (g/t)
Wulong Mine	0.8	3,115	8.59
	0.9	3,115	8.59
	1.0	3,113	8.59
	1.1	3,098	8.63
	1.2	3,083	8.66
	1.3	3,081	8.67
	1.4	3,081	8.67
	1.5	3,081	8.67
Ligunzi Deposit	1.3	306	5.35
	1.4	305	5.36
	1.5	305	5.37
	1.6	304	5.37
	1.7	304	5.38
	1.8	304	5.38
	1.9	303	5.38
	2.0	303	5.39
	2.1	298	5.44

Mine/Deposit	Cut-off Grade Au (g/t)	Quantity (Mt)	Au Grade (g/t)
	2.2	296	5.46
	2.3	296	5.47
	2.4	295	5.47
	2.5	295	5.48
Haojingou-Ligunzi Deposit	0.5	569	6.23
	0.6	563	6.28
	0.7	557	6.34
	0.8	556	6.36
	0.9	545	6.47
	1.0	541	6.51
	1.1	539	6.53
	1.2	538	6.54
	1.3	535	6.57
	1.4	532	6.59
	1.5	530	6.62

Notes:

[1] The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

Figure 8-37: Grade Tonnage Curves of Wulong Project



8.11.4 Hanfeng Project

Mineral Resource is sensitive to the selection of cut-off grade. To illustrate this sensitivity, ore quantities and grade estimates at different cut-off grades of the Lishan and Dongfeng mines are presented in Table 8-57. The reader is cautioned that the figures presented in this table should not be mistaken for a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 8-38 represents this sensitivity as tonnage-grade curves of the Lishan and Dongfeng mines.

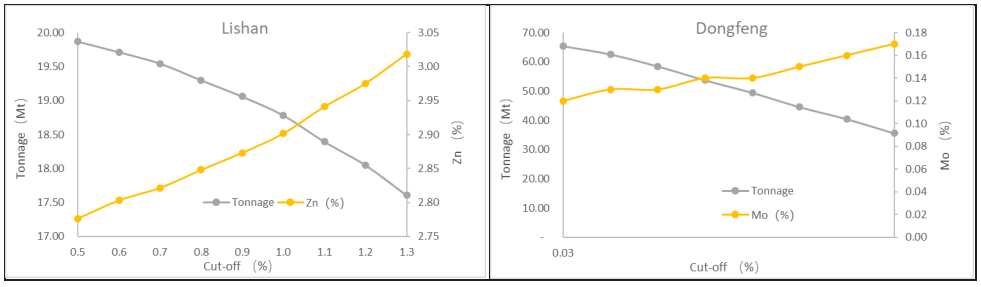
Table 8-57: Block Model Quantities and Grade Estimates[1], Hanfeng Project

Lishan Mine	Cut-off Grade (Zn %)	Quantity (Mt)	Zn Grade (%)
Lishan Mine	0.5	19.87	2.78
	0.6	19.71	2.80
	0.7	19.55	2.82
	0.8	19.30	2.85
	0.9	19.06	2.87
	1.0	18.78	2.90
	1.1	18.40	2.94
	1.2	18.05	2.98
	1.3	17.61	3.02
Dongfeng Mine	**Cut-off Grade (Mo %)**	**Quantity (Mt)**	**Mo Grade (%)**
Dongfeng Mine	0.03	65.37	0.12
	0.04	62.56	0.13
	0.05	58.48	0.13
	0.06	53.74	0.14
	0.07	49.47	0.14
	0.08	44.59	0.15
	0.09	40.49	0.16
	0.10	35.66	0.17

Notes:

[1] The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.

Figure 8-38: Tonnage-Grade Curves of Lishan and Dongfeng Mines



8.11.5 Jintai Project

The Mineral Resources of the Xidengping mine are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 8-58 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 8-39 presents this sensitivity as grade tonnage curves.

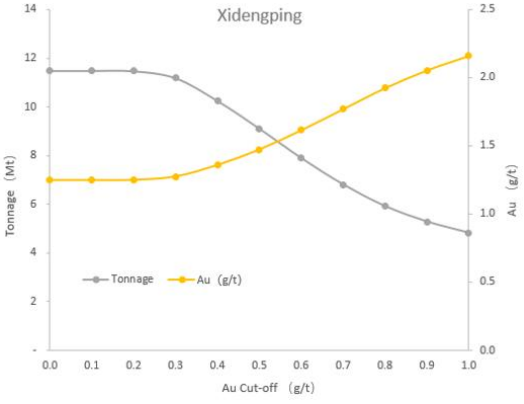
Table 8-58: Global Block Model Quantities and Grade Estimates[1], Xidengping Mine at Various Cut-off Grades

Deposit	Cut-off Grade Gold(g/t)	Quantity (Mt)	Grade Gold(g/t)
Xidengping	0.0	11.48	1.25
	0.1	11.48	1.25
	0.2	11.47	1.25
	0.3	11.18	1.27
	0.4	10.24	1.36
	0.5	9.10	1.47
	0.6	7.90	1.61
	0.7	6.81	1.77
	0.8	5.92	1.92
	0.9	5.29	2.05
	1.0	4.83	2.16

Notes:

[1] The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

Figure 8-39: Grade Tonnage Curves of Xidengping Mine



9 Ore Reserve Estimates

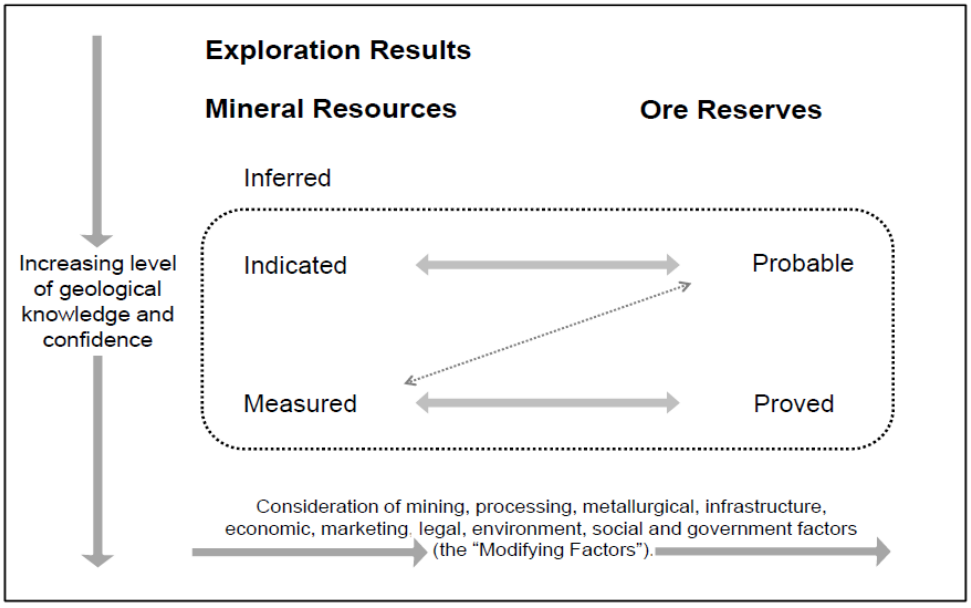
According to the JORC Code,

an 'Ore Reserve' is the economically mineable part of a Measured and/ or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably by justified.

The Modifying Factors are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental. Social and governmental factors.

Figure 9-1 provide for a direct relationship between Indicated Mineral Resources and Probable Ore Reserve and between Measured Mineral Resources and Proved Ore Reserve.

Figure 9-1: Relationship Between Mineral Resources and Ore Reserve



Sources: JORC Code (2012)

According to the JORC Code, a Probable Ore Reserve is the economically mineable part of an Indicated, and in some cases, a Measured Mineral Resource. The confidence in the modifying factors for a Probable Ore Reserve is lower compared to a Proved Ore Reserve. A Proved Ore Reserve, on the other hand, is the economically mineable part of a Measured Mineral Resource and implies a high degree of confidence in the modifying factors.

The Ore Reserve estimates for the Jilong, Huatai, Wulong, Hanfeng, and Jintai Projects have been prepared in accordance with the JORC Code. These estimates were derived by applying modifying factors to the Mineral Resource Estimate, with only Measured and Indicated resources being

converted to Ore Reserve. Inferred resources were treated as waste with zero grade. These projects are operational mines, and their designs and operating practices were reviewed to at least a prefeasibility study level.

The Jilong, Huatai, Wulong, and Hanfeng Projects are underground mines. Skin dilution was applied into the stope shape as an equivalent linear overbreak slough. Subsequently, these annealed mineable shapes were cut using Stope Slicer within GEOVIA Surpac™. Stopes falling outside the design scope or with irregular shapes were filtered out. The cut-off grade with gold price of US$2,050/oz and a zinc price of US$2,550/t were used to estimate the in-stope Ore Reserves. The factors such as ore loss were factored in Microsoft Excel.

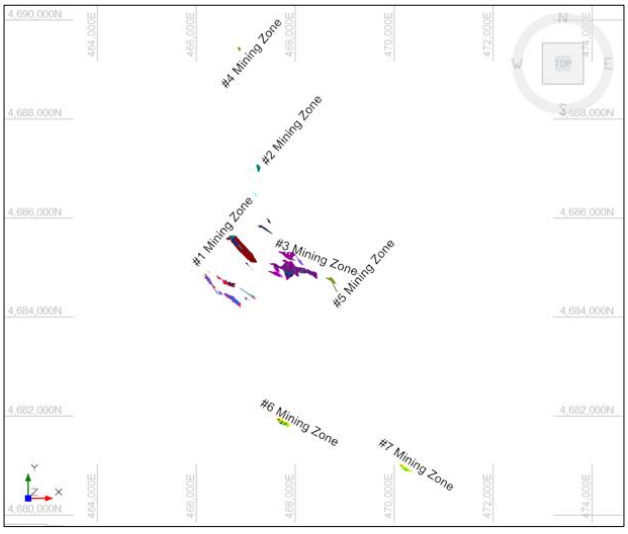
The Jintai Project is an open pit mine. The optimal economic shape for the open pit was determined using GEOVIA Whittle™ optimization. SRK compared this optimal shape with the open pit design from the prefeasibility study and found minimal discrepancies. Consequently, SRK decided to use the prefeasibility study's open pit design. The mining dilution and ore loss were also considered and factored into Ore Reserves.

9.1 Jilong Project

9.1.1 Introduction

Jilong Mining is actively operating and includes several deposits within its various mining zones, specifically Zone 1 through Zone 7. Each of these zones is either currently being exploited or is planned for future exploitation. The locations of these mines, along with their respective veins, are detailed in Figure 9-2, which has been reviewed for the Ore Reserve estimation.

Figure 9-2: Plan View of Mining Zones



Sources: SRK

9.1.2 Mineral Resources Model

The Jilong Project resource block model was completed by SRK geologist in a *.mdl file format, and it has been converted into *.dm file format for design and scheduling purposes.

9.1.3 Feasibility Study

SRK has reviewed the following preliminary design studies:

- Zhuanshanzi 1# Mining Zone Preliminary Design by Chifeng Zhenghang Design Company in February 2024;
- Zhuanshanzi 2# Mining Zone Preliminary Design by Chifeng Jilong Mining Company in February 2024;
- Zhuanshanzi 3# Mining Zone Preliminary Design by Inner Mongolia Mining Development Company in February 2024;
- Zhuanshanzi periphery Mining Zone (4#, 5#, 6#, 7# Mining Zone) Preliminary Design by Chifeng Zhenghang Design Company in February 2024.

9.1.4 Cut-off Grade

The unit cost of mining, processing, general and administrative, and processing recovery from 2021 to 2023 were provided by Jilong Mining, as detailed in Table 9-1. The cut-off grade is calculated to be 2.76g/t, based on the average historical three-year unit costs, while also considering processing recovery and royalty factors, as shown in Table 9-2.

Table 9-1: Unit Cost of Jilong Project from 2021 to 2023

Item	Unit	Actual			Average
		2021	2022	2023	
Mining Cost	CNY/t Ore	760	789	714	755
Processing Cost	CNY/t Ore	154	132	134	139
G&A Cost	CNY/t Ore	241	211	103	151
Processing Recovery for Au	%	97.08	96.61	97.66	97

Sources: Client

Table 9-2: Cut-off Grade Calculation

Item	Unit	Assumption
Gold Price	USD/oz	2,050
Gold Price [1]	CNY/g	429
Mining	CNY/t ore	755
Processing	CNY/t ore	139
G&A	CNY/t ore	151
Processing Recovery	%	97
Royalty	%	4

Item	Unit	Assumption
Cut-off Grade	g/t	2.76

Sources: SRK

[1] The exchange rate of 7.22 USD to CNY was applied.

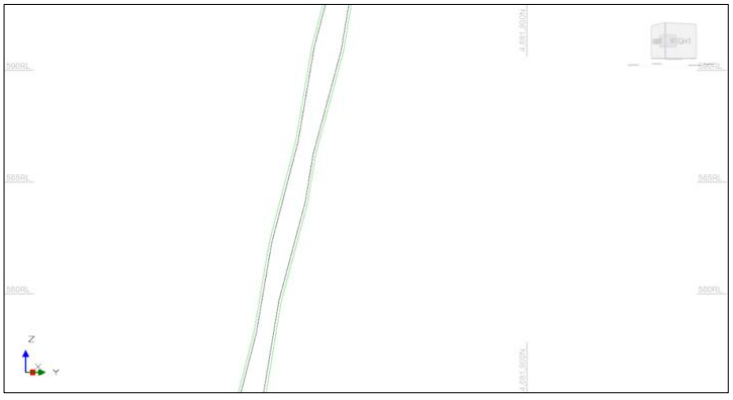
9.1.5 Mining Dilution and Ore Loss

Mining dilution includes unplanned dilution from stope wall failures and overbreak from stope walls and floors. Waste rock dilution primarily originates from material sloughing off the hanging wall, with minor contributions from the ends and floors of the stoping area. Waste dilution typically ranges between 0.04m and 0.2m, depending on the size and shape of the orebodies.

To estimate mining dilution, SRK has expanded the orebody wireframe by 0.04 to 0.2m in all directions (Green line in Figure 9-3), creating skins as an equivalent linear overbreak slough. Overall, it is estimated that mining dilution will be approximately 20%.

Additionally, a mining loss of 5% was estimated and applied to the Ore Reserve estimation.

Figure 9-3: Skin Analysis for Mining Dilution



Sources: SRK

9.1.6 Ore Reserve Estimates

The estimated process details are provided in Table 9-3, with the corresponding waterfall charts illustrated in Figure 9-4 and Figure 9-5.

Approximately 65% of tonnes and 55% of metal have been converted from Mineral Resources to Ore Reserve. Key negative factors affecting this conversion include the exclusion of Inferred Mineral Resources.

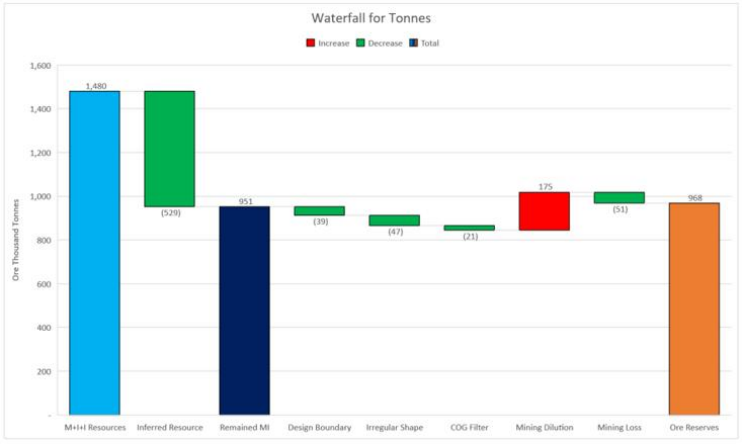
Table 9-3: Estimated Process Summary

Conversion Process	Tonnage (kt)	Au Contained (kg)
M+I+I Resources	1,480	15,022
Inferred Resources Exclusion	(529)	(4,881)

Conversion Process	Tonnage (kt)	Au Contained (kg)
M+I Resources	951	10,141
Design Boundary	(39)	(585)
Irregular Shape	(47)	(644)
COG Filter	(21)	(165)
Mining Dilution	175	2
Ore Loss	(51)	(437)
Ore Reserve	968	8,311

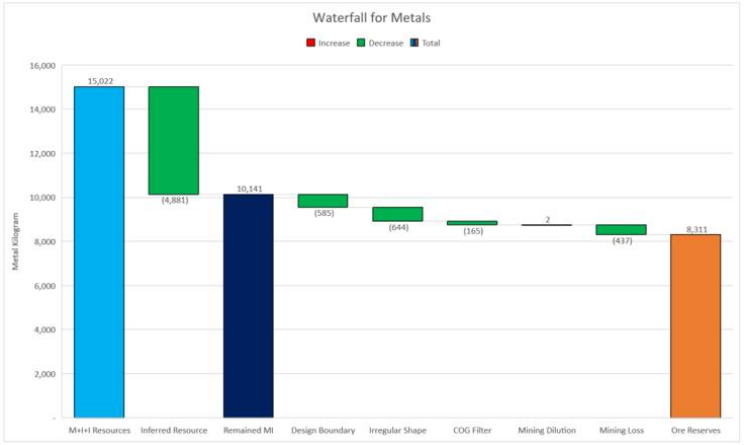
Sources: SRK

Figure 9-4: Estimated Process - Change in Tonnes



Sources: SRK

Figure 9-5: Estimated Process - Change in Metal Contained



Sources: SRK

9.1.7 Ore Reserve statement

SRK has estimated the Ore Reserve for the Jilong Project in compliance with the JORC Code. The Ore Reserve, with an effective date of 31 March 2024, is summarised in Table 9-4.

As of 31 March 2024, the total Ore Reserve for the Jilong Project is estimated at 968 kt at an average grade of 8.59g/t Au, containing 8.31 t of gold. This includes Proved Reserve estimated at 537 kt at an average grade of 9.66g/t Au, containing 5.18 t of gold, and Probable Reserve estimated at 431 kt at an average grade of 7.27g/t Au, containing 3.13 t of gold.

Table 9-4: Jilong Project Underground Ore Reserve Statement, as of 31 March 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	537	9.66	5.18	167
Probable	431	7.27	3.13	101
Total	968	8.59	8.31	267

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Ms. Tzuhsuan Chuang, MAusIMM and Dr Yiefei Jia, FAusIMM and a Chartered Professional in Geology (CP Geo), employees of SRK Consulting China Ltd. Both Dr Jia and Ms. Chuang have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Dr Jia supervised the work of Ms. Chuang. Dr Jia and Ms. Chuang consent to the reporting of this information in the form and context in which it appears;

[2] Ore Reserve are estimated at a cut-off grade of 2.76g/t Au;

[3] Number was rounded to the second significant digit;

[4] Total may not add due to rounding discrepancies; and

[5] Mining dilution is 20% and ore loss is 5%.

9.2 Huatai Project

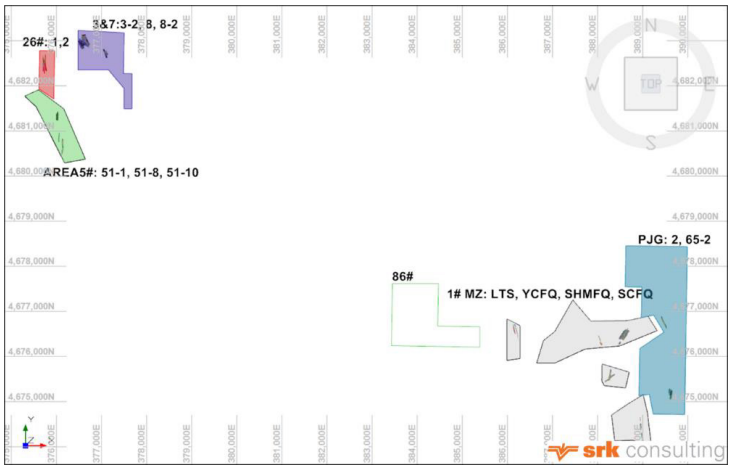
9.2.1 Introduction

Huatai Project is actively operating and includes several deposits within the following mining zones:

- Pengjiagou Mine;
- Honghuagou #1 Mining Zone (referred to as Zone 1);
- Honghuagou #86 Vein (referred to as Vein 86);
- Lianhuashan #5 Mining Zone (referred to as Area 5);
- Lianhuashan #26 Vein (referred to as Vein 26);
- Lianhuashan #3&#7 Vein (referred to as Vein 3&7).

The locations of the mining zones are shown in Figure 9-6. It should be noted that Vein 86 is not included in the Ore Reserve estimation due to its remote spatial location relative to other mines, making its exploitation potentially unprofitable.

Figure 9-6: Plan View of Mining Zones



Sources: SRK

9.2.2 Ore Resources Models

The Huatai Project resource block model was completed by SRK geologist in a *.mdl file format, and it has been converted into *.dm file format for design and scheduling purposes.

9.2.3 Feasibility Study

SRK has reviewed the following preliminary design studies:

- Pengjiagou Preliminary Design by Chifeng Gaoda Engineering Design Company in May 2018. There are 2 veins named 65-2 and 2. The design has covered levels between 456m to 769m with capacity of 30ktpa run-of mine (ROM).
- Honghuagou #1 Mining Zone Expansion Preliminary Design by Inner Mongolia Mining Industry Development Co., Ltd. in May 2013. There are 4 sections named LTS, YCFQ, SHMFQ and SCFQ with 16 veins. The design has covered levels for each section with a total capacity of 30.3ktpa ROM.
- Lianhuashan #5 Mining Zone Expansion Preliminary Design by Chifeng Zhenghang Design Co., Ltd. in November 2022. There are 4 veins named 51-1, 51-6, 51-8 and 51-10. The design has covered 18 levels between 105m to 752m with a total capacity of 60ktpa ROM.
- Lianhuashan #26 Vein Preliminary Design by Chifeng Gaoda Engineering Design Company in May 2018. There are 2 veins named 1 and 2. The design has covered levels between 480m to 760m with capacity of 30ktpa ROM.
- Lianhuashan #3&#7 Vein Preliminary Design (Only 3-2 vein considered) by Chifeng Zhenghang Design Co., Ltd. in July 2015. The design has covered levels between 700m to 820m with capacity of 30ktpa ROM.
- Lianhuashan #3&#7 Vein Mineral Resources Development and Utilization Scheme by Inner Mongolia Geology and Mineral Technology Co., Ltd in December 2019. There are 3 veins named

3-2, 8 and 8-2 considered in this scheme. The scheme has limited its boundary for 8 and 8-2 within 470m level above, 3-2 within 745m level above because of low geology confidence. According to the scheme, the capacity of 3&7 is 60ktpa ROM.

9.2.4 Cut-off Grade

The unit cost of mining, processing, general and administrative, and processing recovery from 2020 to 2022 were provided by Huatai Mining, as detailed in Table 9-5. The fiscal data for 2023 was not collected due to ongoing technological upgrades during the year.

The cut-off grade is calculated to be 2.9g/t, based on the adjustment from average historical three-year unit costs, while also considering processing recovery and royalty factors, as shown in Table 9-6.

Table 9-5: Unit Cost of Huatai Project from 2020 to 2022

Item	Unit	Actual			Average
		2020	2021	2022	
Mining Cost	CNY/t Ore	775	852	1,631	908
Processing Cost	CNY/t Ore	156	170	325	186
G&A Cost	CNY/t Ore	529	385	1,693	636
Processing Recovery for Au	%	93.75	93.41	92.8	93

Sources: Client

Table 9-6: Cut-off Grade Calculation

Item	Unit	Assumption
Au Price	USD/oz	2,050
Au Price [1]	CNY/g	429
Mining	CNY/t ore	800
Processing	CNY/t ore	150
G&A[2]	CNY/t ore	221
Processing Recovery	%	93
Royalty	%	4
Break-even Cut-off Grade	%	2.93

Sources: SRK

[1] The exchange rate of 7.22 USD to CNY was applied.

[2] The G&A costs are unusually high, so SRK opted to use the average G&A costs from Chifeng UG for this mine instead, which is more reasonable in the context of the Huatai overall operating expenses.

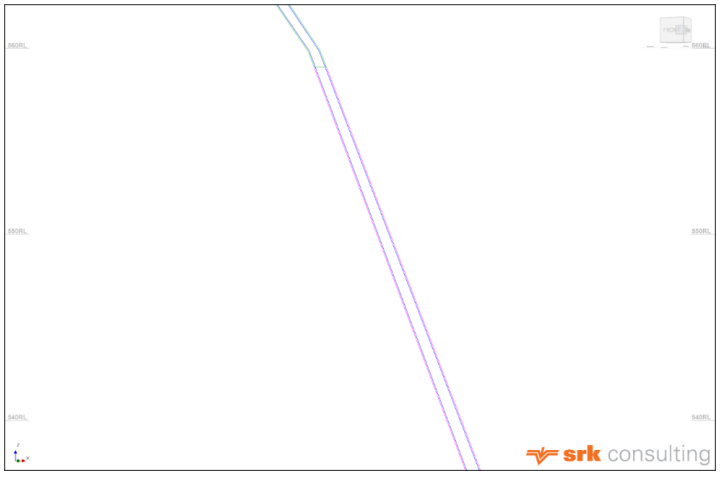
9.2.5 Mining Dilution and Ore Loss

Mining dilution includes unplanned dilution from stope wall failures and overbreak from stope walls and floors. Waste rock dilution primarily originates from material sloughing off the hanging wall, with minor contributions from the ends and floors of the stoping area. Waste dilution typically ranges between 0.02m and 1m, depending on the size and shape of the orebodies.

To estimate mining dilution, SRK has expanded the orebody wireframe by 0.03 to 0.4m in all directions (Pink line in Figure 9-7), creating skins as an equivalent linear overbreak slough. Overall, it is estimated that mining dilution will be approximately 20%.

Additionally, a mining loss of 15% was estimated and applied to Ore Reserves.

Figure 9-7: Skin Analysis for Mining Dilution



Sources: SRK

9.2.6 Ore Reserve Estimates

The estimated process details are provided in Table 9-7, with the corresponding waterfall charts illustrated in Figure 9-8 and Figure 9-9.

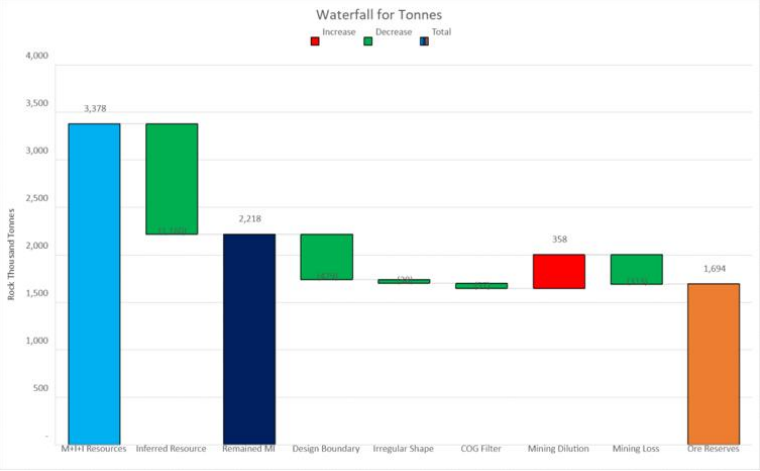
Approximately 50% of tonnes and 43% of metal have been converted from Mineral Resources to Ore Reserve. Key negative factors affecting this conversion include the exclusion of Inferred Mineral Resources and design boundaries.

Table 9-7: Estimated Process Summary

Conversion Process	Tonnage (kt)	Au Contained (t)
M+I+I Resources	3,378	24.45
Inferred Resource Exclusion	(1,160)	(8.34)
M+I Resources	2,218	16.11
Design Boundary	(479)	(3.00)
Irregular Shape	(38)	(0.27)
COG Filter	(57)	(0.32)
Mining Dilution	358	(0.02)
Ore Loss	(313)	(1.99)
Ore Reserves	1,694	10.50

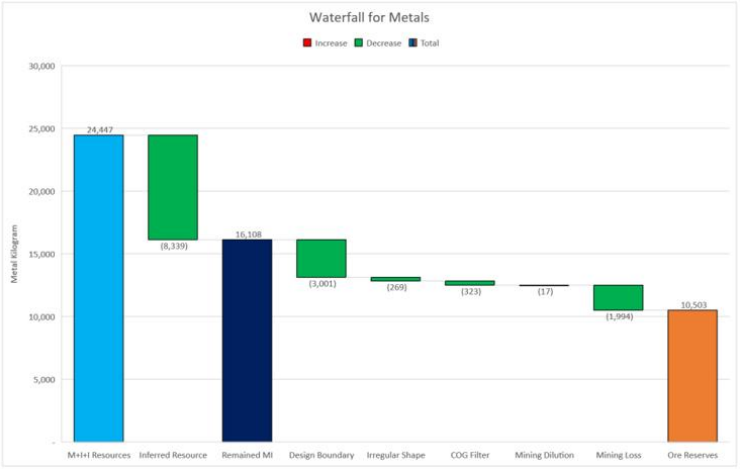
Sources: SRK

Figure 9-8: Estimated Process - Change in Tonnes



Sources: SRK

Figure 9-9: Estimated Process - Change in Metal Contained



Sources: SRK

9.2.7 Ore Reserves Statement

SRK has estimated the Ore Reserve for the Huatai Project in compliance with the JORC Code. Ore Reserves, with an effective date of 31 March 2024, is summarized in Table 9-8.

As of 31 March 2024, the total Ore Reserve for the Huatai Project is estimated at 1,694 kt at an average grade of 6.20g/t Au, containing 10.50 t of gold. This includes Proved Reserve estimated at 226 kt at an average grade of 5.21g/t Au, containing 1.18 t of gold, and Probable Reserve estimated at 1,468 kt at an average grade of 6.35g/t Au, containing 9.32 t of gold.

Table 9-8: Huatai Project Underground Ore Reserve Statement, as of 31 March 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	226	5.21	1.18	38
Probable	1,468	6.35	9.32	300
Total [3]	**1,694**	**6.20**	**10.50**	**338**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Dr Yiefei Jia, FAusIMM and a Chartered Professional in Geology (CP Geo), employees of SRK Consulting China Ltd. Both Dr Jia and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Dr Jia supervised the work of Mr. Lu. Dr Jia and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Ore Reserve are estimated at a cut-off grade of 2.93g/t Au;

[3] Number was rounded to the second significant digit;

[4] Total may not add due to rounding discrepancies; and

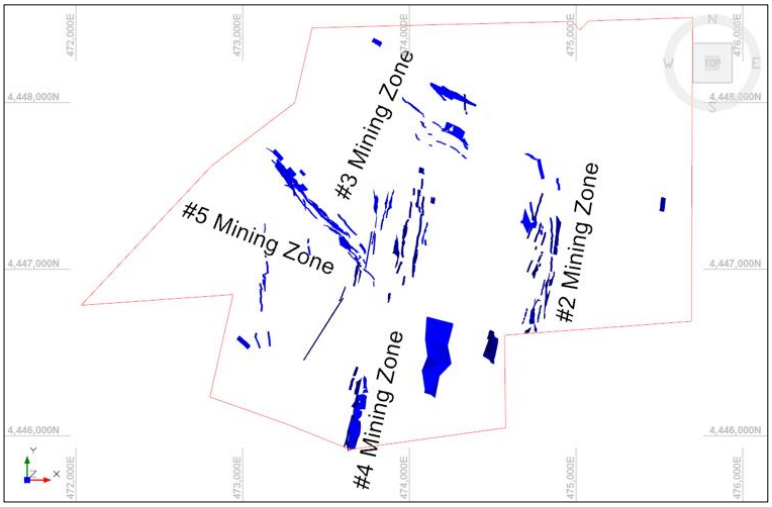
[5] Mining dilution is 20% and ore loss is 15%.

9.3 Wulong Project

9.3.1 Introduction

Wulong Mining is actively operating and includes several deposits within its various mining zones, specifically Zone 1 through Zone 5. Each of these zones is currently being exploited. The locations of these mines, along with their respective veins, are detailed in Figure 9-10, which has been reviewed for the Ore Reserve estimation.

Figure 9-10: Plan View of Mining Zones of Wulong



Sources: SRK

9.3.2 Mineral Resources Models

The Wulong Project resource block model was completed by SRK geologist in a *.mdl file format, and it has been converted into *.dm file format for design and scheduling purposes.

9.3.3 Feasibility Study

SRK has reviewed the following preliminary design studies:

- Wulong #2 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022.
- Wulong #3 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022.
- Wulong #4 and #5 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022.

9.3.4 Cut-off Grade

The unit cost of mining, processing, general and administrative, and processing recovery from 2021 to 2023 were provided by Wulong Mining, as detailed in Table 9-9. The cut-off grade is calculated to be 2.50g/t, based on the adjustment from average historical three-year unit costs, while also considering processing recovery and royalty factors, as shown in Table 9-10.

Table 9-9: Unit Cost of Wulong Project from 2021 to 2023

Item	Unit	Actual			Average
		2021	2022	2023	
Mining Cost	CNY/t Ore	375	494	503	464
Processing Cost	CNY/t Ore	442	573	607	551
General and Administration Cost	CNY/t Ore	80	65	117	88
Processing Recovery for Au	%	90.39	92.23	91.97	91

Sources: Client

Table 9-10: Cut-off Grade Calculation

Item	Unit	Assumption
Gold Price	USD/oz	2,050
Gold Price [1]	CNY/g	429
Mining [2]	CNY/t ore	696
Processing	CNY/t ore	551
G&A [3]	CNY/t ore	221
Processing Recovery	%	97
Payable Rate	%	92
Royalty	%	4
Break-even Cut-off Grade	%	3

Sources: SRK

[1] The exchange rate of 7.22 USD to CNY was applied.

[2] The mining production and cost including remnants extraction and haulage of low-grade ore. Since the current design targets stope production, the mining cost has been factored and adjusted upward.

[3] The G&A costs are unusually low, so SRK opted to use the average G&A costs for this mine instead, which is more reasonable in the context of the overall operating expenses.

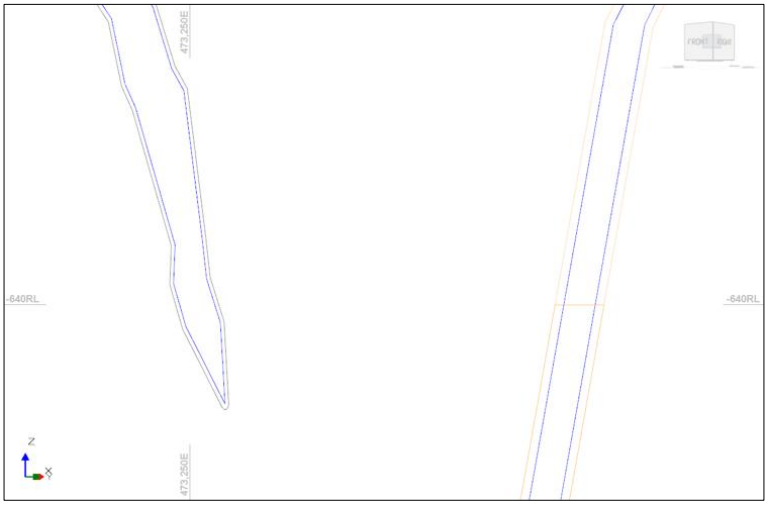
9.3.5 Mining Dilution and Ore Loss

Mining dilution includes unplanned dilution from stope wall failures and overbreak from stope walls and floors. Waste rock dilution primarily originates from material sloughing off the hanging wall, with minor contributions from the ends and floors of the stoping area. Waste dilution typically ranges between 0.04m and 0.2m, depending on the size and shape of the orebodies.

To estimate mining dilution, SRK has expanded the orebody wireframe by 0.04m and 0.2m in all directions (Grey line in Figure 9-11), creating skins as an equivalent linear overbreak slough. Overall, it is estimated that mining dilution will be approximately 20%.

Additionally, a mining loss of 8% was estimated and applied to the Ore Reserve estimation.

Figure 9-11: Skin Analysis for Mining Dilution



Sources: SRK

9.3.6 Ore Reserve Estimates

The estimated process details are provided in Table 9-11, with the corresponding waterfall charts illustrated in Figure 9-12 and Figure 9-13.

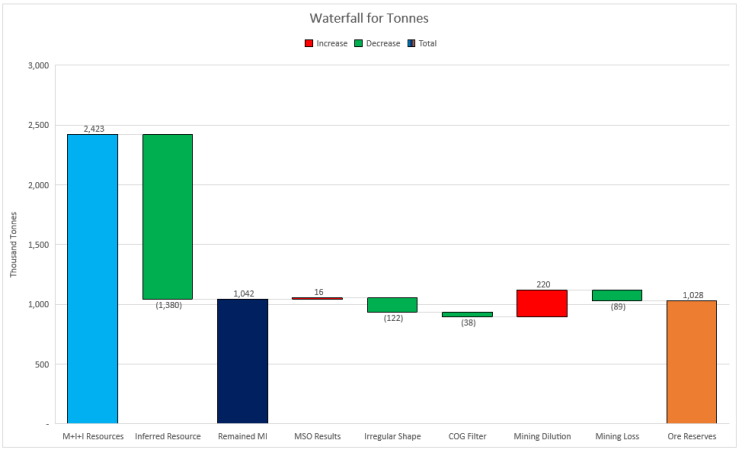
Approximately 43% of tonnes and 39% of metal have been converted from Mineral Resources to Ore Reserve. Key negative factors affecting this conversion include the exclusion of Inferred Mineral Resources and design boundaries.

Table 9-11: Estimates Process Summary

Conversion Process	Tonnage (kt)	Au Contained (kg)
M+I+I Resources	2,423	19,567
Inferred Resource Deduction	(1,380)	(10,270)
Remained M+I Resources	1,042	9,296
Design Boundary	16	47
Irregular Shape	(122)	(1,043)
COG Filter	(38)	(76)
Mining Dilution	220	(21)
Mining Loss	(89)	(656)
Ore Reserves	1,028	7,547

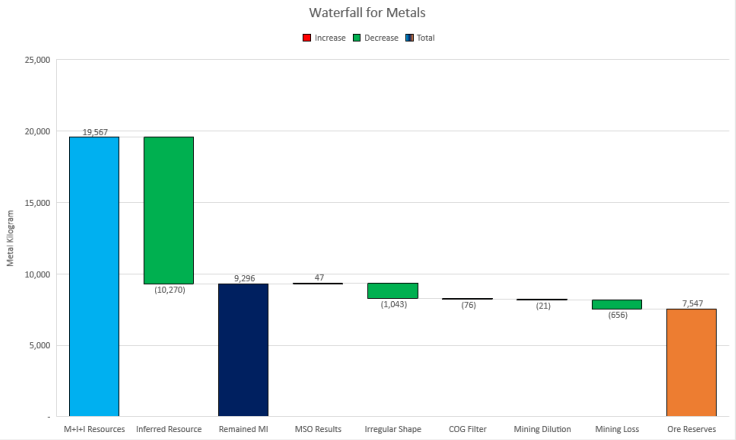
Sources: SRK

Figure 9-12: Estimated Process - Change in Tonnes



Sources: SRK

Figure 9-13: Estimated Process - Change in Metal Contained



Sources: SRK

9.3.7 Ore Reserve Statement

SRK has estimated the Ore Reserve for the Wulong Project in compliance with the JORC Code. The Ore Reserve, with an effective date of 31 March 2024, is summarized in Table 9-12.

As of March 31, 2024, the total Orel Reserve for the Wulong Project is estimated at 1,028kt at an average grade of 7.34g/t Au, containing 7.55 t of gold.

Table 9-12: Wulong Project Underground Ore Reserve Statement, as of 31 March 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	-	-	-	
Probable	1,028	7.34	7.55	243
Total [3]	**1,028**	**7.34**	**7.55**	**243**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Ms. TzuHsuan Chuang, MAusIMM and Dr Yiefei Jia, FAusIMM and a Chartered Professional in Geology (CP Geo), employees of SRK Consulting China Ltd. Both Dr Jia and Ms. Chuang have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Dr Jia supervised the work of Ms. Chuang. Dr Jia and Ms. Chuang consent to the reporting of this information in the form and context in which it appears;

[2] Ore Reserve are estimated at a cut-off grade of 2.50g/t Au;

[3] Number was rounded to the second significant digit;

[4] Total may not add due to rounding discrepancies; and

[5] Mining dilution is 20% and ore loss is 8%.

9.4 Hanfeng Project

9.4.1 Introduction

Hanfeng Project is actively operating and includes several deposits within the following mining zones:

- Lishan Lower Part (Stage1- levels between -92m to -373m);
- Lishan Lower Part (Stage2- levels between -373m to -700m);
- Dongfeng Lower part.

It should be noted that only Lishan Lower Part (Stage1) is included in Ore Reserves since there are no sufficient technical studies regarding the Lishan Lower Part (Stage 2) and Dongfeng Lower part.

In order to classify as Proved or Probable Ore Reserve category, technical studies need to be completed to at least a PFS level with an appraisal of how access would be achieved, mining methodology (including extraction and dilution factors), the geotechnical understanding as well as ventilation. Along with the technical understanding and extraction achievability, the economics of each area needs to be proved, i.e. with the application of Capex and Opex, is it economic to mine, cash flow positive.

In addition, the Dongfeng Molybdenum Mine is expected to begin construction in 2025. Currently, the mine is preparing the feasibility study report. The projected annual mining capacity is 1.65 million tons per year, using underground mining methods, with an annual production of 3,990 tons of molybdenum concentrate at 47% Mo content. The estimated life of mine is 33 years.

9.4.2 Mineral Resources Models

The Hanfeng Project resource block model was completed by SRK geologist in a *.mdl file format, and it has been converted into *.dm file format for design and scheduling purposes.

9.4.3 Feasibility Study

SRK has reviewed the following preliminary design studies:

- Lishan Lower Part (Stage1) Preliminary Design ("**Lishan LS1**") by Changchun Gold Design Institute in Dec. 2021 with capacity of 435Ktpa ROM

9.4.4 Cut-off Grade

The unit cost of mining, processing, general and administrative, and processing recovery from 2020 to 2022 were provided by Hanfeng Mining, as detailed in Table 9-13. The fiscal data in 2023 was not collected since there is no production in 2023.

The cut-off grade is calculated to be 1.4%, based on the adjustment from average historical three-year unit costs, while also considering processing recovery factors, as shown in Table 9-14.

Table 9-13: Unit Cost of Hanfeng Project from 2020 to 2022

Item	Unit	2020	2021	2022	Average
Mining Cost	CNY/t Ore	58	63	75	65
Processing Cost	CNY/t Ore	64	59	65	67
G&A Cost	CNY/t Ore	27	19	33	25
Processing Recovery for Zinc	%	-	87.45	88.31	88

Sources: Client

Table 9-14: Zinc Cut-off Grade Calculation

Item	Unit	Assumption
Zinc Price [1]	USD/t	2,500
Zinc Price [2]	CNY/t	18,050
Underground Mining	CNY/t ore	65
Processing	CNY/t ore	67
Processing Recovery	%	88
G&A	CNY/t ore	25
Payable Rate	%	76
Cut-off Grade	%	1.42

Sources: SRK

[1] CMF price in Q1, 2024 was used for cut-off estimation.

[2] The exchange rate of USD to CNY at 7.22 was applied.

9.4.5 Mining Dilution and Ore Loss

Lishan Lower Part (Stage1) contains various stopes based on horizontal width of the stopes. Mining dilution includes unplanned dilution from stope wall failures and overbreak from stope walls and floors. Waste rock dilution primarily originates from material sloughing off the hanging wall, with minor contributions from the ends and floors of the stoping area. Waste dilution typically ranges between 0.2 m and 1.0 m, depending on the size and shape of the orebodies.

To estimate mining dilution, SRK has expanded the orebody wireframe by 0.2 m and 1.0 m in all directions (Orange line in Figure 9-14), creating skins as an equivalent linear overbreak slough. Overall, it is estimated that mining dilution will be approximately 22%.

Additionally, a mining loss of 20% was estimated and applied to the Ore Reserve estimation.

Figure 9-14: Skin Analysis for Mining Dilution

Sources: SRK

9.4.6 Ore Reserve Estimates

The estimated process details are provided in Table 9-15, with the corresponding waterfall charts illustrated in Figure 9-15 and Figure 9-16.

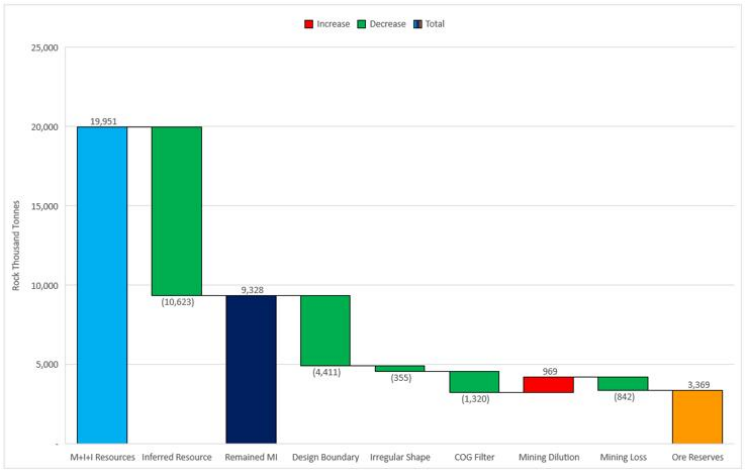
Approximately 17% of tonnes and 15% of metal have been converted from Mineral Resources to Ore Reserve. Key negative factors affecting this conversion include the exclusion of Inferred Mineral Resources and design boundaries.

Table 9-15: Estimated Process Summary

Conversion Process	Tonnage (kt)	Zn Contained (t)
M+I+I Resources	19,951	553,966
Inferred Resource Deduction	(10,623)	(307,867)
M+I Resources	9,328	246,099
Design Boundary	(4,411)	(113,683)
Irregular Shape	(355)	(10,331)
COG Filter	(1,348)	(21,416)
Mining Dilution	923	604
Mining Loss	(828)	(20,255)
Ore Reserves	3,310	81,019

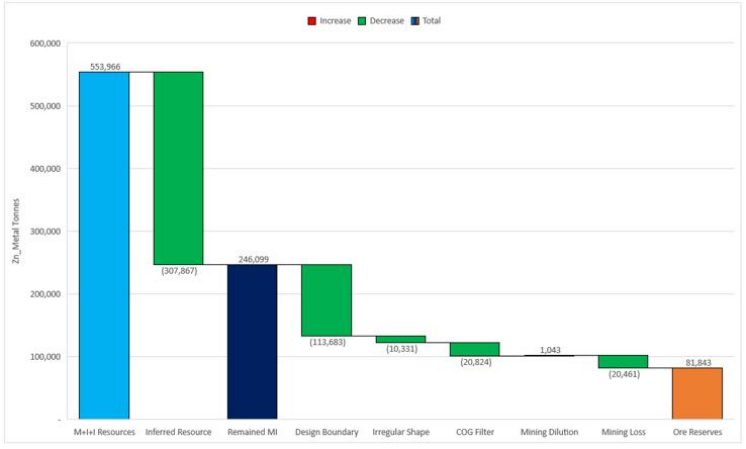
Sources: SRK

Figure 9-15: Estimated Process - Change in Tonnes



Sources: SRK

Figure 9-16: Estimated Process - Change in Metal Contained



Sources: SRK

9.4.7 Ore Reserve statement

SRK has estimated the Orel Reserve for the Hanfeng Project in compliance with the JORC Code. The Ore Reserve, with an effective date of 31 March 2024, is summarised in Table 9-16.

As of March 31, 2024, the total Ore Reserve for the Hanfeng Project (Lishan Lower Part - Stage1) is estimated at 3,310 kt at an average grade of 2.45% Zn, containing 81 kt of Zn. This includes Proved Reserve estimated at 390 kt at an average grade of 2.26% Zn, containing 9 kt of Zn, and Probable Reserve at 2,920 kt at an average grade of 2.47% Zn, containing 72 kt of Zn.

Table 9-16: Hanfeng Project Underground Ore Reserve Statement, as of 31 March 2024

Reserve Category	Tonnage (kt)	Zn Grade (%)	Zn Metal Contained (kt)
Proved	390	2.26	9
Probable	2,920	2.47	72
Total	**3,310**	**2.45**	**81**

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Dr Yiefei Jia, FAusIMM and a Chartered Professional in Geology (CP Geo), employees of SRK Consulting China Ltd. Both Dr Jia and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Dr Jia supervised the work of Mr. Lu. Dr Jia and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Ore Reserve are estimated at a cut-off grade of 1.42% Zn;

[3] Number was rounded to the second significant digit;

[4] Total may not add due to rounding discrepancies; and

[5] Mining dilution is 22% and ore loss is 20%.

9.5 Jintai Project

9.5.1 Introduction

Jintai Project is actively operating and includes several deposits within its various mining zones:

V1, V2 (V2_1, V2_2), V4, 5, V6, V7, V8, V9, and V10

It should be noted that only V1, V2, V4 and V10 have measured resource and indicated resource, but only V1 and V2 are included in Ore Reserves since there are no sufficient technical studies for the rest of mining zones.

9.5.2 Mineral Resources Models

The Jintai Project resource block model was completed by SRK geologist in a *.mdl file format, and it has been converted into *.dm file format for pit optimization, design, and scheduling purposes.

9.5.3 Feasibility Study

SRK has reviewed the following preliminary design studies:

- Preliminary Design for Xidengping Mine with a capacity of 140Ktpa ROM conducted by Jinjian Engineering Design Co., Ltd. ("**GOCOM**") in February 2022 ("**FS 2022**").
- Xidengping Mine Mineral Resources Development and Utilization Scheme with a capacity of 650ktpa conducted by Yunnan Shangli Mining Co., Ltd. ("**Shangli**") in March 2024 ("**FS 2024**").

9.5.4 Cut-off Grade

Economically mineable ore was defined based on the results of open pit optimization. Open pit optimization was used to identify the optimum economic pit shape based on the highest project cash flow. The marginal cut-off grade ("**MCOG**") of gold is defined the destination for material within

designed pit. If the material that has a grade more than MCOG, these materials would truck to the draw-point of mill plant, otherwise would be dump into WRD.

The inputs were applied by SRK to estimate MCOG of gold ore, which are presented in Table 9-17.

Table 9-17: Estimates of MCOG for Gold Ore

Inputs	Unit	Parameter
Mining cost	CNY/t TMM	11
Heap leaching	CNY/t ore feed	48
G&A cost	CNY/t ore feed	31
Recovery Rate	Percentage	78
Payable Rate	Percentage	97
Gold Price	USD/ oz	2,050
Exchange Rate	CNY/USD	7.22
Gold Price	USD/oz	2,050
Gold Price	CNY/g	428.25
Cut-off Grade	g/t	0.25

Sources: SRK

The MCOG is estimated to be 0.25g/t Au. SRK is of the view that material within pit has more than 0.25g/t Au can be processed economically, and reserves at MCOG will have positive revenues.

The MCOG was calculated based on technical and economic assumptions described in the Table above. These assumptions may change in the future, which will affect the MCOG calculation, which will impact the mine inventory estimation.

9.5.5 Modifying Factors

The following modifying factors are used to determine the mine inventory.

- Optimal pit shell: Includes the economic pit limits to the vein domains and excludes resources outstanding mining license or road limit as mining 'no-go' area.
- Pit design: The conversion factor for the mining inventory between the optimized pit shell and the practical mine design has been accounted for in this parameter.
- Dilution: Mining dilution is estimated as 5% by FS 2022. The modifying factor would be updated when more experience parameters were gained during pilot and operation reconciliation data.
- Mining recovery: A 95% mining recovery rate was applied by FS 2022 and similar as dilution rate, updates would be applied when more data obtained.

9.5.6 Ore Reserve Estimates

The estimated process details are provided in Table 9-18, with the corresponding waterfall charts illustrated in Figure 9-17 and Figure 9-18.

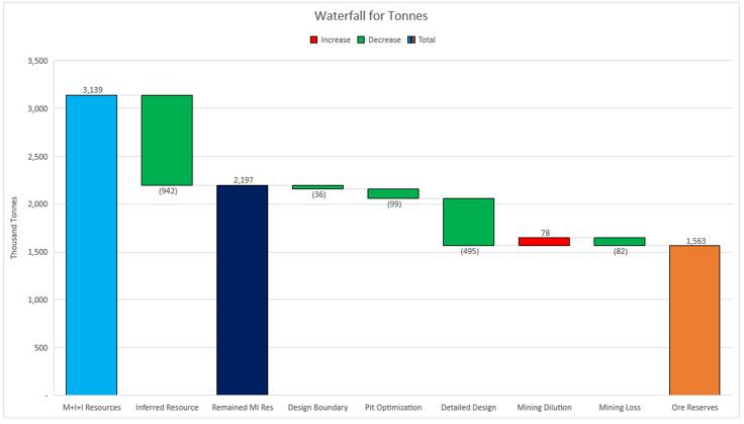
Approximately 50% of tonnes and 37% of metal have been converted from Mineral Resources to Ore Reserve. Key negative factors affecting this conversion include the exclusion of Inferred Mineral Resources.

Table 9-18 Estimated Process Summary

Conversion Process	Tonnage (kt)	Au Metal Contained (t)
M+I+I Resources	3,139	3.15
Inferred Resource	(942)	(1.47)
M+I Resources	2,197	1.69
Design Boundary	(36)	0.05
Pit Optimization	(99)	(0.03)
Detailed Design	(495)	(0.49)
Mining Dilution	78	-
Mining Loss	(82)	(0.06)
Ore Reserves	1,563	1.16

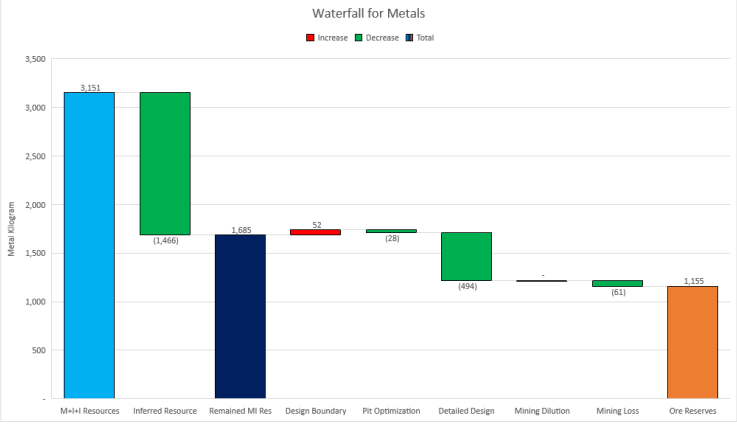
Sources: SRK

Figure 9-17: Estimated Process - Change in Tonnes



Sources: SRK

Figure 9-18: Estimated Process - Change in Metal Contained



Sources: SRK

9.5.7 Ore Reserve Statement

SRK has estimated the Ore Reserve for the Jintai Project in compliance with the JORC Code. The Ore Reserve, with an effective date of 31 March 2024, is summarized in Table 9-19.

As of 31 March 2024, the total Ore Reserve for the Jintai Project (V1&V2) is estimated at 1,563 kt at an average grade of 0.74 g/t Au, containing 1.15 t of gold.

Table 9-19 Open Pit Mineral Ore Reserve Statement of Jintai Project, as of 31 March 2024

Reserve Category	Tonnage (kt)	Au Grade (g/t)	Au Metal Contained (t)	Au Metal Contained (koz)
Proved	-	-	-	
Probable	1,563	0.74	1.15	37
Total [3]	**1,563**	**0.74**	**1.15**	**37**

Sources: SRK

Notes:

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr Erwei Lu, Mr. Falong Hu, MAusIMM, and Dr Yiefei Jia, FAusIMM and a Chartered Professional in Geology (CP Geo), employees of SRK Consulting China Ltd. Both Dr Jia and Mr. Hu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code. Mr Lu, Mr Hu and Dr Jia consent to the reporting of this information in the form and context in which it appears.

[2] Ore Reserve are estimated at a cut-off grade of 0.25g/t Au;

[3] Number was rounded to the second significant digit;

[4] Total may not add due to rounding discrepancies; and

[5] Mining dilution is 5% and ore loss is 5%.

10 Mining Assessment

10.1 Jilong Project

10.1.1 Introduction

The mine is located on mining lease C150000200911420054250. The mining level is from 700m asl to 150m asl, with a total area of 6.42km^2.

Zhuanshanzi Gold Mine now has three stand-alone underground operating systems: Zone 1, Zone 2, and Zone 3. Zone 1 is located on the southwest side of the mine, including No. 27 area and Yangpo area. Zone 2 (also known as Huangjindong) is located on the north side of Zone 1. Zone 3 (also known as Luofengmao) is located on the east side of Zone 1. All of these zones are utilizing underground mining method, accessing the ore body via shafts or adits.

Zhuanshanzi Gold Mine intends to increase its production capacity by developing peripheral Zones 4, 5, 6, and 7. This expansion is projected to commence operations in 2027, with an expected production rate of 60 ktpa.

In addition, the mine is expected to build a processing plant in June 2024 with a capacity of 180 ktpa, combining with the existing processing capacity of 120 ktpa to total 300 ktpa. The mining capacity will increase to 300 ktpa by the end of 2025 due to deeper mining and the expansion of the mining zone, which will match the capacity of the processing plant.

10.1.2 Geotechnical and Hydrogeological Conditions

Visually, the geotechnical and hydrogeological conditions of Jilong Project, where SRK visited, are fair to good. The rock looks integrity underground, and the drifts are unsupported mostly. Local support by wood or steel arcs is necessary where small faults cross the drift.

The tunnels back and walls are dry, and the water on floor is minimum, collecting at the ditch then staged pumps to water tanks close to the adit exits.

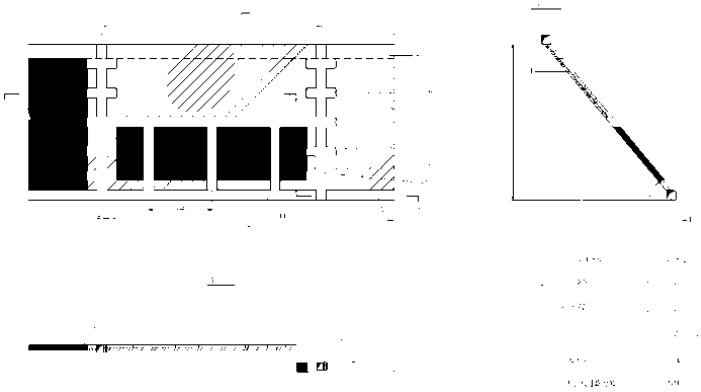
SRK opines that both geotechnical and hydrogeological risks are medium to low as the available data and the site views

10.1.3 Mining Method

The Zhuanshanzi Mine mainly adopted the resuing method since the ore body is very steep and thin with solid surrounding wall rocks. Since the vein's thickness is so thin and the void area so small, miners cannot work within the vein during mining. However, if the waste is removed all at once, the depletion is too high, raising transportation and processing expenses, which is not economically feasible. As a result, this mining method enables the separation of the ore and surrounding rocks, with the ore being transported and extracted while the waste is kept in the stope for backfilling. (See Figure 10-1)

The vein's width is so small that a section of the surrounding rock must be blasted to create a minimum working width, hence the stope's width is crucial. Every effort should be made to limit the mining of waste rock because it is an unprofitable operation.

Figure 10-1: Resuing Method



Source: Design from a PFS level of study (2018)

The mining process is to lay the rubber pad, blast the ore, ventilate, skid the roof support, carry the ore to the chute by hand with rubber pad, withdraw the rubber pad, reuse, level the working platform, and set up the ore chute to the next operation cycle.

Materials Movement and Handling

Electric locomotives are used for transportation to haul ore and waste rocks, and wooden sleeper light rails are laid in the mine (Figure 10-2). The ore is lifted to the surface by shafts with double-deck cages, unloaded to the stockpile and transported by trucks to the processing plant.

Figure 10-2: Mine cart in the underground

Source: Site visit on 31st May 2024

10.1.4 Production

History Production

The current mining operation produces approximately 400-500t of ore per with an average mining grade of 7.75g/t. **Table** 10-1 shows the historical production in the last three years. **Table** 10-2 shows the historical average grade in the last three years.

Table 10-1: Zhuanshanzi Mine Yearly Ore Production from 2021 to 2023

Ore amount (t)	2021	2022	2023
Zone 1-No.27	34,807	60,471	61,139
Zone 1-Yangpo	65,117	56,203	82,879
Zone 2-Huangjindong	17,228	14,765	8,190
Zone 3-Luofengmao	21,161	25,624	2,295
Total	**138,313**	**157,064**	**154,503**

Table 10-2: Zhuanshanzi Mine Average Yearly Au Grade from 2021 to 2023

Grade (g/t)	2021	2022	2023
Zone 1-No.27	7.93	6.34	6.78
Zone 1-Yangpo	8.16	7.92	9.99
Zone 2-Huangjindong	6.67	5.41	5.00
Zone 3-Luofengmao	7.26	5.39	5.00
Average	**7.78**	**6.66**	**8.38**

Mine Design and Access

The stope's length is 50 m, and its height is 40-45 m. Wooden hopper is used, and the ore is transported manually. The distance between hopper is 10m, the sill pillar is 3 m, and no pillar is left. There are raises beside the stope, and the section of the raise is 2.0m × 1.5m. The drift section is about 2.4m × 2.5m depending on the ore body. SRK notes that most of the drifts are solid enough to not to be supported. A few of the drifts with weak surrounding rocks need to support with shotcrete.

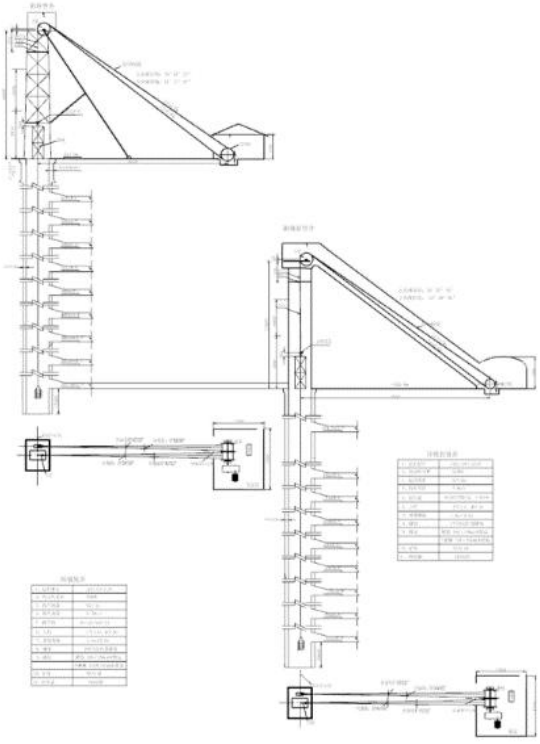
Figure 10-3 shows the design of the shaft, which is used in every zone in Zhuanshanzi Mine. There are different types of orebody access which is shown in **Table** 10-3. **Table** 10-4 shows the purpose of each development in each zone.

Table 10-3: Type of Access in Each Zone

Zone	Type of ore body access
Zone 1	Vertical shaft and Blind shaft
Zone 2	Adit and Vertical shaft
Zone 3	Vertical shaft
Zone 4	Vertical shaft
Zone 5	Vertical shaft
Zone 6	Vertical shaft
Zone 7	Vertical shaft

Source: Summarized from a PFS level of study (2018) and PFS level of study (2024)

Figure 10-3: Design of Shaft



Source: Shaft design from a PFS level study (2018)

Table 10-4: Development System in Each Zone

Zone	Development	Purpose
Zone 1	Yangpo Shaft	Transport for people, equipment, ore and waste; Downcast
	Yangpo Blind Shaft	Transport for people, equipment, ore and waste; Downcast
	No. 27 Shaft	Transport for people, equipment, ore and waste; Downcast
	No. 27 Blind Shaft	Transport for people, equipment, ore and waste
	No. 72 Blind Shaft	Transport for people, equipment, ore and waste; Downcast
	No. 1 Ventilation Shaft	Upcast
	No. 3 Ventilation Shaft	Upcast
Zone 2	Adit	Transport for people, equipment, ore and waste; Downcast
	Huangjindong Shaft	Transport for people, equipment, ore and waste; Downcast
	Blind Shaft	Transport for people, equipment, ore and waste; Downcast;
	Ventilation Shaft	Upcast; Emergency exit
Zone 3	Luofengmao Shaft	Transport for people, equipment, ore and waste; Downcast
	Blind Shaft	Transport for people, equipment, ore and waste; Downcast
	Inclined Shaft	Upcast

Zone	Development	Purpose
	Ventilation Shaft	Upcast

Source: Summarized from a PFS level of study (2018)

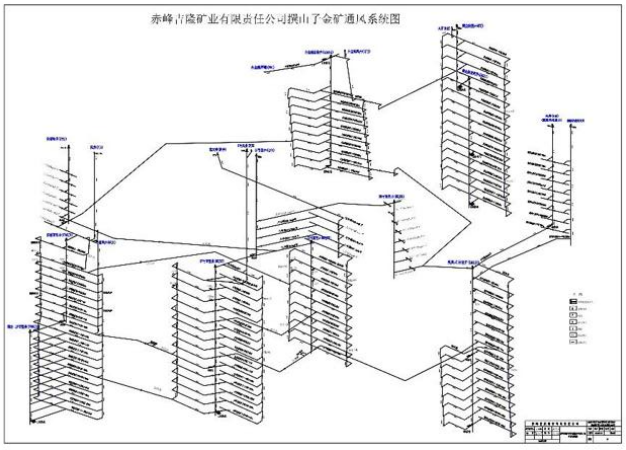
10.1.5 Underground Service

Ventilation

The air flows down the mine to the working places and levels from shafts and downcasts, and then is discharged through upcasts. The studies had designed the air flow in 2D diagram (Figure 10-4) and had estimated the air volume required for each zone individually.

During the site visit, SRK observed that the ventilation was satisfactory and did not present any potential hazards.

Figure 10-4: Example of Ventilation Design in Zhuanshanzi Mine (Zone 1 to Zone 3)



Source: Design from a PFS level of study (2018)

Dewatering

In its current configuration, the mine utilizes a two-stage drainage system. First, water from the drifts drains into a sump, and then water is pumped by pumping stations to a surface pond.

During the site visit, SRK observed that the drainage was satisfactory and did not present any potential hazards.

Air Compressor

There is an air compressor station near the wellhead, and the air leg is the drilling equipment. The analysis demonstrates that the compressed air delivery system satisfies the majority of production

requirements. A comprehensive calculation of air consumption and the selection and amount of air compressors is included in a PFS-level research study (2018).

10.1.6 Mining Equipment

The mining equipment in each zone is shown in **Table** 10-5 to **Table** 10-7.

Table 10-5: Mine Equipment in Zone 1

	Zone 1		
Equipment	**Model**	**Quantity**	**Power (kw)**
Jackleg	YT28	48	
Jackleg	YSP45	12	
Fan	JK58-1- No.3.5	8	3
Fan	JK58-1-No.4	8	5.5
Hoist	2JK2.5×1.5/11.5	1	280
Hoist	2JK2.5×1.5/20	3	315
Hoist	2JK3.0×1.5/20	1	450
Hoist	2JK2×1/20	1	200
Hoist	GK2×1.6×0.9/24	1	115
Air compressor	BLT350A-VFC/1.0	1	250
Air compressor	BLT350A-1.0	1	250
Air compressor	BLT175A-20.5/1.0	2	132
Air compressor	LG-40/8G	1	250
Cage	Double-decks	1	
Cage	Double-decks	7	
Skip	FJD3.2(7)	1	
Mine cart	YFC0.5（6）	100	
Main Fan	FKZ(K40-4) №12	3	37
Main Fan	FKZ(K40-4) №11	1	30
Auxiliary Fan	K40-4-8	16	5.5
Pump	D85-67×7	3	200
Pump	D46-50×10	3	110
Pump	D46-50×12	9	132
Pump	D46-50×9	3	110
Trolley electric locomotives	CJY3/6G	26	13

Source: Summarized from a PFS level of study (2018)

Table 10-6: Mine Equipment in Zone 2

	Zone 2		
Equipment	**Model**	**Quantity**	**Power (kw)**
Jackleg	YT-28	11	
Jackleg	YSP-45	11	
Fan	JK58-1№3.5	6	3
Hoist	2JTP1.6×0.9-24	1	115
Hoist	2JK-2×1.25	1	110
Air compressor	BLT175A-20.5/1.0	1	132
Air compressor	3L-10/8	1	75
Pump	D25-30×8	3	37
Pump	D25-50×8	3	75

Zone 2			
Equipment	**Model**	**Quantity**	**Power (kw)**
Main Fan	K45-4-8	1	7.5
Mine cart	YFC0.7m^3	40	

Source: Summarized from a PFS level of study (2018)

Table 10-7: Mine Equipment in Zone 3

Zone 3			
Equipment	**Model**	**Quantity**	**Power (kw)**
Jackleg	YT-28	11	
Jackleg	YSP-45	11	
Fan	JK58-1№3.5	6	3
Hoist	2JK-2.0×1.0	1	155
Pump	D12-25×12	3	110
Mine cart	YFC0.5m^3	60	

Source: Summarized from a PFS level of study (2018)

10.1.7 Production Schedule

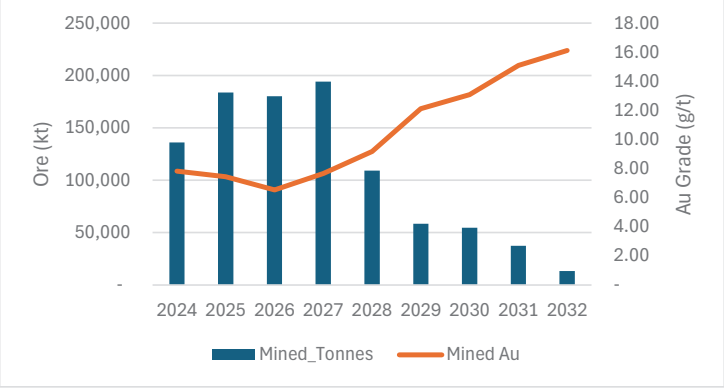
The mine schedule was developed using Deswik software, based on productivity estimates for each task. For instance, stope excavation requires several days for preparation. The assumptions for mining sequence and dependencies are as follows:

- Mining and Processing Operation: The ROM capacity remains at 180 ktpa, with Zones 4, 5, 6, and 7 scheduled to operate in 2027.
- Vertical Overlap: Mining progresses downward, level by level, with typically 3-4 levels grouped into one section for better operational flexibility.
- Horizontally Overlap: Mining advances from the hanging wall to the footwall.
- Priority: Stopes accessible via existing development will be mined first.
- Life of Mine: 9 years.

The development schedule is not considered, as the mine has been previously operational and further development is not seen as high-risk. Mining activities are expected to last approximately nine years. Zones 4, 5, 6, and 7 are new to Jilong Mining, and with the existing infrastructure in Zones 1, 2, and 3.

Figure 10-5 illustrates the production schedule, detailing both the ROM production and the ROM grade. **Table** 10-8 provides the details of mine production.

Figure 10-5: Production Schedule



Sources: SRK

Notes:

[6] The line represents the average gold grade, corresponding to the right axis.

[7] The column represents the ore amount, corresponding to the left axis.

Table 10-8: Production Schedule

Total	Unit	LoM	2024	2025	2026	2027	2028	2029	2030	2031	2032
Total Tonnes Mined	kt	**968**	136	184	180	194	109	58	55	38	13
Au grade	g/t	**8.59**	7.82	7.44	6.54	7.67	9.18	12.11	13.09	15.09	16.12
Contained Au	koz	**267**	34	44	38	48	32	23	23	18	7
Zone 1											
Total Tonnes Mined	kt	**390**	106	131	84	38	31	-	-	-	-
Au grade	g/t	**7.01**	7.70	7.13	6.84	6.21	5.61	-	-	-	-
Contained Au	koz	**88**	26	30	19	8	6	-	-	-	-
Zone 2											
Total Tonnes Mined	kt	**-**	-	-	-	-	-	-	-	-	-
Au grade	g/t	**-**	-	-	-	-	-	-	-	-	-
Contained Au	koz	**-**	-	-	-	-	-	-	-	-	-
Zone 3											
Total Tonnes Mined	kt	**287**	31	52	96	93	15	-	-	-	-
Au grade	g/t	**6.39**	8.25	8.24	6.27	5.25	3.91	-	-	-	-
Contained Au	koz	**59**	8	14	19	16	2	-	-	-	-
Zone 5											
Total Tonnes Mined	kt	**4.53**	-	-	-	5	-	-	-	-	-
Au grade	g/t	**8.94**	-	-	-	8.94	-	-	-	-	-
Contained Au	koz	**1.30**	-	-	-	1.30	-	-	-	-	-
Zone 6											
Total Tonnes Mined	kt	**184.23**	-	-	-	36	45	34	28	28	13
Au grade	g/t	**13.82**	-	-	-	12.57	12.70	12.51	14.92	16.55	16.12
Contained Au	koz	**81.85**	-	-	-	15	18	14	14	15	7

Total	Unit	LoM	2024	2025	2026	2027	2028	2029	2030	2031	2032
Zone 7											
Total Tonnes Mined	kt	**101.63**	-	-	-	23	19	25	26	10	-
Au grade	g/t	**11.37**	-	-	-	12.06	10.93	11.57	11.10	10.79	-
Contained Au	koz	37.14	-	-	-	9	7	9	9	3	-

Sources: SRK

10.2 Huatai Project

10.2.1 Introduction

Huatai Project includes six (6) gold mines, each with an independent development system. They are all utilizing or planning conventional underground mining methodologies, access via adit & shaft or incline shaft, resuing stoping method, railway ore car transportation. Huatai Project operation and plan status are described as follows:

- Pengjiagou Mine: the mining license (30ktpa) was obtained in 2015. The client conducted a preliminary design on this mine, decided to commend its production in 2028.
- Honghuagou #86 Vein: the mining license limits capacity of 30ktpa as the same as Pengjiagou, the client decided to delay construction on this mine.
- Honghuagou #1 Mining Zone: this mine contained 4 sub-zones with their own mining license, which are #1 vein, #3 sub-zone, #1 sub-zone, and Longtoushan. The client conducted a preliminary design on these sub-zones, decided to commend its production in 2027.
- Lianhuashan #26 Vein: the mining license limits capacity of 30ktpa as similar as the Pengjiagou and #86. The client conducted a preliminary design on this mine, decided to commend its production in 2028.
- Lianhuashan #3&#7 Vein: the mining license is also 30ktpa capacity. The client conducted a scoping studies and preliminary design on this mine, decided to commend its production in 2027.
- Lianhuagou #5 Mining Zone: this mine has also decided to modify mining system to achieve the capacity of 60ktpa from the previous 30ktpa. The client conducted a preliminary design on this mine, decided to commend its production in 2026.

10.2.2 Geotechnical and Hydrogeological Conditions

Visually, the geotechnical & hydrogeological conditions of Lianhuashan #5 Zone, where SRK visited are fair to good. The rock looks integrity underground, and the drifts are unsupported mostly. Local support by wood or steel arcs is necessary where small faults cross the drift.

The tunnels back and walls are dry, and the water on floor is minimum, collecting at the ditch then staged pumps to water tanks close to the adit exits.

SRK opines that both geotechnical and hydrogeological risks are medium to low as the available data and the site views.

10.2.3 Mining Method

Huatai Project using a modified resuing stoping method, named slice and fill with rock, for all stopes of mining zones, and planned to use this method for the rest Mineral Resources in future.

The stoping method is suitable for the veins horizontal thickness is less than 0.8m. the mining cycle is from the footwall waste mining, to give a space for miner operation to drill ore blasting holes. Then mine the ore down to the pad at the bottom of slice. The broken ore will be cleaned into artificial ore pass within the stope down to the draw point for ore car collection. Then fill the slice with rock from development heading on upper levels via raises, or mine footwall rock down to perform the work platform for miners to drill the next lift. The modifying point from traditional resuing is the rock sourced out of stope partly, not all from surrounding rock mined down.

The stope length is about 50 to 100m and the height is the same as level interval. There are no crown pillar or rib pillar planned, the sill pillar is proposed for draw point installation and separation stopes. The square-set raise for manway is planned at each end of stope. The draw points interval is about 10m middle to middle.

10.2.4 Production

Historical Production

The current mining operation has been suspended due to technical upgrade and expansion. **Table** 10-9 below displays the historical production records.

Table 10-9: Huatai Project Yearly Ore Production from 2020 to 2023

	2020	2021	2022	2023
Ore (kt)	59,592	53,071	16,929	-
Grade (g/t)	2.37	1.89	1.80	-

Sources: Client

Mine Design and Access

As for Lianhuashan #5 Zone, the underground mine is accessed via 3 staged shafts from surface down to Level 18, as followings:

- Stage I: adit and incline shaft, serving the first 5 levels, the Mineral Resources on these 5 levels are nearly depleted.
- Stage II: a blind caged shaft from Level 5 down to Level 12 as the main access to these levels. The resources on these levels are mined these resent years.
- Stage III: a third shaft have been established to serve the Level 12 down to Level 18. The resources on these levels are the key mining target supporting the production expansion plan.

The broken ore from the stopes is loaded into ore cars from the draw point at the sill of stope. The ore cars are hauled by locomotive via the level drift to shaft station at the level access. The ore is then relayed hoisted to surface by the hoisting system in the shafts.

The waste rock from development headings is backfilled into mined stope.

All personnel and materials are transported in and out of the mine via the staged shafts and level drifts. The level interval is about 40m height, totally 18 levels have been established. The main adit portal and shaft station of level 5 are shown in Figure 10-6, the typical level drift and crosscut drift are shown in Figure 10-7.

Figure 10-6: Photos of Main Adit Portal and Shaft Station on Level 5

Sources: shot during site visit on 25th Dec 2022

Note: Exit Adit of Lianhuashan #5 Zone (left) and Stage II Shaft Station on Level 5 (right)

Figure 10-7: Photos of Typical Level Drift and Cross Cut Drift of Lianhuagou #5 Zone

Sources: shot during site visit on 25th Dec 2022

Note: Typical Level Drift on Level 5 (left) and Typical Cross-cut Drift on Level 8 (right)

Other Mining Zones

As previously described, similar to the Lianhuashan #5 Zone, all other sub-zones are either currently utilizing or planning to utilize conventional underground mining methodologies. Concurrently, preliminary designs for all sub-zones have been conducted in accordance with Chinese Standards. Along with historical operation records, SRK considers these designs to be pre-feasible for guiding Ore Reserves estimation.

10.2.5 Underground Service

Ventilation system, water supply compressed air supply, drainage, and power supply system for #5 Zone is established, and the expansion construction is ongoing. For the Lianhuashan #1 Zone and Lianhuashan #3&#7 Vein, the expansion construction and technical updates are planned to be completed by the end of 2026. For the Pengjiagou and Lianhuashan #26 Vein, the construction is scheduled to be completed in 2029. The expansion plan consists of development system update, machinery purchase and installation, drift renew and re-rail or enlarge the cross-section size, as well as update the service system to fit the enlarged capacity from 30ktpa to 60ktpa.

The level 5 staged sump of #5 Zone and the main power substation underground is shown in Figure 10-8 below.

Figure 10-8: Photos of Level 5 Sump and Main Power Substation of Lianhuagou #5 Zone

Sources: shot during site visit on 25th Dec 2022

Note: Level Sump of # 5 Zone (left) and Main Power Substation on Level 5 (right)

10.2.6 Mining Equipment

The mining equipment in each zone is shown in Table 10-10.

Table 10-10 Main Mine Equipment for Huaitai Project

Equipment	Model	#5 Mining Zone Quantity	Power (kw)
Cage	GLM1/6/2/2	4	
Cage	GDG1/6/2/2	2	
Compressor	LG-13/8G	1	75
Compressor	LG-1 .5/8	3	55
Electric Locomotives	CTY2.5-6GB	3	4
Hoist	2JK2×1/2	2	2
Hoist	2JK2.5×1.2	1	28
Hoist	JKM-2.25×4	1	28
Jackleg	YT-28	4	
Jackleg	YSP-45	2	
Main Fan	FKCDZ No.13/2×37	1	2×37
Material Trolley		3	
Pump	D46-5 ×5	3	55
Pump	D46-5 ×7	6	9
Pump	D46-5 ×1	3	132
Secondary Fan	FBY No. 5.	8	11
Equipment	**Model**	**#3&#7 Vein Quantity**	**Power (kw)**
Cage	YJGG-1.8-2	3	
Compressor	LG-20/8	3	110
Electric Locomotives	ZK3-250/6	6	13
Hoist	2JK-2/30A	1	153
Hoist	2JK-3/30A	1	355
Loading Machine	Z-17AW	12	21
Main Fan	K40-4-11	2	30
Pump	D25-30×6	3	30
Pump	D25-50×11	3	90
Pump	D45-50×7	3	75
Secondary Fan	YBT52-2	12	11
Equipment	**Model**	**#26 Vein Quantity**	**Power (kw)**
Cage	YJGG-1.8-1	1	
Compressor	EX-132A 22.5m^3/min	2	132
Electric Locomotives	CTY2.5/6G	3	4
Hoist	2JK-2/20A	1	215
Jackleg	YT-28	8	
Jackleg	YSP45	4	
Loading Machine	Z-17A	3	21
Main Fan	FKZ-No10/15	2	15
Pump	D85-45×10	3	200
Scraper	2JP-7.5	4	8
Secondary Fan	JK58-1 №4.0	6	6
Secondary Fan	JK58—1No4.5	2	11
Equipment	**Model**	**Pengjiagou Mine Quantity**	**Power (kw)**
Cage	YJGG-1.8-1	2	
Compressor	EX-55A 10.2m^3/min	6	55
Electric Locomotives	CTY2.5/6G	6	4
Hoist	2JK-2/20A	2	215
Jackleg	YT-28	12	
Jackleg	YSP45	8	
Loading Machine	Z-17A	6	21
Main Fan	FKZ-No11/30	2	30

Pump	D25-50×8	6	75
Scraper	2JP-7.5	6	8
Secondary Fan	JK58-1№4.0	6	6
Secondary Fan	JK58—1No4.5	4	11
		#1 Mining Zone	
Equipment	**Model**	**Quantity**	**Power (kw)**
Cage	GLGA-1.8-1	1	-
Cage	Double Deck	4	-
Compressor	LG-10.5/8	6	55
Compressor	BLT100A-10.5/1.0	2	75
Compressor	4L-20/8	1	130
Compressor	2V-7/7	1	39
Hoist	2JTP-1.6×0.9	2	40
Hoist	2JK-2/30A	1	155
Hoist	2JTP-1.6/20A	1	80
Hoist	2JTP-1.2×0.8	2	55
Hoist	2JK-2.0×1.25	1	155
Hoist	JTP-1.2×1.0	1	55
Hoist	2JTP-1.6	1	80
Hoist	JTK-1.0	2	22
Jackleg	YT28	5	-
Main Fan	K40-4-No9	1	11
Main Fan	K40-4-11	1	30
Main Fan	K40-4-10	2	15
Main Fan	K40-4-9	1	11
Pump	D46-50×8	3	90
Pump	D25-50×7	6	55
Pump	D46-50×7	9	95
Pump	D25-30×3	3	15
Pump	D25-50×9	3	75
Pump	D25-30×4	3	19
Pump	D46-50×3	6	37
Secondary Fan	BT52-2	4	11
Secondary Fan	JK58—NO4	4	6
Secondary Fan	JK58-1No.4	8	6
Secondary Fan	K40-4-8	8	6
Secondary Fan	JK58-1NO4	4	6
Trolley Car		9	-

Source: Summarized from the studies

10.2.7 Production Schedule

The mine schedule was developed using Deswik software, based on productivity estimates for each task. For instance, stope excavation requires several days for preparation. The assumptions for mining sequence and dependencies are as follows:

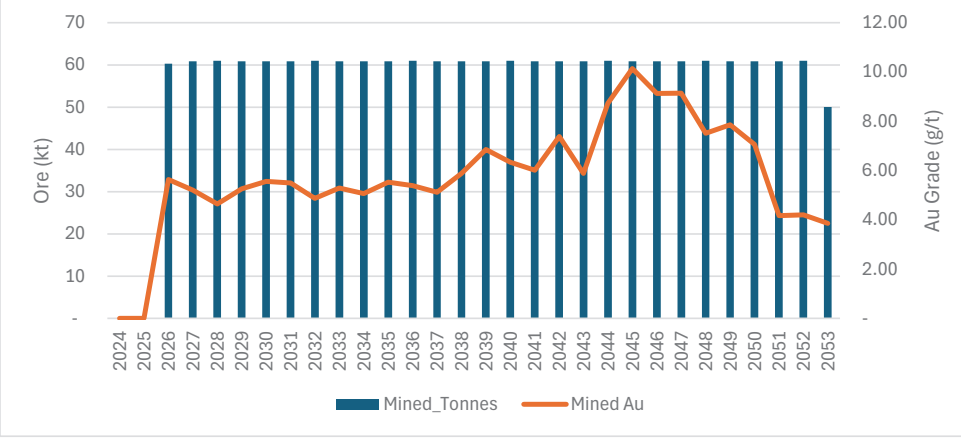
- Mining and Processing Operation: Operations is estimated to start in 2026 with the ROM capacity of 60ktpa.
- Vertical Overlap: Mining progresses downward, level by level, with typically 3-4 levels grouped into one section for better operational flexibility.
- Horizontally Overlap: Mining advances from the hanging wall to the footwall.
- Priority: Based on the current development system and the anticipated yield of mined metals, as well as considering the client's operational strategy, the initial mining operations will focus on #1 Zone and #3&#7 Vein. These will be followed by the extraction of resources from #26 Vein, #5 Zone, and Pengjiagou.

- Life of Mine: 28 years.

The development schedule is not considered, as the mine has been previously operational and further development is not seen as high-risk.

Figure 10-9 illustrates the production schedule, detailing both the ROM production and the ROM grade. Table 10-11 provides the details of mine production.

Figure 10-9: Production Schedule



Sources: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

[2] The column represents the ore amount, corresponding to the left axis.

Table 10-11: Production Schedule

Total	Unit	LoM	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
Total Tonnes Mined	kt	**1,693.20**	-	-	60.3	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	50	-	-	-
Au grade	g/t	**6.2**	-	-	5.6	5.2	4.6	5.3	5.6	5.5	4.9	5.3	5.1	5.5	5.4	5.1	5.9	6.9	6.3	6	7.4	5.9	8.7	10.1	9.1	9.1	7.5	7.9	7.1	4.2	4.2	3.9	-	-	-
Contained Au	koz	**337.5**	-	-	10.9	10.2	9.1	10.3	10.9	10.7	9.6	10.3	9.9	10.8	10.6	10	11.5	13.4	12.4	11.8	14.4	11.5	17.1	19.8	17.9	17.9	14.7	15.4	13.8	8.2	8.2	6.2	-	-	-
Zone 1																																			
Total Tonnes Mined	kt	**789.2**	-	-	-	-	-	33.9	60.8	60.8	61	60.8	60.8	60.8	61	60.8	60.8	60.8	61	60.6	22.7	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Au grade	g/t	**5.7**	-	-	-	-	-	6.1	5.6	5.5	4.9	5.3	5.1	5.5	5.4	5.1	5.9	6.9	6.3	6	8.4	5.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Au	koz	**145.1**	-	-	-	-	-	6.7	10.9	10.7	9.6	10.3	9.9	10.8	10.6	10	11.5	13.4	12.4	11.7	6.1	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
Vein 26																																			
Total Tonnes Mined	kt	**154.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44.2	60.8	49.7	-	-	-	-	-	-
Au grade	g/t	**7.7**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	7.9	7.7	-	-	-	-	-	-
Contained Au	koz	**38.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.7	15.4	12.3	-	-	-	-	-	-
Vein 3&7																																			
Total Tonnes Mined	kt	**357.3**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	38.1	58.6	61	60.8	60.8	60.8	16.8	-	-	-	-	-	-	-	-
Au grade	g/t	**8.4**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	6.8	5.9	8.7	10.1	9.1	9.1	7.5	-	-	-	-	-	-	-	-
Contained Au	koz	**96.2**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	8.3	11.1	17.1	19.8	17.9	17.9	4.1	-	-	-	-	-	-	-	-
Area 5																																			
Total Tonnes Mined	kt	**209**	-	-	60.3	60.8	61	26.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Au grade	g/t	**5**	-	-	5.6	5.2	4.6	4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Au	koz	**33.8**	-	-	10.9	10.2	9.1	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PJG																																			
Total Tonnes Mined	kt	**183**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.2	60.8	61	50	-	-	-
Au grade	g/t	**4.1**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	4.2	4.2	3.9	-	-	-
Contained Au	koz	24.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.5	8.2	8.2	6.2	-	-	-

Sources: SRK

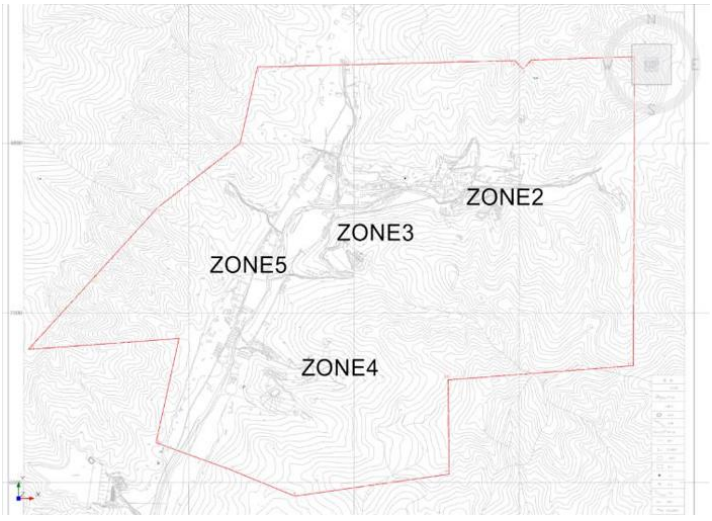
10.3 Wulong Project

10.3.1 Introduction

The administrative division of the Wulong Gold Mine is governed by Zhen'an District of Dandong City, which is located 15km to the northwest of Dandong City. The mine is located on mining lease C2100020011084140116558. The mining level is from 100m asl to -750m asl, with a total area of 6.4990 km^2. The mine started small-scale mining in 1938, became a state-run mine in 1948, and changed from a state-run mine to a private mine in 2009, and the mine has closed the abandoned drift and backfilled the excavated voids with waste rock.

Wulong Gold Mine now has three stand-alone underground operating systems: Zone 2, Zone 3, and Zone 4. Zone 4 is further separated into the main shaft zone and the service shaft zone, which is also known as Zone 5. Figure 10-10 shows the location of each zone.

Figure 10-10: Zone Layout



10.3.2 Geotechnical and Hydrogeological Conditions

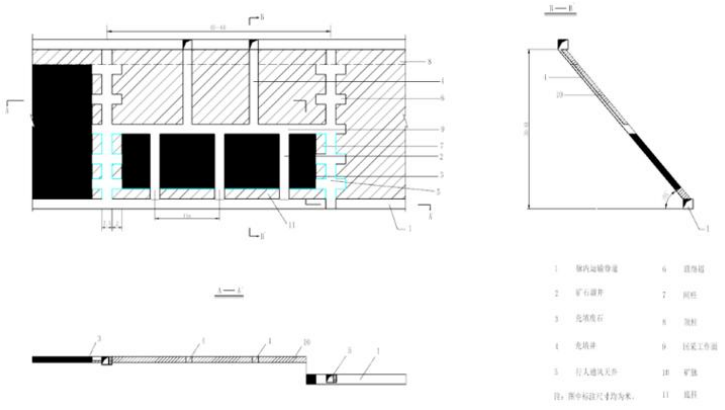
Visually, the geotechnical and hydrogeological conditions at the Wulong Project, as observed by SRK during the site visit, range from fair to good. The underground rock appears intact, with most drifts being unsupported. However, localized support using wood or steel arches is necessary where minor faults intersect the drifts. The tunnel backs and walls are dry, with minimal water on the floor, which is collected in ditches and pumped to water tanks near the adit exits. Based on the available data and site observations, SRK considers the geotechnical and hydrogeological risks to be medium to low.

10.3.3 Mining Method

For steep and thin orebody with solid surrounding wall rocks, resuing method is adopted to separate the ore and surrounding rocks, with the ore being transported and extracted while the waste is kept in the stope for backfilling.

For relatively thicker orebody, overhand cut and fill mining is adopted (See Figure 10-11). Cut and fill mining allows selective mining, separate recovery of high-grade portions, and stope retention of low-grade rock. Excavated voids are backfilled with waste rock once the stope has been mined out. This method provides a relatively inexpensive and convenient way to advance a working platform in order to keep access to the ore for drilling, blasting, and mucking.

Figure 10-11: Overhand Cut and Fill



Source: Design from a PFS level of study (2020)

The stope is around 40 to 60 m wide, and it is not more than 40 m height. The section of the raise is 1.5m x 2.5m. There is a hopper set up every 15 m or so. Each stope has one to two raises that are connected to the upper middle level so that the waste rock can be used to backfill the stope. Once the bottom drift has mined out, the void is backfilled with waste rock generated by development to other level. The waste rock is stored underground in unused drifts.

Materials Movement and Handling

Electric locomotives are used for transportation to haul ore and waste rocks, and wooden sleeper light rails are laid in the mine. The ore is lifted to the surface by shafts with double-deck cages, unloaded to the stockpile and transported by trucks to the processing plant.

10.3.4 Production

History Production

The current mining operation has produced approximately 1,200 t of ore per day over the past three years. Table 10-12 shows the yearly production for each zone, with Zones 3 and 4 being the primary

production areas. The planned mining capacity is 100,000 t per annum based on design capacity. The historical overproduction is due to residues and stockpiles in stopes, along with the mine hauling out low-grade ore as the high gold prices have lowered the cut-off grade.

Table 10-12: Wulong Mine Yearly Ore Production from 2021 to 2023

Ore amount (t)	2021	2022	2023	Total
Zone 2	75,974	-	83,628	159,602
Zone 3	143,009	157,031	169,360	469,400
Zone 4	77,602	216,859	168,297	475,103
Zone 5	59,128	12,058	93,207	152,335
Subtotal	**355,713**	**385,948**	**514,492**	**1,256,440**

Table 15-9 shows the average yearly grade for each zone, with an overall mining grade of 3.47g/t. SRK notes that this is significantly lower than the geological grade, which ranges from 7 to 9g/t. The primary reason for this discrepancy is the mixing of ore from residues, development, and stockpiles. Additionally, the mining grade from the monthly statements suggests that the actual dilution rate may be higher than the intended 10%.

The ore distribution for the last three year is shown in **Table** 10-13. Residues are the stopes that the prior old mine regarded low-grade with no value. The stockpile is low-grade ores from the prior old mine with an Au grade of less than 3g/t, which was heaped in the drift rather than being transferred to the processing plant. Now that the price of gold has increased, the mines have begun to excavate the low-grade stope and transport the stockpile of previously low-grade ore to the processing plant. About 70% of the ore are from the stope (**Table** 10-13), and the stope has the highest grade (**Table** 10-14). It should be noted that this number is not totally correct since during the mine site SRK has been informed that the ore distribution is hard to distinguish between stope and hauling the residues and stockpiles in stopes.

Table 10-13: Wulong Mine Average Yearly Au Grade from 2020 to 2022

Au grade (g/t)	2021	2022	2023	Average
Zone 2	2.42	-	2.57	2.89
Zone 3	2.79	3.28	4.55	3.64
Zone 4	2.97	3.73	3.75	3.66
Zone 5	2.81	3.12	3.49	3.29
Average	**2.75**	**3.52**	**3.78**	**3.47**

Table 10-14: Ore Distribution from 2020 to 2022

Year	Stope			Residues			Development and stockpile		
	Ore (t)	Grade (g/t)	Au (kg)	Ore (t)	Grade (g/t)	Au (kg)	Ore (t)	Grade (g/t)	Au (kg)
2021	269,193	2.89	778	69,895	2.35	164	16,625	2.27	38
2022	266,640	3.79	1,010	100,499	2.95	297	18,809	2.84	53
2023	425,739	3.98	1,696	69,288	2.83	196	19,465	2.63	51
Total	961,572	3.62	3,483	239,682	2.74	657	54,899	2.59	142

Mine Design and Access

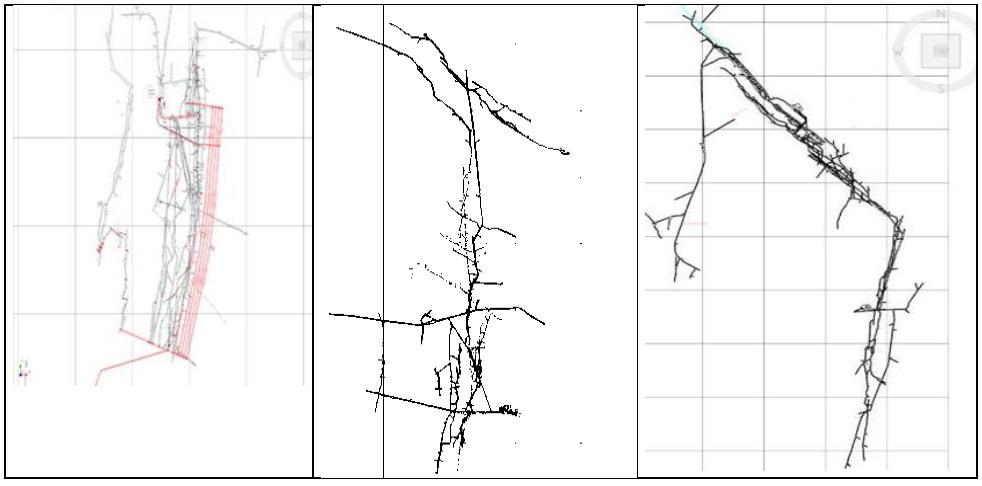
The section of the drift is about 2.4m x 2.5m. SRK notes that most of the drifts are solid enough to not to be supported (Figure 10-12). A few of the drifts with weak surrounding rocks are supported with wood or steel arcs.

Wulong Mine is accessed from shafts with double-deck cages in each zone. Each cage carries 9 people at one time. The current mine as-builts for each area are shown in Figure 10-13.

Figure 10-12: Level 7 in Zone 2 (-136m asl)

Source: Site visit on 23rd Dec 2022

Figure 10-13: Pan Views of Zone 2 (left), Zone 3 (centre) and Zones 4 and 5 (right) As-builts

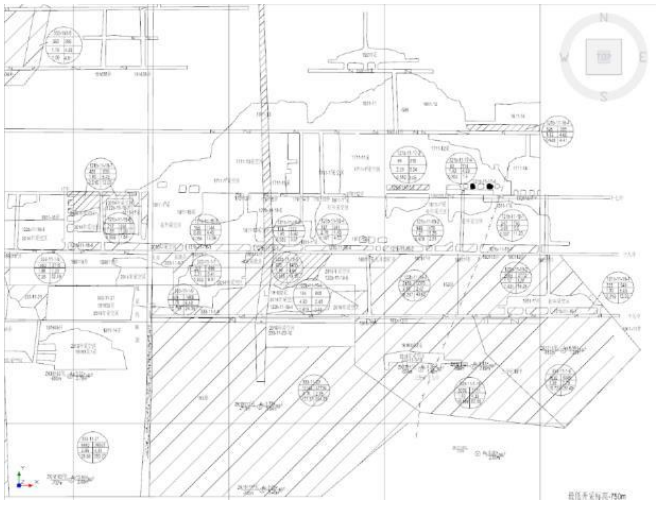


Source: Management

SRK notes that the individual stopes are designed using 2D polygonal long sections once they reach the level through development. Figure 10-14 shows the long section in Zone 4. This method is to divide the ore body into different small blocks according to the geological characteristics and conditions of the deposit (such as ore grade, natural type, reserve category, technical conditions of mining and hydrogeological conditions of the deposit, etc.) or exploration engineering, and for each block, the reserves can be estimated by the arithmetic average method.

SRK notes that this is a medium-risk mine design method, although it is frequently used in highly variable vein systems in China.

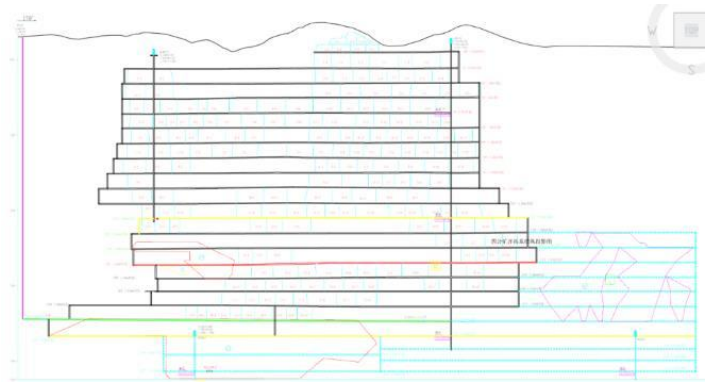
Figure 10-14: Aver Example of 2D polygonal long sections in Zone 4



Source: Management

The development system is shafts and blind shafts. Shafts are being used for transporting ore and waste and personnel. Development to access these stope blocks is designed years in advance. An example of the development design is shown in Figure 10-15. The schedule is based on designs, crosscut assess, faces, raises, and ventilation.

Figure 10-15: Example of development design in Zone 4 and Zone 5



Source: Management

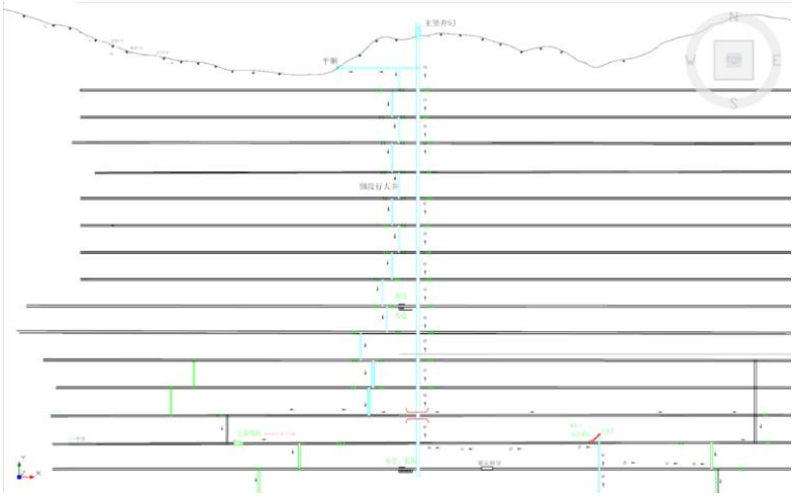
10.3.5 Underground Service

Ventilation

The air flows down the mine to the working places and levels from shafts and downcasts, and then is discharged through upcasts. Figure 10-16 shows the internal design of ventilation. SRK notes that there is no software simulate the rates of flow but only 2D design.

During the site visit, SRK observed that the ventilation was satisfactory and did not present any potential hazards.

Figure 10-16: Ventilation system design in Zone 3



Source: Ventiation design from a PFS level of study (2020)

Dewatering

The current dewatering capacity for the mine is supported by a system of electric pumps set in various levels and locations. Water from the drifts drains into a sump, and then water is pumped by pumping stations to a surface pond.

SRK notes that the problem of water accumulation is not serious during site visit.

Air Compressor

According to a PFS-level research study, the amount of air compressors was calculated by the air consumption of jackleg. The analysis demonstrates that the compressed air delivery system satisfies the majority of production requirements.

10.3.6 Mining Equipment

The quantity of major mining equipment used underground is summarized in **Table** 10-15. The amount and size of the equipment seem to be enough for the operation. SRK notes that only a few equipment is in poor condition. It is less likely that there would be a scarcity of equipment because the mining equipment is less expensive and requires a smaller investment.

Table 10-15: Mining Equipment in Each Zone

Equipment	Zone 2	Zone 3	Zone 4	Zone 5	Total
Trolley electric locomotives	46	25	47	16	134
Electric loader	17	15	20	14	66
Electric scraper	12	13	23	5	53
Mine cart	203	213	281	165	862

Source: Management

10.3.7 Production Schedule

The mine schedule was developed using Deswik software, based on productivity estimates for each task. For instance, stope excavation requires several days for preparation. The assumptions for mining sequence and dependencies are as follows:

- Mining and Processing Operation: Operations remain with the ROM capacity of 100ktpa.
- Vertical Overlap: Mining progresses downward, level by level, with typically 3-4 levels grouped into one section for better operational flexibility.
- Horizontally Overlap: Mining advances from the hanging wall to the footwall.
- Priority: Stopes accessible via existing development will be mined first.
- Life of Mine: 12 years.

Due to the existing infrastructure, there is no ramp-up period.

Figure 10-17 illustrates the production schedule, detailing both the ROM production and the ROM grade. Table 10-16 provides the details of mine production.

Figure 10-17: Production Schedule

Sources: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

[2] The column represents the ore amount, corresponding to the left axis.

Table 10-16: Production Schedule

Wulong	Unit	LoM	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total									
Total Tonnes Mined	**kt**	**1,029**	72	99	99	98	99	108	108
Au grade	**g/t**	**7.35**	7.64	7.55	8.70	7.71	7.40	7.32	7.51
Contained Au	**koz**	**243**	18	24	28	24	24	25	26
Zone 2									
Total Tonnes Mined	**kt**	**174**	23	30	30	29	30	17	14
Au grade	**g/t**	**7.29**	8.77	5.96	6.94	8.17	6.28	7.84	8.00
Contained Au	**koz**	**41**	7	6	7	8	6	4	4
Zone 3									
Total Tonnes Mined	**kt**	**605**	22	30	30	29	30	50	70
Au grade	**g/t**	**6.79**	4.37	5.66	8.37	6.77	6.94	6.75	7.79
Contained Au	**koz**	**132**	3	5	8	6	7	11	18
Zone 4									
Total Tonnes Mined	**kt**	**138**	9	14	20	21	27	26	21
Au grade	**g/t**	**8.21**	10.16	10.16	9.10	6.18	9.34	7.63	6.47
Contained Au	**koz**	**37**	3	5	6	4	8	6	4
Zone 5									
Total Tonnes Mined	**kt**	**111**	18	26	20	19	12	14	
Au grade	**g/t**	**9.43**	8.83	10.16	11.42	10.17	6.91	8.13	
Contained Au	**koz**	**34**	5	8	7	6	3	4	

Sources: SRK

Wulong		LoM	2031E	2032E	2033E	2034E	2035E
Total							
Total Tonnes Mined	**kt**	**1,029**	102	101	66	44	33

Wulong		LoM	2031E	2032E	2033E	2034E	2035E
Au grade	**g/t**	**7.35**	7.19	5.83	7.74	7.58	4.63
Contained Au	**koz**	**243**	24	19	16	11	5
Zone 2							
Total Tonnes Mined	**kt**	**174**	1				
Au grade	**g/t**	**7.29**	7.28				
Contained Au	**koz**	**41**	0				
Zone 3							
Total Tonnes Mined	**kt**	**605**	100	101	66	44	33
Au grade	**g/t**	**6.79**	7.18	5.83	7.74	7.58	4.63
Contained Au	**koz**	**132**	23	19	16	11	5
Zone 4							
Total Tonnes Mined	**kt**	**138**	0				
Au grade	**g/t**	**8.21**	8.01				
Contained Au	**koz**	**37**	0				
Zone 5							
Total Tonnes Mined	**kt**	**111**					
Au grade	**g/t**	**9.43**					
Contained Au	**koz**	**34**					

Sources: SRK

10.4 Hanfeng Project

10.4.1 Introduction

Hanfeng Mining operate 2 established mines, the Lishan Mine and the Dongfeng Mine. They are both utilising conventional underground mining methodologies, access via adit & shaft, shrinkage stoping method, railway ore car transportation. There are 2 processing plants which located in Lishan and Dongfeng respectively. Lishan plant is focused on zinc, lead, and copper resources. Dongfeng Plant processes molybdenum feeds. The infrastructure of both mines is established, and the risk of shortage of power, water, fuel, and materials is low.

The two mines of Hanfeng Project operation and plan status are described as followings:

- Lishan Mine is divided into 2 parts in vertical.
  - The upper part which is above -92m asl, is operated at a nominated capacity of 165ktpa ROM contains zinc, lead, and copper elements, feeding the Lishan plant. The upper part is currently in operation to mine the historically residual inventory. It has been confirmed with the client that the upper part is not within the scope of the Ore Reserves estimation
  - The lower part which is from -92m asl to -700m asl is planned to construct in 2 stages.
    - Stage I is targeting the Mineral Resource from -92m asl down to -373m asl. Stage I is proposed at a capacity of 435ktpa, operating with upper part together to achieve 600ktpa capacity. The construction of Stage I is on progress currently (as of March 2024). Main shaft has been development but not equipped due to ventilation shaft and return air drift is on developing.
    - Stage II will focus on the Mineral Resource under -373m asl, downwards -700m asl. The management of the Company aims achieving 600ktpa capacity of this stage II relay the

Stage I and the upper part operation. However, the technical studies and/or design on this stage is not initiated yet.

- Dongfeng Mine is also divided into 2 parts in vertical, and the intersection elevation is 250m asl.
  - The upper part is on operating as South section and North section
    - South section contains the Mineralisation veins of Zinc, Lead, and copper. This section mined 36kt feed in 2022, and the management the Mineral Resource is nearly depleted. However, they are hoping that the exploration during operation by along veins developing would reveal more resource to maintain a mining plan of 60ktpa for next 3 years. The ore of this section is trucked to Lishan plant for treatment.
    - North section contains veins of Molybdenum element. This section was on care and maintenance before 2022. In 2022 this section was re-operated 6k ROM. Dongfeng Plant was also re-operated to treat this 6k ROM and 9k ore from surface stockpile, which was stored for nearly 10 years.
  - The lower part is for North section which is Moly resources. As of 31 March 2024, the lower part Mineral Resources were estimated, but the technical study is not initialled yet for lower part as well as the mining license is not applied.

Only the Lower Part (Stage 1) of the Lishan Mine was considered during the Ore Reserves estimation, based on the status as of 31 March 2024.

10.4.2 Geotechnical & Hydrogeological Conditions

Visually, the geotechnical & hydrogeological conditions of Dongfeng mine, where SRK visited, are fair to good. The rock looks integrity underground, and the drifts are unsupported mostly. Local support by wood or steel arcs is necessary where small faults are crossing the drift. The surrounding rock of zinc veins are fair, but those around moly veins are weaker than zinc veins. The exposure time is controlled by the operation to mitigate the risk of hanging wall failure, as stated by the management.

The tunnels back and walls are dry, and the water on floor is minimum, collected at the ditch then pumped in stages to wate tanks close to the adit shaft exits.

The geotechnical & hydrogeological parameters for upper parts of Lishan and Dongfeng mines are unavailable to review. The lower part (Stage I) of Lishan Mine has studied and reported geotechnical & hydrogeological conditions. The mechanical properties of rock and ore are summarized in **Table** 10-17. Considering the size of openings, the preliminary design proposed unsupported tunnelling for most drifts and stopes, wood or steel arc would be applied where weak zones occurred, or faults are encountered.

Table 10-17: Summary of Rock Mechanical Properties of Lishan Lower Part (Stage I)

Property	Unit	Ore	Surrounding
Testing Blocks	QTY	11	37
Uniaxial Compressive Strength	MPa	77.68-80.31	84.92-42.71
Extension Strength	MPa	6.69-7.09	2.77-7.52
Cohesion	MPa	8.82-9.02	4.92-9.76

Property	Unit	Ore	Surrounding
Internal Friction Angle	degree	50.96-51.07	42.16-53.71
Average RQD	%	90.8	90.9
Class	N/A	Fair	Fair

Sources: Lishan LS1

The water inflow estimated for the Lishan Lower part, are 434m^3 per day normally, and 3,430m^3 per day maximum. Considering the records of drainage at the range of 200m^3 to 500m^3 per day, hydrogeological condition is classified as simple.

SRK opines that both geotechnical and hydrogeological risks are medium to low based on the available data and the site inspections.

10.4.3 Mining Method

Lishan Upper Part

Lishan Upper Part using shallow hole shrinkage stoping method for all the stopes. When the horizontal width of vein is wider than 2m, no sill pillar stope structure is applied. Otherwise, the stope will leave a 5m high sill pillar for draw points. The crown pillar of stope is 3-4m height. The stope length is about 50m and the height is the same as level interval. The rib pillar is 5-6m and the raise for manway is located in the rib pillar. the draw points interval is about 6-7m middle to middle.

Lishan Lower Part Stage I

The preliminary design for Lishan lower Part proposed 4 stoping methods that suit different vein widths, which are as presented in **Table** 10-18.

Table 10-18: Summary of Stoping Methods for Lishan Lower Part (Stage I)

Parameters	Unit	Shrinkage delay fill	Slice & fill	Resuing	sub-level open stope delay fill
Vein horizontal thickness	m	0.8-5	0.8-5	<0.8	>5
Dipping	degree		>50		
Percentage	%	35	15	10	40
Stope productivity	tpd	150-200	60-80	20-30	200-250
Loss	%	10	12	15	10
Dilution	%	11	10	17	10

Sources: Lishan LS1

The backfill material is waste rock during drift developing.

Dongfeng Upper Part

Dongfeng Upper Part is using the same method as Lishan upper part, which is shrinkage stoping method for all the stopes.

10.4.4 Production

History Production

Table 10-19 below displays the historical production records. According to the client, the ore from the Lishan Mine Upper Part and the Dongfeng Mine Upper South primarily contains zinc and is processed at the Lishan Plant. The ore from the Dongfeng Mine Upper North primarily contains molybdenum and is processed at the Dongfeng Plant. The client did not provide the mined grade data; the only grade information provided by the client pertains to the processing plant input grade.

Table 10-19: Hanfeng Project Yearly Ore Production from 2020 to 2023

		2020	2021	2022	2023
Lishan Mine Upper Part	Ore (t)	426,447	426,347	414,742	285,783
Donfeng Mine Upper South	Ore (t)	69,260	41,389	32,655	12,406
Dongfeng Mine Upper North	Ore (t)	-	-	21,295	70,405

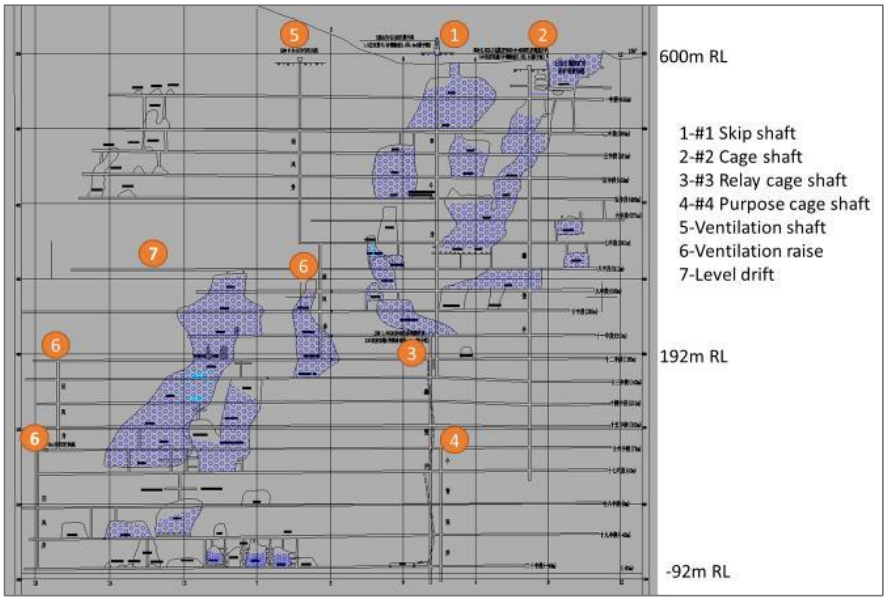
Sources: Client

Underground Mine Design

Lishan Upper Part

The underground mine is accessed via a #2 cage shaft which is from the surface down to 42m asl, the under levels are accessed via relay cage shaft. The run of mine is hoisted up to surface via the #1 skip shaft. The projected view of the mine design is presented in Figure 10-18.

Figure 10-18: Longitudinal Projected View of Lishan Upper Part



Sources: Client

The broken ore from the stopes is loaded into ore cars by the railway ore loader. The ore cars are hauled by locomotive via the level drift to shaft station at the level access. The ore is then hoisted to surface by the hoisting system in the skip shaft. All personnel and materials as well as the waste rock are transported in and out of the mine via the #2 cage shaft and level drifts. The level interval is about 30m height, totally 20 levels have been established.

Lishan Lower Part Stage I

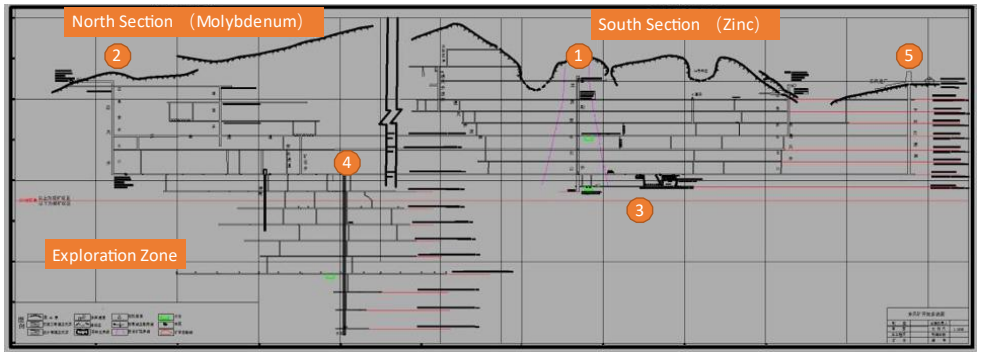
Lishan lower part Stage I designed as adit & blind shaft development. The adit is at 554m asl and the shaft from this adit down to -373m asl with a diameter of 5m, equipping cage. All materials, personal and run of mine are transported via this main shaft. the waste rock will be backfilled into mined voids as planned. When waste rock could not be balanced to fill, the rest waste will be hoisted via the main shaft out.

The level transported as similar as the upper part using ore car hoisted by locomotive from stope to shaft station on each level access.

Dongfeng Upper Part

Dongfeng Mine upper part is accessed via a main cage shaft which is from the surface down to 288m RL. The run of mine from both North and South Sections are hoisted up to surface via the main shaft. The projected view of the mine design is presented in Figure 10-19.

Figure 10-19: Longitudinal Projected View of Dongfeng Upper Part



1- Cage shaft
2- Ventilation shaft
3- Mining license boundary (250m RL)
4- Exploration shaft
5- Retailed shaft

Sources: Client

All materials, personal and run of mine are transported via this main shaft. the distance from North Section to main shaft is somehow long which is around 800 to 1000m. the main adit and drift of level 3 are shown in Figure 10-20.

Figure 10-20: Photos of Access of Adit and Drift on Level 3 at Dongfeng Mine

Sources: shot during site visit on 9th Jan 2023

Note: Access of Adit (left) and Drift (right) on Level 3 od Dongfeng Mine

10.4.5 Underground Service

Lishan Upper Part

Ventilation system for upper part is established. The water supply, compressed air supply, drainage system as well as power supply system have been established already.

Lishan Lower Part Stage I

Lishan lower part has designed underground service system, the ventilation shaft is sinking when the site visit, and the main shaft is sunk but not equipped.

Dongfeng Upper Part

Dongfeng upper part is the same situation as Lishan upper part. The main sump and power substation underground of Dongfeng upper part is shown in Figure 10-21.

Figure 10-21: Photos of Main Sump and Power Substation on Adit Level of Dongfeng Mine

Sources: shot during site visit on 9th Jan 2023

Note: Main Sump on Adit level (left) and Main Power Substation underground (right) at Dongfeng Mine

10.4.6 Mining Equipment

There is no heavy mobile equipment on site. the mine machinery is mostly shaft hoisting equipment and trailway locomotive and ore cars, as well as fans for ventilation.

The machinery of hoisting system is maintenance well during site visit, as shown in Figure 10-22.

Figure 10-22: Shaft Access on Adit Level of Dongfeng Upper Part

Sources: shot during site visit on 9th Jan 2023

The mining equipment in each zone is shown in Table 10-20.

Table 10-20 Mine Equipment Requirements for Hanfeng Project

Equipment	Model	Quantity	Power (kw)
Secondary Fan	JK58—1NO.4	24	5.5
Secondary Fan	JK58—1NO.4.5	20	11
Jack Leg	YT-28	20	
Jack Leg	YSP45	8	
Jack Leg	YGZ90	2	
Loading Machine	Z-17AW	14	21
Scraper	2DPJ—30	8	30
Scraper	ZWY-60/18.5T	12	18.5
Charger	BQF-100	2	

Source: Summarized from the preliminary design

10.4.7 Production Schedule

The mine schedule was developed using Deswik software, based on productivity estimates for each task. For instance, stope excavation requires several days for preparation. The assumptions for mining sequence and dependencies are as follows:

- Mining and Processing Operation: Operation is estimated to be started in 2025 with the ROM capacity of 430ktpa.
- Vertical Overlap: Mining progresses downward, level by level, with typically 3-4 levels grouped into one section for better operational flexibility.
- Horizontally Overlap: Mining advances from the hanging wall to the footwall.
- Priority: Stopes accessible via existing development will be mined first.
- Life of Mine: 8 years.

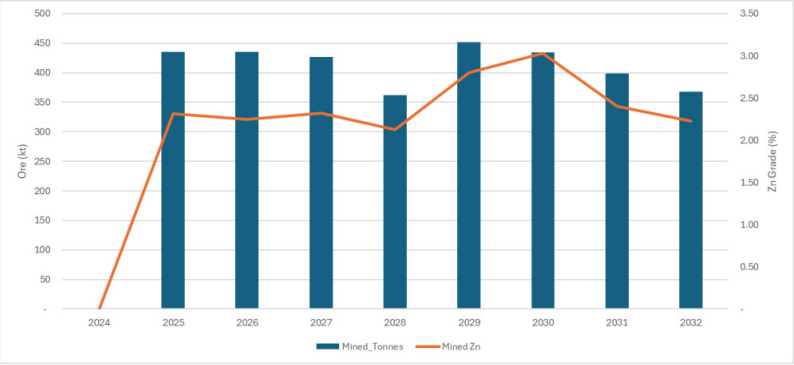
Figure 10-23 illustrates the production schedule, detailing both the ROM production and the ROM grade. **Table** 10-21 provides the details of mine production.

Table 10-21: Production Schedule

Hanfeng		LoM	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Total Tonnes Mined	Mt	3.31		0.43	0.44	0.43	0.36	0.45	0.43	0.40	0.37
Zn grade	%	2.45		2.32	2.25	2.32	2.13	2.80	3.03	2.40	2.23
Contained Zn	kt	81		10	10	10	8	13	13	10	8

Sources: SRK

Figure 10-23: Production Schedule



Sources: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

[2] The column represents the ore amount, corresponding to the left axis.

10.5 Jintai Project

10.5.1 Introduction

Jintai Project obtains one mining license and one exploration license for Xidengping Mine. Based on the geological definition, there are several mineralization zones named V1, V2 (V2_1, V2_2), V4, V5, V6, V7, V8, V9, and V10. It should be noted that only V1, V2, V4, and V10 have measured and indicated resources.

Several technical studies on the mineralized bodies V1 and V2 within the mining license were conducted since they obtained the mining license in 2012. Only V1 and V2 are included in the Ore Reserves, as there are no sufficient technical studies for the remaining mining zones.

They initialled mine construction for V1 and V2 at the beginning 2023 for both mine and plant. The designed capacity for V1 and V2 is 140 ktpa.

Currently, Jintai Mining is in the process of applying for another mining license for the exploitation of V4 and V10, with a capacity of 650 ktpa based on FS 2024.

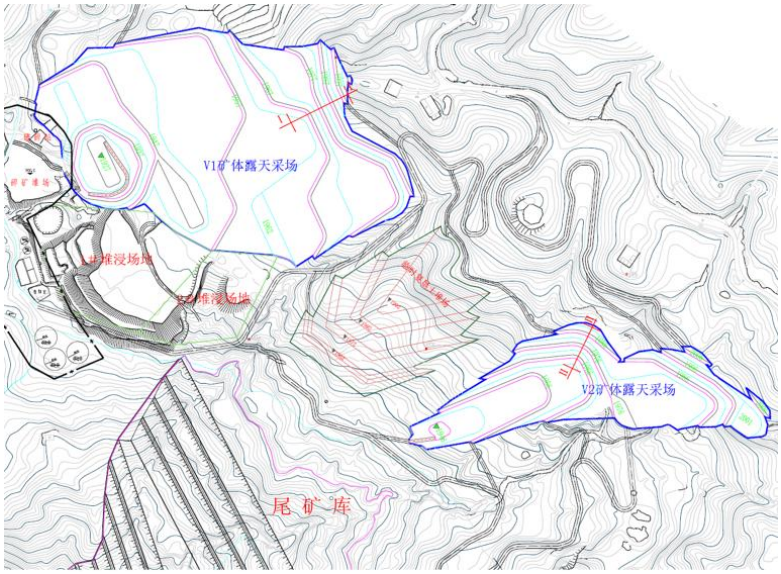
10.5.2 Geotechnical & Hydrogeological Conditions

GOCOM admitted that due to the lack of geotechnical parameters, the surrounding rock characteristics in the open pit mine were analysed using empirical and analogous data. Without detailed geological cross-sections and zoning data, the verification cross-sections were based on a generalized model of the designed open-pit boundary.

Slope stability was analysed using the Janbu, Bishop, Morgenstern-Price, and Spencer methods. The results show that the slope is stable when the final angle is less than 40°. Figure 10-25 shows

the location of the slope stability verification cross-sections, and **Table** 10-22 shows the stability results under different conditions.

Figure 10-24: Production Pit in V1 Pit Area



Sources: Jintai FS 2022

Table 10-22: Jintai Project Slope Stability Analysis Results

Scenario	Janbu		Bishop		Morgenstern-Price		Spencer	
	I-I	II-II	I-I	II-II	I-I	II-II	I-I	II-II
Dead Weight	1.584	1.610	1.569	1.603	1.581	1.606	1.581	1.611
Dead Weight + Earthquake	1.398	1.411	1.367	1.396	1.396	1.412	1.396	1.412
Dead Weight + Precipitation	1.362	1.361	1.348	1.355	1.358	1.357	1.358	1.357

Sources: Jintai FS 2022

The overall slope angles in the design are 10° to 32° for the V1 and 11° to 22° for the V2. In some areas, the angles are controlled within 40°, and GOCOM considered the slope stability to be safe. Additionally, slope stability monitoring and precaution measures should be considered during actual operations.

This area is characterized by a high plateau with low to medium mountain terrain. The currently controlled ore bodies are distributed above the erosion base level. Observations indicate that the terrain is conducive to the natural discharge of groundwater, with atmospheric precipitation quickly draining from the surface and dissolution fractures. Additionally, the rivers within the area have no impact on the water inflow into the ore deposits. Only a few sections of the pit experience minor water infiltration. The hydrogeological conditions at the locations of the ore bodies are classified as simple.

The ore bodies are located on small ridges or gentle slopes, with natural slope angles ranging from 0° to 15°, indicating relatively good stability. During the rainy season, heavy rainfall may cause minor collapses of sandy and muddy materials on the surface. The main ore bodies are either directly exposed at the surface or covered by a thin overburden, resulting in minimal stripping material. The ore bodies consist of massive hard rock, with a soft rock layer as the footwall. The primary gold ore bodies are hosted within fracture zones or fissures, and the ore bodies themselves exhibit good stability. The engineering geological exploration type of the mining area is classified as medium, predominantly consisting of weak to semi-hard clastic rocks.

10.5.3 Mine Method

Considering the mineralisation occurrence and mining license permits, a capacity of 140ktpa feed ore is designed.

The conventional mining sequence proceeds downwards, and two benches work simultaneously in each section.

A conventional open pit mining methodology is used, comprising free dig & loading, and haulage by truck. The mine is run as contractor operation, and the owner response for technical service and management. No magazine is proposed due to no blasting works needed.

Mining

The main mining equipment is excavator. 2 sets of 1m^3 bucket excavators are proposed for about 490ktpa total material movement, which consist of 140ktpa ore and 350ktpa waste in average. 1 set of the same excavator is proposed stand-by for miscellaneous work. Excavator capacity estimates is presented in Table 10-23.

Table 10-23: Excavator (1m^3 bucket) Capacity Estimates

Item	Unit	Parameter for Ore	Parameter for Waste
Days per annual	day	300.0	300.0
Shift per day	shift	2.0	2.0
Hours per shift	hr	8.0	8.0
Bucket Capacity	m^3	1.0	1.0
Circle time per load round	second	45.0	45.0
Bucket fill factor	%	90.0	90.0
Rock swell factor	%	150.0	150.0
Availability	%	80.0	80.0
Utilization	%	80.0	80.0
Bulk density (ore)	t/m^3	2.1	1.9
Annual capacity per excavator	ktpa	317.0	280.0
Capacity per shift	m^3/shift	245.8	245.8

Source: FS 2022

As the estimates result above, 2 set of excavators are suitable for the nominated mine capacity. As the bulk density of waste (~1.9t/m^3) is lower than that of ore (2.1t/m^3), it is resulting an annual capacity per an excavator is 280ktpa, A set of excavators stand-by is reasonable, when considering the work unbalance for waste and ore.

Transport

The transport of material, which are ore and waste, by trucks via in-pit and out-pit roads. The roads are designed based on truck size requirement.

The existing road connected the trail production pit (V1 pit) portal at 1,943m asl and crasher station at 1968mRL is single lane as about 3m wide, the average gradient is 5.9%.

The designed main road is dual lane with 8m total wide, consist of 6m net road surface, 2m berm (1.5m) and ditch (0.5m). The road surface is clay bound macadam pavement. The branch road is 4.5m wide as the same pavement as main road. The segment of road system is as followings:

- V1 pit road above 1,939m asl: out-pit dual lane, the radius of turning is 15m; average gradient is 5% and the total length is about 1,076m;
- V1 pit road below 1,939m asl: in-pit dual lane with the same configuration as out-pit road, and the total length is about 400m
- V2 pit road above 1,980m asl: out-pit dual lane connects to V1 pit 1,988m asl bench at 2,006m asl of V2 pit. The lower part from 2,006m asl down to 1,980m asl is inclined ramp in pit. The total length is 1064m.
- V2 pit road below 1,980m asl: out-pit dual lane from V1 1,950m asl bench to V2 pit 1,980m asl. The total length is 1,025m. The material below 1,980m asl is transported via in-pit ramp as the total length is about 343m.
- Waste routes: the waste stripped from V1 pit is dumped in the temporary stockpile for land reclamation, which is about 50m away from pit edge. This branch road is designed as single lane with a width of 4.5m. The waste form V2 pit will be dumped into V1 mine-out voids via the roads described above.

Considering the total material movement annually, the truck requirement is estimated by FS2022 as shown in Table 10-24. Totally 6 set of 7.8t payload trucks are proposed when considering 70% availability.

Table 10-24: Truck Capacity Estimates

Item	Unit	Feed	Waste
Hours per shift	hr	8.0	8.0
Time utilization	%	85.0	85.0
Loading buckets per truck	bucket	6.0	6.0
Average haulage distance	km	0.9	1.2
Average speed	km/h	20.0	20.0
Travel time per round	min	5.4	7.2
Loading time	min	4.0	4.0
Dumping time	min	1.0	1.0
Waiting time	min	2.0	2.0
Circle time per truck round	min	12.4	14.2
Payload utilization	%	93.0	96.0
Truck payload	t	7.8	7.8
Capacity per shift	t per shift	238.7	214.2
Mining Target	ktpa	140.0	350.0

Item	Unit	Feed	Waste
Days per annual	day	300.0	300.0
Shift per day	shift	2.0	2.0
Workload per shift	t/shift	233.3	583.3
Unbalance factor	N/A	1.2	1.2
Trucks per shift	QTY	1.1	3.1
Availability	%	70.0	70.0
Total trucks	QTY	6.0	

10.5.4 Mine Design

Mine design scope is the 100m South away from country road (X084 road) and the boundary of V1 & V2 veins. The mine design follows typical open pit design procedure, which is from pit optimization, detailed design and modification.

Pit Optimization

To develop an optimal open pit design for the Mine, an optimised open pit shell was prepared using the Lerchs-Grossman 3D algorithm in GEMCOM software (LG 3D). The LG 3D open pit optimiser determines a set of resource blocks with the maximum value per tonne, creating an optimised open pit shell from a resource block model. The inputs of pit optimization as proposed in FS 2022 are presented in Table 10-25.

Table 10-25: Input Parameter for Pit Optimization in FS 2022

Item	Unit	Parameter
Mining cost	CNY/t total material moved	8
Post-mining cost	CNY/t feed ore	98
Mining dilution	%	5
Mining loss	%	5
Processing recovery rate	%	85.5
Gold price	CNY/gram	313
Payable of gold product	%	97
OSA	degree	40

Source: FS 2022

Note:

[1] Post-mining cost includes processing, G&A, and other Miscellaneous

[2] OSA is standing for overall slope angles.

Pit Design

The pit design was under the guide of optimization and the design inputs, then manual modified by engineer. The design inputs are presented in Table 10-26.

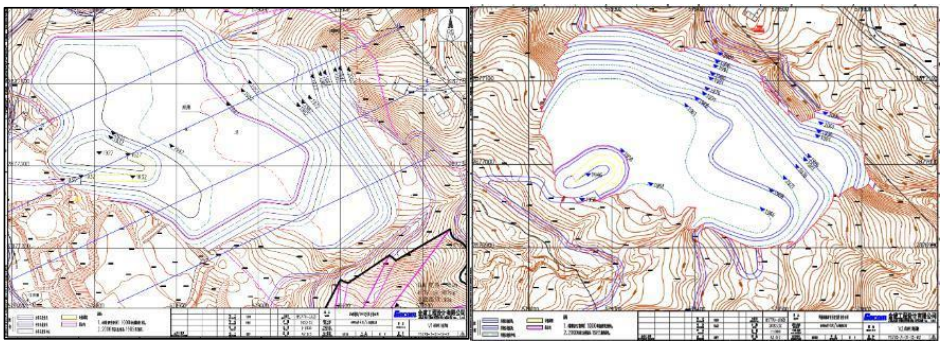
Table 10-26: Summary of Design Inputs

Item	Unit	Parameter
Bench height	m	10
Sub-bench height	m	5
BFA	degree	40
Catch berm	m	4
Safety berm	m	7
Road berm	m	8
Ramp width	m	8
Road gradient	%	5
OSA	degree	40

Note: BFA is standing for bench face angles.

The designs are presented in Figure 10-25 and the results are shown in Table 10-27.

Figure 10-25: Pit Design for V1 and V2 by GOCOM



Source: FS 2022

Table 10-27: Pit Design Result in FS 2022

Item	Unit	V1 Pit	V2 Pit
Pit size	m x m	472 x 336	409 x 138
Crest elevation	mRL	2,007.0	2,011.0
Bottom elevation	mRL	1,972.0	1,946.0
Pit dept	m	80.0	65.0
Closed circle elevation	mRL	1,939.0	1,954.0
resource in pit	kt	1,409.9	212.4
incl. Measured (CN Standard)	kt	-	-
incl. Indicated (CN Standard)	kt	1,253.1	75.4
incl. Inferred (CN Standard, 70%)	kt	156.8	137.0
Waste (Including 30% Inferred).8	kt	699.1	1,096.9
Minable resource	kt	1,362.9	171.3
Stripping ratio	t/t	0.5	6.4
Average grade	g/t	0.81	0.90

Source: FS 2022

The table above shows V2 pit contains more Inferred Resource (79%) than that in V1 pit (11.5%).

10.5.5 Production

The Project has started operation since 2023 (See **Table** 10-28 with average grade of 0.71g/t.

The mining operation employs free digging methods due to the relatively shallow nature of the deposit, eliminating the need for drilling and blasting. The mining and hauling are conducted by contractors.

Table 10-28: Jintai Mine Yearly Ore Production from 2023 to 2024Q1

Item	Unit	2023	2024 Q1	Total
Ore Mined	t	95,930	222,200	318,130
Ore Milled	t	122,924	222,200	345,124
Au grade	g/t	0.83	0.64	0.71

Source: FS 2022

10.5.6 Mine Service

The mine site area is covered by lush vegetation and the weather is classed as hot climate, which belongs to the plateau mountain area. November to May of the next year is the dry season. The rainfall is concentrated from June to October, with the annual average rainfall of 1,000~1,400mm. the average temperature is 12~14 ℃ annually, with the highest temperature could reach around 35 ℃ from May to August.

A flood prevention channel is to be constructed around 2 pits of the project preventing outsource water flowing into pits. As well as the closed circle of each pit, connected channel to outer channel are also designed on 1,947m asl of V1 pit and 1,956m asl of V2 pit, respectively. The channel is designed as 0.8m × 0.8m rectangle, with cemented masonry wall at 0.3m thickness.

The dewater facilities in pit are also designed considering the inflow volume as Table 10-29.

Table 10-29: Water Inflow Estimates and Dewatering

Item	Unit	V1 Pit	V2 Pit
Normal Water Inflow Volume	m^3/d	598	144
Maximum Inflow (once in 20 years)	m^3/d	5978	1439
Maximum days of flooding	day	7	7
Capacity of dewatering	m^3/d	854	206
Dewatering height	m	15	10
Pump	model	SQ35-22	SQ35-22
Head of pump	m	22	22
Rate of pump flow	m^3/h	35	35
Power	kW	5.5	5.5
Set	QTY	2	2

Source: FS 2022

The pumps are planned transfer to V2 pit as soon as V1 is finished mining. The pipeline is designed using DN100 seamless steel tube along benches.

Water consumption is mainly attributable to dust suppression purposes, sourced from plant head tank.

The electric power requirement of the mine site is minimal, and its main uses are the dewatering pump, and lighting. A 10kV/0.4kV substation is located on the mine site and is connected to the national electricity grid.

Maintenance of mobile mining equipment is proposed to be outsourced from downtown.

The diesel supply is planned outsourced from downtown supplier via tank truck to refill the mobile equipment. There are no fuel storage facilities planned on site.

10.5.7 Mining Equipment

Apart from the main mining equipment fleet of excavator and truck, there are several types of equipment suitable for relevant activities. There are water trucks for dedusting, rock breaker, front-end loader (FEL) and so on. The mine fleet as proposed by FS2022 is presented in Table 10-30.

Table 10-30: Main Mining Equipment Fleet as Proposed

Fleet	QTY	Specification
Excavator	3	$1m^3$ bucket
Truck	6	7.8t payload
FEL	1	$1m^3$ bucket
Water truck	1	5t tank
Rock breaker	1	

Sources: Jintai FS 2022

10.5.8 Production Schedule

The strategic scheduling is based on the Whittle shell (RF=1) and serves as a guide for the high-level scheduling of the final design. The processing capacity is designed and constructed to handle 140ktpa. There is no cut-back for V1 and V2; both pits will be operated as a single operation.

The mining sequence and/or dependency is simplified as follows:

- Mining and Processing Operation: Operation remains with the ROM capacity of 140ktpa.
- Operational Design: Based on the Feasibility Study (FS) 2022, the mine is designed to operate 300 days per year, with two shifts per day, each lasting 8 hours. The proposed mining capacity is 140ktpa of feed ore, and the total material mining capacity is approximately 490ktpa.
- Mine Plan Strategy: The strategy involves mining the V1 pit first, with the mined-out pit of V1 serving as the dumping area for waste rock from the V2 pit.
- Vertical Overlap: The mining sequence progresses downwards, bench by bench.
- Horizontal Sequence: The material on each bench is divided into blocks with a maximum area of 2,500 m².

- Stripping Line: The proposed stripping line is 200 m for the V1 pit and 120 m for the V2 pit, with a minimum width of 20 m.

Based on the strategy and assumptions above, the LoM is scheduled using Deswik software. The mining plan, ROM and ROM feed are presented in Figure 10-26 and Figure 10-27 at an annually basis.

The mining schedule by SRK is shown in Table 10-31 below.

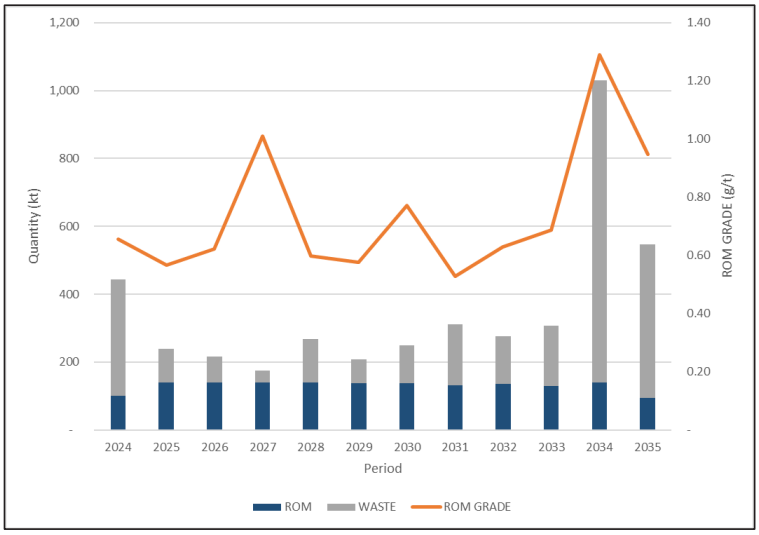
Table 10-31 Mining Schedule of SRK

Item	LOM	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Feed Ore (kt)	**1,563**	100	140	139	140	140	137	137
Grade (g/t)	**0.74**	0.66	0.57	0.62	1.01	0.60	0.58	0.77
Waste (t)	**2,708**	343	99	77	35	127	72	112
S/R (t/t)		3.42	0.71	0.55	0.25	0.91	0.52	0.82
TMM (t)	**4,271**	444	239	216	175	267	208	249
V1 Pit								
Feed Ore (t)	**1,417**	100	140	139	140	140	137	137
Grade (g/t)	**0.72**	0.66	0.57	0.62	1.01	0.60	0.58	0.77
Waste (t)	**1,402**	343	99	77	35	127	72	112
S/R (t/t)	**0.99**	3.42	0.71	0.55	0.25	0.91	0.52	0.82
TMM (t)	**2,819**	444	239	216	175	267	208	249
V2 Pit								
Feed Ore (t)	**146**	-	-	-	-	-	-	-
Grade (g/t)	**0.89**	-	-	-	-	-	-	-
Waste (t)	**1,307**	-	-	-	-	-	-	-
S/R (t/t)	**8.98**	-	-	-	-	-	-	-
TMM (t)	**1,452**	-	-	-	-	-	-	-
Item	**Grade**	g/t	0.81	0.80	0.80	0.82	0.82	0.82
Feed Ore (kt)	**Waste**	kt	1,796	99	28	20	29	346
Grade (g/t)	**S/R**	W/O t/t	1.17	2.94	0.20	0.15	0.21	2.47
Waste (t)	**TMM**	kt	3,330	133	168	160	169	486

Item	LOM	2031E	2032E	2033E	2034E	2035E
Feed Ore (kt)	**1,563**	132	135	129	140	94
Grade (g/t)	**0.74**	0.53	0.63	0.69	1.29	0.95
Waste (t)	**2,708**	178	141	179	891	453
S/R (t/t)		1.35	1.05	1.39	6.37	4.81
TMM (t)	**4,271**	310	276	307	1,031	548
V1 Pit						
Feed Ore (t)	**1,417**	132	135	129	89	-
Grade (g/t)	**0.72**	0.53	0.63	0.69	1.58	-
Waste (t)	**1,402**	178	141	179	37	-
S/R (t/t)	**0.99**	1.35	1.05	1.39	0.42	-
TMM (t)	**2,819**	310	276	307	126	-

Item	LOM	2031E	2032E	2033E	2034E	2035E
V2 Pit						
Feed Ore (t)	**146**	-	-	-	51	94
Grade (g/t)	**0.89**	-	-	-	0.79	0.95
Waste (t)	**1,307**	-	-	-	853	453
S/R (t/t)	**8.98**	-	-	-	16.63	4.81
TMM (t)	**1,452**	-	-	-	905	548
Item	**Grade**	0.82	0.80	0.81	0.80	0.80
Feed Ore (kt)	**Waste**	32	99	1	3	30
Grade (g/t)	**S/R**	0.23	0.71	0.00	0.02	0.21
Waste (t)	**TMM**	172	239	141	143	170

Figure 10-26 TMM Schedule over LoM



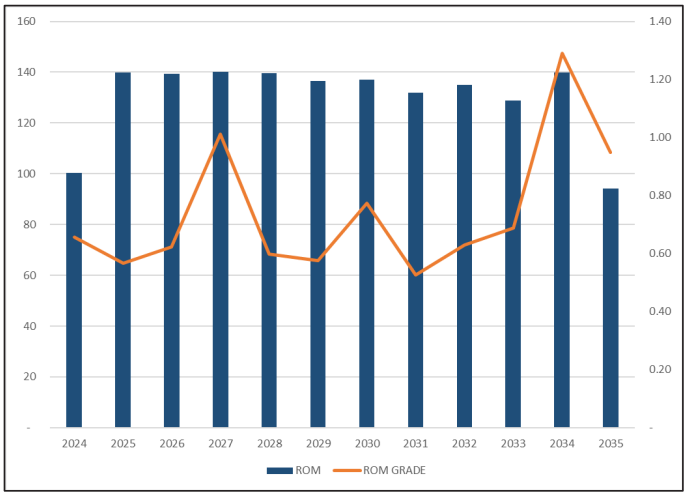
Sources: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

[2] The column represents the ore amount, corresponding to the left axis.

Figure 10-27 Plant Feed Schedule over LoM



Sources: SRK

The proposed plan aligns with the client's strategy to sustain plant feed as previously outlined, resulting in a 12-year mine life, including the initial 9 months of 2024 as the first operational year. Over this period, a total of 1,563 kt of feed will be processed. The final year of the LoM will involve a ramp-down phase.

The peak mining amount is projected in 2034, with a capacity of 1,031ktpa, which exceeds the designed mining capacity. To accommodate this peak, additional equipment mobilization should be planned well in advance, even considering the decade-long lead time. The summary of LoM is in Table 10-32.

Table 10-32 The Summary of LoM

Period	TMM (kt)	ROM (kt)	ROM GRADE (g/t)	WASTE (kt)	SR (t/t)
2024	444	100	0.66	343	3.42
2025	239	140	0.57	99	0.71
2026	216	139	0.62	77	0.55
2027	175	140	1.01	35	0.25
2028	267	140	0.60	127	0.91
2029	208	137	0.58	72	0.52
2030	249	137	0.77	112	0.82
2031	310	132	0.53	178	1.35
2032	276	135	0.63	141	1.05
2033	307	129	0.69	179	1.39
2034	1,031	140	1.29	891	6.37
2035	548	94	0.95	453	4.81

Sources: SRK

11 Processing and Metallurgical Assessment

11.1 Jilong Project

11.1.1 Processing and Metallurgical Testwork

The components of the gold-bearing ore at the Zhuanshanzi Mine are relatively simple. The ore minerals are natural gold, natural silver, electrum, pyrite, sphalerite, galena, chalcopyrite and a small amount of chalcocite, and argentite. The gangue minerals are mainly quartz, followed by feldspar, calcite, sericite, and chlorite. The main mineral available for recovery in the ore is gold.

In 2018, Jilong Mining commissioned Jilin Institute of Geological Sciences to conduct a laboratory flotation process test on ore of the Zhuanshanzi Mine.

The gold grade of the composite sample was 10.20g/t and the silver grade was 45.32g/t. After grinding to -0.074 mm accounting for 70.0% (P_{70}=74μm), the sample was subjected to one roughing, two cleanings and two scavengings to obtain gold concentrate with a gold grade of 147.78g/t and a gold recovery of 95.05%, and a silver grade of 554.34g/t and a silver recovery of 80.25%, the test results are shown in Table 11-1. The test shows that the flotation process can be used to obtain more desirable indexes for the ore of Zhuanshanzi mine, which can provide a reference basis for the subsequent technical update of the processing plant.

Table 11-1: Test Results of ore sample from Jilong Mine

Product	Yield (%)	Grade (g/t)		Recovery (%)	
		Au	Ag	Au	Ag
Concentrate	6.56	147.78	554.34	95.05	80.25
Taillings	93.44	0.54	9.58	4.95	19.75
ROM	100.00	10.20	45.32	100.00	100.00

Source: Laboratory Process Test Study Report on Rock Gold Ore Processing of Zhuanshanzi Mine, Aohan Banner, Inner Mongolia Autonomous Region, February 2018.

11.1.2 Jilong Processing Plant

The existing processing capacity of Jilong Processing Plant is 400tpd (120,000 tpa). It adopts the process of whole ore cyanidation - zinc dust precipitation (Merrill-Crowe process), with the final product being finished gold. The ROM grade is about 6.0 g/t and the total cyanidation recovery rate reaches over 96%.

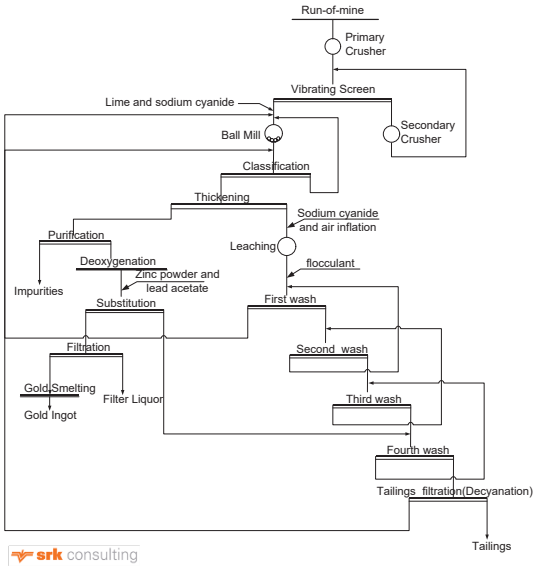
The processing plant is currently undergoing expansion. The original 400tpd processing plant remains unchanged, and a new 600tpd processing plant is being built to achieve a final production capacity of 1,000tpd (300,000 tpa). The entire expansion project is expected to be put into production by June 2024.

11.1.3 Production Status of Processing Plant

Production Flowsheet

The Jilong processing plant adopts a mature process of whole ore cyanidation - counter-current decantation washing ("CCD") - zinc dust precipitation - tailings de-cyanidation and dry stockpiling, the production flowsheet is shown in Figure 11-1.

Figure 11-1: Production Flowsheet of Jilong Processing Plant



The specific production flowsheet is described as follows:

Crushing and Grinding

The crushing operation adopts a two-stage closed-circuit process. The ROM feed size is less than 200mm and the final crushed product size is less than 16mm, after which it is sent to the fine ore bin for grinding.

The grinding operation adopts a one-stage closed-circuit grinding and classification process, consisting of two series with a processing capacity of 100 tpd and 300 tpd, respectively. The final grinding fineness is -74 μm accounting for more than 70% (P_{70}=74μm). At the same time, sodium cyanide and lime are added to the grinding system for gold leaching in advance.

Cyanide Leaching - Zinc Dust Precipitation (Merrill-Crowe Process)

- Pre-leach Thickening and Cyanide Leaching

The overflow from the classifier firstly enters the φ24m thickener for thickening, and the thickened underflow slurry is leached in a train of agitation tanks by adding sodium cyanide and filled with oxygen for 35 hours. The overflow from the thickener is used as the pregnant solution and flows into the pregnant solution tank to enter the zinc dust precipitation circuit (Merrill-Crowe process).

- CCD and Merrill-Crowe Process

The cyanide leached slurry enters a triple-deck thickener and a single thickener for counter current decantation ("CCD"). The final overflow is returned to the grinding system as feed water before and after the ball mill. The final underflow is pump to tailings detoxing operation.

After being purified by the filter cloth of the purification tank, the pregnant solution is vacuum self-primed to the deoxygenation tower for deoxygenation, after which zinc powder is added for zinc dust precipitation, and then fed into a frame filter press by pump. The filtrate enters the lean solution tank as washing water, and the filter cake (gold mud) is blown dry by high pressure air and sent to the smelting room to obtain the final product "gold ingot".

Tailings Decyanation and Stockpiling

The washed pulp (cyanide residue) from CCD operation is transported to the tailings detoxing workshop, where the tailings is press filtered and the cake is simultaneously backwashed with clean water and backblown with high pressure air, while decyanidation reagents are added to break the cyanide in the tailings to reduce the cyanide content of the tailings and the water content of the filter cake to improve the washing efficiency. The water content of the filter cake is around 15% and the filtrate is returned to the cyanidation workshop for reuse, while the filter cake is transported by loader and dump truck to the TSF. The total cyanide content in the final tailings is 5.0mg/L, which meets the environmental requirements.

Mineral Processing Facilities and Main Equipment

The processing plant mainly includes crushing and classification workshop, grinding, leaching and substitution, washing (three-deck thickener) workshop and tailings press filter workshop, and has a complete laboratory assay, TSF, water and electricity supply facilities. The main processing equipment includes crushing and screening machines, grinding and classifying machines, thickeners, purification and deoxygenation equipment, filters, etc. The main processing equipment is shown in Table 11-2.

SRK conducted a site visit to the key workshops and production equipment of the processing plant. SRK noted that the equipment of Jilong processing plant was in good condition and although there were some minor flaws in the equipment configuration, which did not affect production. The site photos of the existing plant are shown in Figure 11-2.

Table 11-2: Main Equipment of Jilong Existing Processing Plant

No.	Equipment	Specification	Power (kw)	Unit	QTY
1	Jaw crusher	PEX250*750	30	Unit	1
2	Chute feeder	JZQ350	7.5	Unit	2
3	Double-deck vibrating screen	2ZD1530	7.5	Unit	1
4	Cone crusher	GP100	90	Unit	1
5	Pendulum feeder	400*400	1.5	Unit	4
6	Ball mill	2100*4500	245	Unit	1
7	Classifier	FC-20	15	Unit	1
8	Ball mill	1500*3000	80	Unit	1
9	Classifier	FLG-120	5.5	Unit	1
10	Triple-blade Roots blower	DQSR-150	30	Unit	2
11	Zinc powder feeder	170-266 型	0.75	Unit	4

No.	Equipment	Specification	Power (kw)	Unit	QTY
12	Leaching agitation tank	4500x4500	7.5	Unit	14
13	Triple-deck thickener	12000*9325	5.5	Unit	2
14	Plate and frame filter press	BAY30/630U	2.2	Unit	6
15	Pre-leach thickener	NZX-24	7.5	Unit	1
16	Washing thickener	NZX-24	7.5	Unit	1
17	High-efficiency energy-saving fast filter press for tailings	HAZF400/1600UK	18.5	Unit	4
18	Purification filter	2100×2100		Unit	5
19	Deoxygenation tower	φ1500×3600		Unit	4
20	Zinc powder substitution equipment			Set	4

Figure 11-2: Site Photos of Jilong Processing Plant

Source: SRK site visit

Historical Production Index

SRK has analysed and summarised the historical production indexes of Jilong processing plant from 2021 to March 2024 through the site visit and collected production statements and other information, and the results are shown in Table 11-3.

According to the data in the table, SRK noted that the actual annual processing throughput has reached the designed capacity, and the total cyanidation recovery rate reaches over 96%.

Table 11-3: Historical Production Index of Jilong Processing Plant

Items	Unit	2021	2022	2023	2024 Q1
Processing throughput	ktpa	143.7	152.7	152.6	33.27
Feed grade	g/t	7.51	6.23	9.33	6.56
Gold recovery	%	97.08	96.61	97.66	96.67
Gold output in ingot	kg	1,048	919	1,390	211

11.1.4 Future Planning of the Processing Plant

Jilong Mining carried out expansion on the existing processing plant in 2022. The original 400tpd processing plant remains unchanged, and a new 600tpd processing plant is being built. The main contents of construction consist of a new crushing system and tailing system, grinding cyanidation and washing replacement system, tailing conveying system and TSF for dry discharge, decyanation system and its auxiliary facilities for living and production. At present, the expansion project has completed the main civil engineering construction, and equipment installation and filter press workshop are continuing. The whole expansion project is expected to be put into operation by June 2024, and then the final processing capacity will reach 1,000tpd (300,000tpa). The site photos of the new plant are shown in Figure 11-3.

The deficiencies in the existing processing flowsheet will be improved by company for the new processing plant, and the automation and intelligent are fully implemented in all the process, with a central control room and a system of computerized automatic control set up. The original three-layer thickener will be changed to three single-layer thickener, which is easy to operate and maintain with a better washing effect. A new integrated machine of washing, filter-press and decyanidation has been added in the tailing workshop, which are more advanced decyanidation equipment for the tailing filter-press at present, and all the processes from feeding to discharging and pressing have achieved full automation.

Figure 11-3: Site Photos of Jilong New Processing Plant

Source: SRK site visit

11.1.5 Tailing Storage Facility

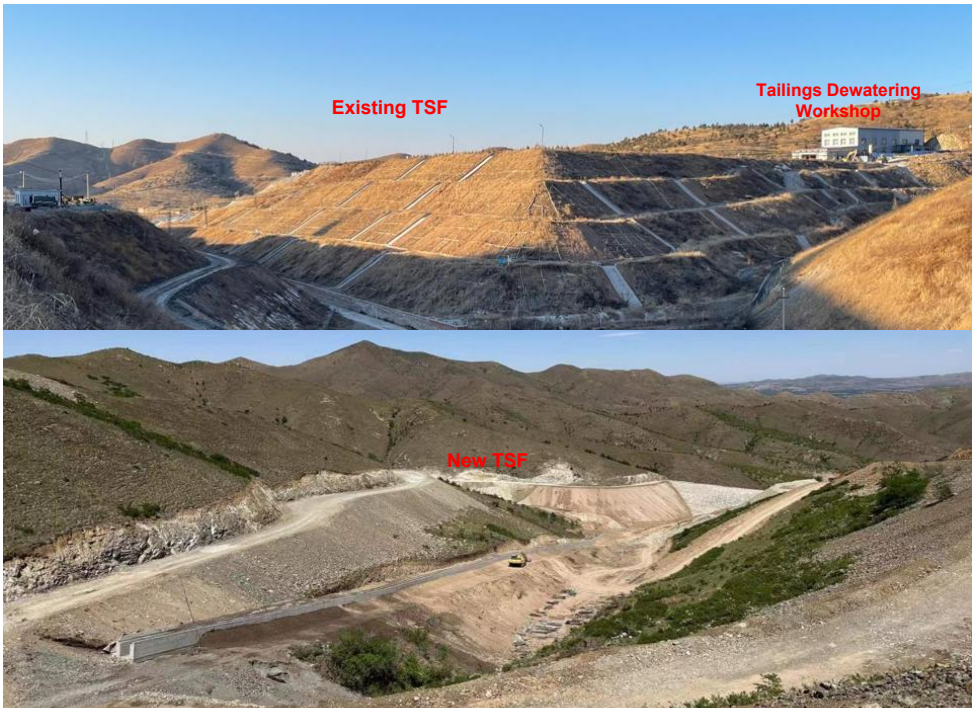
The existing tailings storage facility ("TSF") of Zhuanshanzi Mine was put into operation in 1996, with a maximum dam height of 21.7m and a total volume of about 40×10^4 m^3. To make the TSF meet the requirements of the current national laws and regulations on safety production, standards and norms, and to meet the requirements for the storage capacity of the stockpile after the expansion of the processing plant, Inner Mongolia Mining Development Company Limited was commissioned to carry out design for the TSF for renovation and expansion in 2012, a disposal method of "tailing filter press - dry discharge" was adopted with all filtration wastewater returned to the processing plant for recycle.

The TSF is located in the main valley on the north side of the processing plant. The valley appears from east to west, with a "U" shaped in the cross section, and the status of the TSF is shown in Figure 11-4. The dam height is 40m, with a total storage capacity of $138.7\times10^4m^3$, which belongs to Grade 4 TSF, with a total service life of 12 years. The TSF has accumulated about $124\times10^4m^3$ of tailings, with a remaining capacity of $14.7\times10^4m^3$. The remaining service life is about 0.6 years and and the preparatory work before the closure of the TSF is being carried out according to the design.

The new TSF is 1.2km northeast of the processing plant, which is under construction and plan to test and debug in June 2024. The total hight of the dam is 90m, and the total capacity is $360.5\times10^4m^3$

equals 228.4×10⁴m³ of effective capacity. The service life of new TSF is 14.42 years. The site photos of the TSF are shown in Figure 11-4.

Figure 11-4: TSF of Jilong Zhuanshanzi Mine



Source: SRK site visit

11.1.6 Conclusions and Recommendations

The ore is of sulphide-bearing quartz vein type with characteristics of simple mineral composition, less variety and coarse grain-size. A process of whole ore cyanidation - zinc dust precipitation (Merrill-Crowe) was adopted. SRK believes that the processing flowsheet of the processing plant of Jilong is suitable for the requirements of the ore properties, and the production process and equipment are reasonable, and a satisfied recovery were obtained with no major flaws.

A new processing plant with capacity of 600tpd is under construction. The trial production is expected in the end of June 2024.

The TSF has been expanded since 2012 with safety facilities and safety monitoring equipment that meet the requirements of related laws and regulations, which has passed the safety evaluation and acceptance in 2021. The capacity of the existing TSF is close to the designed capacity while a new TSF with an effective capacity of 228.4×10⁴m³ is under construction, which will serve the processing plants for 14.42 years.

11.2 Huatai Project

11.2.1 Processing and Metallurgical Testwork

The ore in this mining area is mainly auriferous pyrite-quartz vein type, and the main ore minerals are native gold, pyrite, chalcopyrite, magnetite and hematite and the gangue minerals are mainly quartz, sericite, feldspar, followed by chlorite, and graphite.

The gold minerals are predominately electrum and native gold, mainly occurrence in the form of gold inclusions, fissured gold, and intergranular gold. The particle size composition of gold in the ore is fine with a particle size less than 0.01mm accounting for more than 90%, which makes it difficult to dissociate.

In 2017, Huatai Mining commissioned Mineral Experimental Research Institute of Inner Mongolia to conduct a laboratory processing testwork on this type of ore.

The gold grade of test sample is 6.22g/t, after grinding to -0.074mm, accounted for 85% (P_{85}=74μm), a closed-circuit process of "one roughing + two cleanings + two scavengins" was adopted to obtain the gold concentrate with a grade of 149.31g/t and gold recovery of 95.06%, the test result is shown in Table 11-4.

SRK believes that the ore of Honghuagou gold mine are easily benificated, and a more ideal indicator can be obtained by using a single flotation processing flowsheet, the folwsheet structure is simple. However, the particle size composition of gold is considerted to be small, indicating that the particle size of -0.074mm accounting for 85% (P_{85}=74μm), in the one-stage grinding operation can not be reached, it is recommended to consider using a two-stage closed-circuit process in the constuction design in the future. However, Huatai Metallurgical Plant did not adopt flotation but carbon-in-pulp ("CIP") method for obtaining gold bullion on site.

Table 11-4: Test Results of Ore Sample from Huatai Mine

Product	Yield（%）	Au Grade（g/t）	Au Recovery（%）
Concentrate	3.96	149.31	95.06
Tailings	96.04	0.32	4.94
Raw Ore	100.00	6.22	100.00

Source： Laboratory Process Test Study Report on Rock Gold Ore Processing of Honghuagou Mine, Inner Mongolia Autonomous Region, Aug 2017

11.2.2 Production Status of Huatai Processing Plant

The Huatai processing plant, formerly known as the state-owned Chifeng Honghuagou Gold Mine Processing Plant, was built in 1987, and the ore type is primary sulphide ore of auriferous quartz vein type. The designed capacity of the processing plant is 200tpd, and a process of carbon-in-pulp ("CIP") was adopted to produce gold mud as the final product, which is then sent to the metallurgical plant of Jilong Mining to produce gold ingots for sale. The average grade of the ROM is about 2.63 g/t, and the average gold recovery rate reaches over 92%.

Production Flowsheet

A traditional process of CIP was adopted by the processing plant of Huatai mining, which is considered to be relatively reasonable. The production process flowsheet is shown in Figure 11-5, and specified as follows:

Crushing and Grinding

The crushing operation adopts a two-stage closed-circuit process, the feed size of ROM is less than 300mm and the size of the final product is less than 14mm. The grinding operation adopts two-stage closed-circuit classification process, and the slurry from the primary grinding process enters the debris sieve for waste residue filtration, and then enters the hydro-cyclone group for classification, the underflow of the hydrocyclones enters the secondary grinding mill, while the overflow enters to the debris sieve for waste residue filtration, and then enters the procedure of pre-leach thickening. The final grinding fineness is -74 μm accounting for more than 80% (P_{80}=74μm), at the same time, lime is added to the grinding system to adjust the pH value for the pulp.

CIP Process

- **Agitation Leaching and Carbon Adsorption**

The slurry is dewatered by the pre-leach thickener and then enters to surge tank, and the sodium cyanide is pumped from the storage tank into the agitating tank for cyanide leaching by rubber pump. The leaching concentration is about 42-45% with a leaching time of 27 hours, the sodium cyanide concentration is 0.03%, pH value is 10.5~11.5. The active carbon is added for absorption after leaching for about 22 hours with a concentration of 15~ 40g/L for active carbon. After absorption, the slurry contained gold-loaded carbon is fed to the carbon lifting screen through the airlifter to separate the gold-loaded carbon from the slurry, and then sent to the desorption electrowinning operation after screening and washing.

- **Gold Loaded Carbon Desorption**

The gold-loaded carbon enters the acid washing tank and is washed with hydrochloric acid to for inorganic impurities (mainly calcium salts) removal, then transferred to the desorption column, where the gold is desorbed from the gold-loaded carbon by using the normal pressure and temperature desorption method, and then enters the desorption pregnant solution. The unloaded carbon will be returned to the CIP circuit for recycling after desorption.

- **Electrowinning**

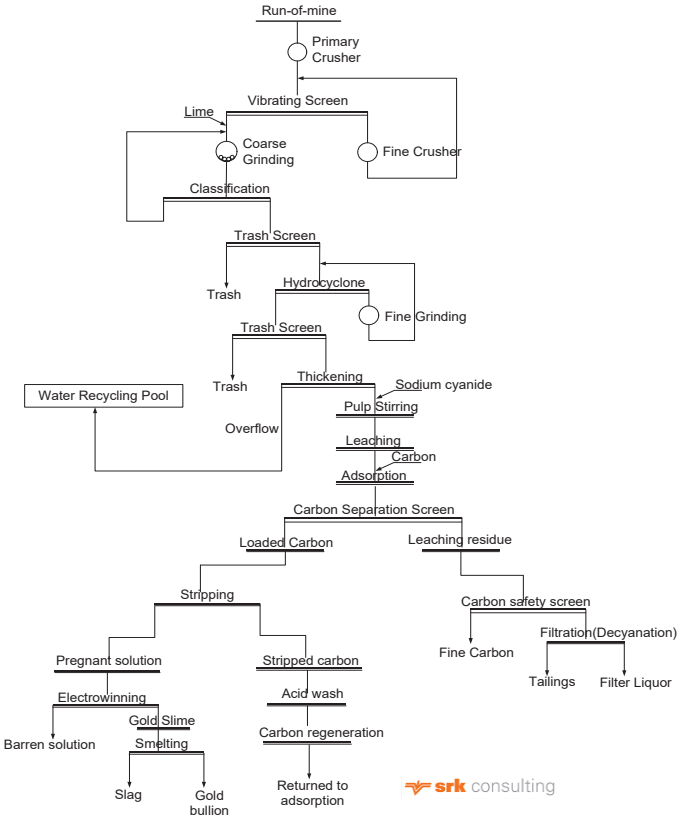
The gold in pregnant solution is reduced to elementary substance in electrowinning cells and precipitate on cathode steel wool. The cathode is periodically taken out and gold is eluted to obtain gold mud. After filter pressing and drying, the gold mud is sent to the smelting workshop of Jilong processing plant. Fluxing agent is added. The gold mud is smelted in the smelting furnace and cast into crude gold ingots.

- **Tailings Decyanation**

The tailings first enter the security screen to recover the broken carbon, and the broken carbon is sold directly to the smelter on site. The undersized slurry is transported to the filter press workshop for filter pressing for cyanide breaking. Recently, three filter presses were newly installed, and cyanide residue was treated by circulating water purification system. The tailings slurry is filter pressed into cakes and then the cyanide residue filter cakes are washed with reagent to break the

cyanide to meet the discharge standard. The filter cake after reagent treatment enters the TSF for storage, and the filtrate returns to the processing plant for recycling.

Figure 11-5: Processing Flowsheet of Huatai Processing Plant



Mineral Processing Facilities and Main Equipment

The processing equipment of Huatai processing plant mainly includes crusher, vibrating screen, ball mill and classifier, etc. in the process of crushing, grinding and classification; leaching tank, adsorption tank, carbon screen and security screen, etc. in leaching process; desorption column, electric heater, electrowinning cell, etc. in desorption electrowinning process. The main processing equipment are shown in Table 11-5.

SRK team conducted site visit on key workshops and production equipment of the processing plant. The photos of the processing plant are shown in Figure 11-6. Due to the long history of the plant, most of the main equipment has been in use for nearly 30 years, with serious problems of equipment aging, leakage and venting, resulting in high energy consumption. The overflow ball mill is used for two-stage grinding, and the fine grinding capacity is not fully utilized. High weir spiral classifier has poor classification effect, so SRK recommend adopting hydrocyclone group to replace the classifier for classification.

Table 11-5: Main Equipment of Huatai Processing Plant

No.	Equipment Name	Specifications	Power (kw)	Unit	Quantity
1	Jaw Crusher	PEF400×600	37	set	1
2	Cone Crusher	PYD900	55	set	1
3	Vibrating Screen	DZ1250×2500		set	1
4	Overflow Ball Mill	MQY1500×3000	95	set	4
5	High Weir Spiral Classifier	FLG-1200		set	2
6	Hydrocyclone	Φ250		set	4（2 in operation 2 standby）
7	Leaching Tank	Φ4000×4500	7.5	set	12
8	Thickener	TNB-15		set	1
9	Desorption Electrolysis			range	1

Figure 11-6: Site Photos of Huatai Processing Plant

Source: SRK site visit

Historical Production Index

The historical production indicators of Huatai processing plant from 2021 to 2023 are shown in Table 11-6. As shown in the table, the gold recovery rate is over 92%. Through site visit and on-site communication, SRK learned that in 2022 and 2023, due to the technical upgrade of the mining system, the annual operating days of the processing plant were few, and the gold output were serious declined. Until now, the processing plant is out of operation due to the mining production ceasing, so there are no production records in 2024.

Table 11-6: Historical Production Index of Huatai Processing Plant

Items	Unit	2021	2022	2023
Processing throughput	ktpa	58.51	19.12	1.62
Feed grade	g/t	2.42	2.69	2.43
Gold recovery	%	93.75	93.41	92.80
Gold output in ingot	kg	132.75	48.02	3.65

11.2.3 Tailings Storage Facility

Huatai TSF was designed by Changchun Gold Design Institute Co., Ltd. of Ministry of Metallurgical Industry in 1980. It is located in an open valley about 0.54 km east of the processing plant, which is a valley-type TSF. The current status of the TSF is shown in Figure 11-7. In order to reduce the pollution to the environment, the tailings press filtering process was added in 2010 for dry storage and seepage control was conducted to the TSF. China Metallurgical Mining Anshan Metallurgical Design and Research Institute Co., Ltd. was commissioned to supplement the design of TSF, which was double checked and accepted by relevant government departments.

The TSF is designed with a total dam height of 35m and a total storage capacity of $200\times10^4 m^3$, which is a Grade 4 TSF. At present, about 149.5×10^4 m^3 tailings have been stored in the TSF, and the remaining storage capacity is 50.5×10^4 m^3, which has remaining service life of 11.7years.

Figure 11-7: TSF of Huatai Mining

11.2.4 Conclusions and Recommendations

The ore is mainly of gold-bearing pyrite-quartz type, and the particle size of gold is fine, which makes it difficult to dissociate.

Traditional CIP technology is adopted for gold recovering. In SRK's opinion, it is reasonable and stable. The satisfactory technical indexes have been achieved, with no major defects. Until now, the processing plant is out of operation due to the mining production ceasing.

The TSF is in good operation condition, with no subsidence, displacement, landslide and vertical and horizontal cracks. The stability of the TSF meets the specification requirements and it has passed the safety evaluation and acceptance in 2021.

11.3 Wulong Project

11.3.1 Processing and Metallurgical Testwork

The ore is primary ore, with low oxidation degree. The ore type is mainly disseminated bismuthinite mineralisation quartz veins, with useful components of native gold and electrum. The ore minerals are dominated by pyrrhotite, with a small amount of pyrite, occasionally with magnetite, chalcopyrite, galena, telluric bismuth, and native bismuth. The gangue minerals are quartz, followed by potash feldspar and albite, and a small amount of biotite, chlorite, anorthite and calcite.

The particle size of gold in the ore is fine, and it mainly occurs as fracture gold and exposed gold. The relationship between gold minerals and sulphides is relatively close, and the dissociation effect

of sulphide is good. Therefore, it is easy to enrich gold into gold concentrate by flotation under suitable grinding fineness.

In 2021, Wulong Mining commissioned Beijing General Research Institute of Mining and Metallurgy ("BGRIMM") to carry out test study on the processing technology in Wulong Mine, with the aim of recommending a technically feasible and economically reasonable processing flowsheet and technical parameters, obtaining better mineral processing indexes, and providing a basis for design and production.

A detailed flotation testwork was carried out. Based on the condition test, closed-circuit comparative tests were carried out on three technological processes: "on-site process" (one roughing, three scavengings and three cleanings), "two roughings, two scavengings and three cleanings" and "stage flotation (two products) process". The gold content of test sample is 3.51g/t. The test results are shown in Table 11-7.

Table 11-7: Test Results of ore sample from Wulong Mine

Flowsheet	Product	Yield (%)	Au Grade (g/t)	Au Recovery (%)
One Roughing, Three Scavengings and Three Cleanings	Gold Concentrate	5.13	61.38	89.73
Two Roughings, Two Scavengings and Three Cleanings	Gold Concentrate	4.99	64.25	90.57
Stage Flotation Process	Gold Concentrate 1	2.29	125.96	80.86
	Gold Concentrate 2	2.61	14.86	10.87
	Gold Concentrate (Total)	4.90	66.80	91.73

Source: Processing Test Study Report of Wulong Gold Mine in Liaoning Province, January 2021.

The testwork results show that the gold concentrate with gold grade of 61.38g/t and gold recovery rate of 89.73% can be obtained by "on-site process" flotation. The gold concentrate with gold grade of 64.25g/t and gold recovery rate of 90.57% can be obtained by the process of "two roughings, two scavengings and three cleanings". Gold concentrate 1 with gold grade of 125.96g/t and gold recovery rate of 80.86% and gold concentrate 2 with gold grade of 14.86g/t and gold recovery rate of 10.87% can be obtained by "stage flotation process". The total gold concentrate grade is 66.80g/t and the total gold recovery rate is 91.73%. After comparative analysis of processing flowsheet indexes, it is recommended to adopt "stage flotation process".

11.3.2 Production Status of Wulong Processing Plant

Wulong Mining built a new 3,000tpd gold flotation plant in 2020, and it was put into operation in January 2021. The old processing plant has ceased production. Grinding and separation are divided into two series. The production capacity of the first series is 2,000tpd, and that of the second series is 1,000tpd. The flotation process of "three-stage roughings, two-stage scavengings and two-stage cleanings" is adopted for gold separation and the final product is gold concentrate for sale.

Production Flowsheet

The processing plant of Wulong Mining adopts the single flotation process for gold ore processing. The production process flowsheet is shown in Figure 11-8, and specified as follows:

Crushing and Screening

The ore in the mining area is transported by car to the ROM bin of the processing plant. A heavy-duty plate feeder is set up under the ROM bin to feed the ore to primary crushing. The primarily crushed product is transported to the screening workshop by the belt conveyor for screening. The oversize product of the upper screen is returned to the secondary crushing buffer bin by the belt conveyor, and is fed to the cone crusher by the heavy-duty mobile belt feeder under the bin for secondary crushing; The oversize product of the lower screen is returned to the fine crushing buffer bin by the belt conveyor, and is fed to the cone crusher by the heavy-duty mobile belt feeder under the bin for fine crushing. The secondarily and finely crushed products and the primarily crushed product are combined and fed into the screening operation by belt conveyor, forming a closed circuit. The undersize product is transferred to the fine ore bin by belt conveyor and enters the grinding and flotation systems. The particle size of the fed ore is no more than 400mm, and the particle size of the crushed product is -8mm after several renovation tests of the vibrating screen sieve pit.

Grinding and Flotation

The grinding operation adopts the two-stage closed-circuit process. The fineness of the primary grinding is 60% of -200 meshes (P_{60}=74μm), and that of the secondary grinding is 90% of -200 meshes (P_{90}=74μm). The flotation operation adopts the stage flotation process (3 roughings + 2 scavengings + 3 cleanings). After Roughing I of the grinding product, the roughing foam goes to Cleaning I to produce concentrate product 1. The roughing tailings go to Roughings II and III, of which the roughing foams go to Cleaning II and Cleaning III to produce concentrate product 2. The two concentrate products are combined as the final concentrate. The Roughing III tailings go to Scavengings I and II to produce the final tailings.

Concentrate Dewatering

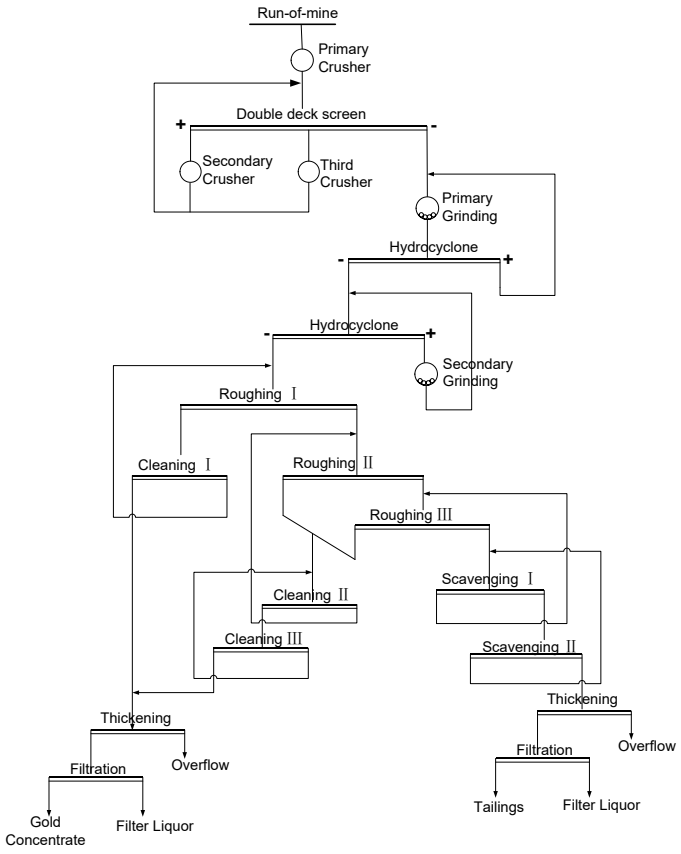
The concentrate is dewatered by two stages of "thickening + filtration" mechanical dewatering process. The moisture of the final product gold concentrate is no more than 18%. After dewatering, the concentrate enters the concentrate warehouse for packing and storage.

In order to ensure the quality of the backwater, the overflow of the thickener and pressure filter water are pumped to the existing Φ30m thickener of the processing plant for precipitation, and the overflow enters the backwater system.

Tailings Transport and Press Filtration

The flotation tailings are thickened and then pumped to the tailings filter-press workshop near the TSF. After the press filtration, the filter cake contains about 18% moisture, and then transported to the TSF for storage by belt conveyor.

Figure 11-8: Production Process Flowsheet of Wulong Processing Plant



Mineral Processing Facilities and Main Equipment

The Wulong processing plant consists of crushing and screening workshop section, grinding and separation section, concentrate dewatering section, tailings dewatering section and auxiliary production section, and the main processing equipment is shown in Table 11-8.

SRK conducted site visit on key workshops and production equipment of the processing plant, and the site photos are shown in Figure 11-9. The workshops are arranged by steps to make full use of the site topography, and the layout is compact and reasonable. The equipment adopts centralized layout, to facilitate production operation, maintenance and management. The main factory plant is equipped with elevators and visiting channels. The floor of the workshops is clean and tidy. The whole process and equipment of the processing plant have reached advanced, reasonable, safe, efficient and environmental protection goals, The plant is built well and in very good condition.

Table 11-8: Main Equipment List of Wulong Processing Plant

No.	Name	Specification and model	Motor power (kw)	Unit	Quantity	Remark
1	Jaw crusher	CT3042	110	set	1	Primary crushing
2	Cone crusher	TP350	250	set	1	Secondary crushing
3	Cone crusher	TP450	315	set	1	Fine crushing
4	Double deck vibrating screen	2YAQ3673SLF-AT	90	set	1	
5	Ball mill	MQY3650	1,250	set	2	Series I
6	Hydrocyclone group	Φ350-6		suit	1	2 standby of Series I
7	Hydrocyclone group	Φ250-10		suit	1	2 standby of Series I
8	Ball mill	MQY3245	800	set	2	Series II
9	Hydrocyclone group	Φ350-4		suit	1	2 standby of Series II
10	Hydrocyclone group	Φ250-8		suit	1	3 standby of Series II
11	Flotation machine	XCFII/KYFII-40	75/55	set	5/8	Series I roughing and scavenging
12	Flotation machine	XCFII/KYFII-16	45/30	set	3/2	Series I cleaning
13	Flotation machine	XCFII/KYFII-24	55/37	set	5/8	Series II coarse scavenging
14	Flotation machine	XCFII/KYFII-10	30/22	set	3/2	Series II cleaning
15	Thickener	Φ18m	5.5	set	1	Concentrate thickening
16	Quick-open chamber filter press	300m^2	18.5	set	3	1 standby, with automatic wetting flap
17	Thickener	Φ60m	35.5	set	1	Tailings thickening
18	Quick-open chamber filter press	800m^2	23.7	set	7	1 standby, with automatic wetting flap

Figure 11-9: Site Photos of Wulong Processing Plant

Souce: SRK site visit

Historical Production Index

The historical production indexes of Wulong processing plant from 2021 to 2023 are shown in Table 11-9. According to the data in the table, the actual annual processing throughput is increasing year by year but have not reached the designed capacity which is 900ktpa because the lack of ore supply. The average gold concentrate grade is of 56.76% and recovery of 91%.

Table 11-9: Historical Production Index of Wulong Processing Plant

Items	Unit	2021	2022	2023	2024Q1
ROM throughput	kt	382.1	418.6	579.3	138.93
Feed grade	g/t	2.48	3.42	3.53	3.17
Concentrate output	kt	14.62	25.13	33.08	6.68
Concentrate grade	g/t	57.93	51.5	57.01	60.6
Gold recovery	%	89.37	90.39	92.23	91.97
Gold in concentrate	kg	847	1,294	1,886	405

11.3.3 Tailings Storage Facilities

The Zhoujiagou TSF is located in the southwest of Wulong processing plant with the straight-line distance of about 3.4km. It is a valley-type TSF, and the current situation is shown in Figure 11-10. The total dam height of the tailings dam is 45m, and the total storage capacity is $158.01\times10^4m^3$, which is a Class 4 TSF. At present, about $127.47\times10^4m^3$ of tailings have been piled up, and the

remaining storage capacity is about $100\times10^4m^3$. The remaining service life is of 5 years and the site selection of the new TSF is being discussing now. SRK recommends that the feasibility study and design of the new TSF should be carried out as soon as possible.

Figure 11-10: TSF of Wulong Mining

11.3.4 Conclusions and Recommendations

As the ore comes from different mining areas, and the ROM properties are obviously different and fluctuating, SRK suggests that the reagent regime in the process of actual production should be adjusted according to the production situation to obtain the optimal separating indexes.

SRK believes that the process flow of Wulong processing plant is reasonable, and the overall layout is reasonable and advanced with large-scale equipment, high automation level, energy saving and high efficiency. The production and management personnel are of high quality, with standardized management.

The flood discharge facility of Zhoujiagou TSF is operating normally, and the flood discharge capacity meets the requirements. The dam body is stable, the overall safety of the TSF is good, and it has passed the safety evaluation and acceptance.

11.4 Hanfeng Project

11.4.1 Processing and Metallurgical Testwork on Lishan Ore

The target mineral of the deep ore in Lishan Mine is mainly sphalerite, while the content of other minerals such as pyrite, smithsonite, galena, cerusite and chalcopyrite is relatively small. The gangue minerals are mainly quartz, carbonate, and feldspar. Sphalerite is linked or wrapped with gangue and other sulphides, and 58.50% of sphalerite is linked or wrapped with gangue.

In 2018, Hanfeng Mining commissioned Jilin Haorong Group Co., Ltd. to carry out a laboratory processing testwork on the ore of Lishan Mine.

The zinc grade of the processing test sample is 3.11%, after grinding to -0.075mm accounted for 70% (P_{70}=75μm), a closed-circuit process of "1 roughing + 4 cleanings + 2 scavengins" was adopted to obtain the zinc concentrate with zinc grade of 47.46% and recovery of 95.77%. The test result is shown in Table 11-10. The experiment result shows that the flotation process can obtain the ideal index on the deep zinc ore in Lishan deposit, which can provide reference for the subsequent deep ore separation.

Table 11-10: Test Results of ore sample from Lishan Mine

Product	Yield (%)	Zn Grade (g/t)	Zn Recovery (%)
Concentrate	6.26	47.46	95.77
Tailings	93.74	0.14	4.23
Raw Ore	100.00	3.10	100.00

Source: Processing Test Study Report of deep zinc ore in Lishan Deposit, Tianbaoshan Mining Area, Longjing City, Jilin Province, October 2018.

11.4.2 Processing and Metallurgical Testwork on Dongfeng Ore

The molybdenum ore of Dongfeng Mine is low sulfide quartz vein type, with disseminated grain size distribution being uneven. Molybdenum minerals are mainly molybdenum sulfide minerals (accounting for 97.39%), followed by molybdenum oxide mineral of powellite (accounting for 2.61%), which mainly occurs in the cracks between ore grains, and a small part is wrapped in gangue or other sulphides. Gangue minerals are mainly of feldspar, quartz and mica, accounting for over 98%. Other gangue mineral content is little.

Hanfeng Mining commissioned Changchun Gold Design Institute to carry out two laboratory processing test study on deep molybdenum ore and refractory molybdenum ore respectively in December 2023.

The deep molybdenum grade of the processing test sample is 0.115%, after coarse grinding to -0.074mm accounted for 75% (P_{75}=74μm), a closed-circuit process of "1 roughing + 6 cleanings + 3 scavengins + cleaning 1 concentrate regrinding (P_{95}=45μm)" was adopted to obtain the molybdenum concentrate with molybdenum grade of 46.96% and recovery of 88.05%. The test result is shown in Table 11-11. The experiment result shows that the flotation process can obtain the ideal index on the deep molybdenum ore, which can provide reference for the subsequent large-scale resource development and optimization of the existing mineral process.

Table 11-11: Test Results of deep ore sample from Dongfeng Mine

Product	Yield (%)	Mo Grade (g/t)	Mo Recovery (%)
Concentrate	0.22	46.96	88.05
Tailings	99.78	0.01	11.95
Raw Ore	100.00	0.115	100.00

Source: Processing Test Study Report of deep molybdenum ore, Changchun Gold Design Institute, December 2023.

The refractory molybdenum grade of the processing test sample is 0.126%. The ore adopts the the stage grinding and floating process, and the process structure is as follows: one stage grinding and floatation (P_{60}=74μm) with one roughing + one scavenging; two stage grinding and flotation(P_{90}=74μm) with one roughing + three scavengings + six cleanings; two roughing coarse concentrate combined for cleaning and cleaning I concentrate regrinding (P_{95}=45μm). The molybdenum concentrate is obtained with molybdenum grade of 46.26% and recovery of 74.72%. The test result is shown in Table 11-12.

Table 11-12: Test Results of refractory ore sample from Dongfeng Mine

Product	Yield (%)	Mo Grade (g/t)	Mo Recovery (%)
Concentrate	0.20	46.26	74.72
Tailings	99.80	0.02	25.28
Raw Ore	100.00	0.126	100.00

Source: Processing Test Study Report of refractory molybdenum ore, Changchun Gold Design Institute, December 2023.

11.4.3 Production Status of Lishan Processing Plant

The Lishan processing plant processes Cu-Pb-Zn polymetallic ore, which sources from Lishan and Dongfeng mining areas. It adopts flotation process, and the products are copper concentrate, lead concentrate and zinc concentrate. The designed processing capacity of Lishan processing plant is 1,500tpd, and the current production capacity has reaches 2,000tpd through technical renovation.

Lishan Plant Production Flowsheet

Crushing

Lishan processing plant adopts two-stage closed-circuit process, with the raw ore feed size of no more than 300mm and the product size of -12mm.

Grinding and Classification

The grinding process adopts a two-stage closed circuit grinding system, divided into two series, equipped with spiral classifier and hydrocyclone for classification, with a final overflow fineness of -200 mesh accounting for 62% to 76% and a concentration of 35% to 38%.

Flotation

The flotation process is based on the principle of "mixed copper and lead flotation with priority", where the mixed copper and lead concentrates are selected from the raw ore before the copper and lead concentrates are separated. The copper-lead mixed flotation process structure is "one roughing,

three scavengings and five cleanings", while the copper-lead separation flotation process structure is "one roughing, two scavenging and five cleanings". The copper-lead mixed flotation tailings are then for flotation of zinc to produce concentrate, with a process structure of "one roughing, three scavengings and five cleanings". The flotation process effectively avoids the use of copper sulphate and other activators and inhibitors, prevents interaction, saves the dosage of chemicals, and achieves better separation index.

Dewatering

Copper concentrate, lead concentrate and zinc concentrate all use a two-stage dewatering process, with one stage of dewatering using a thickener and a discharge concentration of 40% to 50%; the second stage of dewatering uses a cylindrical external filter, with a final concentrate moisture content of 10% to 12%.

SRK believes that for copper-lead-zinc polymetallic ores, the flowsheet of Lishan processing plant is mature and feasible.

11.4.4 Production Status of Dongfeng Processing Plant

The Dongfeng processing plant mainly processes molybdenum ore and the history processing capacity is 500tpd. After optimizing the process, the production capacity reaches to about 700tpd. It adopts flotation process, and the final product is molybdenum concentrate with grade of 40%～45%. The plant ceased operation for years and restart production in July 2022.

Dongfeng Plant Production Flowsheet

Crushing and Grinding

Dongfeng processing plant adopts three-stage closed-circuit process, and the product size is -22mm. The grinding process adopts a two-stage closed circuit grinding system, divided into two series, equipped with double spiral classifier for classification, with a final overflow fineness of -200 mesh accounting for 75% to 85% and a concentration of 38% to 41%.

Flotation and Dewatering

The molybdenum flotation process structure is "one roughing, three scavenging and nine cleanings, phase bubble regrinding, fine tail desulfurization ". The molybdenum concentrate adopted a two-stage dewatering process, with one stage of dewatering using a thickener and a discharge concentration of 40% to 50%; the second stage of dewatering uses a cylindrical external filter, with a final concentrate moisture content of less than 4%.

11.4.5 Mineral Processing Facility and Equipment

Lishan processing plant mainly consists of crushing and screening plant, grinding plant, flotation plant, concentrate dewatering plant and other plants, with lime milk preparation, technical inspection stations and laboratories. The whole plant is built on a hill, making full use of whose natural topography, with compact and reasonable equipment configuration inside the plant, reducing conveying pressure and shortening the length of the tape conveyor and slurry pipeline. The main equipment of Lishan and Dongfeng processing plant is shown in Table 11-13 and Table 11-14 respectively , and the site photos are shown in Figure 11-11 and Figure 11-12.

Table 11-13: Main Equipment of Lishan Processing Plant

Serial No.	Equipment	Specifications	Power（kW）	Unit	Quantity
1	Jaw Crusher	CT2436	90	Pcs.	1
2	Cone Crusher	TP450SH/C	315	Pcs	1
3	Triaxial Horizontal Screen	TTH6162	22	Pcs	1
4	Belt Feeder	B500X2500	24	Pcs	6
5	Chute Feeder	CG1210	15	Pcs	1
6	Ball Mill	MQCG2745	500	Pcs	1
7	Ball Mill	MQCY2.4*3.6	560	Pcs	2
8	Ball Mill	MQCG2430	320	Pcs	1
9	Hydrocyclone	TX350-GX*5		Pcs	1
10	Hydrocyclone	TX250-GX*5		Pcs	1
11	Separator	FGT-2.4	18.5	Pcs	4
12	Flotation Blower	CF220-1.34	360	Pcs	2
13	Flotation Blower	CF120-1.26	150	Pcs	2
14	Flotation Machine	XCF-16	585	Pcs	13
15	Flotation Machine	KYF-16	330	Pcs	11
16	Flotation Machine	BF-8	570	Pcs	19
17	Flotation Machine	BF-2.8	165	Pcs	15
18	Flotation Machine	KYFII-8	242	Pcs	11
19	Flotation Machine	BF-1.2	66	Pcs	15
20	Flotation Machine	BF-2.0	60	Pcs	8
21	Flotation Machine	XCFII-8	150	Pcs	10
22	Thickener	NZS-5	7.5	Pcs	2
23	Thickener	NZS-12	12	Pcs	3
24	Ceramic Filter	KS3-30	22	Pcs	1
25	Ceramic Filter	BY-18	22	Pcs	2

Source: SRK collected.

Table 11-14: Main Equipment of Dongfeng Processing Plant

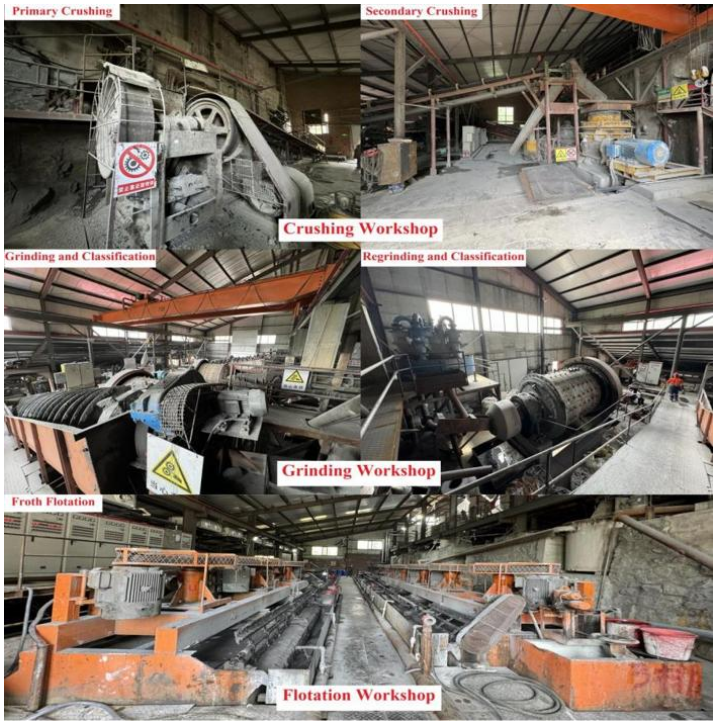
Serial No.	Equipment	Specifications	Power（kW）	Unit	Quantity
1	Jaw Crusher	PE600x900		Pcs.	1
2	Cone Crusher	PYD1200		Pcs	1
3	Vibrating Screen	1500x3000		Pcs	2
4	1# Ball mill	MQG2130	155	Pcs	1
5	2# Ball mill	MQY2124	130	Pcs	1
6	3# Ball mill	MQY2124	130	Pcs	1
7	Ball Mill	MQY2430		Pcs	1
8	Spiral Classifier	Φ1500	7.5	Pcs	3
9	Hydrocyclone	FX250-G×5		Pcs	1
10	Regrinding Ball Mill	Φ900×1800	11	Pcs	1
11	Hydrocyclone	Φ150		Pcs	2

Serial No.	Equipment	Specifications	Power（kW）	Unit	Quantity
12	1st Agitator Tank	Φ2500	18.5	Pcs	1
13	2nd Agitator Tank	Φ2000	11	Pcs	1
14	Flotation Machine	XCF/KYF-8	22~15	Pcs	13
15	Flotation Machine	BF-2.8	11	Pcs	8
16	Flotation Machine	5A	5.5	Pcs	4

Source: SRK collected.

Figure 11-11: Photos of Lishan Processing Plant

Figure 11-12: Photos of Dongfeng Processing Plant



Source: SRK site visit

11.4.6 Historical Production Index

The processing production records of Lishan and Dongfeng processing plant from 2021 to March 2024 are shown in Table 11-15. As can be seen, Lishan processing plant has decreased its production throughput by almost 39% in 2023 compared to that in 2022, which is mainly attributed to the implementation of technical modifications. The average Cu, Pb and Zn recovery is of 54.30%, 65.43% and 88.40% respectively.

The Dongfeng processing plant ceased operation for years and restart production in July 2022. The actual production capacity reached over 500 tpd in 2024Q1. The average Mo concentrate grade is of 42.32% and recovery of 70.84%.

Table 11-15: Historical Production Index of Lishan and Dongfeng Processing Plants

Items	Unit	2021	2022	2023	2024 Q1
(1) Lishan processing plant					
Ore Milled	kt	505.89	578.98	351.11	81.30
Feed Grade (Cu)	%	0.19	0.13	0.13	0.09
Feed Grade (Pb)	%	0.68	0.63	0.73	0.60
Feed Grade (Zn)	%	2.12	2.02	1.71	1.42

Items	Unit	2021	2022	2023	2024 Q1
Cu Concentrate Output	t	2,932.03	2,014.82	1,438.74	287.63
Concentrate Garde (Cu)	%	20.16	18.62	17.47	13.83
Cu Recovery	%	61.23	49.84	54.35	51.80
Pb Concentrate Output	t	3,477.51	3,257.23	2,716.15	520.98
Pb Concentrate Garde	%	63.65	66.75	68.00	61.54
Pb Recovery	%	64.47	59.60	71.69	65.95
Zn Concentrate Output	t	19,905.29	21,882.40	11,287.29	2,186.28
Zn Concentrate Garde	%	47.18	47.12	47.40	46.89
Zn Recovery	%	87.45	88.31	89.17	88.67
(2) Dongfeng processing plant					
Ore Milled (Mo)	kt	-	15.02	82.11	50.37
Feed Grade (Mo)	%	-	0.17	0.14	0.13
Mo Concentrate Output	t	-	41.71	206.48	111.91
Concentrate Garde (Mo)	%	-	43.45	40.64	42.87
Mo Recovery	%	-	71.69	67.57	73.27

11.4.7 Tailings Storage Facility

Lishan TSF was completed and put into operation in 1965, and in 2007 the Changchun Gold Design Institute was commissioned to carry out the restoration design and renovation. The site is located to the southeast of the Lishan processing plant, at a distance of about 3.2km, and it is a valley type TSF. The total dam height of the TSF is 59.5m, with a total storage capacity of $1,164\times10^4m^3$, which is a class 3 storage facility. At present, a volume of $982\times10^4m^3$ tailings has been stockpiled in the TSF, with a remaining storage capacity of $182\times10^4m^3$ and an expected remaining service life of 2.9 years. The Lishan TSF plan to expand the storage volume of total $2,146\times10^4m^3$ with dam height of 80m to serve for both Lishan and Dongfeng plant, which can extend the service life of about 6.7a.

The Dongfeng TSF is located to the south of Lishan processing plant, at a distance of about 1.5km. The total dam height of the TSF is 74m, with a total storage capacity of $640\times10^4m^3$ and is a class 3 storage facility. At present, a volume of $252\times10^4m^3$ storage capacity remained, an expected remaining service life of 4.6 years.

The current situation of the Lishan TSF and Dongfeng TSF is shown in Figure 11-13.

Figure 11-13: TSF of Hanfeng Mining

11.4.8 Conclusion and Recommendations

The Dongfeng processing plant mainly processes molybdenum ore, and the history processing capacity is 500tpd. After optimizing the process, the production capacity reaches to about 700tpd. It adopts flotation process, and the final product is molybdenum concentrate with grade of 40%～45%.

The Lishan plant is built on a hill, making a full use of the natural topography, and the equipment inside the plant is compact and reasonable.

Lishan TSF has been in operation for many years with no uneven settlement and no cracks in the dam. The enterprise has now installed online monitoring facilities. The overall safety is qualified and has passed the safety evaluation and acceptance.

11.5 Jintai Project

11.5.1 Metallurgical Testwork

Kunming Metallurgical Research Institute ("**KMRI**") and the Centre Laboratory of Yunnan Geological and Mineral Exploration and Development Bureau ("**Yunnan Central Lab**") and Jintai Mining conducted metallurgical testwork on the Xidengping gold ore. The tests include the flowing aspects:

- Mineralogy
- Agitation Leaching
- Column leaching
- Selection of gold leaching agent and
- Industrial test of heap leach

The testing results of the sieve analysis of -33mm of Xindengping ore by the KERI showed 39.5% of "slime", and the column leaching showed a serious permeability problem. The results of the physical properties of -25mm ore by the Yunnan Central Lab are shown in Table 11-16, and the "slime" content was 25.62%, which is relatively high, and the test report describe it as "average permeability", which SRK understands as "not serious permeability problems". Jintai Mining also found slime and serious permeability problems in the ore by soaking the ore in tanks. During the site visit, SRK found that the ores were highly oxidized by In-situ crushing. Combined with the test results of the high slime content of the ore and the high lime dosage, SRK recommends pelleting heap leaching with alkaline cement or lime as the binder.

Table 11-16: Ore Physical Property Test Results

Item	Unit	Results
Density	g/cm^3	2.60
Heap Density	g/cm^3	1.42
Angle of Repose	degree	40
Hardness		6.3
Moisture Content[1]	%	0.55
Slime Content	%	25.62
Permeability coefficient[2]	m/d	1.30
Moisture Absorption Rate	%	17.96

Note:

[1] The Moisture Content was tested at the original ore-2mm particle size, and the rest of the parameters were measured at the original ore-25mm particle size.

[2] The permeability coefficient was tested at a spray intensity of 10 $L/m^2 \cdot h$.

In order to verify the feasibility of gold extraction by heap leaching, Jintai Mining conducted industrial tests of heap leaching at the mine site from January 2014 to February 2015. The industrial test was carried out in three phases, with the test stacked ore grade ranging from 0.3 to 2.0g/t, with an average of 1.06g/t. The test heap area was about 24,000m^2 and the total amount of ore heap during the test period was about 160,000t. A crushing process with two open circuit sections and pre-screening before fine crushing was used to crush the ore to less than 50mm, which was transported by car to

the leach pad for stacking, with the initial test ore stacking height ranging from 1 to 2.5m and the later ore stacking height ranging from 5 to 15m. Leaching by sodium cyanide solution spraying, the test spraying intensity was 13-20 L/m^2·h. The leaching period was about 3 months, and the dosage of sodium cyanide was stabilized at about 150g/t and the dosage of lime was stabilized at about 4.2kg/t, which was much lower than the dosage of column leaching in the laboratory. The average gold leaching rate during the industrial test was about 80%, it is a satisfactory result, confirming that heap leaching method was feasible for Xidengping Gold Mine.

11.5.2 Jintai Heap Leaching Plant

GOCOM Engineering Design Co., Ltd. completed the *Preliminary Design of Eryuan Jintai Mining Development Co. Ltd. For 140,000t/a Open Pit Mining Project at Xidengping Gold Mine in Eryuan County* in October 2022, which was designed maximum size of stacked ore is 35mm and the heap was constructed by truck and then bulldozer. The ore heap is constructed in multiple layers, each layer is 7m high, and when the previous layer of leaching is finished, the next layer is directly constructed without unloading the first one, until 6 layers. The heap was leached by spraying with 0.15%~0.20% Jinchan gold leaching agent. Design leaching rate of 86%, the final product is gold-loaded carbon, with the heap leaching comprehensive recovery rate of 85.05%. The GOCOM Preliminary Design is the basis of the current heap leach plant construction at mine, and also the design basis for this report.

The Jintai Heap Leaching Plant was completed and put into operation in October 2023. The project included the restoration of the original crushing production line and solution ponds, as well as the construction of new solution ponds and water and electricity supply facilities. As of March 31, 2024, leaching has been completed on the D1 and D2 ore heaps, leaching on the D3 and D4 ore heaps is underway, and D5 ore heap is under construction. The total amount of ore in the D1 and D2 heaps that has completed leaching is 122,924 t, yielding 83.06 kg of gold (carbon-loaded gold), with an average gold recovery rate of 81.56%. Leaching on D3 heap is currently ongoing, with a total ore amount of 78,290 t, after leaching for 58 days, r55.23 kg of gold was recovered, with a recovery rate of 70.54%. The total amount of ore in the D4 heap is 109,249 t. After leaching for 35 days, 35.93 kg of gold was recovered, with a recovery rate of 55.78%. The D3 and D4 heaps are still leaching, and gold recoveries will still improve.

The main technical risks are the coarse particle size of the ore feeding the heap and the poor permeability of the heap. SRK recommends changing the crushing process from open circuit to closed circuit, reducing the crushed particle size to less than 25 mm, and using cement or lime for granulation. Then, use a belt conveyor to transport the granulated ore and build the heap, thereby improving the heap's permeability. SRK believes that controlling the ore particle size and enhancing heap permeability are key measures to ensure gold recovery rates.

11.5.3 Heap Leaching Process

The design process mainly includes three systems of ore crushing, heap leaching and adsorption, and the final product is gold-loaded carbon with a gold grade between 2000g/t to 4000 g/t. Jintai Mining entrusts other party to processing the gold-loaded carbon (elution - electrowinning - smelting), to produce a final product of Gold Dorè. The gold stripped carbon will be returned to the adsorption system. The heap leaching process is shown in Figure 11-14 and illustrated as follows

Ore Crushing

A two-stage open-circuit crushing process is used to crush the ore to -35mm. The maximum particle size of the open-pit ore is 500mm, which is transported by car to the ROM bin or ore stacking area in the crushing workshop of the processing plant. Then the material less than 100mm is screened out by a grizzly feeder, and the oversize material is fed to a primary jaw crusher. The undersize material of the grizzly feeder and the coarsely crushed product are fed to a vibrating screen to screen out materials less than 35mm, and the oversize material is fed into a secondary jaw crusher. The finely crushed product is combined with the undersize material and transported by truck to the leach pad for stacking.

Heap Leaching Site

The heap leaching site covers an area of 7.24hm^2 (7,2400m^2) and is located about 150m to the south of the open pit of Orebody V1. It is a gentle slope of medium and low mountains, which requires slope cutting to reduce the gradient. The longitudinal slope gradient of the heap leaching site is finally determined to be 5-10% and the lateral slope to be 4-5%, to reduce the earthwork volume of the slope cutting engineering. In order to prevent uneven settlement, the filling section adopts the bedded earth rolling method, with a compaction coefficient of no less than 0.97. In order to prevent the impact of groundwater on site stability, a groundwater collection and drainage system is installed under the leach pad. The groundwater collection and drainage system is located below the anti-seepage system, and the burial depth is not less than 1.5m, that is, the sand and gravel blind drain is arranged in the base, and after the collection infiltration of the sand reverse filter layer, the groundwater is discharged to the downstream sedimentation tank by the DN200 ultra-high molecular weight polyethylene drainage pipe in the gravel layer, which is used as production water, or discharged after the detection reaches the environmental emission standard.

Bottom Pad Laying

The durable bottom pad is a compound pad composed of 4,800g/m^2 sodium-based bentonite impermeable blanket (GCL) + one layer of 2mm-thick HDPE geomembrane. A gradient of not less than 3% is set when the bottom pad is laid, to facilitate the leach solution flowing into the collection ditch along the bottom slope, and the DN100 ultra-high molecular weight polyethylene drainage pipe is laid in the direction of downstream water to dredge the liquid flow. A sand gravel layer of 2-10mm and 16-32mm with a thickness of 300-500mm is laid on the geomembrane as an ore heap percolation drainage layer and a protective bottom pad to ensure that the leach solution can smoothly penetrate into the bottom of the ore heap and flow into the collection tank through the collection facility. After completion of the bottom facilities of the leach pad, the ore stacking work begins.

Ore Stacking

The crushed ore (-35mm) is transported directly to the leach pad by car. The truck is equipped with a bulldozer to stack the ore stacking, and the excavator is used to turn the ore stacking and shape it. It adopts a zonal and layered stacking method, with a layer height of 7m. After the completion of ore stacking, the surface layer of the ore stacking compacted by vehicles is loosened for 3-4m by an excavator to facilitate the penetration of the leach solution. According to the terrain around the ore stacking ground, grooves are laid with a slope of 2-5% to facilitate the collection of leach solution,

and the collected leach solution flows into the sedimentation pond and the pregnant leach solution pond. It adopts a permanent heap leach yard without unloading the heap.

Laying of Solution Distribution Pipes

After the completion of ore stacking in each zone, a solution distribution pipe network is laid on the top of the heap, and the solution distribution is carried out by rotating-swing spray nozzles (the Senninger spray nozzles). The grid of the nozzle is generally 4×4m. A regulating valve is set at the connection between the main pipe and the branch pipe to control the flow and troubleshooting of a certain part of the ore stacking.

Alkaline Washing

At the time of ore stacking, a certain amount of lime is added in advance. When the ore stacking is washed with water, the pH value of the effluent may reach 9-10. If it cannot reach the specified pH value, a certain amount of caustic soda should be added until the pH value of the effluent reaches 11-11.5, after which stop washing, and then spray it with a gold leaching agent solution.

Spray Leaching

The solution with a concentration of 0.15%-0.20% and a pH= 1-11.5 is prepared in the barren solution pond with the Jinchan gold leaching agent as gold leaching reagent. The prepared leach solution is pumped from the barren solution pond to the spray pipe network, through which the ore stacking is sprayed and leached. The spray intensity is 6L to 30L/m^2·h, and the continuous time of each spray is 1h with the interval time of 0.5h, which can be adjusted according to the process stage or the actual site situation.

The sprayed leaching solution permeates the heap from surface to bottom while the gold is dissolved into the leaching solution, and flowing out of the ore heap flows into the pregnant leach solution collection pond and is pumped to the pregnant leach solution pond after precipitation. The pregnant leach solution is then discharged to the barren solution pond after being adsorbed by carbon. The returned barren solution should be added with leaching agent according to the analysis results to ensure the concentration of gold leaching agent and pH value of the leaching solution. The ore stacking is continued to be sprayed to form a spray-leach-adsorption cycle until the end of leaching.

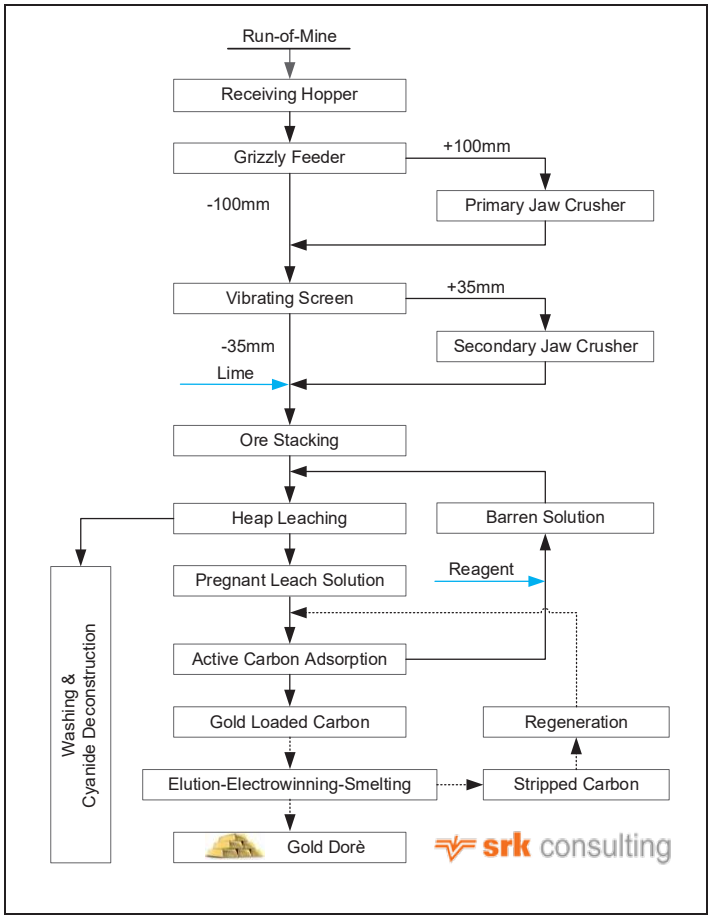
Active Carbon Adsorption

Active carbon is used as gold and silver adsorbent and loaded into the adsorption column. The gold and silver in the pregnant leach solution are adsorbed and leached by five adsorption columns in series. After the gold load of the active carbon reaches the designed adsorption capacity (4,000g/t), it is discharged through the bottom carbon discharge valve, and then sampled, weighed and stored after the surface moisture is dried. The gold-loaded carbon is the final product on site. While Jintai Mining entrusts other party to processing the gold-loaded carbon (elution - electrowinning - smelting), to produce a final product of Gold Dorè. The gold stripped carbon will be returned to the adsorption system. Jintai tells SRK the striped carbon will be recycled three times and then will be sold.

Washing and Purification

The design leaching cycle is 50-60 days. After the completion of leaching, the ore heap is sprayed and washed with a weak alkaline limewater to wash out the residual leaching solution containing gold and gold leaching agent, and finally it is sprayed and washed with the alkaline bleaching powder solution to detoxify the ore heap. The washing-purification time is about 15-20 days. After the washing and purification of the ore heap is completed, the pipe network is dismantled, the impermeable bottom pad is re-laid on the top of the ore stacking, and then the second layer of the ore heap is stacked and leached until the stacking and leaching of the 6th layer ore heap is completed. After the final leaching, the disinfected leaching residue is stored in situ and reclaimed by covering soil.

Figure 11-14: Heap Leaching Process Flowsheet of Xidengping Gold Mine



Source: SRK

11.5.4 The Facilities and equipment of Heap Leaching Plant

A complete crushing system, solution pond system and adsorption system are left over from the original heap leaching test plant. Although the facilities and equipment of these systems are small, they can still be used after maintenance. *GOCOM Preliminary design* to make use of them, and added some solution pond, water supply and drainage facilities and laboratories, spare parts warehouse, reagent storage and products warehouse. The main production facilities and equipment designed are shown in Table 11-17. Figure 11-15 shows the key facilities of the heap leaching plant.

Table 11-17: Heap Leaching Facilities and Equipment

No.	Equipment	Equipment name and specification	Installed power（kW）	Quantity	Remarks
1	Jaw crusher	PE600×900	55	1	Utilize used equipment
2	Vibrating screen	SZZ-1545	11	1	Utilize used equipment
3	Jaw crusher	PEX300×1300	55	1	Utilize used equipment
4	Adsorption column	Φ2000×3000mm		15	New
5	Pregnant Solution Pond	15×8×3m, 300m^3		2	Utilize used equipment
6	Barren Solution Pond	ф21×3m, 900m^3		1	Utilize used equipment
7	Barren Solution Pond	ф15×3m, 450m^4		1	New
8	solution collecting pond	18×6×3m, 300m^3		1	New
9	Heap leaching site	72,400m^2		1	New construction

Source：Jintai provided and SRK site visit

Figure 11-15: Main Facility Photos of Xidengping Heap Leach Plant

Source: SRK site visit

11.5.5 Designed technical index and production performance

The technical index of heap leaching designed by *GOCOM Preliminary design* is shown in Table 11-18, and the scale of heap leaching is 140,000 t/a, with 0.83g/t of feed grade, the overall gold recovery rate is 85.05%, the final product is gold-loaded carbon with the gold grade of 4,000g/t, the annual output of gold (contained in gold-loaded carbon) is 98.83kg.

Table 11-18: Designed Technical Index of Heap Leaching

No.	Item	Unit	Quantity
1	The scale of ROM	t/a	140,000
2	Ore fragmentation of mine ore supply	mm	500～0
3	Particle size of stacked ore	mm	35～0
4	Grade of ROM	g/t	0.83
5	Gold content of ROM	kg/a	116.2
6	Leaching rate	%	86
7	Washing rate	%	99
8	Adsorption rate	%	99.9
9	Comprehensive Recovery Rate[1]	%	85.05
10	Leaching period	day	90
11	The quantity of leaching residue	t/a	140,000
12	The grade of leaching residue	g/t	0.124
13	Gold content of leaching residue	kg/a	17.37
14	The quantity of gold loaded carbon	t/a	24.71
15	The grade of gold loaded carbon	g/t	4,000
16	Gold content in loaded carbon	kg/a	98.83
17	The consumption of lime	kg/t	4.5
18	The consumption of Jinchan gold leaching agent	kg/t	0.35
19	The consumption of bleaching powder	kg/t	0.55

Note:

[1] Overall recovery rate= Leaching rate × washing rate × Adsorption rate

The heap leaching plant was completed in October 2023. It includes the maintenance of the existing crushing equipment and the construction of the plant building, reinforcement and anti-seepage treatment of the existing solution pond, construction of new solution pond, construction of the heap leaching site, and construction of basic infrastructure.

As of March 31, 2024, four heaps were constructed and leached, among which the leaching on heaps D1 and D2 has been completed, leaching on the D3 and D4 ore heaps is underway, and D5 ore heap is under construction. The ore quantities and gold leaching amounts for each heap are shown in Table 11-19, and the leaching rate curves are illustrated in Figure 11-16. For the two heaps where leaching has been completed, the recovery rate for D1 heap is 87.8%, and for D2 heap it is 77.6%. The significant difference between these rates is attributed to the fact that D1 heap contains 21,000 t of uncrushed raw ore, leading to considerable sampling error and a lower grade, which in turn results in an inflated recovery rate. The recovery rate for D2 heap is more reliable and can represent the actual production recovery rate.

SRK observed on site that the pregnant leach solution (PLS) was turbid and had low grade, speculating two possible reasons:

- High clay content in the ore, leading to poor permeability;
- Excessive spray intensity of the leach solution, causing the leach solution to erode the heap.

SRK also noted on site that to improve the permeability of the heap, the actual particle size of the ore in the heap was around -100mm, much larger than the designed -35mm. Although the coarser particle size can improve permeability, it will significantly impact the recovery rate. SRK recommends

maintaining the designed ore crushing particle size and adopting granulation operations to ensure the permeability of the heap.

Table 11-19: Heap Leaching Production Performance, as of 31 March 2024

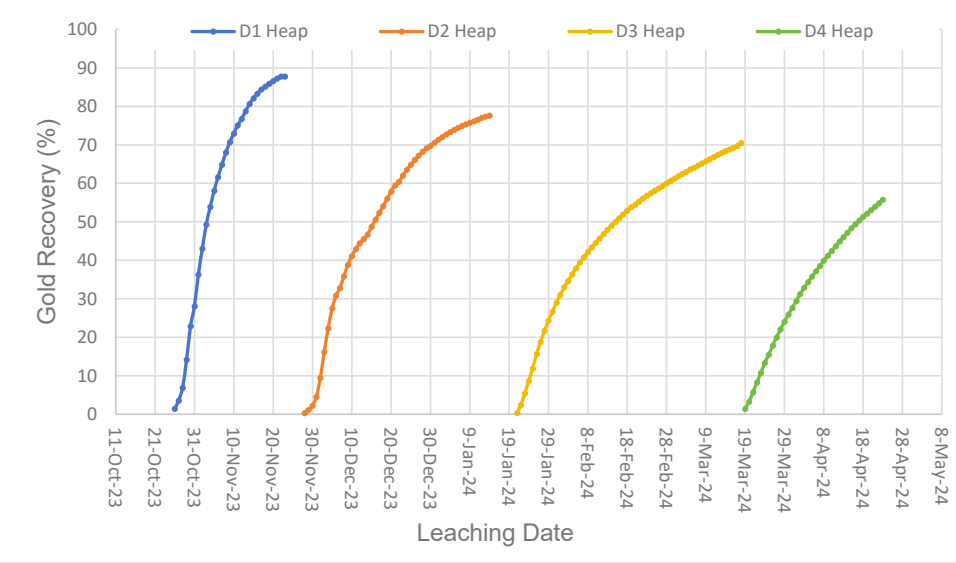
Item	Unit	No.					
		D1	D2	D3	D4	D5	合计
Ore quantity	t	51,110	71,814	112,964	109,249	35,941	381,077
Average grade	g/t	0.77	0.87	0.69	0.59	0.57	0.69
The amount of metal	g	39,354	62,478	78,290	64,412	19,051	263,586
Leaching time	day	28	47	58	35		
Cumulative gold load in carbon	g	34,557	48,503	55,226	35,930		174,215
Cumulative recovery rate[1]	%	87.81	77.63	70.54	55.78		

Source: SRK calculated based on data provided by Jintai Mining

Note:

[1] The recovery rate is calculated according to the accumulated gold load in carbon and the amount of metal in heap.

Figure 11-16: Heap leaching Production Curve for Xidengping Mine



Source: drawn by SRK according to Jintai's "Gold-loaded Carbon Production Report"

11.5.6 Conclusion and Recommendation

- The designed maximum size of stacked ore is 35mm, and the heap is continuously stacked without unloading, with a total of 6 layers superimposed, and the average height of each layer is 7m. Due to the particle size is the most important factor affecting gold leaching rate, SRK recommends using closed circuit for fine-crushing operation to reduce the particle size of stacked ore to 100% less than 25mm. The permeability of ore stack is the key factor affecting the success or failure of heap leaching. SRK suggests that cement and sodium cyanide solution should be used for pelleting to avoid argillization, and belt conveyors and stacking conveyor should be used to build ore stack to avoid compaction and ensure the permeability of ore stack. Pelleting with

cement and sodium cyanide solution can provide sufficient protective alkali in advance, and save the pre-alkaline washing operation, shorten the leaching period and improve the leaching rate of gold.

- It is reasonable to construct groundwater seepage control and drainage system by cutting treatment of heap leaching site as stepped type. It is reasonable to lay the liquid collection drainage pipe network system on the bottom pad of the ore heap, which can timely export the leaching solution to the ore stack and reduce the scouring of the ore at the bottom of the stack. During the site construction, it is recommended to rationally arrange the location and network of the system according to the terrain conditions.
- The design scale of heap leaching is 140,000 t/a, the average grade of ore is 0.83g/t, the overall recovery rate of gold is 85.05%, the final product is gold-loaded carbon, the gold grade of loaded carbon is 4000g/t. In view of the easy leaching of Xidengping gold ore and the leaching rate is 85%~91% in column leaching test, SRK believes that the overall recovery of 85% gold can be reached or even exceeded under the condition of ensuring the permeability of ore stack. SRK observed on-site that the maximum particle size feeding the heap was approximately 120mm, which is much larger than the designed particle size for heap leaching. Additionally, there are permeability issues with the ore heap, which will result in the gold recovery rate not meeting the design specifications. SRK suggests modifying the existing open-circuit crushing process to a two-stage closed-circuit process, reducing the ore to below 20mm, and adding a drum granulator to granulate the crushed ore, and using a belt conveyor to build the heap.
- Heap leaching has the characteristics of flexible scale, low investment, low cost and short-term benefit, and Xidengping ore is suitable for heap leaching. The discovery of V4 orebody makes it possible to expand the scale of heap leaching to 1 million t/a. The current scale of 140,000 t/a is feasible by mainly using the facilities and equipment of the original pilot plant. Jintai Mining plans to build a second crushing workshop to expand production capacity. SRK recommends using a closed-circuit crushing process to reduce the ore to less than 25mm and granulating the crushed ore to improve the heap's permeability. SRK believes that this can achieve the designed recovery rate of 85%.
- The final product of the mine is gold-loaded carbon, Jintai Mining entrusts other party to processing the gold-loaded carbon, to produce a final product of gold doré, SRK suggests that a smelting workshop should be built in the mine to use a processing device of "high-temperature elution and homothermal electrowinning " to produce Gold Dorè.

12 Project Infrastructure

12.1 Location and Access

12.1.1 Jilong Project

The Jilong gold project is located about 21km west of Aohanqi or 58km west of Chifeng City, Inner Mongolia. The Zhuanshanzi gold mine is approximately 45km away from the Pingzhuang Station of Yebaishou - Chifeng Railway in the southwest and only 15km away from the Xiaohe Station of Beijing – Tongliao Railway in the north. There are gravel roads connecting the mine to the railway stations and main paved roads.

12.1.2 Huatai Project

The Huatai gold project, including the Lianhuashan gold mine, Honghuagou gold mine and Pengjiagou gold mine, is located approximately 33~38km west of Chifeng City, Inner Mongolia. Three operating mines are all within 3 to 10km away from the Honghuagou Station of Beijing – Tongliao Railway. Chifeng City has extensive networks of railway line and well paved highways. There are gravel roads connecting these mines to the railway station and main paved roads. Access to these properties is convenient.

12.1.3 Wulong Project

The Wulong gold project is located about 15km west of Dandong City or 38km south of Donggang City, Liaoning Province. Access to the Wulong gold mine is very convenient. The Dandong-Dalian highway is 11km away from the mine in the southeast. There are gravel roads connecting the mine to the main paved roads.

12.1.4 Hanfeng Project

The Jilong lead-zinc project is located approximately 42km of northwest of Longjing City, Jilin Province. Access to the project area is excellent. The Changchun-Tumen Railway and National Highway G302 pass through Laotougou Township in the southeast of Tianbaoshan mine area. Laotougou Town is just 15km southeast of the project's properties and there is a cement road connecting Laotougou Town and the project site.

12.1.5 Jintai Project

Jintai project is located about 54km road away Southwest to Eryuan county, Dali Bai Autonomous Prefecture, Yunnan Province. Access to Jintai project is very convenient. The local downtown Liantiexiang is about 3km from mine site and the connected with national road to Eryuan county about 51km. the downtown to Dali is about 106km.

12.2 Power Supply

12.2.1 Jilong Project

Jilong Mining has built a 4,000kVA+6,300kVA general step-down substation in the first mining area of the Zhanshanzi Gold Mine and the power supply is Yuanbaoshan 66kV, a second substation. The power supply in the mining area is sourced from the general step-down substation. A 10kV transmission line is connected to the power distribution room in the mining area through LGJ-95mm^2 steel-cored aluminum stranded wires. The power supply meets production needs.

12.2.2 Huatai Project

The power supply for the Huatai project is sourced from the Northeast Power Grid, and the industrial 10kv high-voltage line has been connected to the Lianhuashan and Honghuagou gold mining areas, which can meet both production needs.

12.2.3 Wulong Project

Wulong operating gold mine is an old mining area with complete power supply facilities. The Northeast Power Grid runs through the whole area, and the power supply is sufficient.

12.2.4 Hanfeng Project

There is a 110kV high-voltage dedicated line for Tianbaoshan operating mine, and the power supply can fully meet the production needs.

Jintai project is located about 54km road way Southwest to Eryuan county, Dali Bai Autonomous Prefecture, Yunnan Province. Access to Jintai project is very convenient. The local downtown Liantiexiang is about 3km from mine site and the connected with national road to Eryuan county about 51km. the downtown to Dali is about 106km.

12.2.5 Jintai Project

The power supply for the Jintai project is sourced from the 35kV power station of Liantiexiang town which is a station to the China Southern Power Grid. The industrial 10kv high-voltage line has been connected to the project about 1.8km away, which can meet both production needs. Residential electricity is supplied as the mine is not constructed, during site visit. Figure 12-1 shows the power station and the connection of power line.

Figure 12-1: Power Station of Liantiexiang

12.3 Water Supply

12.3.1 Jilong Project

Water for production and domestic use is sourced from underground water with a water volume of 70 cubic meters per day ("m^3/d") per water well

12.3.2 Huatai Project

Water for production and domestic use is sourced from underground water (electromechanical wells), and the water volume is relatively sufficient.

12.3.3 Wulong Project

The water for mine production and surrounding residents is taken from the special water intake area of the mining area, and water resources are relatively sufficient.

12.3.4 Hanfeng Project

The production water supply is from the water source of Huxiantang water source on the southeast side of the ore processing plant and the underground water of Lishan Pit.

Huxiantang Water Source: there is a 6m×12m water intake pumping station built at the water intake point, using three sets (one for backup and two for use) of water intake pumps D155-30×9 (Q=72～126m^3/h, H=270m, N=200kW), through a D300mm iron pipe through an air-raid shelter and the

water source pipeline at the mouth of Dongfenggou, and then directly pump water to the high-level water tank of the ore processing plant. The straight-line distance of water supply is about 5,000m.

In addition, the backwater from the Lishan tailings pond is also transported to the high-level water tank of the concentrator through the pump station.

Lishan Pit Gushing Water: the gushing water from the Lishan pit, through four-level drainage pumping stations, are pumped to the surface. The water supply capacity is 500m3/d.

12.3.5 Jintai Project

The production water is planned sourced from the nearby river of Heihui. A pump station and powerhouse are planned to construct. Pipeline connecting water source and head tank of processing plant is also planned. the water source location is shown in Figure 12-2.

Figure 12-2: Planned Water Source Point along Heihui River

The domestic water is source from the spring pond and the water plant of Xidengping village, which is the source for local community. The pipeline has been constructed along the road get into mine site.

13 Environmental Studies, Permitting, and Social or Community Impact

13.1 Environmental, Permitting, and Social or Community Review Objective

The objective of this due diligence review is to identify and or verify the existing and potential Environmental, Permitting, and Social or Community liabilities and risks, and assess any associated proposed remediation measures for the Project.

13.2 Environmental, Permitting, and Social or Community Review Process, Scope, and Standards

The process for the verification of the environmental compliance and conformance for the Project comprised a review and inspection of the Project's environmental management performance against:

- Chinese national environmental regulatory requirements; and
- World Bank/International Finance Corporation ("**IFC**") environmental standards and guidelines, and internationally recognised environmental management practices.

The methodology applied for this environmental review of the Project consisted of a combination of documentation review, site visit, and interviews with Company technical representatives. The lasts site visit for the environmental review was undertaken in May 2024.

13.3 Status of Environmental Impact Assessment

The basis of environmental policy in China is contained in the 2018 Constitution of the People's Republic of China. Pursuant to Article 26 of the Constitution, the state protects and improves the environment in which people live and the ecological environment. It prevents and controls pollution and other public hazards. The state organizes and encourages afforestation and the protection of forests.

The following are other Chinese laws that provide environmental legislative support to the Minerals Resources Law of the People's Republic of China (2019) and the Environmental Protection Law of the People's Republic of China (2014):

- Environmental Impact Assessment ("**EIA**") Law (2018).
- Law on Prevention & Control of Atmospheric Pollution (2018).
- Law on Prevention & Control of Noise Pollution (2021).
- Law on Prevention & Control of Water Pollution (2017).
- Law on Prevention & Control Environmental Pollution by Solid Waste (2020).
- Forestry Law (2021).
- Water Law (2016).
- Land Administration Law (2019).

- Protection of Wildlife Law (2023).
- Regulations on the Administration of Construction Project Environmental Protection (2017).

In accordance with Chinese legislation the Project will be subjected to a comprehensive EIA to assess the environmental impacts of the proposed development on the human and natural environment prior to the commencement of mining operations.

The details of the EIA reports and approvals for each project are presented in the tables below.

13.3.1 Jilong Project

Table 13-1:Details of the EIA Reports and Approvals for the Jilong Project

Project	Produced By	Production date	Approved By	Approval date
Chifeng Jilong Mining Ltd. Gold Mine Mining and Processing Project (400 tpd)	Chifeng City Environmental Science Institute	September, 2007	Chifeng City Environmental Protection Bureau	January 30, 2008
Zhuanshanzi Gold Mine (No.4, 5, 6, 7 ore body) Mining Project (200 tpd)	Hebei Deyuan Environmental Protection Ltd.	May, 2019	Chifeng City Ecology and Environmental Bureau	December 30, 2019
Zhuanshanzi Gold Mine Processing Expansion Project	Inner Mongolia Guxincheng Environmental Technology Ltd.	February,2023	Chifeng City Ecology and Environmental Bureau	April 18, 2023

13.3.2 Huatai Project

Table 13-2: Details of the EIA Reports and Approvals for the Huatai Project

Project	Produced By	Production date	Approved By	Approval date
Chifeng Huatai Mining Ltd. Gold Mine Mining and Processing Expansion Project (0.06Mtpa)	Chifeng City Environmental Science Institute	May, 2007	Chifeng City Environmental Protection Bureau	June 6, 2007
Chifeng Huatai Mining Ltd. Honghuagou No.1 Mining Area Expansion Project (0.06Mtpa)	Chifeng Environmental Investment Ltd.	May, 2020	Chifeng City Ecology and Environmental Bureau	October 12, 2020
Chifeng Huatai Mining Ltd. Lianhuashan No.5 Mining Area Expansion Project (0.06Mtpa)	Chifeng Environmental Investment Ltd.	July, 2020	Chifeng City Ecology and Environmental Bureau	September 4, 2020
Chifeng Huatai Mining Ltd. Lianhuashan No.3 and No.7 Ore Body Mining Project (0.06Mtpa)	Chifeng Environmental Investment Ltd.		Chifeng City Ecology and Environmental Bureau	October 12, 2020
Chifeng Huatai Mining Ltd. Pengjiagou Gold Mine Project (0.03Mtpa)	Chifeng City Environmental Science Institute	October, 2014	Chifeng City Environmental Protection Bureau	December 1, 2014
Chifeng Huatai Mining Ltd. Lianhuashan No.26 Ore Body Mining Project (0.03Mtpa)	Chifeng City Environmental Science Institute	February, 2015	Chifeng City Environmental Protection Bureau	March 24, 2015

Project	Produced By	Production date	Approved By	Approval date
Chifeng Huatai Mining Ltd. Honghuago No.86 Ore Body Mining Project (0.03Mtpa)	Chifeng City Environmental Science Institute	October, 2014	Chifeng City Environmental Protection Bureau	December 1, 2014

13.3.3 Wulong Project

Table 13-3: Details of the EIA Reports and Approvals for the Wulong Project

Project	Produced By	Production date	Approved By	Approval date
Liaoning Wulong Gold Mine Development Project (0.15Mtpa)	Dandong City Environmental Protection Science Institute	October, 2006	Dandong City Environmental Protection Bureau	November 6, 2006
Liaoning Wulong Zhoujiagou TSF Treatment and Processing Plant (800 tpd) Decommissioning Project	China Coal Technology & Engineering Group Shenyang Design & Research Institute Ltd.	December, 2013	Dandong City Environmental Protection Bureau	April 8, 2014

13.3.4 Hanfeng Project

Table 13-4: Details of the EIA Reports and Approvals for the Hanfeng Project

Project	Produced By	Production date	Approved By	Approval date
Longjing Hanfeng Mining Ltd. Tianbaoshan Mine Area Residual Resources Recovery and Utilization Project	Yanbian Environmental Protection Science Institute	March, 2005	Yanbian Environmental Protection Bureau	March 14, 2005
Lishan-xinxing Mine Area Lead-Zinc Mining Expansion Project (0.18Mtpa)	Jilin Metallurgical Research Institute Jilin Linchang Environmental Technology Service Ltd.	May, 2013	Jilin Province Environmental Protection Bureau	June 9, 2013
Jilin Hanfeng Lishan Processing Plant Technical Transformation Project	Jilin Northeast Coal Industry Environmental Protection Research Ltd.	February, 2017	Yanbian Environmental Protection Bureau	February 20, 2017
Jilin Hanfeng Lishan Mining Area Expansion Project (0.6Mtpa)	Jilin Linchang Environmental Service Ltd.		Jilin Province Ecology and Environmental Bureau	August 31, 2021

13.3.5 Jintai Project

Table 13-5: Details of the EIA Reports and Approvals for the Jintai Project

Project	Produced By	Production date	Approved By	Approval date
Xidengping Gold Mine Mining, Processing and Tailings Project (0.14Mtpa)	Kunming Nonferrous Metallurgy Design & Research Institute Ltd..	December 2013	Yunnan Province Environmental Protection Bureau	February 17, 2014

SRK noted that the EIA reports for the Liaoning Wulong Gold Mine Development Project (0.15Mtpa) and Liaoning Wulong Zhoujiagou TSF Treatment and Processing Plant (800 tpd) Decommissioning Project did not include the new processing plant. However, Wulong Mining stated that the EIA report had been submitted to the environmental protection bureau and was under review. Yunnan Rongtan Environmental Protection Technology Co., Ltd. prepared a report on the optimization and demonstration of environmental protection measures for the project in May 2022. The report concluded that the changes resulting from the continuation of the project do not constitute significant changes and do not alter the environmental impact assessment conclusions already approved for the project.

13.4 Status of Environmental Licenses and Permits

According to the requirements of relevant laws and regulations of China, a series of environmental protection related licenses and permits should be obtained during the operation of mines, such as safety production permit, water use permit and site discharge permit.

13.4.1 Safety Production Permit

The safety production permits for each project are presented in the following tables.

Table 13-6: Details of Safety Production Permits of Jilong Project

Project	Jilong Project
Safety Production Permit No.	[2021] 002320
Issued To	Chifeng Jilong Mining Ltd.
Issued By	Chifeng City Emergency Management Bureau
Licensed Activity	Gold and Silver Mine Underground Mining, TSF Operation
Issue Date	2 July, 2021
Expiry Date	1 July, 2024
Project	Jilong Project
Safety Production Permit No.	[2022] 006589
Issued To	Chifeng Jilong Mining Ltd. Zhuanshanzi Gold Mine #1 Mining Section Technical Transformation Project
Issued By	Chifeng City Emergency Management Bureau
Licensed Activity	Gold and Silver Mine Underground Mining
Issue Date	10 January, 2022
Expiry Date	9 January, 2025
Project	Jilong Project
Safety Production Permit No.	[2021] 005704
Issued To	Chifeng Jilong Mining Ltd. #3 Mining Section
Issued By	Chifeng City Emergency Management Bureau
Licensed Activity	Gold and Silver Mine Underground Mining
Issue Date	6 May, 2021
Expiry Date	5 May, 2024
Project	Jilong Project
Safety Production Permit No.	[2024] 005701
Issued To	Chifeng Jilong Mining Ltd. #2 Mining Section
Issued By	Inner Mongolia Autonomous Region Mine Safety Supervision Bureau
Licensed Activity	Gold and Silver Mine Underground Mining
Issue Date	11 May, 2024
Expiry Date	10 May, 2027
Project	Jilong Project

Safety Production Permit No.	[2024] 005703
Issued To	Chifeng Jilong Mining Ltd. Gold Processing Plant TSF
Issued By	Inner Mongolia Autonomous Region Mine Safety Supervision Bureau
Licensed Activity	TSF Operation
Issue Date	11 May, 2024
Expiry Date	10 May, 2027

Table 13-7: Details of Safety Production Permits of Huatai Project

Project	Huatai Project
Safety Production Permit No.	[2021] 001595
Issued To	Chifeng Huatai Mining Ltd.
Issued By	Chifeng City Emergency Management Bureau
Licensed Activity	Gold Mine Underground Mining, TSF Operation
Issue Date	12 December, 2021
Expiry Date	11 December, 2024
Project	Huatai Project
Safety Production Permit No.	[2021] 001602
Issued To	Chifeng Huatai Mining Ltd. TSF
Issued By	Chifeng City Emergency Management Bureau
Licensed Activity	TSF Operation
Issue Date	24 September, 2021
Expiry Date	23 September, 2024

Huatai Mining stated that the safety production permit for the underground mining had been taken away by the relevant authority due to the technical transformation engineering.

Table 13-8: Details of Safety Production Permits of Wulong Project

Project	Wulong Project
Safety Production Permit No.	[2022] BF061113
Issued To	Liaoning Wulong Gold Mining Ltd.
Issued By	Liaoning Province Emergency Management Bureau
Licensed Activity	Gold Mine Underground Mining
Issue Date	11 April, 2022
Expiry Date	7 June, 2024
Project	Wulong Project
Safety Production Permit No.	[2022] BF062063
Issued To	Liaoning Wulong Gold Mining Ltd. Zhoujiagou TSF
Issued By	Liaoning Province Emergency Management Bureau
Licensed Activity	TSF Operation
Issue Date	11 April, 2022
Expiry Date	28 October, 2023

Table 13-9: Details of Safety Production Permits of Hanfeng Project

Project	Hanfeng Project
Safety Production Permit No.	[2023] HYBY0001

Issued To	Jilin Hanfeng Mining Technology Ltd.
Issued By	Jilin Province Emergency Management Bureau
Licensed Activity	Lead, Zinc, Copper, Molybdenum Mining and TSF Operation
Issue Date	11 August, 2023
Expiry Date	10 August, 2026
Project	Hanfeng Project
Safety Production Permit No.	[2024] DXYBYBB0058
Issued To	Jilin Hanfeng Mining Technology Ltd. Lishan Mine
Issued By	Jilin Province Emergency Management Bureau
Licensed Activity	Non-coal Mining
Issue Date	26 February, 2024
Expiry Date	15 May, 2025
Project	Hanfeng Project
Safety Production Permit No.	[2024] DXBYBB0071
Issued To	Jilin Hanfeng Mining Technology Ltd. Lishan Mine Tianbaoshan Lead-Zinc Mine Area Dongfeng Mine
Issued By	Jilin Province Emergency Management Bureau
Licensed Activity	Non-coal Mining
Issue Date	26 February, 2024
Expiry Date	15 January, 2025
Project	Hanfeng Project
Safety Production Permit No.	[2023] WKBYYB0010
Issued To	Jilin Hanfeng Mining Technology Ltd. Lishan TSF
Issued By	Jilin Province Emergency Management Bureau
Licensed Activity	TSF Operation
Issue Date	11 May, 2023
Expiry Date	9 March, 2026
Project	Hanfeng Project
Safety Production Permit No.	[2023] WKBYYB0006
Issued To	Jilin Hanfeng Mining Technology Ltd. Tianbaoshan Lead-Zinc Mine Area Dongfeng TSF
Issued By	Jilin Province Emergency Management Bureau
Licensed Activity	TSF Operation
Issue Date	11 May, 2023
Expiry Date	6 March, 2026

No Safety Production Permit for Jintai Project has been sighted as part of this review. However, during the site visit Jintai Mining informed SRK that the application for safety production permit was under process.

13.4.2 Water Use Permit

The water use permits for the Project are presented in the following tables.

Table 13-10: Details of Water Use Permits of Jilong Project

Project	Jilong Project
Water Use Permit No.	D150430G2021-0058

Issued To	Chifeng Jilong Mining Ltd.
Issued By	Aohan Qi Water Bureau
Issue Date	15 January, 2023
Expiry Date	14 January, 2028
Water Supply Source	Groundwater
Water Use Allocation	139,800m^3/year
Project	Jilong Project
Water Use Permit No.	D150430G2023-0003
Issued To	Chifeng Jilong Mining Ltd.
Issued By	Aohan Qi Water Bureau
Issue Date	3 July, 2023
Expiry Date	2 July, 2028
Water Supply Source	Groundwater
Water Use Allocation	78,000m^3/year

Table 13-11: Details of Water Use Permits of Huatai Project

Project	Huatai Project
Water Use Permit No.	D150404G2021-0044
Issued To	Chifeng Huatai Mining Ltd.
Issued By	Chifeng City Songshan District Water Bureau
Issue Date	11 January, 2022
Expiry Date	11 January, 2027
Water Supply Source	Groundwater
Water Use Allocation	133,700m^3/year

Table 13-12: Details of Water Use Permits of Wulong Project

Project	Wulong Project
Water Use Permit No.	201400076680
Issued To	Liaoning Wulong Gold Mining Ltd.
Issued By	Agriculture and Rural Bureau of Zhen 'an District, Dandong City
Issue Date	27 May, 2020
Expiry Date	27 May, 2025
Water Supply Source	Groundwater
Water Use Allocation	200,000m^3/year

Table 13-13: Details of Water Use Permits of Hanfeng Project

Project	Hanfeng Project
Water Use Permit No.	D222405G2022-0014
Issued To	Jilin Hanfeng Mining Technology Ltd.
Issued By	Longjing City Water Bureau
Issue Date	1 October, 2022
Expiry Date	30 September, 2027
Water Supply Source	Groundwater and surface water
Water Use Allocation	403,000m^3/year

Table 13-14: Details of Water Use Permits of Jintai Project

Project	Jintai Project
Water Use Permit No.	D532930S2024-0028
Issued To	Eryuan Jintai Mineral Development Ltd.
Issued By	Eryuan County Water Bureau
Issue Date	15 May, 2024
Expiry Date	15 May, 2029
Water Supply Source	Surface water
Water Use Allocation	92,400m^3/year

13.4.3 Site Discharge Permit

The status of site discharge permit/registration for the Project are summarized as follows:

- Jilong Project has registered the discharge of fixed pollution sources on July 10, 2020. The registration number is 91150430779492220K002X. Registration is valid until July 9, 2025.
- Huatai Project has registered the discharge of fixed pollution sources on January 6, 2021. The registration number is 9115040476767883814P002Z. Registration is valid until January 5, 2026.
- Wulong Project has registered the discharge of fixed pollution sources on March 10, 2020. The registration number is 91210600673786837T001W. Registration is valid until March 9, 2025.
- Hanfeng Project has registered the discharge of fixed pollution sources on August 22, 2023. The registration number is 91222405764593512F001X. Registration is valid until March 9, 2025.
- Jintai Project has registered the discharge of fixed pollution sources on October 20, 2023. The registration number is 91532930670871876300 1Z. Registration is valid until October 19, 2028.

13.5 Environmental Study and Management

This chapter summarizes the conclusions of EIA studies, the status of environmental management observed during site visits and the recommendations made by SRK.

13.5.1 Jilong Project

According to the EIA report, the vegetation in the project area belongs to the arid grassland vegetation area. Due to years of reclamation, a large area of natural vegetation has been destroyed. Much of the surrounding land has been reclaimed for farming. No rare plants under state or local protection have been found around the project. The project area is heavily affected by human activities and large wild animals have disappeared. Small wildlife is limited to small rodents and reptiles. No wild animals and birds under state protection were found in the project area.

The domestic water source for the project comes from two wells located 2.1 kilometers away. The well also replenishes the processing plant with fresh water. Mine water is sedimented underground and discharged into the upper sump and reused in the processing plant. During the winter, the project may have a small amount of mine water discharging outside. The EIA believes that the project's water abstraction will not have a great impact on the production and domestic water consumption of

local villagers and other water users. Chifeng Jilong reported to SRK that the groundwater quality is regularly monitored. SRK has sighted a environmental monitoring report which was produced in April, 2024. Water samples from water monitoring well and mine dewatering outlet were collected in March, 2024. The water monitoring results are all within the limits of the relevant environmental standards. SRK recommends the company improve an effective drainage system to divert run-off from undisturbed areas around disturbed areas.

During the site visit, SRK noticed that there are waste rock dumps in each mining area of the project. No geochemical characterization of waste rocks or acid rock drainage ("ARD") assessment has been sighted as part of this review. At present, the tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. The accident and collection ponds were built at the foot of the tailings dam. Two tailings samples from the project, which were wet and dry tailings separately, were collected and tested in December, 2022. The test results show that cyanide in the tailings meet the requirements of technical specification for pollution control of cyanide leaching residue in gold industry (less than 5 mg/L). During the time of SRK's site visit, SRK did not observed any evidence of leaching or ARD impacts. A new TSF and a new filter press workshop are under construction which is located to the northeast of the processing plant. The EIA approval for the Zhuanshanzi Gold Mine Processing Expansion Project states all production wastewater should be reused.

The dust emissions sources for the project are mainly from drilling, explosion, ore crushing and screening, tailings storage facility, waste rock dump, open areas and movement of vehicles and mobile equipment. SRK sighted that dust removers were installed in the processing plant. SRK did not note the obvious dust emission in the open area of the project during the time of this site visit.

The hazardous materials generated by the project mainly consists of hydrocarbons (i.e. waste oils), processing reagents, chemical and oil containers, explosives, etc. SRK noted during the site visit that storage of sodium cyanide was generally safe. Chifeng Jilong stated that vehicle fuel and machinery maintenance are all outsourced. The project has a main explosives magazine and four sub-magazines. During the site visit SRK inspected the main explosive magazine, and it is SRK's opinion that it is a secure facility that is designed and managed in accordance with relevant Chinese National requirements. SRK recommends that the collected waste oil and dangerous chemical be stored with secondary containment which is in line with the recognised international industry management practices.

13.5.2 Huatai Project

The EIA report states that there are no sensitive targets such as nature reserves within 10 km of the project area. There are no rare, endangered and protected plant species within the scope of the project. Animal resources within the scope of the project are scarce, mainly small rodents, reptiles and common birds, and there are no rare and endangered animals. After the implementation of management measures, there is little impact on the vegetation and animals in the project area.

The domestic water and fresh water for the processing plant will be supplied from underground wells. The mine water is generally collected by water tank and reused for underground production. The processing wastewater is fully recycled and the tailings filter wastewater is reused for processing as well. The residents in the town near the project use centralized water supply. The EIA of the project concluded that the groundwater extraction would not have a significant impact on local groundwater resources. In addition, the EIA opines the project has a slight impact on surface water and

groundwater after taking measures such as wastewater reuse and TSF seepage prevention. The company provided a groundwater quality monitoring report for the mining area in May 2022. Manganese, iron, arsenic, mercury, cadmium and lead in the samples did not exceed the requirements of the third class of groundwater quality standards. SRK recommends the company improve an effective drainage system to divert run-off from undisturbed areas around disturbed areas.

At present, waste rock from the project is mainly used for underground backfilling or sold for road building. During this site visit, SRK noticed that there are past-generated waste dumps at the portal of shafts in each mining area. No geochemical characterization of waste rocks or acid rock drainage ("ARD") assessment has been sighted as part of this review. However, the EIA considers the waste rock generated by the project to be General Industrial Solid Waste Class I. At present, the tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. During the time of SRK's site visit, SRK did not observed any evidence of leaching or ARD impacts.

The dust emissions sources for the project are mainly from drilling, explosion, ore crushing and screening, tailings storage facility, waste rock dump, open areas and movement of vehicles and mobile equipment. The EIA concluded that the dust generated by the project had little impact on the surrounding environment after appropriate management measures were taken. SRK sighted that dust removers were installed in the processing plant. SRK did not see significant dust generation during this site visit.

The hazardous materials generated by the project mainly consists of hydrocarbons (i.e. waste oils), processing reagents, chemical and oil containers, explosives, etc. SRK noted during the site visit that storage of sodium cyanide was generally safe. There is no gas and diesel storage on site. Chifeng Huatai reported that the waste oil produced by the project is stored in a separate warehouse. During the site visit SRK inspected this explosive magazine, and it is SRK's opinion that it is a secure facility that is designed and managed in accordance with relevant Chinese National requirements. SRK recommends that the collected waste oil and dangerous chemical be stored with secondary containment which is in line with the recognised international industry management practices.

13.5.3 Wulong Project

The project area is well covered with vegetation. Wild animals in this area mainly include hares, squirrels, pheasants and so on. The EIA report states that there were no rare or endangered plants and animals in the project area. The impact of the project on the level of plant population, community and ecosystem was not significant. After greening, the vegetation in the project area will be gradually restored, which will make up for the loss of plant species diversity.

The main river in the project area is the Banshi River, which is a seasonal river. The river eventually drains into Tiejia Reservoir. The project has a water treatment plant to treat fluoride in the mine dewatering water. The treated mine dewatering water is reused for production and heating, and the excess water is discharged into the Banshi River. The processing wastewater is fully recycled. SRK noted that the project's TSF is approximately 7 km from the downstream reservoir. Therefore, it should be ensured that the operation of the project will not affect the Banshi River and Tiejia Reservoir. Liaoning Wulong stated that the Environmental Protection Bureau conducted surface water and groundwater monitoring for the project. However, no water monitoring report has been sighted as part of this review. SRK recommends that quality monitoring be undertaken of the

groundwater and surface water resources within the project area (including upstream and downstream of the project area), and also any site water discharges.

During this site visit, SRK noticed that the waste rocks were temporarily dumped at the portal of shafts in each mining area. Liaoning Wulong stated that the waste rock from the project is mainly used for underground backfilling or sold for construction. No geochemical characterization of waste rocks or acid rock drainage ("ARD") assessment has been sighted as part of this review. At present, the tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. The accident and leakage collection ponds were built at the foot of the tailings dam. During the time of SRK's site visit, SRK did not observed any evidence of leaching or ARD impacts.

The dust emissions sources for the project are mainly from drilling, explosion, ore crushing and screening, tailings storage facility, waste rock dump, open areas and movement of vehicles and mobile equipment. The project's EIA report concluded that the operation of the project would have no significant impact on the ambient air. SRK did not see significant dust generation during this site visit.

The hazardous materials generated by the project mainly consists of hydrocarbons (i.e. waste oils), processing reagents, chemical and oil containers, explosives, etc. SRK noted during the site visit that storage of sodium cyanide was generally safe. There is no gas and diesel storage on site. During the site visit SRK inspected this explosive magazine, and it is SRK's opinion that it is a secure facility that is designed and managed in accordance with relevant Chinese National requirements. SRK recommends that the collected waste oil and dangerous chemical be stored with secondary containment which is in line with the recognised international industry management practices.

13.5.4 Hanfeng Project

The forest vegetation in the project area belongs to the typical flora of Changbai Mountain and has been replaced by natural secondary forest and artificial forest after long-term human activities. Due to the influence of human activities, the wildlife resources in the surveyed area have been sharply reduced. No endangered or protected plants and animals in the project area were reported in the EIAs. The EIA report opines in general the construction of the project will not change the ecological structure and the characteristics of biodiversity.

Surface water bodies near the project include the Baoshan River and the Burhaton River. According to the EIA, there is no hydraulic connection between the local water source well and the groundwater of the mining area, and the project production has no influence on the drinking water of its residents. However, about 17km downstream of the project is the drinking water source of Laotougou Town, with a water intake of 1000t/d, supplying water to about 12,000 people. SRK recommends the company develop an emergency response plan for water supply to cope with problems caused by changes in groundwater table and pollution accident. Alternative water sources can be provided if the development affects the surrounding community's access to water. The mine dewatering water of the project are collected and reused for mining and processing. Jilin Hanfeng stated that all processing wastewater and mine dewatering water of the project are reused and shall not be discharged. SRK recommends the company construct an effective drainage system to divert run-off from undisturbed areas around disturbed areas. In addition, some prevention measures, such as surface hardening, ground seepage control and second containment facility, are recommended to mitigate the water pollution risks.

During this site visit, SRK noticed that the waste rocks from the project were temporarily dumped near the portal of shaft in the mining area and processing plant. Jilin Hanfeng stated that the waste rock is mainly used for underground backfilling. SRK has sighted some former waste rock dumps on site and one of them has been rehabilitated. No geochemical characterization of waste rocks or acid rock drainage ("ARD") assessment has been sighted as part of this review. However, the EIA concluded that the waste rock from the project was not classified as hazardous waste. At present, the tailings of the project are discharged into the TSF. During the time of SRK's site visit, SRK did not observed any evidence of leaching or ARD impacts.

The dust emissions sources for the project are mainly from drilling, explosion, ore crushing and screening, tailings storage facility, waste rock dump, open areas and movement of vehicles and mobile equipment. SRK sighted that dust removers were only installed in the Lishan processing plant. SRK has sighted minor dust generation in the TSF during this site visit.

The hazardous materials generated by the project mainly consists of hydrocarbons (i.e. waste oils), processing reagents, chemical and oil containers, explosives, etc. There is a semi-underground diesel tank on site, and the ground has been hardened. A hazardous waste storage workshop is also set up on site to store waste oil. During the site visit SRK inspected this explosive magazine, and it is SRK's opinion that it is a secure facility that is designed and managed in accordance with relevant Chinese National requirements. SRK recommends that the collected waste oil and dangerous chemical be stored with secondary containment which is in line with the recognised international industry management practices.

13.5.5 Jintai Project

Due to the restriction of geological and soil conditions, as well as the frequent human activities around the area, the native vegetation no longer exists in the project area. The main vegetation types in the area are shrub grass and secondary vegetation. The forest coverage rate of the district is about 30%, and the trees are mainly Yunnan pine and blue eucalyptus. In addition, a small amount of sloping farmland is distributed around the project area, and the main crops are corn, beans and flue-cured tobacco. During the EIA survey, gold buckwheat (Fagopyrumdibotrys), which is National second-class protected plants, was found near the mining area (outside the mine site boundary). No old and famous trees were found within the EIA survey area. Four species of national second-class protected wild animals were found to in the project's survey area, which consist of pine sparrowhawk (Accipiter virgatus), common buzzard (Buteo buteo), kestrel (Falco tinnunculus) and leopard cat (Prionailurus bengalensis). The EIA concluded that with better management, the operation of the project would not have a significant impact on the diversity and distribution pattern of vegetation in this area and would have a lesser impact on wildlife.

Surface water bodies near the project include the Heihui River and the Liantie River. The Heihui River flows by the west of the mine site. The Liantie River is a tributary of the Heihui River, which flows from east to west into the Heihui River and is located to the south outside the mine area. The project's domestic water sources are drawn from the same springs as the local population. The project's supplementary water source for production comes from the Heihui River, which is also used for irrigation of the local villagers' farmland. The EIA predicted that the mining would not affect the drinking water sources of the surrounding villages. SRK recommends the company develop an emergency response plan for water supply to cope with problems caused by changes in groundwater table and pollution accident. The settling ponds are recommended to collect and dispose the leaching

water from waste rock dump and mine water from open pit. All production wastewater from the heap leaching process will be reused and not discharged, and the heap leaching production facilities are designed and to be constructed with anti-seepage measures. SRK noted the exceedance of arsenic levels in soil at the mine site during the environmental baseline study. The EIA report opines that this is related to the co-occurrence of arsenic in the gold ore formation process and that the project is located in an area where the background value of arsenic is high. In August 2022, the 209th Geological Team of Yunnan Nuclear Industry conducted a report on the current status of major heavy metals in the soil and the background survey of the surrounding areas of the Xidengping Gold Mine in Eryuan County. The report concluded that the current background values of arsenic in the soil both within and around the mining area exceed the Category II screening value (60 mg/kg) specified in the "Soil Environmental Quality Standards for Soil Pollution Risk Management and Control of Construction Land (Trial)" (GB36600-2018). The other major heavy metals did not exceed the limit values. During this site visit, SRK observed the drainage ditch was well constructed around the leaching heap. Emergency pond and rainwater collection pond were constructed downstream of the leaching heap. The leach heap was paved with HDPE membrane and bentonite to prevent seepage. SRK sighted groundwater monitoring boreholes were utilized around the leaching heap. The company stated that qualified third party tested groundwater samples on a quarterly basis.

The waste rock were discharged into the waste rock dumps next to the open pit of the V1 ore body. The EIA report states that the heap leaching residue are hazardous waste. The project's heap leaching residue is to be disposed of in situ and impermeable measures will be adopted to prevent leakage. During the site visit, SRK noted the stripped topsoil were collected and rehabilitated. No geochemical characterization of waste rocks or acid rock drainage ("ARD") assessment has been sighted as part of this review. However, the EIA concluded that the waste rock from the project was not classified as hazardous waste. During the time of SRK's site visit, SRK did not observed any evidence of leaching or ARD impacts.

The dust emissions sources for the project are mainly from ore crushing, ore stockpile, waste rock dump, open areas and movement of vehicles and mobile equipment. The project's EIA report concluded that the operation of the project would have a minor impact on the ambient air. During this site visit, SRK observed that a certain amount of dust was generated when vehicles passed over the haul road. Water sprinkling was adopted to mitigate the dust emission on site.

No explosives will be used in the operation of the project and therefore there will be no explosives store on site. For this project, hazardous substances include mainly leaching reagents and hydrocarbons (i.e. waste oils). The handling, storage and transportation of hazardous materials shall prevent leakage, overflow or other accidental discharge into soil, surface water and groundwater. SRK suggests taking measures to mitigate the risk of pollution caused by leakage, such as surface hardening and second containment facility to reduce spillage and avoid flowing into key areas, and collected waste oil shall be handed over to a local specialized company for disposal. During the site visit, SRK noted that the leaching reagents were stored in a well protected room. SRK recommends that the leaching reagents purchase, transportation, handling/storage, use, equipment decommissioning, operation safety, emergency response, training, etc. should comply with the Chinese legal requirements and the standards of the International Cyanide Management Code.

13.6 Occupational Health and Safety

A well developed and comprehensive safety management system comprises site inductions, site policies, safe work procedures, training, risk/hazard management (including signage), use of personal protective equipment ("PPE"), emergency response process, incident/accident reporting, an onsite first aid/medical centre, designated safety responsibilities for site personnel, regular safety meetings and a work permit/tagging system.

SRK has reviewed the safety management systems and emergency response plans as provided by the Company and is of the opinion that the reports cover items that are generally in line with recognised Chinese industry practices and Chinese safety regulations. During this site visit, SRK observed that safety signs were in place, safety provisions and rules were also displayed within the work areas, guard railings were installed on all gantries, and proper personal protection equipment was provided and was being used by the workers, such as hardhats. SRK thinks more PPE could be given to workers, such as earplugs and dust masks.

SRK has sighted the statistics of work-related injury records in the last three years for the Project. The statistics show that there was one fatal accident which occurred for Chifeng Huatai in 2022 and Jilin Hanfeng in 2023 respectively. SRK recommends the company conduct safety record and develop incident analysis reports for the possible injuries in future. The proposed reports analysed the cause of injuries and identified measures to prevent a recurrence, which are in line with international recognized OHS accident monitoring practice.

13.7 Site Closure Planning and Rehabilitation

The Chinese national requirements for mine closure are covered under Article 21 of the Mineral Resources Law of People's Republic of China (023), the Rules for Implementation of the Mineral Resources Law of the People's Republic of China, the Mine Site Geological Environment Protection Regulations (2019), and the Land Rehabilitation Regulation (2011) issued by the State Council. In summary, these legislative requirements cover the need to conduct geological environment protection and land rehabilitation.

There is currently no overall operational closure planning process in place for the Project that is in line with the recognised international industry management practices. However, SRK was provided with a number of Project's Geological Environment Protection and Land Reclamation Plans which describes the proposed rehabilitation of the mine sites.

13.7.1 Chifeng Jilong

- The Geological Environment Protection and Land Reclamation Plan for the Zhuanshanzi Gold Mine was produced by Inner Mongolia Huadi Environmental Consulting Ltd. in March 2024. The plan states that the total cost of static investment is CNY 15,024,500, of which the static investment of mine geological environment is CNY 1,233,400, and the land reclamation is CNY 13,791,100.

13.7.2 Chifeng Huatai

- The Geological Environment Protection and Land Reclamation Plan for the Honghuagou #1 Mining Section was produced by China Building Materials Industry Geological Survey Center

Liaoning Team in April 2022. The plan states that the investment on the geological environmental protection is CNY 21,365,400.

- The Geological Environment Protection Plan for the Lianhuashan #5 Mining Section was produced by China Building Materials Industry Geological Survey Center Liaoning Team in June 2020. The plan states that the investment on the geological environmental protection is CNY 1,947,900.
- The Geological Environment Protection Plan for the Lianhuashan #3 and #7 Ore Body was produced by China Building Materials Industry Geological Survey Center Liaoning Team in April 2020. The plan states that the investment on the geological environmental protection is CNY 2,002,200.
- The Geological Environment Protection and Land Reclamation Plan for the Pengjiagou Mining Section was produced by China Building Materials Industry Geological Survey Center Liaoning Team in March 2021. The plan states that the investment on the geological environmental protection is CNY 6,433,500.
- The Geological Environment Protection and Land Reclamation Plan for the Lianhuashan #26 Ore Body was produced by Inner Mongolia No.10 Geological Mineral Exploration and Development Ltd. and Chifeng Guoyuan Real Estate Evaluation Ltd. in July 2014. The plan states that the investment on the geological environmental protection is CNY 1,222,100.
- The Geological Environment Protection and Land Reclamation Plan for the Honghuagou #86 Ore Body was produced by China Building Materials Industry Geological Survey Center Liaoning Team in December 2021. The plan states that the investment on the geological environmental protection is CNY 3,549,000.

13.7.3 Liaoning Wulong

- The Geological Environment Protection and Land Reclamation Plan for Liaoning Wulong Gold Mine was produced by Liaoning Nonferrous Geological Team 103 Ltd in July 2020. The plan states that the dynamic investment on the geological environmental protection and land reclamation are CNY 35,895,100 and CNY 3,917,400, respectively.

13.7.4 Jilin Hanfeng

- The Geological Environment Protection and Land Reclamation Plan for the Dongfeng Mine was produced by Changchun Xiaohua Mineral Science and Technology Ltd. in November 2016. The plan states that the investment on the geological environmental protection and land reclamation are CNY 6,622,727.
- The Geological Environment Protection and Land Reclamation Plan for the Lishan Mine was produced by Changchun Xiaohua Mineral Science and Technology Ltd. in July 2021. The plan states that the investment on the geological environmental protection and land reclamation are CNY 15,313,300.

13.7.5 Yunnan Jintai

- The Geological Environment Protection and Land Reclamation Plan for the Xidengping Gold Mine was produced by Southwest Nengkuang Construction Engineering Ltd. and Yunnan Jinrang Technology Ltd. in January 2022. The plan states that the investment on the geological environmental protection and land reclamation are CNY 1,182,200 and CNY 4,942,000, respectively.

SRK notes that the above-mentioned geological environmental protection and land reclamation plans for the Project are generally in line with the relevant regulations and recognised Chinese industry practices. According to the Chinese legal requirements, a mine geological environment treatment and restoration fund account should be established by the mine. The company provided information about the accounts, and SRK opines that the Project generally complied with the requirements of the relevant regulations. In addition, during this site visit SRK observed that Chifeng Huatai and Chifeng Jilong's TSF have both been partially conducted reclamation.

13.8 Social Aspects

13.8.1 Jilong Project

The project is located 98km to the east of Chifeng City, Inner Mongolia Autonomous Region and is surrounded mainly by farmland and forest. The nearest settlement is Fumin Village, with about a hundred households, mostly Han Chinese, with a few Mongolians.

During this site visit, Chifeng Jilong reported that there are no environmental non-compliance notices or fines for the project. Chifeng Jilong also stated that there are no natural reserves or significant cultural heritage sites within or surrounding the project area; and the EIA report also does not report any natural reserves or significant cultural heritage sites within or surrounding the project.

The EIA report for the Chifeng Jilong Mining Ltd. Gold Mine Mining and Processing Project (400 tpd)t provided the public participation surveys for the project construction. The survey results showed 83.33% personal support for the project and there are no people who are opposed to the project in the survey. In terms of the impact on local environmental quality, most of the public's concerns focused on ecological damage, accounting for 36.67% of the total number of respondents. Other EIA reports for the Jilong Project also show that there were no objections during the public participation process.

Chifeng Jilong reported that the company had done a lot of work to maintain community relations, including building a primary school in Aohanqi, providing free waste rock to nearby residents to build roads, and providing free vehicles for residents to use.

13.8.2 Huatai Project

The project is located in Wangfu Town, Chifeng City, Inner Mongolia Autonomous Region and is surrounded mainly by farmland and forest. The surrounding communities are predominantly Han Chinese.

During this site visit, Chifeng Huatai reported that there are no environmental non-compliance notices or fines for the project. Chifeng Huatai also stated that there are no natural reserves or significant

cultural heritage sites within or surrounding the project area; and the EIA report also does not report any natural reserves or significant cultural heritage sites within or surrounding the project.

SRK reviewed the environmental impact assessment reports provided by the company. The reports, which includs detailed results of public participation, show that the majority of the public supports the project's operation, with no objections raised. Chifeng Huatai stated that the company has good relations with the local community and has donated to it for COVID-19. SRK has sighted the receipt for the above donation.

13.8.3 Wulong Project

The project is located in Zhen'an District, Dandong City, Liaoning Province and is surrounded mainly by farmland and forest. During this site visit, SRK noted that settlements dotted the area around the mine site. The surrounding communities are predominantly Han Chinese. Liaoning Wulong stated that the company has good relations with the local community.

The company informed that in 2021, the fluoride in the Banshi River had exceeded relevant standard, which had an impact on the downstream. The company said it was caused by other industrial and mining enterprises upstream from the river. Liaoning Wulong also stated that there are no natural reserves or significant cultural heritage sites within or surrounding the project area; and the EIA report also does not report any natural reserves or significant cultural heritage sites within or surrounding the project.

The EIA report for the Liaoning Wulong Gold Mine Development Project provided the public participation surveys for the project construction. The survey results showed 100% personal support for the project. The respondents believed that the project had a positive effect on the local area, both economic and social. But they also argue that the company should invest more in environmental protection to ensure that surface and groundwater are not polluted. And air pollutants and factory boundary noise are discharged in a stable manner. In addition, due to historical reasons, there are still some residents waiting to be relocated in the mining area.

In January 2020, the company signed a waste rock donation agreement with Banshi Village, giving 60,000 m^3 of waste rock. In addition, the company also donated CNY 5,000 to the village primary school on Teachers' Day 2022.

13.8.4 Hanfeng Project

The project is located in Tianbaoshan Town, Longjing City, Jilin Province and is surrounded mainly by farmland and forest. The surrounding communities are predominantly Han Chinese and Korean. Jilin Hanfeng stated that the company has good relations with the local community.

During this site visit, Jilin Hanfeng reported that there are no environmental non-compliance notices or fines for the project. Jilin Hanfeng also stated that there are no natural reserves or significant cultural heritage sites within or surrounding the project area; and the EIA reports also do not report any natural reserves or significant cultural heritage sites within or surrounding the project.

The EIA reports for the project provided the public participation surveys for the project construction. The survey results of EIA for the Tianbaoshan Mine Area Residual Resources Recovery and Utilization Project showed 89% personal support for the project. The local residents did raise the impact on surface water quality and local employment as the key concerns for the project's

development. The survey results of EIA for the Lishan-xinxing Mine Area Lead-Zinc Mining Expansion Project showed that the respondents have no objection to the construction of this project. The survey results of EIA for the Lishan Processing Plant Project showed most of the affected residents in the project area are in favor of the construction of the project. No objections were raised during the public participation for the EIA of Jilin Hanfeng Lishan Mining Area Expansion Project (0.6Mtpa).

13.8.5 Jintai Project

The project is located 20 km to the southwest of Eryuan County, Yunnan Province and is surrounded mainly by farmland and forest. The project is administrated by Liantie Township and the surrounding villages are predominantly Bai and Han Chinese.

Yunnan Jintai stated that there are no natural reserves or significant cultural heritage sites within or surrounding the project area; and the EIA reports also do not report any natural reserves or significant cultural heritage sites within or surrounding the project. During the site visit, SRK was informed that more than 30 cemeteries within the mine rights have been relocated through compensation agreements with villagers. Yunnan Jintai stated that the forest and land use procedures had been completed. SRK has sighted part of land and forest use approvals/permits. However, SRK observed some cattle from nearby villagers grazing within the mining right during the site visit. Yunnan Jintai responded that in the future fences will be installed along the boundary of the mine site to keep cattle out. Dali Environmental Protection Bureau issued a production discontinuance notice in February 2015 (before the acquisition of Chifeng Gold) which was about the non-compliance of water pollution control and disposal of hazardous waste.

The original EIA report for the project provided the public participation surveys for the project construction. The survey results showed 98.5% personal support for the project and 100% group support. During the latest EIA publicity period, no opinions and suggestions from personals and groups were received.

14 Capital and Operating Costs

The mines owned by the five mining companies all have a long production history. Capital expenditures ("**Capex**") for construction of the mines, ore processing plants and onsite facilities had been invested in history. The Jilong, Huatai, Wulong, and Hanfeng Projects are underground mines, and the Jintai Project is an open pit mine.

14.1 Jilong Project

14.1.1 Capital Expenditures

Sunk Cost

The client has provided the sunk cost for future expansion of existing mine zones, which is shown in Table 14-1.

Table 14-1: Jilong Sunk Capital Expenditures (Unit: CNY)

Year	Item	Value
2022	27 vein blind shaft 5-10 middle ventilation shaft	180,847
2022	Yangpo blind shaft ventilation shaft	363,150
2022	72 shaft maintenance	265,578
2022	Yangpo level 4 ventilation shaft	29,420
2021	Xinluo Fengmao shaft	3,506,239
2020	28th shaft	1,382,067
2020	Yangpo winch renovation	462,872
2019	27th vein blind shaft level 6 to 10	950,235
2018	27th vein cage	1,474,228
	Total	**8,614,635**

Source: Client

Sustaining

Sustaining capital includes capital development and all costs related to the acquisition, replacement, or major overhaul of assets during the mine life required to sustain operations. According to the data provided by Jilong Mining, the capital expenditures for the last three years from 2021 to 2023 are shown in Table 14-2.

Table 14-2: Jilong Capital Expenditures from 2021 to 2023

Year	Unit	2021	2022	2023
Capital Expenditures	CNY	44,432,223.74	85,613,521.79	158,520,251.98

Source: Client

Expansion

Jilong Mining has completed new preliminary design study for expansion zone (zone 5, zone 6 and zone 7), the detailed items are in Table 14-3. The construction period is three years.

Table 14-3: Initial Capital Expenditures for Jilong Expansion

Item	Investment ('0000 CNY)
Mining	8,970
Water supply and drainage	300
Power supply and communication	570
Heating and ventilation	300
General plan transportation	450
Machine repair	300
Environment	500
Other expenses	1,000
Contingency	860
Working capital	525
Total project investment	**13,775**

Source: Client

14.1.2 Operating Cost

Administration

Administration cost includes controllable cost and uncontrollable cost.

- Controllable cost: salary; welfare; travel expense; repair cost, etc.
- Uncontrollable cost: depreciation and amortization; board fees; insurance; and fund.

The average unit cost of administration for the last three years from 2021 to 2023 is about CNY151/t milled ore (Table 14-4).

Table 14-4: Jilong administration cost from 2020 to 2022 (Unit: CNY)

Year	Total	Milled Ore (t)	Unit cost
2023	45,230,681	440,865	102.6
2022	32,303,476	152,739	211.5
2021	31,916,934	132,643	240.6

Mining

Table 14-5 - Table 14-7 show a breakdown of the operating cost from 2021 to 2023 in each zone. Table 14-8 shows the total cost for the last three years, and Table 14-9 shows the total ore amount for the last three years. The average unit operating cost is CNYB755/t (Table 14-10). However, each zone's unit cost varies a lot due to different ore body and unforeseen situation. Therefore, since the

unit cost varies due to different situations every year, SRK takes the average unit cost of the past three years as an estimate for the future.

Table 14-5: Jilong Operating Costs in 2023 (Unit: CNY)

Project	Zone	Material	Auxiliary material	Labor	Electricity	Manufacturing	Total
Development	Zone 1-No.27	810,999	61,397	2,870,530	691,349	7,312,228	11,746,503
	Zone 2-Huangjindong	1,038,050	79,581	2,125,518	500,416	7,832,346	11,575,912
	Zone 3-Luofengmao	397,763	66,894	1,495,729	402,088	5,851,801	8,214,274
Zone 1-Yangpo	Zone 1-Yangpo	481,917	482,316	1,154,955	529,067	5,392,787	8,041,041
	Total	2,728,729	690,188	7,646,732	2,122,920	26,389,162	39,577,730
Mining	Zone 1-No.27	6,455,828	186,920	7,713,650	1,218,853	13,023,064	28,598,315
	Zone 2-Huangjindong	741,438	16,997	2,640,693	84,905	1,457,383	4,941,417
	Zone 3-Luofengmao	233,323	12,471	236,991	83,197	854,367	1,420,348
	Zone 1-Yangpo	5,236,131	156,224	8,107,402	1,497,467	18,712,548	33,709,772
	Total	12,666,720	372,612	18,698,736	2,884,422	34,047,363	68,669,853
Total	Zone 1-No.27	7,266,827	248,318	10,584,180	1,910,201	20,335,292	40,344,818
	Zone 2-Huangjindong	1,779,489	96,578	4,766,211	585,322	9,289,730	16,517,329
	Zone 3-Luofengmao	631,086	79,364	1,732,720	485,286	6,706,167	9,634,623
	Zone 1-Yangpo	5,718,047	638,540	9,262,357	2,026,533	24,105,336	41,750,814
	Total	15,395,449	1,062,800	26,345,468	5,007,342	60,436,525	108,247,583

Source: Client

Table 14-6: Jilong Operating Costs in 2022 (Unit: CNY)

Project	Zone	Material	Auxiliary material	Labor	Electricity	Manufacturing	Others	Total
Development	Zone 1-No.27	1,100,597	288,792	3,484,087	1,182,996	11,958,967	-	18,015,440
	Zone 1-Yangpo	1,032,157	205,579	1,884,848	960,546	10,762,257	-	14,845,388
	Zone 2-Huangjindong	1,122,377	136,817	2,848,302	514,067	9,579,323	-	14,200,887
	Zone 3-Luofengmao	675,054	59,517	1,865,760	754,490	5,682,040	-	9,036,861
	Total	3,930,186	690,705	10,082,996	3,412,100	37,982,588	-	56,098,575
Mining	Zone 1-No.27	4,786,349	314,659	7,152,615	1,013,049	10,769,514	-	24,036,185
	Zone 1-Yangpo	3,717,508	186,148	7,653,279	1,003,705	11,836,541	-	24,397,181
	Zone 2-Huangjindong	958,913	51,466	2,551,496	129,835	2,598,092	-	6,289,801
	Zone 3-Luofengmao	2,182,480	176,458	2,862,683	557,362	3,924,867	-	9,703,850
	Total	11,645,249	728,731	20,220,072	2,703,950	29,129,015	-	64,427,017
Exploration	Zone 1-No.27						562,324	562,324
	Zone 1-Yangpo						1,884,157	1,884,157
	Zone 2-Huangjindong						580,656	580,656
	Zone 3-Luofengmao						305,460	305,460
	Total						3,332,597	3,332,597
Total	Zone 1-No.27	5,886,946	603,451	10,636,702	2,196,045	22,728,482	562,324	42,613,949
	Zone 1-Yangpo	4,749,665	391,727	9,538,127	1,964,251	22,598,799	1,884,157	41,126,726
	Zone 2-Huangjindong	2,081,290	188,284	5,399,797	643,902	12,177,415	580,656	21,071,345
	Zone 3-Luofengmao	2,857,534	235,975	4,728,442	1,311,852	9,606,907	305,460	19,046,171

Project	Zone	Material	Auxiliary material	Labor	Electricity	Manufacturing	Others	Total
	Total	15,575,435	1,419,437	30,303,069	6,116,050	67,111,602	3,332,597	123,858,190

Source: Client

Table 14-7: Jilong Operating Costs in 2021 (Unit: CNY)

Project	Zone	Material	Auxiliary material	Labor	Electricity	Manufacturing	Others	Total
Development	Zone 1-No.27	1,110,318	531,577	4,457,234	1,560,926	14,224,936	-	21,884,991
	Zone 1-Yangpo	1,045,963	113,266	2,551,140	1,137,966	8,743,970	-	13,592,305
	Zone 2-Huangjindong	731,072	45,595	2,355,193	519,472	8,602,664	-	12,253,996
	Zone 3-Luofengmao	359,083	16,386	1,790,596	730,805	4,891,233	-	7,788,103
	Total	3,246,435	706,824	11,154,163	3,949,169	36,462,803	-	55,519,394
Mining	Zone 1-No.27	2,002,311	245,164	4,044,365	575,506	5,034,336	-	11,901,681
	Zone 1-Yangpo	2,823,252	168,317	7,362,326	1,376,188	11,027,553	-	22,757,636
	Zone 2-Huangjindong	541,284	40,115	2,204,824	144,740	2,596,296	-	5,527,259
	Zone 3-Luofengmao	1,184,136	62,847	2,186,886	477,875	3,217,710	-	7,129,454
	Total	6,550,983	516,443	15,798,401	2,574,307	21,875,895	-	47,316,030
Exploration	Zone 1-No.27						469,384	469,384
	Zone 1-Yangpo						64,210	1,788,087
	Zone 2-Huangjindong						-	64,210
	Zone 3-Luofengmao						1,788,087	-
	Total						2,321,682	2,321,682
Total	Zone 1-No.27	3,112,629	776,741	8,501,599	2,136,432	19,259,272	469,384	34,256,056
	Zone 1-Yangpo	3,869,215	281,583	9,913,466	2,514,154	19,771,523	64,210	38,138,028
	Zone 2-Huangjindong	1,272,356	85,710	4,560,017	664,212	11,198,960	-	17,845,464
	Zone 3-Luofengmao	1,543,219	79,234	3,977,482	1,208,680	8,108,943	1,788,087	14,917,557
	Total	9,797,418	1,223,268	26,952,564	6,523,476	58,338,698	2,321,682	105,157,106

Source: Client

Table 14-8: Jilong Total Mining Operating Costs from 2021 to 2023 (Unit: CNY)

Zone	2021	2022	2023
Zone 1-No.27	34,256,056	42,613,949	40,344,818
Zone 1-Yangpo	38,138,028	41,126,726	16,517,329
Zone 2-Huangjindong	17,845,464	21,071,345	9,634,623
Zone 3-Luofengmao	14,917,557	19,046,171	41,750,814
Total	**105,157,106**	**123,858,190**	**108,247,583**

Source: Client

Table 14-9: Jilong Mined Ore Amount from 2021 to 2023 (Unit: t ore)

Zone	2021	2022	2023
Zone 1-No.27	34,807	60,471	61,139
Zone 1-Yangpo	65,117	56,203	8,190
Zone 2-Huangjindong	17,228	14,765	2,295
Zone 3-Luofengmao	21,161	25,624	79,981
Total	**138,313**	**157,064**	**151,605**

Source: Client

Table 14-10: Jilong Unit Mining Operating Cost from 2021 to 2023 (Unit: CNY/t ore)

Zone	2021	2022	2023	Average
Zone 1-No.27	984	705	660	749
Zone 1-Yangpo	586	732	2,017	740
Zone 2-Huangjindong	1,036	1,427	4,198	1,416
Zone 3-Luofengmao	705	743	522	597

Source: Client

Processing

Mineral processing costs are mainly divided into materials, labor, electricity and manufacturing costs, of which manufacturing costs account for 44% of the total cost, followed by electricity and materials, and labor and auxiliary materials account for less than 10% of the total cost (Table 14-11).

The average processing cost over the years fluctuates by about 5%, and SRK believes that it is within an acceptable range. Since the situation varies from year to year, SRK takes the three-year average unit cost of CNY139/milled ton as the future estimated cost.

Table 14-11: Jilong Processing Cost Breakdown from 2021 to 2023 (Unit: CNY/t milled ore)

Year	Material	Auxiliary material	Labor	Electricity	Manufacturing	Total	Milled Ore (t)	Unit Cost
2023	3,764,928	1,248,362	1,884,340	5,429,747	8,497,033	20,824,408	155,483	**134**
2022	3,873,404	1,127,216	1,968,017	4,564,695	8,651,853	20,185,185	152,739	**132**
2021	2,949,958	1,474,997	1,767,844	4,518,274	9,749,187	20,460,261	132,643	**154**

Source: Client

14.2 Huatai Project

14.2.1 Capital Expenditures

Huatai Gold Mine has no production in 2023, SRK only summarized historical data from 2020 to 2022.

The Huatai Gold Mine plans to expand its production in the near future; however, SRK does not obtain the detailed expenditures data but only the acquiring equipment plan and construction plan. Table 14-12 shows the long-term assets from the last three years of 2020 to 2022.

Table 14-12: Huatai long-term Assets from 2020 to 2022

Year	Unit	2022	2021	2020
Fixed Assets	CNY	218,887,444	236,246,822	228,680,655
Intangible assets	CNY	38,731,136	43,454,398	10,315,657
Construction in progress	CNY	46,667,432	45,287,423	29,937,734

Source: Client

14.2.2 Operating Cost

Huatai Gold Mine has no production in 2023. SRK only summarized historical data from 2020 to 2022.

Administration

Administration cost includes controllable cost and uncontrollable cost.

- Controllable cost: salary; welfare; travel expense; repair cost, etc.
- Uncontrollable cost: depreciation and amortization; board fees; insurance; fund, etc.

The average unit cost of administration for the last three years from 2020 to 2022 is about CNY650/t milled ore (Table 14-13).

Table 14-13: Huatai Administration Cost from 2020 to 2022 (Unit: CNY)

Year	Controllable Cost	Uncontrollable Cost	Total	Ore Milled (t)	Unit cost
2022	11,032,936	20,145,339	31,178,275	18,415	1,693
2021	93,78,894	11,347,107	20,726,000	53,784	385
2020	10,335,280	19,045,051	29,380,331	55,513	529

Source: Client

Mining

Table 14-14 and Table 14-15 show a breakdown of the operating cost from 2020 to 2022 in each zone.

Table 14-16 shows the total cost for the last three years, and Table 14-17 shows the total ore amount for the last three years. The average unit operating cost is CNY908/t (Table 14-18). Each zone's unit cost varies a lot due to different ore body and unforeseen situation. Therefore, since the unit cost will change slightly due to different situations every year, SRK takes the average unit cost of the past three years as an estimate for the future.

Table 14-14: Huatai Ming Operating Costs in 2022 (Unit: CNY)

Project	Zone	Material	Fuel & Electricity	Labor	Manufacturing	D&A	Total
Development	Zone 1	-	-	-	-17	-	-17
	Zone 3	-	-	-	-	-	-
	Zone 5	24,600	68,767	2,447,924	726,280	393,864	3,661,435
	Vein #14	-	-	-	-	-	-
	Vein #82	-	-	-	-	-	-
	Vein #8	-	-	-	-	-	-
	Subtotal	24,600	68,767	2,447,924	726,263	393,864	3,661,418
Mining	Zone 1	-	-	-	-	-	-
	Zone 3	-	-	-	-	-	-
	Zone 5	168,188	547,302	7,396,463	6,612,664	5,084,096	19,808,714
	Vein #14	-	-	-	-	-	-
	Vein #82	-	-	-	-	-	-
	Vein #8	-	-	-	-	-	-

Project	Zone	Material	Fuel & Electricity	Labor	Manufacturing	D&A	Total
	Subtotal	168,188	547,302	7,396,463	6,612,664	5,084,096	19,808,714
Exploration	Zone 1	-	-	389,650	-	-	389,650
	Zone 3	-	-	328,851	-	-	328,851
	Zone 5	-	24,901	757,203	-	-	782,104
	Vein #14	-	-	-	-	-	-
	Vein #82	-	-	-	-	-	-
	Vein #8	-	-	-	-	-	-
	Subtotal	-	24,901	1,475,703	-	-	1,500,604
Total	Zone 1	-	-	389,650	-17	-	389,633
	Zone 3	-	-	328,851	-	-	328,851
	Zone 5	192,788	640,971	10,601,590	7,338,944	5,477,960	24,252,253
	Vein #14	-	-	-	-	-	-
	Vein #82	-	-	-	-	-	-
	Vein #8	-	-	-	-	-	-
	Subtotal	192,788	640,971	11,320,090	7,338,927	5,477,960	24,970,736

Source: Client

Table 14-15: Huatai Mining Operating Costs in 2021 (Unit: CNY)

Project	Zone	Material	Fuel & Electricity	Labor	Manufacturing	Total
Development	Zone 1	8,133	7,587	32,451	131,962	180,133
	Zone 3	28,407	32,958	29,672	407,236	498,272
	Zone 5	99,669	74,002	1,768,444	738,784	2,680,899
	Vein #14					-
	Vein #82					-
	Vein #8	-	-	-	-	-
	Subtotal	136,209	114,547	1,830,566	1,277,982	3,359,304
Mining	Zone 1	340,072	240,386	652,425	4,679,964	5,912,847
	Zone 3	120,353	270,078	5,404,581	3,663,452	9,458,464
	Zone 5	212,068	443,113	14,849,744	10,221,957	25,726,882
	Vein #14					-
	Vein #82					-
	Vein #8	-	-	-	5,449	5,449
	Subtotal	672,493	953,578	20,906,750	18,570,821	41,103,642
Exploration	Zone 1	-	25,722	920,420	-	946,142
	Zone 3	-	17,145	993,891	-	1,011,036
	Zone 5	-	58,998	1,084,483	-	1,143,480
	Vein #14					-
	Vein #82					-
	Vein #8	-	-	-	-	-
	Subtotal	-	101,865	2,998,794	-	3,100,658
Total	Zone 1	348,205	273,695	1,605,296	4,811,926	7,039,122
	Zone 3	148,760	320,181	6,428,144	4,070,688	10,967,772
	Zone 5	311,737	576,113	17,702,670	10,960,741	29,551,261
	Vein #14	-	-	-	-	-
	Vein #82	-	-	-	-	-
	Vein #8	-	-	-	5,449	5,449
	Subtotal	808,702	1,169,989	25,736,110	19,848,803	47,563,604

Source: Client

Table 14-16: Huatai Total Mining Operating Cost from 2020 to 2022 (Unit: CNY)

Zone	2020	2021	2022
Zone 1	9,044,696	7,039,122	389,633

Zone	2020	2021	2022
Zone 3	16,165,995	10,967,772	328,851
Zone 5	21,039,952	29,551,261	24,252,253
Vein #14	-	-	-
Vein #82	-	-	-
Vein #8	155,431	5,449	-
Subtotal	46,406,074	47,563,604	24,970,736

Source: Client

Table 14-17: Huatai Mined Ore Amount from 2020 to 2022 (Unit: t ore)

Zone	2020	2021	2022
Zone 1	6,338	6,630	-
Zone 3	25,091	12,806	-
Zone 5	28,096	36,319	15,310
Vein #14	-	-	-
Vein #82	-	-	-
Vein #8	319	67	-
Subtotal	59,844	55,822	15,310

Source: Client

Table 14-18: Huatai unit Mining Operating Cost from 2020 to 2022 (Unit: CNY/t ore)

Zone	2020	2021	2022
Zone 1	1,427	1,062	-
Zone 3	644	856	-
Zone 5	749	814	1,584
Vein #14	-	-	-
Vein #82	-	-	-
Vein #8	487	81	-

Source: Client

Processing

Mineral processing costs are mainly divided into materials, labor, electricity and manufacturing costs, of which manufacturing costs account for 33% of the total cost (Table 14-19).

The average processing cost over the years increases year by year. Since the situation varies from year to year, SRK takes the three-year average unit cost of CNY186/t milled ore as the future estimated cost.

Table 14-19: Huatai Processing Cost Breakdown from 2020 to 2022 (Unit: CNY/t milled ore)

Year	Material	Labor	Electricity	Manufacturing	DA	Total	Milled Ore (t)	Unit cost
2022	752,586	1,347,554	1,176,261	1,776,624	925,886	5,978,910	18,415	325
2021	1,801,182	1,348,114	3,018,685	2,966,885		9,134,866	53,784	170
2020	2,321,274	1,220,340	2,332,155	2,803,292		8,677,060	55,513	156

Source: Client

14.3 Wulong Project

14.3.1 Capital Expenditures

Table 14-20 shows the long-term assets from the last three years from 2021 to 2023.

Table 14-20: Wulong long-term Assets from 2021 to 2023 (Unit: CNY)

Year	Unit	2021	2022	2023
Capital Expenditures	CNY	316,396,204.79	211,473,955.77	137,289,431.35

Source: Client

History Capital Development

Table 14-21 - Table 14-23 shows the capital development in the past three years. It can be seen from the table that the Wulong Mine continues to invest CNY40 M to CNY50 M in capital development every year for future mining operations. The engineering cost accounts for the highest proportion of the total expenditures.

Table 14-21: Wulong Capital Development in 2022 (Unit: CNY)

Zone	Material	Engineering	Electricity	Total
Zone 2	-	-	-	-
Zone 3	4,767,562	12,095,832	5,100,454	21,963,849
Zone 4	5,301,728	17,363,307	3,292,772	25,957,807
Zone 5	-	-	-	-
Total	**10,069,290**	**29,459,140**	**8,393,226**	**47,921,655**

Source: Client

Table 14-22: Wulong Capital Development in 2021 (Unit: CNY)

Zone	Material	Engineering	Electricity	Total
Zone 2	1,081,001	11,042,731	2,498,850	14,622,581
Zone 3	1,418,025	7,908,514	2,329,573	11,656,112
Zone 4	932,800	4,445,198	1,860,554	7,238,552
Zone 5	979,089	4,902,458	1,253,285	7,134,832
Total	**4,410,915**	**28,298,901**	**7,942,262**	**40,652,078**

Source: Client

Table 14-23: Wulong Capital Development in 2020 (Unit: CNY)

Zone	Material	Engineering	Electricity	Manufacturing	Total
Zone 2	860,295	12,416,086	2,405,396	3,789,302	19,471,079
Zone 3/4	920,274	10,904,227	4,117,873	5,733,935	21,676,309
Zone 5	747,195	7,842,371	1,074,611	1,239,986	10,904,163
Total	**2,527,764**	**31,162,684**	**7,597,879**	**10,763,223**	**52,051,551**

Source: Client

Future Capital Expenditures

The mine intends to expand zone 2's current development and increase its capacity to 700,000t. After two exploration rights are converted to mining rights, the lifting capacity will be increased to 1 M tons per year and 3,000t/d.

To set the stage for exploration, the mine also intends to finish the ventilation shafts of zones 2, 3, and 4. A total of CNY486.27 million ("**mln**") will be invested on development over the next three years.

The estimated capital expenditures in 2023, 2024 and 2025 are shown in Table 14-24.

However, it should be noted that no capital expenditure will be applied in this report since the Mineral Resource is only last for at most three years; therefore, the capacity will not increase in the LoM.

Table 14-24: Wulong Capital Expenditures in 2023-2025 (Unit: CNY mln)

Project	2023	2024	2025	Total
Development	54.12	44.66	35.34	134.12
Exploration	36.8	39	39.66	115.46
Drilling	9.35	11.45	13.49	34.29
Prospecting	0.5	0.2	0	0.7
Research	2	2	2	6
Equipment	5	8.3	14.4	27.7
Intangible	3	3	3	9
Reclamation	5	12	2	19
Buildings	30	60	50	140
Total	**145.77**	**180.61**	**159.89**	**486.27**

14.3.2 Operating Cost

Administration

Administration cost includes controllable cost and uncontrollable cost.

- Controllable cost: salary; welfare; travel expense; repair cost, etc.
- Uncontrollable cost: depreciation and amortization; board fees; insurance; fund, etc.

The average unit cost of administration for the last three years from 2020 to 2022 is about CNY88/t milled ore (Table 14-25).

Table 14-25: Wulong Administration Costs from 2020 to 2022 (Unit: CNY)

Year	Controllable Cost	Uncontrollable Cost	Total	Milled tons	Unit cost
2022	29,939,870	19,684,450	49,624,320	423,235	117.2
2021	19,423,132	5,314,096	24,737,228	382,814	64.6
2020	23,975,835	5,269,819	29,245,654	367,551	79.6

Source: Client

Mining

Mining costs are divided into material, electricity, manufacturing and engineering costs. Table 14-26, Table 14-27 and Table 14-28 show the historical operating cost for the last three years from 2021 to 2023.

Table 14-29 shows the total cost for the last three years, and Table 14-30 shows the total ore amount for the last three years. The average unit operating cost is CNY464/t (Table 14-31). Each zone's unit cost varies a lot due to different ore body and unforeseen situation. Therefore, since the unit cost will change slightly due to different situations every year, SRK takes the average unit cost of the past three years as an estimate for the future.

Table 14-26: Wulong Mining Operating Costs in 2023 (Unit: CNY)

Project	Zone	Material	Electricity	Manufacturing	Engineering	Total
Development	Zone 2	2,960,915	1,966,190	2,497,000	12,526,321	19,950,425
	Zone 3	2,022,578	1,746,557	3,158,324	9,390,342	16,317,801
	Zone 4	1,112,931	655,404	1,132,087	4,088,818	6,989,240
	Zone 5	1,453,454	498,619	2,058,117	5,008,599	9,018,789
	Subtotal	7,549,877	4,866,770	8,845,528	31,014,080	52,276,255
Mining	Zone 2	6,052,120	3,588,510	5,716,617	24,423,905	39,781,153
	Zone 3	8,822,491	6,411,434	13,415,664	34,287,179	62,936,769
	Zone 4	10,063,795	6,079,723	11,038,052	36,699,010	63,880,580
	Zone 5	5,181,151	1,337,710	12,445,812	11,459,575	30,424,248
	Subtotal	30,119,557	17,417,377	42,616,146	106,869,669	197,022,749
Exploration	Zone 2		40,784		1,663,845	1,704,629
	Zone 3		67,379		3,348,726	3,416,105
	Zone 4		84,804		2,494,716	2,579,519
	Zone 5		40,289		1,815,727	1,856,016
	Subtotal		233,256		9,323,013	9,556,269
Total	Zone 2	9,013,035	5,595,484	8,213,617	38,614,071	61,436,207
	Zone 3	10,845,069	8,225,370	16,573,989	47,026,247	82,670,675
	Zone 4	11,176,726	6,819,931	12,170,138	43,282,544	73,449,339
	Zone 5	6,634,605	1,876,618	14,503,930	18,283,901	41,299,053
	Subtotal	37,669,434	22,517,403	51,461,674	147,206,763	258,855,274

Source: Client

Table 14-27: Wulong Mining Operating Costs in 2022 (Unit: CNY)

Project	Zone	Material	Electricity	Manufacturing	Engineering	Total
Development	Zone 2					
	Zone 3	376,751	570,918	2,211,730	1,930,688	5,090,087
	Zone 4	588,569	488,662	2,159,021	3,272,032	6,508,284
	Zone 5					
	Subtotal	965,320	1,059,579	4,370,751	5,202,720	11,598,371
Mining	Zone 2					
	Zone 3	8,723,341	9,348,810	36,059,415	24,209,330	78,340,895
	Zone 4	10,424,752	7,257,824	30,996,487	38,258,255	86,937,318
	Zone 5					
	Subtotal	19,148,093	16,606,634	67,055,901	62,467,585	165,278,214
Exploration	Zone 2					

Project	Zone	Material	Electricity	Manufacturing	Engineering	Total
	Zone 3		35,433		6,316,960	6,352,392
	Zone 4		72,175		7,457,603	7,529,778
	Zone 5					
	Subtotal		107,607		13,774,563	13,882,170
Total	Zone 2					
	Zone 3	9,100,092	9,955,160	38,271,145	32,456,978	89,783,374
	Zone 4	11,013,321	7,818,661	33,155,508	48,987,891	76,708,980
	Zone 5					
	Subtotal	20,113,413	17,773,821	71,426,652	81,444,868	138,677,397

Source: Client

Table 14-28: Wulong Mining Operating Costs in 2021 (Unit: CNY)

Project	Zone	Material	Electricity	Manufacturing	Engineering	Others	Total
Development	Zone 2	139,645	736,934	1,712,530	3,502,287	129,558	6,220,955
	Zone 3	278,704	877,761	1,326,052	4,560,215	216,297	7,259,029
	Zone 4	152,870	398,727	1,154,066	1,324,769	66,773	3,097,205
	Zone 5	62,299	123,707	175,831	731,370	35,636	1,128,844
	Subtotal	633,518	2,137,129	4,368,480	10,118,641	448,264	17,706,032
Mining	Zone 2	835,140	3,361,124	8,047,432	15,209,103	4,426,455	31,879,253
	Zone 3	2,060,279	5,012,644	6,676,878	18,138,679	6,187,258	38,075,738
	Zone 4	1,886,210	3,867,328	10,500,953	9,579,328	736,847	26,570,665
	Zone 5	1,473,143	1,827,562	2,094,429	6,501,770	568,089	12,464,993
	Subtotal	6,254,772	14,068,658	27,319,692	49,428,879	11,918,649	108,990,649
Exploration	Zone 2				2,301,837		2,301,837
	Zone 3				2,087,791		2,087,791
	Zone 4				1,181,953		1,181,953
	Zone 5				1,167,404		1,167,404
	Subtotal				6,738,986		6,738,986
Total	Zone 2	974,785	4,098,058	9,759,962	21,013,227	4,556,013	40,402,045
	Zone 3	2,338,983	5,890,405	8,002,930	24,786,685	6,403,555	47,422,558
	Zone 4	2,039,080	4,266,055	11,655,019	12,086,050	803,619	30,849,823
	Zone 5	1,535,443	1,951,269	2,270,260	8,400,544	603,725	14,761,241
	Subtotal	6,888,291	16,205,787	31,688,171	66,286,506	12,366,913	133,435,667

Source: Client

Table 14-29: Wulong Total Mining Operating Costs from 2021 to 2023 (Unit: CNY)

Zone	2021	2022	2023
Zone 2	40,402,045	0	61,436,207
Zone 3	47,422,558	89,783,374	82,670,675
Zone 4	30,849,823	100,975,381	73,449,339
Zone 5	14,761,241	0	41,299,053
Total	**133,435,667**	**190,758,755**	**258,855,274**

Source: Client

Table 14-30: Wulong Mined Ore Amount from 2020 to 2022 (Unit: t ore)

Zone	2021	2022	2023
Zone 2	0	0	83,628
Zone 3	157,031	157,031	169,360
Zone 4	229,204	229,204	168,297
Zone 5	0	0	93,207

Zone	2021	2022	2023
Total	386,235	386,235	514,492

Source: Client

Table 14-31: Wulong unit Mining Operating Cost from 2020 to 2022 (Unit: CNY/t ore)

Zone	2021	2022	2023
Zone 2	532	0	735
Zone 3	332	572	488
Zone 4	398	441	436
Zone 5	250	0	443

Source: Client

Processing

Mineral processing costs are mainly divided into engineering, materials, labor, electricity and manufacturing costs, of which engineering costs account for almost 80% of the total cost (Table 14-32).

The average processing cost over the years fluctuates by about 15%, and SRK believes that it is within an acceptable range. Since the situation varies from year to year, SRK takes the three-year average unit cost of CNY551/t milled ore as the future estimated cost.

Table 14-32: Wulong Processing Cost breakdown from 2021 to 2023

Year	Material	Labor	Electricity	Manufacturing	Engineering	Others	Total	Milled Ore (t)	Unit Cost
2023	11,445,747	1,497,492	11,662,686	36,598,065	289,824,277		351,028,267	578,302	**607**
2022	10,089,676		11,729,476	13,508,509	202,683,857		238,011,518	423,235	**573**
2021	11,226,241	5,445,402	9,822,196	3,983,634	137,349,895	1,513,777	169,341,145	382,814	**442**

Source: Client

14.4 Hanfeng Project

14.4.1 Capital Expenditures

Despite no production at Hanfeng Mine in 2023, a total of CNY 66.08 million has already been invested as sunk capital expenditure, covering both the upper and lower parts of the mine.

Table 14-33 shows the long-term assets from the last three years from 2020 to 2022.

Hanfeng Mine has estimated CNY 218,700,000 for the near future capital expenditures.

Table 14-33: Hanfeng long-term Assets from 2020 to 2022

Year	Unit	2020	2021	2022
Fixed Assets	CNY	83,897,76	85,564,329	90,484,679
Intangible assets	CNY	76,064,919	122,258,198	120,289,196
Construction in progress	CNY	684,241	11,021,642	36,037,545

Source: Client

14.4.2 Operating Cost

SRK summarised the historical operating cost data from 2020 to 2022.

Administration

SRK did not obtain the administration breakdown cost by the mine but summarised from the income statement (Table 14-34). The average unit cost of last three years from 2021 to 2023 is about CNY25/t milled ore.

Table 14-34: Hanfeng Administration Cost from 2021 to 2023

Year	Cost (CNY)	Milled Ore (t)	Unit Cost (CNY/t)
2023	11,541,130	351,106	33
2022	11,188,014	578,981	19
2021	13,448,789	505,891	27

Source: Client

Mining

Mining cost is divided into direct cost and indirect cost. Direct cost includes labor, ore transport, materials, electricity, etc. Table 14-35 -Table 14-37 show the last three-year direct cost breakdown. The proportion of labor costs is the largest, and its unit cost increases with the year. The proportion of material cost is the second largest, accounting for about 10% of the total cost. In the past three years, the unit cost has increased from CNY62.5/t to CNY88/t.

The average unit mining operating cost of the last three year is approximately CNY65/t ore. The unit cost changed slightly due to different situations every year, so SRK takes the average unit cost of the past three years as an estimate for the future.

Table 14-35: Hanfeng Direct Mining Operating Cost in 2022 (Unit: CNY)

Item	Dongfeng Mine	Lishan Mine	Dongfeng Molybdenum	Total	Unit Cost
Labor costs	4,262,440	22,614,386	3,203,489	30,080,315	57.41
Office expenses	6,830	34,604	-	41,434	0.08
Repair fee	126,438	540,118	1,840	668,396	1.28
Laboratory test fee	35,939	14,909	8,671	59,518	0.11
Outsourcing processing fee	-	197,185	-	197,185	0.38
Ore transport fee	539,008	1,054,328	46,401	1,639,737	3.13
Education funding	-	-	-	-	0.00
Materials	416,847	4,998,807	767,277	6,182,930	11.80
Amortization of low-value consumables	2,220	-	-	2,220	0.00
Mobile fuel cost	104,860	492,410	-	597,270	1.14
Mobile repair fee	-	3,859	-	3,859	0.01
Manufacturing costs	287,750	446,763	160,112	894,625	1.71
Electricity	547,218	3,348,185	350,744	4,246,147	8.10
Others	172,603	1,165,615	125,423	1,463,641	2.79
Total	**6,502,152**	**34,911,169**	**4,663,956**	**46,077,277**	**87.95**

Source: Client

Table 14-36: Hanfeng Direct Mining Operating Cost in 2021 (Unit: CNY)

Item	Dongfeng Mine	Lishan Mine	Total	Unit cost
Labor costs	3,710,000	20,420,000	24,140,000	47.28
Office expenses	0	10,000	10,000	0.02
Repair fee	20,000	400,000	420,000	0.81
Laboratory test fee	70,000	0	70,000	0.14
Outsourcing processing fee	0	140,000	140,000	0.27
Ore transport fee	360,000	870,000	1,230,000	2.42
Education funding	0	10,000	10,000	0.03
Materials	360,000	3,910,000	4,260,000	8.35
Amortization of low-value consumables	10,000	40,000	50,000	0.09
Mobile fuel cost	20,000	290,000	310,000	0.61
Mobile repair fee	-	-	-	0
Manufacturing costs	410,000	410,000	820,000	1.61
Electricity	790,000	2,470,000	3,270,000	6.4
Others	150,000	180,000	330,000	0.65
Total	**5,910,000**	**29,150,000**	**35,060,000**	**68.69**

Source: Client

Table 14-37: Hanfeng Direct Mining Operating Cost in 2020 (Unit: CNY)

Item	Dongfeng Mine	Lishan Mine	Total	Unit cost
Labor costs	4,120,000	16,690,000	20,810,000	41.98
Office expenses	-	10,000	10,000	0.02
Repair fee	40,000	200,000	230,000	0.47
Laboratory test fee	50,000	40,000	90,000	0.18
Outsourcing processing fee	0	160,000	160,000	0.32
Ore transport fee	110,000	780,000	890,000	1.8
Education funding	10,000	10,000	10,000	0.03
Materials	550,000	4,780,000	5,330,000	10.75
Amortization of low-value consumables	-	-	-	0
Mobile fuel cost	50,000	110,000	160,000	0.32
Mobile repair fee	10,000	-	10,000	0.01
Manufacturing costs	-	-	-	0
Electricity	630,000	1,570,000	2,200,000	4.44
Others	520,000	570,000	1,090,000	2.21
Total	**6,090,000**	**24,900,000**	**31,000,000**	**62.53**

Source: Client

Processing

Processing cost includes labor, material, and electricity. Table 14-38 shows the direct processing cost in the last three year. Unit cost ranges from CNY63/t to CNY71/t milled ore, and the average three years unit cost is CNY67/t milled ore.

Table 14-38: Hanfeng Direct Processing Cost from 2020 to 2022 (Unit: CNY)

Item	2022	2021	2020
Labor	4,149,437	3,320,000	3,220,000
Travel expenses	455	-	0
Office expenses	7,737	10,000	0
Repair fee	113,009	290,000	430,000
Laboratory test fee	395,163	290,000	300,000

Item	2022	2021	2020
Outsourcing processing fee	40,393	-	0
Ore transportation fee	894,389	750,000	660,000
Material	16,574,300	13,580,000	13,580,000
Amortization of low-value consumables	470	10,000	-
Business	5,450	0	10,000
Mobile fuel cost	132,878	50,000	20,000
Mobile repair fee	3,957	-	0
Manufacturing	690	-	-
Electricity	14,845,142	11,480,000	10,880,000
Others	271,359	80,000	110,000
Total	37,434,830	29,850,000	29,220,000
Unit Cost	**63.02**	**66.19**	**71.84**

Source: Client

14.5 Jintai Project

14.5.1 Capital Expenditures

Jintai has started operation since 2023. Table 14-39 is the historical capital expenditure.

Table 14-39: Jintai capital expenditure from 2021 to 2024 Q1 (Unit: CNY).

Year	Capital Expenditures
2021	5,648,935
2022	18,035,939
2023	56,203,821
2024 1-3	2,724,970

Source: Client

14.5.2 Operating Cost

Administration

The general and administrative (G&A) costs encompass both direct and indirect expenses, including depreciation and amortization. The G&A unit cost for 2023 is 7.42 CNY/t ore.

Mining cost

Mining cost is estimates based on contractor mining basic. The mine management has engaged mining contractor, and the draft contract has provided for review. The mining unit cost for 2023 is 30.34 CNY/t ore.

Processing cost

The processing cost includes material, electricity and labour salary. The processing unit cost for 2023 is 41.81 CNY/t ore.

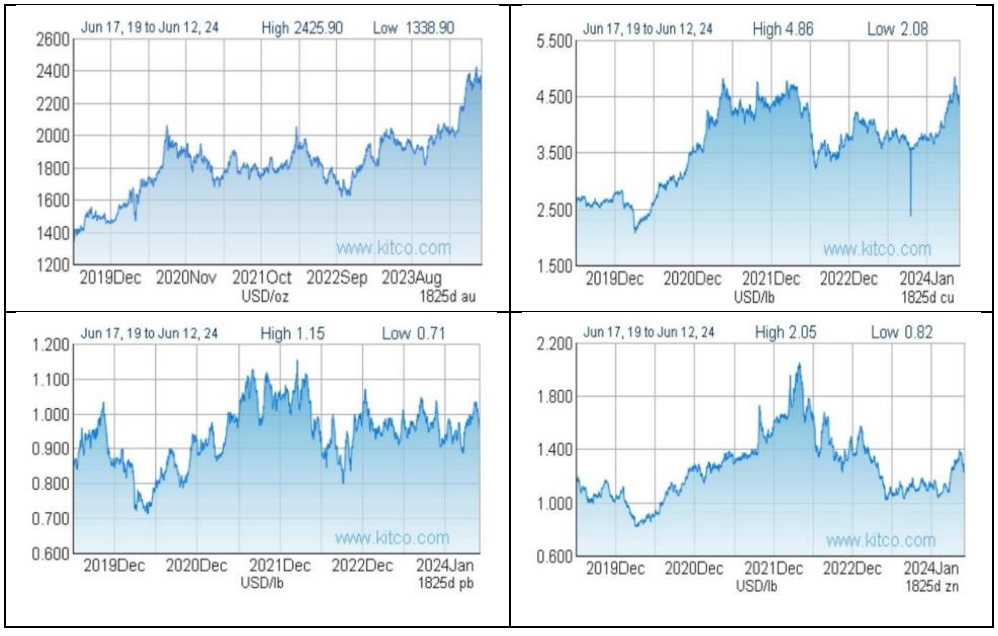
15 Economic Analysis

An economic model was created to project annual cash flows and evaluate sensitivities. This economic analysis, which evaluated on a discounted cash flow basis, is solely for the purpose of Ore Reserve estimation.

15.1 Historical Price

Metal markets are mature, global markets with reputable smelters and refineries located throughout the world. Figure 15-1 shows the metal price trends for gold, copper, lead and zinc over the past five (5) years from 2019 to 2024, in US$, which were sourced from the world largest precious metals and base metals website: www.kitco.com.

Figure 15-1: 5-Year Price Trends of Gold, Copper, Lead and Zinc



Source: World Largest Precious Metals (gold on upper left) and Base Metals (copper on upper right, lead on lower left and zinc on lower right) Website: www.kitco.com.

15.2 Price Forecast

The Gold price forecasts of Deutsche Bank and Zinc price forecasts of CMF is shown in Table 15-1.

A gold price of US$2,050 was used for the calculation of the cut-off grade in the Ore Reserve estimates for the Jilong, Huatai, Wulong and Jintai projects. A zinc price of US$2,500/t was used for the cut-off grade in Ore Reserve estimate for the Hanfeng project.

A fixed gold price of US$2,050/oz and a fixed zinc price of US$2,550/t, respectively as the forecasted prices for gold and zinc are used in the technical and economic analysis for the Chifeng Gold Project.

Table 15-1: Gold, Copper, Lead and Zinc Price Forecasts

Commodity	Unit	2024	2025	2026	2027	2027 and after
Gold	US$/oz	2,080	2,100	2,141	2,050	2,050
Zinc	US$/t	2,550	2,550	2,500	2,450	2,500

Source: Forecasted Prices for Gold and Zinc by CMF in the 1st Quarter of 2024.

15.3 Capital Expenditure Forecast

The sunk and forecast capital expenditure for Jilong, Huaitai, Wulong and Jintai Projects over the LoM is shown in Table below:

Table 15-2: Consolidated Capital Expenditure (Sunk and Forecast) over LOM for Jilong, Huaitai, Wulong and Jintai Projects

Underground Gold Mine in China	Unit	LoM	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Jilong																																			
Initial/Expansion	RMB Million	137.8				82.7	41.3	13.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining	RMB Million	921.9	44.4	85.6	158.5	89.1	120.2	117.9	127.1	71.5	38.3	35.9	24.6	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Huatai																																			
Initial/Expansion	RMB Million	259.5				34.5	23.0	-	68.2	34.1	11.4	-	-	-	-	-	-	-	-	-	14.8	6.3	-	-	-	-	-	15.7	6.7	31.4	13.4	-	-	-	-
Sustaining	RMB Million	946.7	45.3	46.7	-	-	-	30.4	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	25.3
Wulong																																			
Initial/Expansion		665.2	316.4	211.5	137.3																														
Sustaining	RMB Million	494.3				34.5	47.4	47.7	47.0	47.7	51.7	52.1	49.1	48.4	31.7	21.1	15.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Underground Total																																			
Total Initial/Expansion	RMB Million	**1,062.4**	316.4	211.5	137.3	117.2	64.4	13.8	68.2	34.1	11.4	-	-	-	-	-	-	-	-	-	14.8	6.3	-	-	-	-	-	15.7	6.7	31.4	13.4	-	-	-	-
Total Sustaining	RMB Million	**2,362.9**	89.7	132.3	158.5	123.6	167.6	196.0	204.9	150.0	120.7	118.7	104.3	88.0	62.4	51.8	46.6	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	25.3
Total Underground Capex	**RMB Million**	**3,425.3**	**406.1**	**343.8**	**295.8**	**240.8**	**232.0**	**209.8**	**273.0**	**184.1**	**132.1**	**118.7**	**104.3**	**88.0**	**62.4**	**51.8**	**46.6**	**30.8**	**30.7**	**30.7**	**45.5**	**37.1**	**30.7**	**30.7**	**30.7**	**30.8**	**30.7**	**46.4**	**37.4**	**62.2**	**44.2**	**30.7**	**30.7**	**30.8**	**25.3**
Open Pit Gold Mine in China																																			
Jintai																																			
Initial/Expansion	RMB Million	56.2			56.2																														
Sustaining	RMB Million	23.0				1.5	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	1.9	2.1	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Open Pit Total	**RMB Million**	**79.2**	**-**	**-**	**56.2**	**1.5**	**2.1**	**2.1**	**2.1**	**2.1**	**2.0**	**2.0**	**1.9**	**2.0**	**1.9**	**2.1**	**1.4**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Capex																																			
Total Initial/Expansion	RMB Million	**1,118.6**	316.4	211.5	193.5	117.2	64.4	13.8	68.2	34.1	11.4	-	-	-	-	-	-	-	-	-	14.8	6.3	-	-	-	-	-	15.7	6.7	31.4	13.4	-	-	-	-
Total Sustaining	RMB Million	**2,385.9**	89.7	132.3	158.5	125.1	169.7	198.1	206.9	152.0	122.7	120.7	106.3	90.0	64.3	53.9	48.0	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	30.7	30.7	30.7	30.8	25.3
Total Capex	**RMB Million**	**3,504.5**	**406.1**	**343.8**	**352.0**	**242.3**	**234.1**	**211.9**	**275.1**	**186.1**	**134.1**	**120.7**	**106.3**	**90.0**	**64.3**	**53.9**	**48.0**	**30.8**	**30.7**	**30.7**	**45.5**	**37.1**	**30.7**	**30.7**	**30.7**	**30.8**	**30.7**	**46.4**	**37.4**	**62.2**	**44.2**	**30.7**	**30.7**	**30.8**	**25.3**

The sunk and forecast capital expenditure for Hanfeng Project over the LoM is shown in Table below:

Table 15-3: Consolidated Capital Expenditure (Sunk and Forecast) over LOM for Hanfeng Project

Hanfeng	Unit	LoM	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Expansion	RMB Million	109.4				76.5	32.8	-	-	-	-	-	-	-
Sustaining	RMB Million	72.1				-	9.5	9.5	9.3	7.9	9.8	9.5	8.7	8.0
Sunk Capex	RMB Million	117.6	11.0	40.5	66.1									
Total	RMB Million	299.1	11.0	40.5	66.1	76.5	42.3	9.5	9.3	7.9	9.8	9.5	8.7	8.0

15.4 Jilong Project

15.4.1 Principal Assumptions

The Jilong Project contains 0.97 Mt of Ore Reserves with an average grade of 8.59 g/t Au. SRK conducted an economic analysis based on the following basic assumptions:

- The final product is gold ingot;
- The price of gold is US$2,050/oz;
- LoM is 9 years within 6 mining zones;
- Chinese Yuan ("CNY") is the local currency, while the US$ is used for the technical economic analysis. The exchange rate is 7.22 CNY /US$;
- SRK does not consider future inflation or currency and cost fluctuations; the price and cost remain constant over the LoM.
- Unit sustaining costs, operating costs, mining dilution, mining recovery, and processing recovery rate are considered constants over the LoM;
- Working capital will be fully recovered when the mine is closed.

Production Schedule

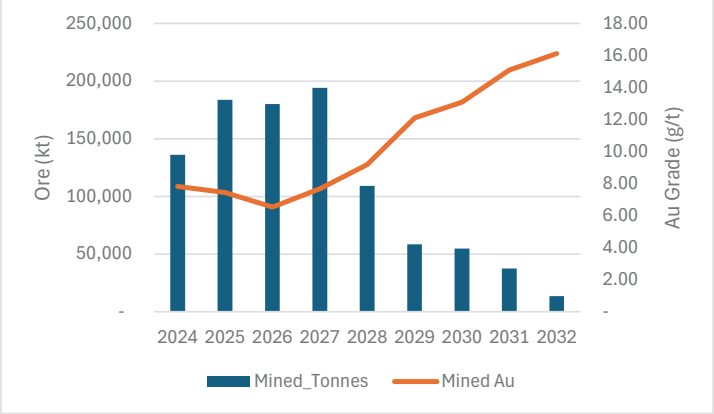
Table 15-4 shows the technical parameters over life of mine, and Figure 15-2 is the mining schedule.

Table 15-4: Technical Parameters for Jilong Project

Parameter	Unit	Value over the LoM
Ore Reserves	t	967,648
Au Grade	g/t	8.59
Contained Au	koz	267
Processing Recovery	%	97%
Gold Produced	g	8,060,976
Gold Produced	oz	259,166

Source: SRK

Figure 15-2: Jilong Project Schedule



Source: SRK

Notes:

1 The line represents the average gold grade, corresponding to the right axis.

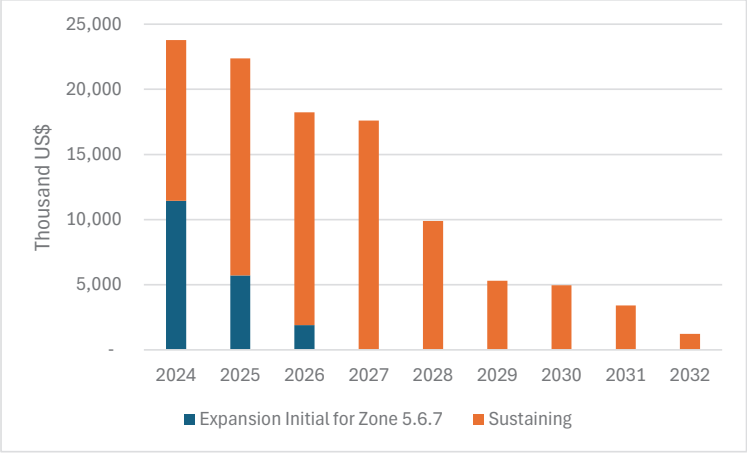
2 The column represents the mined amount, corresponding to the left axis.

Capex

For expansion, initial capital costs are derived from the PFS and are projected to commence 3 years prior to production. Sustaining costs are calculated using the average historical data from the past three years (2020 to 2022).

Please see Chapter 14.1.1 for more details.

Figure 15-3: Annual Capex over the LoM



Source: SRK

Opex

SRK has averaged historical three-year (2021 to 2023) cost for the estimated future unit cost.

Please see Chapter 14.1.2 for more details.

Figure 15-4: Annual Opex over the LoM

Source: SRK

Tax and Surcharges

SRK used 4.5% for royalty for the technical economic model ("**TEM**") and the income tax for Jilong Project is 15%. There are no other surcharges considered.

Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the depreciation period is 10 years.

Closure Cost

The closure cost is estimated to be US$2 mln (See Chapter 13.7.1) and is assumed to be distributed across the LoM.

15.4.2 Financial Net Present Value

The NPV is about USD 135million at a 10% discount rate. Table 15-5 shows the Total Cash Flow over the LoM. Figure 15-5 shows the net cash flow and Table 15-6 shows the NPV with different discount rate.

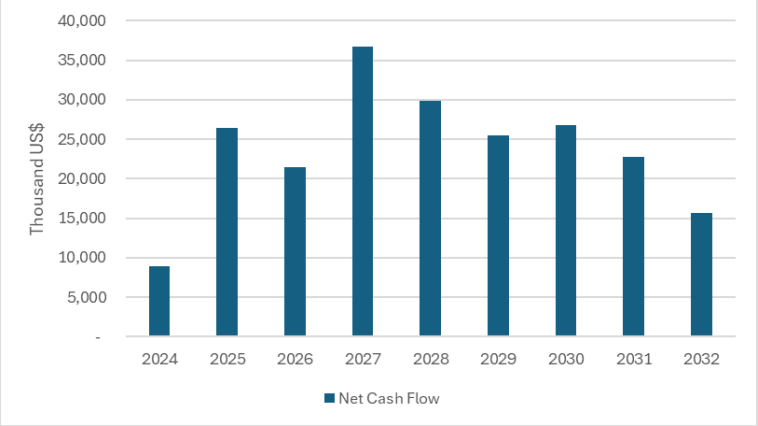
Table 15-5: Total Cash Flow over the LoM for Jilong Project (unit: US$ mln)

Item	Total Cash Flow over the LoM
Revenue	531
Opex	140

Item	Total Cash Flow over the LoM
Capex	107
Tax & other fees	68
After tax cash-flow	1,056

Source: SRK

Figure 15-5: Annual Net Cash Flow for Jilong Project (unit: 000' US$)



Source: SRK

Table 15-6: NPV with Different Discount Rate for Jilong Project (unit: US$ mln)

Discount Rate	NPV
5%	168
6%	161
7%	154
8%	147
9%	141
10%	**135**
11%	130
12%	125
13%	120
14%	115
15%	111

Source: SRK

15.4.3 Sensitivity Analysis

SRK conducted single factor sensitivity analysis for the Project. The gold price, Capex and Opex are chose to run the sensitivity analysis with ±30% range. The result is shown in Table 15-7 and Figure

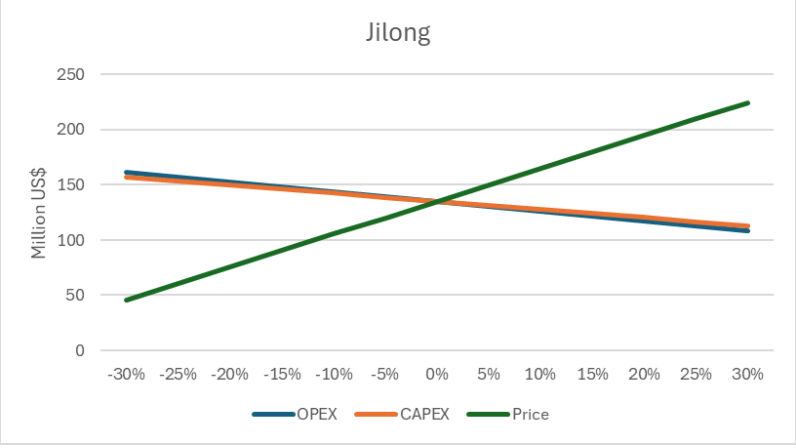
15-6. Price is relatively the most sensitive factor in NPV, when price is at 25%, the Project cannot be economical.

Table 15-7: Sensitivity Analysis for Jilong Project at 10% Discount Rate (unit: US$ mln)

NPV	Opex	Capex	Price
-30%	162	157	45
-25%	157	153	60
-20%	153	150	75
-15%	148	146	90
-10%	144	142	105
-5%	140	139	120
0%	135	135	135
5%	131	132	150
10%	126	128	165
15%	122	124	180
20%	117	120	195
25%	113	117	210
30%	109	113	225

Source: SRK

Figure 15-6:Sensitivity Analysis for Jilong Project at 10% Discount Rate (unit: US$ mln)



Source: SRK

15.5 Huatai Project

15.5.1 Principal Assumptions

The Huatai Project contains 1.69 Mt of Ore Reserves with an average grade of 6.2g/t Au. SRK conducted an economic analysis based on the following basic assumptions:

- The final product is gold ingot;
- The price of gold is US$2,050/oz;
- LoM is 28 years within 5 mining zones;
- Chinese Yuan ("CNY") is the local currency of the Project, while the US$ is used for the technical economic analysis. The exchange rate is 7.22 CNY /US$;
- SRK does not consider future inflation or currency and cost fluctuations; the price and cost remain constant over the LoM.
- Unit sustaining costs, operating costs, mining dilution, mining recovery, and processing recovery rate are considered constants over the LoM;
- Working capital will be fully recovered when the mine is closed.

Production Schedule

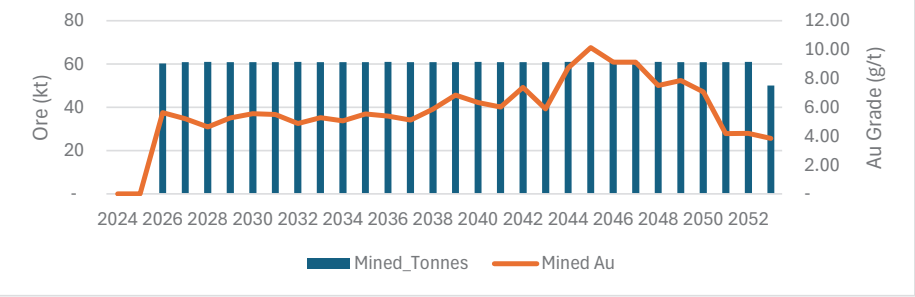
Table 15-8 shows the technical parameters over life of mine, and Figure 15-7 is the mining schedule.

Table 15-8: Technical Parameters for Huatai Project

Parameter	Unit	Value over the LoM
Ore Reserves	t	1,693,160
Au Grade	g/t	6.2
Contained Au	koz	337
Processing Recovery	%	93%
Gold Produced	g	9,796,021
Gold Produced	oz	314,949

Source: SRK

Figure 15-7: Huatai Project Schedule



Source: SRK

Notes:

[3] The line represents the average gold grade, corresponding to the right axis.

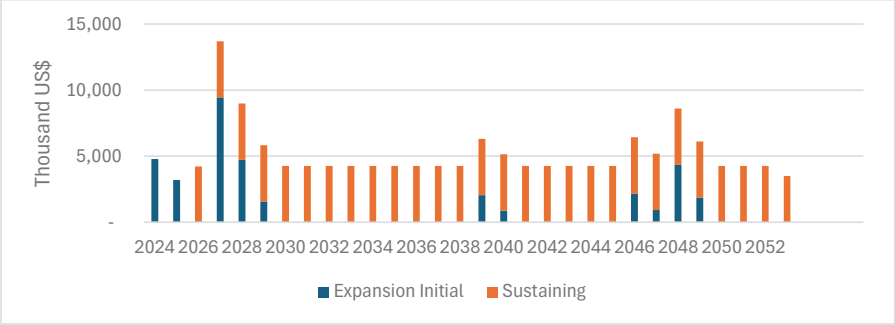
[4] The column represents the mined amount, corresponding to the left axis.

Capex

For expansion, initial capital costs are derived from the PFS and are projected to commence 1 to 2 years prior to production. Sustaining costs are calculated using the average historical data from the past three years (2020 to 2022).

Please see Chapter 14.2.1 for more details.

Figure 15-8: Annual Capex over the LoM



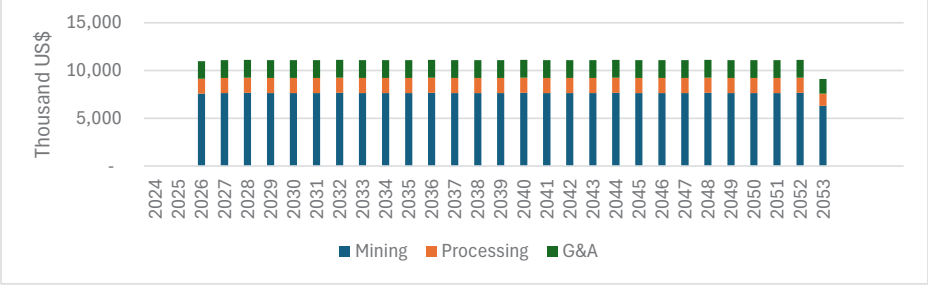
Source: SRK

Opex

SRK has averaged historical three-year (2020 to 2022) costs for estimate future unit cost.

Please see Chapter 14.2.2 for more details.

Figure 15-9: Annual Opex over the LoM



Source: SRK

Tax and Surcharges

SRK used 4.5% for royalty for the TEM and the income tax for Huatai Project is 15%. There are no other surcharges considered.

Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the depreciation period is 10 years.

Closure Cost

The closure cost is estimated to be US$5 million (See Chapter 13.7.2) and is assumed to be distributed across the LoM.

15.5.2 Financial Net Present Value

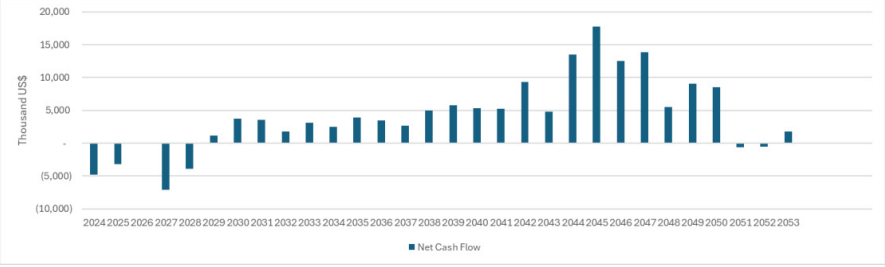
The NPV is about US$11.26 mln at a 10% discount rate. Table 15-9 shows the total cash flow over LoM. Figure 15-10 shows the net cash flow and Table 15-10 shows the NPV with different discount rate.

Table 15-9: Total Cash Flow over the LoM for Huatai Project (Unit: US$ mln)

Item	Total Cash Flow over the LoM
Revenue	646
Opex	308
Capex	154
Tax & other fees	54
After tax cash-flow	124

Source: SRK

Figure 15-10: Annual Net Cash Flow for Huatai Project (Unit: 000' US$)



Source: SRK

Table 15-10: NPV with Different Discount Rate for Huatai Project (Unit: US$ mln)

Discount Rate	NPV
5%	40.49
6%	32.08
7%	25.22
8%	19.62
9%	15.03
10%	11.26

Discount Rate	NPV
11%	8.16
12%	5.59
13%	3.47
14%	1.72
15%	0.26

Source: SRK

15.5.3 Sensitivity Analysis

SRK conducted single factor sensitivity analysis for the Project. The gold price, Capex and Opex are chose to run the sensitivity analysis with ±30% range.

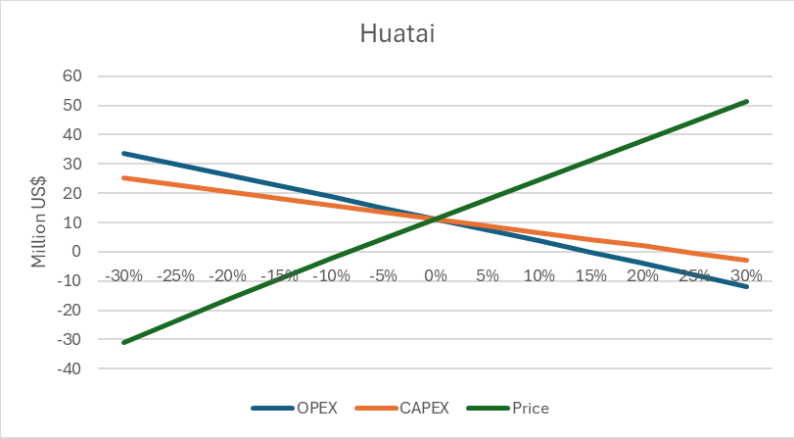
The results, detailed in Table 15-11 and Figure 15-11, indicate that gold price is the most significant factor affecting NPV. The Project becomes uneconomical if the price decreases by 5%. Similarly, both Opex and Capex are critical, as a 10% increase in these costs renders the Project uneconomical.

Table 15-11: Sensitivity Analysis for Huatai Project at 10% Discount Rate (Unit: US$ mln)

NPV	Opex	Capex	Price
-30%	34	25	-31
-25%	30	23	-24
-20%	26	20	-16
-15%	23	18	-9
-10%	19	16	-2
-5%	15	14	5
0%	11	11	11
5%	8	9	18
10%	4	7	25
15%	0	4	31
20%	-4	2	38
25%	-8	0	45
30%	-12	-3	51

Source: SRK

Figure 15-11: Sensitivity Analysis for Huatai Project at 10% Discount Rate (Unit: US$ mln)



Source: SRK

15.6 Wulong Project

15.6.1 Principal Assumptions

The Wulong Project contains 1.03 Mt of Ore Reserves with an average grade of 7.35g/t Au. SRK conducted an economic analysis based on the following basic assumptions:

- The final product is gold ingot;
- The price of gold is US$2,050/oz;
- LoM is 12 years within 4 mining zones;
- Chinese Yuan ("CNY") is the local currency of the Project, while the US$ is used for the technical economic analysis. The exchange rate is 7.22 CNY /US$;
- SRK does not consider future inflation or currency and cost fluctuations; the price and cost remain constant over the LoM.
- Unit sustaining costs, operating costs, mining dilution, mining recovery, and processing recovery rate are considered constants over the LoM;
- Working capital will be fully recovered when the mine is closed.

Production Schedule

Table 15-12 shows the technical parameters over life of mine, and Figure 15-12 is the mining schedule.

Table 15-12: Technical Parameters for Wulong Project

Parameter	Unit	Value over the LoM
Ore Reserves	t	1,028,726

Parameter	Unit	Value over the LoM
Au Grade	g/t	7.35
Contained Au	koz	243
Processing Recovery	%	91%
Gold Produced	g	6,884,000
Gold Produced	oz	211,326

Source: SRK

Figure 15-12: Wulong Project Schedule

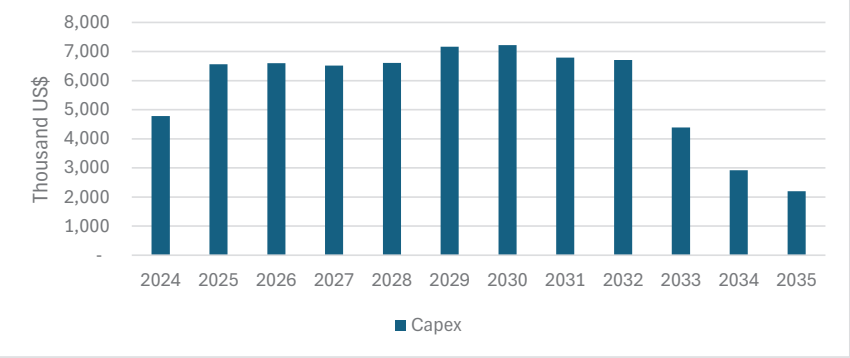
Source: SRK

Capex

Sustaining costs are calculated using the average historical data from the past three years (2021 to 2023).

Please see Chapter 14.3.1 for more details.

Figure 15-13: Annual Capex over the LoM



Source: SRK

Notes:

[5] The line represents the average gold grade, corresponding to the right axis.

[6] The column represents the mined amount, corresponding to the left axis.

Opex

SRK has averaged historical three-year (2021 to 2023) cost for the estimated future unit cost.

Please see Chapter 14.3.2 for more details.

Figure 15-14: Annual Opex over the LoM

Source: SRK

Tax and Surcharges

SRK used 4.5% for royalty for the TEM and the income tax for Wulong Project is 15%. There are no other surcharges considered.

Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the depreciation period is 10 years.

Closure Cost

The closure cost is estimated to be US$5.5 mln (See Chapter 13.7.3) and is assumed to be distributed across the LoM.

15.6.2 Financial Net Present Value

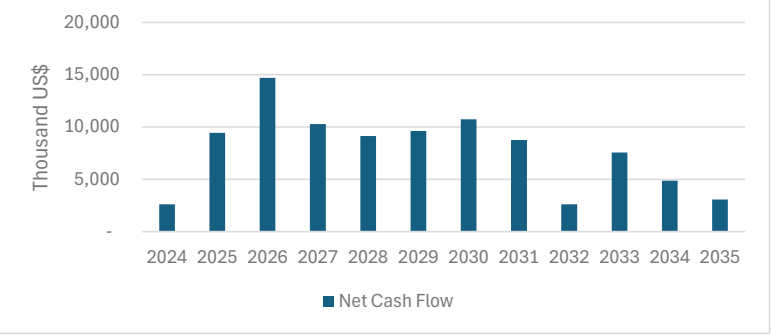
The NPV is about US$ 56 mln at a 10% discount rate. Table 15-13 shows the total cash flow over LoM. Figure 15-15 shows the net cash flow and Table 15-14 shows the NPV with different discount rate.

Table 15-13: Total Cash Flow over the LoM for Wulong Project (Unit: US$ mln)

Item	Total Cash Flow over the LoM
Revenue	417
Opex	209
Capex	68
Tax & other fees	41
After tax cash-flow	93

Source: SRK

Figure 15-15: Annual Net Cash Flow for Wulong Project (Unit: 000' US$)



Source: SRK

Table 15-14: NPV with Different Discount Rate for Wulong Project (Unit: US$ mln)

Discount Rate	NPV
5%	71
6%	67
7%	64
8%	61
9%	58
10%	56
11%	53
12%	51
13%	49
14%	47
15%	45

Source: SRK

15.6.3 Sensitivity Analysis

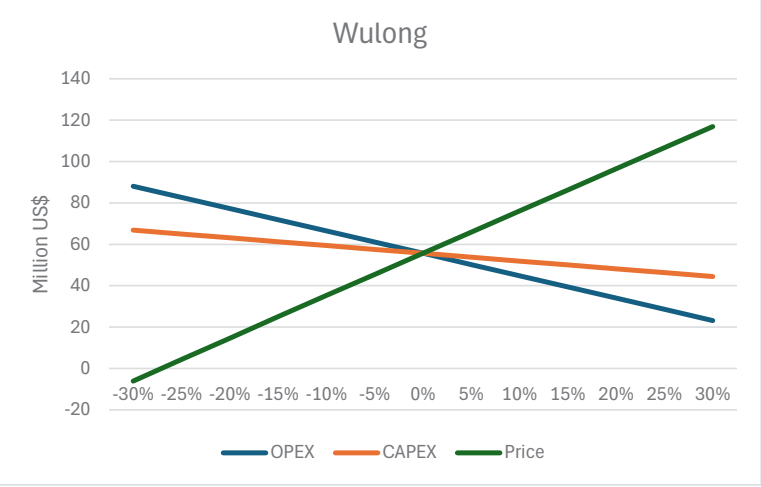
SRK conducted single factor sensitivity analysis for the Project. The gold price, Capex and Opex are chose to run the sensitivity analysis with ±30% range. The result is shown in Table 15-15 and Figure 15-16. The Project remains economical as long as the gold price does not decrease by more than 30%.

Table 15-15: Sensitivity Analysis for Wulong Project at 10% Discount Rate (Unit: US$ mln)

NPV	Opex	Capex	Price
-30%	88	67	-6
-25%	83	65	4
-20%	77	63	15
-15%	72	61	25
-10%	66	59	35
-5%	61	58	45
0%	56	56	56
5%	50	54	66
10%	45	52	76
15%	39	50	86
20%	34	48	96
25%	29	46	107
30%	23	44	117

Source: SRK

Figure 15-16:Sensitivity Analysis for Wulong Project at 10% Discount Rate (Unit: US$ mln)



Source: SRK

15.7 Hanfeng Project

15.7.1 Principal Assumptions

The Hanfeng Project contains 3.31 Mt of Ore Reserves with an average grade of 2.45% Zn. SRK conducted an economic analysis based on the following basic assumptions:

- The final product is Zn concentrate;

- The price of Zn concentrate is US$2,550/t;
- LoM is 8 years within 1 mining zones;
- Chinese Yuan ("CNY") is the local currency of the Project, while the US$ is used for the technical economic analysis. The exchange rate is 7.22 CNY /US$;
- SRK does not consider future inflation or currency and cost fluctuations; the price and cost remain constant over the LoM.
- Unit sustaining costs, operating costs, mining dilution, mining recovery, and processing recovery rate are considered constants over the LoM;
- Working capital will be fully recovered when the mine is closed.

Production Schedule

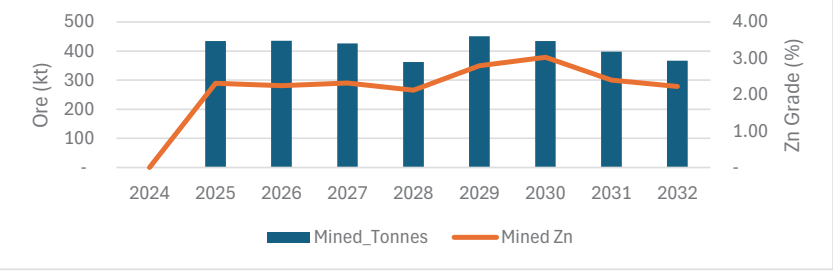
Table 15-16 shows the technical parameters over the LoM, and Figure 15-17 is the mining schedule.

Table 15-16: Technical Parameters for Hanfeng Project

Parameter	Unit	Value over the LoM
Ore Reserves	t	3,310,358
Zn Grade	%	2.45
Contained Zn	kt	81
Processing Recovery	%	88%
Zn Concentrate	t	152,385

Source: SRK

Figure 15-17:Hanfeng Project Schedule



Source: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

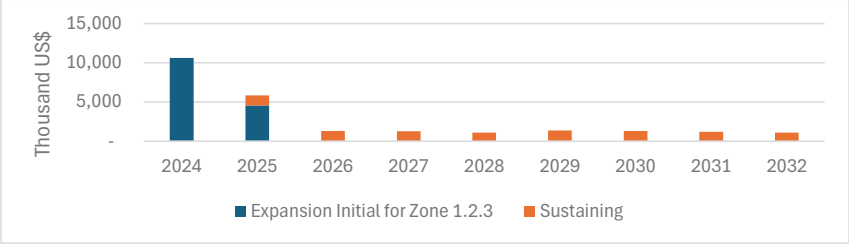
[2] The column represents the mined amount, corresponding to the left axis.

Capex

For expansion, initial capital costs are derived from the PFS and are projected to commence 2 years prior to production. Sustaining costs are calculated using the average historical data from the past three years (2020 to 2022).

Please see Chapter 14.4.1 for more details.

Figure 21-17: Annual Capex over the LoM



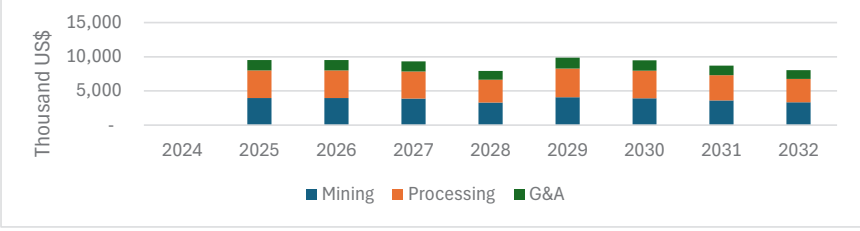
Source: SRK

Opex

SRK has averaged historical three-year (2020 to 2022) costs for the estimated future unit cost.

Please see Chapter 14.4.2 for more details.

Figure 15-18: Annual Opex over the LoM



Source: SRK

Tax and Surcharges

SRK used 4.5% for royalty for the TEM and the income tax for Hanfeng Project is 15%. There are no other surcharges considered.

Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the depreciation period is 10 years.

Closure Cost

The closure cost is estimated to be US$2.1 mln (See Chapter 13.7.4) and is assumed to be distributed across the LoM.

15.7.2 Financial Net Present Value

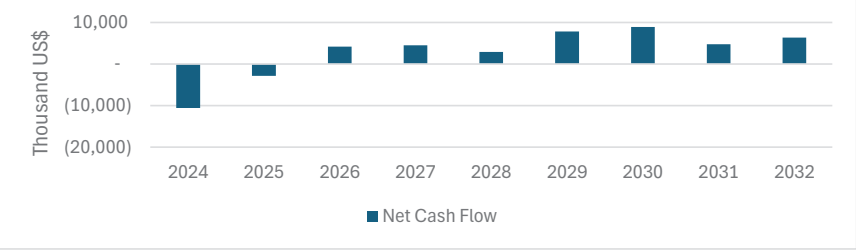
The NPV is about US$ 10 mln at a 10% discount rate. Table 15-17 shows the total cash flow over LoM. Figure 15-20 shows the net cash flow and Table 15-18 shows the NPV with different discount rate.

Table 21-14: Total Cash Flow over the LoM for Hanfeng Project (Unit: US$ mln)

Item	Total Cash Flow over the LOM
Revenue	161
Opex	72
Capex	25
Tax & other fees	38
After tax cash-flow	26

Source: SRK

Figure 15-19:Annual Net Cash Flow for Hanfeng Project (Unit: 000' US$)



Source: SRK

Tabel 21-15: NPV with Different Discount Rate for Hanfeng Project (Unit: US$ mln)

Discount Rate	NPV
5%	16
6%	15
7%	14
8%	12
9%	11
10%	10
11%	9
12%	8
13%	7
14%	6
15%	5

Source: SRK

15.7.3 Sensitivity Analysis

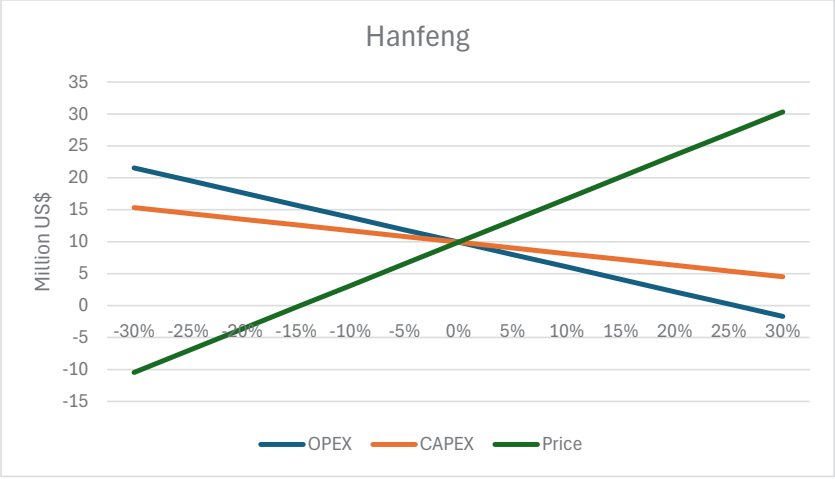
SRK conducted single factor sensitivity analysis for the Project. The Zn price, Capex and Opex are chose to run the sensitivity analysis with ±30% range. The result is shown in Table 15-17 and Figure 15-21. The Project becomes uneconomical if the price decreases by 15%. OPEX is the second most sensitive factor, with the Project becoming uneconomical if Opex increases by 20%.

Table 15-17: Sensitivity Analysis for Hanfeng Project at 10% Discount Rate (Unit: US$ mln)

NPV	Opex	Capex	Price
-30%	22	15	-10
-25%	20	14	-7
-20%	18	14	-4
-15%	16	13	0
-10%	14	12	3
-5%	12	11	7
0%	10	10	10
5%	8	9	13
10%	6	8	17
15%	4	7	20
20%	2	6	24
25%	0	5	27
30%	-2	5	30

Source: SRK

Figure 15-20:Sensitivity Analysis for Hanfeng Project at 10% Discount Rate (Unit: US$ mln)



Source: SRK

15.8 Jintai Project

15.8.1 Principal Assumptions

The Jintai Project contains 1.56 Mt of Ore Reserves with an average grade of 0.74g/t Au. SRK conducted an economic analysis based on the following basic assumptions:

- The final product is gold ingot;
- The price of gold is US$2,050/oz;
- LoM is 12 years within 2 open pits;
- Chinese Yuan ("CNY") is the local currency of the Project, while the US$ is used for the technical economic analysis. The exchange rate is 7.22 CNY /US$;
- SRK does not consider future inflation or currency and cost fluctuations; the price and cost remain constant over the LoM.
- Unit sustaining costs, operating costs, mining dilution, mining recovery, and processing recovery rate are considered constants over the LoM;

Working capital will be fully recovered when the mine is closed.

Production Schedule

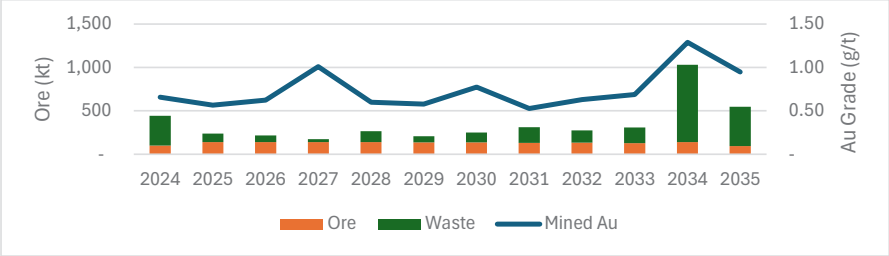
Table 15-18 shows the technical parameters over the LoM, and Figure 15-21 is the mining schedule.

Table 15-18: Technical Parameters for Jintai Project

Parameter	Unit	Value over the LoM
Ore Reserves	t	1,562,601
Wast	t	2,708,352
Strip Ratio	t/t	1.73
Au Grade	g/t	0.74
Contained Au	koz	37.12
Processing Recovery	%	78
Gold Produced	g	896,046
Gold Produced	oz	28,809

Source: SRK

Figure 15-21: Jintai Project Schedule



Source: SRK

Notes:

[1] The line represents the average gold grade, corresponding to the right axis.

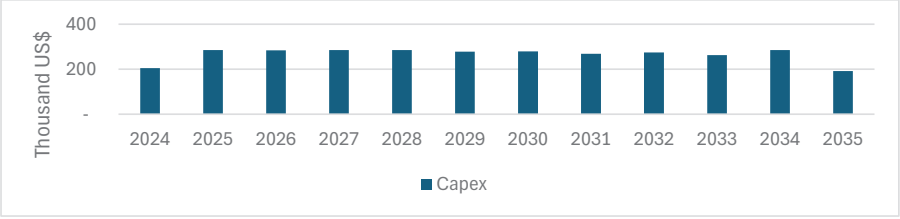
[2] The column represents the mined amount, corresponding to the left axis.

Capex

SRK has averaged historical two-year (2023 to 2024Q1) cost and the PFS for the estimated future sustaining unit cost.

Please see Chapter 14.5.1 for more details.

Figure 15-22: Annual Capex over the LoM



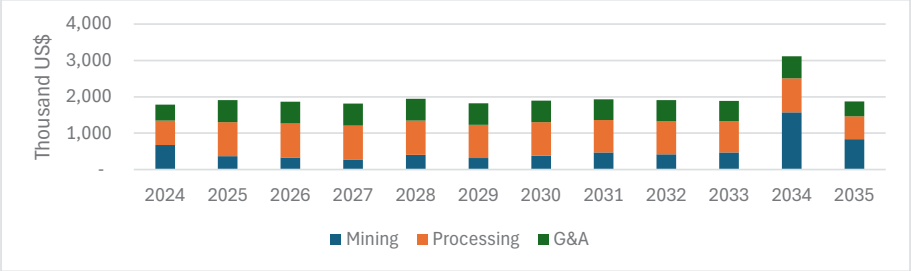
Source: SRK

Opex

SRK has averaged historical two-year (2023 to 2024Q1) cost and the PFS for the estimated future unit cost.

Please see Chapter 14.5.2 for more details.

Figure 15-23:Annual Opex over the LoM



Source: SRK

Tax and Surcharges

SRK used 4.5% for royalty for the TEM and the income tax for Jintai Project is 25%. There are no other surcharges considered.

Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the depreciation period is 10 years.

Closure Cost

The closure cost is estimated to be US$0.8 mln (See Chapter 13.7.5) and is assumed to be distributed across the LoM.

15.8.2 Financial Net Present Value

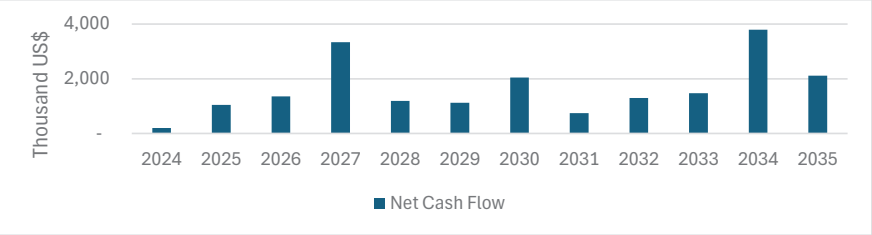
The NPV is about USD 10 mln at a 10% discount rate. Table 15-19 shows the total cash flow over LoM. Figure 15-24 shows the net cash flow and Table 15-20 shows the NPV with different discount rate.

Table 15-19: Total Cash Flow over the LoM for Jintai Project (Unit: US$ mln)

Item	Total Cash Flow over the LoM
Revenue	57
Opex	24
Capex	3
Tax & other fees	10
After tax cash-flow	20

Source: SRK

Figure 15-24: Annual Net Cash Flow for Jintai Project (Unit: 000' US$)



Source: SRK

Table 15-20: NPV with Different Discount Rate for Jintai Project (Unit: US$ mln)

Discount Rate	NPV
5%	14
6%	13
7%	12
8%	12
9%	11
10%	10
11%	10
12%	9
13%	9
14%	8
15%	8

Source: SRK

15.8.3 Sensitivity Analysis

SRK conducted single factor sensitivity analysis for the Project. The price, Capex and Opex are chose to run the sensitivity analysis with ±30% range. The result is shown in Table 15-21 and Figure 15-25. Price is relatively the most sensitive factor in NPV, however, when price is below 30%, the Project can still be economical.

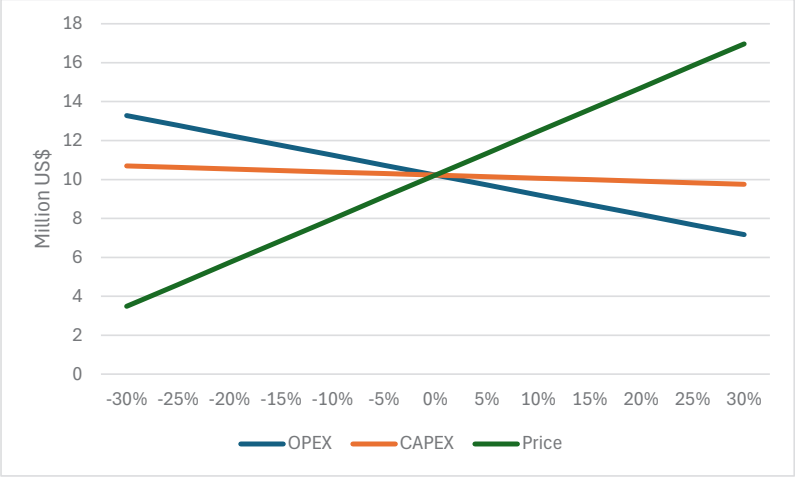
Table 15-21: Sensitivity Analysis for Jintai Project at10% Discount Rate (Unit: US$ mln)

NPV	Opex	Capec	Price
-30%	13	11	3
-25%	13	11	5
-20%	12	11	6
-15%	12	10	7
-10%	11	10	8
-5%	11	10	9
0%	10	10	10
5%	10	10	11
10%	9	10	12

NPV	Opex	Capec	Price
15%	9	10	14
20%	8	10	15
25%	8	10	16
30%	7	10	17

Source: SRK

Figure 15-25: Sensitivity Analysis for Jintai Project at10% Discount Rate (Unit: US$ mln)



Source: SRK

16 Risk Assessment

SRK completed a risk assessment of the specific risks identified for the Chifeng Gold Project in relation to their likelihood of occurrence within the LoM and consequence in accordance with the Exchange to the Listing Rules.

In general, the risk of a project decreases from exploration, through development, to the production stage. The Chifeng Gold's five projects are all advanced projects.

SRK considered various technical aspects which may affect the feasibility and future cash flow of the Taizhou Project. SRK's final Risk Assessment is presented in Table 16-1.

Table 16-1: Risk Assessment for Chifeng Gold Project

Risk Source/Issue	Likelihood	Consequence	Risk
Jilong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Poor Underground Condition	Possible	Moderate	Medium
Poor Mine Plan	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing and smelting			
Poor Plant Reliability	Unlikely	Moderate	Low
Lower Throughput	Unlikely	Moderate	Low
Lower Smelting Recovery	Possible	Moderate	Medium
Environmental and Social			
Water management	Possible	Moderate	Medium
Waste Rock and Tailings Management	Possible	Moderate	Medium
Environmental Approval	Unlikely	Moderate	Low
Social Aspects	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Possible	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Huatai Project			

Risk Source/Issue	Likelihood	Consequence	Risk
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing and smelting			
Poor Plant Reliability	Possible	Moderate	Medium
Lower Throughput	Possible	Moderate	Medium
Lower Smelting Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Major	Medium
Waste Rock and Tailings Management	Possible	Moderate	Medium
Hazardous Materials Management	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Likely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Likely	Moderate	High
Wulong Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing			

Risk Source/Issue	Likelihood	Consequence	Risk
Poor Plant Reliability	Unlikely	Moderate	Low
Lower Throughput	Unlikely	Moderate	Low
Lower Processing Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Possible	Moderate	Medium
Waste Rock and Tailings Management	Unlikely	Moderate	Low
Environmental Approval	Possible	Moderate	Medium
Social Aspects	Possible	Minor	Low
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium
Jintai Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Unlikely	Moderate	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Unlikely	Moderate	Low
Poor Mine Technical Management	Unlikely	Moderate	Low
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Processing and Metallurgy			
Poor Process Reliability	Unlikely	Moderate	Low
Lower Ore Throughput	Unlikely	Moderate	Low
Poor Permeability of Ore Heap	Possible	Moderate	Medium
Lower Gold Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Major	Medium
Waste Rock and Tailings Management	Unlikely	Moderate	Low
Social Aspects	Possible	Moderate	Medium
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium

Risk Source/Issue	Likelihood	Consequence	Risk
Operating Cost Underestimated	Possible	Moderate	Medium
Hanfeng Project			
Geology, Mineral Resources and Ore Reserves			
Lack of Significant Mineral Resource	Possible	Major	Low
Lack of Significant Ore Reserve	Unlikely	Major	Medium
Significant Unexpected Geological Faulting	Possible	Moderate	Medium
Unexpected Groundwater Ingress	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Unlikely	Moderate	Low
Significant Geological Structure	Unlikely	Moderate	Low
Excessive Surface Subsidence	Unlikely	Moderate	Low
Lack of Competent Technical Personnels	Possible	Moderate	Medium
Poor Mine Technical Management	Possible	Moderate	Medium
Significantly lacking Ore Reserves	Unlikely	Major	Medium
Ore Processing			
Poor Plant Reliability	Possible	Moderate	Medium
Lower Throughput	Possible	Moderate	Medium
Lower Processing Recovery	Possible	Moderate	Medium
Environmental and Social			
Water Management	Unlikely	Moderate	Low
Waste Rock and Tailings Management	Possible	Moderate	Medium
Environmental Approval	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Unlikely	Minor	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Medium
Operating Cost Underestimated	Possible	Moderate	Medium

In the risk assessment, various risk issues have been assessed for Likelihood, Consequence, and Overall Rating. SRK has used a matrix as described below.

The Likelihood of a risk is considered within a certain time frame, e.g., five years, as:

- **Likely:** will probably occur;
- **Possible:** may occur; or
- **Unlikely:** unlikely to occur.

The Consequence of a risk is classified as:

- **Major:** the factor poses an immediate danger to the Taizhou Project that, if uncorrected, will have a material effect on the Taizhou Project cash flow and performance and could lead a project failure;

- **Moderate:** the factor, if uncorrected, will have a significant effect on the Taizhou Project cash flow and performance; or
- **Minor:** the factor, if uncorrected, will have little or no effect on the Taizhou Project cash flow and performance.

The overall risk assessment combines the Likelihood and Consequence of a risk and be classified as Low (unlikely and possible minor risks, and unlikely moderate risk), Medium (likely minor, possible moderate, and unlikely major risks) and High (likely moderate and major risks, and possible major risks).

17 Conclusions and Recommendations

SRK conducted a full technical review on the Chifeng Gold Project and the conclusions and recommendations of this review have been discussed in each main section or technical discipline of this Report.

The Projects consists of five operating projects; the Jilong, Huatai and Wulong Projects are underground gold mines, the Jintai Project is an open pit gold mine, and the Hanfeng Project, including the Lishan and Dongfeng mines, is an underground lead-zinc polymetallic project. The Jintai Project just started mining operation in the first quarter of 2024, while the other four projects including the Jilong Huatai, Wulong and Hanfeng projects have been in production for many years.

17.1 Jilong Project

There are still production exploration programs ongoing at the Zhuanshanzi Mine for further Mineral Resources. SRK recommends that Jilong mining conduct a structured QA/QC process for these exploration work, including the level exploration tunnelling, in-fill drilling, sampling, sample preparation, analysis, internal and external checks, and insertion of control samples (i.e. blank, standard and duplicate samples). SRK recommends that Jilong mining retains coarse duplicates and pulp duplicate samples for future examination.

SRK has conducted Mineral Resource and Ore Reserve Estimates under the JORC Code. It is recommended to improve the quality of grade control model and incorporate it into resource/reserve model.

The processing flowsheet of whole ore cyanidation and Merrill-Crowe process is suitable for the requirements of the ore properties. The production process and equipment are reasonable, and better technical indicators were obtained with no major flaws.

The current equipment for crushing is far from perfect, resulting that the crushing product grain-size is larger, and SRK recommends the proposed processing plant to choose new crushing equipment with a large reduction ratio, high efficiency, and low consumption to reduce the grain size of ore that to be fed and to achieve more crushing and less grinding, to reduce the energy consumption of grinding and to improve economic efficiency.

The capacity of the existing TSF is close to the design of closure and SRK recommends that the construction progress of new TSF shall be accelerated as soon as possible.

The access and mine design are appropriate for the mine; also, the geotechnical structure and drainage are acceptable during the site visit. There are PFS level studies for each zone with detailed design of underground service.

- The areas visited were clean, reasonably well-ventilated and dry.
- There is minimal geological support underground, verifying that mining is progressing as per plan, and/ or one ore. There is no regular face sampling, hence unable to reconcile the MRE with the actual mining face grade, with ore mined/ moved grades, processed grades and gold produced.

- Reported that the mine does not have sufficient geologists. Reported limited budget for technical support services, and it appears that they generally have cheap limited skilled technical services support.
- On surface they utilise ore/ waste sorting based on size. Material is hoisted to surface and put through a large screen with small material assumed to be ore.
- Nobody could explain how dilution and ore lose are calculated for the mine planning. Suitable information is not collected.

17.2 Huatai Project

There are still production exploration programs ongoing for further Mineral Resources. SRK recommends that Huatai mining conduct a structured QA/QC process for these exploration work, including the level exploration tunnelling, in-fill drilling, sampling, sample preparation, analysis, internal and external checks, and insertion of control samples (i.e. blank, standard and duplicate samples). SRK recommends that Huatai mining retains coarse duplicates and pulp duplicate samples for future examination.

Traditional CIP technology is adopted for gold recovering. In SRK's opinion, it is reasonable and stable. The satisfactory technical indexes have been achieved, with no major defects.

At the time of SRK site visit, the processing plant was in a state of shutdown. Huatai Mining informed that the reason was that the ongoing technical innovation and the production capacity expansion were underway, not due to the aging of the equipment, and the other reason was that the carbon slurry adsorption was in electrolysis.

SRK has conducted Mineral Resource and Ore Reserve Estimates under the JORC Code. It is recommended to improve the quality of grade control model and incorporate it into resource/reserve model.

In general, mine of Huatai Project were operated at small scale capacity for a long time. The geotechnical and hydrogeological conditions are not complex to deal with. Therefore, the underground access method, stoping method, and related service systems & machinery are suitable for the mine operations.

In order to ensure normal mining production in the future, the existing operation system and the design needs further supplementation and improvement, which include mainly the following aspects:

- The reconciliation study is recommended in the future. The reconciliation study would help the operation to compare the estimates against production, then improve the estimation getting a higher-level confidence of resource estimates and improve mining operation outcomes.

17.3 Wulong Project

There are still production exploration programs ongoing for further Mineral Resources. SRK recommends that Wulong mining conduct a structured QA/QC process for these exploration work, including the level exploration tunnelling, in-fill drilling, sampling, sample preparation, analysis, internal and external checks, and insertion of control samples (i.e. blank, standard and duplicate

samples). SRK recommends that Wulong mining retains coarse duplicates and pulp duplicate samples for future examination.

SRK has conducted Mineral Resource and Ore Reserve Estimates under the JORC Code. It is recommended to improve the quality of grade control model and incorporate it into resource/reserve model.

Wulong Project has been operating for a long period of time, and there are operations of exploration still ongoing for further resource. There is no major issue for development and the mine design. During the site visit, SRK notes that the geotechnical structure and drainage are acceptable. Also, there are PFS level of studies for each zone with detailed design of underground service.

Recommendations

- No mining software derived plan.
- Planning 100ktpa, achieving 60ktpa from underground stopes, supplemented by underground and surface stockpiles, but no ore grade verification of stockpile material.
- There is minimal geological support underground, verifying that mining is progressing as per plan, and/ or one ore. There is no regular face sampling, hence unable to reconcile the MRE with the actual mining face grade, with ore mined/ moved grades, processed grades and gold produced.
- The actual dilution rate and recovery rate seems to be incompatible with the planned one as the mining grade is incredibly lower than the geological grade. It is recommended to conduct a reconciliation study for a better understanding of overbreak and improve future production.

17.4 Hanfeng Project

recommends Hanfeng Mining to upgrade Mineral Resource category as the currently measured and/ or indicated resource are not sufficient to meet a proposed mine life or capacity. It is proposed to carry out in-fill drilling exploration and/or underground exploration and studies of modifying factors along with life of mine plan, against the estimated Mineral Resources, for upper parts of Lishan and Dongfeng mines.

In order to ensure normal mining production in the future, the existing operation system and the design needs further supplementation and improvement, which include mainly the following aspects:

- Resources estimates update is recommended. The remained resource as stated in the Annually Resource/Reserve Report are 707kt including all category of Dongfeng Upper Zinc resources, however, the management states that remnant mining is ongoing as the resources are nearly depleted. The uncertain of Mineral Resources makes the LOM plan uncertain.
- The reconciliation study is recommended in future when Mineral Resource modelling is established. The reconciliation study would help the operation to compare the estimates against production, then improve the estimation getting a higher-level confidence of resource estimates.

17.5 Jintai Project

SRK has conducted Mineral Resource and Ore Reserve Estimates under the JORC Code. It is recommended to improve the quality of grade control model and incorporate it into resource/reserve model.

SRK considers the mining and stripping method adopted to be mature mining technology commonly used in open pit mining practices, and it is technically reasonable and feasible. The designed bench height and bench slope angle are considered reasonable, as well as the small-scale excavator is suitable for selective mining. However, the truck payload (7.8t) might not so popular as practice. Some larger truck (30t payload) is on site standing by, during site visit. The loading round would be increased then the haulage round would be reduced. But the excavator and truck matching each other would not be a material risk for operation, as the total volume of mining is small.

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Closure

This report, Competent Person's Report for the Spring Rain Gold and Lead-Zinc Projects in the People's Republic of China, was prepared by

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All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

Appendix A JORC Code Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	**Jilong and Huatai Projects** • Both projects use the same sampling techniques. • Samples were taken from drill cores by splitting along the core axis. The sample length ranges from 0.8m to 1.0m. The weight of samples was between 9.45 kilograms ("kg") and 12.38kg. • Samples were collected from tunnels using a channeling method. The sample channel was perpendicular or roughly perpendicular to the strike of mineralised body. The section of channel was 10cm × 5cm, and the sample length ranges from 0.1m to 1.2m. The distance between samples were 6m along drift, and 40 m along transverse drift. • Geological logging was completed, and the mineralised intervals were determined by experienced geologists. • All samples were submitted to commercial laboratories for assay. Industry standard practice has been applied on site to ensure sample presentively. The laboratories have applied appropriate QA/QC to sample preparation and appropriate calibration of QA/QC to analytical instruments. **Wulong Project** • The trench, tunnel and diamond drill core samples were collected. • For the Wulong Mine, the tunnel samples were taken by channeling method. The sample channel was perpendicular or roughly perpendicular to the strike of mineralised body. The section of channel was 10cm × 5cm, the length was generally 1.0m, and the maximum length was less than 1.5 m. The distance between samples were 6m along drift, and 40 m along transverse drift. • For the Ligunzi Gold Deposit, the trench samples were taken by channeling method. The section of channel was 10 cm × 3 cm, and the length was less than 1.5 m. The drill core samples were sampled by 1/2 split core method. The sample length was 1.0 m. The maximum length was 1.5 m, and the minimum length was 0.2 m. • For the Haojingou-Ligunzi Deposit, the trench samples were sampled using channeling method. The section of channel was 10 cm × 5 cm, and the length of 0.9m-1.0 m. The surface drilling core samples were sampled by 1/2 split core method. The sample length generally ranges from

Criteria	JORC Code explanation	Commentary
		0.2 m to 1.5 m. • The tunnel samples positions were determined by the geologists and were sampled by the other workers. • Geological logging was completed, and the mineralised intervals were determined by experienced geologists. • All samples were submitted to commercial laboratories for assay. Industry standard practice has been applied on site to ensure sample presentively. The laboratories have applied appropriate QA/QC to sample preparation and appropriate calibration of QA/QC to analytical instruments. **Jintai Project** • Diamond drill core samples were collected. • Drilling & sampling has been conducted by Kunming branch of Yunnan Geological Engineering Survey and Design Institute, Dali Hengchuang Foundation Engineering Co. LTD., the Shandong 6th Geology and Mineral Exploration Institute and Yunnan Southern Geological Exploration Engineering Corporation. • Most of the trenches were not included in the Mineral Resource estimate, just for the purpose of gold domain exploration. • Geological logging was completed, and the mineralised intervals were determined by experienced geologists. • All samples were submitted to commercial laboratories for assay. Industry standard practice has been applied on site to ensure sample presentively. The laboratories have applied appropriate QA/QC to sample preparation and appropriate calibration of QA/QC to analytical instruments. **Hanfeng Project** • Diamond drill core samples and underground tunnel samples were collected. • Drilling & sampling of the deep areas for both Lishan and Dongfeng Mines has been conducted by Team 603 of Jilin Province Non-ferrous Geological Exploration Bureau. • Most of the drilling and tunnel samples were included in the Mineral Resource estimate of the deep area. • Geological logging was completed, and the mineralised intervals were determined by experienced geologists. • All samples were submitted to commercial laboratories for assay. Industry standard practice has been applied on site to ensure sample presentively. The laboratories have applied appropriate QA/QC to sample preparation and appropriate calibration of

Criteria	JORC Code explanation	Commentary
		QA/QC to analytical instruments.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	**Jilong Project** • All drill holes were conducted by XY-4 drill rigs, with a starting diameter of 110mm. After passing through the Quaternary loose sedimentary layers, the diameter of the drill bit was changed to 75 mm until termination of the hole. • The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m deep after commencement. • For the Zhuanshanzi 1#2#3#&depth Block, the down-hole survey was conducted with YT-1 little caliber compass clinometer. • For the Zhuanshanzi 4#5#6#7# Block, the down-hole survey was conducted with BZM-R-B little caliber compass clinometer. **Huatai Project** • The surface drill holes were conducted by XY-4 drill rigs, with a starting diameter of 110 mm. After passing through the Quaternary loose sedimentary layers, the diameter of the drill bit was changed to 75 mm. • The underground holes were conducted by modified XY-2 and XY-4 drill rigs, with a starting diameter of 75 mm until termination. • The collars of the holes were properly surveyed, and down-hole surveying was undertaken at 50m intervals starting at 25m after commencement. • For the Honghuagou #1 Mining Zone, the down-hole survey was conducted with KXP-2 little caliber compass clinometer. • For the Honghuagou #86 Vein, Pengjiagou Deposit and Lianhuashan #26 Vein, the down-hole survey was conducted with CX-6B little caliber compass clinometer. • For the Lianhuashan #5 Mining Zone and #3&7 Vein, the down-hole survey was conducted with S42 little calibre compass clinometer. **Wulong Project** • For the Wulong Mine, tunnels were excavated by Wulong Mining. The profile of the tunnel was 1.8-2.0 m × 2.0-2.2 m, and the slope was 0.3%-0.7%. • For the Ligunzi Deposit, the bottom width of trenches is 0.6-0.8 m, the top width varied depending on the looseness of the soil, and the depth of the trenches is at least 0.3 m of the bedrock excavated. • In 2010, two holes were drilled by the diamond wire line core drilling technique with the XY-4 drilling rig. The diameter is

Criteria	JORC Code explanation	Commentary
		75 mm. Drill holes survey were done with the XJL compass clinometer. The depth was verified. • The cross -section size of drift was 1.8-2.2 m × 2.0-2.3 m, and the slope was 0.3%-0.7%. • For Haojingou-Ligunzi Deposit, the width of trenches was 1-1.2 m on the top and 0.6-08 m at the bottom. The depth was 0-3 m and at least 0.3 m of the bedrock should be excavated. • A total of 73 surface boreholes were drilled during the detailed exploration period in the exploration license area. The types of drilling rigs were XY-4, XY-44 and XY-B6. The hole's diameter is 75 mm, and the core diameter is 53 mm. A total of 14 underground boreholes were drilled with a hole diameter of 47 mm and the core diameter of 35 mm. • The borehole depth was verified at the interval of 50 m and after the borehole was finished. • The profile of the tunnels along drift was 2.2 m × 2.5 m, and the slope was less than 0.5%. The profile of the raises was 2.0 m × 1.0-1.3 m, and the slope was 50°-60°. **Jintai Project** • The borehole's diameter is greater than 75 mm, and the core diameter is 55 mm. The cores were cleaned, labelled, and placed regularly. The recovery rates for the whole cores varied from 82% to 100% and for the mineralised cores varied from 81% to 99%. • The bottom width of trenches is 0.6m-1.0 m and the top width varied from 2.2 m to 2.5 m. At least 0.3 m of bedrock should be excavated. All the trenches were named regularly. **Hanfeng Project** • Lishan Mine: The section size of the channel sample was 10cm × 3cm, and the sample length is generally 1.0m ~ 1.5m. The sample weight was generally 9.5kg ~ 10.5kg. The relative error between the actual weight and the theoretical weight of the sample is 0.04% ~ 9.76%. A total of 789 samples were collected. The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of mineralized body and mineralization. The core was split along the core axis into two halves by the YPK-1 type core splitter. The half was retained as the core, and the other half was bagged and weighed before being sent to the laboratory for analysis. The

Criteria	JORC Code explanation	Commentary
		sample length generally ranged from 1.00m to 1.50m, with a few samples ranging from 0.30m to 0.80m and the longest being 1.90m. • Dongfeng Mine: The section size of the channel sample was 10cm × 3cm, and the sample length is generally 1.0m ~ 1.5m. The sample weight was generally 7.5kg ~ 8.5kg. The relative error between the actual weight and the theoretical weight of the sample is 0.00% ~ 4.80%. A total of 702 samples were collected. The drilling samples were sampled by ½ split core method. The sample length was determined by core recovery, thickness of mineralized body and mineralization. The core was split along the core axis into two halves by the YPK-1 type core splitter. One half was retained as the core, and the other half was bagged and weighed before being sent to the laboratory for analysis. The sample length generally ranged from 1.00m to 1.50m, with a few samples ranging from 0.30m to 0.80m and the longest being 2.00 m.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	**Jilong Project:** • For the Zhuanshanzi 1#2#3#&depth Block, the recovery rates for the whole cores varied from 86% to 100%, for the Zhuanshanzi 4#5#6#7# Block, the recovery rates for the whole cores varied from 92% to 100%. • There is no known relationship between sample recovery and grade. **Huatai project**: • For the Honghuagou #1 Mining Zone, the recovery rates for the whole cores varied from 99.28% to 100%, and the core recovery rates of #86 Vein varied from 75% to 100%, the core recoveries of Pengjiagou deposit varied from 93% to 100%, and the core recoveries of Lianhuashan #5 Mining Zone were 100%, the core recoveries of #26 Vein and #3&7 Vein varied from 94% to 100%. • There is no known relationship between sample recovery and grade. **Wulong Project** • Lost core during the drilling is recorded during geological logging. • The drilling program utilised drilling techniques to ensure minimal loss of any size fraction. • There is no known relationship between sample recovery and grade.

Criteria	JORC Code explanation	Commentary
		Jintai Project • Lost core during the drilling is recorded during geological logging. • The drilling program utilised drilling techniques to ensure minimal loss of any size fraction. • There is no known relationship between sample recovery and grade. **Hanfeng Project** • Lost core during the drilling is recorded during geological logging. • The drilling program utilised drilling techniques to ensure minimal loss of any size fraction. • There is no known relationship between sample recovery and grade. • The average recovery rate was 99% for both Lishan and Dongfeng Mines
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	**Jilong project**: • A total of 5,989.9 m tunnels along drift have been geologically, hydro-geologically and geotechnically logged at the Zhuanshanzi 1#2#3#&depth Block. **Huatai project**: • A total of 17,143.24 m tunnels along drift have been geologically, hydro-geologically and geotechnically logged at the Honghuagou #1 Mining Zone, and a total of 9,381.5m tunnels along drift have been geologically, hydro-geologically and geotechnically logged at the Lianhuashan #5 Mining Zone. **Wulong Project:** • Most Samples are geologically logged at 1.0 m. • All trenches, tunnels, and retrieved drillcores have been logged by geologists for recovery, lithology, alteration, texture, mineralogy and mineralisation. • Lost core is recorded during geological logging **Jintai Project:** • Most Samples are geologically logged at 1.0 m. • All trenches and retrieved cores have been logged by geologists for recovery, lithology, alteration, texture, mineralogy and mineralisation. • Lost core is recorded during geological logging **Wulong Project:** • The drilling core sample length generally

Criteria	JORC Code explanation	Commentary
		ranged from 0.5m to 1.5m. All samples were logged by geologists for recovery, lithology, alteration, texture, mineralogy and mineralisation. **Hanfeng Project:** • Lishan Mine The drilling core sample length generally ranged from 1.0m to 1.5m, with a few samples ranging from 0.30m to 0.80m and the longest being 1.90m. All samples were logged by geologists for recovery, lithology, alteration, texture, mineralogy and mineralisation. Lost core is recorded during geological logging. • Dongfeng Mine The core drilling sample length generally ranged from 1.0m to 1.5m, with a few samples ranging from 0.30m to 0.80m and the longest being 2.00m. All samples were logged by geologists for recovery, lithology, alteration, texture, mineralogy and mineralisation. Lost core is recorded during geological logging.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	**Jilong and Huatai Projects** • both projects use the same sub-sampling techniques and preparation procedures. • the drilling samples were sampled by ½ split core method. • the sample preparation was based on the Chechott formula: $Q=Kd^2$, K=0.8. The core sample preparation was conducted in the following procedures: • the original samples were crushed passing a mesh of 30 screen; • the sub-sample with 700g was collected from a riffle splitter; and • the sub-sample was pulverized passing a mesh of 200 screen; and about 200g of pulp sample was bagged and labelled for analysis. The rest was stored as a pulp reject. **Wulong Project** • the drilling samples were sampled by ½ split core method. • the sample preparation was based on the Chechott formula: $Q=Kd^2$, K=0.8. The core sample preparation was conducted in the following procedures: • the original samples were firstly coarse crushed by the jaw crusher and were crushed to 10mm; • the samples were then medium crushed to 0.25mm (60 mesh) by rod mill; • the sub-sample with 350-450g was collected as duplicate from a riffle; and • the sub-sample with 150-500g was collected from a rifle and was then

Criteria	JORC Code explanation	Commentary
		pulverized passing a mesh of 200 screen; and then was bagged and labelled for analysis. **Hanfeng Project** • the drilling samples were sampled by ½ split core method by the YPK-1 type core splitter. • The core sample weight was between 0.63kg and 4.4kg, and the tunnel sample weight was between 7.5kg and 10.5kg. • the sample preparation included coarse crushing (jaw crusher), medium crushing (disc mill) and fine crushing (disc mill). Each stage was divided into crushing, screening, mixing and shrinkage. **Jintai Project** • The drilling samples were sampled by ½ split core method. The sample length varies from 0.5 m to 1.5 m. • The sample preparation included coarse crushing, medium crushing and fine crushing. Each stage was divided into crushing, screening, mixing and shrinkage. • From 2020 to 2021, The total loss rate was less than 5%. The K value was set to 0.5 in the formulation $Q = Kd^2$ and the sample was crushed to 0.074 mm (200 mesh). • From 2020 to 2022, The samples were firstly coarse crushed by the jaw crusher and were crushed to 4 mm. Then the samples were medium crushed by the disc mill and were crushed to 1 mm. After that, there were the mixing and splitting procedures. The K value was set to 0.8 in the formulation $Q = Kd^2$ and the sample was crushed to 0.074 mm (200 mesh). • Both internal and external lab check samples were according to the Specification of Testing Quality Management for Geological Laboratories.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision*	**Jilong** Project • Verifications by Jilong Mining: A total of 853 internal check samples have been adopted before 2018 production report, the qualification rate is 98.48%; and 447 samples have been adopted for external check, the qualification rate is 98.66%. During the 2018 production exploration report, a total of 297 samples were selected as internal duplicates, the qualification rate is 98.32%; a total of 149 samples were selected for external check, the qualification rate is 97.32%. • Verifications by SRK: A total of 154 samples were selected and sent to SGS Laboratory located in Tianjin, China for verification assay. A large bias was

Criteria	JORC Code explanation	Commentary
	have been established.	observed between the original assay and check results, SRK advised to send the samples to Intertek laboratory for re-analysis. The returned results show that a general trend can be observed although larger bias is found in the higher-grade samples, which may be led by the nugget effect of visible gold. **Huatai Project** • Verifications by Huatai Mining: A total of 51 samples internal duplicates during the 2013 Pengjiagou detailed exploration have been applied, the internal check qualification rate was 96.58%; 30 samples have been selected for external check, the external check qualification rate was 95.26% • Verifications by SRK: A total of 50 samples were selected from the Honghuagou Mine and sent to SGS Laboratory located in Tianjin, China for verification assay. A large bias was observed between the original assay and check results, SRK advised to send the samples Intertek laboratory for re-analysis. The returned results show that a general trend can be observed although larger bias is found in the higher-grade samples, which may be led by the nugget effect of visible gold. For A total of 55 samples from the Lianhuashan Mine were selected and sent them to SGS for re-analysis. A large bias was observed between the original assay and check results. About 60% results for Au are within ±20%. About 40% results are out of ±20%, which may be caused by the nugget effect. **Wulong Project** • Verifications by Wulong Mining: a total of 164 samples were taken during 2016 resource verification report, for internal verification, with a qualification rate of 97.56% and 72 samples for external verification, with a qualification rate of 94.17%. During the 2017 annual report, 30 internal verification samples were taken, with a qualification rate of 96.67%. In 2018, 35 internal verification samples were taken, with a qualification rate of 100% for internal verification and 30 external verification samples, with a qualification rate of 100% for external verification. During the 2019 resource verification report, 41 internal verification samples were taken, with a 100% qualification rate and 30 external verification samples, with a 100% qualification rate for external inspection. • Verifications by SRK: For Haojingou-

Criteria	JORC Code explanation	Commentary
		Ligunzi deposit, a total of 36 have been taken. A small bias was observed between the original assay and check results. About 88.9% results for Au are within ±20%. About 11.1% of the results are out of ±20%, which may be caused by the nugget effect. For the Wulong mine, a total of 129 samples (about 3% of total above 1g/t Au) have been taken, most of the returned analysis results are within ±20%, which are acceptable. **Jintai Project** • Verifications by Jintai Mining: From 2007 to 2010, a total of 30 samples were taken for internal lab check with a proportion of 1.99%. 30 samples were taken for external lab check with a proportion of 1.99%. The qualification rate was 70% for internal check and 56.67% for external check. From 2020 to 2021, a total of 50 samples were taken for internal lab check with a proportion of 8.91%. 31 samples were taken for external lab check with a proportion of 5.51%. The qualification rate was 70% for internal check and 100% for external check. From 2012 to 2022, a total of 819 samples were taken for internal lab check with a proportion of 8.51%. 350 samples were taken for external lab check with a proportion of 3.63%. The qualification rate was 68.62% for internal check and 89.71% for external check. • Verifications by SRK: A total of 77 samples (4.25% of total above 0.3 g/t Au samples) have been sent to SGS Mineral Laboratory located in Tianjin, China. The scatter diagrams show that about 52% results for Au are within ±20%. About 48% results are out of ±20%, which may be caused by the nugget effect. **Hanfeng:** • Verifications by Hanfeng Mining: Internal and external check samples' results were provided; however, the original samples were not provided. 1,208 samples were taken for internal analysis with a qualification rate of 96% for internal analysis; 710 samples were taken for external analysis with a qualification rate of 97% for external analysis. 80 samples were taken for internal analysis with a 95% pass rate for internal analysis, and 40 samples were taken for external analysis with a 100% pass rate for external analysis. 80 samples were taken for internal analysis with a pass rate of 99% for internal analysis, 40 samples were taken for external analysis with a pass rate of 100% for external analysis.

Criteria	JORC Code explanation	Commentary
		• Verifications by SRK: For the Lishan Project, a total of 152 samples have been taken (about 3% of total above 0.5% Zn), with most of the returned analysis results for Cu and Zn are within ±20%, the Pb have returned poorer performance, however, most of which are in the very low grade, thus the results are considered acceptable. For the Dongfeng project, a total of 189 samples have been taken, with all of the returned analysis results for Mo are within ±20%, which are acceptable.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• All geological logging and sampling information were completed on paper logs before being transferred to Excel spreadsheets. All logging and sampling data were routinely checked by Mining's technical management team and provided to the Mining for storage. Soft copies of all information were finally provided.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	**Jilong and Huatai Projects** • The coordinate system of Jilong mine is CGCS 2000 and Zone GK N40. The drillhole collars and topography (1:2000) were surveyed by RTK. **Wulong Project** • The coordinate system for both Wulong mine and Ligunzi deposit is Beijing 54, while the Xi'an 80 is used for the Haojingou-Ligunzi deposit. • The topographic map survey utilizes a scale of 1:2000. **Jintai Project** • All the drill hole collars were surveyed under CGCS2000. • The topographic map survey utilizes a scale of 1:2000. **Hanfeng Project** • The coordinate system is CGCS2000. • The topographic map survey utilizes a scale of 1:2000.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	**Jilong Project** • Data space is 40m × 6m(strike), • Data space is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • For the 1# 2#3#&depth Block, a 0.4 m interval composite length was selected for compositing. For the #4 #5 #6 #7 Block,

Criteria	JORC Code explanation	Commentary
		the composite length is 1m. **Huatai Project** • Huatai Project: Data space is 40m × 20m(strike), • Data space is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • For #1 Mining Zone, a 0.8 m interval composite length was selected for compositing. For #86 Vein, #26 Vein, #3&#7 Vein, #5 Mining Zone, and Pengjiagou mine, the composite length is 0.5m. **Wulong Project** • For Wulong Mine, the level interval is 40 m approximately. The spacing between the channels of tunnel samples is 6 m. • For Ligunzi Deposit, the level interval is 40 m approximately. The spacing between the channels of tunnel samples is 4 m. The trench spacing is 100 m to 200 m approximately. • For Haojingou-Ligunzi Deposit, the drill spacing is 80 m to 80 m approximately. • Data spacing & distribution is considered acceptable for establishing geological continuity & grade variability appropriate for classifying a Mineral Resource. **Jintai Project** • The drill spacing is 80 m to 80 m approximately. • Data spacing & distribution is considered acceptable for establishing geological continuity & grade variability appropriate for classifying a Mineral Resource. **Hanfeng Project** • Lishan Mine：fan drill rig was applied for the mineralized veins exploration, the main drillhole density is 40 m to 160 m approximately, the height between the drifts is about 40m-80m. • Lishan Mine：fan drill rig was applied for the mineralized veins exploration, the main drillhole density is 50 m to 200 m approximately, the drift space is about 40m-100m.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key*	**Jilong and Huatai Projects** • No material biased sampling result was recognized. • Not applicable to this project. **Wulong Project**

Criteria	JORC Code explanation	Commentary
	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• No drilling orientation & sampling bias has been recognized at this time. **Jintai Project** • No drilling orientation & sampling bias has been recognized at this time. **Hanfeng Projecy** • No drilling orientation & sampling bias has been recognized at this time.
Sample security	• *The measures taken to ensure sample security.*	**Jilong and Huatai Projects** • Some core samples are exposed to the outdoors, which is an issue that needs to be addressed. **Wulong Project** • Samples were stored in a secured location. Internally, the commercial laboratories operate an audit trail tracking the samples at all times whilst in their custody. **Jintai Project** • Samples were stored in a secured location. Internally, the commercial laboratories operate an audit trail tracking the samples at all times whilst in their custody. **Hanfeng Project** • Samples were stored in a secured location. Internally, the commercial laboratories operate an audit trail tracking the samples at all times whilst in their custody.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	**Jilong and Huatai Projects** • A review of the sampling techniques and data was carried out by SRK as part of the Resource estimate and the database is considered to be sufficient quality to carry out Resource estimation. **Wulong Project** • SRK visited the drill core store, sample preparation lab and carried inspection of drillhole sealing mark. Internal reviews are completed on sampling techniques & data. **Jintai Project** • SRK visited the drill core store, sample preparation lab and carried inspection of drillhole sealing mark. Internal reviews are completed on sampling techniques & data. **Hanfeng Project** • SRK visited the drill core store. Internal reviews are completed on sampling techniques & data.

Section 2 Reporting of Exploration Results

(*Criteria listed in the preceding section also apply to this section.)*

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	**Jilong Project** • Two mining licenses are currently held by Jilong Mining. One mining licence covering 6.24km^2, valid till 29 Sep. 2026, the other one covering 9.134km^2, valid till 27 Mar. 2032. No proximate Classified Forests and historical sites were reported. **Huatai Project** • Six mining licenses are currently held by Huatai Mining. #26 Vein covering 0.3199km^2, valid till 17 Nov. 2024. #3&#7 Vein covering 1.016km^2, valid till 5 Sep. 2025. #5 Mining Zone covering 0.8138km^2, valid till 14 Sep. 2024. #86 Vein covering 1.8332km^2, valid till 17 Nov. 2025. #1 Mining Zone covering 2.7978km^2, valid till 5 Jun. 2024. Pengjiagou Mine covering 3.7362km^2, valid till 17 Nov. 2025. No proximate Classified Forests and historical sites were reported. • Regarding any impediments, it is unknown to SRK at this moment. **Wulong Project** • The deposits are located within Mining Leases No. C2100002011084140116558 and Exploration Tenement T21000020080440100063 47 and T211200804020005662. • SRK have not independently verified the standing of the tenements. **Jintai Project** • The deposits are located within Mining Leases NO C5300002012054110124688 and Exploration Tenement T530000200903401002 6977. • SRK have not independently verified the standing of the tenements. **Hanfeng Project** • Lishan Mining Area in Tianbaoshan Lead-Zinc Mine, its Mining License No. C2224002021083210152512 • Dongfeng Mining Area in Tianbaoshan Lead-Zinc Mine, its Mining License No. C2200002010123120093830
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	**Jilong Project** • For the Zhuanshanzi 1#2#3#&depth Block,81 diamond boreholes were carried out, and 6240 Tunnels were conducted. • For the Zhuanshanzi 4#5#6#7# Blocks, 64

Criteria	JORC Code explanation	Commentary
		diamond boreholes were carried out, 12 Tunnels were conducted, and 55 Trenchs were conducted. **Huatai Project** • For the Honghuagou deposit, 96 diamond boreholes were carried out, and 764 Tunnels were conducted. • For the Pengjiagou deposit, 44 diamond boreholes were carried out, and 112 Tunnels were conducted. • For the Lianhuashan deposit, 96 diamond boreholes were carried out, and 1,153 Tunnels were conducted. **Wulong Project:** See Section 5.3. **Jintai Project:** See Section 5.5. **Hanfeng Project:** See Section 5.4.
Geology	• *Deposit type, geological setting and style of mineralisation.*	**Jilong and Huatai Projects:** • The genetic type is medium-low temperature hydrothermal gold deposit. The gold-bearing quartz veins filled mainly along suitable faults and/or fractures. **Wulong Project:** • The Wulong Gold Mine is a large quartz vein type gold mine, the mineralized body is controlled by two groups of fault structures, the north-west trending faults, and the north-east trending faults. The wall rocks are mixed granite, mixed granite gneiss, fine-grained diorite, and granite porphyry et al. The ore type is mainly quartz vein type, and the industrial type of the deposit is gold-bearing quartz single vein type. **Jintai Project:** • The metallogenic mechanism of the deposits was that gold was activated and dissolved under the action of high temperature and high pressure by the underground hot brine and entered underground hot water in the form of complex ions to form gold-bearing hydrothermal liquid. The hydrothermal liquid rose along the structure and fracture in the thermal cycle. Near the surface, due to the decrease of temperature and pressure, a large amount of silicon in the hydrothermal liquid (hot spring) precipitated, with a small amount of gold. Due to the large amount of silicon precipitation, the channel was gradually blocked, and the temperature and pressure of the hydrothermal liquid increased. The rapid decrease of temperature and pressure led to the rapid decrease of gold solubility in hot water, with a large amount of gold precipitation near the surface at a certain depth. This process was repeated many

Criteria	JORC Code explanation	Commentary
		times, and gold domains were eventually formed and further enriched in the weathering process. **Hanfeng Project:** • Lishan Pb-Zn Deposit (Below the -92m asl) is a zinc polymetallic deposit dominated by zinc ore, with some copper and lead. The mineralised bodies are lenticular and lentil shaped. There are 128 zinc-lead-copper mineralized bodies were defined. • Dongfeng Mo Deposit (above 250m asl) mainly occurs in the porphyritic monzogranite, contact zone of granodiorite and volcanic rock and schistosity zone of quartz diorite porphyry, which are mostly composed of quartz veins and altered breccia. • According to the geological characteristics of the deposit, including the wall rock alteration, ore texture and structure, the Lishan deposit belongs to post-magmatic metasothermal filling metasomatic polymetallic deposit. The Dongfeng deposit belongs to the skarn-type polymetallic deposit.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	**Jilong Project** • For the Zhuanshanzi 1#2#3#&depth Block, it is informed by data from 81 drillholes, for a combined length of 19,078.32m, and 6,240 tunnels, for a combined length of 5,989.89 m, with a total of 14,930 assay samples. • For the Zhuanshanzi 4#5#6#7# Block, it is informed by data from 64 drillholes, for a combined length of 10,810.47m, with a total of 339 assay samples, 55 trenches, for a combined length of 90.69 m, with a total of 106 assay samples, and 12 tunnel, for a combined length of 45.94 m, with a total of 87 assay samples. **Huatai Project** • A total of 236 drillholes, for a combined length of 57,043.07m, and 2,029 tunnels, for a combined length of 4,474.51 m, with a total of 6,973 assay samples. • All information of drillholes carried out so far in Jilong and Huatai project area are collected, including collar, elevation, depth, survey etc. and details see database along with this report. **Wulong Project** • SRK's estimation of the Mineral Resources documented in this report is informed by data from 139 drillholes, for a combined length of 38,160 m, and 5,601 tunnels, for a combined length of 9,542 m, and 282 trenches, for a combined length of 171 m, with a total of 17,389 assay samples. The boundary of the estimation is the Wulong mining licence,

Criteria	JORC Code explanation	Commentary
		Ligunzi and Haojingou-Ligunzi exploration permits. **Jintai Project** • Database used for Mineral Resource estimate contains 208 holes / 14720.68 m. **Hanfeng Project** • As of March,2024. There were 194 drillholes（46,351.96 m) and 102 tunnel samples (477.3m) in the resource database for Lishan Mine and 252 drillholes（88,402 m) and 63 tunnel samples (431m) in the database for Dongfeng Mine.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	**Jilong Project** • Exploration data is reported as the average sample grade over the mineralised intersection. The mineralised domain is defined at cut-off grade of 1.5g/t Au. • Jilong project: For the Zhuanshanzi 1#2#3#&depth Block, Capping grade is 52g/t. For the Zhuanshanzi 4#5#6#7# Block, no capping was applied. • Not applicable to this project **Huatai Project** • Exploration data is reported as the average sample grade over the mineralised intersection. The mineralised domain is defined at cut-off grade of 1.5 g/t Au. • Huatai project: Capping grade had been applied in six mineralised zones, and details see evaluation of outliers along with this report. • Not applicable to this project **Wulong Project** • The main ore body outlier value samples have been capped. • For Wulong deposit and Haojingou-Ligunzi deposit, all raw samples were composited to 1 m downhole lengths, with a minimum of 0.75 m for each composite sample. • For Ligunzi deposit, all raw samples were composited to 2 m downhole lengths, with a minimum of 1.5 m for each composite sample. • No metal equivalents are reported. **Jintai Project** • The main ore body outlier value samples have been capped. • All raw samples were composited to 1 m downhole lengths, with a minimum of 0.75 m for each composite sample. • No metal equivalents are reported. **Hanfeng Project** • Assay capping for Pb, Zn and Cu was applied

Criteria	JORC Code explanation	Commentary
		for the mineralized domains of Lishan Mine and Assay capping for Mo for Dongfeng Mine. • A composite length of 1 m was chosen for both Lishan and Dongfeng Mine as it does not distort the grade distribution for the mine when compared to the length-weighted raw grade statistics. • No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	**Jilong and Huatai Projects** • True width was calculated and as such only downhole lengths were reported. • Most tunnels are perpendicular to the gold mineralized body. • Not applicable. **Wulong and Jintai Projects** • SRK was provided with section maps of all mineralized domains. SRK has constructed the solid models according to the maps provided by the client and they are acceptable for the estimation. **Hanfeng Project** • SRK was provided with section and plan maps of all mineralized domains. SRK generated the solid model for each veins according to the drillholes and tunnelling data.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	**Jilong:** Shown in the: Mineral Resource Estimation section of this Report. **Huatai:** Shown in the: Mineral Resource Estimation section of this Report. **Wulong:** Please refer to the report. **Jintai:** Please refer to the report. **Hanfeng:** Please refer to the report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	**Jilong and Huatai:** Reporting was fully representative of the data provided at this stage. **Wulong and Jintai:** No other exploration results for the project. **Hanfeng:** No other exploration results for the project.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating*	**Jilong, Huatai, Wulong, Jintai, Hanfeng Projects** SRK is not aware of any other material or substantive exploration data that has not been reported.

Criteria	JORC Code explanation	Commentary
	substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	**Jilong and Huatai Projects** • Having a structured QA/QC process is necessary for the company's future exploration work, including controlling the insertion of samples (i.e. blank, standard and duplicate samples). • For the Jilong and Huatai project, safe retention of coarse waste and powder samples is necessary. **Wulong Project** • SRK suggests that further detailed infill drilling exploration, rock mechanical, hydrogeological studies, seismic surveys, metallurgical testing, and other exploration activities should be conducted in the future. **Jintai Project** • SRK suggests that further detailed infill drilling exploration, rock mechanical, hydrogeological studies, seismic surveys, metallurgical testing, and other exploration activities should be conducted in the future. **Hanfeng Project** • SRK recommends carrying out in-fill drilling exploration and/or underground exploration for resource category upgrade to meet life of mine plan for lower parts of Lishan and Dongfeng mines.

Section 3 Estimation and Reporting of Mineral Resources

(*Criteria listed in section 1, and where relevant in section 2, also apply to this section.)*

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	**Jilong and Huatai Projects** • The data provided by the Company in access format was imported into Surpac (Ver2020.1) and validated. • Data validation steps included: Validation through constraints set in the database, e.g., overlapping/missing intervals, intervals exceeding maximum depth, valid geology codes, missing assays; Validation through 3D visualization to check for any obvious collar, down-hole survey, or assay import errors. **Wulong Project** • The original data have been compiled into an exploration report adhering to Chinese standards, featuring the relevant plan and profile maps and tables. SRK has finished organizing, validating, and establishing the database. • The data validation process involves: Setting restrictions in the database to ensure validation, such as checking for duplicate/exact sampling intervals, ensuring sampling intervals do not exceed the maximum hole depth, validating geological codes, and addressing missing assays. Inspecting for errors in the import of Collar, Survey, and Assay data through a 3D view. **Jintai Project** • The original data have been compiled into an exploration report adhering to Chinese standards, featuring the relevant plan and profile maps and tables. SRK has finished organizing, validating, and establishing the database. • The data validation process involves: Setting restrictions in the database to ensure validation, such as checking for duplicate/exact sampling intervals, ensuring sampling intervals do not exceed the maximum hole depth, validating geological codes, and addressing missing assays. Inspecting for errors in the import of Collar, Survey, and Assay data through a 3D view. **Hanfeng Project** • The original data have been compiled into an exploration report adhering to Chinese standards, and profile maps and tables. SRK has sorted out, validate and complied the database. • The data validation process involves: Setting restrictions in the database to ensure validation, such as checking for duplicate/exact sampling intervals, ensuring

Criteria	JORC Code explanation	Commentary
		sampling intervals do not exceed the maximum hole depth, validating geological codes, and addressing missing assays. Inspecting for errors in the import of Collar, Survey, and Assay data through a 3D view.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	**Jilong Project:** The site visit was conducted by SRK team during 23-25 December 2022 and 14 to 15 May 2024. **Huatai Project:** The site visit was conducted by SRK team during 23-25 December 2022 and 14 to 15 May 2024. **Wulong Project:** The site visit was conducted during 22-23 December 2022 and 16 to 17 May 2024. **Jintai Project:** The site visit was conducted during 7-9 March 2023 and 21-23 May 2024. **Hanfeng Project:** SRK conducted a site inspection to the Jilin Hanfeng on 9-10 January 2023 and 17-18 May 2024.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	**Jilong Project** • The geological interpretation is specifically based on lithology, and Au grade. • Mineralization domains were based on geological interpretation & mineralised trends. 44 Solid models were created at the Zhuanshanzi 1#2#3#&depth Block and 4 Solid models were created at the Zhuanshanzi 4#5#6#7# Block by sectional interpretation of the drilling dataset. Domain boundaries were modelled to a 1g/t Au. Domain boundaries were treated as hard boundaries. • Geological domains were based on rock types. **Huatai Project:** • The geological interpretation is specifically based on lithology, and Au grade. • Mineralization domains were based on geological interpretation & mineralised trends. A total of 16 mineralized domains were constructed in Honghuagou mine, a total of 6 mineralized domains were constructed in Pengjiagou deposit, and a total of 12 mineralized domains were constructed in Lianhuashan deposit. Domain boundaries were modelled to a 1g/t Au. Domain boundaries were treated as hard boundaries. • Geological domains were based on rock types. **Wulong Project:**

Criteria	JORC Code explanation	Commentary
		• Geological interpretation is based on information such as collar, survey, lithology, and assay data. It is also supported by surface geological mapping and trenching. • The mineralized domains were interpreted by the samples collected based on a cut-off grade of 1.0 g/t Au. • The data used for resource estimation is derived from reliable exploration reports and laboratory analysis. • A total of 33 mineralized domains were constructed in Wulong mine, a total of 6 mineralized domains were constructed in Ligunzi deposit, and a total of 17 mineralized domains were constructed in Haojingou-Ligunzi deposit. **Jintai Project:** • Geological interpretation is based on information such as collar, survey, lithology, and assay data. It is also supported by surface geological mapping and trenching. • The mineralized domains were interpreted by the samples collected based on a cut-off grade of 0.3 g/t Au. • The data used for resource estimation is derived from reliable exploration reports and laboratory analysis. • Nine mineralized domains have been identified in the model and are denoted as v1, v2, v4, v5, v6, v7, v8, v9, and v10. • The drill spacing between 80-160 meters apart, with the majority measuring 80 by 80 meters. **Hanfeng Project:** • Geological interpretation is based on information such as collar, survey, lithology, assay data and geological mapping and reports. • The Lishan lead-zinc mineralization (below-92m asl) consists of 128 veins. The vein domains were modelled using a broad 0.5% Zn cutoff, and a total of 178 molybdenum orebodies of varying sizes of Dongfeng Mine have been modelled using a cutoff of 0.03% Mo in leapfrog by the vein tool. • The data used for resource estimation is derived from reliable exploration reports and laboratory analysis.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	**Jilong and Huatai Projects:** It is detailed in the Report. **Wulong and Jingtai Projects:** Extrapolation was limited to approximately half of the level interval and the drill spacing. Internal interpolation was normally 80 m, with a maximum of 160 m. **Hanfeng Project:** detailed in the Report.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	**Jilong Project:** • The estimation method for Au was Inverse Distance Weighting Square (IDW) by using Surpac software. • For the Zhuanshanzi 1#2#3#&depth Block, the bock size was set to be 4 m (X) × 4 m (Y) × 4 m (Z). The sub-block size was set to be 1 m (X) × 1 m (Y) × 1 m (Z); for the Zhuanshanzi 4#5#6#7# Block, the bock size was set to be 4 m (X) × 4 m (Y) × 4 m (Z). The sub-block size was set to be 0.5 m (X) × 0.5 m (Y) × 0.5 m (Z). • The interpolation was conducted three times, see report for search parameters. • SRK conducted outlier handling for Au. • Model validation was performed using Swath plot comparison. **Huatai Project:** • The estimation method for Au was Inverse Distance Weighting Square (IDW) by using Surpac software. • For #1 Mining Zone of Honghuagou, a block size of 4 m (X) × 4 m (Y) × 4 m (Z) was used. For #86 Vein of Honghuagou mine, #26 Vein #3&#7 Vein and #5 Mining zone of Lianhuashan mine, and Pengjiagou mine, a block size of 2 m (X) × 2 m (Y) × 2 m (Z) was used. And the sub-size of all zones was set to be 1 m (X) × 1 m (Y) × 1 m (Z). • The interpolation was conducted three times, see report for search parameters. • SRK conducted outlier handling for Au. • Model validation was performed using Swath plot comparison. **Wulong Project:** • A block size of 4 m easting by 4 m northing by 4 m elevation was used. The block model used the same coordinate system as that was used in data collection. • The Inverse Distance Weighting Square (IDW2) method was used for grade estimation via Surpac in the block model. • Conduct three sets of search interpolations, employing a minimum of 1 and a maximum of 25 composite samples per block for grade interpolation, with the search radius progressively increasing from 40m or 45m to 180m or 200m. • SRK performed a thorough validation of the interpolation model results, which included visual examination and "Swath Plots" analysis

Criteria	JORC Code explanation	Commentary
		Jintai Project: • A block size of 10 m easting by 10 m northing by 5 m elevation was used. The block model used the same coordinate system as that was used in data collection. • The Inverse Distance Weighting Square (IDW2) method was used for grade estimation via Surpac in the block model. • Conduct three sets of search interpolations, employing a minimum of one and a maximum of 25 composite samples per block for grade interpolation, with the search radius progressively increasing from 40m or 80m to 160m. • SRK performed a thorough validation of the interpolation model results, which included visual examination and "Swath Plots" analysis. **Hanfeng Project:** • Suitable block interval and unit size was adopted to build a block model which was able to contain the mineralized zones. details in section 13.4.8 • The Inverse Distance Weighting Square (ID2) method was used for grade estimation via Surpac in the block model. • Three different search ellipsoids were aligned with the different mineralization orientations for both Lishan and Dongfeng Mine. • The swath plot validation approach was adopted by SRK for the validation.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	**Jilong, Huatai, Wulong, Jingtai, Hanfeng Projects:** Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	**Jilong and Huatai Projects:** • A cut-off grade of 1.5g/t Au is selected to report the Mineral Resources. • The underground resources of this project are reported based on the underground mining and the corresponding mineralised domains and cut-off grades. **Wulong Project:** • A 1.0 g/t cut-off grade was used to report the in situ Mineral Resources. This cut-off grade is estimated to be the minimum grade required for economic extraction at current prices. **Jintai Project:** • A 0.3 g/t cut-off grade was used to report the in situ Mineral Resources. This cut-off grade is estimated to be the minimum grade required for economic extraction at current

Criteria	JORC Code explanation	Commentary
		prices. **Hanfeng Project:** • SRK considers that major portions of the Lishan and Dongfeng are amenable for underground mines. • a cut-off grade of 0.50 % Zn was used to report the in situ Mineral Resources for Lishan Mine (below-92m asl) • a cut-off grade of 0.03 % Mo was used to report the in situ Mineral Resources of the Dongfeng Mine (below 250m asl)
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	**Jilon and Huatai Projects:** • SRK considers that major portions of the Jilong and Huatai are amenable for underground mines. **Wulong Project:** • For steep and thin orebody with solid surrounding wall rocks, resuing method is adopted to separate the ore and surrounding rocks, with the ore being transported and extracted while the waste is kept in the stope for backfilling. • For relatively thicker orebody, overhand cut and fill mining is adopted. Cut and fill mining allows selective mining, separate recovery of high-grade portions, and stope retention of low-grade rock. Excavated voids are backfilled with waste rock once the stope has been mined out. • No mining factors have been applied to the Mineral Resource. **Jintai Project:** • A conventional open pit mining methodology is used, comprising free dig & loading, and haulage by truck. • No mining factors have been applied to the Mineral Resource. **Hanfeng Project:** • SRK considers that major portions of the Lishan and Dongfeng are amenable for underground mines.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions*	• All the Projects are in production, metallurgical treatment processes, metallurgical methods, historical production performances and laboratory test results are available. • Metallurgical Test and results of Jilong Project, Huatai Project, Wulong Project, Hanfeng Project and Jintai Project are depicted in section 12.1, 12.2, 12.3, 12.4 and 12.5 respectively.

Criteria	JORC Code explanation	Commentary
	made.	
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	**Jilong Project:** • Three EIA reports have been completed and approved for the Jilong Project, covering the current main production facilities, the expanded processing plant and the new tailings storage facility. **Huatai Project:** • The EIA report for the mining and processing was prepared and approved in 2007. In addition, SRK has sighted other six EIA reports and approvals which cover the whole mining sections. **Wulong Project:** • Two EIA report have been completed and approved for the Wulong Projecct, covering the mine site and TSF. The EIA report for the new processing plant had been submitted to the environmental protection bureau and was under review. **Jintai Project:** • The EIA report has been produced and approved for the Jintai Project, covering mining and processing. **Hanfeng Project:** • SRK has sighted four EIA reports prepared for the Hanfeng Project. • Considerations of the potential environmental impacts and waste management measures have been stated in the above EIA reports.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	**Jilong and Huatai Projects:** • The relationship between SG value and different ore types and Au grade are analysed by SRK, there is no obvious correlation was found between SG and grade, and the average value was used for resource estimation, see the report for details. **Wulong Project:** • The SG has no significant correlation against the Au grade. • For Wulong mine, a total of 88 SG samples were collected from underground adits during the resource validation from 2016 to 2019.The SG was set at 2.67g/cm^3. • For Ligunzi deposit, the SG was set at 2.67g/cm^3 based on the data from Wulong mine, the same deposit type. • For Haojingou-Ligunzi deposit, a total of 48 SG samples were collected from 12 drillhole and YM307 during the general exploration from 2012 to 2017. The SG was set at 2.69g/cm^3.

Criteria	JORC Code explanation	Commentary
		Jintai Project: • The wax method was used for the SG test. • The samples represented the needs of mineralized body evaluation. • The SG values were 2.15g/cm^3 for domain V9 and V10, 2.29g/cm^3 for domain V8, and 2.24g/cm^3 for domain V4, V5, V6 and V7. **Hanfeng Project** • the average value of 3.62g/cm^3 was used for resource estimation of Lishan, and 2.68g/cm^3 was applied for Dongfeng Mine.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	**Jilong and Huatai Projects:** • For all the blocks of the Jilong and Huatai projects, Resources with a mean sample distance of 40m are classified as Measured resource; Resources with a mean sample distance of 80m are classified as Indicated resources; Resources with a mean sample distance of 160m are classified as Inferred resources. **Wulong Project:** • Drillhole spacing distance was used as the basis for classification. • SRK considers that blocks estimated with an average drillhole spacing of less than 40 m can be classified in the Indicated category within the meaning of the CIM Definition Standards for Mineral Resources and Mineral Reserves. • Blocks excluded by Indicated category and within the mineralized domains should be appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability. **Jintai Project:** • The Mineral Resource has been classified as Measured, Indicated and Inferred based on data spacing and using a combination of historical knowledge of mining history, geological and mineralisation continuity, as well as the drill spacing and geostatistical measures to provide confidence in the tonnage and grade estimates: • SRK considers that blocks estimated with an average drillhole spacing of less than 40 m for both trending and dip direction can be classified in the Measured category within the meaning of the CIM Definition Standards for Mineral Resources and Mineral Reserves. • SRK considers that estimated with an average drillhole spacing of less than 80 m for both trending and dip direction can be

Criteria	JORC Code explanation	Commentary
		classified in the Indicated category. For those blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit. Those blocks can be appropriately classified as Measured or Indicated. • blocks excluded by Measured and Indicated category and within the mineralized domains should be appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability. **Hanfeng Project:** • SRK considers geological continuity, sampling interval, sampling data quality and variation range. Resources with a mean sample distance of 40m are classified as Measured resource; Resources with a mean sample distance of 80m are classified as Indicated resources; Resources with a mean sample distance of 160m are classified as Indicated resources for Lishan Mine. • For the Dongfeng Molybdenum Deposit （ below 250m asl）, Resources with a mean sample distance of 50m are classified as Measured resource; Resources with a mean sample distance of 100m are classified as Indicated resources; Resources with a mean sample distance of 200m are classified as Indicated resources for Dongfeng Mine.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Peer reviews of this CPR have been performed by Dr Yonglian Sun and Mr Pengfei Xiao within SRK internally. • Dr Yonglian Sun, a Corporate Consultant (Geotech), FAusIMM, FIEAust, CPEng • Mr Pengfei Xiao, a Principal Consultant (Geology) and MAIG
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if*	**Jilong and Huatai Projects:** • The tonnages and grades for the Measured and Indicated Resources are estimated to a certain acceptable level of confidence, based on the data density observed by the Competent Person. • The tonnages and grades for the Inferred resources are estimated to a low-level confidence, as sparse data cannot support a precise estimation of the deposit. • SRK's resource estimation is a global estimate. **Wulong Project:** • The tonnages and grades for the Indicated

Criteria	JORC Code explanation	Commentary
	local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Resources are estimated to a certain acceptable level of confidence, based on the data density observed by the Competent Person. • The tonnages and grades for the Inferred resources are estimated to a low-level confidence, as sparse data cannot support a precise estimation of the deposit. • SRK's resource estimation is a global estimate. **Jintai Project:** • The tonnages and grades for the Measured and Indicated Resources are estimated to a certain acceptable level of confidence, based on the data density observed by the Competent Person. • The tonnages and grades for the Inferred resources are estimated to a low-level confidence, as sparse data cannot support a precise estimation of the deposit. • SRK's resource estimation is a global estimate. **Hanfeng Project:** • The tonnages and grades for the Indicated Resources are estimated to a certain acceptable level of confidence, based on the data density observed by the Competent Person. • The tonnages and grades for the Inferred resources are estimated to a low-level confidence, as sparse data cannot support a precise estimation of the deposit. • SRK's resource estimation is a global estimate.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	**Jilong Project:** • Jilong Project has one operating mine named the Zhuanshanzi Mine and has standalone mine systems named Zone 1, 2, and 3. The expansion of Zone 4, 5, 6, and 7 is projected to commence operations in 2027. • The Ore Reserves estimate is based on the Mineral Resource model developed by SRK geologists as of 31 March 2024. Inferred Resources have been excluded from this estimate. • The Ore Reserves are reported inclusive of Mineral Resources. • The Ore Reserves estimate is derived from

Criteria	JORC Code explanation	Commentary
		stope designs and technical and economic feasible checking, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the Run-of-Mine (ROM) Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant. **Huaitai Project:** • Huatai Mining has six operating mines named #1 Mining Zone, #26 Vein, #86 Vein, #3&#7 Vein, #5 Mining Zone and Pengjiagou Mine. • The Ore Reserves estimate is based on the Mineral Resource model developed by SRK geologists as of 31 March 2024. Inferred Resources have been excluded from this estimate. • The Ore Reserves are reported inclusive of Mineral Resources. • The Ore Reserves estimate is derived from stope designs and technical and economic feasible checking, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the Run-of-Mine (ROM) Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant. **Wulong Project:** • Wulong Mining has one operating mine named the Wulong Mine and has three stand-alone underground operating systems: Zone 2, Zone 3, and Zone 4. • The Ore Reserves estimate is based on the Mineral Resource model developed by SRK geologists as of 31 March 2024. Inferred Resources have been excluded from this estimate. • The Ore Reserves are reported inclusive of Mineral Resources. • The Ore Reserves estimate is derived from stope designs and technical and economic feasible checking, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the Run-of-Mine (ROM) Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant. **Jintai Project:** • Jintai Project consists of one operating mine named Xidengping Mine with v1 and v2 pit. • The Ore Reserves estimate is based on the Mineral Resource model developed by SRK geologists as of 31 March 2024. Inferred Resources have been excluded from this estimate. • The Ore Reserves are reported inclusive of Mineral Resources. • The Ore Reserves estimate is derived from pit

Criteria	JORC Code explanation	Commentary
		optimization and pit design, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the Run-of-Mine (ROM) Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant. **Hanfeng Project:** • Hanfeng Project has two mining areas named Lishan and Donfeng. Ore Reserves were estimated in Lishan Lower Part (Stage 1). • The Ore Reserves estimate is based on the Mineral Resource model developed by SRK geologists as of 31 March 2024. Inferred Resources have been excluded from this estimate. • The Ore Reserves are reported inclusive of Mineral Resources. The Ore Reserves estimate is derived from stope designs and technical and economic feasible checking, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the Run-of-Mine (ROM) Pad before the primary crusher and/or stockpiles at the processing plant.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	**Jilong Project:** • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in December 2022. • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in May 2024. **Huatai Project:** • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in December 2022. • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in May 2024. • Huatai Gold Mine suspended its production in 2022, and had no production in 2023, and the project is under expansion period, is planning to start its production in 2026. **Wulong Project:** • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in December 2022. • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in May 2024. **Jintai Project:** • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in March 2023. • SRK engineers, including specialists in mining, processing, geology, and environmental

Criteria	JORC Code explanation	Commentary
		disciplines, visited the site in May 2024. **Hanfeng Project:** • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in January 2023 • SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in May 2024. • The Hanfeng Mine suspended its production activities in 2022 and has not resumed production in 2023. The project is currently in an expansion phase, with plans to recommence production in 2025.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	**Jilong: Project** • SRK received following studies (Jilong Studies): ✓ Zhuanshanzi #1 Mining Zone Preliminary Design by Chifeng Zhenghang Design Company in February 2024. ✓ Zhuanshanzi #2 Mining Zone Preliminary Design by Chifeng Zhenghang Design Company in February 2024. ✓ Zhuanshanzi #3 Mining Zone Preliminary Design by Chifeng Zhenghang Design Company in February. 2024. ✓ Zhuanshanzi periphery Mining Zone (#4, #5, #6, #7 Mining Zone) Preliminary Design by Chifeng Zhenghang Design Company in February 2024. • Zhuanshanzi Mine currently has three stand-alone underground operating systems: Zone 1, Zone 2, and Zone 3. • Zhuanshanzi Gold Mine intends to increase its production capacity by developing peripheral Zone 4, 5, 6, and 7. This expansion is projected to commence operations in 2027, with an expected production rate of 60 ktpa. • After reviewing the studies and operating data, SRK opines that the project could meet the international Pre-Feasibility Study (PFS) level in general and could serve as a basis for Ore Reserves conversion. • The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion. **Huaitai Project:** • SRK received following studies (Huatai Studies): ✓ Pengjiagou Preliminary Design by Chifeng Gaoda Engineering Design Company in May 2018. ✓ Honghuagou #1 Mining Zone Expansion Preliminary Design by Inner Mongolia Mining Industry Development Co., Ltd. in May 2013. ✓ Lianhuashan #5 Mining Zone Expansion Preliminary Design by Chifeng

Criteria	JORC Code explanation	Commentary
		Zhenghang Design Co., Ltd. in November 2022. ✓ Lianhuashan #26 Vein Preliminary Design by Chifeng Gaoda Engineering Design Company in May 2018. ✓ Lianhuashan #3&#7 Vein Preliminary Design by Chifeng Zhenghang Design Co., Ltd. in July 2015. ✓ Lianhuashan #3&#7 Vein Mineral Resources Development and Utilization Scheme by Inner Mongolia Geology and Mineral Technology Co., Ltd. in December 2019. • Huatai Gold Mine currently suspended its operation, and plans its operating systems as follows: Pengjiagou, Honghuagou #1 Mining Zone, Lianhuashan #5 Mining Zone, Lianhuashan #26 Vein, Lianhuashan #3-7 Vein. • After reviewing the studies and operating data, SRK opines that the project could meet the international Pre-Feasibility Study (PFS) level in general and could serve as a basis for Ore Reserves conversion. • The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion. **Wulong Project:** • SRK received following studies (Wulong Studies): ✓ Wulong #2 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022. ✓ Wulong #3 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022. ✓ Wulong #4 and #5 Mining Zone Preliminary Design by Shenyang Nonferrous Metallurgy Design and Research Institute in Feb 2022. • Wulong Gold Mine currently has three stand-alone underground operating systems: Zone 2, Zone 3, Zone 4 and Zone 5. • After reviewing the studies and operating data, SRK opines that the project could meet the international Pre-Feasibility Study (PFS) level in general and could serve as a basis for Ore Reserves conversion. • The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion. **Jintai Project:** • Xidengping Gold Mine Preliminary Design by Jinjian Engineering Design Co., Ltd. in Feb. 2022. ("2022 Preliminary Design") • Jintai obtained one mining license and one exploration license for the Xidengping Mine.

Criteria	JORC Code explanation	Commentary
		Several technical studies on the mineralized bodies V1 and V2 within the mining license area have been conducted since the acquisition of the mining license in 2012. Construction was initiated at the beginning of 2023. The 2022 Preliminary Design is considered to be at a Pre-Feasibility Study (PFS) level, providing a reasonable basis for assessment. • After reviewing the feasibility study and operating data, SRK opines that the project could meet the international PFS level in general and could serve as a basis for Ore Reserves conversion. • The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion. **Hanfeng Project:** • SRK received following study (Hanfeng Study): ✓ Lishan Lower Part (Stage1) Preliminary Design by Changchun Gold Design Institute in Dec. 2021. • After reviewing the studies and operating data, SRK opines that the project could meet the international Pre-Feasibility Study (PFS) level in general and could serve as a basis for Ore Reserves conversion. • The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	**Jilong Project:** • Only one type of ore is extracted from underground for the treatment flowsheet by Zhuanshanzi Gold Mine. • The marginal cut-off grade (MCOG) is applied for review the cut-off grades. ✓ The reference gold metal prices are US$2,050 per ounce. The price was based on the Deutsche Bank long-term forecast price released in 1Q2024. ✓ The exchange rate is 7.22 CNY/ USD. ✓ The costs are based on the actual costs from 2021 to 2023 with SRK's analysis. ✓ Mining costs are 755 CNY /mined ton. ✓ Processing costs are 139 CNY /milled ton. ✓ General and administration costs are 151 CNY /milled ton. ✓ The processing recovery is 97%. ✓ The royalty is 4%. • The MCOG is estimated to be 2.76g/t. • The Ore Reserves were reported based on the SRK's MCOG estimation. **Huatai Project:** • Only one type of ore is extracted from underground for the treatment flowsheet by Huatai Gold Mine. • The marginal cut-off grade (MCOG) is applied

Criteria	JORC Code explanation	Commentary
		for review the cut-off grades. ✓ The reference gold metal prices are US$2,050 per ounce. The price was based on the Deutsche Bank long-term forecast price released in 1Q2024. ✓ The exchange rate is 7.22 CNY/ USD. ✓ The costs are based on the actual costs from 2020 to 2022 with SRK's analysis. ✓ Mining costs are 800 CNY /mined ton. ✓ Processing costs are 150 CNY /milled ton. ✓ General and administration costs are 221 CNY /milled ton. ✓ The processing recovery is 93%. ✓ The royalty is 4%. • The MCOG is estimated to be 2.9g/t. • The Ore Reserves were reported based on the SRK's MCOG estimation. **Wulong Project:** • Only one type of ore is extracted from underground for the treatment flowsheet by Wulong processing plant. • The marginal cut-off grade (MCOG) is applied for review the cut-off grades. ✓ The reference gold metal prices are US$2,050 per ounce. The price was based on the Deutsche Bank long-term forecast price released in 1Q2024. ✓ The exchange rate is 7.22 CNY/ USD. ✓ The costs are based on the actual costs from 2021 to 2023 with SRK's analysis. ✓ Mining costs are 696 CNY /mined ton. ✓ Processing costs are 551 CNY /milled ton. ✓ General and administration costs are 221 CNY /milled ton. ✓ The processing recovery is 97%. ✓ The royalty is 4%. • The MCOG is estimated to be 3g/t. • The Ore Reserves were reported based on the SRK's MCOG estimation. **Jintai Project:** • Only one type of ore is extracted from the open pit for the treatment flowsheet by Jintai. • The marginal cut-off grade (MCOG) is applied for review the cut-off grades. ✓ The costs are based on 2022 Preliminary Design with SRK's analysis. ✓ The exchange rate is 7.22 CNY/ USD. ✓ For post-mining costs, there are four components: haulage costs, leach pad rehandling costs, heap leaching costs, and general & administration costs. The total post-mining cost is 87.5 CNY /milled ton. ✓ The reference gold metal prices are US$2,050 per ounce. The price was based on the Deutsche Bank long-term

Criteria	JORC Code explanation	Commentary
		forecast price released in 1Q2024. ✓ The processing recovery is considered the production data as 78%. • The MCOG is estimated to be 0.25g/t which differs from the ore types applied by the 2022 Preliminary Design. • The Ore Reserves were reported based on the SRK's MCOG estimation. **Hanfeng Project:** • Only one type of ore is extracted from underground for the treatment flowsheet by Hanfeng Mine. • The marginal cut-off grade (MCOG) is applied for review the cut-off grades. ✓ The reference zinc metal prices are US$2,500 per ton. The price was based on the CMF forecast price released in 1Q2024. ✓ The exchange rate is 7.22 CNY/ US$. ✓ The costs are based on the actual costs from 2020 to 2022 with SRK's analysis. ✓ Mining costs are 65 CNY /mined ton. ✓ Processing costs are 67 CNY /milled ton. ✓ General and administration costs are 25 CNY /milled ton. ✓ The processing recovery is 88%. ✓ The payable rate is 76%. • The MCOG is estimated to be 1.4% Zn. • The Ore Reserves were reported based on the SRK's MCOG estimation.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to*	**Jilong Project:** • The stope designs modelled by SRK was used as the estimation boundary. • Skin dilution was applied into the stope shape as an equivalent linear overbreak slough. Subsequently, these annealed mineable shapes were cut using Stope Slicer within GEOVIA Surpac. Stopes falling outside the design scope or with irregular shapes were filtered out. A cut-off grade with gold price of USD 2,050/oz was used to estimate the in-stope Mineral Reserve. Factors such as ore loss were factored in using Microsoft Excel. • The Zhuanshanzi Mine mainly adopted the resuing method since the ore body is very steep and thin with solid surrounding wall rocks. • The dilution factor is approximately 20.0%. • The recovery factor is 95.0%. • No Inferred Mineral Resources are included in the Ore Reserves. • Zhuanshanzi Gold Mine was established in 2005 and has a long operation history, and various facilities are well developed. A 10kV transmission line is connected to the power distribution room in the mining

Criteria	JORC Code explanation	Commentary
	their inclusion. • *The infrastructure requirements of the selected mining methods.*	area through LGJ-95mm2 steel-cored aluminium stranded wires. The power supply meets production needs. Telephones and mobile communication are also available. **Huatai Project:** • The stope designs modelled by SRK was used as the estimation boundary. • Skin dilution was applied into the stope shape as an equivalent linear overbreak slough. Subsequently, these annealed mineable shapes were cut using Stope Slicer within GEOVIA Surpac. Stopes falling outside the design scope or with irregular shapes were filtered out. A cut-off grade with gold price of USD 2,050/oz was used to estimate the in-stope Mineral Reserve. Factors such as ore loss were factored in using Microsoft Excel. • The Huatai mines adopted a modified resuing stoping method, named slice and fill with rock, for all stopes of mining zones, and planned to use this method for the rest of Mineral Resources in future. • The dilution factor is approximately 20.0%. • The recovery factor is 85.0%. • No Inferred Mineral Resources are included in the Ore Reserves. • Huatai mines were operating previously, and various facilities are well developed. The power supply for the Huatai mines' power supply is sourced from the Northeast Power Grid, and the industrial 10kv high-voltage line has been connected to the mining areas, which can meet both production needs. Telephones and mobile communication are also available. **Wulong Project:** • The stope designs modelled by SRK was used as the estimation boundary. • Skin dilution was applied into the stope shape as an equivalent linear overbreak slough. Subsequently, these annealed mineable shapes were cut using Stope Slicer within GEOVIA Surpac. Stopes falling outside the design scope or with irregular shapes were filtered out. A cut-off grade with gold price of USD 2,050/oz was used to estimate the in-stope Mineral Reserve. Factors such as ore loss were factored in using Microsoft Excel. • The Wulong Mine mainly adopted the resuing method since the ore body is very steep and thin with solid surrounding wall rocks. • The dilution factor is approximately

Criteria	JORC Code explanation	Commentary
		20.0%. • The recovery factor is 92.0%. • No Inferred Mineral Resources are included in the Ore Reserves. • Wulong Mine has a long operation history since last century, and various facilities are well developed. The Northeast Power Grid runs through the whole area, and the power supply is sufficient. Telephones and mobile communication are also available. **Jintai Project:** • The detailed open pit design provided by Jintai was used as the estimation boundary. • To develop an optimal open pit design, an optimized open pit shell was prepared using the Lerchs-Grossman 3D algorithm. The pit design was under the guide of optimization and the design inputs, then manual modified by engineer. A cut-off grade with gold price of USD 2,050/oz was used. • The scoping-level of geotechnical studies were conducted by Jinjian Engineering Design Co., Ltd. The overall slope angle used in the design is 10° ~ 32° for V1, 11° ~ 22° for V2, and the overall slope angle is also controlled within 40° for certain areas. And the open pit slope is safe and reliable. • The dilution factor is 5.0%, consistent with Jintai's estimate. • The recovery factor is 95.0%, consistent with Jintai's estimate. • The minimum mining width is 20.0 meters. • No Inferred Mineral Resources are included in the Ore Reserves. • Jintai commenced production in 2023, and various facilities are well developed. The industrial 10kV high-voltage line has been connected to the project, approximately 1.8 km away, which can meet production needs. Telephones and mobile communication are also available. **Hanfeng Project:** • The stope designs modelled by SRK were used as the estimation boundary. • Skin dilution was applied into the stope shape as an equivalent linear overbreak slough. Subsequently, these annealed mineable shapes were cut using Stope Slicer within GEOVIA Surpac. Stopes falling outside the design scope or with irregular shapes were filtered out. Cut-off grade with zinc price of USD 2,500/t was used to estimate the in-stope Ore

Criteria	JORC Code explanation	Commentary
		Reserve. Factors such as ore loss were factored in using Microsoft Excel. • Hanfeng Study proposed 4 stoping methods that suit different vein widths: ✓ Shrinkage delay fill ✓ Slice & fill ✓ Resuing ✓ Sub-level open stope delay fill • According to the Hanfeng Study, the dilution and loss are as follows: ✓ Shrinkage delay fill: 11% dilution, 10% loss rate ✓ Slice & fill: 10% dilution, 12% loss rate ✓ Resuing: 17% dilution, 15% loss rate ✓ Sub-level open stope delay fill: 10% dilution, 10% loss rate • The records of Annual Reserves Report 2021 presented the dilution is around 32% and the mining loss is about 19% in average. • For dilution, SRK utilized the skin dilution analysis results, which indicated a rate of 22%. • The mining loss was assessed at 20%. • No Inferred Mineral Resources are included in the Ore Reserves. • Hanfeng Mine has been in production for many years, and various facilities are well developed. There is a 110KV high-voltage dedicated line for Tianbaoshan operating mine, and the power supply can fully meet the production needs. Telephones and mobile communication are also available.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the*	• All the Projects are in production, metallurgical treatment processes, metallurgical methods, historical production performances and laboratory test results are available, providing reliable data of Metallurgical Factors. • Metallurgical Testworks and results of Jilong Project, Huatai Project, Wulong Project, Hanfeng Project and Jintai Project are depicted in section 12.1, 12.2, 12.3, 12.4 and 12.5, respectively. • The metallurgical process and historical production indexes of Jilong Project, Huatai Project, Wulong Project, Hanfeng Project and Jintai Project are shown in Section 16.1, 16.2, 16.3, 16.4 and 16.5, respectively.

Criteria	JORC Code explanation	Commentary
	specifications?	
Environmen-tal	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Jilong Project: SRK noticed that there are waste rock dumps in each mining area of the project. The tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. The tailings test results sampled in 2022 show that cyanide in the tailings meet the requirements of technical specification for pollution control of cyanide leaching residue in gold industry (less than 5 mg/L). • Huatai Project: Waste rock from the project is mainly used for underground backfilling or sold for road building. SRK noticed that there are past-generated waste dumps at the portal of shafts in each mining area. The EIA considers the waste rock generated by the project to be General Industrial Solid Waste Class I. • Wulong Project: The waste rocks were temporarily dumped at the portal of shafts in each mining area. Liaoning Wulong stated that the waste rock from the project is mainly used for underground backfilling or sold for construction. The tailings of the project are dry discharged into the TSF after being treated in the filter press workshop. • JIntai Project: The EIA report states that the heap leaching residue is hazardous waste. The project's heap leaching residue is to be disposed of in situ and impermeable measures will be adopted to prevent leakage. • Hanfeng Project: The waste rocks from the project were temporarily dumped near the portal of shaft in the mining area and processing plant. Jilin Hanfeng stated that the waste rock is mainly used for underground backfilling. The EIA concluded that the waste rock from the project was not classified as hazardous waste.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	**Jilong, Huatai, Wulong,Jintai, and Hanfeng Projects:** The operation is established, and all required infrastructure is in place.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of*	**Jilong:** • Capital costs: ✓ Expansion for Zone 5, 6, 7: US$ 19.0 million. ✓ Sustaining Capital: US$ 87.7 million. (The unit sustaining cost was estimated based on data from 2021 to 2023, amounting to US$ 91.0 per milled ton. This estimate was used for forecasting the years 2024 to 2032.) ✓ SRK assumed that working capital is 30% of the operating expenses in

Criteria	JORC Code explanation	Commentary
	treatment and refining charges, penalties for failure to meet specification, etc. • *The allowances made for royalties payable, both Government and private.*	2024 and would be fully recovered at the end of the Life of Mine (LoM). ✓ Mine closure fees have been considered in the economic projection, and no residual value would be considered. • Operating costs were categorized into the following components: administration costs, mining costs, and processing costs. These were based on historical production. ✓ Administration costs: US$ 31 per milled ton. ✓ Underground mining costs: US$ 105 per mined ton. ✓ Processing costs: US$ 19 per milled ton. • No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. • The exchange rate was 7.22 RMB/US$. • The treatment and refining charge have been included in the processing costs. • Government royalties are charged 4.5% of the revenue. **Huatai:** • Capital costs: ✓ Expansion: US$ 35.9 million. ✓ Sustaining Capital: US$ 118.4 million. The unit sustaining cost was estimated based on data from 2020 to 2021, amounting to US$ 70 per milled ton. This estimate was used for forecasting the years 2026 to 2053.) ✓ SRK assumed that working capital is 30% of the operating expenses in 2026 and would be fully recovered at the end of the LoM. ✓ Mine closure fees have been considered in the economic projection, and no residual value would be considered. • Operating costs were categorized into the following components: administration costs, mining costs, and processing costs. These were based on historical production. ✓ Administration costs: US$ 31 per milled ton. ✓ Underground mining costs: US$ 126 per mined ton. ✓ Processing costs: US$ 26 per milled ton. • No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. • The exchange rate was 7.22 RMB/US$. • The treatment and refining charge have been included in the processing costs. • Government royalties are charged 4.5% of the revenue.

Criteria	JORC Code explanation	Commentary
		Wulong: • Capital costs: ✓ Sustaining capital: US$ 68.5 million. (The unit sustaining cost was estimated based on data from 2021 to 2023, amounting to US$ 67 per milled ton. This estimate was used for forecasting the years 2024 to 2035.) ✓ SRK assumed that working capital is 30% of the operating expenses in 2024 and would be fully recovered at the end of the LoM. ✓ Mine closure fees have been considered in the economic projection, and no residual value would be considered. • Operating costs were categorized into the following components: administration costs, open pit mining costs, and processing costs. These were based on historical production. ✓ Administration costs: US$ 31 per milled ton. ✓ Underground mining costs: US$ 96 per mined ton. ✓ Processing costs: US$ 76 per milled ton. • No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. • The exchange rate was 7.22 RMB/US$. • The treatment and refining charge have been included in the processing costs. • Government royalties are charged 4.5% of the revenue. **JIntai:** • Capital costs: ✓ Sustaining Capital: US$ 3.2 million (The unit sustaining cost was estimated based on data from the first quarter of 2024, amounting to US$ 2 per milled ton. This estimate was used for forecasting the years 2024 to 2035.) ✓ SRK assumed that working capital is 30% of the operating expenses in 2024 and would be fully recovered at the end of the LoM. ✓ Mine closure fees have been considered in the economic projection, and no residual value would be considered. • Operating costs were categorized into the following components: administration costs, open pit mining costs, and processing costs. These were based on historical production costs and the 2022 Preliminary Design. ✓ Administration costs: US$ 4.3 per milled ton. ✓ Open pit mining costs (ore & waste):

Criteria	JORC Code explanation	Commentary
		US$ 1.5 per mined waste and ore ton. ✓ Processing costs: US$ 6.7 per milled ton. • No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. • The exchange rate was 7.22 RMB/US$. • Transportation charges have been included in the administration costs. • The treatment and refining charge have been included in the processing costs. • Government royalties are charged 4.5% of the revenue. **Hanfeng:** • Capital costs: ✓ Expansion: US$ 15.1 million. ✓ Sustaining Capital: US$ 10 million. (The unit sustaining cost was estimated based on data from 2021, amounting to US$ 3 per milled ton. This estimate was used for forecasting the years 2025 to 2032.) ✓ SRK assumed that working capital is 30% of the operating expenses in 2025 and would be fully recovered at the end of the LoM. ✓ Mine closure fees have been considered in the economic projection, and no residual value would be considered. • Operating costs were categorized into the following components: administration costs, open pit mining costs, and processing costs. These were based on historical production. ✓ Administration costs: US$ 3 per milled ton. ✓ Underground mining costs: US$ 9 per mined ton. ✓ Processing costs: US$ 9 per milled ton. • No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. • The exchange rate was 7.22 RMB/US$. • The refining charge to zinc price is 24%. • Government royalties are charged 4.5% of the revenue.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-*	**Jilong Project:** • For economic analysis, gold metal price was US$2,050 per ounce • There is no other revenue factor considered. **Huatai Project:** • For economic analysis, gold metal price was US$2,050 per ounce • There is no other revenue factor considered.

Criteria	JORC Code explanation	Commentary
	products.	**Wulong Project:** • For economic analysis, gold metal price was US$2,050 per ounce • A 92.0% payable rate is considered due to the final product. **JIntai Project:** • For economic analysis, gold metal price was US$2,050 per ounce • A 97.0% payable rate is considered due to the final product **Hanfeng Project:** • For economic analysis, zinc metal price was US$2,550 per metric ton. • A 76% payable rate is considered due to the final product
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• See Sections 15.1 and 15.2. • No special market assessment was conducted. The Chifeng Gold's five projects are all operating projects, and for example, the Jilong, Huatai, Wulong and Hanfeng projects have been in production for many years and the Jintai Project started operation in the first quarter of 2024. They have built and maintained a good relationship between the mines and the market.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	**Jilong Project:** • The discount rate used for NPV calculation ranges from 5% to 15%, with increments of 1%. All results indicate a positive NPV. • The Capex, Opex, along with gold prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the gold price. However, even when the gold price decreases by 30%, the Jilong Project remains economical. **Huatai Project:** • The discount rate used for NPV calculation ranges from 5% to 15%, with increments of 1%. All results indicate a positive NPV. • The Capex, Opex, along with gold prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the gold price. However, a decrease in the gold price by approximately 9%, an increase in

Criteria	JORC Code explanation	Commentary
		Opex by approximately 15%, or an increase in Capex by 25% would render the Huatai Project uneconomical. **Wulong Project:** • The discount rate used for NPV calculation ranges from 5% to 15%, with increments of 1%. All results indicate a positive NPV. • The Capex, Opex, along with gold prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the gold price. However, when the gold price decreases by approximately 27%, would render the Wulong Project uneconomical. **Jintai Project:** • The discount rate used for NPV calculation ranges from 5% to 15%, with increments of 1%. All results indicate a positive NPV. • The Capex, Opex, along with gold prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the gold price. However, even when the gold price decreases by 30%, the Jintai Project remains economical. **Hanfeng Project:** • The discount rate used for NPV calculation ranges from 5% to 15%, with increments of 1%. All results indicate a positive NPV. • The Capex, Opex, along with zinc prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30.% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the zinc price. A decrease in the zinc price by approximately 15%, or an increase in Opex by approximately 25%, would render the Hanfeng Project uneconomical.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• **Jilong Project**: The public participation surveys of the EIA reports show that there were no objections to the project development. • **Huatai Project**: The EIA reports, which include detailed results of public participation, show that the majority of the public supports the project's operation, with no objections raised. • **Wulong**: **Project** The public participation surveys of the EIA reports show that there were no objections to the project development. • **Jintai Project**: The public participation survey results showed 98.5% personal support for the project and 100% group support.

Criteria	JORC Code explanation	Commentary
		• **Hanfeng Project:** The public participation surveys of the EIA reports show that there were no objections to the project development.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	**Jilong Project:** • There is no material risk for operation. • Risk assessment for Jilong Project is included in this CPR. • The project is located within the current mining licenses, for current and expansion operations which are valid until 29 September 2026 and 27 March 2032, respectively. The end of LoM is in 2032, it is believed that there is no reason to expect that Zhuanshanzi Mine will be unable to renew its license. **Huatai Project:** • There are two material risks for operation: "underestimated the operating cost" and "the project's economic feasibility". • Risk assessment for Huatai Project is included in this CPR. • The project holds several mining licenses based on the individual operating systems, most of which will expire in 2024 or 2025. The end of the LoM is projected to be in 2053. It is believed that there is no reason to expect that the Huatai Gold Mine will encounter any challenges in renewing its licenses. **Wulong Project:** • There is no material risk for operation. • Risk assessment for Wulong Project is included in this CPR. • The project is located within the current mining licenses, which are valid until 4 August 2035. The end of the LoM is projected to be in 2035. It is believed that there is no reason to expect that Wulong Gold Mine will encounter any challenges in renewing its license. **Jintai Project:** • There is no material risk for operation. • Risk assessment for Jintai Project is included in this CPR. • The project is located within the current mining license, which is valid until 6 June 2032. Although this date is earlier than the end of LoM in 2035, it is believed that there is no reason to expect that Jintai will be unable to renew its license. **Hanfeng Project:** • There are one material risks for operation: "the project's economic feasibility". • Risk assessment for Hanfeng Project is included in this CPR. • The project holds two mining licenses based on individual operating systems. The license for

Criteria	JORC Code explanation	Commentary
		the Lishan Lower Part is set to expire on 27 August 2050. The end of the LoM is projected to be in 2032.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	**Jilong, Huatai, Wulong Jintai, Hanfeng Projects:** • Measured Mineral Resources in the mine designs are classified as Proved Ore Reserves. Indicated Mineral Resources in the mine designs are classified as Probable Ore Reserves. • The classification of Ore Reserves appropriately reflects the Competent Person's view of the deposits. • There is no Measured Mineral Resources are classified as Probable Ore Reserves.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	**Jilong, Huatai, Wulong Jintai, Hanfeng Projects:** • The Ore Reserves estimates have been peer reviewed internally and is in line with current industry standards.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	**Jilong Project:** • The Ore Reserves estimates are based on Jilong Studies and ongoing operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate. **Huatai Project:** • The Ore Reserves estimates are based on Huatai Studies and historical operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate. **Wulong Project:** • The Ore Reserves estimates are based on Wulong Studies and ongoing operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate. **Jintai Project:** • The Ore Reserves estimates are based on 2022 Preliminary Design and ongoing operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate. **Hanfeng Project:** • The Ore Reserves estimates are based on Hanfeng Studies and historical operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate.

Appendix B Compliance with Chapter 18

Chapter 18				Sections in SRK's Report
18.01	**DEFINITIONS AND INTERPRETATION**			Not applicable. [1]
18.02-18.04	**CONDITIONS FOR [REDACTED] OF NEW APPLICANT MINERAL COMPANIES**			]
18.02	In addition to satisfying the requirements of Chapter 8, a Mineral Company which has applied for [**REDACTED**] must also satisfy the requirements of this Chapter.			
18.03	A Mineral Company must:—			
	(1)	establish to the Exchange's satisfaction that it has the right to participate actively in the exploration for and/or extraction of Natural Resources, either:—		Executive Summary and Section 3.2
		(a)	through control over a majority (by value) of the assets in which it has invested together with adequate rights over the exploration for and/or extraction of Natural Resources; or	
			Note: 'control over a majority' means an interest greater than 50%.	
		(b)	through adequate rights (arising under arrangements acceptable to the Exchange), which give it sufficient influence in decisions over the exploration for and/or extraction of the Natural Resources;	
	(2)	establish to the Exchange's satisfaction that it has at least a portfolio of:—		Executive Summary and Section 8.10
		(a)	Indicated Resources; or	
		(b)	Contingent Resources, identifiable under a Reporting Standard and substantiated in a Competent Person's Report. This portfolio must be meaningful and of sufficient substance to justify a [**REDACTED**];	
	(3)	if it has commenced production, provide an estimate of cash operating costs including the costs associated with:—		Executive Summary and Section14
		(a)	workforce employment;	
		(b)	consumables;	
		(c)	fuel, electricity, water and other services;	
		(d)	on and off-site administration;	
		(e)	environmental protection and monitoring;	
		(f)	transportation of workforce;	
		(g)	product marketing and transport;	
		(h)	non-income taxes, royalties and other governmental charges; and	
		(i)	contingency allowances;	
		Note:	*A Mineral Company must:* • *set out the components of cash operating costs separately by category;* • *explain the reason for any departure from the list of items to be included under cash operating costs; and* • *discuss any material cost items that should be highlighted to* [**REDACTED**].	
	(4)	demonstrate to the Exchange's satisfaction that it has available working capital for 125% of the group's present requirements, that is for at least the next 12 months, which must include:—		Not applicable. [2], Section 15 only for reference
		(a)	general, administrative and operating costs;	
		(b)	property holding costs; and	
		(c)	the cost of any proposed exploration and/or development; and	
		Note:	*Capital expenditures do not need to be included in working capital*	

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			requirements. Where they are financed out of borrowings, relevant interest and loan repayments must be included.	
	(5)		ensure that its working capital statement in the [**REDACTED**] document under Listing Rule 8.21A states it has available sufficient working capital for 125% of the group's present requirements, that is for at least 12 months from the date of its [**REDACTED**] document.	Not applicable. [2], Section 15 only for reference
18.04	If a Mineral Company is unable to satisfy either the profit test in rule 8.05(1), the market capitalisation/revenue/cash flow test in rule 8.05(2), or the market capitalisation/revenue test in rule 8.05(3), it may still apply to be [**REDACTED**] if it can establish to the Exchange's satisfaction that its directors and senior managers, taken together, have sufficient experience relevant to the exploration and/or extraction activity that the Mineral Company is pursuing. Individuals relied on must have a minimum of five years relevant industry experience. Details of the relevant experience must be disclosed in the [**REDACTED**] document of the new applicant.			Not applicable. [2]
	Note *: A Mineral Company relying on this rule must demonstrate that its primary activity is the exploration for and/or extraction of Natural Resources.*			
18.05-18.08	**CONTENTS OF [REDACTED] DOCUMENTS FOR NEW APPLICANTS**			
18.05	In addition to the information set out in Appendix 1A, a Mineral Company must include in its [**REDACTED**] document:—			
	(1)		a Competent Person's Report;	Executive Summary, Section 1 and Section 2.2
	(2)		a statement that no material changes have occurred since the effective date of the Competent Person's Report. Where there are material changes, these must be prominently disclosed;	Section 2.4
	(3)		the nature and extent of its prospecting, exploration, exploitation, land use and mining rights and a description of the properties to which those rights attach, including the duration and other principal terms and conditions of the concessions and any necessary licences and consents. Details of material rights to be obtained must also be disclosed;	Section 3.2 and Section 13.4
	(4)		a statement of any legal claims or proceedings that may have an influence on its rights to explore or mine;	Section 2.3
	(5)		disclosure of specific risks and general risks. Companies should have regard to Guidance Note 7 on suggested risk analysis; and	Executive Summary and Section 16
	(6)		if relevant and material to the Mineral Company's business operations, information on the following:—	
		(a)	project risks arising from environmental, social, and health and safety issues;	Executive Summary and Section 16
		(b)	any non-governmental organisation impact on sustainability of mineral and/or exploration projects;	Not applicable. [1], Section 2.3
		(c)	compliance with host country laws, regulations and permits, and payments made to host country governments in respect of tax, royalties and other significant payments on a country by country basis;	Sections 13.2, 13.3
		(d)	sufficient funding plans for remediation, rehabilitation and, closure and removal of facilities in a sustainable manner;	Section 13.7
		(e)	environmental liabilities of its projects or properties;	Section 13.5
		(f)	its historical experience of dealing with host country laws and practices,	Section 13.8

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			including management of differences between national and local practice;	
		(g)	its historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements; and	Not applicable. [1], Section 2.3
		(h)	any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims.	Section 13.4
18.06-18.08	***Additional disclosure requirements that apply to certain new applicant Mineral Companies***			
18.06	If a Mineral Company has begun production, it must disclose an estimate of the operating cash cost per appropriate unit for the minerals and/or Petroleum produced.			Section 14
18.07	If a Mineral Company has not yet begun production, it must disclose its plans to proceed to production with indicative dates and costs. These plans must be supported by at least a Scoping Study, substantiated by the opinion of a Competent Person. If exploration rights or rights to extract Resources and/or Reserves have not yet been obtained, relevant risks to obtaining these rights must be prominently disclosed.			Not applicable. [3]
18.08	If a Mineral Company is involved in the exploration for or extraction of Resources, it must prominently disclose to [**REDACTED**] that its Resources may not ultimately be extracted at a profit.			Section 10.8 and Section 9
18.09-18.13	**RELEVANT NOTIFIABLE TRANSACTIONS INVOLVING THE ACQUISITION OR DISPOSAL OF MINERAL OR PETROLEUM ASSETS**			Not applicable. [1,3]
18.09	A Mineral Company proposing to acquire or dispose of assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must:—			
	(1)		comply with Chapter 14 and Chapter 14A, if relevant;	
	(2)		produce a Competent Person's Report, which must form part of the relevant circular, on the Resources and/or Reserves being acquired or disposed of as part of the Relevant Notifiable Transaction;	
			Note: The Exchange may dispense with the requirement for a Competent Person's Report on disposals where shareholders have sufficient information on the assets being disposed of.	
	(3)		in the case of a major (or above) acquisition, produce a Valuation Report, which must form part of the relevant circular, on the Mineral or Petroleum Assets being acquired as part of the Relevant Notifiable Transaction; and	
	(4)		comply with the requirements of rules 18.05(2) to 18.05(6) in respect of the assets being acquired.	
	Note: Material liabilities that remain with the issuer on a disposal must also be discussed.			
18.10-18.11	***Requirements that apply to listed issuers***			Not applicable. [1,3]
18.10	A listed issuer proposing to acquire assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must comply with rule 18.09.			
18.11	On completion of a Relevant Notifiable Transaction involving the acquisition of Mineral or Petroleum Assets, unless the Exchange decides otherwise, a listed issuer will be treated as a Mineral Company.			

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18.12-18.13	***Requirements that apply to Mineral Companies and listed issuers***	Not applicable. [1,3]
18.12	The Exchange may dispense with the requirement to produce a new Competent Person's Report or a Valuation Report under rules 18.05(1), 18.09(2) or 18.09(3), if the issuer has available a previously published Competent Person's Report or Valuation Report (or equivalent) which complies with rules 18.18 to 18.34 (where applicable), provided the report is no more than six months old. The issuer must provide this document and a no material change statement in the [**REDACTED**] document or circular for the Relevant Notifiable Transaction.	
18.13	An issuer must obtain the prior written consent of a Competent Person(s) or Competent Evaluator for their material to be included in the form and context in which it appears in a [**REDACTED**] document or circular for the Relevant Notifiable Transaction, whether or not such person or firm is retained by the [**REDACTED**] applicant or the issuer.	
18.14-18.17	**CONTINUING OBLIGATIONS**	Not applicable. [1,3]
18.14	***Disclosure in reports***	
18.14	A Mineral Company must include in its interim (half-yearly) and annual reports details of its exploration, development and mining production activities and a summary of expenditure incurred on these activities during the period under review. If there has been no exploration, development or production activity, that fact must be stated.	
18.15-18.17	***Publication of Resources and Reserves***	Not applicable. [1,3]
18.15	A listed issuer that publicly discloses details of Resources and/or Reserves must give an update of those Resources and/or Reserves once a year in its annual report, in accordance with the reporting standard under which they were previously disclosed or a Reporting Standard.	
18.16	A Mineral Company must include an update of its Resources and/or Reserves in its annual report in accordance with the Reporting Standard under which they were previously disclosed.	
18.17	Annual updates of Resources and/or Reserves must comply with rule 18.18.	
	Note: Annual updates are not required to be supported by a Competent Person's Report and may take the form of a no material change statement.	
18.18-18.27	**STATEMENTS ON RESOURCES AND/OR RESERVES**	
18.18	***Presentation of data***	
18.18	Any data presented on Resources and/or Reserves by a Mineral Company in a [**REDACTED**] document, Competent Person's Report, Valuation Report or annual report, must be presented in tables in a manner readily understandable to a non-technical person. All assumptions must be clearly disclosed and statements should include an estimate of volume, tonnage and grades.	Executive Summary, Section 8.10 and Section 9
18.19	***Basis of evidence***	Not applicable. [1]
18.19	All statements referring to Resources and/or Reserves:—	
	(1) in any new applicant [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction, must be substantiated in a Competent Person's Report which must form part of the document; and	
	(2) in all other cases, must at least be substantiated by the issuer's internal experts.	
18.20	***Petroleum Competent Persons' Reports***	Not applicable. [3]

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18.20	A Competent Person's Report for Mineral Companies involved in the exploration for and/or extraction of Petroleum Resources and Reserves must include the information set out in Appendix 25.		
18.21-18.22	***Competent Person***		
18.21	A Competent Person must:—		
	(1)	have a minimum of five years experience relevant to the style of mineralization and type of deposit under consideration or to the type of Petroleum exploration, reserve estimate (as appropriate), and to the activity which the Mineral Company is undertaking;	Section 2.7
	(2)	be professionally qualified, and be a member in good standing of a relevant Recognised Professional Organisation, in a jurisdiction where, in the Exchange's opinion, the statutory securities regulator has satisfactory arrangements (either by way of the IOSCO Multilateral MOU or other bi-lateral agreement acceptable to the Exchange) with the Commission for mutual assistance and exchange of information for enforcing and securing compliance with the laws and regulations of that jurisdiction and Hong Kong; and	Section 2.7
	(3)	take overall responsibility for the Competent Person's Report.	Sections 2.7 and 2.9
18.22	A Competent Person must be independent of the issuer, its directors, senior management and advisers. Specifically the Competent Person retained must:—		Section 2.7 and 2.10
	(1)	have no economic or beneficial interest (present or contingent) in any of the assets being reported on;	
	(2)	not be remunerated with a fee dependent on the findings of the Competent Person's Report;	
	(3)	in the case of an individual, not be an officer, employee or proposed officer of the issuer or any group, holding or associated company of the issuer; and	
	(4)	in the case of a firm, not be a group, holding or associated company of the issuer. Any of the firm's partners or officers must not be officers or proposed officers of any group, holding or associated company of the issuer.	
18.23	***Additional requirements of Competent Evaluators***		Not applicable. [4]
18.23	In addition to the requirements set out in rules 18.21(2) and 18.22, a Competent Evaluator must:—		
	(1)	have at least ten years relevant and recent general mining or Petroleum experience (as appropriate);	
	(2)	have at least five years relevant and recent experience in the assessment and/or valuation of Mineral or Petroleum Assets or securities (as appropriate); and	
	(3)	hold all necessary licences.	
	Note: A Competent Person's Report or Valuation Report may be performed by the same Competent Person provided he or she is also a Competent Evaluator.		
18.24	***Scope of Competent Persons' Reports and Valuation Reports***		
18.24	A Competent Person's Report or Valuation Report must comply with a Reporting Standard as modified by this Chapter, and must:—		
	(1)	be addressed to the Mineral Company or listed issuer;	Executive Summary, Section 1 and Section 2.2
	(2)	have an effective date (being the date when the contents of the Competent	Section 2.4

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		Person's Report or Valuation Report are valid) less than six months before the date of publishing the [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction required under the Listing Rules; and	
	(3)	set out what Reporting Standard has been used in preparing the Competent Person's Report or Valuation Report, and explain any departure from the relevant Reporting Standard.	Executive Summary, Section 1 and Section 2.2
18.25-18.26	***Disclaimers and Indemnities***		
18.25	A Competent Person's Report or Valuation Report may contain disclaimers of sections or topics outside their scope of expertise in which the Competent Person or Competent Evaluator relied upon other experts' opinions, but must not contain any disclaimers of the report in its entirety.		Section 2.11 and 2.12
18.26	The Competent Person or Competent Evaluator must prominently disclose in the Competent Person's Report or Valuation Report the nature and details of all indemnities provided by the issuer. Indemnities for reliance placed on information provided by issuers and third party experts (for information outside the Competent Person's or Competent Evaluator's expertise) are generally acceptable. Indemnities for fraud and gross negligence are generally unacceptable.		Section 2.11 and 2.12
18.27	***Obligations of sponsor***		Not applicable. [4]
18.27	Any sponsor appointed to or by a new applicant Mineral Company under Chapter 3A must ensure that any Competent Person or Competent Evaluator meets the requirements of this Chapter.		
18.28-18.34	**REPORTING STANDARD**		
18.28-18.30	***Mineral reporting standard***		
18.28	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting mineral Resources and Reserves must also satisfy rules 18.29 and 18.30.		
18.29	A Mineral Company must disclose information on mineral Resources, Reserves and/or exploration results either:—		Executive Summary, Section 1, Section 8.10 and Section 9
	(1)	under:	
		(a) the JORC Code;	
		(b) NI 43-101; or	
		(c) the SAMREC Code,	
		as modified by this Chapter; or	
	(2)	under other codes acceptable to the Exchange as communicated to the market from time to time, provided the Exchange is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.	
	Note:	*The Exchange may allow presentation of Reserves under other reporting standards provided reconciliation to a Reporting Standard is provided. A Reporting Standard applied to specific assets must be used consistently.*	
18.30	A Mineral Company must ensure that:—		
	(1)	any estimates of mineral Reserves disclosed are supported, at a minimum, by a Prefeasibility Study;	Section 9
	(2)	estimates of mineral Reserves and mineral Resources are disclosed separately;	Section 8.10 and Section 9

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	(3)	Indicated Resources and Measured Resources are only included in economic analyses if the basis on which they are considered to be economically extractable is explained and they are appropriately discounted for the probabilities of their conversion to mineral Reserves. All assumptions must be clearly disclosed. Valuations for Inferred Resources are not permitted;		Section 15
	(4)	for commodity prices used in Pre-feasibility Studies, Feasibility Studies and valuations of Indicated Resources, Measured Resources and Reserves:—		
		(a)	the methods to determine those commodity prices, all material assumptions and the basis on which those prices represent reasonable views of future prices are explained clearly; and	Section 8.10, Section 9 and Section 15
		(b)	if a contract for future prices of mineral Reserves exists, the contract price is used; and	Section 9 and Section 15
	(5)	for forecast valuations of Reserves and profit forecasts, sensitivity analyses to higher and lower prices are supplied. All assumptions must be clearly disclosed.		Not applicable. [4]
18.31-18.33	***Petroleum reporting standard***			Not applicable. [3]
18.31	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting Petroleum Resources and Reserves must also satisfy rules 18.32 and 18.33.			
18.32	A Mineral Company must disclose information on Petroleum Resources and Reserves either:—			
	(1)	under PRMS as modified by this Chapter; or		
	(2)	under other codes acceptable to the Exchange if it is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.		
	Note: A Reporting Standard applied to specific assets must be used consistently.			
18.33	A Mineral Company must ensure that:—			
	(1)	where estimates of Reserves are disclosed, the method and reason for choice of estimation are disclosed (i.e. deterministic or probabilistic methods, as defined in PRMS). Where the probabilistic method is used, the underlying confidence levels applied must be stated;		
	(2)	if the NPVs attributable to Proved Reserves and Proved plus Probable Reserves are disclosed, they are presented on a post-tax basis at varying discount rates (including a reflection of the weighted average cost of capital or minimum acceptable rate of return that applies to the entity at the time of evaluation) or a fixed discount rate of 10%;		
	(3)	Proved Reserves and Proved plus Probable Reserves are analysed separately and principal assumptions (including prices, costs, exchange rates and effective date) and the basis of the methodology are clearly stated;		
	(4)	if the NPVs attributable to Reserves are disclosed, they are presented using a forecast price as a base case or using a constant price as a base case. The bases for the forecast case must be disclosed. The constant price is defined as the unweighted arithmetic average of the closing price on the first day of each month within the 12 months before the end of the reporting period, unless prices are		

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		defined by contractual arrangements. The basis on which the forecast price is considered reasonable must be disclosed and Mineral Companies must comply with rule 18.30;	
		Note: In the forecast case under PRMS, the economic evaluation underlying the investment decision is based on the entity's reasonable forecast of future conditions, including costs and prices, which will exist during the life of the project.	
	(5)	if estimated volumes of Contingent Resources or Prospective Resources are disclosed, relevant risk factors are clearly stated;	
		Note: Under PRMS, wherever the volume of a Contingent Resource is stated, risk is expressed as the chance that the accumulation will be commercially developed and graduate to the reserves class. Wherever the volume of a Prospective Resource is stated, risk is expressed as the chance that a potential accumulation will result in a significant discovery of Petroleum.	
	(6)	economic values are not attached to Possible Reserves, Contingent Resources or Prospective Resources; and	
	(7)	where an estimate of future net revenue is disclosed, whether calculated without discount or using a discount rate, it is prominently disclosed that the estimated values disclosed do not represent fair market value.	
18.34	***Mineral or Petroleum Asset Valuation Reports***		Not applicable. [4]
18.34	A Mineral Company must ensure that:—		
	(1)	any valuation of its Mineral or Petroleum Assets is prepared under the VALMIN Code, SAMVAL Code, CIMVAL or such other code approved by the Exchange from time to time;	
	(2)	the Competent Evaluator states clearly the basis of valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate, having regard to the nature of the valuation and the development status of the Mineral or Petroleum Asset;	
	(3)	if more than one valuation method is used and different valuations result, the Competent Evaluator comments on how the valuations compare and on the reason for selecting the value adopted; and	
	(4)	in preparing any valuation a Competent Evaluator meets the requirements set out in rule 18.23.	

Appendix C Chapter 2.6 of the Guide for New Listing Applicants

	Chapter 2.6	Section in SRK's Report
(i)	The cut-off grade (which should be an industry standard commonly used), minimum mining width, economic parameters (e.g. waste to ore ratio, stope productivity), specific gravity derivation, prevailing commodity price assumptions;	Section 8.10 and Section 9
(ii)	If the Competent Person has a different view on certain assumptions (e.g. processing recovery rate) made by the applicant, both views should be disclosed in the [**REDACTED**] document, with differences highlighted and underlying reasons for the different views, and the impact on the applicant if the more conservative view is adopted;	Section 9
(iii)	Detailed analysis for harmful elements identified at mines (e.g. mercury or arsenic at lead and zinc mines) to give a better picture of whether there are material concentrations of these elements within particular lodes, and the impact on the saleability of the minerals;	Section 9
(iv)	Clear and meaningful drawings and diagrams, shown to scale, of the location of the applicant's principal Mineral or Petroleum Assets;	Section 3
(v)	The procedures, amount of testing, assessment and time required to ascertain the amount of Reserves, and the existing Reserves of the mine over its entire mine life, expected average Resource and Reserve grades of ore that can be extracted in future years (preferably covering the whole economic life of the mine), depletion charges and hedging activities;	Section 9 and Section 10
(vi)	Whether the historical or expected improved recovery rate is used for estimating the net present value ("NPV"), and the basis on which the discount rates are considered appropriate;	Section 15
(vii)	If the Competent Person did not conduct a site visit, the applicant should disclose in the "Business" section of the [**REDACTED**] document the basis on which the Reserves/Resources, cost forecasts and other data relating to the mines/ oilfields as disclosed in the CPR are arrived at, how the lack of a site visit would affect the reliability of the information, and an appropriate risk factor 3; and	Section 7
(viii)	All material risks mentioned in the CPR should be disclosed in the "Risk Factors" section of the [**REDACTED**] document.	Section 16

Appendix D Assay Results

Assay Results for Verification Samples Collected on the Jilong Project.

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	SGS Au (g/t)	Intertek Au (g/t)
黄金洞竖井三中段(561m)ZC6	Channel	17.23	ZS001	24.8	15.92
黄金洞竖井三中段(561m)ZC7	Channel	3.37	ZS002	3.14	3
黄金洞竖井三中段(561m)ZC8	Channel	9.78	ZS003	34.9	9.15
黄金洞竖井三中段(561m)ZC9	Channel	20.68	ZS004	16.6	27.59
黄金洞盲竖井一中段(481m)ZC6	Channel	20.41	ZS005	27	20.78
黄金洞盲竖井一中段(481m)ZC7	Channel	45.07	ZS006	62.6	50.42
黄金洞盲竖井一中段(481m)ZC8	Channel	38.09	ZS007	60.8	42.72
黄金洞盲竖井一中段(481m)ZC9	Channel	3.97	ZS008	3.6	3.75
黄金洞盲竖井二中段(442m)ZC5	Channel	15.23	ZS009	28.5	27.19
黄金洞盲竖井二中段(442m)ZC6	Channel	36.41	ZS010	79.9	57.56
黄金洞盲竖井二中段(442m)ZC7	Channel	9.96	ZS011	23.2	16.46
黄金洞盲竖井二中段(442m)ZC8	Channel	6.43	ZS012	10.8	6.99
黄金洞盲竖井二中段(442m)ZC9	Channel	18.23	ZS013	21.9	16.74
黄金洞竖井三中段(561m)ZC40	Channel	6.49	ZS014	6.6	8.72
黄金洞竖井三中段(561m)ZC41	Channel	11.25	ZS015	7.46	8
黄金洞竖井三中段(561m)ZC42	Channel	8.67	ZS016	12.6	18.94
黄金洞竖井三中段(561m)ZC43	Channel	10.28	ZS017	13.9	11.56
黄金洞竖井三中段(561m)ZC44	Channel	9.95	ZS018	27.3	17.64
黄金洞盲竖井一中段(481m)ZC26	Channel	6.43	ZS019	14.6	8.54
黄金洞盲竖井一中段(481m)ZC27	Channel	12.78	ZS020	24.6	11.79
黄金洞盲竖井一中段(481m)ZC28	Channel	7.63	ZS021	47.1	16.8
黄金洞盲竖井一中段(481m)ZC29	Channel	25.63	ZS022	59.2	16.8
黄金洞盲竖井二中段(442m)ZC56	Channel	7.21	ZS023	12	33.14
黄金洞盲竖井二中段(442m)ZC57	Channel	13.71	ZS024	19.2	6.18
黄金洞盲竖井二中段(442m)ZC58	Channel	5.26	ZS025	6.76	12.18
黄金洞盲竖井二中段(442m)ZC59	Channel	20.11	ZS026	19.8	20.81
黄金洞盲竖井二中段(442m)ZC60	Channel	39.57	ZS027	39.4	36.25
落凤毛竖井二中段(621m)ZC5	Channel	12.15	ZS028	22.1	11.78
落凤毛竖井二中段(621m)ZC6	Channel	20.71	ZS029	12.3	24.2
落凤毛竖井二中段(621m)ZC7	Channel	31.47	ZS030	38.8	34.47
落凤毛竖井二中段(621m)ZC8	Channel	26.12	ZS031	35.1	40.32
落凤毛竖井二中段(621m)ZC9	Channel	7.23	ZS032	5.1	5.6
落凤毛竖井二中段(621m)ZC10	Channel	10.54	ZS033	18.8	10.9
落凤毛竖井二中段(621m)ZC11	Channel	8.97	ZS034	7.83	2.99
落凤毛竖井四中段(523m)ZC26	Channel	15.55	ZS035	28.2	3.91

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	SGS Au (g/t)	Intertek Au (g/t)
落凤毛竖井四中段(523m)ZC27	Channel	6.92	ZS036	21.9	10.46
落凤毛竖井四中段(523m)ZC28	Channel	6.51	ZS037	9.13	9.03
落凤毛竖井四中段(523m)ZC29	Channel	8.48	ZS038	8.29	6.64
落凤毛竖井四中段(523m)ZC30	Channel	14.81	ZS039	33	11.56
落凤毛竖井四中段(523m)ZC31	Channel	8.99	ZS040	3.44	3.97
落凤毛竖井四中段(523m)ZC32	Channel	9.51	ZS041	13.6	16
落凤毛竖井四中段(523m)ZC33	Channel	11.25	ZS042	14.9	12.36
落凤毛竖井三中段(563m)ZC36	Channel	4.23	ZS043	2.22	1.76
落凤毛竖井三中段(563m)ZC37	Channel	10.11	ZS044	23.6	15.97
落凤毛竖井三中段(563m)ZC38	Channel	27.54	ZS045	5.49	15.32
落凤毛竖井三中段(563m)ZC39	Channel	7.14	ZS046	9.21	7.24
落凤毛竖井三中段(563m)ZC40	Channel	19.22	ZS047	41.1	23.68
落凤毛竖井三中段(563m)ZC41	Channel	9.02	ZS048	9.27	11.36
落凤毛竖井四中段(523m)ZC34	Channel	10.35	ZS049	29.9	13.52
落凤毛竖井四中段(523m)ZC35	Channel	1.95	ZS050	1.23	1.64
落凤毛竖井四中段(523m)ZC36	Channel	1.28	ZS051	0.66	0.86
落凤毛竖井四中段(523m)ZC37	Channel	1.74	ZS052	0.81	1.15
落凤毛竖井四中段(523m)ZC38	Channel	1.56	ZS053	1.47	1.88
落凤毛竖井四中段(523m)ZC39	Channel	9.87	ZS054	10.5	10.67
阳坡盲竖井一中段(264m)ZC39	Channel	1.49	ZS055	3.42	1.83
阳坡盲竖井一中段(264m)ZC40	Channel	1.86	ZS056	2.52	3.17
阳坡盲竖井一中段(264m)ZC41	Channel	1.89	ZS057	5.19	1.53
阳坡盲竖井一中段(264m)ZC42	Channel	1.73	ZS058	0.33	1.78
阳坡盲竖井一中段(264m)ZC43	Channel	1.74	ZS059	1.34	2.01
阳坡竖井八中段(303m)ZC13	Channel	16.73	ZS060	16.8	21.13
阳坡竖井八中段(303m)ZC14	Channel	22.22	ZS061	44	25.88
阳坡竖井八中段(303m)ZC15	Channel	27.69	ZS062	62.5	27.4
阳坡竖井八中段(303m)ZC16	Channel	21.51	ZS063	40	22.49
阳坡竖井八中段(303m)ZC17	Channel	17.16	ZS064	27.6	15.54
阳坡竖井八中段(303m)ZC18	Channel	14.22	ZS065	20.8	17.59
阳坡盲竖井一中段(264m)ZC31	Channel	4.01	ZS066	3.63	3.51
阳坡盲竖井一中段(264m)ZC32	Channel	9.75	ZS067	22.4	8.82
阳坡盲竖井一中段(264m)ZC33	Channel	4.08	ZS068	8.97	4.17
阳坡盲竖井一中段(264m)ZC34	Channel	8.62	ZS069	25.1	10.36
27 号盲竖井一中段(303m)ZC31	Channel	9.89	ZS070	17.9	11.01
27 号盲竖井一中段(303m)ZC32	Channel	14.36	ZS071	20.9	11.3
27 号盲竖井一中段(303m)ZC33	Channel	8.86	ZS072	10.3	8.66
27 号盲竖井一中段(303m)ZC34	Channel	9.04	ZS073	2.31	5.71
27 号盲竖井一中段(303m)ZC35	Channel	14.36	ZS074	19.6	15.65
27 号盲竖井四中段(147m)ZC74	Channel	2.43	ZS075	1.02	1
27 号盲竖井四中段(147m)ZC75	Channel	1.87	ZS076	2.58	2.36
27 号盲竖井五中段(102m)CM1	Channel	15.56	ZS077	37	17.65
27 号盲竖井五中段(102m)CM2	Channel	15.06	ZS078	40.2	31.73
27 号盲竖井五中段(102m)CM2	Channel	18.43	ZS079	28.4	18.6
ZK10-05	Drill Core	10.02	ZS080	28.6	9.86
ZK10-05	Drill Core	9.79	ZS081	11.8	12.61
ZK10-05	Drill Core	11.23	ZS082	8.76	9.84
ZK10-13	Drill Core	8.25	ZS083	17.9	10.25
ZK10-13	Drill Core	7.86	ZS084	14.9	10.55
ZK10-13	Drill Core	9.93	ZS085	7.8	9.54
27 号竖井五中段(510m)ZC11	Channel	26.33	ZS086	67.2	29.98
27 号竖井五中段(510m)ZC13	Channel	17.24	ZS087	27.4	16.26
27 号竖井五中段(510m)ZC15	Channel	15.67	ZS088	18.4	15.38

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	SGS Au (g/t)	Intertek Au (g/t)
27 号竖井五中段(510m)ZC17	Channel	32.11	ZS089	54.6	51.75
28 号盲竖井一中段(476m)ZC5	Channel	32.98	ZS090	47.6	33.98
28 号盲竖井一中段(476m)ZC7	Channel	19	ZS091	44.6	27.53
28 号盲竖井一中段(476m)ZC9	Channel	16.985	ZS092	23.2	16.66
28 号盲竖井一中段(476m)ZC11	Channel	29.48	ZS093	64.4	33.57
28 号盲竖井一中段(476m)ZC13	Channel	35.04	ZS094	73.8	45.81
28 号盲竖井一中段(476m)ZC15	Channel	30.52	ZS095	44	43.63
28 号盲竖井一中段(476m)ZC31	Channel	49.16	ZS096	55.6	55.61
28 号盲竖井一中段(476m)ZC33	Channel	25.83	ZS097	8.7	17.94
28 号盲竖井一中段(476m)ZC35	Channel	6.82	ZS098	37.8	8.51
28 号盲竖井一中段(476m)ZC1	Channel	4.97	ZS099	12.8	4.63
28 号盲竖井一中段(476m)ZC3	Channel	12.27	ZS100	31.8	10.21
28 号盲竖井一中段(476m)ZC5	Channel	30.28	ZS101	40	27.05
28 号盲竖井一中段(476m)ZC7	Channel	26.19	ZS102	25.9	24.53
28 号盲竖井四中段(358m)ZC37	Channel	17.43	ZS103	138	69.62
28 号盲竖井四中段(358m)ZC39	Channel	21.71	ZS104	33.2	22.63
28 号盲竖井四中段(358m)ZC41	Channel	3.64	ZS105	3.06	2.48
28 号盲竖井四中段(358m)ZC43	Channel	2.76	ZS106	10.6	5.24
28 号盲竖井四中段(358m)ZC2	Channel	23.21	ZS107	22.9	23.41
28 号盲竖井四中段(358m)ZC4	Channel	42.25	ZS108	54.7	38.19
28 号盲竖井六中段(277m)ZC23	Channel	18.81	ZS109	75.4	22.5
28 号盲竖井六中段(277m)ZC25	Channel	17.03	ZS110	41.4	17.8
28 号盲竖井六中段(277m)ZC27	Channel	4.36	ZS111	7.32	5.32
28 号盲竖井六中段(277m)ZC29	Channel	38.16	ZS112	78.6	40.63
28 号盲竖井六中段(277m)ZC31	Channel	19.31	ZS113	29.5	28.12
28 号盲竖井六中段(277m)ZC33	Channel	14.99	ZS114	35	15.85
28 号盲竖井七中段(237m)ZC31	Channel	26.27	ZS115	45.9	34.29
28 号盲竖井七中段(237m)ZC33	Channel	12.95	ZS116	14.1	15.05
28 号盲竖井七中段(237m)ZC35	Channel	22.18	ZS117	29.2	37.91
28 号盲竖井七中段(237m)ZC37	Channel	9.42	ZS118	8.25	9.19
28 号盲竖井七中段(237m)ZC39	Channel	22.27	ZS119	61	41.43
28 号盲竖井七中段(237m)ZC21	Channel	7.3	ZS120	17.7	16.01
28 号盲竖井七中段(237m)ZC23	Channel	49.305	ZS121	109	51.23
28 号盲竖井七中段(237m)ZC25	Channel	17.75	ZS122	24.9	20.06
28 号盲竖井七中段(237m)ZC27	Channel	5.26	ZS123	8.13	8.96
落凤毛竖井三中段(563m)ZC108	Channel	11.825	ZS124	16.4	19.83
落凤毛竖井三中段(563m)ZC2	Channel	22.56	ZS125	188	172.5
落凤毛竖井三中段(563m)ZC4	Channel	5.97	ZS126	14.6	7.67
落凤毛竖井三中段(563m)ZC6	Channel	30.05	ZS127	57.7	44.76
落凤毛竖井三中段(563m)ZC3	Channel	2.94	ZS128	12.2	5.22
落凤毛竖井三中段(563m)ZC5	Channel	23.55	ZS129	51	26.71
落凤毛竖井三中段(563m)ZC7	Channel	27.77	ZS130	99.8	43.28
落凤毛竖井三中段(563m)ZC9	Channel	31.62	ZS131	41.8	30.11
落凤毛竖井三中段(563m)ZC11	Channel	1.33	ZS132	3.7	2.94
72 号盲竖井一中段(309m)ZC33	Channel	10.77	ZS133	15	11.97
72 号盲竖井一中段(309m)ZC35	Channel	6.48	ZS134	9.34	10.09
72 号盲竖井一中段(309m)ZC37	Channel	9.27	ZS135	24.4	17.67
72 号盲竖井一中段(309m)ZC39	Channel	37.78	ZS136	58.9	43.86
72 号盲竖井一中段(309m)ZC41	Channel	8.26	ZS137	16.5	12.53
72 号盲竖井一中段(309m)ZC2	Channel	19.53	ZS138	81.1	31.49
白金线盲竖井七中段(391m)南 ZC27	Channel	105.19	ZS139	112	119
白金线盲竖井七中段(391m)南 ZC29	Channel	67.57	ZS140	110	72.6
白金线盲竖井七中段(391m)南 ZC31	Channel	17.73	ZS141	32.2	18.12

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	SGS Au (g/t)	Intertek Au (g/t)
白金线盲竖井七中段(391m)南 ZC33	Channel	12.43	ZS142	25.2	11.66
白金线盲竖井七中段(391m)南 ZC35	Channel	14.85	ZS143	14.3	20.44
阳坡竖井六中段(387m)ZC34	Channel	18.98	ZS144	23.2	14.72
阳坡竖井六中段(387m)ZC36	Channel	14.88	ZS145	30.5	11.27
阳坡竖井六中段(387m)ZC38	Channel	8.5	ZS146	13.4	9.23
阳坡竖井六中段(387m)ZC40	Channel	5.575	ZS147	11.9	10.54
阳坡竖井六中段(387m)ZC42	Channel	2.03	ZS148	2.72	1.41
阳坡盲竖井十中段(-122m)ZC17	Channel	8.56	ZS149	14.9	6.55
阳坡盲竖井十中段(-122m)ZC19	Channel	9.25	ZS150	17.3	9.92
阳坡盲竖井十中段(-122m)ZC21	Channel	22.3	ZS151	35.5	22.87
阳坡盲竖井十中段(-122m)ZC23	Channel	37.65	ZS152	61.3	52.79
阳坡盲竖井十中段(-122m)ZC2	Channel	7.37	ZS153	19	24.3
阳坡盲竖井十中段(-122m)ZC4	Channel	5.33	ZS154	3.96	3.86

Assay Results for Verification Samples Collected on the Huatai Project.

Ore Sample No	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t	Check Au g/t
YM1-ZM1-2	Channel	6.95	HT01	7.86	6.55
YM1-ZM3-4	Channel	7.01	HT02	9.51	8.23
YM1-ZM5-6	Channel	8.11	HT03	10.7	17.71
YM1-ZM7-8	Channel	9.02	HT04	5.46	10.47
YM1-ZM9-10	Channel	6.55	HT05	8.19	6.87
YM1-ZM11-12	Channel	5.88	HT06	8.64	7.53
YM1-ZM13-14	Channel	6.32	HT07	7.41	6.29
YM2-ZM2-2	Channel	7.55	HT08	11.3	9.38
YM2-ZM2-3	Channel	5.95	HT09	7.53	8.71
YM2-ZM4-5	Channel	6.45	HT10	9.6	7.71
YM2-ZM6-7	Channel	9.32	HT11	13.8	10.12
YM2-ZM8-9	Channel	4.63	HT12	5.31	4.71
YM1-ZM21-22	Channel	3.32	HT13	3.12	3.37
YM1-ZM21-23	Channel	9.79	HT14	9.15	8.21
YM1-ZM25-25	Channel	4.91	HT15	5.82	4.96
YM2-ZM1-1	Channel	1.44	HT16	2.22	1.42
YM2-ZM3-3	Channel	15.01	HT17	13.6	8.24
YM2-ZM5-5	Channel	10.14	HT18	9.42	7.92
YM1-ZM3H5	Channel	3.22	HT19	3.57	2.89
YM1-ZM4H7	Channel	6.31	HT20	8.97	8.22
YM1-ZM5H9	Channel	7.61	HT21	11.3	9.86
YM1-ZM6H11	Channel	6.98	HT22	7.77	6.32
YM1-ZM7H13	Channel	4.06	HT23	4.53	3.97
YM1-ZM8H15	Channel	9.14	HT24	7.95	7.78
CK110HC2213	Drill Core	22.05	HT25	25.5	23.11
CK110HC2214	Drill Core	18.74	HT26	23.4	20.33
CK110HC2215	Drill Core	27.12	HT27	26.4	33.1
CK110HC2216	Drill Core	19.58	HT28	23.7	22.97
CK44ZA1941	Drill Core	5.83	HT29	6	6.18
CK90HC2016	Drill Core	1.35	HT30	1.92	1.12
632m 中段 CM8H2	Channel	9.88	HT31	13	10.28
632m 中段 CM8H3	Channel	12.38	HT32	14.8	13.67
591m 中段 CM0H2	Channel	11.46	HT33	13.5	12.09

Ore Sample No	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t	Check Au g/t
591m 中段 CM0H3	Channel	12.34	HT34	11.7	11.15
591m 中段 CM2H2	Channel	9.46	HT35	10.8	9.95
591m 中段 CM2H3	Channel	8.43	HT36	15.2	15.36
591m 中段 CM6H2	Channel	8.95	HT37	8.07	7.56
CM2-1H2	Drill Core	4.68	HT38	6.81	5.44
CM0H2	Drill Core	5.24	HT39	5.46	5.43
CM1H2	Drill Core	5.62	HT40	6.15	5.94
CM2-2H2	Drill Core	5.87	HT41	6.96	6.28
CM2-2H3	Drill Core	6.33	HT42	7.44	7.84
CM5AH2	Drill Core	4.01	HT43	4.59	3.96
CM7H2	Drill Core	3.76	HT44	4.56	3.15
CM9H2	Drill Core	3.06	HT45	3.18	2.41
CM9-1H3	Drill Core	4.09	HT46	5.76	3.58
KZK1951H4	Drill Core	3.63	HT47	4.14	3.07
KZK1952H2	Drill Core	5.03	HT48	7.89	6.53
KZK197A2H2	Drill Core	4.58	HT49	5.16	3.63
KZK197A2H3	Drill Core	4.77	HT50	6.24	5.49

Assay Results for Verification Samples Collected on the Huatai Project.

Hole_id	Check sample No.	Original Au(g/t)	SGS Au(g/t)
4708YM3M21	LHS01	3.37	3.53
3818-2YM2N59	LHS02	4.12	4.68
4708YM3M18	LHS03	4.33	5.68
TC33N12	LHS04	4.91	4.19
4708-2YM2N74	LHS05	5.31	4.91
5148-2YM1N23	LHS06	5.62	6.75
3818-2YM2N55	LHS07	6.13	6.72
5148-2YM1N14	LHS08	6.36	8.82
4258-2YM2N57	LHS09	6.9	7.79
4258-2YM1N19	LHS10	7.18	0.80
KZK702	LHS11	7.52	7.08
4258YM3M5	LHS12	7.96	11.2
4258-2YM1N14	LHS13	8.21	7.40
4258YM4M23	LHS14	8.42	12.4
6398YM4N27	LHS15	8.76	9.41
ZK901	LHS16	9.12	9.90
5598YM3N23	LHS17	9.33	10.4
5998-2YM1M22	LHS18	9.57	10.9
5998-2YM1M16	LHS19	9.89	8.92
5148-2YM1N18	LHS20	10.2	10.8
ZK1004	LHS21	10.35	10.1
ZK903	LHS22	10.67	12.8
4258-2YM2N71	LHS23	11.15	12.3
4258-2YM1N11	LHS24	11.34	15.5
ZK1205	LHS25	12.36	14.3
4258YM4M26	LHS26	13.03	13.4

Hole_id	Check sample No.	Original Au(g/t)	SGS Au(g/t)
4708-2YM1N44	LHS27	14.2	17.1
5598-2YM2M25	LHS28	15.27	21.1
5998-2YM1M8	LHS29	16.59	26.7
3818-2YM2N50	LHS30	18.56	20.7
5998-2YM1M24	LHS31	21.05	38.2
5598YM3N25	LHS32	25.61	4.66
5598YM3N9	LHS33	40.21	53.4
14551-10YM3-11	LHS40	3.23	4.78
10551-10YM3-11	LHS41	3.45	3.23
10551-10YM3-9	LHS42	3.88	4.03
10551-10YM3-26	LHS43	4.13	4.75
6551-10CM1-1-H2	LHS44	4.33	3.37
10551-10YM3-20	LHS45	4.63	5.93
6551-10YM3-H19	LHS46	5.01	5.83
KZK197A3	LHS47	5.23	2.93
6551-10YM3-H10	LHS48	5.45	4.44
24951-1CM2-1	LHS49	5.78	5.50
6551-10CM1-H2	LHS50	6.11	8.62
33751-1CM12	LHS51	6.32	3.92
6451CM5	LHS52	6.62	7.14
45851-1CM1	LHS53	7.01	17.4
50051-1CM3	LHS54	7.28	10.0
53551-9YM2-CM8	LHS55	8.21	8.72
50051-8CM1	LHS56	9.03	10.2
41651-1CM11	LHS57	9.64	15.9
50051-9YM2-CM7	LHS58	9.98	19.8
50051-9YM2-CM2	LHS59	10.36	40.3
53551-9YM2-CM10	LHS60	11.34	12.9
53551-8CM9	LHS61	13.07	0.19

Assay Results for Verification Samples Collected on the Wulong Project (Wulong Mine)

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t
14163 沿（十四中段）7	Channel	1	WL01	1.11
14163 沿（十四中段）8	Channel	7.6	WL02	7.2
14163 沿（十四中段）9	Channel	1.3	WL03	1.44
14163 沿（十四中段）10	Channel	2.17	WL04	1.41
14163 沿（十四中段）11	Channel	3.74	WL05	4.11
1911 沿(十九中段）23	Channel	15	WL06	17.8
1911 沿(十九中段）24	Channel	3.6	WL07	15.7
1911 沿(十九中段）25	Channel	6.6	WL08	7.64
18 中水平（十八中段）38	Channel	14.7	WL09	14.9
18 中水平（十八中段）39A	Channel	15	WL10	17
18 中水平（十八中段）39B	Channel	5.5	WL11	5.49
ZK1816346	Drill Core	2.8	WL12	18.5

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t
ZK1816347	Drill Core	12.7	WL13	13
ZK1816348	Drill Core	3.4	WL14	3.87
ZK19111H1	Drill Core	10.7	WL15	11.5
ZK19111H3	Drill Core	1.66	WL16	1.86
ZK19112H1	Drill Core	4.4	WL17	4.11
ZK19112H2	Drill Core	3.33	WL18	3.57
十八中段 4KH273	Channel	17.54	WL19	19.9
十八中段 4KH274	Channel	19.99	WL20	21.5
十八中段 4KH275	Channel	4.52	WL21	0.5
十八中段 4KH276	Channel	2.82	WL22	1.65
十八中段 4KH277	Channel	4.13	WL23	4.71
十九中段 4KH455	Channel	7.47	WL24	7.23
十九中段 4KH456	Channel	12.87	WL25	13.6
十九中段 4KH457	Channel	7.69	WL26	8.73
十九中段 4KH458	Channel	4.59	WL27	4.38
十九中段 4KH459	Channel	3.53	WL28	4.89
十九中段 4KH460	Channel	8.53	WL29	9.06
二十中段 9HF028	Channel	1.2	WL30	1.35
二十中段 9HF031	Channel	1.2	WL31	2.28
二十中段 9HF036	Channel	1.45	WL32	0.27
二十中段 9HF037	Channel	1.3	WL33	1.59
二十中段 9HF040	Channel	1.5	WL34	1.86
二十中段 9HF041	Channel	1.1	WL35	1.22
ZK1816346	Drill Core	2.8	WL36	2.37
ZK1816347	Drill Core	12.7	WL37	14.2
ZK1816348	Drill Core	3.4	WL38	4.02
ZK19111H1	Drill Core	10.7	WL39	12.6
ZK19111H3	Drill Core	1.66	WL40	1.8
ZK19112H1	Drill Core	4.4	WL41	4.38
ZK19112H2	Drill Core	3.33	WL42	3.45
十八中段 4KH335	Channel	12.9	WL43	14.5
十八中段 4KH336	Channel	2.34	WL44	2.42
十九中段 4KH340	Channel	15.3	WL45	16.8
十九中段 4KH341	Channel	3.39	WL46	3.42
十九中段 4KH342	Channel	3.89	WL47	3.65
十九中段 4KH343	Channel	4.18	WL48	3.99
十九中段 4KH461	Channel	4.34	WL49	4.13
十九中段 4KH462	Channel	5.45	WL50	5.67
十九中段 4KH463	Channel	4.7	WL51	4.96
二十中段 H71	Channel	15.64	WL52	17.7
二十中段 H72	Channel	15.02	WL53	16.4
二十中段 H73	Channel	17.91	WL54	19.9
二十中段 H74	Channel	5.69	WL55	6.36

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t
1523 沿（十五中段）10	Channel	4.2	WL56	4.59
1523 沿（十五中段）11	Channel	1.3	WL57	2.19
1723 沿（十七中段右端）1	Channel	10.6	WL58	9.4
1723 沿（十七中段右端）2	Channel	17.8	WL59	19.1
1723 沿（十七中段右端）3	Channel	5.9	WL60	5.56
1723 沿（十七中段右端）4	Channel	20	WL61	21
ZK182329	Drill Core	4.3	WL62	4.73
ZK1823210	Drill Core	1.6	WL63	1.94
ZK182331	Drill Core	14.06	WL64	15.1
ZK182332	Drill Core	1.3	WL65	1.97
ZK182333	Drill Core	2.1	WL66	1.95
ZK182341	Drill Core	8.7	WL67	8.18
ZK182342	Drill Core	13.2	WL68	14
ZK182343	Drill Core	9.7	WL69	8.72
ZK182344	Drill Core	3.4	WL70	3.76
十四中段 3KH96	Channel	3.11	WL71	2.96
十四中段 3KH97	Channel	3.65	WL72	3.7
十四中段 2HF004	Channel	1.57	WL73	1.71
十四中段 2HF005	Channel	6.82	WL74	6.87
十四中段 2HF006	Channel	23.4	WL75	25.3
十八中段 2KH303	Channel	34.27	WL76	26
十八中段 2KH304	Channel	53.22	WL77	49.1
十八中段 2KH305	Channel	13.2	WL78	15.1
十八中段 2KH306	Channel	36.5	WL79	42.2
十一中 H226	Drill Core	8.25	WL80	9.26
十一中 H227	Drill Core	5.52	WL81	5.24
十一中 H228	Drill Core	9.41	WL82	9.4
十中段 9HF251	Drill Core	1.67	WL83	1.91
十中段 9HF252	Drill Core	2.52	WL84	2.59
十中段 9HF253	Drill Core	6.29	WL85	5.93
十中段 9HF255	Channel	5.96	WL86	5.3
十一中段 9HF269	Channel	1.01	WL87	1.6
十一中段 9HF270	Channel	2.7	WL88	2.79
十一中段 9HF271	Channel	1.46	WL89	3.31
六中段 H19	Channel	8.06	WL90	6.87
六中段 H20	Channel	12.42	WL91	14.3
十九中 H201	Channel	8.42	WL92	8.95
十九中 H202	Channel	6.85	WL93	6.16
十九中 H203	Channel	7.73	WL94	9.26
十九中 H219	Channel	6.78	WL95	7.24
十九中 H220	Channel	7.38	WL96	7.15
二十中 H241	Channel	13.57	WL97	14.7
二十中 H242	Channel	12.63	WL98	11.6

Ore Sample No.	Sample Type	Original Au g/t	Check Sample No.	Check Au g/t
二十中 H243	Channel	6.2	WL99	7.07
ZK18423H2	Channel	3.5	WL100	3.76
1811 沿（十八中段）1	Channel	5.7	WL101	9.06
1811 沿（十八中段）2	Channel	19	WL102	20.7
1811 沿（十八中段）3	Channel	31	WL103	36.5
1811 沿（十八中段）4	Channel	9.4	WL104	10.3
1811 沿（十八中段）5	Channel	5.6	WL105	5.44
18 中水平（十八中段）53	Channel	30.5	WL106	33.3
18 中水平（十八中段）54	Channel	1.2	WL107	1.68
18 中水平（十八中段）34	Channel	1.2	WL108	1.14
十九中段 32	Channel	3.2	WL109	3.59
十九中段 30	Channel	5.4	WL110	4.87
十九中段 29	Channel	3.3	WL111	2.95
十九中段 16	Channel	11.7	WL112	13.7
十九中段 14	Channel	14.6	WL113	16.5
十九中段 13	Channel	7	WL114	7.41
ZK1816313	Drill Core	4.5	WL115	4.45
ZK1816314	Drill Core	2.1	WL116	1.91
ZK1816333	Drill Core	5.3	WL117	4.99
ZK1816334	Drill Core	14.2	WL118	13.8
ZK1816335	Drill Core	17.6	WL119	18.2
ZK1816336	Drill Core	4.9	WL120	5.1
ZK1816342	Drill Core	6.3	WL121	7.47
ZK1816343	Drill Core	1.1	WL122	1.42
ZK1816344	Drill Core	2.4	WL123	3.22
ZK19112H4	Drill Core	2.4	WL124	2.19
ZK19112H5	Drill Core	3.5	WL125	3.51
ZK19112H6	Drill Core	1.3	WL126	1.28
ZK19112H8	Drill Core	2.7	WL127	2.93
ZK19112H9	Drill Core	2.1	WL128	2.4
ZK19112H10	Drill Core	2.2	WL129	2.88

Assay Results for Verification Samples Collected on the Wulong Project (Haojingou-Ligunzi Deposit)

Hole id	Check sample No.	Original Au(g/t)	SGS Au(g/t)
TC2-558-1	HJG01	1.09	0.93
ZK500-2	HJG02	1.28	1.08
321-225-1	HJG03	1.45	1.17
K232-1-232-40	HJG04	1.7	1.61
ZK796-1	HJG05	1.78	1.83
K232-1-232-50	HJG06	2	1.83
ZK772-1	HJG07	2.14	2.44
ZK521-1	HJG08	2.31	1.90

Hole id	Check sample No.	Original Au(g/t)	SGS Au(g/t)
TC38-549-1	HJG09	2.56	2.21
TC547-547-20	HJG10	2.72	2.19
ZK508-4	HJG11	2.91	2.68
ZK505-2	HJG12	3.18	2.75
ZK805-4	HJG13	3.38	2.84
K230-1-230-15	HJG14	3.7	3.19
K231-3-231-3	HJG15	4.1	3.59
TC547-547-7	HJG16	4.49	4.59
ZK508-2	HJG17	4.8	4.62
K233-1-233-11	HJG18	5.3	6.30
ZK824-1	HJG19	5.87	6.64
ZK512-5	HJG20	6.51	4.22
307-231-7	HJG21	6.82	8.12
K232-1-232-49	HJG22	7.2	7.84
ZK830-2	HJG23	7.51	7.27
ZK509-2	HJG24	7.98	8.15
307-232-12	HJG25	8.41	9.39
307-232-10	HJG26	8.73	8.41
K31-1-231-1	HJG27	9.3	9.10
307-232-11	HJG28	10.3	9.09
63-547-14	HJG29	11.1	12.7
ZK820-1	HJG30	13.5	13.9
TC547-547-17	HJG31	15.33	16.5
ZK820-6	HJG32	17.8	15.3
ZK818-6	HJG33	20.4	21.5
CK551-1	HJG34	27.6	2.32
TC547-547-18	HJG35	41.08	6.63
TC547-547-11	HJG36	433.99	5.44

Assay Results for Verification Samples Collected on the Hanfeng Project (Lishan Mine)

Ore Sample No.	Sample Type	Original			Check Sample No.	Check		
		Cu_(%)	Pb_(%)	Zn_(%)		Cu_(%)	Pb_(%)	Zn_(%)
ZK24A10-5-63	Drill Core	0.562	0.011	0.538	LS001	0.547	0.011	0.553
ZK24A10-7-55	Drill Core	1.213	0.02	0.666	LS002	1.5	0.015	0.658
ZK24A8-1-24	Drill Core	0.207	0.019	3.429	LS003	0.185	0.027	2.55
ZK24A8-2-39	Drill Core	0.215	0.107	3.118	LS004	0.231	0.119	3.03
ZK24A8-3-28	Drill Core	0.317	0.002	2.025	LS005	0.327	0.0032	1.88
ZK24A4-1-37	Drill Core	0.274	0.039	2.784	LS006	0.275	0.038	2.89
ZK24A4-2-32	Drill Core	0.708	0.131	13.501	LS007	0.665	0.13	12.56
ZK24A4-2-33	Drill Core	0.452	0.018	12.035	LS008	0.43	0.022	11.18
ZK24A4-2-34	Drill Core	0.695	0.049	2.06	LS009	0.702	0.05	1.85
ZK24A4-2-35	Drill Core	0.714	0.029	1.426	LS010	0.629	0.029	1.29

Ore Sample No.	Sample Type	Original			Check Sample No.	Check		
		Cu_(%)	Pb_(%)	Zn_(%)		Cu_(%)	Pb_(%)	Zn_(%)
ZK24A4-3-31	Drill Core	0.723	0.038	3.625	LS011	0.771	0.02	3.33
ZK24A4-4-26	Drill Core	0.633	0.044	2.598	LS012	0.684	0.033	2.55
ZK24A4-4-32	Drill Core	0.219	0.121	2.283	LS013	0.233	0.117	2.4
ZK24A4-5-69	Drill Core	2.241	0.001	0.897	LS014	2.13	0.0036	0.865
ZK24A4-5-70	Drill Core	5.909	0.001	0.675	LS015	6.25	0.0051	0.647
ZK24A4-6-51	Drill Core	0.43	0.017	4.536	LS016	0.14	0.0056	4.27
ZK24A4-6-75	Drill Core	1.681	0.019	5.716	LS017	1.65	0.0033	5.02
ZK24A4-6-79	Drill Core	0.222	0.012	0.659	LS018	0.223	0.0049	0.659
ZK24A4-6-81	Drill Core	11.8	0.016	0.743	LS019	10.35	0.0044	0.68
ZK24A4-6-84	Drill Core	0.261	0.013	0.534	LS020	0.263	0.012	0.511
ZK24A4-6-85	Drill Core	0.777	0.062	0.853	LS021	0.84	0.056	0.876
ZK24A0-3-41	Drill Core	0.214	0.111	3.43	LS022	0.187	0.077	2.94
ZK24A0-3-45	Drill Core	0.236	0.069	4.716	LS023	0.228	0.028	4.53
ZK24A0-3-46	Drill Core	0.702	0.251	2.205	LS024	0.697	0.224	2.08
ZK24A0-3-47	Drill Core	0.217	0.036	0.618	LS025	0.215	0.0093	0.554
ZK24A0-5-13	Drill Core	0.342	0.058	3.195	LS026	0.347	0.0089	2.84
ZK24A0-5-19	Drill Core	0.399	0.115	4.674	LS027	0.442	0.04	4.3
ZK24A0-5-20	Drill Core	0.263	0.007	6.727	LS028	0.289	0.02	6.46
ZK24A0-5-16	Drill Core	0.217	0.017	1.318	LS029	0.211	0.011	1.23
ZK24A0-7-30	Drill Core	0.229	0.023	2.841	LS030	0.195	0.024	2.53
ZK24A0-7-31	Drill Core	0.224	0.181	3.519	LS031	0.218	0.202	3.43
ZK24A0-9-18	Drill Core	0.496	0.019	1.936	LS032	0.493	0.0037	1.76
ZK24A0-9-21	Drill Core	0.291	0.018	2.281	LS033	0.294	0.0026	2.15
ZK24A0-10-12	Drill Core	0.302	0.001	2.765	LS034	0.196	0.0027	2.71
ZK24A0-10-20	Drill Core	0.562	0.001	1.363	LS035	0.577	0.0022	1.25
ZK24A0-10-25	Drill Core	0.331	0.001	6.84	LS036	0.343	0.0012	6.26
ZK24A0-11-17	Drill Core	1.476	0.001	1.204	LS037	1.36	0.0046	1.02
ZK24A0-11-18	Drill Core	3.739	0.001	1.478	LS038	3.25	0.0041	1.24
ZK24A0-11-25	Drill Core	0.334	0.001	3.532	LS039	0.336	0.0087	2.75
ZK24A0-11-26	Drill Core	2.137	0.001	2.247	LS040	1.72	0.0011	1.74
ZK24A0-11-31	Drill Core	0.272	0.002	0.605	LS041	0.245	0.0055	0.514
ZK24A0-11-32	Drill Core	0.247	0.001	1.589	LS042	0.214	0.0033	1.26
ZK24A0-12-32	Drill Core	0.363	0.001	1.626	LS043	0.324	0.0041	1.35
ZK24A0-12-33	Drill Core	0.885	0.001	2.097	LS044	0.707	0.0065	2.52
ZK24A0-12-34	Drill Core	0.291	0.001	4.136	LS045	0.261	0.0041	3.38
ZK24A0-12-35	Drill Core	7.552	0.001	1.952	LS046	7.05	0.0039	1.49
ZK24A0-12-36	Drill Core	0.669	0.001	2.413	LS047	0.638	0.0084	2.07
ZK24A0-12-37	Drill Core	3.73	0.001	1.414	LS048	3.27	0.003	1.18
ZK24A0-12-40	Drill Core	0.351	0.001	2.303	LS049	0.321	0.0027	1.79
ZK24A0-12-41	Drill Core	0.421	0.001	2.076	LS050	0.318	0.014	1.94
ZK24A0-12-42	Drill Core	0.361	0.001	2.269	LS051	0.288	0.0029	2.12
ZK24A0-12-43	Drill Core	0.362	0.001	2.276	LS052	0.312	0.014	1.9
ZK24A0-12-10	Drill Core	4.845	0.001	0.855	LS053	4.37	0.0045	0.787
ZK24A0-13-21	Drill Core	0.394	0.001	3.082	LS054	0.37	0.01	2.86
ZK24A0-13-22	Drill Core	0.732	0.081	5.265	LS055	0.727	0.089	4.22
ZK24A0-13-23	Drill Core	0.898	0.018	3.752	LS056	0.911	0.0041	2.9
ZK24A0-13-31	Drill Core	0.565	0.155	6.311	LS057	0.579	0.161	6.49

Ore Sample No.	Sample Type	Original			Check Sample No.	Check		
		Cu_(%)	Pb_(%)	Zn_(%)		Cu_(%)	Pb_(%)	Zn_(%)
ZK24A0-13-36	Drill Core	0.513	0.001	7.312	LS058	0.488	0.0042	6.79
ZK24A0-14-47	Drill Core	0.536	0.013	1.658	LS059	0.531	0.015	1.46
ZK24A0-14-52	Drill Core	0.202	0.001	1.487	LS060	0.197	0.0042	1.47
ZK24A0-14-53	Drill Core	0.435	0.001	3.971	LS061	0.424	0.01	3.96
ZK24A0-14-58	Drill Core	0.536	0.073	2.984	LS062	0.494	0.079	2.65
ZK24A0-14-60	Drill Core	0.354	0.003	2.016	LS063	0.323	0.015	1.97
ZK24A0-15-50	Drill Core	0.344	0.354	6.976	LS064	0.345	0.346	6.72
ZK24A0-15-54	Drill Core	0.308	0.121	4.42	LS065	0.287	0.119	3.83
ZK24A0-15-55	Drill Core	0.318	0.078	5.008	LS066	0.293	0.074	5.08
ZK24A0-15-57	Drill Core	0.228	0.129	5.067	LS067	0.223	0.123	5.16
ZK24A0-15-58	Drill Core	0.277	0.104	2.243	LS068	0.272	0.105	1.84
ZK24A0-17-50	Drill Core	0.203	0.096	11.705	LS069	0.213	0.103	10.28
ZK24A0-17-71	Drill Core	7.177	0.008	1.292	LS070	0.777	0.0047	1.26
ZK24A0-17-92	Drill Core	0.281	0.008	0.597	LS071	0.308	0.0035	0.221
ZK24A0-17-81	Drill Core	0.618	0.009	0.504	LS072	0.638	0.0031	0.295
ZK24A0-17-82	Drill Core	0.528	0.014	0.963	LS073	0.551	0.0034	0.901
ZK24A0-17-83	Drill Core	0.479	0.024	1.143	LS074	0.493	0.0047	1.08
ZK24A0-17-84	Drill Core	0.998	0.015	1.541	LS075	1.07	0.0035	1.47
ZK24A0-17-87	Drill Core	0.676	0.017	1.275	LS076	0.733	0.003	1.21
ZK24A1-2-3	Drill Core	0.204	0.001	5.948	LS077	0.162	0.0043	5.67
ZK24A1-2-4	Drill Core	0.873	0.001	5.221	LS078	0.795	0.0052	5.02
ZK24A1-4-53	Drill Core	0.289	0.001	5.881	LS079	0.28	0.0044	5.74
ZK24A1-4-56	Drill Core	0.22	0.006	2.374	LS080	0.22	0.011	2.36
ZK24A1-4-58	Drill Core	0.61	0.281	3.845	LS081	0.55	0.25	3.72
ZK24A1-4-59	Drill Core	0.211	0.063	2.581	LS082	0.206	0.065	2.51
ZK24A1-7-6	Drill Core	0.587	0.017	0.621	LS083	0.576	0.011	0.572
ZK24A1-7-14	Drill Core	0.629	0.009	2.362	LS084	0.638	0.0079	2.13
ZK24A1-7-15	Drill Core	0.881	0.008	3.251	LS085	0.826	0.0057	3.17
ZK24A1-7-16	Drill Core	0.966	0.004	1.804	LS086	0.904	0.0027	1.61
ZK24A1-7-21	Drill Core	0.211	0.004	2.706	LS087	0.208	0.004	2.47
ZK24A1-8-16	Drill Core	0.421	0.001	4.607	LS088	0.388	0.0038	4.61
ZK24A1-8-17	Drill Core	0.269	0.002	2.986	LS089	0.245	0.0038	2.66
ZK24A1-8-20	Drill Core	0.723	0.04	9.817	LS090	0.748	0.041	8.96
ZK24A1-8-21	Drill Core	0.213	0.001	3.909	LS091	0.202	0.0065	3.68
ZK24A1-8-23	Drill Core	0.741	0.119	2.891	LS092	0.766	0.113	2.78
ZK24A1-8-29	Drill Core	2.522	0.001	2.011	LS093	2.31	0.031	1.9
ZK24A1-8-42	Drill Core	2.195	0.008	7.855	LS094	2.36	0.0066	6.48
ZK24A1-8-43	Drill Core	2.681	0.036	12.283	LS095	2.75	0.03	10.45
ZK24A1-8-44	Drill Core	1.828	0.119	17.639	LS096	1.92	0.115	15.34
ZK24A1-9-15	Drill Core	0.419	0.001	1.597	LS097	0.426	0.0041	1.58
ZK24A1-9-16	Drill Core	0.283	0.001	1.506	LS098	0.298	0.0027	1.41
ZK24A1-9-17	Drill Core	0.389	0.001	3.141	LS099	0.397	0.0033	2.91
ZK24A1-9-18	Drill Core	0.573	0.001	4.221	LS100	0.593	0.0091	4.11
ZK24A1-9-21	Drill Core	0.219	0.001	3.425	LS101	0.221	0.0035	3.27
ZK24A1-9-24	Drill Core	0.263	0.001	0.861	LS102	0.283	0.0059	0.951
ZK24A1-9-34	Drill Core	0.372	0.001	3.704	LS103	0.38	0.0019	3.57
ZK24A1-9-35	Drill Core	0.624	0.001	8.049	LS104	0.571	0.0025	7.4

Ore Sample No.	Sample Type	Original			Check Sample No.	Check		
		Cu_(%)	Pb_(%)	Zn_(%)		Cu_(%)	Pb_(%)	Zn_(%)
ZK24A3-9-54	Drill Core	0.252	0.254	5.862	LS105	0.266	0.262	5.09
ZK24A3-9-55	Drill Core	0.563	0.059	8.594	LS106	0.548	0.074	7.66
ZK24A3-9-56	Drill Core	0.947	0.001	11.906	LS107	1.03	0.013	10.38
ZK24A3-9-57	Drill Core	0.232	0.196	11.597	LS108	0.212	0.206	9.76
ZK24A3-9-58	Drill Core	0.596	0.043	10.303	LS109	0.603	0.063	9.92
ZK24A3-9-59	Drill Core	0.401	0.001	14.76	LS110	0.391	0.016	11.75
ZK24A3-10-63	Drill Core	1.224	0.051	5.284	LS111	1.17	0.042	5.61
ZK24A3-10-64	Drill Core	1.782	0.004	3.819	LS112	1.84	0.012	3.34
ZK24A3-10-65	Drill Core	2.955	0.046	2.712	LS113	2.9	0.036	2.25
ZK24A3-10-66	Drill Core	1.702	0.109	0.886	LS114	1.75	0.111	0.838
ZK24A3-10-69	Drill Core	1.033	0.004	4.884	LS115	1.23	0.017	4.41
ZK24A3-10-71	Drill Core	1.259	0.001	3.015	LS116	1.35	0.0029	2.75
ZK24A3-10-75	Drill Core	6.494	0.005	0.529	LS117	5.87	0.0084	0.432
ZK24A3-10-78	Drill Core	4.607	0.001	0.638	LS118	3.96	0.0036	0.458
ZK24A3-10-79	Drill Core	7.909	0.005	0.521	LS119	7.02	0.0041	0.452
ZK24A3-10-80	Drill Core	11.107	0.006	0.668	LS120	10.4	0.0036	0.536
ZK24A3-10-85	Drill Core	2.936	0.001	0.601	LS121	2.6	0.0037	0.443
ZK24A3-10-86	Drill Core	6.079	0.003	0.593	LS122	5.96	0.0037	0.479
ZK24B2-5-80	Drill Core	1.947	0.008	2.146	LS123	1.84	0.0019	1.79
ZK24B2-5-82	Drill Core	1.117	0.001	5.661	LS124	1.07	0.0055	5.33
ZK24B2-5-85	Drill Core	5.343	0.007	0.51	LS125	5.06	0.0033	0.484
ZK24B2-5-87	Drill Core	14.862	0.001	1.243	LS126	12.15	0.0026	1.02
ZK2402-4	Drill Core	2.24	0.24	2.98	LS127	2.26	0.216	2.82
C15-2-21-136	Channel	0.529	0.148	23.19	LS128	0.512	0.212	20.47
23C001-KT23C001-63	Channel	1.365	0.166	2.789	LS129	1.35	0.177	1.81
23C001-KT23C001-65	Channel	0.892	0.126	2.494	LS130	0.988	0.135	2.22
23C001-KT23C001-68	Channel	1.988	0.171	3.742	LS131	2.02	0.173	3.3
23C001-KT23C001-69	Channel	2.596	0.211	2.864	LS132	2.85	0.219	2.59
23C001-KT23C001-70	Channel	0.515	0.268	1.563	LS133	0.604	0.256	1.37
23C001-KT23C001-71	Channel	1.597	0.137	2.382	LS134	1.7	0.16	2.18
23C001-KT23C001-72	Channel	6.147	0.249	2.123	LS135	6.14	0.225	3.72
23C001-KT23C001-73	Channel	2.098	0.32	2.768	LS136	2.36	0.261	2.51
23C001-KT23C001-82	Channel	4.901	0.17	4.594	LS137	5.16	0.177	4.14
24C001-KT24C001-35	Channel	0.265	0.183	1.868	LS138	0.255	0.16	1.62
24C001-KT24C001-36	Channel	0.346	0.102	2.147	LS139	0.373	0.108	2.13
24C001-KT24C001-44	Channel	0.324	0.339	1.764	LS140	0.35	0.308	1.7
24C009-KT24C009-2	Channel	1.585	0.149	20.54	LS141	1.43	0.158	16.51
24C009-KT24C009-7	Channel	0.941	0.206	4.068	LS142	0.814	0.165	3.04
24C009-KT24C009-8	Channel	0.468	0.151	4.402	LS143	0.42	0.124	3.31
24C009-KT24C009-9	Channel	0.378	0.105	2.097	LS144	0.365	0.092	1.56
24C009-KT24C009-10	Channel	0.699	0.205	5.49	LS145	0.687	0.183	4.54
24C009-KT24C009-11	Channel	0.732	0.306	7.07	LS146	0.831	0.292	6.72
24C009-KT24C009-12	Channel	0.944	0.391	7.96	LS147	1.05	0.363	7.15
24C009-KT24C009-13	Channel	0.791	0.461	7.09	LS148	0.931	0.386	7.41
24C009-KT24C009-14	Channel	0.687	0.364	4.43	LS149	0.764	0.352	6.52
24C009-KT24C009-15	Channel	0.505	0.216	6.55	LS150	0.559	0.201	3.15
24C009-KT24C009-16	Channel	0.608	0.192	4.03	LS151	0.7	0.187	3.46

Ore Sample No.	Sample Type	Original			Check Sample No.	Check		
		Cu_(%)	Pb_(%)	Zn_(%)		Cu_(%)	Pb_(%)	Zn_(%)
24C009-KT24234	Channel	1.812	0.114	20.98	LS152	1.72	0.111	21.42

Assay Results for Verification Samples Collected from the Hanfeng Project (Dongfeng Mine)

Ore Sample No.	Sample Type	Original Mo (%)	Check Sample No.	Check Mo (%)
ZK1001_133	Core	0.036	DF001	0.035
ZK1002_97	Core	0.03	DF002	0.029
ZK1005_230	Core	0.033	DF003	0.03
ZK201_144	Core	0.031	DF004	0.027
ZK203_102	Core	0.091	DF005	0.098
ZK102_51	Core	0.089	DF006	0.093
ZK104_90	Core	0.073	DF007	0.073
ZK501_217	Core	0.043	DF008	0.04
ZK505_67	Core	0.067	DF009	0.068
ZK901_230	Core	0.058	DF010	0.06
ZK903_198	Core	0.034	DF011	0.032
ZK906_67	Core	0.035	DF012	0.032
ZK1102_5	Core	0.054	DF013	0.05
ZK1105_84	Core	0.044	DF014	0.047
ZK1108_68	Core	0.044	DF015	0.048
ZK1113_47	Core	0.047	DF016	0.044
ZK1118_65	Core	0.052	DF017	0.049
ZK1302_115	Core	0.042	DF018	0.04
ZK1305_75	Core	0.086	DF019	0.083
ZK1308_73	Core	0.079	DF020	0.096
ZK1310_92	Core	0.044	DF021	0.048
ZK1501_5	Core	0.035	DF022	0.034
ZK1502_87	Core	0.086	DF023	0.082
ZK1504_90	Core	0.058	DF024	0.06
ZK1506_113	Core	0.065	DF025	0.073
ZK1509_152	Core	0.092	DF026	0.087
ZK1513_63	Core	0.07	DF027	0.085
ZK1517_53	Core	0.031	DF028	0.029
ZK1701_6DH2349	Core	0.037	DF029	0.035
ZK1706_44	Core	0.095	DF030	0.096
ZK1709_58	Core	0.039	DF031	0.037
ZK1902_16	Core	0.065	DF032	0.067
ZK1903_54	Core	0.088	DF033	0.093
ZK1905_47	Core	0.048	DF034	0.046
ZK1907_68	Core	0.098	DF035	0.099
ZK1911_108	Core	0.047	DF036	0.051
ZK1914_126	Core	0.086	DF037	0.084

Ore Sample No.	Sample Type	Original Mo (%)	Check Sample No.	Check Mo (%)
ZK2101_H83	Core	0.079	DF038	0.074
ZK2103_6DH2709	Core	0.041	DF039	0.046
ZK2104_H1097	Core	0.051	DF040	0.056
ZK2106_112	Core	0.08	DF041	0.082
ZK2111_24	Core	0.046	DF042	0.05
ZK2301_9	Core	0.039	DF043	0.036
ZK2302_95	Core	0.038	DF044	0.039
ZK2303_124	Core	0.033	DF045	0.036
ZK2305_114	Core	0.042	DF046	0.047
ZK2307_68	Core	0.038	DF047	0.036
ZK2310_32	Core	0.034	DF048	0.034
ZK2312_103	Core	0.05	DF049	0.0018
ZK2314_166	Core	0.084	DF050	0.091
ZK2502_6DH2778	Core	0.036	DF051	0.033
ZK2503_H447	Core	0.06	DF052	0.065
ZK2505_H1150	Core	0.044	DF053	0.073
ZK2505_H1216	Core	0.032	DF054	0.031
ZK2506_H1668	Core	0.053	DF055	0.061
ZK2507_71	Core	0.046	DF056	0.043
ZK2510_179	Core	0.038	DF057	0.032
ZK2513_14	Core	0.053	DF058	0.059
ZK2516_91	Core	0.055	DF059	0.054
ZK2521_79	Core	0.032	DF060	0.036
ZK2702_142	Core	0.041	DF061	0.036
ZK2704_207	Core	0.041	DF062	0.037
ZK2707_111	Core	0.094	DF063	0.095
ZK2710_56	Core	0.048	DF064	0.048
ZK2711_137	Core	0.058	DF065	0.058
ZK2714_76	Core	0.096	DF066	0.091
ZK2901_6DH890	Core	0.034	DF067	0.037
ZK2902_6DH1804	Core	0.057	DF068	0.059
ZK2904_5	Core	0.044	DF069	0.046
ZK2905_35	Core	0.035	DF070	0.031
ZK2909_44	Core	0.092	DF071	0.094
ZK2912_169	Core	0.034	DF072	0.035
ZK2915_80	Core	0.072	DF073	0.066
ZK3104_2	Core	0.03	DF074	0.025
ZK3107_103	Core	0.056	DF075	0.064
ZK3302_114	Core	0.09	DF076	0.095
ZK3304_150	Core	0.033	DF077	0.025
ZK3306_15	Core	0.03	DF078	0.029
ZK3311_47	Core	0.052	DF079	0.046
ZK3310_18	Core	0.053	DF080	0.053
ZK3702_25	Core	0.039	DF081	0.037

Ore Sample No.	Sample Type	Original Mo (%)	Check Sample No.	Check Mo (%)
ZK4102_59	Core	0.048	DF082	0.052
ZK1001_134	Core	0.126	DF083	0.127
ZK1002_121	Core	0.262	DF084	0.262
ZK1003_187	Core	0.155	DF085	0.152
ZK202_196	Core	0.215	DF086	0.233
ZK102_125	Core	0.148	DF087	0.162
ZK105_83	Core	0.178	DF088	0.189
ZK502_232	Core	0.105	DF089	0.11
ZK506_7	Core	0.11	DF090	0.108
ZK903_225	Core	0.22	DF091	0.225
ZK1101_55	Core	0.162	DF092	0.153
ZK1104_116	Core	0.145	DF093	0.142
ZK1109_4	Core	0.109	DF094	0.101
ZK1117_53	Core	0.276	DF095	0.309
ZK1304_37	Core	0.115	DF096	0.126
ZK1310_68	Core	0.109	DF097	0.115
ZK1501_113	Core	0.278	DF098	0.294
ZK1505_109	Core	0.186	DF099	0.193
ZK1508_122	Core	0.306	DF100	0.326
ZK1516_20	Core	0.111	DF101	0.116
ZK1702_105	Core	0.167	DF102	0.17
ZK1709_76	Core	0.265	DF103	0.263
ZK1904_15	Core	0.112	DF104	0.125
ZK1908_5	Core	0.242	DF105	0.245
ZK1913_50	Core	0.352	DF106	0.347
ZK2103_H136	Core	0.116	DF107	0.125
ZK2108_31	Core	0.328	DF108	0.32
ZK2114_48	Core	0.187	DF109	0.21
ZK2302_46	Core	0.258	DF110	0.247
ZK2304_40	Core	0.165	DF111	0.164
ZK2307_38	Core	0.311	DF112	0.322
ZK2311_24	Core	0.314	DF113	0.312
ZK2314_69	Core	0.303	DF114	0.312
ZK2502_H321	Core	0.256	DF115	0.276
ZK2505_H1203	Core	0.455	DF116	0.506
ZK2511_47	Core	0.448	DF117	0.448
ZK2515_105	Core	0.169	DF118	0.18
ZK2521_38	Core	0.124	DF119	0.13
ZK2703_38	Core	0.122	DF120	0.136
ZK2707_32	Core	0.152	DF121	0.155
ZK2710_33	Core	0.163	DF122	0.181
ZK2711_142	Core	0.151	DF123	0.154
ZK2901_6DH916	Core	0.115	DF124	0.112
ZK2904_111	Core	0.132	DF125	0.143

Ore Sample No.	Sample Type	Original Mo (%)	Check Sample No.	Check Mo (%)
ZK2910_122	Core	0.157	DF126	0.175
ZK2915_56	Core	0.13	DF127	0.147
ZK3107_63	Core	0.201	DF128	0.212
ZK3307_7	Core	0.164	DF129	0.155
ZK3306_2	Core	0.198	DF130	0.195
ZK3312_122	Core	0.104	DF131	0.111
ZK504_103	Core	0.246	DF132	0.234
ZK505_3	Core	0.589	DF133	0.588
ZK1904_161	Core	0.684	DF134	0.719
ZK2307_55	Core	1.184	DF135	1.16
ZK2709_9	Core	1.204	DF136	1.21
ZK3702_97	Core	0.597	DF137	0.61
ZK1903_88	Core	1.528	DF138	1.43
ZK2710_131	Core	2.24	DF139	2.07
8 中_D8CM2	Channel	0.065	DF140	0.065
9 中_D9YM2	Channel	0.044	DF141	0.053
9 中_D9CM1	Channel	0.041	DF142	0.036
9 中_D9CM5	Channel	0.076	DF143	0.074
9 中_D9CM10	Channel	0.032	DF144	0.033
9 中_D9CM10	Channel	0.089	DF145	0.108
10 中_D10CM1	Channel	0.067	DF146	0.071
10 中_D10CM7	Channel	0.044	DF147	0.044
10 中_D10CM5	Channel	0.034	DF148	0.033
10 中_D10CM8	Channel	0.067	DF149	0.055
10 中_D10CM8	Channel	0.056	DF150	0.062
10 中_D10CM10	Channel	0.071	DF151	0.072
11 中_D11CM2	Channel	0.058	DF152	0.08
11 中_D11CM8	Channel	0.05	DF153	0.05
12 中_D12CM2	Channel	0.066	DF154	0.066
12 中_D12CM4	Channel	0.045	DF155	0.049
12 中_D12CM5	Channel	0.031	DF156	0.029
12 中_D12CM6	Channel	0.048	DF157	0.049
12 中_D12CM1	Channel	0.054	DF158	0.057
12 中_D12CM1	Channel	0.044	DF159	0.047
8 中_D8CM7	Channel	0.265	DF160	0.258
8 中_D8CM7	Channel	0.261	DF161	0.244
8 中_D8CM1	Channel	0.233	DF162	0.216
9 中_D9CM2	Channel	0.16	DF163	0.147
9 中_D9YM3	Channel	0.21	DF164	0.193
9 中_D9CM3	Channel	0.199	DF165	0.181
9 中_D9CM10	Channel	0.137	DF166	0.135
9 中_D9CM10	Channel	0.367	DF167	0.334
9 中_D9CM8	Channel	0.296	DF168	0.29
10 中_D10CM7	Channel	0.105	DF169	0.097

Ore Sample No.	Sample Type	Original Mo (%)	Check Sample No.	Check Mo (%)
10 中_D10CM4	Channel	0.219	DF170	0.196
10 中_D10CM8	Channel	0.102	DF171	0.103
10 中_D10CM8	Channel	0.133	DF172	0.135
10 中_D10CM9	Channel	0.21	DF173	0.235
10 中_D10CM9	Channel	0.15	DF174	0.138
10 中_D10CM6	Channel	0.139	DF175	0.14
11 中_D11CM2	Channel	0.122	DF176	0.122
11 中_D11CM7	Channel	0.128	DF177	0.117
12 中_D12CM2	Channel	0.207	DF178	0.201
12 中_D12CM2	Channel	0.174	DF179	0.165
12 中_D12CM4	Channel	0.103	DF180	0.109
12 中_D12CM5	Channel	0.143	DF181	0.134
12 中_D12CM6	Channel	0.171	DF182	0.169
12 中_D12CM1	Channel	0.171	DF183	0.549
9 中_D9YM2	Channel	0.506	DF184	0.441
10 中_D10CM7	Channel	1.068	DF185	1.07
11 中_D11CM4	Channel	1.482	DF186	1.41
12 中_D12CM1	Channel	0.603	DF187	0.154
9 中_D9CM3	Channel	1.686	DF188	2.55
10 中_D10CM9	Channel	4.658	DF189	3.95

Assay Results for Verification Samples Collected from the Jintai Project

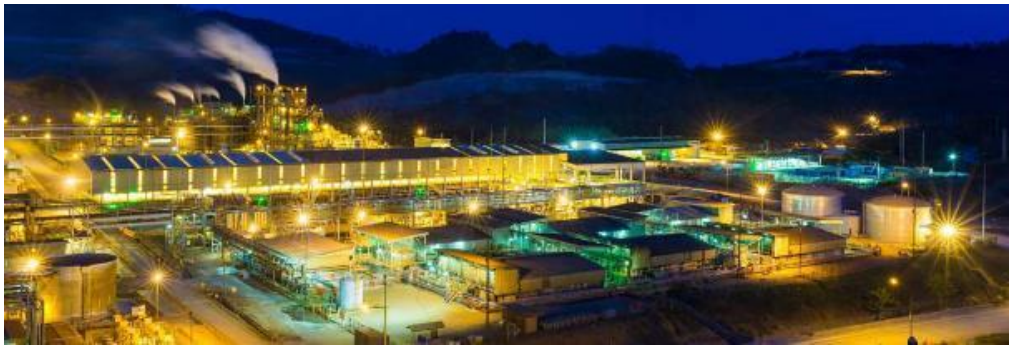
Sample	Au_Xidengping	Au_SGS	Sample	Au_Xidengping	Au_SGS
BT102-1-H6	5.08	4.62	ZK110-9H34	1.10	0.88
BT106-H6	1.31	1.58	ZK114-5H29	19.70	17.20
BT130-1-H5	0.69	0.85	ZK120-7H54	2.69	2.75
YJK2H9	1.84	1.39	ZK121-1H18	0.35	0.31
ZK001H2	0.78	0.58	ZK124-7H42	1.28	1.59
ZK003H11	0.44	0.29	ZK124-7H54	0.330	0.29
ZK007H10	4.08	2.60	ZK1928-H45	0.60	0.53
ZK100-1H21	0.82	0.65	ZK2004H29	1.47	1.60
ZK100-3H18	6.03	5.83	ZK2401H5	7.14	5.73
ZK100-3H57	0.39	0.36	ZK2406H24	7.92	4.49
ZK100-5H30	2.16	1.48	ZK2820H6	0.89	0.01
ZK100-5H64	0.72	0.62	ZK301H3	0.39	0.32
ZK102-13H34	2.16	1.89	ZK307H3	0.88	0.64
ZK102-1H24	1.10	0.76	ZK401H14	0.57	0.49
ZK102-1H47	0.81	0.60	ZK404H27	0.52	0.37
ZK102-3H2	0.67	0.66	ZK405H5	0.64	0.53
ZK102-3H34	1.52	1.58	ZK801H18	0.55	0.50

Sample	Au_Xidengping	Au_SGS	Sample	Au_Xidengping	Au_SGS
ZK102-5H29	0.42	0.42	ZK803H12	0.37	0.40
ZK102-5H34	0.51	0.53	ZK82-25-H8	0.42	0.29
ZK102-5H36	0.34	0.21	ZK87-5-H18	17.20	16.60
ZK102-5H46	0.57	0.52	ZK94-13-H76	0.47	0.40
ZK104-0H112	0.87	0.94	ZK95-17-H2	0.42	0.38
ZK104-0H30	0.36	0.27	ZK95-6-H30	0.71	0.52
ZK104-0H4	3.60	3.38	ZK96-1-H106	0.32	0.43
ZK104-1H34	0.98	0.97	ZK97-1-H11	0.33	0.31
ZK104-1H9	5.31	4.17	ZK97-1-H18	0.57	1.22
ZK104-5H41	0.75	0.48	ZK98-0-H27	1.23	1.10
ZK104-5H68	1.16	1.18	ZK98-13-H25	1.10	1.09
ZK106-0H2	1.99	1.45	ZK98-13-H27	3.87	3.94
ZK106-0H26	2.38	1.28	ZK98-1-H19	2.09	1.48
ZK106-3H6	3.97	1.08	ZK98-25-H24	0.49	0.46
ZK106-3H14	3.04	1.81	ZK98-25-H35	2.43	1.82
ZK106-3H21	0.95	0.97	ZK98-3-H34	2.42	2.10
ZK106-3H13	1.93	3.66	ZK98-3-H43	0.40	0.31
ZK106-3H119	0.51	0.41	ZK98-9-H24	1.75	2.42
ZK106-3-H47	1.50	1.29	ZK98-9-H8	0.66	1.00
ZK106-3H77	2.33	2.17	ZK99-1-H4	3.12	2.73
ZK110-1H35	0.31	0.24	ZK99-2-H4	1.68	2.54
ZK110-3H10	2.65	2.97			

Final

Independent Competent Person's Report for the Sepon Gold and Copper Project, Lao People's Democratic Republic

Project Spring Rain, Savannakhet Province , Lao People's Democratic Republic
Chifeng Jilong Gold Mining Co., Ltd.



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Final

Independent Competent Person's Report for the Sepon Gold and Copper Project, Lao People's Democratic Republic

Project Spring Rain, Savannakhet Province , Lao People's Democratic Republic

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Ore Processing Plant and Smelter of Sepon Mine

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Contents

Tables

Figures

Appendices

Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

Abbreviation	Terminology
'	minute of arc
%	percent/percentage
/	per
°	degree(s) of arc
°C	degree(s) Centigrade
3D	three-dimensional
AER	Annual Environmental Report
Ag	The chemical symbol for silver
AN/FO	ammonium nitrate/fuel oil
ARD	acid rock drainage
As	The chemical symbol for arsenic
ASL	above sea level
Au	The chemical symbol for gold
AusIMM	Australasian Institute of Mining and Metallurgy
B.Eng.	Bachelor of Engineering
B×H	breadth × height
BD	bulk density
Capex	capital cost
CCD	counter current decantation
Chifeng Gold	Chifeng Jilong Gold Mining Co., Ltd.
Client	Chifeng Gold
cm	centimetre(s)
Conc.	Concentrate
CP	Competent Person
CPI	consumer price index
CPR	Competent Person's Report
CIL	carbon in leach
CRF	cemented rock fill
CSV	comma-separated values
Cu	The chemical symbol for copper
Cut-off grade	The grade threshold above which a mineral material is considered potentially economic and is selectively mined and processed as ore
$CuSO_4$	copper sulphate
CV	Coefficient of Variation
DA	depreciation and amortization
m/s	meter(s) per second
DCF	discounted cash flow
Dr.	Doctor of Philosophy
ECAP	Environmental Corrective Action Plan
EIA	The Environmental Impact Assessment
EPMP	Environmental Protection and Management Plan

Abbreviation	Terminology
ESHS	Environmental, Social, Health and Safety
etc.	et cetera (= and so on)
FAusIMM	Fellow of the AusIMM
Fe	The chemical symbol for iron
FS	feasibility study report
g	gram(s)
g/t	gram(s) per tonne
GPS	global positioning system
GRG	gravity recoverable gold
ha	hectare(s)
HKEx or the Stock Exchange	The Stock Exchange of Hong Kong Limited
HQ core	core diameter of 63.5mm
POX	concentrate pressure oxidation
i.e.	id Est (= that is)
ID5	inverse distance power of 5
IFC	International Finance Corporation
Indicated Mineral Resource	An Indicated Mineral Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	An Inferred Mineral Resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
Intertek	Intertek Laboratory in Beijing
IP	Induced Polarisation, which is an exploration technique whereby an electrical current is pulsed through the ground and the response from the sub surface measured in order to identify minerals of interest. Strong IP responses may be a result of sulphide which may be associated with gold mineralisation
[**REDACTED**]	[**REDACTED**]
IRR	internal rate of return
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition, as published by the Joint Ore Reserves Committee.
JORC Committee	Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
kg	kilogram(s), equivalent to 1,000 grams
kg/t	kilogram(s) per tonne
km	kilometre(s), equivalent to 1,000 metres
km^2	square kilometre(s)
kt	Thousand tonne(s)
ktpa	Thousand tonne(s) per annum
kV	kilovolt(s)
kW	kilowatt(s)
kWh/t	kilowatt(s) hour per tonne
Laos	Lao People's Democratic Republic

Abbreviation	Terminology
L×B×H	length × breadth × height
LHD	load-haul-dump machine
LoM	life of mine
LXML	Lane Xang Minerals Limited Company, a subsidiary of Chifeng Gold
m	meter(s)
M	Million(s)
m ASL	meter(s) above sea level
M.Eng.	Master of Engineering
M.Sc.	Master of Science
m/kt	meter(s) per kilo tonne
m^2	square metre(s)
m^3	cubic metre(s)
m^3/d	cubic meter(s) per day
m^3/s	cubic meter(s) per second
m^3/t	cubic meter(s) per tonne
m^3/year	cubic meter(s) per year
MAusIMM	Member of the AusIMM
Measured Mineral Resource	A Measured Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes
Mineral Resources	A concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction, as defined in JORC Code. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge
mg/l	milligram(s) per litre
mg/m^3	milligram(s) per cubic metre
mm	millimetre(s)
Mn	The chemical symbol for manganese
Mo	The chemical symbol for molybdenum
Moz	Million ounce(s)
Projects	Sepon Gold and Copper Projects
Mr.	Mister
Mt	Million tonne(s)
Mtpa	Million tonne(s) per annum
MW	Megawatt(s), equivalent to 1,000,000 watts
NCF	net cash flow
Ni	The chemical symbol for nickel
NPV	net present value
NQ core	core diameter of 47.6mm
O.K.	Ordinary Kriging
OHS	occupational health and safety
Opex	operating cost
Ore Reserves	The economically mineable part of a Measured and/or Indicated mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out including consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal,

Abbreviation	Terminology
	environmental, social and government factors, as defined in the JORC definition standards. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves
oz	Ounce
Pb	The chemical symbol for lead
pH	hydrogen ion concentration
Ph.D.	Doctor of Philosophy
ppb	part(s) per billion
PRC	People's Republic of China
Probable Ore Reserve	A Probable Ore Reserve is the economically mineable part of an Indicated, and in some circumstances Measured Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out including consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Proved Ore Reserve (or Proved Ore Reserve)	A Proved Ore Reserve is the economically mineable part of a Measured Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
QA/QC	Quality Assurance / Quality Control
QMS	Quality Management System
Report	Competent Person's Report
RMB	Renminbi, which is the official currency of the People's Republic of China.
RMB/a	RMB per annum
RMB/g	RMB per gram
ROM	run-of-mine
RTK	real-time kinematic
S	The chemical symbol for sulphur
SBX	Sodium butyl xanthate
SD	standard deviations
SG	specific gravity
SRK	SRK Consulting China Ltd trading as SRK Consulting
t	tonne(s), equivalent to 1,000kg
t/h	tonne(s) per hour
t/m^3	tonne(s) per cubic meter
TFe	Total iron, including magnetic and non-magnetic iron
tpa	tonne(s) per annum
tpd	tonne(s) per day
tph	tonne(s) per hour
TSF	tailings storage facility
TSX	Toronto Stock Exchange
USD	United States Dollar
V	The chemical symbol for vanadium

Abbreviation	Terminology
Valmin Code	Australian Code for Public Reporting of Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities used in Independent Expert Reports
VAT	value-added tax
WRD	waste rock dump
WSCP	Water and Soil Conservation Plan
Zn	The chemical symbol for zinc
µm	micron(s), 1/1,000 of a millimetre

Executive Summary

SRK Consulting China Ltd.("**SRK**") was requested by Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**" or the "**Client**") to prepare a Competent Person's Report ("**CPR**" or the "**Report**") for its Sepon Gold and Copper Projects (the "the **Projects**") located in Savannakhet Province, Lao People's Democratic Republic ("**Laos**") in accordance with guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("**JORC Code (2012)**") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**HKEx**"), including the Chapter 18 requirements (Appendix C), Chapter 2.6 of the Guide for New Listing Applicants (Appendix D) and other relevant regulations of the Exchange and Hong Kong Exchanges and Clearing Ltd ("HKEx"). The projects include exploration licenses, mining licenses, currently operating open-pit mines, and associated ore processing and metallurgic plants, as well as an underground mine, and various defined deposits with gold, copper and rare earth elements ("**REE**") mineral resources (the REE project will be reported in a separate report). The projects are currently operated by Lane Xang Minerals Limited Company ("**LXML**"), which is a subsidiary of Chifeng Gold.

This Report consists of an independent review of the geology, exploration, mineral resources, Ore Reserves, mining, mineral processing and smelter-refinery, capital investment, operating cost, and environmental and social aspects of the Projects.

Outline of Work Program

The geological models for the Projects were constructed and provided to SRK by Chifeng Gold. In SRK's opinion, the geological models are a reasonable representation of the distribution of the targeted mineralisation at the current level of sampling. The models were reviewed and updated by SRK from December 2022 to January 2023, as well as in January and June 2024.

Based on the Mineral Resource statements and models and the studies and mine designs provided by LXML and third parties, SRK rescheduled the production profile and converted parts of the Mineral Resources into Ore Reserves.

During the period from 9 December 2022 to 14 December 2022, SRK's personnel conducted site visits to the Sepon Project, inspected and observed the status of the operation at that time, held meetings with the managements and technical personnel of LXML, sighted geology, exploration, mineralization, mining operation, ore processing and metallurgic operation, as well as their own data verification programs. SRK team also conducted additional site visits in December 2023 and May 2024, respectively, inspecting mining, ore processing and smelter, and environmental and social aspects.

SRK team reviewed the information provided by LXML, and compiled a technical report according to JORC (2012) technical report form, and submitted it to the client for comments in January 2023, and late submitted a memo of updating Mineral Resources and Ore Reserves as of 31December 2023.

From May to June 2024, SRK further conducted site visits, and updated the report as of 31 March 2024.

SRK will further revise the report based on the feedbacks from the client and related third parties, and will finalize it in the due course.

Results

Overall

The Sepon project area located in Savannakhet province, south-central Laos is an operating mine with open-pit and underground mining and facilities to process gold and copper ores to produce gold bars and cathode copper plates since 2003. After acquired the project in 2018, Chifeng Gold has conducted a lot of exploration programs to look for and define mineral resources to maintain the production and extend the mine life. As of 31 March 2024, by reviewing Sepon's exploration data and resource models, SRK reports the remaining mineral resources as classified as open-pitable gold, underground gold, and low grade copper as shown in Table ES- 1.

Table ES- 1: Summary of Remaining Mineral Resources of Sepon Project as of 31 March 2024

Type	Category	Tonnage (Kt)	Au (g/t)	Au (koz)	Cu (%)
Gold	Measured	302	7.78	76	-
	Indicated	8,618	3.93	1,090	-
	Mea+Ind	8,921	4.06	1,165	-
	Inferred	6,174	3.60	715	-
Low Grade Copper	Measured	-	-	-	-
	Indicated	4,868	-	-	1.41
	Inferred	2,078	-	-	1.71

Sepon mine's technical personnel conducted various studies and designed the mining production for the next few years to mine part of above resources. By reviewing Sepon mine's data and models, SRK reports the Ore Reserves as of 31 March 2024, classified as surface mining Gold and underground mining Gold, and surface mining Copper as shown in Table ES- 2.

Table ES- 2: Summary of Remaining Ore Reserves of Sepon Project as of 31 March 2024

Type	Sub-Type	Category	Tonnage (kt)	Au (g/t)	Cu (%)	Note
Surface mining	Open-pit Gold	Proved	38	1.19	-	Included in Resources
		Probable	2,853	2.18	-	
		Total	**2,891**	**2.17**		
	Stockpile Gold	Proved	-	-	-	Included in resources
		Probable	2,703	2.34	-	
	Stockpile Copper	Proved	-	-	-	
		Probable	1,638	-	0.95	
Underground Mining Gold		Proved	257	5.25		Included in Resources
		Probable	3,493	4.18	-	
		Total	**3,750**	**4.26**	**-**	

SRK reviewed the production schedule planned by Sepon mine, including three years of surface mining and seven years of underground mining, as well as processing, and the economic parameters proposed by the Sepon mine, such as capital expenditures ("**Capex"**) and operating expenses ("**Opex**") in next few years. By using the parameters and the products' prices forecasted by SRK, SRK conducted an economic analysis by using discount cashflow method ("**DCF**"), and the analytical results show that the operations of surface mining and underground mining as well as processing are economically viable without considering recovering the sunken capital invested.

Operational Licenses and Permits

SRK has sighted the business license and mining license. The land use is mainly governed by a Mineral Exploration and Production Agreement ("MEPA") concession from the Lao Government, combined with land compensation with the communities impacted by the Project. The Company has compensated the impacted residents entitled for the land use accordingly.

Property Description and Ownership

LXML possesses a mining permit with a total area of 116.96 km^2, that is valid till 29 September 2033. According to the Company, additional mining licensed area of 17.65 km^2 has been extended, and therefore the total mining license area has been increased from 99.31 km^2 to 116.96 km^2. LXML possesses an exploration permit with a total area of 1,010.40 km^2, that is valid till June 2026. The exploration permit consists of 32 inflection points.

Geology and Mineralization

Mineralization styles of the Sepon district can be classified as an intrusion-centred hydrothermal system with the majority of known Cu and Au mineralization spatially associated with the Padan and Thengkham porphyry centres. Mineralisation typically displays a zoned pattern in both mineralization type and metal content. Porphyry Mo-Cu systems occur at the core zoning outward through skarn and carbonate replacement Cu deposits to the Au dominated sediment-hosted systems which show Carlin type of deposit characteristics. Pb-Zn mineralization occurs distal to the porphyry's contact metamorphic aureole in a sediment-hosted setting, though a genetic link is yet to be confirmed.

Three major controls on the distribution of gold and copper mineralization in the Sepon Basin have been identified. The primary control is understood to be the porphyry centres around which there is a metal zonation. Secondary control is the structural architecture (faults and folds). In the case of Au mineralisation there seems to be a strong (third order) lithological control where gold dominantly occurs along or close to the Nalou-Discovery formation contact which acts as a favourable receptive region.

Exploration Status

The first campaign was greenfields exploration drilling. This drilling was completed by RTZ during the 1990s. Oxiana continued to use the drilling and sampling protocols developed by RTZ after acquiring the project.

In May 2006 the Sepon site adopted a policy of requiring no wet RC drilling of mineralised zones. If wet RC sample was encountered the hole was stopped. A total of 1,321,787m of diamond drilling ("DD") and reverse circulation ("RC") drilling data are contained in the resource database. Of this, 85% is geologically logged, and 98% of sampled intervals contain gold and copper assays (15% of the RC data were assayed but not logged).

Only samples within the mineralisation or geological domains are used in the estimations. A total of 1503 diamond holes (100,582.5m), 2,840RC drill holes (170,825.6m) and 13,661 grade control RC holes (202,618.3m) were used to create the Nalou block model.

A total of 1,022 DD (117,495m), 2,3732 RC (no Grade Control) (175,499.2m) RC drill holes and 45,635 RC Grade Control holes (764,831.8m) for a total of 1,057,826m were used to create the Discovery region block model.

After Chifeng Gold took over the Sepon project, the exploration programs focused on discovering new gold deposits in brownfields to supply the processing plant and keep on the production, as well as discovering new types of mineralization in greenfields.

Mineral Resource and Estimates

SRK has used the datasets made available by LXML, as well as the findings from the previous Mineral Resource Technical Report from LXML. The basic model was prepared by LXML in Vulcan and leapfrog using conventional 3D block modelling and OK estimation techniques. SRK reviewed the process of grade interpolation in historical reports. Based on the current stope topography in March 2024, SRK reported the Mineral Resource within the open pit and underground.

The Sepon gold and copper deposits possess the Mineral Resources as shown in Table ES- 3 gold, in Table ES- 4 for the copper mineral resources.

Table ES- 3: Sepon Gold Mineral Resources as of 31 March 2024 [1]

Type	Category	Tonnage (kt)[2]	Au (g/t)	Au (t)	Au (koz)[2]
Oxide	Measured	36	1.18	0.04	1
	Indicated	2,355	1.56	3.68	118
	MES+IND[3]	2,391	1.56	3.72	120
	Inferred	3,006	1.49	4.49	144
Primary	Measured	267	8.66	2.31	74
	Indicated	6,263	4.82	30.21	971
	MES+IND[3]	6,530	4.98	32.53	1,046
	Inferred	3,168	5.61	17.76	571
Total	Measured	302	7.78	2.35	76
	Indicated	8,618	3.93	33.90	1,090
	MES+IND[3]	8,921	4.06	36.25	1,165
	Inferred	6,174	3.60	22.25	715

Sources: SRK

Notes:

[1] The information relates to Mineral Resource conversion is based on information compiled by Mr. Liang Li, MAusIMM, and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Li have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in JORC (2012). Dr Xu supervised the work of Mr. Li. Both Dr Xu and Mr. Li consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] MES+IND: combined measured and Indicated Mineral Resource.

[4] The cut-off grade depends on ore type (Otyp) and mining method. For open pit mining and gold stockpiles, the cut-off grade of oxide ores is 0.6 g/t, the cut-off grade of primary ores is 1.5 g/t. For Underground mining, the cut-off grade of primary ores is 2.3 g/t.

Table ES- 4: Mineral Resource Estimate of Total Copper, as of 31 March 2024 [1]

Type	Category	Tonnage (kt)[2]	Cu (%)	Cu (kt)[2]

Oxide	Measured	-	-	-
	Indicated	1,819	0.94	17.17
	MES+IND[3]	1,819	0.94	17.17
	Inferred	856	1.89	16.18
Primary	Measured	-	-	-
	Indicated	3,049	1.69	51.47
	MES+IND[3]	3,049	1.69	51.47
	Inferred	1,222	1.59	19.37
Total	Measured	-	-	-
	Indicated	4,868	1.41	68.63
	MES+IND[3]	4,868	1.41	68.63
	Inferred	2,078	1.71	35.55

Sources: SRK

Notes:

[1] The information relates to Mineral Resource conversion is based on information compiled by Mr. Liang Li, MAusIMM, and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Li have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in JORC (2012). Dr Xu supervised the work of Mr. Li. Both Dr Xu and Mr. Li consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] MES+IND: combined measured and Indicated, Mineral Resource.

[4] The cut-off grade depends on ore type (Otyp) and mining method. For open pit mining and copper stockpiles, the cut-off grade of oxide ores is 0.7% Cu, the cut-off grade of primary ores is 0.3% Cu. For Underground mining, the cut-off grade of primary oxide ores is 0.8% Cu.

Ore Reserve Estimates

The gold deposits that are being or to be exploited include DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, Far West Area (Including MAI OP, NON OP, NKN OP), DSE UG, DSW UG. The copper deposits that are being or to be exploited include KHN UG, TKM OPs.

Among these gold and copper deposits, only DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, DSE UG, and KHN UG possess Measured and Indicated Mineral Resources. Additionally, KHN UG is currently in the re-feasibility study stage. Consequently, open-pit gold mines including DSE OP, DSW OP, NLU OP, NMK OP, and SKM OP could be converted to Ore Reserves from their Mineral Resources. For underground gold mines, only DSE UG would be considered for estimating Ore Reserves. None of the copper deposits would be considered for estimating Ore Reserves.

SRK was provided with the SGPS revised on 18 March 2020. Mineral resource models, final open pit designs and underground mining study have been updated by LXML since completion of SGPS. The changes make it necessary relying on both SGPS and updates to estimate Ore Reserves.

The updated block models were applied by SRK to estimate mineable materials. The updated open pit designs have been applied by the LXML to guide mining boundaries for open pit mining. It is technically feasible to report Ore Reserves in Table ES- 5 for open pit mining (gold).

Table ES- 5: Ore Reserve Statement for Open Pit Mining, as of 31 March 2024 [1, 3, 4]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
DSE OP					
Oxide	Proved	-	-	-	-
	Probable	569	1.54	0.87	28

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
	Sub-total [2]	569	1.54	0.87	28
Primary	Proved	-	-	-	-
	Probable	-	-	-	-
	Sub-total [2]	-	-	-	-
Total [2]	Proved	-	-	-	-
	Probable	569	1.54	0.87	28
	Total	569	1.54	0.87	28
DSW OP					
Oxide	Proved	-	-	-	-
	Probable	17	1.08	0.02	1
	Sub-total[2]	17	1.08	0.02	1
Primary	Proved	-	-	-	-
	Probable	71	4.66	0.33	11
	Sub-total [2]	71	4.66	0.33	11
Total [2]	Proved	-	-		-
	Probable	88	3.98	0.35	11
	Total	88	3.98	0.35	11
NMK OP					
Oxide	Proved	36	1.09	0.04	1
	Probable	1,272	1.35	1.72	55
	Sub-total[2]	1,308	1.34	1.76	56
Primary	Proved	1	2.57	0.003	0.1
	Probable	270	3.17	0.86	27
	Sub-total [2]	271	3.17	0.86	28
Total [2]	Proved	37	1.14	0.04	1
	Probable	1,542	1.67	2.57	83
	Total	1,579	1.66	2.61	84
NLU OP					
Oxide	Proved	-	-	-	-
	Probable	73	1.17	0.09	3
	Sub-total[2]	73	1.17	0.09	3
Primary	Proved	1	3.44	0.003	0.1
	Probable	532	4.24	2.26	73
	Sub-total [2]	533	4.24	2.26	73
Total [2]	Proved	1	3.44	0.003	0.1
	Probable	605	3.87	2.34	75
	Total	606	3.87	2.34	75
SKM OP					
Oxide	Proved	-	-	-	-
	Probable	48	1.88	0.09	3
	Sub-total [2]	48	1.88	0.09	3
Primary	Proved	-	-	-	-
	Probable	0.5	2.39	0.001	0.04
	Sub-total [2]	0.5	2.39	0.001	0.04
Total [2]	Proved	-	-		-
	Probable	49	1.89	0.09	3
	Total	49	1.89	0.09	3
Grand total					
Oxide	Proved	36	1.09	0.04	1
	Probable	1,979	1.41	2.79	90
	Sub-total [2]	2,016	1.40	2.82	91
Primary	Proved	2	2.93	0.01	0.2
	Probable	873	3.94	3.44	111
	Sub-total [2]	875	3.94	3.45	111
Total [2]	Proved	38	1.19	0.05	1
	Probable	2,853	2.18	6.23	200
	Total	2,891	2.17	6.28	202

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Mr. Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Mr. Lu, Mr. Wu and Dr Xu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr. Wu is undertaking to qualify as Competent Person as defined in JORC (2012). Mr. Wu and Dr Xu supervised the work of Mr. Lu. Mr. Wu, Mr. Lu and Dr Xu consent to the reporting of this information in the form and context in which it appears. Totals may not add due to rounding discrepancies.

[2] Mining dilution is 7.5% and mining loss is 5%.

[3] The Ore Reserves in the table are included in the Mineral Resources. They should not be added to the Mineral Resources.

Besides of deposits being or to be exploited, there are stockpiles on site for buffering and supplying ores to the processing plant. Probable Ore Reserves were reported for those available stockpiles with detailed and good tracking records. The results are shown in Table ES- 6 and Table ES- 7.

Table ES- 6: Ore Reserve Statement of Gold Stockpiles, as of 31 March 2024 [1, 2,3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
	Probable	361	1.91	0.69	22
	Sub-total [2]	361	1.91	0.69	22
Primary	Proved	-	-	-	-
	Probable	2,341	2.40	5.63	181
	Sub-total [2]	2,341	2.40	5.63	181
Total [2]	Proved	-	-	-	-
	Probable	2,703	2.34	6.32	203
	Total	2,703	2.34	6.32	203

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Mr. Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Mr. Lu, Mr. Wu and Dr Xu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr. Wu is undertaking to qualify as Competent Person as defined in JORC (2012). Mr. Wu and Dr Xu supervised the work of Mr. Lu. Mr. Wu, Mr. Lu and Dr Xu consent to the reporting of this information in the form and context in which it appears. Totals may not add due to rounding discrepancies.

[2] By reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

[3] The Ore Reserves in the table are included in the Mineral Resources. They should not be added to the Mineral Resources.

Table ES- 7: Ore Reserve Statement of Copper Stockpiles, as of 31 March 2024 [1, 2,3]

Type	Category	Tonnage (kt)	Copper Grade (%)	Copper Content (kt)
Oxide	Proved	-	-	-
	Probable	1,638	0.95	15.48
	Sub-total [2]	1,638	0.95	15.48
Primary	Proved	-	-	-
	Probable	-	-	-
	Sub-total [2]	-	-	-
Total [2]	Proved	-	-	-
	Probable	1,638	0.95	15.48

Type	Category	Tonnage (kt)	Copper Grade (%)	Copper Content (kt)
	Total	1,638	0.95	15.48

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Mr. Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Mr. Lu, Mr. Wu and Dr Xu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr. Wu is undertaking to qualify as Competent Person as defined in JORC (2012). Mr. Wu and Dr Xu supervised the work of Mr. Lu. Mr. Wu, Mr. Lu and Dr Xu consent to the reporting of this information in the form and context in which it appears. Totals may not add due to rounding discrepancies.

[2] By reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

[3] The Ore Reserves in the table are included in the Mineral Resources. They should not be added to the Mineral Resources.

Underground mining is new to LXML. It is located beside of DSE OP, and its decline access is built at the DSE OP. Ore Reserves in Table ES- 8 is for underground mining (gold).

Table ES- 8: Ore Reserve Statement of Underground Gold Mining, as of 31 March 2024 [1, 2, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
	Probable	-	-	-	-
	Sub-total [2]	-	-	-	-
Primary	Proved	257	5.25	1.35	43
	Probable	3,493	4.18	14.62	470
	Sub-total [2]	3,750	4.26	15.97	513
Total [2]	Proved	257	5.25	1.35	43
	Probable	3,493	4.18	14.62	470
	Total	3,750	4.26	15.97	513

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Mr. Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Mr. Lu, Mr. Wu and Dr Xu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr. Wu is undertaking to qualify as Competent Person as defined in JORC (2012). Mr. Wu and Dr Xu supervised the work of Mr. Lu. Mr. Wu, Mr. Lu and Dr Xu consent to the reporting of this information in the form and context in which it appears.

[2] Totals may not add due to rounding discrepancies.

[3] Modifying factors discussed in Section 11.5.4 has been applied to Ore Reserves estimation.

[4] The Ore Reserves in the table are included in the Mineral Resources. They should not be added to the Mineral Resources.

Surface Mining

Historically, LXML (LXML Sepon) used to be an operational open-pit gold and copper mine. In 1992, Rio Tinto discovered Sepon. In 1999, Rio Tinto sold an 80% option over Sepon to Oxiana. In 2004, Oxiana bought Rio's remaining 20% stake in Sepon. In 2008, Oxiana merged with Zinifex to form OZ Minerals. In 2010, MMG acquired Sepon from OZ Minerals. In 2018, Chifeng acquired LXML (LXML Sepon) from MMG.

As for gold and copper operations:

- Gold production commenced in 2003 but ceased in 2013 due to price fluctuations and other factors. In 2020, gold operations resumed. Construction of the underground mine commenced in April 2022 at DSE UG, and the first gold ore was transported to the surface in 2023. Since then, the gold operation has transitioned to a combination of open-pit and underground mining.
- Copper production began in 2005, and in 2021, LXML ceased open-pit copper mining operations. Since then, the copper processing plant has only processed oxide copper stockpiles.

As of 31 March 2024, the gold deposits that are being or to be exploited include DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, Far West Area (Including MAI OP, NON OP, NKN OP), DSE UG, DSW UG. The copper deposits that are to be exploited include KHN UG, TKM OPs.

In addition to these deposits, there are dozens of stockpiles on site to supply (tonnes & grade) gold and oxide copper ore feed to the processing plant.

The overall capacity of the gold plant is 3.8 Mtpa. Historical production data of the copper plant shows that 0.5 to 1.3 Mtpa oxide copper ore were processed. SRK noted that the actual gold mining capacity of ore was 4.2 Mtpa, 3.8 Mtpa and 2.5Mtpa for 2021 to 2023, of which the year in 2021 was greater than 3.8 Mtpa . Excess ore were stored in the gold ore stockpile.

The conventional mining cycle, comprising drilling, blasting, loading, and hauling, are employed for the extraction of ore and waste rocks. The mining operations were conducted on flitches with a height of 2.5 meters. Based on SRK's review, the open-pit mining is expected to be completed in the near future, approximately within three years.

The final open-pit designs have been applied by LXML to guide mining boundaries. The mining cycle and management have been practiced for a long time. SRK considers that no significant risks will be encountered for the open-pit mining in the future.

Underground Mining

DSE UG is designed as an underground mine to extend mine life. A mining study at scoping level contained in Sepon Gold Project Study ("SGPS") is available to date. The mining capacity proposed by LXML is about 650 – 710 ktpa.

In SGPS, the proposed mining methods in the DSE UG include long-hole stoping with cemented backfill (LHSB), long-hole stoping with pillars (LHSP), and post pillar cut and fill (PPCA).

Construction of the underground mine commenced in April 2022 at DSE UG as mentioned before. As of March 31, 2024, SRK was provided with revised ventilation designs and underground designs by LXML.

SRK re-ran the stope optimization based on LHSB, as selected by LXML, then applied modifying factors and prepared the production schedule based on a review of LXML's data. SRK notes that LHSB has been widely practiced globally and is technically feasible.

Production Schedule

Production schedule prepared by SRK based on gold and copper minerals are shown in Table ES-9.

Table ES-9: Production Schedule of LXML

Type	Unit	Total	2024	2025	2026	2027	2028	2029	2030
Gold Production									
Open pit mining									
Ore tonnage	kt	2,891	1,641	829	421	-	-	-	-
Au grade	g/t	2.17	2.11	1.66	3.43	-	-	-	-
Au metal	kg	6,275	3,459	1,372	1,444	-	-	-	-
Waste tonnage	kt	19,509	9,909	3,180	6,420	-	-	-	-
Stockpile rehandling									
Ore tonnage	kt	2,703	436	1,230	1,036	-	-	-	-
Au grade	g/t	2.34	2.34	2.34	2.34	-	-	-	-
Au metal	kg	6,322	1,021	2,878	2,423	-	-	-	-
Underground mining									
Ore tonnage	kt	3,750	465	744	793	770	546	402	31
Au grade	g/t	4.26	4.37	4.94	4.53	3.61	3.81	4.25	3.21
Au metal	kg	15,961	2,031	3,676	3,592	2,774	2,082	1,705	101
Copper Production									
Stockpile rehandling									
Ore tonnage	kt	1,638	899	738	-	-	-	-	-
Cu grade	%	0.95	0.95	0.95	-	-	-	-	-
Cu metal	kt	15	8	7	-	-	-	-	-

Sources: SRK

Mineral Processing Testing and Recovery Method

Flotation and concentrate pressure oxidation ("POX") and carbon in leach ("CIL") process are applied to primary gold ore, while CIL is applied to oxide gold ore to recovery gold. The final product is Gold Doré. The overall capacity of the Sepon Gold Plant is 3.8 Mtpa, including a primary/transition ores capacity of 2.2 Mtpa and an oxide ore capacity of 1.6 Mtpa. In the past three years, the oxide ore throughput varied between 1.0 and 1.5 Mtpa, with gold recovery ranging from 51.8% to 68.9%. The primary ore throughput is from 1.9 to 2.1 Mtpa, with gold recovery ranging from 55% to 67%. Yearly gold production exceeds 6 tonnage. Although most of the facilities and equipment of the gold plant were reformed from the ex-service copper plant, historical production proves it to be practicable.

The copper ore processing facility includes a traditional agitation leaching plant and a heap leaching operation. The mixed ore is crushed and washed, the undersized is agitation leached after milling and then goes to counter current decantation ("CCD") for the separation of pregnant leach solution ("PLS") and residue. The oversized ore is stacked on pad for heap leaching. The pregnant solutions from agitation leach and heap leach are merged for solvent extraction and electrowinning ("SX/EW"), producing cathode copper plates. The integrated copper recovery is greatly influenced by the ore grade. Historical production data of the copper plant shows that 0.5 to 1.3 Mtpa oxide copper ore are processed; with cathode copper production around 6,000 tpa, and copper recovery varying from 50% to 78%. An overall recovery rate of 65% is recommended by SRK as a parameter for subsequent deposit evaluation and economic analysis, considering the long heap leach cycle.

Low grade primary copper ore is amenable to the flotation process. Flotation tests indicated that copper recovery of 83% to 89%, with concentrate grade of 18% to 24%, can be achieved using the conventional flotation process. A Proof-of-Concept study has been completed for the purpose of

primary copper resource development. By using the existing facilities of the current gold plant and a throughput of 7.5 Mtpa, the NPV is negative. The break-even price is USD9,119 per tonne of copper. The primary copper resource development requires a higher copper price and reliable resource volume. A detailed feasibility study is recommended in due course.

Environmental and Social Aspects

The sources of environmental risk are project activities that may result in potential environmental impacts. These project activities have been previously described within this report. In summary, the most significant potential environmental and social risks for the development of the Project, currently identified as part of the project assessment and this SRK review, are:

- TSF seepage pollution
- Fugitive dust pollution; and
- Deficit mine closure fund.

Capital Expenditures and Operating Expenses

LXML has about 21 years of production history since 2003. Capital expenditures ("Capex") for construction of the mines, ore processing plants, on-site facilities etc. had been invested in the past.

LXML has made a plan for further Capex in next three years. SRK has developed a unit sustaining capital forecast based on the average expenditures for the years 2022 and 2023. Table ES- 10 summarises the three Capex needed for the Sepon Project as proposed by LXML with SRK's assumption for further sustaining capital.

Table ES- 10: Further Capex needed for LXML

Item	Unit	2024	2025	2026	2027	2028	2029	2030
Growth	USD million	36.8	23.6	17.2				
Exploration	USD million	7.8	8.3	8.0				
Sustain	USD million	13.9	18.1	11.4	2.7	1.9	1.4	0.1
Total	USD million	58.6	50.1	36.6	2.7	1.9	1.4	0.1

Sources: LXML and SRK's Forecast

During the economic analysis, non-current assets will be considered for amortization and depreciation. Together with further Capex, they will adhere to the amortization and depreciation rates as proposed in Table 18-2. It is reasonable to expect that the operation of the Sepon project will be extended with further exploration and feasibility studies, the mine closure fees and the residual value of the project will not be considered in the economic projection.

SRK was provided with production and financial records for three year of 2021, 2022, and 2023, 1Q2024 and summaries of historical production costs in various cost centres. ES-12 summarizes the unit operating costs.

Table ES-11: Unit Operating Costs in 2021, 2022, 2023 and 1Q2024

Item	Unit	2021	2022	2023	1Q2024
Open pit mining					
OP Mining	USD/Ore&Waste	3.1	3.0	2.7	3.2
OP Mining	USD/mined ton	29.7	29.3	37.1	25.0
Underground mining					
UG Mining	USD/mined ton	-	-	28.8	49.2
Processing					
Processing Oxide Gold	USD/milled ton	17.1	18.5	16.9	11.0
Processing Primary Gold	USD/milled ton	62.1	69.7	56.6	54.3
Processing Gold	USD/milled ton	43.3	48.3	44.1	40.4
Processing Copper	USD/milled ton	47.6	36.0	23.0	18.4
General & Administration					
G&A	USD/milled ton	20.4	9.0	9.8	9.1

Sources: LXML

Table ES-12 presents the operating costs forecast.

Table ES-12: Operating Cost Forecast

Item	Unit	2024	2025	2026	2027	2028	2029	2030
Gold Operation (unit cost)								
OP mining (Ore & Waste)	USD/mined ton	3.0	3.0	3.0	-	-	-	-
UG mining (Ore)	USD/mined ton	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Processing	USD/milled ton	45.0	45.0	45.0	45.0	45.0	45.0	45.0
G&A	USD/milled ton	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Gold Operation (total cost)								
OP Mining	USD million	16.3	26.0	27.7	26.9	19.1	14.1	1.1
UG Mining	USD million	20.9	33.5	35.7	34.6	24.6	18.1	1.4
Processing	USD million	4.2	6.7	7.1	6.9	4.9	3.6	0.3
G&A	USD million	41.4	66.2	70.6	68.5	48.6	35.7	2.8
Copper Operation (unit cost)								
Processing Copper	USD/milled ton	35.0	35.0	-	-	-	-	-
Copper Operation (total cost)								
Processing	USD million	31.5	25.8	-	-	-	-	-
G&A	USD million	8.1	6.6	-	-	-	-	-
Total Opex	USD million	227.8	221.9	169.7	68.5	48.6	35.7	2.8

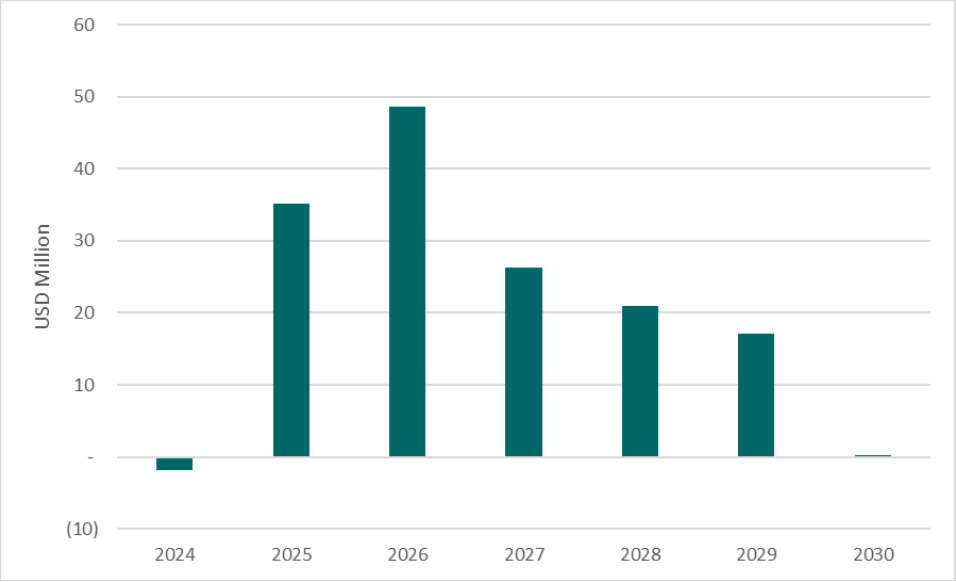
Sources: SRK

Economic Analysis

Based on the information provided by LXML, SRK's preliminary review and analysis indicate that LXML still has about three years of surface gold mining (including open-pit and stockpile rehandling) and surface copper mining (stockpile rehandling only), and seven years of underground gold operation.

Figure ES- 1 shows the annual net cash flow for LXML.

Figure ES- 1: Annual Net Cash Flow for LXML



Sources: SRK

Based on the parameters reviewed and summarized in the report, an economic analysis indicates that the overall operation will have a NPV ranging from USD 111.6 million (at a discount rate of 8%) to USD 98.4 million (at a discount rate of 12%), and USD 104.7 million at the base case (at a discount rate of 10%).

A risk analysis shows that when the gold' prices decrease about 16%, and the Opex increases about 22%, the NPV of the project will be negative..

Project Risk Analysis

Mining is a relatively high-risk industry. In general, the risk may be expected to decrease from exploration, development, through to production stage. The Sepon Project is a production project. Risks exist in different areas. SRK considered various technical aspects which may affect the feasibility and future cash flow of the Project, and conducted a qualitative risk analysis which has been summarised in Table ES-13.

Table ES-13: Project Risk Assessment of the Sepon Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Lack of Significant Ore Reserves	Possible	Major	High
Unexpected Groundwater Ingress	Unlikely	Minor	Low
Mining			
Significant Production Shortfalls	Unlikely	Major	Medium
Significant Geological Structure	Possible	Minor	Low
Excessive Surface Subsidence	Unlikely	Minor	Low
Poor Ground Conditions	Possible	Moderate	Medium
Ore Processing			
Lower Recovery	Unlikely	Moderate	Low
High Production Cost	Possible	Minor	Low
Poor Plant Reliability	Unlikely	Minor	Low
Capital and Operating Costs			
Project Timing Delays	Possible	Minor	Low
Capital Cost Increases	Unlikely	Minor	Low
Operating Cost Underestimated	Likely	Minor	Medium
High mine closure cost	Likely	Moderate	High
Environmental, Social and Permitting			
Impact to the ecological system	Possible	Moderate	Medium
Poor waste rock management	Possible	Moderate	Medium
Poor hazardous substances management	Possible	Minor	Low
Dust Pollution	Possible	Minor	Low
Renewal of mining licence	Unlikely	Major	Medium

Two high risks of the project are "Lack of significant Ore Reserves" and "High mine closure cost". To manage the risks, SRK recommends the Company should further conduct feasibility studies to develop currently available mineral resources in order to extend the mine life of the project, as well as proactively manage the environmental and mine closure issues during the production, in order to reduce the high mine closure cost at the end of the mine.

1 Introduction and Terms of Reference

SRK Consulting China Ltd. ("**SRK**") was requested by Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**" or the "**Client**") to prepare a Competent Person's Report ("**CPR**" or the "**Report**") for its Sepon Gold and Copper Projects (the "**the Projects**") located in Savannakhet Province, Lao People's Republic ("**Laos**") in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("**JORC Code (2012)**") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**HKEx**"), including the Chapter 18 requirements (Appendix C), Chapter 2.6 of the Guide for New Listing Applicants (Appendix D) and other relevant regulations of the Exchange and Hong Kong Exchanges and Clearing Ltd ("HKEx").

The projects include exploration licenses, mining licenses, currently operating open-pit mines, and associated ore processing metallurgic plants, as well as an underground mine in development, and various defined deposits with gold, copper and rare earth elements ("**REE**") mineral resources. The projects are currently operated by Lane Xang Minerals Limited Company ("**LXML**"), which is 90% owned by Chifeng Gold, and 10% owned by Laos government.

1.1 Scope of Work

The scope of work, as defined in letters of engagement executed in November 2022 and May 2024 between Chifeng Gold and SRK, includes the review/updating of mineral resource models for the gold and copper mineralisation, and review the REE mineralization, delineated on the Projects and preparation of a CPR in compliance with JORC (2012) and the [**REDACTED**] requirements of the HKEx. This work involved the assessment of the following aspects of the Projects.

- Regional, local and mine geology
- Exploration history, quality and independent data verification
- Geological modelling, mineral resource estimation and validation
- Mining assessment
- Processing and mineral recovery, smelter and refinery
- Environmental and social
- Operating and capital costs; and economic analysis
- Preparation of a Mineral Resource Statement and a Ore Reserve Statement
- Recommendations for additional work

1.2 Work Program

The mineral resource statement reported herein is a collaborative effort between Chifeng Gold/LXML and SRK personnel. The exploration database was compiled and maintained by Chifeng Gold/LXML, and was audited by SRK. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralization at the current level of sampling. The geostatistical analysis, variography and grade models were completed by SRK during the months from December 2022 to January 2023.

The Mineral Resource Statement reported herein was prepared in conformity with the generally accepted CIM Exploration Best Practices Guidelines and CIM Estimation of Mineral Resource and Ore Reserves Best Practices Guidelines. This technical report was prepared according to JORC (2012) and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**HKEx**").

The technical report was compiled in SRK China offices during the months from December 2022 and January 2023, and was updated from May to June 2024.

1.3 Basis of Technical Report

This report is based on information collected by SRK during site visits carried out between 8 and 14 December 2022, December 2024, and May 2024, and additional information provided by LXML throughout the course of SRK's investigations. SRK has no reason to doubt the reliability of the information provided by LXML. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with LXML and Sepon Mine personnel
- Inspection of the Sepon Gold and Copper Projects area, including outcrops and drill cores
- Review of exploration data collected by LXML
- Additional information obtained from public domain sources

This report has been prepared to accommodate the requirements of HKEx, and the Mineral Resources and Ore Reserves are reported according to the JORC Code (2012) which is binding upon all Australasian Institute of Mining and Metallurgy ("**AusIMM**") members.

1.4 Qualifications of SRK and SRK Team

SRK Consulting comprises over 1,700 professionals, offering expertise in a wide range of resource engineering disciplines. SRK's independence is ensured by the fact that it holds no equity in any projects and that its ownership rests solely with its staff. This fact permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Ore Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. SRK has also worked with a large number of major international mining companies and their projects, has provided mining industry consultancy service inputs.

The short bios of key SRK personnel are shown below:

Anshun Xu (Anson Xu), ***Ph.D., FAusIMM,*** is a Corporate Consultant (Geology) who specializes in the exploration of mineral deposits. He has more than 30 years' experience in exploration and development of various types of mineral deposits including Cu-Ni sulphide deposits related to ultra-basic rocks, tungsten and tin deposits, diamond deposits, and especially deep expertise in various types of gold deposits, including vein-type, fracture-breccia zone type, alteration type, and carlin type. He was responsible for the resource estimations of several diamond deposits, and for reviews of resource estimations of several gold deposits. He recently completed several due diligence jobs for clients from both China and overseas including technical review projects such as Canadian NI43-

101 reports and HKEx IPO technical reports. Dr. Xu was the Projects manager of this project and the Competent Person ("CP") who takes overall responsibility for this report.

Yingting (Tony) Guo. ***Ph.D., P. Geo. MMSA***, is a Professional Geoscientist and a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Canada (P. Geo), holding License Number 31257. He is also a Qualified Professional (QP) Member with special expertise in Geology and Ore Reserves from the Mining and Metallurgical Society of America (MMSA), holding Member Number 01472QP. Dr. Guo has extensive experience in precious metals exploration, mineral resource estimate, mining project PEA study as well JORC / 43-101 report preparation. He has worked and/or prepared NI43-101/JORC reports on more than 10 gold/copper projects including the Toromocho copper mine project from Chinalco in Peru; Jiama Copper-Gold mine project for China Gold International in Tibet, China. Vatukoula Gold project for Zhongrun Resources in Fiji. He has sufficient experience relevant to the style of Sepon gold/copper mineralization and deposit types under consideration to qualify as Competent Person, as defined in JORC code. He will be responsible for data verification, as well as reviewing on geology, exploration, resource estimate, and he visited the project site.

Liang Li, *MEng*. (Geology and Resources), is a Senior Geological Consultant at SRK China. Prior to joining SRK, he worked as a geologist for three different companies. He has gained lots of experiences and expertise in mine geology, grade control and optimization, resources/reserves management. He is also very familiar with the processes and principles to geological prospecting of metallic ore deposits in China. He gained lots of rules of thumb in mining, especially in resources/reserves estimation. In addition, he is proficient in digital modelling by using Surpac.

Yonggang Wu, (Mining and Reserves)，*M.Eng.*, is a Principle Consultant (Mining). He joined SRK after graduation from Jiangxi University of Science and Technology in 2007. He has acquired specialized knowledge of mining engineering, MineSight software and has been involved in various projects to date. He has worked on a wide range of commodities including Au, Ag, Pb, Zn, Mn, Cu, Fe, W, Sn, fluorite, potassium salts, alum, phosphorus, serpentine, and many more. He has accumulated extensive experience in mineral resource/ Ore Reserve estimation, pit limit optimization and design, underground mining design, long-term production planning, mining assessment, public facilities and infrastructures assessment and due diligence studies. Yonggang has expertise in geological and mining modelling and is proficient in using MineSight, Surpac, AutoCAD, and other specialized software packages. He has been involved in dozens of independent technical reports, due diligence reports and annual reports to provide [**REDACTED**], decision makers and shareholders with unbiased technical opinions.

Erwei Lu, *M.Eng.;* Consultant (Mining) at SRK China***,*** he obtained his bachelor's degree and master's degree in mining engineering from Central South University. He has over five years of practice of underground operation, and about one year's mineral project evaluation experience. He worked as an on-site mining engineer in Zambia for China Nonferrous Metal Mining (Group) Co., Ltd. after graduation in 2017. He also worked for an autonomous driving application and mineral project investment companies since 2022. He is familiar with large scale underground mobile equipment operation and training, long-hole blasting, mine design and scheduling, and production management, as well as autonomous driving application in open pit mine, and project evaluation.

Lanliang Niu, B.Eng., *MAusIMM*, is a Principal Consultant (Mineral Processing), who graduated in 1987 from Beijing University of Science and Technology majoring in ore processing. He has worked on the industrial testing of gold leaching with low grade ores, managed or participated in

processing and metallurgical testing for more than 10 precious and non-ferrous metals projects. With SRK, he has been responsible for the ore processing and metallurgical scope of work and involved in many key projects. Mr. Niu was responsible for the metallurgical and processing review.

Andy Li, PhD, *MAusIMM*, is a Principal Environmental Consultant with SRK Consulting China Ltd. Having graduated with a doctoral degree in Environmental Engineering from the Florida State University, he has over 12 years' experience in the environmental engineering field and has worked in various environmental projects in the USA, China, Mongolia, and a number of South Asian countries. He has particular expertise in environmental due diligence reviews, environmental compliance, and impact assessments for mining, mineral processing, refining, and smelting; in contaminated-site assessments and remedial design; in wetland and landfill rehabilitation; and in environmental-risk assessment. He also has extensive experience in water/wastewater treatment design, water distribution systems, and storm water management system design. Dr. Li was responsible for the environmental, permit, social and community review.

Yonglian Sun, *B.Eng. PhD, FAusIMM, FIEAust, CPEng*., is a Corporate Consultant and a Practice Leader of SRK China. Dr Sun has over 30 years' experience in geotechnical engineering and mining engineering in five countries across four continents. He also has extensive international experience in mining project evaluation for project financing and overseas stock market listings. Over the last decade, Dr Sun has led and coordinated dozens of due diligence projects for many mining companies and most of them have been successfully financed or listed on the HKEx. Dr Sun provided internal peer review to ensure the quality of the report meets the required standard.

Alex Thin, (Peer review), *BEng, FAusIMM, FIMMM, FSAIMMA*, Principal Consultant (Mining) at SRK China. He is an experienced mining professional with over 30 years' experience. His strategy and leadership experience spans feasibility studies, mineral asset audits and evaluations, independent technical reports, techno-economic studies, capital raising, merger and acquisitions, managing joint ventures, local and international stock exchange compliance, business development and investor/ stakeholder relations. Alex's industry experience spans operational (underground and open pit), technical, consulting and corporate within the metalliferous resources sector, covering precious metals, base metals and bulk commodities.

1.5 Site Visit

Dr. Anshun Xu and Dr. Yingting (Tony) Guo visited the Sepon Project during the period from 8 to 14 December 2022 accompanied by Mr. Paul Harris, Chairman of LXML, and other management and technical personnel of LXML In December 2023, Mr. Yonggang Wu, Mr. Liang Li, and Mr. Erwei Lu visited the project site; and In May 2024, Dr. Andy Li, Mr. Lanliang Niu and Mr. Erwei Lu also conducted a site visit to the project site for updating the technical report of the project.

The purpose of the site visits was to review the digitalization of the exploration database and validation procedures, review exploration procedures, define geological modelling procedures, examine drill core, interview project personnel, and collect all relevant information for the preparation of a revised mineral resource model and inspect the geology and mineralization of the projects, and observe the mining and processing operations. During the visit, a particular attention was given to the treatment and validation of historical drilling data.

SRK was given a full access to relevant data and conducted interviews with Sepon/LXML personnel to obtain information on the past exploration work, to understand procedures used to collect, record,

store and analyse historical and current exploration data, as well as operating issues and related data.

1.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by LXML personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

1.7 Declaration

SRK's opinion contained herein and effective as of **March 31, 2024**, is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Chifeng Gold/LXML, and neither SRK nor any affiliate has acted as advisor to Chifeng Gold/LXML, its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

2 Reliance on Other Experts

SRK trusts the information from Chifeng Gold regarding mine ownership, legal and financial liability. SRK did not carry out independent validation on the information regarding licences and permits of the Projects summarised in "3 Licences and Permits" of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but have relied on the Client. SRK was informed by Chifeng Gold that there are no known litigations potentially affecting the Projects.

Chifeng Gold provided the digital database used for geological modelling. SRK verified this database and removed repeated samples. It is SRK's opinion that the database used for resource estimation has been validated and was collected and built in a professional manner.

The topography used in estimating the mineral resource statement in this report relies on the topographic survey map from the geological report prepared by local geological brigade. SRK trusts the results of this survey.

3 Operational Licenses and Permits

This section summarises related operational licences and permits. SRK relies on the information provided by the Company, and SRK understands that a legal due diligence review of this Project has been undertaken by the Company's legal advisors.

3.1 Mining License

Table 3-1 summarizes key information of the mining license, and a scanned copy of the original mining license associated with an English translation is attached in Appendix A.

Table 3-1: Mining License

Name of Mine	Sepon Copper Gold Mine
Ming License No.	ML0002
Issued to	Lane Xang Minerals Limited
Issued by	Ministry of Mine and Energy
Area (km^2)	116.96
Issuing Date	30 September 2023
Expiry Date	29 September 2033

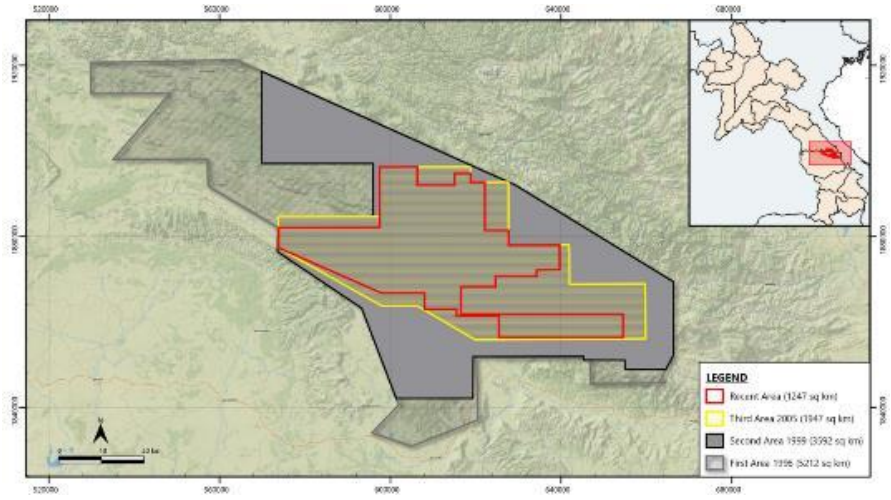
3.2 Exploration Permit

Currently, LXML possesses an exploration permit with a total area of 1,010.40 km^2, which is valid till June 2026. The exploration permit consists of 32 inflection points which have been provided in Table 3-2 below.

Table 3-2: Inflection Points of Sepon Exploration Permit

	Coordinates（Indian60/UTM zone48N)							
No.	**Easting**	**Northing**	**No.**	**Easting**	**Northing**	**No.**	**Easting**	**Northing**
1	573862	1882069	12	627729	1881372	23	654528	1856386
2	597530	1882125	13	627740	1877917	24	625446	1856403
3	597493	1896201	14	639684	1877944	25	625435	1861368
4	606341	1896245	15	639712	1872165	26	615504	1861365
5	606312	1891995	16	634320	1872099	27	615536	1862969
6	615094	1891995	17	634273	1870635	28	608051	1862967
7	615077	1894679	18	624641	1870635	29	608036	1866712
8	618788	1894699	19	624691	1868192	30	597977	1866708
9	618801	1892615	20	616589	1868192	31	573861	1877302
10	622176	1892641	21	616585	1861836	32	573862	1882069
11	622176	1881382	22	654556	1861825			

Figure 3-1: The Exploration Permit area of Sepon Project



(Source: LXML, 2022)

3.3 Other Key Operational Licenses and Permits

Table 3-3 presents the major information of the business license. LXML operates the Sepon project, in which Chifeng Gold owns 90% interest and the Lao Government owns the rest 10%.

Table 3-3: Business License

Name of Enterprise	Lane Xang Minerals Limited
Registration No.	01-00010734
Operation Activities	Sepon Gold-Copper Exploitation
Issued by	Ministry of Industry and Commerce
Issuing Date	19 October 2018
Expiry Date	Long Term

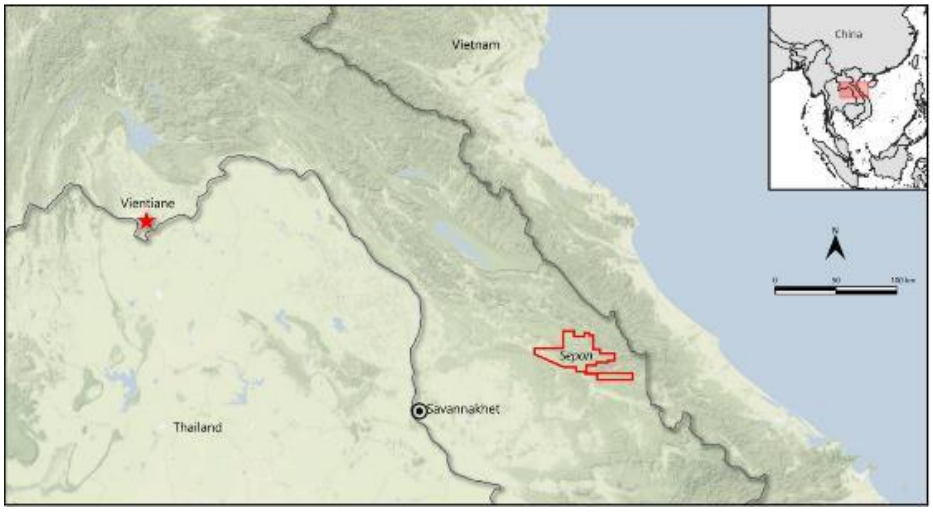
The Company provided SRK with revised Mineral Exploration and Production Agreement ("MEPA") dated 15 September 2023 between the Lao government and the Company. According to this agreement, up to 1,127.00 km^2 contract area is defined for the purpose of mining and exploration activities for the project. Annual rent fee is paid to the Lao Government as follows: USD 200/ km^2 for exploration and USD 8,000/ km^2 for mining. This contract area is served as the land use agreement with the Lao Government. In addition, communities living within LXML's concession area retain land use rights and are legally entitled to compensation for impacts to their land, property and livelihoods due to exploration activities and mining operations. According to the Company, the average compensation paid is ranged from USD 9,000 – 15,000/ha, based on quality of assets on the compensated land. The Company has compensated the impacted residents accordingly.

4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Accessibility

The Sepon project area located in Savannakhet province, south-central Laos (Figure 4-1). Access to the project area from Vientiane, the capital of Laos may take about 1.5 hours flight or about 8 hour driving with a distance about 560 km. There are daily charter flights between Vientiane and Sepon mine in weekdays. There are also daily flights between Vientiane and Chinese, Vietnam and Thailand cities. Alternate access to the project is about 1 hour flight between Vientiane and Savannakhet and then 4 hour bus-ride between Savannakhet to Sepon.

Figure 4-1: Location of Sepon Project



Source: LXML, 2022

4.2 Physiography and Climate

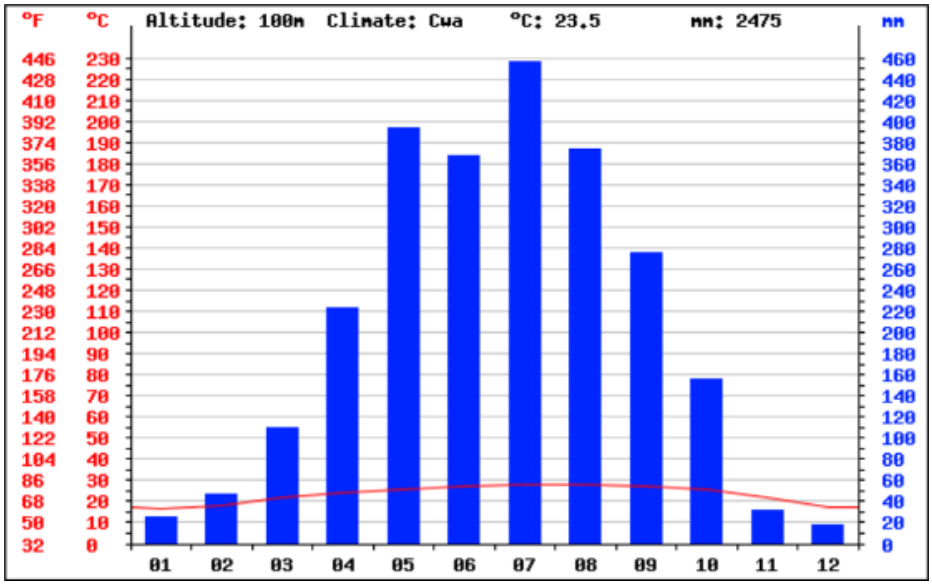
The Sepon project area has a geomorphology of low-mid mountains. The elevations generally range from 240 to 420m above sea level ("ASL"). The highest point in the mountainous area in north is 755.0m ASL. In the mine area, the relative elevation differences are about 50 to about 100m.

The mountain ranges generally strike near east to westerly. Water runs from the slope of each side to small streams. During dry the season, most of the small streams are dry out, while the small rivers into which the small streams flow have running water all year round. The small rivers flow into Sebanghiang River at the foot of the south slope, and the Sebanghiang River flows into Mekong River.

The climate in the project area belongs to tropic climate with northeast monsoon and southwest monsoon. The raining season relates to the southwest monsoon with the characteristics of heavy rains, high temperatures and high moistures, and lasts from mid-April to mid-October. The dry

season lasts from mid-October to mid-April of the following year with the characteristics of less rains and relatively lower temperatures and moistures, with the driest season from mid-November to mid-February of the following year. The monthly temperatures and precipitations in the project area have been illustrated in Figure 4-2 below.

Figure 4-2: Monthly Temperatures and Precipitations in the Project Area



4.3 Local Resources and Infrastructure

In the Sepon Project region, the vegetations are abundant with eucalyptus forest and bushes.

Villages are widely distributed in the area, and villagers generally work in agriculture and forestry productions. Rice is the main crop and Manihot is also important crop. Industry is not well developed. Labours are abundant, while technical personnel are absent.

Power line of 220 KV goes through the area and supplies the electricity. Telephones and mobile communication are also available.

5 History

Artisanal gold panning in numerous river valleys of the Sepon district was practiced in history, but no assessment of the hard rock potential had ever been undertaken prior to the involvement of CRA Exploration in 1990.

Potential of the Sepon district was first recognised by CRA geologists. While the style of mineralization was not immediately well understood, the association of porphyry intrusives, district scale alteration and extensive gold occurrences (alluvial and hardrock) was considered highly significant. The prospectivity was further confirmed by the assay results for 18 rock samples reported between 3.6 and 55.9g/t Au.

An application covering 5,000 square kilometers ("km^2") in Savannakhet and Khammouane Provinces was submitted to the Lao Government in early 1991, and a MEPA was signed in September 1993. This Agreement provides for the exclusive right to explore, mine, process, transport and market all minerals from the MEPA.

Intensive exploration by CRA/RioTinto between 1993 and 1999 resulted in the discovery of gold and copper mineral resources in six separate deposits. In 1999 Rio Tinto decided to divest of the Sepon Project because it did not satisfy the companies resource size criteria. The project was put to competitive tender and following extensive due diligence Oxiana successfully bid for an 80% stake in the project in early 2000. Rio Tinto retained a 20% shareholding and has continued to provide strong support for Oxiana's subsequent gold and copper mine developments.

Oxiana decided to develop the project in two phases, i.e. oxidized gold development and oxidized copper development. In October 2001 a definitive feasibility study on development of gold mineral resources was done. The gold production from the Sepon project started in 2003, and stopped in December 2013 due to high operating cost and low grade. The feasibility study for developing the copper mineral resources was conducted in 2002. In March 2005, the Sepon mine completed the construction of copper processing plant and started copper production. In 2017, the peak production of cathode copper was more than 90,000 tonnes per year.

In 2018, Chifeng Gold acquired LXML which owns the Sepon project. In 2020, the Sepon project started production of gold from mining primary gold mineral resources. Currently the production is mainly from the primary gold resources, focusing on processing of oxidized gold and copper resources, with an annual production of about 10,000 tonnes cathode copper, and about 7 tonnes gold.

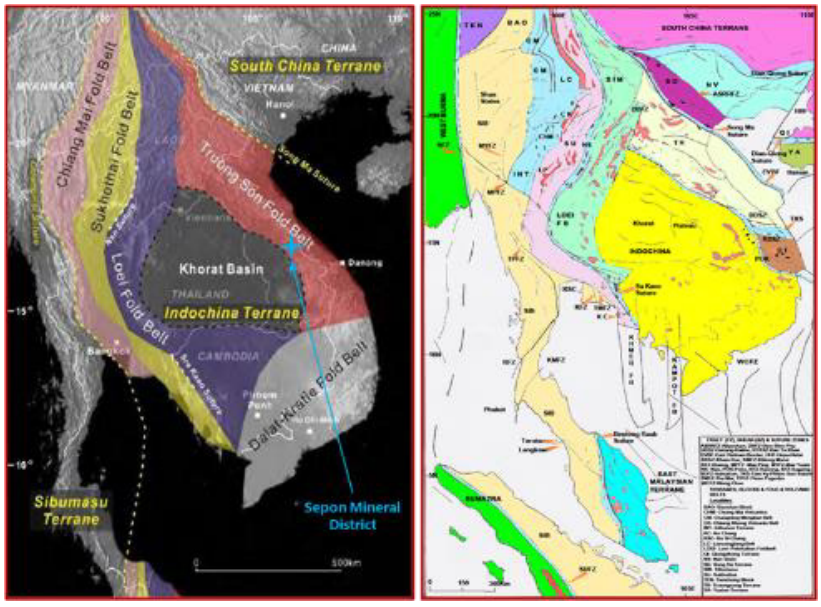
6 Geological Setting and Mineralization

6.1 Regional Geology

Tectonically, Sepon project area lies within the Truongson Fold Belt (or Annamite Cordillera) and the Kontum Massif. The Truongson Fold Belt is a NW elongated belt between South China Terrane and Indochina Terrane (Figure 6-1).

The Troungson Fold Belt is consisted of Early to Mid Palaeozoic sediments and lesser volcanic rocks, interspersed with lesser tectonic slices of metamorphic terranes, bound to the north by the Song Ma-Song Da suture zone and to the south by the NW trending Truongson Fault. The Kontum Massif comprises an Upper Proterozoic basement of ortho- and para-gneiss, crystalline schist and migmatite which abuts the Truongson Fold Belt to the south.

Figure 6-1: Regional Geology Setting



6.1.1 Regional Stratigraphy

The main strata in the region include the Proterozoic low to mid-high grade metamorphic rocks, such as schist, marble and gneiss; Palaeozoic marine volcanic and sedimentary rocks with some continental volcanic and sedimentary rocks, such as limestone, sandstone, siltstone, shale, mudstone and marlstone; Mesozoic continental sedimentary rocks, such as red sandstone and clay; and Cenozoic loose sand and gravel.

6.1.2 Regional Structures

In the Sepon district, the Truongson Fold Belt is represented by a series of E-W trending basins which are truncated by the NW-striking Truongson Fault (Figure 6-1). Affected by the Fault, NW and nearly S-N striking faults were developed, with some secondary faults striking NE and nearly E-W.

6.1.3 Magmatic Rocks

Granitic intrusions have been mapped in the district as well as rhyodacite and andesite dykes and stocks, interpreted to be part of the Late Palaeozoic Variscan Orogeny. At least three phases of around 300 Ma rhyodacite porphyry intrusion are recognised, including a late, quartz-stockwork veined phase, which is interpreted to be genetically associated with all known Cu and Au mineralisation in the field. Minor remnants of Jurassic to Cretaceous Khorat Basin continental sedimentary rocks unconformably overlie the Palaeozoic marine sedimentary sequences to the east and north, while west of the Kontum Massif and south of the Truongson Fault, Khorat sedimentary rocks are dominant. Cenozoic volcanic rocks unconformably overlie the Palaeozoic rocks to the north-east.

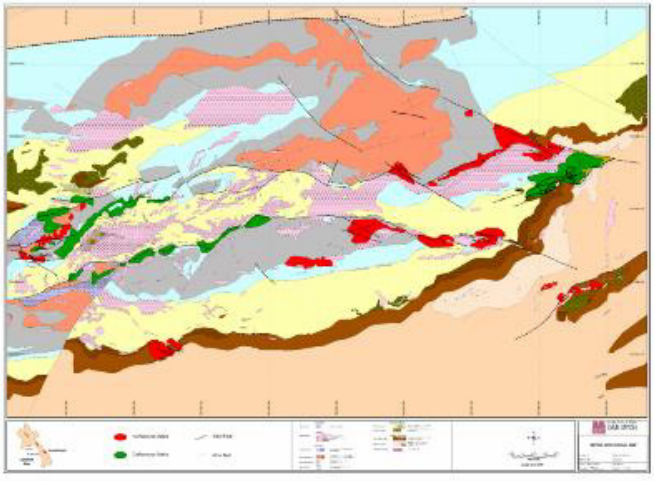
6.1.4 Regional Mineralization

There are abundant mineral resources in the region, including gold, copper, lead-zinc and limestone resources, as well as coal, iron, REE and bauxite resources.

6.2 Property Geology

Figure 6-2 shows a geological map of the Sepon Project area.

Figure 6-2: Local Geology Setting



Source: Sepon Mine, LXML

6.2.1 Gold and Copper Deposit Geology

Stratigraphy

The Sepon basin comprises Devonian to Carboniferous age continental fluvial and shallow to deep marine sediments, deposited during the formation of an E-W oriented pull-apart basin. Alternating sequences of carbonate (calcareous shale, dolostone, limestone) and siliciclastic (sandstone, siltstone) rocks form the stratigraphy of the SMD.

The Sepon stratigraphic sequence succession has been informally divided into 8 formations based on lithology and depositional setting (Figure 6-3).

1. Highway Formation

The Highway Formation represents the lower siliclastic, marine sedimentary sequence of stratigraphy that dominates the southern and eastern areas around the Sepon Mining District and also directly north of the North Bounding Fault. The lower member of the Highway Formation comprises a sequence dominated by thick bedded arenitic to arkosic sandstones with lesser, irregular interbeds of siltstone, mudstone and shale. Intervals of thin bedded to laminated calcilutite, calcarenite and limestone occur towards the top of the member. The Upper Highway Member is compositionally similar to the Lower Member but is distinct due to generally thinner bedding thicknesses and more regular (even thickness) beds. It is characterised as medium to thickly bedded (ranging from 0.1 m to 1 m, averaging 0.4 m thick beds) massive quartz-feldspar-mica sandstone with regular interbeds of thinly bedded to laminated siltstone, banded siltstone and mudstone-shale. The Upper Highway Member represents a transitional sequence and has gradational relationships between the underlying Lower Highway Member and the overlying Vang Ngang Formation. It displays variable thickness laterally across the Sepon district. In some areas (particularly from Houay Yeng to Nampa) it is very difficult to map as a distinct unit and may not be present at all and the Lower Highway Member appears to be in direct contact with the Vang Ngang Formation siltstones and/or cherts.

2. Vang Ngang Formation

The Vang Ngang Formation is characterised by very well bedded, thin (2 cm-15 cm) and rhythmically bedded red and green siltstone with lesser sandstone that is typically silicified to chert. Unlike the underlying Highway Formation, the Vang Ngang sediments are non-micaceous. The cherts are underlain by a limestone unit that locally occurs at the boundary between the underlying Highway Formation and overlying Vang Ngang cherts, which serves as a marker unit. The limestone is typically a light grey colour, non-fossiliferous and massive with little internal structure apart from stylolites. In the Ban Salo area is contains sub-vertical veins of barite. The top of the Vang Ngang Formation is marked by the Graptolite Member shales which is a thin unit of laminated, thinly bedded black carbonaceous to graphitic shales containing common graptolite fossils. The Graptolite member is commonly silicified or "cherty" at its base.

3. Kengkeuk Formation

The Kengkeuk Formation consists of black laminated calcareous, carbonaceous shales with rare nodular texture. In the upper parts of the Kengkeuk Formation, the shales become more calcareous, with discrete beds/lamina of carbonate and sand to gravel sized crinoid clasts. Limestone / dolomite talus breccias are common in the upper parts of the formation. Overall, the unit was deposited in a shallowing upwards succession, ranging from deep-water basinal shales in the lower sections, up to

proximal fore-reef slope breccias (or even reef margin) in the upper portions of the unit. The upper carbonate-rich portion of the unit represents a carbonate slope succession that was probably deposited in front of a prograding reef system.

4. Namphuc Formation

The Namphuc Formation, comprising andesite-pebble to cobble conglomerates and volcanic rocks grading to siliceous conglomerates, occur at, or close to the base of the Kengkeuk formation. The Namphuc volcanics sporadically outcrop adjacent to several units and therefore the base of the volcanic unit likely represents an unconformity.

5. Nalou Formation

The Nalou Formation is a platformal carbonate succession that has been almost completely dolomitized throughout the Sepon basin. The Nalou Formation is divided into five units:

- Lower laminated unit
- Lower dolomite-mudstone unit
- Laminated dolomite unit
- Upper bioclastic unit.
- Upper pale bioclastic unit (laterally restricted)

6. Discovery Formation

The Discovery formation is characterized by 200 m-300 m of grey - black to tan weathered nodular calcareous mudstone, with minor bioclastic material near the base of the formation.

The nodular calcareous mudstones grade upwards to planar laminated calcareous mudstone, siltstone and sandstone of the Nam Kian formation. In some areas a narrow bioclastic dolarenite to algal dolarenite - dololutite layer occurs at the contact between the Discovery and Nam Kian formations mudstone.

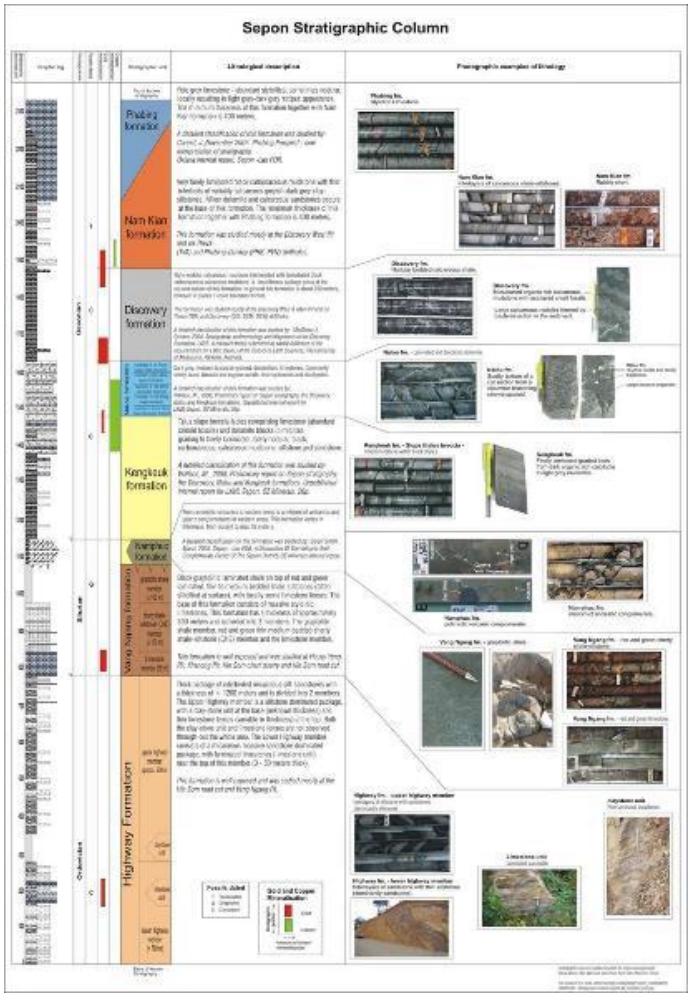
7. Nam Kian Formation

The Nam Kian formation contains variably carbonaceous and calcareous, well laminated and well bedded shale mudstone, siltstone, sandstone and minor chert.

8. Phabing Formation

Overlying and potentially locally interbedded with the Nam Kian Formation is the Phabing limestone, characterized by pale grey to dark grey limestone with abundant stylolites, sometimes nodular, locally resulting in a light to dark grey striped appearance. The minimum thickness of this formation together with Nam Kian formation is 400 m. This formation forms the distinctive karst hills at Phabing and south of Phavat.

Figure 6-3: Sepon Stratigraphy Log



Structures

The dominant structural grain of the Sepon basin strikes E to ENE and is controlled by the preferential alignment of basin-related fault structures and generally shallowly to moderately N dipping bedding planes. Dip value variations can be attributed to (locally tight) folding and faulting. Two main fold axis trends have been recognized in the Sepon Basin. The dominant fold generation strikes E to ENE, has wavelengths varying up to kilometre-scale, and are open folds. The E to ENE trending folds are deformed by N-trending folds as can be seen at Houay Bang and Houay Payee. The N-trending folds are typically broad open structures with wavelengths of 100's of meters. Tight, m-scale folds of varying orientation have also been documented across the district. These folds are typically associated with faults and their presence can be used as a tool to map brittle structures.

Dominant fault directions are NW (parallel to the Truongson Fault zone) and E to ENE. The NW and E to ENE faults typically dip steeply to the north and south and accommodate variable, but in some instances considerable (e.g. NW-trending Muang Luang Fault), strike-slip and dip-slip offset. The NW faults typically cut the E to ENE trending faults but are thought to have developed broadly contemporaneously in response to movement along the Truongson Fault.

Magmatic Rocks

Rhyodacite Porphyry (RDP), minor andesite, and rare lamprophyre are the only intrusive rocks to have been recognized within the Sepon district. The RDP has a remarkably consistent composition and morphology throughout the area with quartz and feldspar phenocrysts (2 mm-5 mm across) set in an aphanitic groundmass. No equigranular, crowded or megacrystic textures have been observed. A quartz-poor RDP variant has been identified that appears to be spatially associated with Cu mineralization at Thengkham East and South.

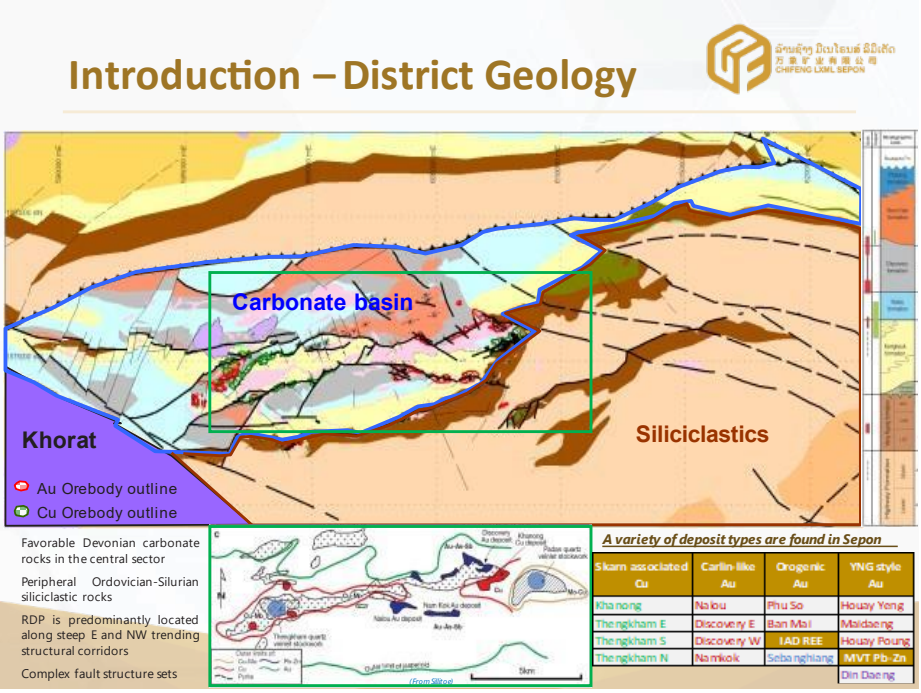
Three major intrusive centres occur across the Sepon district; the Thengkham, Padan and Kaban intrusive centres. The majority of primary gold mineralisation at potentially economic grade is located between the Thengkam Intrusive center in the W and the Padan Intrusive center in the East. These bodies are associated with intense quartz-dominated stock-work veins, and hornfels/skarn alteration of the wall rocks which result in them forming resistive hills. At Thengkham the RDPs are composed of abundant sills, dykes and intrusions with irregular geometries. RDP stocks, sills and dykes have also been mapped at Nakachan, Ban Mai, Katia, and Phu Xo. These porphyry occurrences form a broadly E trending linear across the Sepon district. Numerous RDP dykes also cut the sedimentary sequence, mainly within steep W- or NW- trending fault zones, but also along relatively flat-lying structures such as bedding planes or formational contacts.

Gold and Copper Mineralization

Gold and copper mineralization in the Sepon deposits has many similarities to the sediment-hosted replacement style deposits of the Great Basin, Nevada: host rocks comprise mid-Palaeozoic aged calcareous and carbonaceous sediments; high-angle faults serve as fluid conduits and are major ore controls; ore-bodies are generally tabular to rod-shaped; alteration is characterized by the dissolution of carbonate minerals and the precipitation of silica (jasperoid); gold is generally ultra-fine and intimately associated with pyrite; base metal levels are typically low. Significant differences between Sepon and the Great Basin Carlin-type deposits include the age of gold mineralization – Permian versus Late Eocene respectively, and the tectonic setting – compressive versus extensional respectively. Although the Sepon mineralization shares many characteristics with the Carlin-type of mineralization, it may more accurately be described as "distal-disseminated Au-Ag", due to its position within a possible zoned, porphyry intrusive centred system.

In the Sepon Project area, gold and copper mineralization has been discovered in a carbonate basin as illustrated in Figure 6-4. Different mineralization types of deposits have been identified, such as skarn associated copper, carlin gold, orogenic gold, and supergene gold deposits. Some of the deposits have been mined out and some are to be developed.

Figure 6-4: Sepon Carbonate Basin and Mineralization Types



Alterations

There are 14 alteration subtypes that have been recognized in the three broad alteration zones. The earliest documented intrusion-related alteration/mineralization events are K-silicate alteration and associated A-type quartz stock working, hornfels and prograde skarn. Distal to, and transitional with, K-silicate alteration is propylitic alteration, which is commonly observed in the internal cores of rhyodacite porphyry sills adjacent to prograde skarn or K-silicate front. Observed to overprint the K-silicate and prograde skarn alteration types is phyllic alteration, retrograde skarn and carbonate replacement. A texture-destructive equivalent of the phyllic zone is silica-pyrite alteration where there is pervasive and intense replacement of fine to coarse grained quartz and >10 % vol pyrite. Overprinting the above alteration types is intermediate argillic alteration, which is commonly texturally destructive because of the increase in clay minerals. Silicification is a long-lived and pervasive event in these magmatic hydrothermal systems spanning across the porphyry Mo, skarn and jasperoid front. Alteration associated with the sediment-hosted Au systems is typically silicification, decalcification and dolomitization.

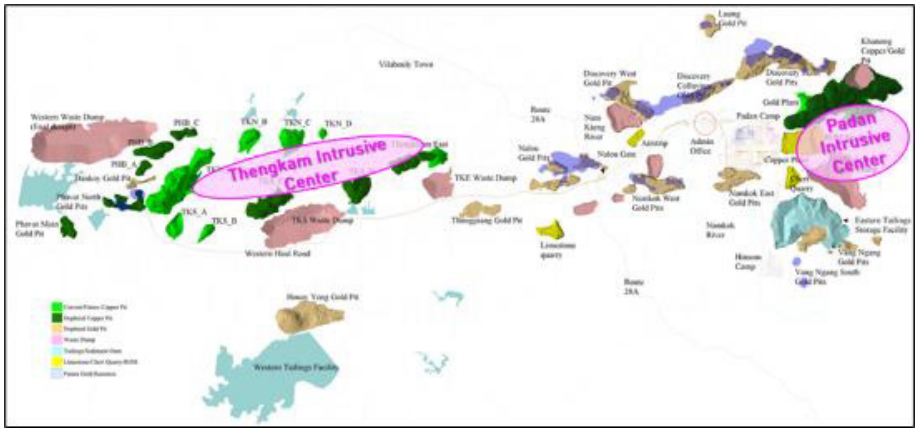
6.3 Deposit Types

This chapter describes the mineral deposit type(s) being investigated or being explored for and the geological model or concepts being applied in the investigation and on the basis of which the exploration program is planned

6.3.1 Copper and Gold Mineralization types

Mineralization styles of the Sepon district can be classified as an intrusion-centred hydrothermal system with the majority of known Cu and Au mineralization spatially associated with the Padan and Thengkham porphyry centres. Mineralisation typically displays a zoned pattern in both mineralization type and metal content. Porphyry Mo-Cu systems occur at the core zoning outward through skarn and carbonate replacement Cu deposits to the Au dominated sediment-hosted systems which show Carlin type deposit characteristics (Figure 6-5). Pb-Zn mineralization occurs distal to the porphyry's contact metamorphic aureole in a sediment-hosted setting, though a genetic link is yet to be confirmed.

Figure 6-5: Relationship between magmatic rock bodies and mineralization types

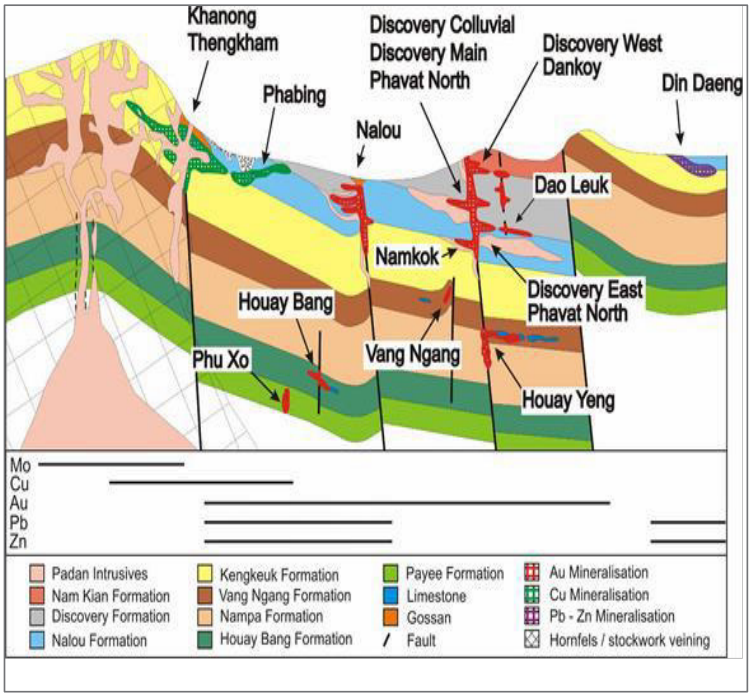


Main intrusive centers that control the location of copper mineralisation (proximal) and gold mineralisation (distal) are discussed below.

The dominant style of mineralization in the Sepon mining district is micro disseminated sediment-hosted gold localized in combined structural, rheological and chemical traps. Gold mineralization occurs closely associated with decalcification of calcareous shale and irregularly distributed silica replacement (jasperoid) bodies. The geometry of the deposits is controlled by the interplay of shallow-dipping lithological contacts (dominantly Nalou-Discovery Formation contact) and high-angle faults, forming tabular to rod-like ore bodies. Faults as well as formation contacts often coincide with porphyry margins suggesting that intrusion as well as auriferous fluids exploited similar crustal pathways.

Gold mineralization is associated with elevated concentrations of arsenic, antimony and locally thallium which is also evident in the extensive soil sampling dataset that covers the Sepon mining district.

Figure 6-6: Schematic Cross-Section showing Relationship between magmatic rock bodies and mineralization types of Sepon Project



6.3.2 Main Factors of Metallogeny

Three major controls on the distribution of gold and copper mineralization in the Sepon Basin have been identified. The primary control is understood to be the porphyry centres around which there is a metal zonation. Secondary control is the structural architecture (faults and folds). In the case of Au mineralisation there seems to be a strong (third order) lithological control where gold dominantly occurs along or close to the Nalou-Discovery formation contact which acts as a favourable receptive region.

- Primary Control

The bulk of the mineralisation across the Sepon district is spatially associated with RDP intrusive centres. All known copper deposits are immediately adjacent to intrusive centres and the main sediment-hosted gold zone is located between two of the largest intrusive centres and located in a peripheral position with respect to the molybdenum and copper zones.

- Secondary Control

The structural architecture around the margins of the intrusions is a key control on the distribution of mineralization. NW to WNW and E to ENE faults localise mineralization from district to outcrop scale and likely acted as the main conduits for mineralizing fluid. These faults provided traps and focused fluids into other depositional sites such as lithological contacts and fold axes. Much of the mineralization occurs to the east and west of the intrusive centres, rather than the north or south. This also likely relates to the overall architecture of the basin and more specifically the orientation of favourable feeder structures like NW- and E- striking faults.

- Ternary Control

Lithological receptivity favourable factors include: (1) the receptivity of calcareous black shale, with gold deposition accompanying decalcification and jasperoid development; (2) the rheological and permeability contrasts between footwall rhyodacite porphyry sills or bioclastic dolomite and the overlying calcareous shale; (3) the carbonate and clay content of formations Vang Ngang and Kengkeuk and their amenability to forming skarn assemblages.

Petrologic, fluid inclusion and organic studies of drill core samples suggest temperatures >600°C for alteration assemblages developed proximal to intrusions and 150°C-250°C for alteration associated with sediment-hosted gold deposits. It has been estimated that ~4.5 km of stratigraphic section has been eroded from above the currently exposed rocks.

7 Exploration and its Quality Assurance and Quality Control and Sampling

7.1 Exploration Programs

7.1.1 Exploration Programs of Gold and Copper Deposits Prior to Chifeng Gold

The first campaign was greenfields exploration drilling. This drilling was completed by RTZ during the 1990s. Oxiana continued to use the drilling and sampling protocols developed by RTZ after acquiring the project. This drilling included the oxide gold drilling in the neighbouring Discovery deposit to the north of Khanong.

Oxiana encountered significant amounts of wet sample during RC drilling in Khanong.

In 2006 it was recognised that wet RC samples were subject to considerable downhole grade smearing. This was demonstrated at Thengkham by drill holes TKN035, a wet RC hole, which returned 2m @ 5% Cu from 74.0 m plus 65.0 m at 6.4% Cu from 94.0 m. This hole was twinned by DD hole TKN077 which intercepted a 0.9m void from 72.2m, then 1.8 m of copper carbonate mineralisation at 41.0 % Cu from 73.1 m. The remainder of the hole was unmineralised dolomite. This was interpreted as indicating that the copper carbonate mineralisation self-stoped as TKN035 was drilled causing the second very long, high grade intersection.

In May 2006 the Sepon site adopted a policy of requiring no wet RC drilling of mineralised zones. If wet RC sample was encountered the hole was stopped. Therefore, any RC drilling post 1/5/2006 is restricted to pre-collars only or was part of a sterilisation campaign. Geologists and/or geotechnicians supervised RC drill rigs at all times while diamond drill rigs were checked twice daily by geology staff to ensure drilling practices were being followed. Drillers maintained drilling logs which recorded the depth and number of drill runs as well as important information such as core loss and ground conditions. In situations where errors were detected in the core during processing, drillers' logs and field geologists' notebooks could be consulted to rectify the error.

Drill holes collars have been surveyed by a range of methods including total station survey instrument, differential GPS, theodolite, handheld GPS and tape and compass over the past years. Planned collar coordinates, which are generally surveyed using handheld GPS, were also recorded for further check to the actual coordinates. The planned coordinates are resurveyed by total station in Sepon SPG06 grid system or differential GPS in the UTM IT60 grid system once drilling was completed. The coordinates in UTM IT60 grid system are converted to local Sepon SPG60 grid system. As set in the database system, the actual coordinates will not be entered into database if the difference to the planned coordinates is greater than 20m. Further check was then conducted to confirm the correct actual coordinates. All drill holes collars survey are stored in the database and ranked according to method and date of survey. Only the most recent survey and the highest rank survey are used for data extraction.

Collar validation was also performed by displaying the drill holes on screen against surface to check visually if there is any collar that is off the surface. Drill holes collars which appear far away from surface or outside of the project boundary are then investigated.

Prior to June 2007, most downhole surveys were conducted by drilling contractor using Eastman Single-shot Cameras with the result recorded in a survey disc. Since June 2007, all downhole surveys were conducted using Reflex camera which provides reading results digitally. The results were then written manually by the driller on a piece of paper. Protocol dictates that surveys should be taken at depths of 12m, 30m, 60m (then every 30m to the bottom of hole). Historically vertical holes with depths of around 50m were not surveyed. These drill holes were drilled at high angles to sub-horizontal mineralisation and hence any deviation is regarded as insignificant and immaterial to resource estimation.

Core orientations were carried out at 18m intervals using chinagraph-tipped spear in the selected holes. Post 2006, all core has been oriented using the electronic ACE Reflex Core Orientation tool. Segments of core were classified as having good, medium or poor quality bottom-of-hole lines (BOH) or no BOH. The BOH line is used as the reference line for recording, presenting and interpreting structural data.

Drilling contractors provide the downhole surveys to LXML. LXML geologists then check the survey disc/form and initial the survey after having been checked Data is then entered into the database. All surveys are entered into the database; however, if a survey is deemed to be erroneous a field in the database is set to "reject". Only data with accepted surveys are exported for use in resource estimation. The grid to magnetic deviation at Sepon is 1° and so and azimuth conversion problems are inconsequential.

Downhole surveys were checked both mathematically in LaosDB (maximum deviation of 0.27º per metre downhole where dip > -80º) and visually for excessive deviation or unlikely hole traces. Any obvious problems were identified and rectified in the database prior to export for use in the Mineral Resource modelling. Neither the planned nor actual rig set up azimuth is recorded in the LaosDB.

A total of 1,321,787m of DD and RC drilling data is contained in the resource database, of this 85% is geologically logged, and 98% of sampled intervals contain gold and copper assays (15% of the RC data was assayed but not logged).

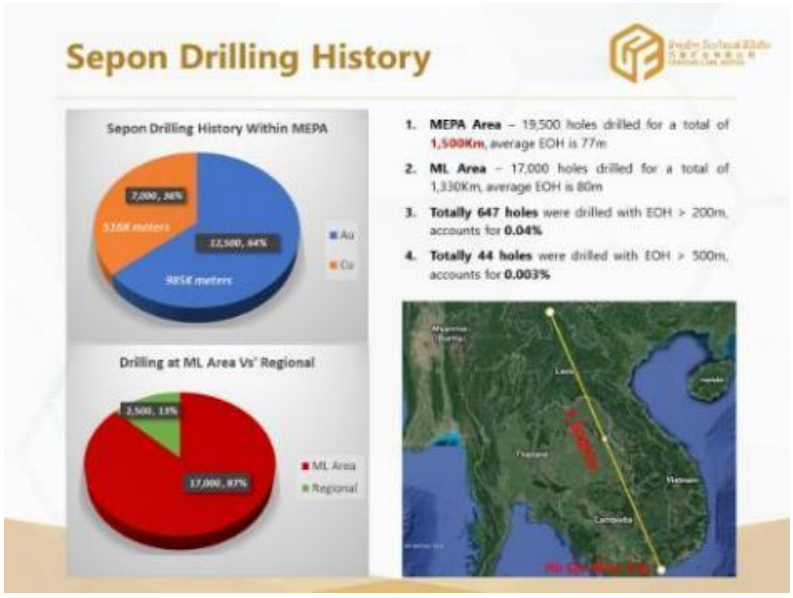
Only samples within the mineralisation or geological domains are used in the estimations. There are also some drillings within block model extents not used in estimations as they fall outside of the areas of interest, or have suspicious assay results.

A total of 1503 diamond holes (100,582.5m), 2,840RC drill holes (170,825.6m) and 13,661 grade control RC holes (202,618.3m) were used to inform the Nalou block model.

A total of 1,022 DD (117,495m), 2,3732 RC (not Grade Control) (175499.2m) RC drill holes and 45,635 RC Grade Control holes (764,831.8m) for a total of 1,057,826m were used to inform the Discovery region block model.

Figure 7-1 summarized the drillings that have been completed by December 2022 in the Sepon Project area.

Figure 7-1: Drilling Programs completed in Sepon Project by December 2022



7.1.2 Exploration Programs of Gold and Copper Deposits by Chifeng Gold

After Chifeng Gold took over the Sepon project, the exploration programs focused on discovering new gold deposits in brownfield to supply the processing plant and keep on the production, as well as discovering new types of mineralization in green field. Figure 7-2 and Figure 7-3 summarized the exploration programs in 2021 and 2022.

Figure 7-2: Exploration Programs completed in Sepon Project in 2021

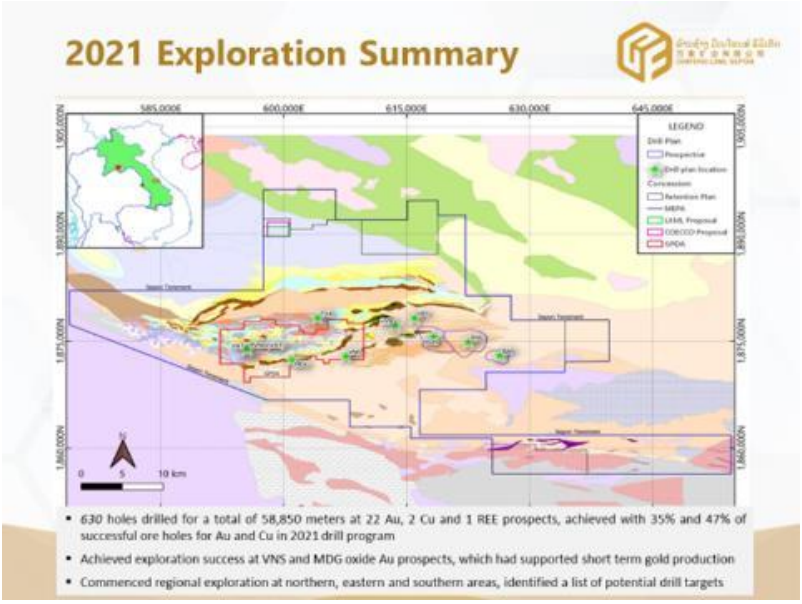
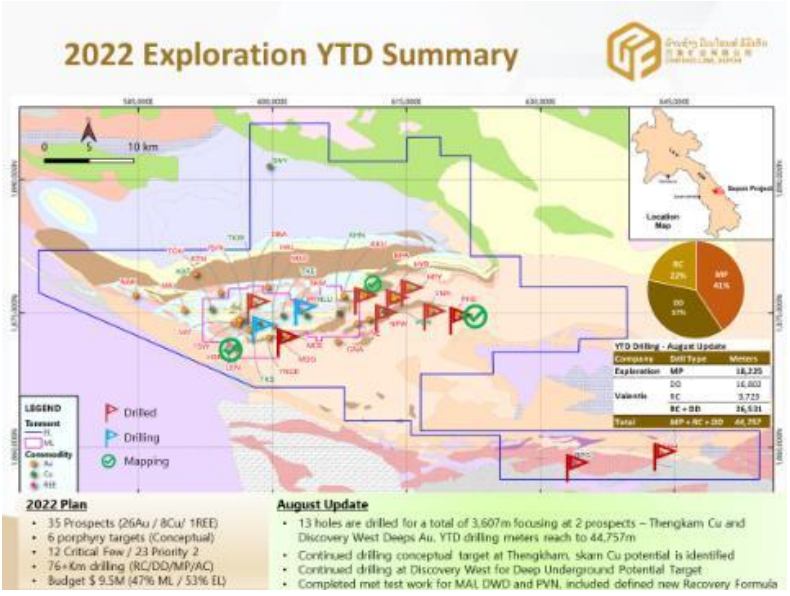


Figure 7-3: Exploration Programs completed in Sepon Project in 2022



7.1.3 Trenching

LXML conducted exploration work basically by its in-house personnel of the exploration department, including trenching, drilling, and general geological survey and mapping. Figure 7-4 shows trenches used in the exploration programs.

Figure 7-4: Trenches used in the exploration in Sepon Project

7.1.4 Drilling

LXML conducted exploration work basically by its in-house personnel of the exploration department, with different drilling rigs. Figure 7-5 shows rigs LXML owns and uses in exploration programs.

Figure 7-5: Drill rigs used in the exploration in Sepon Project

Diamond Drilling

Diamond drilling is carried out by a variety of track or skid mounted rigs with 3 m masts. Core barrel lengths are usually 3 m, but sometimes 1.5 m. All diamond drilling is wireline drilling. Drilling productivity is hampered by the very clay rich ground resulting in short run lengths. The diamond drilling has predominantly used triple tube drilling methods to enhance recovery and mostly using a HQ3 size core barrel. Core samples are usually collected over 1 m intervals but may range from 0.5-1.5 metres in length to enable samples to be broken on lithological and mineralisation contacts. Where possible RC pre-collars are used to reduce drilling costs, which is also recorded in the drill hole database.

Run by run recovery has been recorded for all diamond drilling carried out at Sepon and for all drill runs. DD recovery averages 95% (based on length) and RC recovery averages 80% (based on mass).

The recovery data is somewhat muddied by the recording of 'cavities' in the database. There are some true cavities in the Khanong area (small caves that occur in dolomite or limestone). Originally drillers recorded "cavity" when they encountered unconsolidated material inferred to have formed in a cavity.

Since March 2014 this practice changed and that material is now recorded as core loss, the term cavity is only used on voids now.

Diamond drilling recovery improves with depth, reflecting the better drilling conditions and absence of clay and unconsolidated fill.

Reverse Circulation Drilling

RC drilling is carried out by a variety of track mounted rigs with 6 m masts and rods. All hammers are face sample with 5 ¼ inch bits and 3 ½ inch rods. No attempt is made to control the direction of the hole. Boosters are not normally used. Exploration, Resource and grade control RC samples are collected at 1.0 m downhole intervals. Representative rock chips are collected during the drilling and logged on site by a geologist to establish the stratigraphic context of the sampling and to provide a geological description of each sample.

No RC drilling has been carried out routinely by the Resource Geology department since 2006. RC drilling at Khanong represents a large amount of the data used to estimate copper grades.

Each metre sample is weighed to assess drilling recovery prior to splitting. The average RC sample weight for dry samples was 22.7kg. This compares to expected sample weights from a 5 ¼ inch hole of 25 kg, assuming average supergene material density (1.8t/m3). Sample moisture is recorded and has been summarised below.

About 26% of the RC samples were wet or moist out at Discovery, and 32% from Nalou was wet or moist. This constitutes 31% of the total RC data for Discovery and Nalou metres.

Grade control drilling was used in both Nalou and Discovery resource models for the first time in 2019. This decision was made to better inform the model in terms of data density and produced higher quality geostatistics. It also allowed a small amount of material to be classified as measured due to the greatly increased kriging efficiency.

7.1.5 Mapping

Exploration surface interpretation and grade control bench mapping have been used in areas as guidance to generate lithological and structural models. This geological information was further used for interpreting the ore delineation when generating ore domains. The Resource department at Sepon does not do bench or pit wall mapping or surface mapping but relies on other departments for this information.

7.2 Quality Assurance and Quality Control of the Exploration Programs

The samples from multiple drilling of the Sepon project development. There are at least five batches of drilling data that relate to these prospects:

- Pre-Oxiana (CRA/Rio Tinto) 1993-1999
- Oxiana Pre-Mining 2000-2002
- Oxiana Active Mining 2002-2006
- SPGRDP (Sepon Resource Development Program) 2006-2007
- LXML Resource and Exploration Drilling Programs 2007-2019
- LXML Grade Control Programs 2020-2022

The quality of the datasets from periods of 2020-2022 has been reviewed by SRK.

LXML developed a standard procedure in which quality control samples were inserted within the sample stream in order to validate analysis and drill-core samples. All of these protocols are also located on the LXML intranet. Full QC reports can be found in monthly reports located on the Sepon server.

LXML has prepared Core Sample Preparation for Lab Testing Standard Operating Procedure which demonstrated the QA/QC procedures in the exploration. Quality control samples including standard samples, blank samples and duplicated samples.

7.2.1 Standard Sample

Certified reference materials (standards) are inserted in the sample stream. Currently, most standards have been produced by Ore Research & Exploration and Grade Control. There were 71 standards used within the reporting period, and details are shown in Table 7-1.

Table 7-1: ALS and Sepon Lab Standards

Standard Name	METHOD	ELEMENT	UNITS	NOMINAL VALUE	STD DEVIATION	DATA SOURCE
Au_HG_OX_22	FA-AAS	Au	PPM	3.2	0.07	User
Au_HG_PR_22	FA-AAS	Au	PPM	6.94	0.16	User
Au_LG_21	FA-AAS	Au	PPM	1.31	0.04	User
Au_LG_OX_22	FA-AAS	Au	PPM	2.02	0.05	User
Au_LG_PR_22	FA-AAS	Au	PPM	1.58	0.04	User
Au_MG_21	FA-AAS	Au	PPM	2.04	0.07	User
Au_MG_PR_22	FA-AAS	Au	PPM	3.65	0.15	User

Standard Name	METHOD	ELEMENT	UNITS	NOMINAL VALUE	STD DEVIATION	DATA SOURCE
Cu_HG2	FA-AAS	Au	PPM	0.115	0.004	LaosDB
Cu_N1	4A-ICP	Au	PPM	0.508	0.02	User
Cu_N2	4A-ICP	Au	PPM	0.388	0.014	User
Cu-A	FA-AAS	Au	PPM	0.674	0.034	LXM-ACQ-GradeControl
Cu-B	FA-AAS	Au	PPM	0.37	0.02	LXM-ACQ-GradeControl
Cu-C	FA-AAS	Au	PPM	0.18	0.009	LXM-ACQ-GradeControl
Cu-D	FA-AAS	Au	PPM	0.181	0.01	LXM-ACQ-GradeControl
Cu-E	FA-AAS	Au	PPM	0.21	0.007	LXM-ACQ-GradeControl
Cu-F	FA-AAS	Au	PPM	0.212	0.006	LXM-ACQ-GradeControl
Cu-G	FA-AAS	Au	PPM	0.289	0.015	LaosDB
HG_Oxide	FA-MD	Au	ppm	0.412	0.007	User
MG_Oxide	FA-AAS	Au	ppm	0.196	0.007	User
OREAS_15Pc	FA-AAS	Au	PPM	1.61	NULL	LXM-ACQ-GradeControl
OREAS_50Pb	FA-AAS	Au	PPM	0.841	NULL	LXM-ACQ-GradeControl
OREAS_51P	FA-AAS	Au	PPM	0.43	NULL	LXM-ACQ-GradeControl
OREAS_52P	FA-AAS	Au	PPM	0.183	NULL	LXM-ACQ-GradeControl
OREAS_53Pb	FA-AAS	Au	PPM	0.623	NULL	LXM-ACQ-GradeControl
OREAS_54Pa	FA-AAS	Au	PPM	2.9	NULL	LXM-ACQ-GradeControl
OREAS_6Pc	FA-AAS	Au	PPM	1.53	0.12	LXM-ACQ-GradeControl
OREAS_7Pb	FA-AAS	Au	PPM	2.77	NULL	LXM-ACQ-GradeControl
OX_Au_L6	FA-MD	Au	ppm	0.379	0.015	LaosDB
OX_Cu_L6	FA-MD	Au	PPM	0.462	0.01	User
OX_Cu_M6	MD-MD	Au	PPM	0.28	0.007	User
OX_H3	FA-MD	Au	ppm	4.99	0.06	User
OX_H4	UNK	Au	ppm	4.8	0.16	User
OX_M4	FA-MD	Au	ppm	3.29	0.085	User
OX_M5	FA-MD	Au	ppm	1.5	0.05	User
Ox-P1H	FA-MD	Au	ppm	0.92	0.06	User
Ox-P1L	FA-MD	Au	ppm	0.88	NULL	User
Ox-P2H	FA-MD	Au	PPM	2.08	0.07	User
Ox-P2L	FA-MD	Au	PPM	1.94	0.08	User
PR01	FA-AAS	Au	PPM	1.03	NULL	User
PR02	FA-AAS	Au	PPM	3.28	0.13	User
STD_F	FA-AAS	Au	PPM	1.546	NULL	LXM-ACQ-GradeControl
STD_G	FA-AAS	Au	PPM	3.254	NULL	LXM-ACQ-GradeControl
STD_H	FA-AAS	Au	PPM	5.336	NULL	LXM-ACQ-GradeControl
STD_OX_H2	FA-AAS	Au	PPM	5.03	NULL	LXM-ACQ-GradeControl
STD_OX_H2	FA-AAS-40	Au	PPM	5.03	NULL	LXM-ACQ-GradeControl
STD_OX_H3	FA-AAS	Au	PPM	4.93	0.32	LXM-ACQ-GradeControl
STD_OX_H4	FA-AAS	Au	PPM	4.8	0.2	LXM-ACQ-GradeControl
STD_OX_L1	FA-AAS	Au	PPM	1.331	NULL	LXM-ACQ-GradeControl
STD_OX_L1	FA-AAS-40	Au	PPM	1.331	NULL	LXM-ACQ-GradeControl
STD_OX_L2	FA-AAS	Au	PPM	1.48	NULL	LXM-ACQ-GradeControl
STD_OX_L3	FA-AAS	Au	PPM	0.518	NULL	LXM-ACQ-GradeControl
STD_OX_L4	FA-AAS	Au	PPM	1.36	NULL	LXM-ACQ-GradeControl
STD_OX_M2	FA-AAS	Au	PPM	3.41	NULL	LXM-ACQ-GradeControl
STD_OX_M2	FA-AAS-40	Au	PPM	3.41	NULL	LXM-ACQ-GradeControl
STD_OX_M3	FA-AAS	Au	PPM	0.642	NULL	LXM-ACQ-GradeControl
STD_OX_M4	FA-AAS	Au	PPM	3.29	NULL	LXM-ACQ-GradeControl
STD_OX_M5	FA-AAS	Au	PPM	1.47	0.05	LXM-ACQ-GradeControl
STD_OX_P1H	FA-AAS	Au	PPM	0.926	0.039	LXM-ACQ-GradeControl
STD_OX_P1L	FA-AAS	Au	PPM	0.885	0.028	LXM-ACQ-GradeControl
STD_OX_P2H	FA-AAS	Au	PPM	2.08	0.04	LXM-ACQ-GradeControl
STD_OX_P2L	FA-AAS	Au	PPM	1.94	0.08	LXM-ACQ-GradeControl
STD_SEP05_1	FA-AAS	Au	PPM	0.574	NULL	LXM-ACQ-GradeControl
STD_SEP05_1	FA-AAS-40	Au	PPM	0.574	NULL	LXM-ACQ-GradeControl
STD_SEP05_2	FA-AAS	Au	PPM	0.307	NULL	LXM-ACQ-GradeControl

Standard Name	METHOD	ELEMENT	UNITS	NOMINAL VALUE	STD DEVIATION	DATA SOURCE
STD_SEP05_3	FA-AAS	Au	PPM	2.55	NULL	LXM-ACQ-GradeControl
STD_SEP12_1	FA-AAS	Au	PPM	0.36	0.01578	LXM-ACQ-GradeControl
STD_SEP13	FA-AAS	Au	PPM	0.15	0.021	LXM-ACQ-GradeControl
STD_SEP14	FA-AAS	Au	PPM	1.03	0.026	User
STD_X	FA-AAS	Au	PPM	1.44	NULL	LXM-ACQ-GradeControl
STD_Y	FA-AAS	Au	PPM	0.79	NULL	LXM-ACQ-GradeControl

7.2.2 Duplicates

Two types of duplicates are used for monitoring laboratory's preparation and analytics: field duplicates and lab duplicates.

Reverse circulation field duplicates have been prepared using a single tier riffle splitter. The larger sample size submitted for analysis has shown better repeatability than diamond drill field duplicates. Analytical duplicates are prepared by taking duplicate splits after pulverization of the sample material.

Lab duplicates are prepared by taking duplicate rotary splits after finer (-2mm) crushing of the sample material.

7.2.3 Blanks

Pulp and coarse blanks are inserted into the sample stream at the Sepon core shed operational area.

Presently, on average, coarse blanks and pulp blanks standards are inserted at start of each drill holes and thereafter at a rate of one in every 20 samples.

The Coarse Blank consists of crushed limestone sourced from the limestone pit within Sepon mine site. Analysis of the samples was done by ALS-Lab and Sepon Lab. The Coarse Blank used in Sepon has some detectable presence of Au based on the results of the analysis done by ALS.

Pulp Blank is mainly a hydrated lime originally placed in 25 kg rice bags. They are then re-packed by onsite samplers who scoop it into foil pouches for insertion. The source of the sample is from Vietnam

The blanks occasionally show some low-level contamination (<0.04 g/t maximum). It is uncertain if this should be attributed to the blank source material - establishment of a background baseline value should eliminate most of the noise associated with background mineralisation.

7.2.4 QA/QC Performance

The procedure of inserting control samples was routinely carried out over the entire exploration programmes. The control samples include pulp duplicates, coarse rejects and reference standards. Internal check and external check data from JM exploration between 2020 and 2022 were provided to SRK, and the main elements were Au, Cu and Ag.

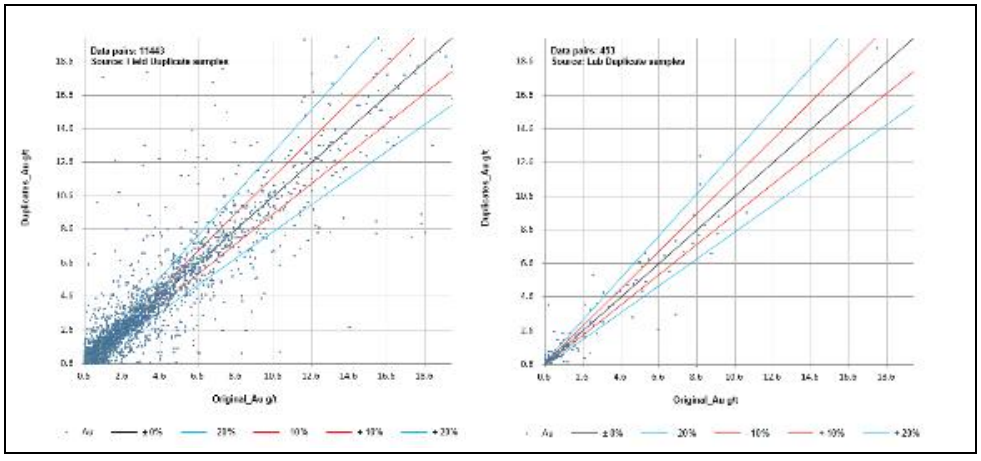
a. Duplicate

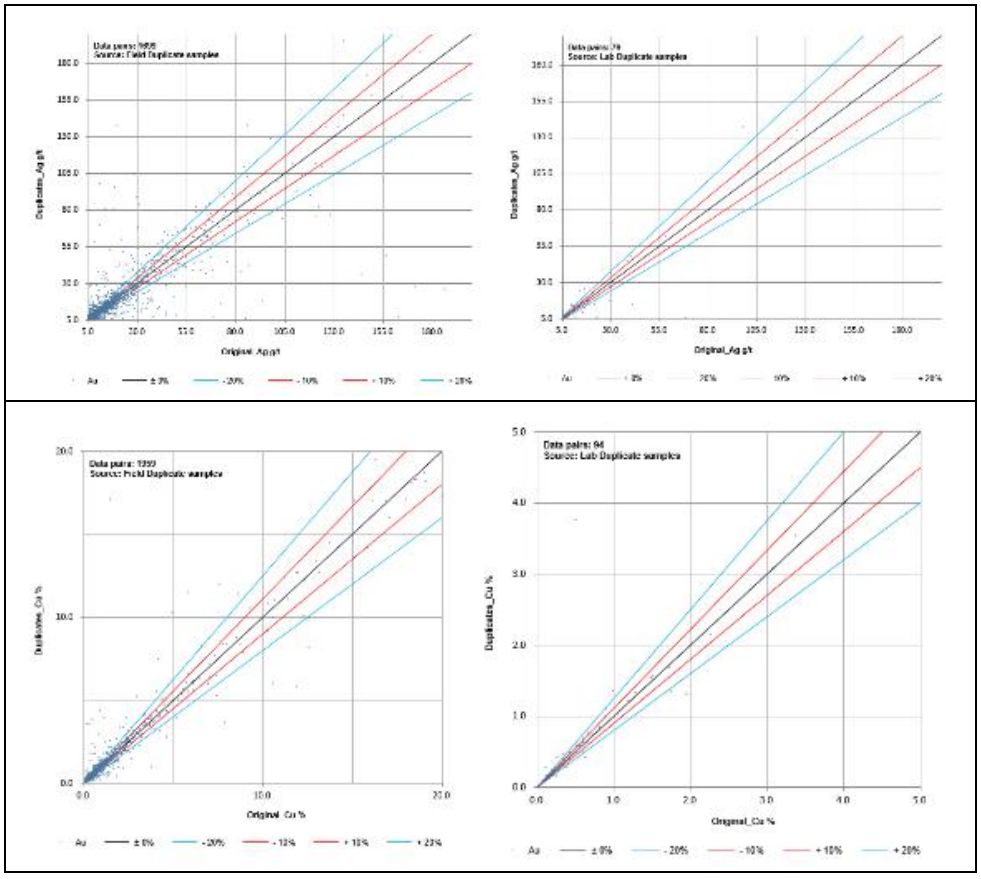
Two types of duplicates are used for monitoring laboratory's preparation and analytics: field duplicates and lab duplicates.

The Au field duplicate samples are general acceptable, among all 11443 field duplicate samples, 42% of which are below 10% relative difference and 63% of which are below 20% relative difference; the Ag field duplicate samples are general acceptable, among all 1699 field duplicate samples, 47% of which are below 10% relative difference and 71% of which are below 20% relative difference; the Cu field duplicate samples are general acceptable, among all 1959 field duplicate samples, 58% of which are below 10% relative difference and 79% of which are below 20% relative difference.

The Au field duplicate sample performance is not as good as Cu and Ag due to more nugget effect of Au, about 37% field duplicate samples are greater than 20% relative difference. The Au Lab duplicate samples are general acceptable, among all 177 Lab duplicate samples, 39% of which are below 10% relative difference and 61% of which are below 20% relative difference; the Ag Lab duplicate samples are general acceptable, among all 79 Lab duplicate samples, 52% of which are below 10% relative difference and 68% of which are below 20% relative difference; the Cu Lab duplicate samples are general acceptable, among all 94 Lab duplicate samples, 62% of which are below 10% relative difference and 86% of which are below 20% relative difference. The Au Lab duplicate sample performance is not as good as Cu and Ag due to more nugget effect of Au, about 39% Lab duplicate samples are greater than 20% relative difference. The field and lab duplicate samples performance are shown below.

Figure 7-6: Field and Lab Duplicate Au Ag and Cu Plot of Control Sample Programme





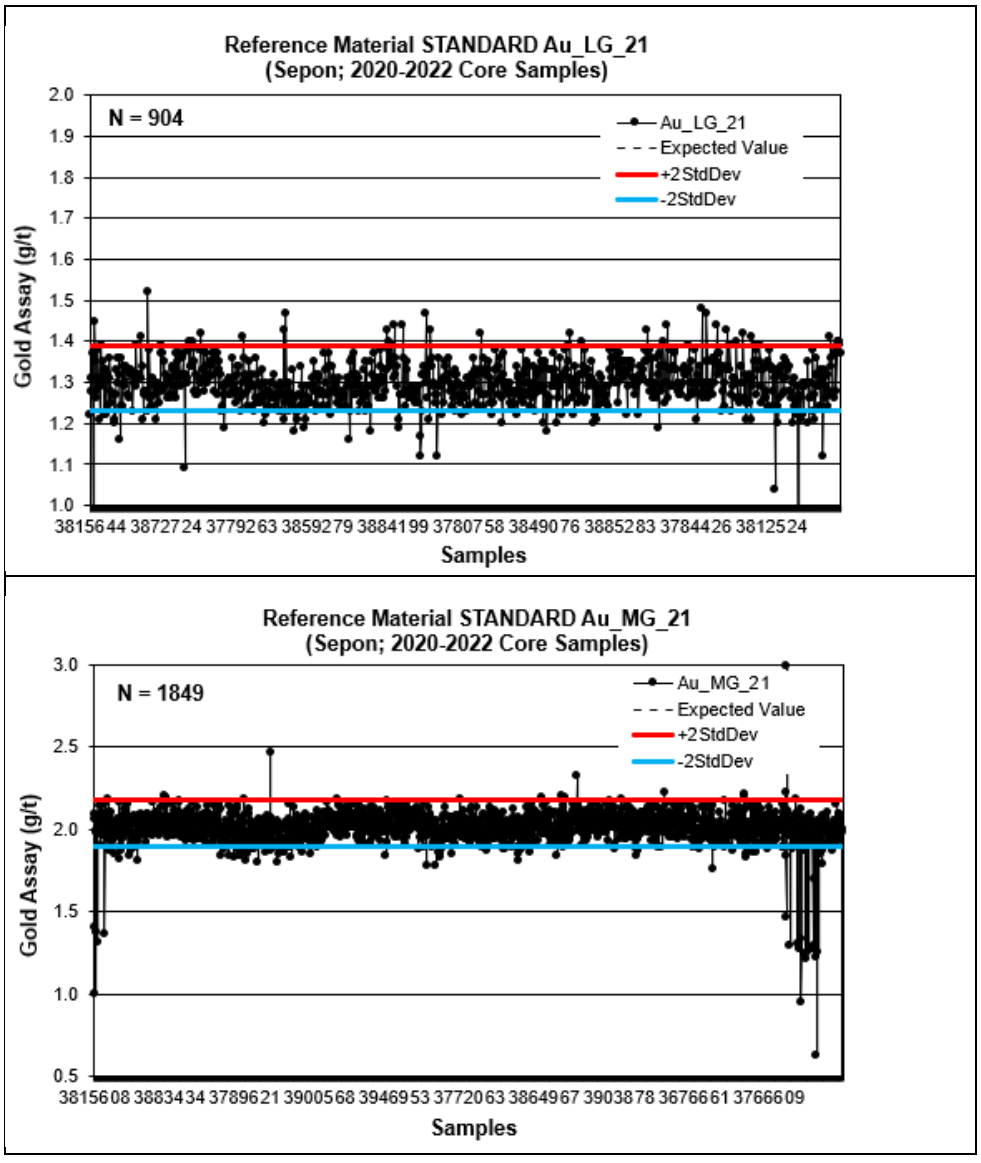
b. Reference Standards

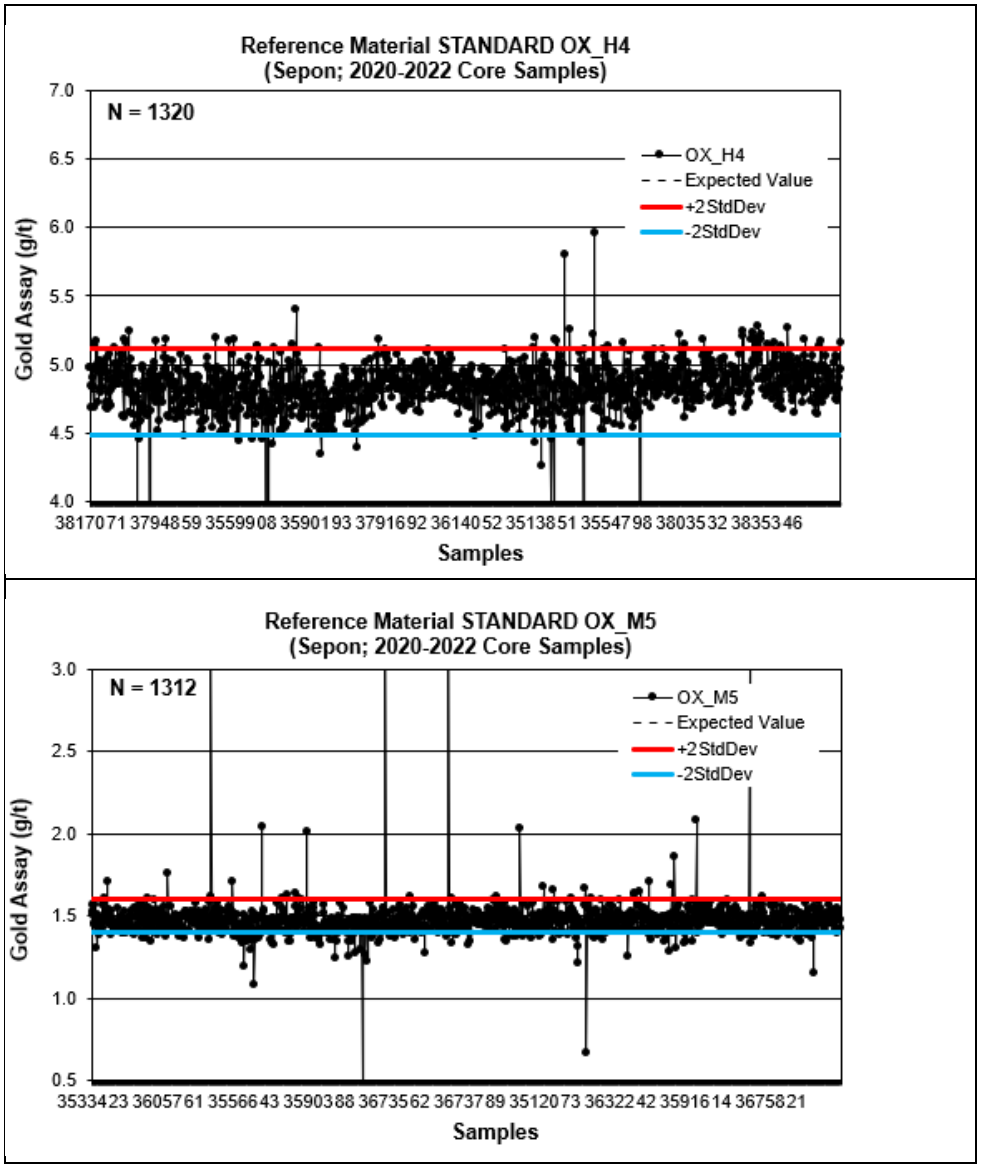
There were 71 standards used for monitoring laboratory's preparation and analytics.

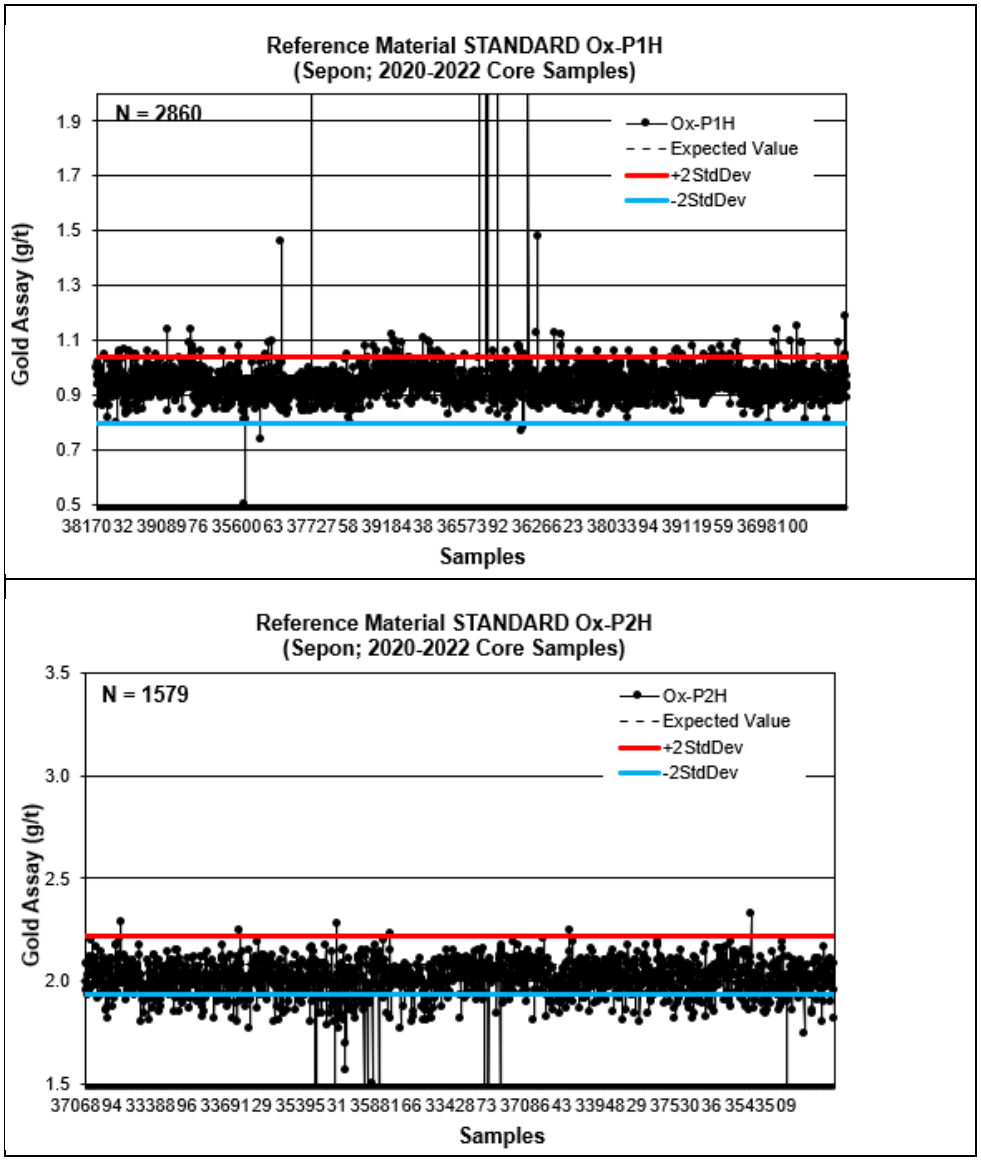
SRK selected standards with large quantities for statistical analysis: Au_LG_21 Au_MG_21 OX_H4 OX_M5 Ox-P1H Ox-P2H and Ox-P2L.

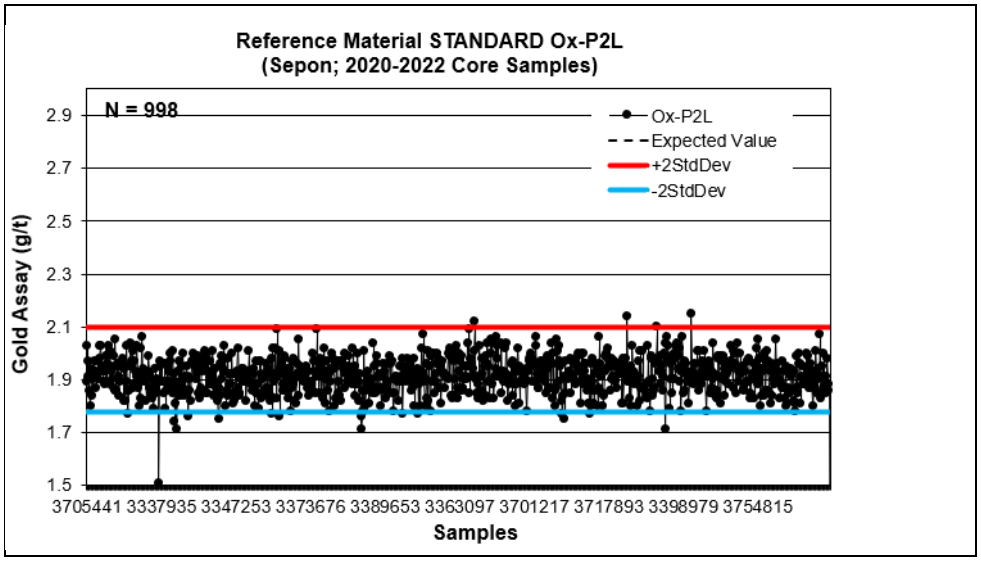
According to the comparison curves between the standard sample reanalysis results and the standard grade values in Figure 7-7, the Au analysis results of each standard sample are fluctuating within 20% around the standard value.

Figure 7-7: Performance of standards of Sepon




Reference Material STANDARD OX_H4
(Sepon; 2020-2022 Core Samples)
N = 1320
OX_H4
Expected Value
+2StdDev
-2StdDev
Gold Assay (g/t)
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3817071 3794859 3559908 3590193 3791692 3614052 3513851 3554798 3803532 3835346
Samples
Reference Material STANDARD OX_M5
(Sepon; 2020-2022 Core Samples)
N = 1312
OX_M5
Expected Value
+2StdDev
-2StdDev
Gold Assay (g/t)
3.0
2.5
2.0
1.5
1.0
0.5
3533423 3605761 3556643 3590388 3673562 3673789 3512073 3632242 3591614 3675821
Samples

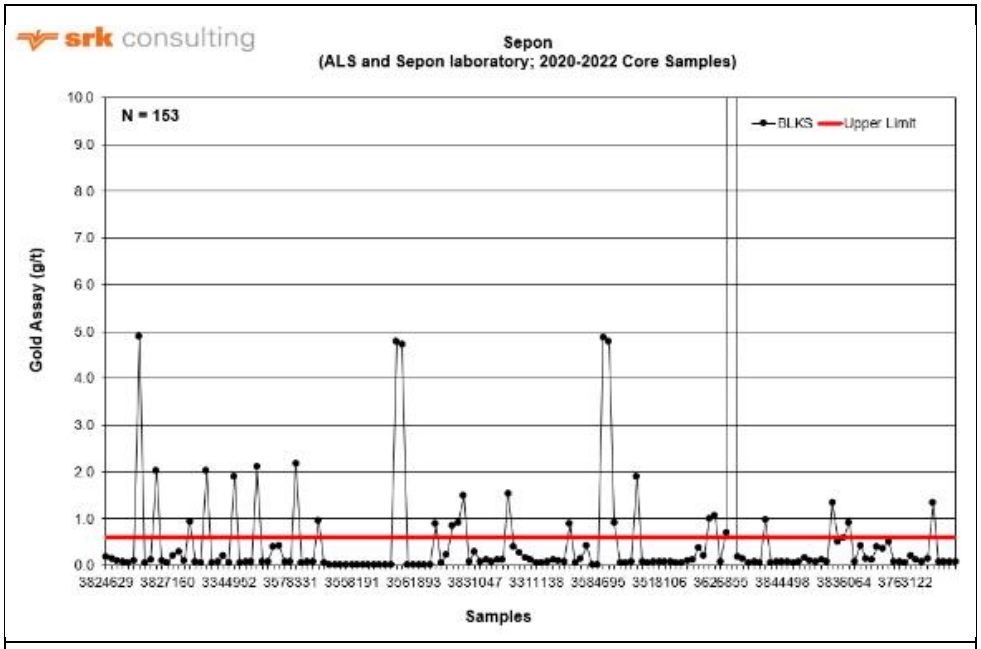

Reference Material STANDARD Ox-P1H
(Sepon; 2020-2022 Core Samples)
N = 2860
Ox-P1H
Expected Value
+2StdDev
-2StdDev
Gold Assay (g/t)
1.9
1.7
1.5
1.3
1.1
0.9
0.7
0.5
3817032 3908976 3560063 3772758 3918438 3657392 3626623 3803394 3911959 3698100
Samples
Reference Material STANDARD Ox-P2H
(Sepon; 2020-2022 Core Samples)
N = 1579
Ox-P2H
Expected Value
+2StdDev
-2StdDev
Gold Assay (g/t)
3.5
3.0
2.5
2.0
1.5
3706894 3338896 3369129 3539531 3588166 3342873 3708643 3394829 3753036 3543509
Samples

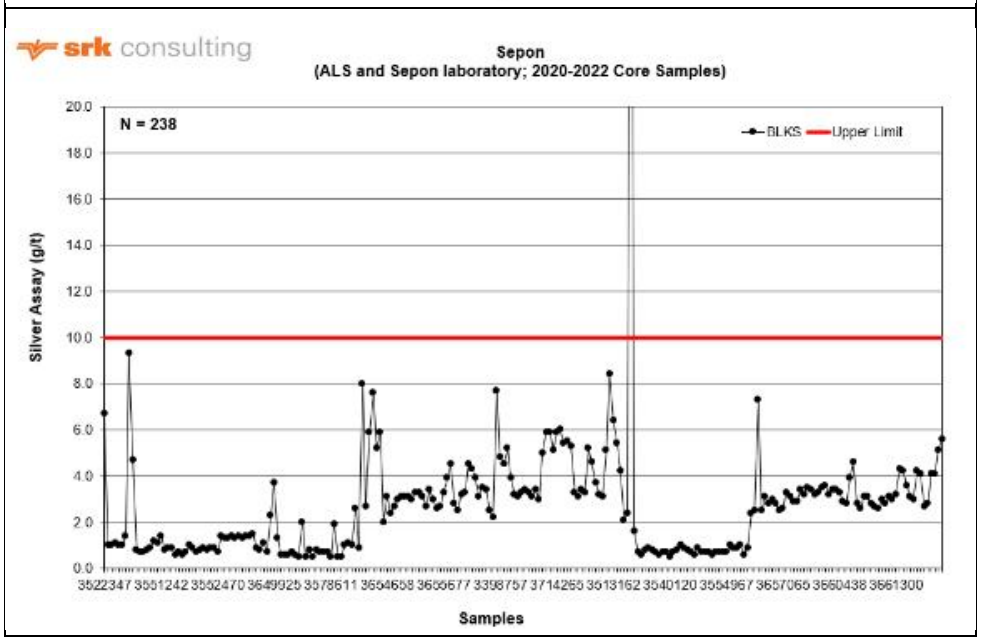


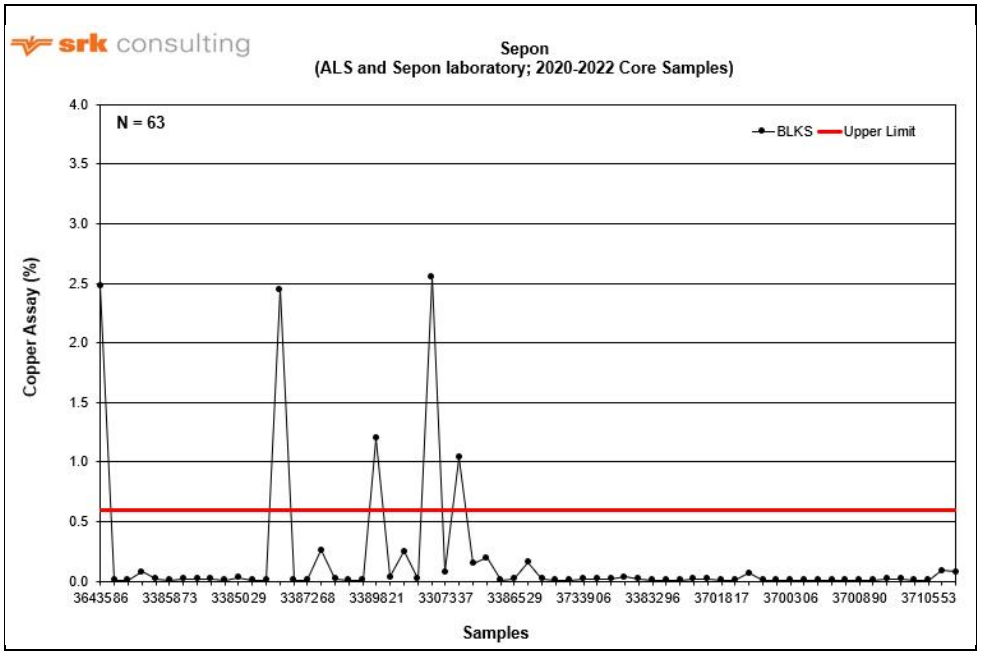
c. Blanks

The blank samples are the original blank sample, and the comparison of blank samples is shown in the figure below. The value of 5 samples exceeds the detection limit of 10 times, and the qualified rate is 92.1%. The blank samples performance is shown below.

Figure 7-8: Performance of blanks of Sepon







7.2.5 SRK Comments

SRK considers that, QA/QC performed during 2020-2022 for Sepon mine are consistent with generally accepted industry practices and are therefore adequate for resource estimation.

7.3 Sample Preparation, Analyses, and Security

7.3.1 Sample Preparation and Analyses of Gold and Copper Deposit

Sample preparation is the most critical step in the entire Laboratory operations and it must provide a homogeneous analytical sub-sample that is representative of the sample submitted to the laboratory.

Samples on arrival at the Laboratory are logged into the ALS tracking system with a bar code label attached. Samples are then dried in an oven at temperature of about 110 degrees followed by crushing of rock chips and drill samples to 70% of the sample passing 2mm. The samples are then split using the riffle splitter 250g and are pulverised to 85% less than 75 microns

The analytical methods employed at Sepon site have varied little over the years. The current assay protocol used by the Sepon Resource department is shown below in Table 7-2.

Table 7-2: Current Sepon Resource Assay Protocol

PROTOCOL	METHOD	TRIGGER	LAB	ELEMENTS ANALYZED
321 ALS-SepCu+IR07	Au-AA25 ME-ICP61		ALS	Au Ag,Al,As,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,Ga,K,La, Mg,Mn,Mo,Na,Ni,P,Pb,S,Sb,Sc,Sr,Th,Ti,Tl,U,V,W,Zn

+Cu-PKGPH06	S-IR07		S_S (Sulphide Sulphur)
	Cu-OG62	>0.5%Cu for OG62	Cu
	CuCN-PH06	>0.2% for	Cu (Cyanide Leach Soluble)
	CuR-PH06	Sequential	Cu (4 Acid Soluble)
	CuS-PH06	Cu-	Cu (Sulphuric Acid Soluble)
	CuT-PH06	PKGPH06	Cu (Calculated Total)

Notes

[1] ME-ICP61 Four Acid Near Total- ICP Multi-element Method

[2] ME-OG62 Four Acid Near Total Assay Grade Multi-element Method

[3] Au-AA25_26 Fire Assay Gold AAS finish

[4] IR07 Total S by Leco Furnace IR – provides sulphur speciation (sulphide sulphur and sulphate sulphur)

[5] PKGPH06 - Sequential Copper CuCn-PH06 (Cu Cyanide leach soluble), CuS-PH06 (Cu Sulphuric Acid leach soluble), CuR-PH06 (Cu 4 acid digest soluble) and CuT-PH06 (Cu calculated total based on all 3 methods of leach).

7.3.2 Bulk Density

Historically, various estimations of the wax density have been undertaken; in February 2014. R. Berthelsen and A. Lewin (MMG) confirmed that the density used in the calculation of specific gravity ("SG") in the database is correct. The review formed part of a larger Mineral Resource site review (Sepon resource report 2014).

Samples for bulk density determination are taken from diamond drill core every 10m using wax coated core immersion method; however, in 2015 sample interval was changed to 5m interval. This is to reduce the wide range of sample selection interval hence to allow for more oxide material selection.

Density data was collected for all rock types during each drilling program from 1993 to 2016. During the period 1993-1999 (Rio Tinto International, "RTI"), the field procedure for determining density values changed several times, as summarised by Loader and Curtis (1999). Various techniques for SG measurement have been used in the past. Only SG determination using the Archimedes method (with or without wax coating) has been used in the Mineral Resource models, all other methods are flagged for exclusion in the database.

The bulk density determinations were estimated into both Nalou and Discovery models as there is sufficient data density per rock type to enable ordinary krigginkriggg efficiencies over 50%. All SG's were validated both visually and statistically, with errant SG values being flagged in the Leapfrog database for exclusion. The flagged field has been sent to the Sepon database administrator to address in the main database.

7.3.3 Database Management

The Sepon Exploration and Resource database system consists of three components, one manual and two digital. These are a manual on Field Logging System, a Data Entry Database (DEDB), and a Master Database (LaosDB). Each digital component is configured to run in SQL Server with user access and permissions controlled by domain logins.

The databases are backed up incrementally 8 hourly (kept for 5 days on the server) and fully daily (kept for 2 weeks on the server). IT incrementally back up the servers to tape daily, with the tapes

kept in the server container for a week. Full back ups of the servers are conducted weekly and the tapes stored both in the admin building and offsite at the LXML Vientiane office.

7.3.4 SRK Comments

In the opinion of SRK, the sampling preparation, security and analytical procedures used by LXML are consistent with generally accepted industry best practices and are, therefore, adequate.

8 Data Verification

8.1 Verifications by SRK

SRK has arranged to re-sample a total of 83 pulps from drilling holes DIS745, DIS747, DIS750, DIS761 and KHN1154 to check the repeatability and accuracy of the assay results for the Sepon project. The pulp samples details are listed in Table 10.1 below. SRK has also visited and collected 12 rock chip samples at Discovery West Pit (DSW), Nalou Pit (NIU), Thengkham East Pit (TKE) and Thengkham North Pit (TKN) to verify the mineralization types and grades, and has these samples assayed at the ALS Global Australia (Table 8-1 and Table 8-2).

These pulp samples show gold and copper re-assay values with a 8.18% and 14.65% difference from the respective original assay values from the primary assay lab. It clearly verifies the general tenor of pertinent exploration data, and SRK believes that these data have been verified to a reasonable extent.

Two types of duplicates are used for monitoring laboratory's preparation and analytics: field duplicates and lab duplicates.

The rock samples from three different pits show the various mineral mineralizations such as carlin type gold mineralization, skarn and hornfelsed copper mineralization, hydrothermal gold- copper-molybdenum mineralization.

Table 8-1: Comparison with Re-assay by SRK and Original Assay from Sepon for Drilling Cores

Hole_ID	D_FROM (m)	D_TO (m)	Sample Type	Sample ID	Original Assay		Re-Assay		Diff(%)		Weight (g)
					Au (g/t)	Cu (%)	Au (g/t)	Cu (%)	Au	Cu	
DIS745	121	122	Pulp	D5096913	0.7		0.67		3.03		450
DIS745	122	123	Pulp	D5096914	1.5		1.54		3.97		410
DIS745	123	124	Pulp	D5096915	1.7		1.62		-6.57		450
DIS745	124	125.3	Pulp	D5096917	1.2		1.09		-5.36		500
DIS745	125.3	126	Pulp	D5096918	0.5		0.46		-6.32		430
DIS745	126	127.2	Pulp	D5096919	0.7		0.69		-		480
DIS745	127.2	128	Pulp	D5096920	3.9		3.05		-23.44		430
DIS745	128	129	Pulp	D5096921	1.7		1.67		-2.95		290
DIS745	129	130	Pulp	D5096922	3.2		3.02		-6.10		340
DIS745	130	131.4	Pulp	D5096923	4.2		4		-4.40		290
DIS747	131	132	Pulp	D5097107	0.5		0.52		-1.90		450
DIS747	132	133	Pulp	D5097108	1.4		1.44		2.82		370
DIS747	133	133.5	Pulp	D5097110	0.9		0.92		3.31		390
DIS747	133.5	134	Pulp	D5097111	1.1		1.28		19.74		420
DIS747	134	135	Pulp	D5097112	6.1		6.09		-0.65		300
DIS747	135	135.5	Pulp	D5097113	6.6		7.24		8.95		370
DIS747	135.5	136	Pulp	D5097115	28		30.5		9.03		400
DIS747	136	137	Pulp	D5097116	16		16.7		6.05		390
DIS747	137	138	Pulp	D5097117	14		18.9		28.61		390
DIS747	138	139	Pulp	D5097118	3.9		3.97		1.27		360
DIS747	139	140	Pulp	D5097119	3.9		3.99		2.03		370
DIS747	140	141.3	Pulp	D5097120	4.8		4.74		-1.88		330
DIS747	141.3	142	Pulp	D5097121	12		11.6		-0.35		320
DIS750	137	138	Pulp	D5097471	1.1		1.1		2.76		350
DIS750	138	139	Pulp	D5097473	0.8		0.8		-3.68		460
DIS750	139	140	Pulp	D5097474	21		32.8		42.01		410
DIS750	140	141	Pulp	D5097475	7.9		8.35		5.29		470
DIS750	141	142	Pulp	D5097476	3.3		3.33		1.21		470
DIS750	142	143	Pulp	D5097477	1.2		1.17		0.86		340
DIS750	143	144	Pulp	D5097478	12		18.3		43.35		340
DIS750	144	145.1	Pulp	D5097479	1.3		1.77		31.37		350
DIS750	145.1	146	Pulp	D5097480	2.3		2.28		-2.17		380
DIS750	146	147	Pulp	D5097481	2.2		3.17		36.57		470
DIS750	147	148	Pulp	D5097482	3.5		3.68		3.88		580
DIS750	148	149	Pulp	D5097484	1.1		1.17		3.48		500

Hole_ID	D_FROM (m)	D_TO (m)	Sample Type	Sample ID	Original Assay		Re-Assay		Diff(%)		Weight (g)
					Au (g/t)	Cu (%)	Au (g/t)	Cu (%)	Au	Cu	
DIS750	149	150	Pulp	D5097485	1.2		1.31		5.49		480
DIS750	150	151	Pulp	D5097486	2.4		2.55		4.82		520
DIS750	151	152	Pulp	D5097487	3.3		3.56		8.80		490
DIS750	152	153	Pulp	D5097488	1.2		1.95		48.41		480
DIS750	153	154	Pulp	D5097489	1.1		1.1		-		570
DIS750	154	155	Pulp	D5097490	1		1.02		-1.94		480
DIS750	155	156	Pulp	D5097491	1.9		1.91		1.58		320
DIS761	166	166.6	Pulp	D5127483	0.1		0.05		-18.18		510
DIS761	166.6	168	Pulp	D5127484	1.3		1.33		2.28		470
DIS761	168	169	Pulp	D5127485	4.2		4.24		1.90		450
DIS761	169	170	Pulp	D5127486	0.9		2.46		94.61		470
DIS761	170	171	Pulp	D5127487	1.1		1.1		-0.90		490
DIS761	171	172	Pulp	D5127488	2.2		2.4		7.79		470
DIS761	172	173	Pulp	D5127489	2.9		3.03		5.08		490
DIS761	173	174	Pulp	D5127490	24		22.5		-6.32		430
DIS761	174	175	Pulp	D5127492	5.1		6.22		20.18		340
DIS761	175	176	Pulp	D5127493	3.7		3.96		8.15		410
DIS761	176	177	Pulp	D5127494	1.5		1.65		12.22		410
DIS761	177	178	Pulp	D5127495	1.2		1.69		32.30		370
DIS761	178	179	Pulp	D5127496	2		2		-		370
DIS761	179	180	Pulp	D5127497	3.9		4.7		18.10		410
DIS761	182	183	Pulp	D5127500	4.9		5.08		4.22		350
DIS761	183	184	Pulp	D5127501	3.9		4.46		14.42		390
DIS761	184	185	Pulp	D5127503	2.7		3.19		15.91		480
DIS761	185	186	Pulp	D5127504	1.8		1.84		1.09		390
DIS761	186	186.6	Pulp	D5127505	1.8		2.23		20.25		410
DIS761	186.6	188	Pulp	D5127506	0.5		0.57		13.08		400
KHN1154	200	201	HCHQ	D2212912		1.35		1.42		5.10	1980
KHN1154	201	202	HCHQ	D2212913		0.73		0.93		24.64	1840
KHN1154	202	203	HCHQ	D2212914		2.46		3.45		33.43	1970
KHN1154	203	204	HCHQ	D2212915		0.64		1.04		47.99	1710
KHN1154	204	205	HCHQ	D2212916		0.99		1.24		22.54	1750
KHN1154	205	206	HCHQ	D2212918		1.22		1.01		-18.86	1790
KHN1154	206	207	HCHQ	D2212919		3.89		3.58		-8.26	1700
KHN1154	207	208	HCHQ	D2212920		1.03		0.91		-11.82	1810
KHN1154	208	209	HCHQ	D2212921		3.99		5.29		27.93	1960
KHN1154	209	210	HCHQ	D2212922		5.84		8.59		38.11	1910
KHN1154	210	211	HCHQ	D2212924		4.28		5.00		15.55	2420
KHN1154	211	212	HCHQ	D2212925		3.4		4.19		20.84	1880
KHN1154	212	213	HCHQ	D2212926		1.61		1.97		20.17	1830
KHN1154	213	214	HCHQ	D2212927		0.89		0.99		11.41	2020
KHN1154	214	215	HCHQ	D2212928		0.94		0.88		-6.79	1970
KHN1154	215	216	HCHQ	D2212930		0.19		0.23		19.30	2120
KHN1154	216	217	HCHQ	D2212931		0.36		0.41		12.11	1960
KHN1154	217	218	HCHQ	D2212932		0.16		0.13		-20.30	1880
KHN1154	218	219	HCHQ	D2212933		1.31		1.20		-8.52	2040
KHN1154	219	220	HCHQ	D2212934		0.45		0.92		69.20	1660
Total sample				82					8.18	14.65	

Figure 8-1: Au Comparison with Re-assay by SRK and Original Assay from Sepon for Drilling Cores

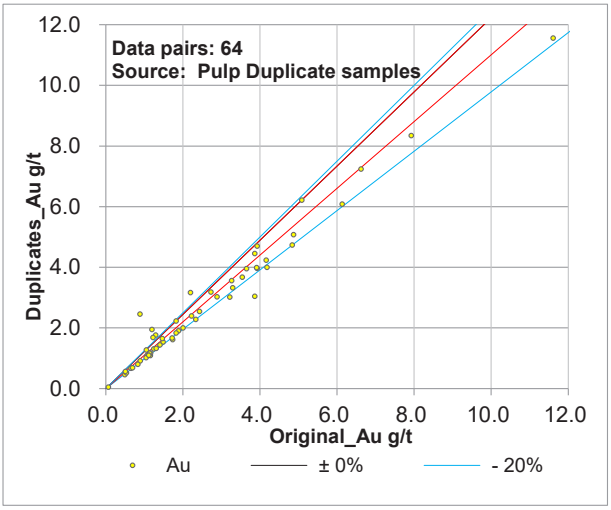


Figure 8-2: Cu Comparison with Re-assay by SRK and Original Assay from Sepon for Drilling Cores

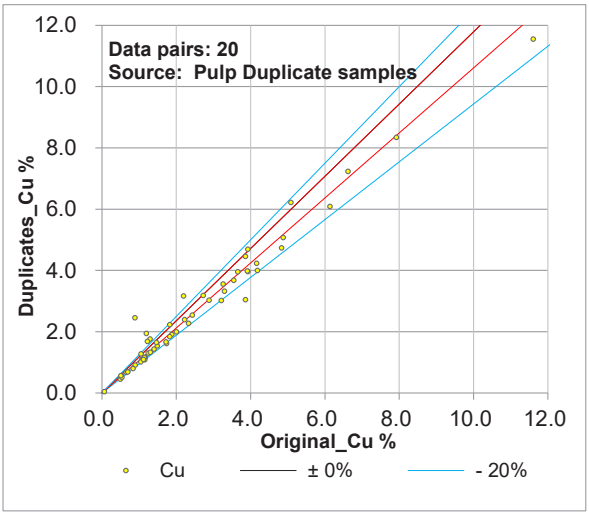


Table 8-2: Assay Report for Rock Samples from Sepon by SRK 2022

Prospect	Pit name	SPL_ID	Cu(%)	Au(g/t)	W(Kg)	Comment
DSW	Discovery West_A1 pit	R328792	<0.01	0.35	1.2	Au, 6-9 g/t
NLU	Nalou_ Pit	R328793	<0.01	4.84	2	Au, 3-5 g/t
TKE	Thengkham East pit	R328794	5.15	2.99	3.8	Cu, 0.5-1.0 %

Prospect	Pit name	SPL_ID	Cu(%)	Au(g/t)	W(Kg)	Comment
TKN	Thengkham North A pit	R328795	0.65	0.49	2.8	Cu_pri
TKN	Thengkham North A pit	R328796	1.25	0.18	2	Cu_pri
TKN	Thengkham North A pit	R328797	0.02	0.94	1.6	Cu_pri
TKN	Thengkham North A pit	R328798	0.38	0.08	2	Cu_pri
TKN	Thengkham North A pit	R328799	1.14	0.19	2.6	Cu_pri
TKN	Thengkham North A pit	R328800	0.37	0.56	2.6	Cu_pri
TKN	Thengkham North A pit	S174600	0.14	0.09	2	Cu_pri
TKN	Thengkham North A pit	S174601	0.98	0.41	2	Cu_pri
TKN	Thengkham North A pit	S174602	1.12	0.16	1.4	Cu_pri
Total		12 SPL			26	

8.2 Site Visits

Dr. Anson Xu and Dr. Tony Guo from SRK team visited the Sepon property from 8 December 2022 to 14 December of 2022 (Figure 8-2 to Figure 8-4). Table 8-3 lists the details for all the sites visited.

Table 8-3: Sites Visited at Sepon Property by SRK Team

Date	Site	Activities
Dec. 9	Mine camp	Visited mine office and met mine senior officers and technical team
Dec.10	Discovery West A2-A3 pits, Nalou pit and Theng-kham east pit, Core shack	Visited DISW A2, A3 operation pits, Nalou and TKE pit; verified the Calin-type sulfide Au mineralization and skarn type Cu mineralization, collected samples R328792, R328793 and R328794 respectively; visited drilling sites of holes PVN1233D1 and MBE036; Checked out cores from holes PVN 1199, HYB163, DSW928, KHN1154, TKE454, PVN1231D1, BME036, DSW039D1
Dec. 11	Discovery and Nalou pits and underground tunnel	Visited open pit operation, sighted mining equipment, checked out mining designing and plan; visited underground tunnel and stopes development
Dec. 12	TKN pits, Processing plants and Laboratory	Visited TKN A pits and slope to check out the lower grade skarn and hornfelzed Cu mineralization, collected rock chip samples from R328796 to R328800, S174600, S174601; Visited processing plant, floatation, high-pressure leaching tanks and laboratory
Dec. 13	Corporate office	Visited corporate office and met mine senior officers and technical team

Figure 8-2: Black Colour Carbonate Hosted Carlin Type Au Mineralization at Discovery West A2 Pit

Figure 8-3: Skarn Type Cu Mineralization at Slope Wall of TKN A Pit

Figure 8-4: Hydrothermal Cu-Au Mineralization in the Intrusive

In December 2023 and May 2024, SRK team conducted an additional site visit to inspect other technical aspects of open-pit and underground mining, ore processing and smelter, as well as environmental issues.

9 Mineral Processing and Metallurgical Testing

9.1 Gold Ores

9.1.1 Mineralogy

A comprehensive mineralogical study on 60 drill core samples from Sepon Gold Mine was conducted. Sepon ores exhibit typical characteristics of refractory gold ores. In addition to occurring mainly as submicroscopic gold and micron-size inclusions in arsenian pyrite, the presence of slow-dissolving gold telluride, carbonaceous matter and arsenic-bearing Cu-Pb minerals makes gold extraction more challenging.

Bulk mineralogy and gold deportment studies were conducted on 30 of the 60 core samples, including 3 oxide ore samples and 27 primary samples. The mineralogical studies have concluded that:

1. Sepon Primary ores exhibit typical characteristics of refractory gold ores. In addition to occurring mainly as submicroscopic gold and micron-size inclusions in arsenian pyrite, the presence of slow-dissolving gold telluride, carbonaceous matter and arsenic-bearing Cu-Pb minerals makes gold extraction more challenging.
2. Grain size, liberation, association and chemistry of gold minerals (particularly gold tellurides) are the major mineralogical factors affecting gold recovery by gravity, flotation and also cyanidation.
3. Since gold is intimately associated with arsenian pyrite, overall gold recovery will be dictated by the efficiency and effectiveness of pyrite flotation, pressure oxidation and cyanidation.
4. Sepon Primary gold ores are composed mainly of silicate and carbonate minerals (including quartz, dolomite, muscovite and calcite), with trace to minor amounts of sulphide and other minerals. Dolomite is a calcium-magnesium bearing carbonate, which will drive acid demand to over 250 kg/t for the associated quantities within Sepon Primary gold, making any processing route uneconomical which includes acidification.
5. Sepon Primary gold can be classified as Carlin-type due to the presence of organic carbon. It is well known that carbonaceous material in the Carlin-type ores is detrimental to gold ore processing due to its preg-robbing capability. The presence of organic carbon dictates that some fraction of the Sepon Primary gold mineral inventory to be classified as double refractory.
6. Pyrite is the predominant sulphide mineral within Sepon Primary gold ores. Pyrite occurs as arsenian pyrite, mainly fine-grained (down to 1μm) and disseminated in silicate and carbonates. Coarse pyrite (up to several hundred microns) is not common.
7. The grade of refractoriness varies among the primary gold pits; with Nalou and Namkok being classified as highly refractory, while Discovery ore as mildly refractory.

9.1.2 Metallurgical Tests

The metallurgical response of Sepon Primary Ores has been evaluated since 2005. The most relevant testing data have been considered for the 2020 reformation design purposes. This includes three different testing campaigns:

- Burnie Laboratory campaign 2004 – 2005
- Hazen Testwork campaign 2006 – 2007
- G&T Testwork campaign 2006-2008
- Ammtec Testwork campaign - 2010
- ALS Testwork campaign 2012 -2013
- BGRIMM Testwork campaign 2018 - 2019

The metallurgical samples used for these testing campaigns are considered representative of the deposit.

9.1.3 GRG Test

A Gravity Recoverable Gold ("GRG") test was conducted in the year of 2019 BGRIMM testing program. Under a grind fineness of 60% to 90% minus 74 microns，the gravity concentrate grade of the Knelson concentrator is around 20 g/t with a gold recovery of only about 10%. The grinding fineness had little effect.

During the 2013 ALS testing program, a GRG test using a master composite sample (P_{80} = 53 microns) resulted in a gold recovery of 14.5%, with a mass pull of 4.36%. The GRG test results indicate that the gravity process is not feasible with the ultrafine dissemination of gold.

Flotation Test

The flotation response from Sepon Primary ores has received significant attention in order to maximise gold recovery. The tests were involved in the above testing campaigns. The flotation responses are illustrated in Figure 9-1 and summarized below:

- Gold flotation recovery is in line with the sulphur, arsenic, organic carbon and the mass pull of the concentrate. The flotation time should be no less than 50 minutes.
- The optimal primary grind size is P80=53 μm. The regrind and re-flotation of the flotation tails cannot improve the gold recovery.
- Flash flotation prior to conventional flotation can significantly improve the gold recovery.

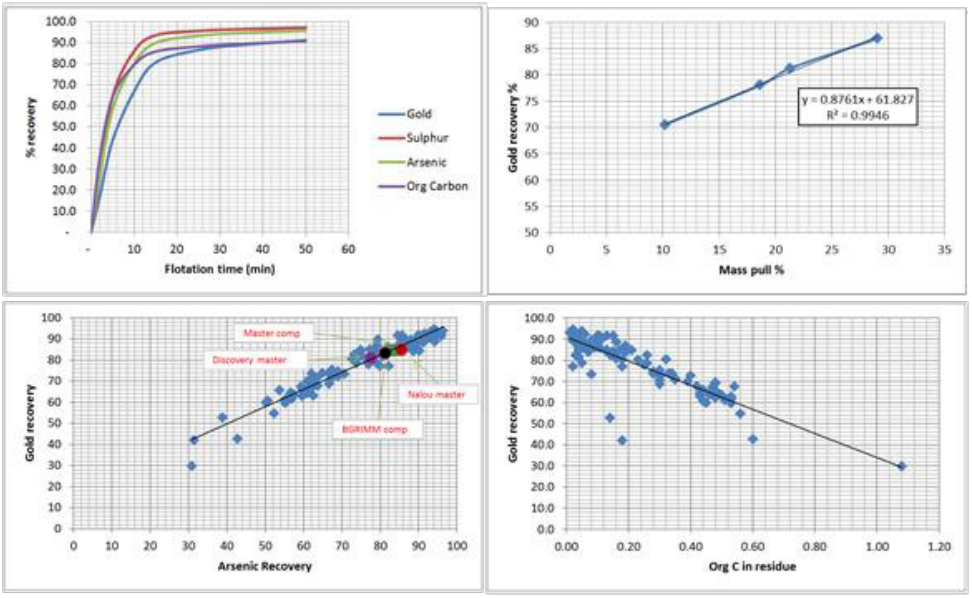
Table 9-1 summarizes the results of four locked cycle flotation tests by BGRIMM.

Table 9-1: BGRIMM Flotation Test Results

Flotation Sheet	Head Grade (g/)	Concentrate Grade (g/t)	Mass Pull (%)	Gold Recovery (%)
Carbon pre-float	4.38	29.10	10.19	70.52
Conventional	4.38	18.31	18.64	78.04
Flash pre-float	4.38	16.94	21.32	81.24
Intensified flash pre-float	4.38	12.95	29.04	86.89

Source: Sepon Gold Project Study – Chapter 7 Metallurgy and Mineral Processing

Figure 9-1: Sepon Primary Ore Flotation Response



Source: Sepon Gold Project Study – Chapter 7 Metallurgy and Mineral Processing

Pressure Oxidation

All pressure oxidation feeds were pre-acidulated with flotation concentrate. The post POX residue underwent the CIL process.

Hazen performed POX tests in both batch and pilot plant tests. Three batch tests gave consistent CIL results of 93.7% - 94.2% gold recovery when the sulphide sulphur oxidation was around 95%. The pilot plant produced CIL recoveries of 91.3% - 94.4% for partially acidulated feeds. When the feed was fully pre-acidulated the recoveries were 81% - 85%.

ALS POX tests confirmed the gold recovery ranges from 92% to 94%.

BGRIMM tests showed recoveries within 92.0% - 95.3%, and no regrind either lime boil was required.

Flotation Tails CIL

Historically cyanide leaching of flotation tails has been performed under aggressive leaching conditions including 2,000 ppm sodium cyanide concentration. Under these conditions, the cyanide consumption was over 4 kg/t, yielding a non-economical business proposition as additional gold recovery was within 3% - 6%.

A pre-conditioning step and a lower cyanide concentration in the CIL were tested. Cyanide consumption was reduced to under 0.4 kg/t.

An additional test was performed by regrinding the flotation tails down to 10 microns; however recovery was not improved highlighting the severe liberation issue related to the non- recoverable gold.

LXML Metallurgical Laboratory and Testing

The Sepon Gold Plant has been reformed to process oxide ore and primary ore in a parallel mode. The oxide ore is processed by the carbon-in-leaching ("CIL") process, and the primary ore is processed by the "flotation - concentrate POX - CIL process". The final product is Gold Doré. As both the oxide and primary ores are refractory, the gold recoveries are low, with the oxide ore ranging from 51.8% to 68.9% and primary ore ranging from 54.7% to 67.0%.

A metallurgical laboratory adjacent to the plants complex conducted metallurgical tests frequently on the samples from different ore bodies and plant flow to optimise the operation parameters for gold recovery improvement. Figure 9-2 shows part of the metallurgical test equipment.

Figure 9-2: Part of Test Devices in Sepon Metallurgical Laboratory

Source: SRK site visit

Tests of Reducing Mass Pull by Regrinding-Recleaning of primary flotation concentrate have been completed in the laboratory. A new plant for regrinding-recleaning of primary concentrate is being built to reduce the carbonates for acid saving of concentrate acidulation. The target regrind fineness is P80=20 μm, and the test results are shown in Table 9-2. Mass pull is capable of being reduced down to ~15% via regrinding at a small cost to recovery (e.g., 1-2%). Correspondingly, the flotation recovery of calcium which is the indicator for sulfuric acid consumption in acidification ahead of POX, was reduced by 50% or more.

Table 9-2: Primary Concentrate Regrinding-recleaning Test Result

Reflotation Circuit	Mass Pull (%)	Ca Recovery (%)	Au Recovery (%)		
			Flot	POX-CIL	Overall
Current Plant Circuit	29.10	17.1	86.8	78.0	67.7
Coarse Split Flotation - Regrinding	15.66	5.5	86.2	80.1	69.1

Reflotation Circuit	Mass Pull (%)	Ca Recovery (%)	Au Recovery (%)		
			Flot	POX-CIL	Overall
Regrinding	19.31	7.3	86.5		69.3
Coarse Split Flotation - Regrinding	16.90	6.0	86.3		69.1

Source: LXML- Reducing Mass Pull by Regrinding-Recleaning

The current laboratory test is resin-in-Leach ("RIL"), using resin to replace activated carbon as the gold adsorbent. It is expected to improve the gold recovery as that the strong adsorption capacity of the resin can compete with organic carbon.

9.1.4 Conclusion and Recommendation

Sepon gold ores, both oxide and primary, are refractory due to the ultrafine deportment, the presence of arsenic and antimony minerals and organic carbon.

CIL process is suitable for the gold extraction of oxide ore, but the gold recovery is low. The historical production performance shows gold recovery ranging from 51.8% to 68.9%.

Flotation-POX-CIL process is suitable for the gold extraction of primary ore. The flotation tests indicate the gold recovery of flotation concentrate ranges from 85% to 90%, and the concentrate POX-CIL recovery ranges from 92% to 94%.

Gravity concentration is not suitable for the processing of Sepon gold ores. The gold extraction rate is as low as 3% to 6% for the flotation tails cyanidation.

The onsite metallurgical laboratory is well equipped. The frequent tests can guide the processing plant operation to remain steady and achieve satisfactory result.

9.2 Copper ores

9.2.1 Introduction

Sepon oxide copper ores are processed using hydrometallurgical process including agitation leaching and heap leaching, solvent extraction and electrowinning ("EX/EW") of the pregnant leach solution ("PLS"). The current copper plant adopts this process.

Supergene copper ores are processed using a unique hydrometallurgical process designed as an alternative to flotation and heap leaching. The supergene ores are now depleted.

Primary copper mineralisation at Thengkham and at Khanong has been identified; however, this ore contains chalcopyrite which the Sepon process was not designed to treat because chalcopyrite is refractory under the designed leaching conditions.

The test study on primary copper ores is focused on flotation process to produce a saleable copper concentrate.

9.2.2 Mineralogy

Seven primary ore samples from Thengkham East were examined for mineralogy by ALS in 2008. The mineral composition is listed in Table 9-3 for the seven samples. Nearly all of the copper was present as chalcopyrite. Minor tennantite and bornite, accounting for less than 3% of the total copper, were found in some of the samples. Pyrite was the other main sulphide mineral, varying from 0.2% to 10% in the samples. Gangue minerals varied between the samples. The major gangue minerals were dolomite, other carbonates such as calcite and ankerite, garnet, mica, quartz, and other silicates such as diopside, orthoclase, serpentine and amphibole.

Table 9-3: Mineral composition of Thengkham East Primary Samples

Mineral	Sample ID						
	R036781	R036782	R036783	R036784	R036785	R036786	R036787
Chalcopyrite	6.19	1.86	1.09	8.13	1.59	1.87	0.72
Bornite	0	0	0	0	0	0.01	0.01
Tennantite	0.14	0	0.03	0	0	0	0
Pyrite	4.85	0.94	2.96	9.93	0.28	0.18	4.81
Molybdenite	0	0	0.07	0.03	0.01	0.01	0
Iron Oxide	0	0.01	0.01	0.01	0.54	0.99	10.42
Ankerite	0.58	15.26	0.06	47.61	0.18	0.56	0.11
Calcite	2.72	5.8	1.61	0.29	11.1	18.04	11.42
Dolomite	**40.98**	**53.41**	5.65	4.58	0.11	0.17	0.18
Fluorite	0.08	0.2	0.02	0.46	0.01	0.01	0.57
Apatite	0.01	0.02	0.13	0.05	0.11	0.11	0.01
Amphibole	0.41	0.11	0.03	0	0	0.21	10.06
Andradite_Grossular	0.56	1.68	0.65	1.61	64.85	55	0.37
Chlorite	0.07	0.98	0	0.02	0.28	0.03	0
Chlorite_2	0	0	0	16.84	1.35	1.77	0.13
Chlorite_3	0	0	0.01	0	2.79	0.61	0.38
Chlorite_4	0	0	0	1.19	0.45	0.52	0
Diopside	4.54	2.79	0.43	0.3	0.34	0.92	26.76
Illite	0.07	0.06	1.63	0.86	8.41	4.9	0.01
Muscovite	0.63	0.17	26.01	4.56	0.12	0.1	0
Orthoclase	0.01	0	10.01	0.01	0.25	0.1	0
Phlogopite	0	0	0	0	0.02	0.02	2.23
Quartz	38.12	16.66	49.08	3.38	6.73	13.57	0.24
Serpentine	0.02	0.01	0.05	0	0	0.07	31.55
Titanite	0.01	0.01	0.04	0.01	0.34	0.16	0
Others	0.01	0.03	0.43	0.13	0.14	0.07	0.02
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: LXML - Sepon Thengkham Primary Copper Proof of Concept

9.2.3 Flotation Test

Flotation tests were conducted on 29 composites samples, which covered different rock types and lithologies, and a broad range of copper, sulphur, calcium and magnesium grade.

The tests adopted conventional flowsheet comprising rougher flotation at grind size of P_{80}=106 μm, regrinding the rougher concentrate to target fineness of P80=25 μm then cleaner flotation. The tests results are summarised in Table 11-4.

Low grade samples with average grade of 0.61% Cu yielded a copper recovery of 84.5%, with a concentrate grade of 18.5% Cu.

Middle grade samples with average grade of 1.12% Cu yielded a copper recovery of 83.2%, with a concentrate grade of 19.4% Cu.

High grade samples with average grade of 1.42% Cu, yielding a copper recovery of 57.0%, with a concentrate grade of 7.5%. All the high grade samples showed a high sulphur content and high Acid Soluble Copper (ASCu) fraction, which resulted in the low concentrate grade and low copper recovery.

Table 9-4: Primary Copper Flotation Results

Sample ID	Lithology	Head Grade (%)		Regrind (µm)	Mass pull (%)	Conc. Grade (%)		Cu Recovery (%)
		Cu	S			Cu	S	
Comp 8	Massive sulphide	0.28	1.2	24.4	1.0	24.5	27.9	88.8
Comp 6	Altered dolomite	0.39	11.8	24.9	2.3	13.0	22.1	77.1
Comp 2	Skarn	0.47	4.8	25.1	2.4	16.0	21.4	82.4
Comp 4	Magnesium Skarn	0.48	4.1	21.2	2.7	15.0	18.8	82.9
Comp 10	Altered Hornfels	0.53	2.9	24.4	1.9	24.9	28.9	89.3
Comp 5	Altered dolomite	0.60	8.7	25.2	3.1	16.6	34.5	85.3
Master TK3	HNF + SLT	0.73	5.5	30.0	5.0	12.1	39.8	87.9
Comp R2_5	Altered dolomite	0.84	8.0	23.0	3.6	19.0	37.1	80.5
Master TK6	HSK/DOL/HNF	0.86	4.8	25.0	2.7	26.4	33.5	83.6
Master TK1	DOL	0.87	2.8	22.4	3.5	19.9	23.7	86.8
Average		**0.61**	**5.5**	**24.6**	**2.8**	**18.7**	**28.8**	**84.5**
Master TK4	MAG/SCS-DOL	0.90	8.1	22.0	4.8	12.7	33.6	73.7
Comp R2_II	RDP	0.92	5.5	25.4	3.2	26.6	31.0	92.4
Master TK5	RDP	0.96	2.6	26.0	5.3	15.3	19.1	85.9
Comp R2_3	Magnesium Skarn	0.99	7.6	24.3	3.8	21.1	27.5	80.2
Master TK9	SRD/HSK/DOL	1.00	7.6	30.0	5.7	13.4	39.4	80.8
Master TK10	DOL/SRD/SLT	1.00	8.9	31.0	5.4	16.8	37.6	89.0
Comp R2_I	Skarn	1.05	7.4	25.7	3.6	26.9	31.1	91.2
Comp 3	Magnesium Skarn	1.07	5.0	20.7	5.9	15.1	19.0	83.4
Master TK7	MSS/HNF	1.09	4.7	32.0	5.4	19.0	35.6	91.3
Comp 9	Altered Hornfels	1.23	2.3	25.0	3.7	28.3	30.3	84.4
Comp 7	Massive sulphide	1.29	4.4	24.3	3.7	23.7	31.4	68.3
Comp 1	Skarn	1.33	5.2	25.9	5.2	21.1	25.0	82.5
Comp R2_9	Altered Hornfels	1.33	6.5	25.6	4.9	19.8	38.1	72.7
Master TK12	MSS-DOL	1.47	5.7	33.0	10.4	12.4	40.3	89.6
Average		**1.12**	**5.8**	**26.5**	**5.1**	**19.4**	**31.4**	**83.2**
Master TK8	DOL/RDP	0.96	*12.1*	34.0	15.0	3.4	47.7	53.2
Master TK11	MSS-SLT/DOL	1.29	13.2	42.0	19.3	3.1	49.1	47.3
Comp R2_7	Massive sulphide	1.13	14.0	25.7	4.4	21.3	37.6	81.6
Master TK2	RDP	1.11	18.0	39.0	22.0	3.2	48.7	69.2
Master TK13	MSS - DOL/RDP	2.63	43.0	29.0	13.2	6.7	47.9	33.6
Average		**1.42**	**20.1**	**33.9**	**14.8**	**7.5**	**46.2**	**57.0**

Source: LXML - Sepon Thengkham Primary Copper Proof of Concept

A master composite was produced from other composites previously used for bench flotation testing. The flotation test results are shown in Table 9-5. The test achieved a copper recovery of 89.1%, with a concentrate grade of 22.3%.

Table 9-5: Master Composite Flotation Test Results

Product	Mass Pull (%)	Grade (%)			Recovery (%)		
		Cu	S	Fe	Cu	S	Fe
Cleaner Conc.	4.25	22.3	28.8	26.1	89.1	17.2	10.3
Cleaner Tail	4.32	0.56	12.1	14.7	2.27	7.32	5.89
Rougher Tail	91.4	0.10	5.9	9.87	8.59	75.5	83.8
Calc'd Head	100.0	1.06	7.14	10.8	100.0	100.0	100.0
Assay Head		1.11	6.79	10.2			

Source: LXML - Sepon Thengkham Primary Copper Proof of Concept

9.2.4 Conclusion and Recommendation

Conventional flotation process can be applied to the primary copper ores to produce a saleable copper concentrate. The concentrate grade and copper recovery are affected by the sulphur grade and ASCu/TCu ratio. A general copper recovery of 80% can be achieved.

The gold and silver are likely recovered into copper concentrate but there are no relevant data. The precious metals credit to the concentrate cannot be evaluated. More flotation tests are recommended to assess the gold and silver recovery and concentrate quality.

10 Mineral Resource Estimates

The JORC Code 2012 defines a mineral resource as:

"a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories."

"All reports of Mineral Resources must satisfy the requirements that there are reasonable prospects for eventual economic extraction (ie more likely than not), regardless of the classification of the resource.

Portions of a deposit that do not have reasonable prospects for eventual economic extraction must not be included in a Mineral Resource…"

10.1 Introduction

LXML is an operating mine at the Effective Date. It hosts several deposits along a 14 km long belt of carbonaceous rocks. Figure 10-1 is showing the plan view of current LXML deposits.

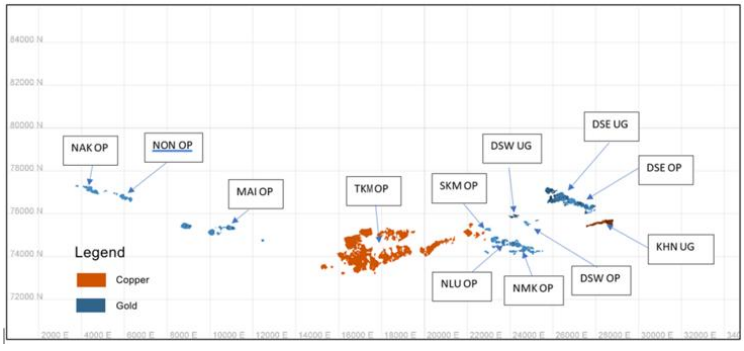
The open pits are or will be constructed at the area of deposits of DSE OP, DSW OP, NLU OP, SKM OP, NKW OP, TKM OP, KHN OP and Far west areas (Nakachan (NAK OP), Ban Non (NON OP), and Ban Mai (MAI OP)). The underground mines are located at deposits Discovery Deep East (DSE UG) and Discovery Deep West (DSW UG).

In addition to these deposits, there are dozens of stockpiles of gold and copper ore on site.

The latest block models and data were constructed or updated by LXML personnel as at the 31 March 2024.

At the Effective Date, SRK estimated Mineral Resource from these deposits and stockpiles.

Figure 10-1: Plan view of LXML Mineral Resource Deposits

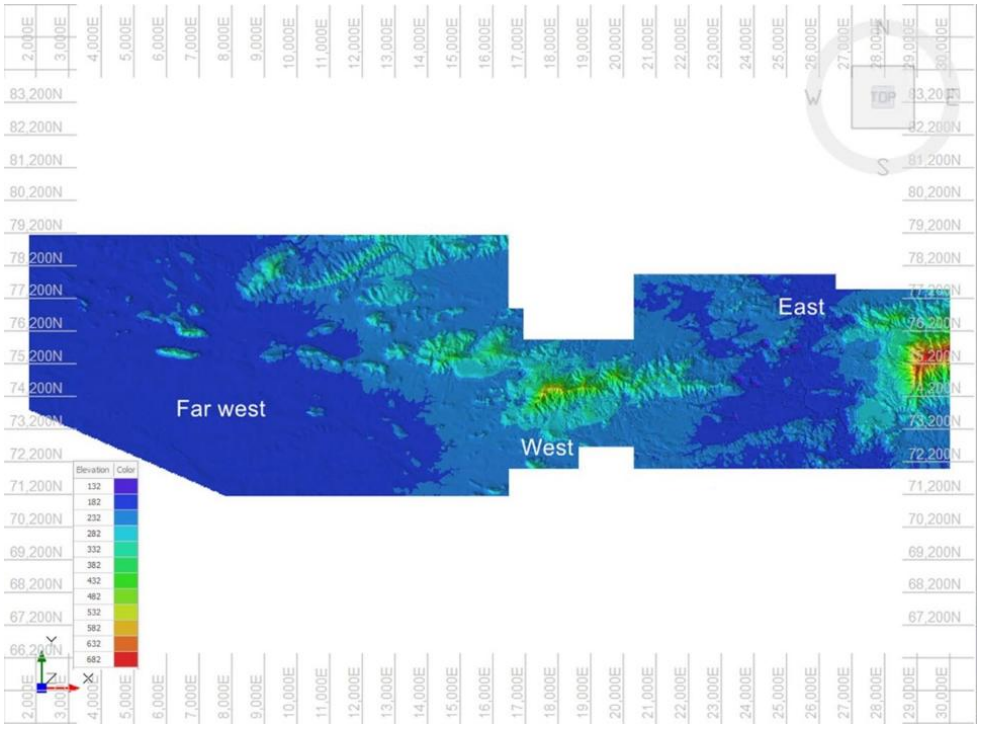


Sources: LXML

10.2 Year (Quarter)-end Map and Mined-out Areas

SRK was provided with a year (Quarter)--end map dated on 31 March 2024. The map covers those deposits that are working or in plan. After reviewing of the year-end map, SRK considered it was of sufficient details to support Mineral Resource estimate.

Figure 10-2: Year(Quarter)-end Map, Dated on 31 March 2024



Sources: SRK

10.3 Mineral Resource Models

SRK were provided with the latest block models, thirteen in total, which were constructed or updated by LXML personnel between in February to March 2024 and September 2023 (nlu_gc.bmf) and notes ("MR 2024Q1 Classification Notes.xlsx"), where Mineral Resource categories are classified in twelve block models. Among them, six block models have been updated based on sustaining exploration campaigns. They are: DSE OP ("dse_gc_29032024.bmf"), DSW OP ("dsw_gc_03022024.bmf"), "nkk_gc300324.bmf", NMK OP ("nkk_gc300324.bmf"), NLU OP ("nlu_gc160324.bmf together with nlu_gc.bmf"), SKM OP ("Songkham_v3.bmf"), and DSC UG ("DSC_UG_FEB24.bmf").

For the Phavat deposit ("PVT"), the Mineral Resources cannot be reported by SRK since the block model "bm_pvt_oct 2023.bmf " has not been classified as Mineral Resource.

10.4 Open Pit Mining

10.4.1 Songkam (SKM OP)`

The key parameters for SKM Mineral Resource estimation are summarized in Table 10-1.

Table 10-1: Key Parameters of Mineral Resources Estimate (SKM OP)

Item	Description
Software	Vulcan
Drill hole database	The database contains information for 129 boreholes and 5,589 samples with Cu, Au and silver (Ag) assays
Cut-off grade	Oxidized gold ore: 0.6 g/t Primary gold ore: 1.5 g/t.
Block size	The Parent block model is 10 x10 x 5m, and the sub cell is 2 x 2 x 1m
Grade capping	Au:10 g/t
Grade interpolation	Ordinary Kriging
Search parameter	▪ Domain HG – 1 pass: Rotation 1:88 Rotation 2:-5.5 Rotation 3:0；Maj (dist.):30 Inter (dist.):20 Minor (dist.):10; Min No Samples:8 Max No Samples:20 – 2 pass: Rotation 1:88 Rotation 2:-5.5 Rotation 3:0；Maj (dist.):60 Inter (dist.):40 Minor (dist.):20; Min No Samples:8 Max No Samples:20 ▪ Domain LG – 1 pass: Rotation 1:88 Rotation 2:-5.5 Rotation 3:0；Maj (dist.):30 Inter (dist.):20 Minor (dist.):10; Min No Samples:8 Max No Samples:20
Mineral Resource classification	Indicated: Approximate drill-hole spacing 10 to 25m; All of pit assigned Indicated; Entirely classified as Indicated based on main HG mineralising lense within pit shell being drilled between 10 to 25m spacing. Multiple holes on most sections showing mineralised intersections. Reasonable definition of the mineralised body. Final GC drilling not completed.

Sources: LXML

The SKM Statement of Mineral Resource is shown in Table 10-2.

Table 10-2: Mineral Resource Statement of SKM OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
SKM open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	47	2.02	0.10	3
		MES+IND	47	2.02	0.10	3
		Inferred	-	-	-	-
	Primary	Measured	-	-	-	-
		Indicated	0.5	2.57	0.001	0.04
		MES+IND	0.5	2.57	0.001	0.04
		Inferred	-	-	-	-
	Total	Measured	-	-	-	-
		Indicated	48	2.03	0.10	3
		MES+IND	48	2.03	0.10	3
		Inferred	-	-	-	-

Sources: SRK

10.4.2 Discovery East (DSE OP)

The key parameters for DSE Mineral Resource estimation are summarized in Table 10-3.

Table 10-3: Key Parameters of Mineral Resources Estimate (DSE OP)

Item	Description
Software	Vulcan
Drill hole database	-
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t
Block size	The Parent block model is 150 x 96 x 75m, and the sub cell is 1 x1 x 2.5 m
Grade capping	-
Grade interpolation	-
Search parameter	-
Mineral Resource classification	Indicated: Approximate drill-hole spacing 20 to 40m through the area. Some parts with closer spacing. Inferred: Approximate drill-hole spacing up to 40m. All of DSE02A pit assigned Indicated. All of Oxide in DES04B is classified as Indicated, all of Primary in DSE04B is classified as Inferred. The DSE04B pit is targeting the northern edge of mineralisation and several sections do not have drilling closing out the mineralisation. Therefore, this mineralisation has been classified as Inferred in this pit shell. All other mineralisation has been classified as Indicated.

Sources: LXML

The DSE Statement of Mineral Resource is shown in Table 10-4.

Table 10-4: Mineral Resource Statement of DSE OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
DSE open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	558	1.65	0.92	30
		MES+IND	558	1.65	0.92	30
		Inferred	-	-	-	-
	Primary	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	145	3.20	0.46	15
	Total	Measured	-	-	-	-
		Indicated	558	1.65	0.92	30
		MES+IND	558	1.65	0.92	30
		Inferred	145	3.20	0.46	15

Sources: SRK

10.4.3 Discovery West (DSW OP)

The key parameters for DSW Mineral Resource estimation are summarized in Table 10-5.

Table 10-5: Key Parameters of Mineral Resources Estimate (DSW OP)

Item	Description
Software	-
Drill hole database	-
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t
Density	-
Block size	The Parent block model is 150 x 96 x 75m, and the sub cell is 1 x1 x 2.5m
Grade capping	-
Grade interpolation	-
Search parameter	-
Mineral Resource classification	Indicated: Approximately 20m spacing with some closer spaced drilling in places from previous GC campaigns. All of pits classified as Indicated Inferred: Approximate drill-hole spacing up to 40m

Sources: LXML

The DSW Statement of Mineral Resource is shown in Table 10-6.

Table 10-6: Mineral Resource Statement of DSW OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
DSW open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	1.16	0.02	1	16
		MES+IND	1.16	0.02	1	16
		Inferred	-	-	-	-
	Primary	Measured	-	-	-	-
		Indicated	5.01	0.35	11	70
		MES+IND	5.01	0.35	11	70
		Inferred	-	-	-	-
	Total	Measured	-	-	-	-
		Indicated	4.28	0.37	12	86
		MES+IND	4.28	0.37	12	86
		Inferred	-	-	-	-

Sources: SRK

10.4.4 Namkok West (NKW OP)

The key parameters for NKW Mineral Resource estimation are summarized in Table 10-7.

Table 10-7: Key Parameters of Mineral Resources Estimate (NKW OP)

Item	Description
Software	Leapfrog and Vulcan
Drill hole database	The database contains information for 17,421 boreholes and 530,024 samples with Cu, Au and silver (Ag) assays

Item	Description
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t.
Density	14,209 SG samples
Block size	The Parent block model is 60 x 30 x 10m, and the sub cell is 1 x 1 x 2.5m
Grade capping	Au Primary LG Pass 1:Au Lower:0.005 g/t Au Upper :15g/t Au Primary HG Pass 1:Au Lower:0.005 g/t Au Upper :30g/t Au Oxide LG Pass 1:Au Lower:0.001 g/t Au Upper :15g/t Au Oxide HG Pass 1:Au Lower:0.001 g/t Au Upper :20g/t
Grade interpolation	Ordinary Kriging
Search parameter	Domain Au Primary HG 1 pass: Dynamic anisotropy；Maj (dist.):50 Inter (dist.):25 Minor (dist.):20; Min No Samples:12 Max No Samples:15 2 pass: Dynamic anisotropy；Maj (dist.):80 Inter (dist.):40 Minor (dist.):30; Min No Samples:9 Max No Samples:16 3 pass: Dynamic anisotropy；Maj (dist.):120 Inter (dist.):80 Minor (dist.):60; Min No Samples:6 Max No Samples:18 4 pass: Dynamic anisotropy；Maj (dist.):1000 Inter (dist.):800 Minor (dist.):600; Min No Samples:4 Max No Samples:12
Mineral Resource classification	Measured (approx. 10m spacing), Indicated (20 to 25m spacing), Inferred (>50m, up to 70m) Measured (approx. 10m spacing), Indicated (20 to 25m spacing), Inferred (>50m, up to 70m) All of pit NMK01B classified as Indicated. All of NMK02A classified as Measured. All of NMK02B is Inferred. All of NMK3A is Indicated.

Sources: LXML

The NKW Statement of Mineral Resource is shown in Table 10-8.

Table 10-8: Mineral Resource Statement of NKW OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
NKW open pit (OP)	Oxide	Measured	36	1.18	0.04	1
		Indicated	1,300	1.43	1.86	60
		MES+IND	1,336	1.43	1.91	61
		Inferred	215	1.01	0.22	7
	Primary	Measured	1	2.77	0.00	0
		Indicated	265	3.41	0.90	29
		MES+IND	266	3.40	0.91	29
		Inferred	-	-	-	-
	Total	Measured	37	1.23	0.04	1
		Indicated	1,566	1.77	2.77	89
		MES+IND	1,602	1.76	2.81	90
		Inferred	215	1.01	0.22	7

Sources: SRK

10.4.5 Nalou (NLU OP)

The key parameters for NLU Mineral Resource estimation are summarized in Table 10-9.

Table 10-9: Key Parameters of Mineral Resources Estimate (NLU OP)

Item	Description
Software	Leapfrog and Vulcan
Drill hole database	The database contains information for 17,421 boreholes and 530,024 samples with Cu, Au and silver (Ag) assays.
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t.
Density	14,209 SG samples
Block size	The Parent block model is 60 x 30 x 10m, and the sub cell is 1 x 1 x 2.5m
Grade capping	Au Primary LG Pass 1:Au Lower:0.005 g/t Au Upper :15g/t Au Primary HG Pass 1:Au Lower:0.005 g/t Au Upper :30g/t Au Oxide LG Pass 1:Au Lower:0.001 g/t Au Upper :15g/t Au Oxide HG Pass 1:Au Lower:0.001 g/t Au Upper :20g/t
Grade interpolation	Ordinary Kriging
Search parameter	Domain Au Primary HG 1 pass: Dynamic anisotropy；Maj (dist.):50 Inter (dist.):25 Minor (dist.):20; Min No Samples:12 Max No Samples:15 2 pass: Dynamic anisotropy；Maj (dist.):80 Inter (dist.):40 Minor (dist.):30; Min No Samples:9 Max No Samples:16 3 pass: Dynamic anisotropy；Maj (dist.):120 Inter (dist.):80 Minor (dist.):60; Min No Samples:6 Max No Samples:18 4 pass: Dynamic anisotropy；Maj (dist.):1000 Inter (dist.):800 Minor (dist.):600; Min No Samples:4 Max No Samples:12
Mineral Resource classification	Measured (5 to 10m spacing), Indicated (20 to 25m spacing, some areas broader with less than 50m), Inferred (>50m) Classification applied by each pit shell/stage. 2B includes Measured where GC drilling has been undertaken (approximately 5 by 10m spacing). All other mineralisation in this pit is considered Indicated with a drill-spacing of between 20 to 25 metres. 2C has been classified in the same way as for 2B. 3C is entirely classified as Indicated as no GC has been completed for this pit shell and drill spacing is approximately 25 metre (less then 50m). 3D is entirely Inferred due to the drilling being broad-spaced in this volume.

Sources: LXML

The NLU Statement of Mineral Resource is shown in Table 10-10.

Table 10-10: Mineral Resource Statement of NLU OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
NLU open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	72	1.25	0.09	3
		MES+IND	72	1.25	0.09	3
		Inferred	24	1.20	0.03	1
	Primary	Measured	2	2.87	0.01	0.2
		Indicated	530	4.53	2.40	77
		MES+IND	532	4.53	2.41	77
		Inferred	-	-	-	-
	Total	Measured	2	2.87	0.01	0.2
		Indicated	602	4.14	2.49	80
		MES+IND	604	4.14	2.50	80
		Inferred	24	1.20	0.03	1

Sources: SRK

10.4.6 Ban Mai (MAI OP)

The key parameters for MAI Mineral Resource estimation are summarized in Table 10-11.

Table 10-11: Key Parameters of Mineral Resources Estimate (MAI OP)

Item	Description
Software	Leapfrog
Drill hole database	The database contains information for 1,309 boreholes and 97,225 samples with Cu, Au and silver (Ag) assays
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t.
Density	4,494 SG samples
Block size	The Parent block model is 25 x 12.5 x 25m, and the sub cell is 6.25 x 3.125 x 6.25m
Grade capping	Domain Au_H_01:Au Lower:0.01 g/t Au Upper :15g/t Domain Au_H_02: Au Lower:0.005 g/t Au Upper :5g/t Domain Au_V_01: Au Lower:0.005 g/t Au Upper :25g/t Domain Au_V_08: Au Lower:0.07 g/t Au Upper :10g/t Domain Au_V_09: Au Lower:0.02 g/t Au Upper :15g/t Domain Au_V_10: Au Lower:0.09 g/t Au Upper :10g/t Domain Au_V_11: Au Lower:0.005 g/t Au Upper :10g/t Domain Au_V_12: Au Lower:0.03 g/t Au Upper :4g/t Domain Au_V_14: Au Lower:0.005 g/t Au Upper :2g/t Domain Au_V_16: Au Lower:0.005 g/t Au Upper :12g/t Domain Au_V_17: Au Lower:0.005 g/t Au Upper :5g/t
Grade interpolation	Ordinary Kriging
Search parameter	Dynamic anisotropy； Maj (dist.):50 Inter (dist.):50 Minor (dist.):10; Min No Samples:5 Max No Samples:20
Mineral Resource classification	Inferred: ranges from 50 to 100m. Entirely classified as Inferred based on deposit only recently delivered from Exploration drilling for assessment as Mineral Resource. Drilling is broad spaced (50 to 100m spacing). Several mineralised intersections on the main mineralised sections provide support for estimating/reporting a mineral resource but inconsistent and variable results do not support higher than Inferred Mineral Resource until further definition drilling is completed.

Sources: LXML

The MAI Statement of Mineral Resource is shown in Table 10-12.

Table 10-12: Mineral Resource Statement of MAI OP Deposit at Far West Mine, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Ban Mai open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	734	2.03	1.49	48
	Primary	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
		Inferred	354	3.43	1.21	39
	Total	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	1,088	2.48	2.70	87

Sources: SRK

10.4.7 Ban Non (NON)

Table 10-13: Key parameters of Mineral Resources estimate (NON)

Item	Description
Software	Leapfrog
Drill hole database	The database holds information for about 269 boreholes and 26562 samples each of which include Cu Au and Ag grade and other element-related data.
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t.
Density	1079 SG samples
Block size	The Parent block model is 25 x 12.5 x 25, and the subcell is 6.25 x 3.125 x 3.125
Grade capping	Domain Au_OX_01:Au Lower:0.005 g/t Au Upper :10g/t Domain Au_OX_02:Au Lower:0.005 g/t Au Upper :10g/t Domain Au_H_01:Au Lower:0.01 g/t Au Upper :10g/t Domain Au_W_03:Au Lower:0.005 g/t Au Upper :10g/t
Grade interpolation	Ordinary Kriging
Search parameter	Dynamic anisotropy；Maj (dist):30 Inter (dist):25 Minor (dist):5; Min No Samples:1 Max No Samples:20
Mineral Resource classification	Inferred:ranges from 50 to 100m. Entirely classified as Inferred based on desposit only recently delivered from Exploration drilling for assessment as Mineral Resource. Drilling is broad-spaced (50 to 100m spacing). Several mineralised intersections on the main mineralised sections provide support for estimating/reporting a mineral resource but inconsistent and variable results do not support higher than Inferred Mineral Resource until further definition drilling is completed.

Sources: LXML

Table 10-14: Mineral Resource Memorandum of Ban Non Open Pit Deposit at Far West Mine, , as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Ban Non open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	782	1.82	1.42	46
	Primary	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	55	3.67	0.20	7
	Total	Measured	-	-	-	-
		Indicated	-	-	-	-

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
		MES+IND	-	-	-	-
		Inferred	837	1.94	1.63	52

Sources: SRK

10.4.8 Nakachan (NAK OP)

The key parameters for NAK Mineral Resource estimation parameters summarized in Table 10-15.

Table 10-15: Key Parameters of Mineral Resources Estimate (NAK OP)

Item	Description
Software	Leapfrog
Drill hole database	The database contains information for 208 boreholes and 23,082 samples with Cu, Au and silver (Ag) assays
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 0.6 g/t, and for primary gold ore is 1.5 g/t.
Density	940 SG samples
Block size	The Parent block model is 20 x 15 x 5m, and the sub cell is 5 x 3x 2.5m
Grade capping	Domain Au in Oxide: Au Lower:0.03 g/t Au Upper :6g/t Domain Au in Primary: Au Lower:0.03 g/t Au Upper :6g/t Domain Au Waste: Au Lower:0.005 g/t Au Upper :0.6g/t
Grade interpolation	Ordinary Kriging
Search parameter	Au in Oxide DIP 193.3 Dip Azi 120 PITCH 40；Maj (dist.):30 Inter (dist.):25 Minor (dist.):5; Min No Samples:4 Max No Samples:20 Au in Primary DIP 25.2 Dip Azi 191.6 PITCH 11.6；Maj (dist.):308.3 Inter (dist.):95.8 Minor (dist.):50.9; Min No Samples:4 Max No Samples:20 Au Waste DIP 25.9 Dip Azi 191.6 PITCH 175.2；Maj (dist.):250 Inter (dist.):207 Minor (dist.):177; Min No Samples:4 Max No Samples:20
Mineral Resource classification	Inferred: ranges from 50 to 100m. Entirely classified as Inferred based on deposit only recently delivered from Exploration drilling for assessment as Mineral Resource. Drilling is broad-spaced (50 to 100m spacing). Several mineralised intersections on the main mineralised sections provide support for estimating/reporting a mineral resource but inconsistent and variable results do not support higher than Inferred Mineral Resource until further definition drilling is completed.

Sources: LXML

The NAK Statement of Mineral Resource is shown in Table 10-16.

Table 10-16: Mineral Resource Statement of NAK OP Deposit at Far West Mine, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Nakachan open pit (OP)	Oxide	Measured	-	-	-	-
		Indicated	-	-	-	-

	MES+IND	-	-	-	-
	Inferred	1,251	1.07	1.33	43
Primary	Measured	-	-	-	-
	Indicated	-	-	-	-
	MES+IND	-	-	-	-
	Inferred	212	2.76	0.58	19
Total	Measured	-	-	-	-
	Indicated	-	-	-	-
	MES+IND	-	-	-	-
	Inferred	1,463	1.31	1.92	62

Sources: SRK

10.4.9 Thenkham (TKM OP)

The TKM OP Mineral Resource is shown in Table 10-17.

Table 10-17: Mineral Resource Statement of TKM OP Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Cu Grade (%)	Cu Content (kt)
TKM OP	Oxide	Measured	-	-	-
		Indicated	-	-	-
		M+I	-	-	-
		Inferred	856	1.89	16.18
	Primary	Measured	-	-	-
		Indicated	-	-	-
		M+I	-	-	-
		Inferred	32	1.82	0.59
	Total	Measured	-	-	-
		Indicated	-	-	-
		M+I	-	-	-
		Inferred	888	1.89	16.77

Sources: SRK

10.5 Underground Mining

10.5.1 Discovery Deep East (DSE UG)

The key parameters for DSE UG Mineral Resource estimation are summarized in Table 10-18.

Table 10-18: Key Parameters of Mineral Resources Estimate (DSE UG)

Item	Description
Software	Vulcan
Drillhole database	The database contains information for 22,096 boreholes and 69,474 samples with Cu, Au and silver (Ag) assays
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 3 g/t, and for primary gold ore is Domain.

Item	Description
Density	21,642 SG samples
Block size	The Parent block model is 5 x 3 x 2.5m, and the sub cell is 1 x 1 x 1.25m
Grade capping	Au Lower:0.005 g/t Au Upper :10 g/t
Grade interpolation	Ordinary Kriging
Search parameter	Domain AuHGPr_Vn1 Dynamic anisotropy; Min No Samples:12 Max No Samples:20 Domain AuHGPr_Vn2 Dynamic anisotropy; Min No Samples:8 Max No Samples:20 Domain AuHGPr_Vn3 Dynamic anisotropy; Min No Samples:4 Max No Samples:20
Mineral Resource classification	Measured (approximately 15m spaced drilling), Indicated (mostly 25m, up to 50m spaced), Inferred (50 to 100m spaced)

Sources: LXML

The DSE UG Statement of Mineral Resource is shown in Table 10-19 .

Table 10-19: Mineral Resource Statement of DSE UG Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
DSE underground (UG)	Oxide	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	-	-	-	-
	Primary	Measured	264	8.73	2.30	74
		Indicated	3,057	6.85	20.93	673
		MES+IND	3,320	7.00	23.23	747
		Inferred	1,237	7.02	8.68	279
	Total	Measured	264	8.73	2.30	74
		Indicated	3,057	6.85	20.93	673
		MES+IND	3,320	7.00	23.23	747
		Inferred	1,237	7.02	8.68	279

Sources: SRK

10.5.2 Discovery Deep West (DSW UG)

The key parameters for DSW UG Mineral Resource estimation are summarized in Table 10-20.

Table 10-20: Key Parameters of Mineral Resources Estimate (DSW UG)

Item	Description
Software	Vulcan
Drill hole database	The database contains information for 21,580 boreholes and 698,180 samples with Cu, Au and silver (Ag) assays
Cut-off grade	The Au cut-off grade depends on the gold ore types. For oxidized gold ore, the cut-off grade is 3 g/t, and for primary gold ore is Domain.
Density	21642 SG samples

Item	Description
Block size	The Parent block model is 20 x 10 x 10m, and the sub cell is 2 x 2 x 2m
Grade capping	Au Lower:0.005 g/t Au Upper :10 g/t
Grade interpolation	Ordinary Kriging
Search parameter	Domain Au Primary HG 1 pass: Dynamic anisotropy; Maj (dist.) :50 Inter (dist.):25 Minor (dist.):20; Min No Samples:12 Max No Samples:15 2 pass: Dynamic anisotropy; Maj (dist.):80 Inter (dist.):40 Minor (dist.):30; Min No Samples:9 Max No Samples:16 3 pass: Dynamic anisotropy; Maj (dist.):120 Inter (dist.):80 Minor (dist.):60; Min No Samples:6 Max No Samples:18 4 pass: Dynamic anisotropy; Maj (dist.):1000 Inter (dist.):800 Minor (dist.):600; Min No Samples:4 Max No Samples:12
Mineral Resource classification	Inferred (Variable 30 to 110m spacing), All of UG Mineral Resource classified as Inferred

Sources: LXML

The DSW UG Statement of Mineral Resource is shown in Table 10-21.

Table 10-21: Mineral Resource Statement of DSW UG Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
DSW underground (UG)	Oxide	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	-	-	-	-
	Primary	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	1,165	5.68	6.62	213
	Total	Measured	-	-	-	-
		Indicated	-	-	-	-
		MES+IND	-	-	-	-
		Inferred	1,165	5.68	6.62	213

Sources: SRK

10.5.3 Khanong (KHN UG)

The KHN UG Mineral Resource is shown in Table 10-22.

Table 10-22: Mineral Resource Statement of KHN UG Deposit, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Cu Grade (%)	Cu Content (kt)
KHN UG	Oxide	Measured	-	-	-
		Indicated	-	-	-
		MES+IND	-	-	-
		Inferred	-	-	-
	Primary	Measured	-	-	-

		Indicated	2,445	1.90	46.52
		MES+IND	2,445	1.90	46.52
		Inferred	595	1.58	9.39
	Total	Measured	-	-	-
		Indicated	2,445	1.90	46.52
		MES+IND	2,445	1.90	46.52
		Inferred	595	1.58	9.39

Sources: SRK

10.6 Stockpile

10.6.1 Gold Stockpile

SRK was provided with summary details of the LXML gold stockpiles ("WK13_All Stockpile Status survey 27 Mar 2024 EODS_Au_Ca_Mg_update.xls") as of 31 March 2024. There are 41 stockpiles on site, of which 15 are oxide gold stockpiles, and 26 are primary gold stockpiles that are available for extraction of gold. The materials in these available stockpiles were converted to Indicated Mineral Resource.

The gold stockpile Statement of Mineral Resource is shown in Table 10-23.

Table 10-23: Mineral Resource Statement of Gold Stockpile, as of 31 March 2024

Deposit	Ore Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Gold Stockpile	Oxide	Measured	-	-	-	-
		Indicated	361	1.91	0.69	22
		MES+IND	361	1.91	0.69	22
		Inferred	-	-	-	-
	Primary	Measured	-	-	-	-
		Indicated	2,341	2.40	5.63	181
		MES+IND	2,341	2.40	5.63	181
		Inferred	-	-	-	-
	Total	Measured	-	-	-	-
		Indicated	2,703	2.34	6.32	203
		MES+IND	2,703	2.34	6.32	203
		Inferred	-	-	-	-

Sources: SRK

10.6.2 Copper Stockpile

SRK was provided with summary details of the LXML copper stockpiles ("wk13_All Stockpile Status survey 27-Mar 2024 EODS _Cu_Update.xls") as of 27 March 2024. There are 20 stockpiles on site, of which 15 are oxide copper stockpiles, and 5 are primary copper stockpiles that are available for extraction of copper. The materials in these available stockpiles were converted to Indicated Mineral Resource. The copper stockpile Statement of Mineral Resource is shown in Table 10-26.

Table 10-24: Mineral Resource Statement of Copper Stockpile, as of 31 March 2024

Deposit	Type	Category	Tonnage (kt)	Cu Grade (%)	Cu Content (kt)
Copper Stockpile	Oxide	Measured	-	-	-
		Indicated	1,819	0.94	17.17
		MES+IND	1,819	0.94	17.17
		Inferred	-	-	-
	Primary	Measured	-	-	-
		Indicated	603	0.82	4.95
		MES+IND	603	0.82	4.95
		Inferred	595	1.58	9.39
	Total	Measured	-	-	-
		Indicated	2,422	0.91	22.12
		MES+IND	2,422	0.91	22.12
		Inferred	595	1.58	9.39

Sources: SRK

10.7 Conclusions and Recommendations

The data provided from LXML is sufficient to estimate the Mineral Resource.

The total LXML gold Mineral Resource is shown in Table 10-25.

Table 10-25: Mineral Resource Estimate of Total Gold, as of 31 March 2024[1]

Type	Category	Tonnage (kt)[2]	Au (g/t)	Au (t)	Au (koz)[2]
Oxide	Measured	36	1.18	0.04	1
	Indicated	2,355	1.56	3.68	118
	MES+IND[3]	2,391	1.56	3.72	120
	Inferred	3,006	1.49	4.49	144
Primary	Measured	267	8.66	2.31	74
	Indicated	6,263	4.82	30.21	971
	MES+IND[3]	6,530	4.98	32.53	1,046
	Inferred	3,168	5.61	17.76	571
Total	Measured	302	7.78	2.35	76
	Indicated	8,618	3.93	33.90	1,090
	MES+IND[3]	8,921	4.06	36.25	1,165
	Inferred	6,174	3.60	22.25	715

Sources: SRK

Notes:

[1] 1 The information relates to Mineral Resource estimation is based on information compiled by Mr. Liang Li, MAusIMM, and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Li have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in JORC (2012). Dr Xu supervised the work of Mr. Li. Both Dr Xu and Mr. Li consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] MES+IND: combined measured and Indicated, Mineral Resource.

[4] The cut-off grade depends on ore type (Otyp) and mining method. For open pit mining and gold stockpiles, the cut-off grade of oxide ores is 0.6 g/t, the cut-off grade of primary ores is 1.5 g/t. For Underground mining, the cut-off grade of primary oxide ores is 3 2.3 g/t, the cut-off grade of primary ores is domain ..

The total LXML copper Mineral Resource is shown in Table 10-26.

Table 10-26: Mineral Resource Estimate of Total Copper, as of 31 March 2024 [1]

Type	Category	Tonnage (kt)[2]	Cu (%)	Cu (kt)[2]
Oxide	Measured	-	-	-
	Indicated	1,819	0.94	17.17
	MES+IND[3]	1,819	0.94	17.17
	Inferred	856	1.89	16.18
Primary	Measured	-	-	-
	Indicated	3,049	1.69	51.47
	MES+IND[3]	3,049	1.69	51.47
	Inferred	1,222	1.59	19.37
Total	Measured	-	-	-
	Indicated	4,868	1.41	68.63
	MES+IND[3]	4,868	1.41	68.63
	Inferred	2,078	1.71	35.55

Sources: SRK

Notes:

[1] The information relates to Mineral Resource conversion is based on information compiled by Mr. Liang Li, MAusIMM, and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Li have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in JORC (2012). Dr Xu supervised the work of Mr. Li. Dr Xu and Mr. Li consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

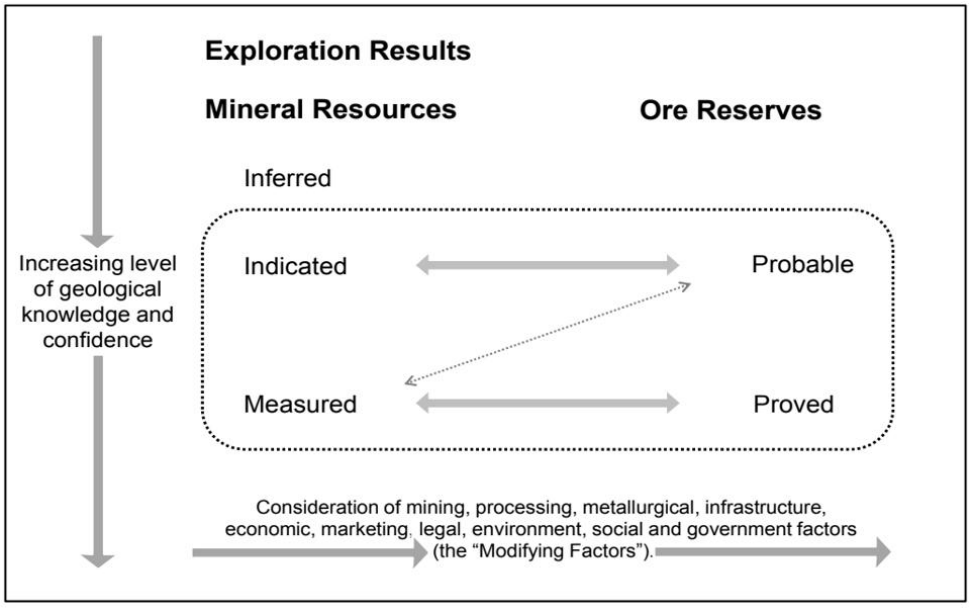
[3] MES+IND: combined measured and Indicated, Mineral Resource.

[4] The cut-off grade depends on ore type (Otyp) and mining method. For open pit mining and copper stockpiles, the cut-off grade of oxide ores is 0.7% Cu, the cut-off grade of primary ores is 0.3% Cu. For Underground mining, the cut-off grade of primary oxide ores is 0.8% Cu.

11 Ore Reserve Estimates

The JORC (2012) provide for a direct relationship between Indicated Mineral Resources and Probable Ore Reserve and between Measured Mineral Resources and Proved Ore Reserve. As shown in Figure 11-1 below.

Figure 11-1: Relationship Between Mineral Resources and Ore Reserves



Sources: JORC (2012)

The following statement has been extracted from the JORC (2012) for reference:

"An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified."

"The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported."

11.1 Introduction

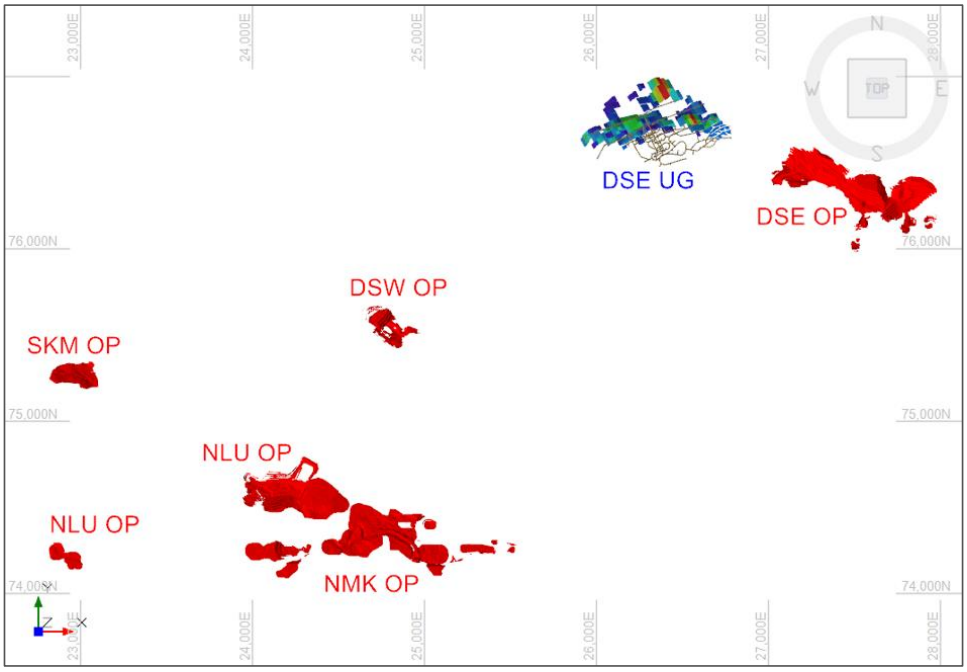
The gold deposits that are being or to be exploited include DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, Far West Area (Including MAI OP, NON OP, NKN OP), DSE UG, DSW UG. The copper deposits that are being or to be exploited include KHN UG, TKM OPs.

DSE UG, DSW UG and KHN UG will be developed as underground mines, while all the other deposits will be continued as open pits.

Among these gold and copper deposits, only DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, DSE UG, and KHN UG possess Measured and Indicated Mineral Resources. Additionally, KHN UG is currently in the re-feasibility study stage. Consequently, open-pit gold mines including DSE OP, DSW OP, NLU OP, NMK OP, and SKM OP could be converted to Ore Reserves from their Mineral Resources. For underground gold mines, only DSE UG would be considered for estimating Ore Reserves. None of the copper deposits would be considered for estimating Ore Reserves..

The location of the deposits considered in the Ore Reserve estimation review, are shown in Figure 11-2.

Figure 11-2: Plan View of Ore Deposits to Estimate Ore Reserves



Sources: SRK

In addition to these deposits, there are dozens of stockpiles on site to supply (tonnes & grade) gold and oxide copper ore feed to the processing plant.

As of 31 March 2024, SRK estimated Ore Reserves from these deposits and stockpiles.

11.2 Feasibility Study

SRK was provided with the Sepon Gold Project Study ("SGPS") revised on 18 March 2020. AMC Consultants Pty Ltd ("AMC") completed the Mining, Geotechnical and Ore Reserves components of the SGPS.

As of 31 March 2024, SRK noted that the mineral resource models, final open pit designs, and underground mining study have changed since completion of SGPS.

For gold operations, LXML has gradually transitioned from open pit mining with stockpiles to a combination of open pit and underground mining with stockpiles. Developing the DSE UG for underground mining and the Far West Area for open pit mining would extend the mine life of LXML. The oxide and primary gold processing capacity is 3.8 million Mtpa run-of-mine ("RoM").

For copper operations, LXML currently only processes oxide copper ore from stockpiles, utilizing hydrometallurgy processing. LXML aims to develop the TKM OPs to exploit more oxide copper ore to maintain its oxide copper production. In the meantime, developing the KHN UG to exploit primary copper ore is under technical studies. Historical production data of the copper plant shows that 0.5 to 1.3 Mtpa oxide copper ore were processed.

SRK was also provided with Geotechnical Review - Open Pit & Underground revised on 4 December 2023. MEC Mining Pty Ltd ("MEC") provided a critical review of the geotechnical design and operational function relating to the underground and open pit mines. It was believed that geotechnical risk to be managed well in LXML. MEC has also provided a comprehensive list of improvements opportunities and believed that there were only minor recommendations that MEC considers a high priority.

As of 31 March 2024, SRK was provided with the updated mineral resource models, final open pit designs, underground mine designs, financial results, and capital report by LXML. SRK will estimate Ore Reserves based on the data provided by LXML with minimal modification.

11.3 Mineral Resource Models

Ore Reserves estimation was conducted based on mineral resource models constructed by LXML between in February to March 2024 and September 2023 (nlu_gc.bmf).

Block models have been updated based on sustaining exploration updates. SRK was provided with six latest block models. After review of these block models, SRK noted that:

- The block model covering DSE OP ("dse_gc_29032024.bmf") has fields to support preliminary reporting of Ore Reserves.
- The block model covering DSW OP ("dsw_gc_03022024.bmf") has fields to support preliminary reporting of Ore Reserves.
- The block model covering NMK OP ("nkk_gc300324.bmf") has fields to support preliminary reporting of Ore Reserves.
- The block model covering NLU OP ("nlu_gc160324.bmf together with nlu_gc.bmf") has fields to support preliminary reporting of Ore Reserves.
- The block model covering SKM OP ("Songkham_v3.bmf") has fields to support preliminary reporting of Ore Reserves.
- The classification notes ("MR 2023 Classification Notes.xlsx") which explains how LXML geologists define the geological confidence in open pit mines have fair and adequate information to support preliminary reporting of Ore Reserves.
- The block model covering DSC_UG ("DSC_UG_FEB24.bmf") has fields to support preliminary reporting of Ore Reserves.

These block models were applied by SRK to estimate Ore Reserves.

11.4 Open Pit Mining

11.4.1 Month-end Map

SRK was provided with the Month-end map in March 2024 together with topography in December 2023 which has the pre-backfill data with a scale of 1:1000. The map covers those deposits that are working or in plan. After review of the Month-end map, SRK considered it is detailed enough to support Ore Reserves estimate.

11.4.2 Open Pit Design

Ever since the completion of SGPS, open-pit designs have been updated by LXML mining engineers. SRK understands that the typical life of mine ("LoM") for an open pit is several months due to small size of open pit. Open pit designs have been updated by LXML based on exploitation status, update of mineral resource models and other modifying factors.

SRK was provided with latest final open pit designs applied by LXML. Comparison between open-pit designs and survey of Month-end maps shows that the difference is little. SRK considered that it is technically feasible to guide mining boundaries based on the updated final open pit designs, and that the open pit designs can be used directly to support Ore Reserves estimate.

11.4.3 Cut-off Grade

The data in Table 11-1 provided, in SRK's opinion, was sufficient to verify cut-off grades to estimate Ore Reserves as of 31 March 2024, as it is shown in Table 11-2.

Table 11-1 Unit Operating Cost of Open Pit Gold Mining

Item	Unit	Actual				Budget
		2021	2022	2023	1Q2024	2024
OP Mining	USD/Ore&Waste	3.1	3.0	2.7	3.2	3.4
Processing Oxide Gold	USD/milled ton	17.1	18.5	16.9	11.0	15.7
Processing Primary Gold	USD/milled ton	62.1	69.7	56.6	54.3	48.0
G&A	USD/milled ton	20.4	9.0	9.8	9.1	8.7
Overall Recovery Gold	%	54.6	63.8	64.1	65.3	68.4

Sources: LXML

Table 11-2: Gold Cut-off Grade Calculation

Item	Unit	Oxide Gold	Primary Gold
Gold Price	USD/Oz	2,050.0	2,050.0
Gold Price	USD/g	66.9	66.9
Processing	USD/milled ton	17.0	55.0
Processing Recovery	%	65.0	65.0
G&A	USD/milled ton	9.0	9.0
Cut-off Grade	g/t	0.6	1.5

Sources: SRK

[1] Due to short life of open pit mining, a short-term price is considered more applicable than a long-term price to calculate cut-off grade.

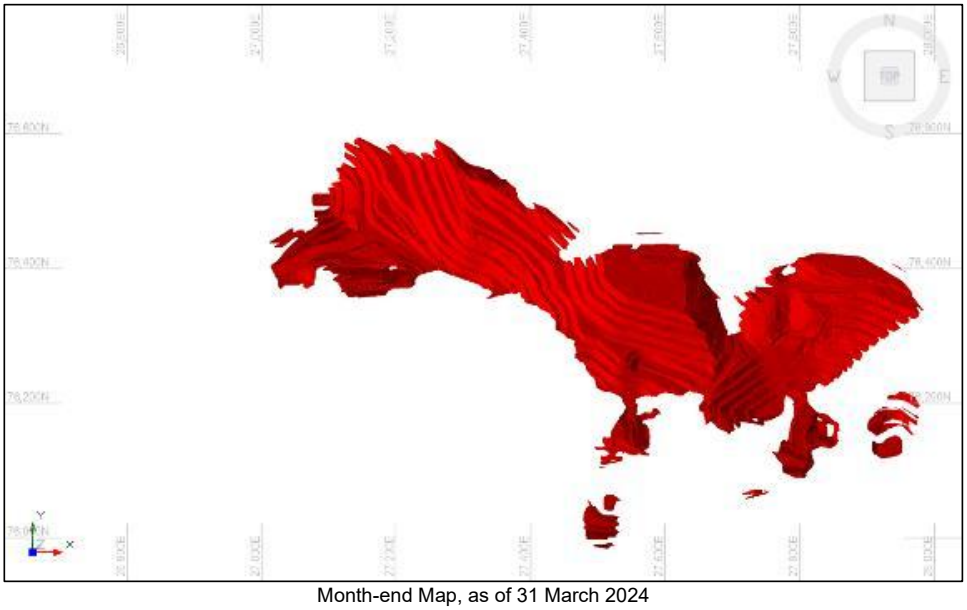
11.4.4 Dilution and Loss

Same with LXML, mining dilution at 7.5% and mining loss at 5.0% were applied when estimating Ore Reserves.

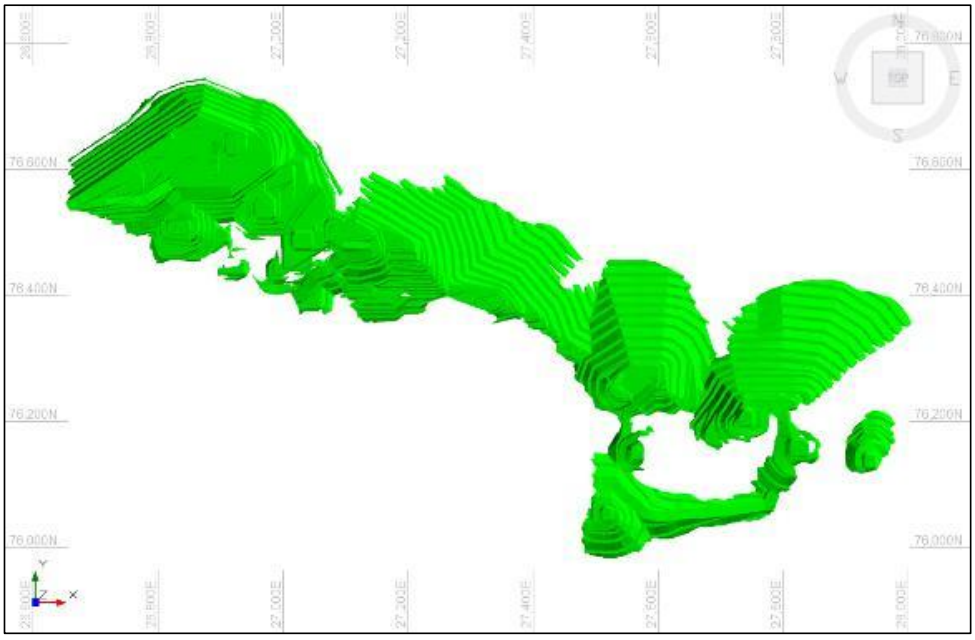
11.4.5 DSE OP

Comparison of DSE OP, end-of-month map and final open pit design is shown in Figure 11-3.

Figure 11-3: Comparison between Month-end Status and Final Open Pit Design for DSE OP



Month-end Map, as of 31 March 2024



Final Open Pit Design

Sources: SRK

Table 11-3 is showing key parameters when estimating Ore Reserves for DSE OP.

Table 11-3: Key Parameters of Ore Reserves Estimate (DSE OP)

Item	Description
Mining method	Open Pit Mining
Cut-off Au grade	Oxide Ore: 0.6g/t; Primary Ore: 1.5g/t
Mining loss rate	5%
Mining dilution rate	7.5%

Sources: LXML and SRK

The DSE OP statement of Ore Reserves is shown in Table 11-4.

Table 11-4: Ore Reserves Estimate of DSE OP Deposit, as of 31 March 2024 [1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
-	Probable	569	1.54	0.87	28
-	Sub-total [2]	569	1.54	0.87	28
Primary	Proved	-	-	-	-
-	Probable	-	-	-	-
-	Sub-total [2]	-	-	-	-

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Total [2]	Proved	-	-	-	-
-	Probable	569	1.54	0.87	28
-	Total	569	1.54	0.87	28

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Personas defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Both Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

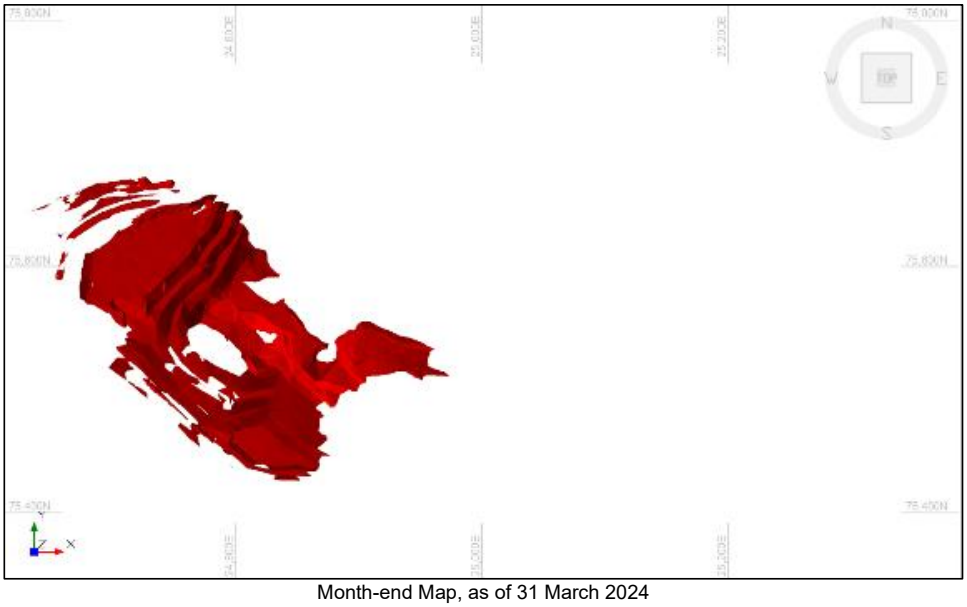
[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

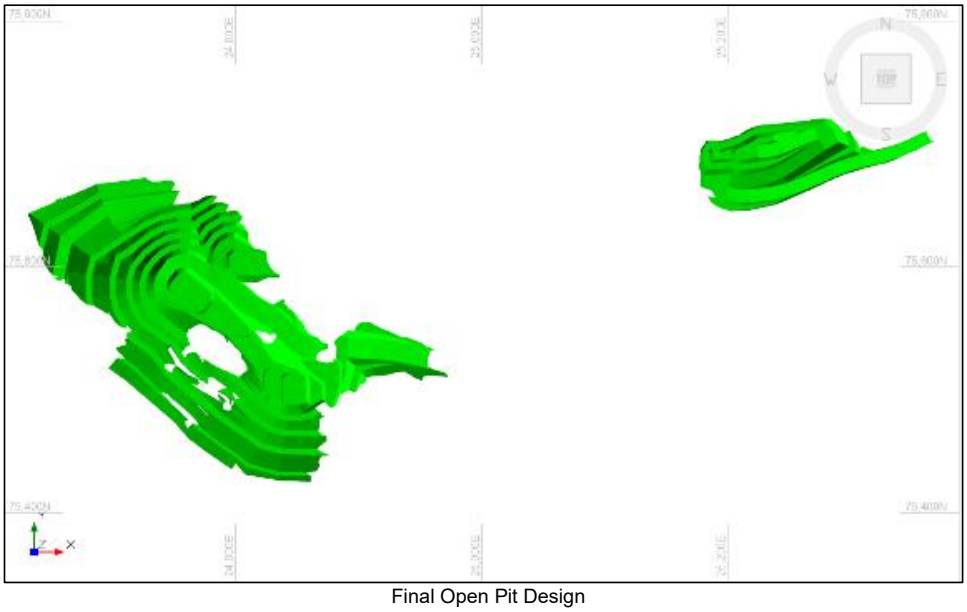
11.4.6 DSW OP

Comparison of DSW OP, Month-end map and final open pit designs is shown in Figure 11-4.

Figure 11-4: Comparison between Month-end Status and Final Open Pit Designs for DSW OP



Month-end Map, as of 31 March 2024



Final Open Pit Design

Sources: SRK

Table 11-5 is showing key parameters when estimating Ore Reserves for DSW OP.

Table 11-5: Key Parameters of Ore Reserves Estimate (DSW OP)

Item	Description
Mining method	Open Pit Mining
Cut-off Au grade	Oxide Ore: 0.6 g/t; Primary Ore: 1.5 g/t
Mining loss rate	5%
Mining dilution rate	7.5%

Sources: LXML and SRK

The DSW OP statement of Ore Reserves is shown in Table 11-6.

Table 11-6: Ore Reserves Estimate of DSW OP Deposit, as of 31 March 2024[1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
-	Probable	17	1.08	0.02	1
-	Sub-total[2]	17	1.08	0.02	1
Primary	Proved	-	-	-	-
-	Probable	71	4.66	0.33	11
-	Sub-total[2]	71	4.66	0.33	11
Total[2]	Proved	-	-	-	-
-	Probable	88	3.98	0.35	11

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
-	Total	88	3.98	0.35	11

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Personas defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

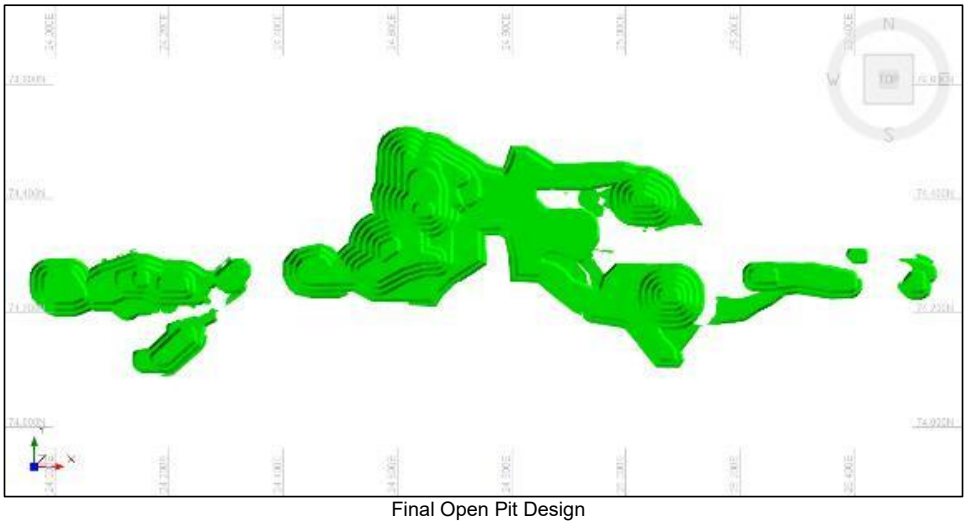
[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.4.7 NMK OP

Comparison of the NMK OP Month-end map and final open pit designs is shown in Figure 11-5.

Figure 11-5: Comparison between Month-end Status and Final Open Pit Designs for NMK OP

Month-end Map, as of 31 March 2024



Final Open Pit Design

Sources: SRK

Table 11-7 is showing key parameters when estimating Ore Reserves for NMK OP.

Table 11-7: Key Parameters of Ore Reserves Estimate (NMK OP)

Item	Description
Mining method	Open Pit Mining
Cut-off Au grade	Oxide Ore: 0.6g/t; Primary Ore: 1.5 g/t
Mining loss rate	5%
Mining dilution rate	7.5%

Sources: LXML and SRK

The NMK OP statement of Ore Reserves is shown in Table 11-8.

Table 11-8: Ore Reserves Estimate of NMK OP Deposit, as of 31 March 2024[1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	36	1.09	0.04	1
-	Probable	1,272	1.35	1.72	55
-	Sub-total[2]	1,308	1.34	1.76	56
Primary	Proved	1	2.57	0.003	0.1
-	Probable	270	3.17	0.86	27
-	Sub-total[2]	271	3.17	0.86	28
Total[2]	Proved	37	1.14	0.04	1
-	Probable	1,542	1.67	2.57	83
-	Total	1,579	1.66	2.61	84

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Personas defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

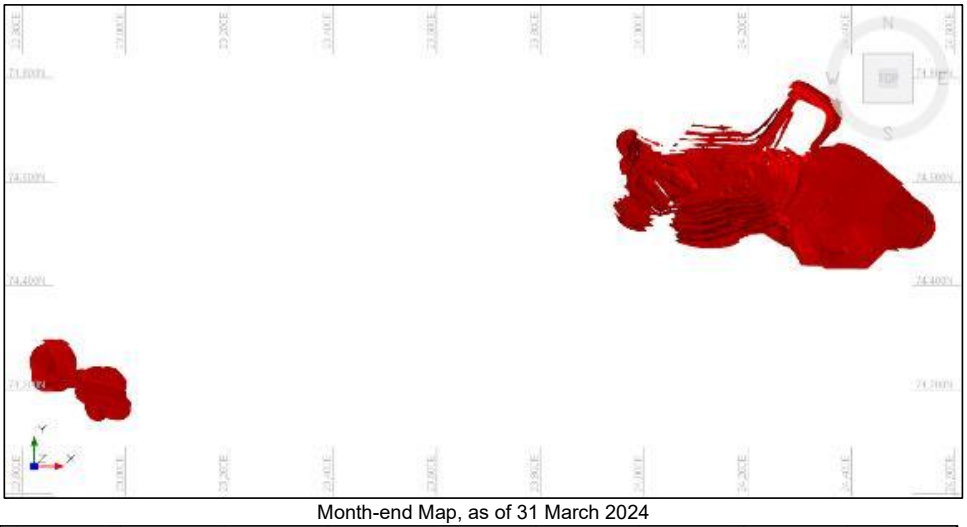
[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

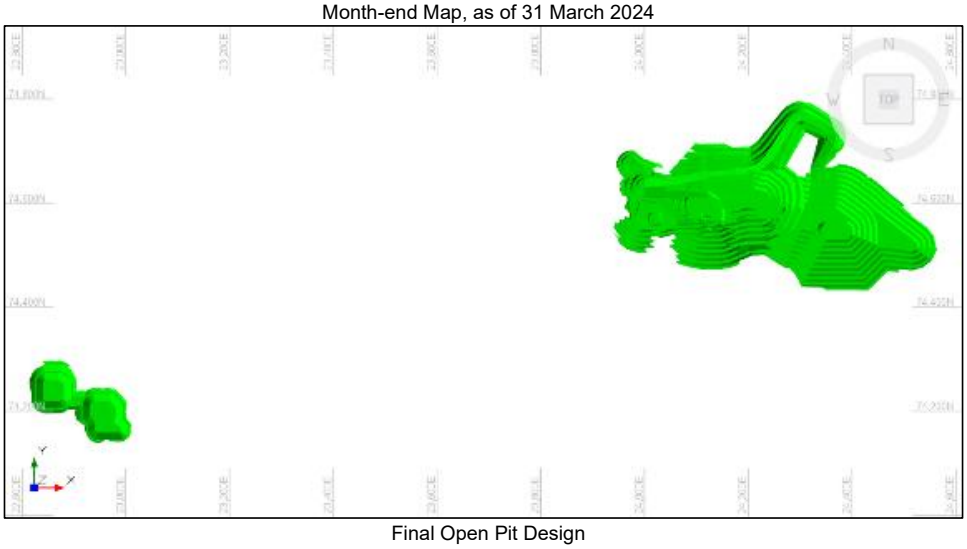
11.4.8 NLU OP

Comparison of NLU OP, Month-end map and final open pit designs is shown in Figure 11-6.

Figure 11-6: Comparison between Month-end Status and Final Open Pit Designs for NLU OP



Month-end Map, as of 31 March 2024



Final Open Pit Design

Sources: SRK

Table 11-9 is showing key parameters when estimating Ore Reserves for NLU OP.

Table 11-9: Key Parameters of Ore Reserves Estimate (NLU OP)

Item	Description
Mining method	Open Pit Mining
Cut-off Au grade	Oxide Ore: 0.6 g/t; Primary Ore: 1.5 g/t
Mining loss rate	5%
Mining dilution rate	7.5%

Sources: LXML and SRK

The NLU OP statement of Ore Reserves is shown in Table 11-10.

Table 11-10: Ore Reserves Estimate of NLU OP Deposit, as of 31 March 2024[1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
	Probable	73	1.17	0.09	3
	Sub-total[2]	73	1.17	0.09	3
Primary	Proved	1	3.44	0.003	0.1
	Probable	532	4.24	2.26	73
	Sub-total[2]	533	4.24	2.26	73
Total[2]	Proved	1	3.44	0.003	0.1
	Probable	605	3.87	2.34	75
	Total	606	3.87	2.34	75

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Personas defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

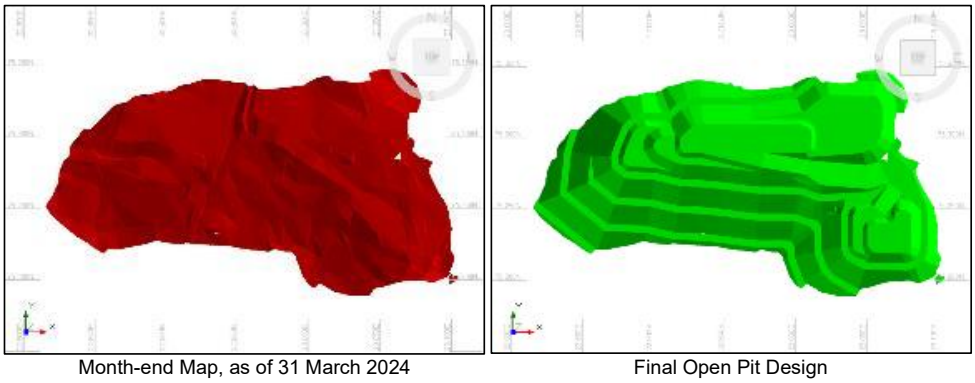
[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.4.9 SKM OP

Comparison of SKM OP Month-end map and final open pit design is shown in Figure 11-7.

Figure 11-7: Comparison between Month-end Status and Final Open Pit Design for SKM OP



Month-end Map, as of 31 March 2024 | Final Open Pit Design

Sources: SRK

Table 11-11 is showing key parameters when estimating Ore Reserves for SKM OP.

Table 11-11: Key Parameters of Ore Reserves Estimate (SKM OP)

Item	Description
Mining method	Open Pit Mining
Cut-off Au grade	Oxide Ore: 0.6 g/t; Primary Ore: 1.5 g/t
Mining loss rate	5%
Mining dilution rate	7.5%

Sources: LXML and SRK

The SKM OP statement of Ore Reserves is shown in Table 11-12.

Table 11-12: Ore Reserves Estimate of SKM OP Deposit, as of 31 March 2024[1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
-	Probable	48	1.88	0.09	3
-	Sub-total[2]	48	1.88	0.09	3
Primary	Proved	-	-	-	-
-	Probable	0.5	2.39	0.001	0.04
-	Sub-total[2]	0.5	2.39	0.001	0.04
Total[2]	Proved	-	-	-	-
-	Probable	49	1.89	0.09	3
-	Total	49	1.89	0.09	3

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Personas defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.5 Underground Mining

Underground mining is new to LXML. It is located beside of DSE OP, and its decline access is built at the DSE OP.

11.5.1 Mined-out Area

A decline and other development system are being driven to provide an access to deep mineral resources. SRK was provided with three-dimensional ("3D") survey of the actual development and stopes. Figure 11-8 is showing the decline development end face and one of the stopes which was mined out during site visit.

Figure 11-8 DSE UG Underground Site Visiting Photos

Decline Development End | Mined Stope

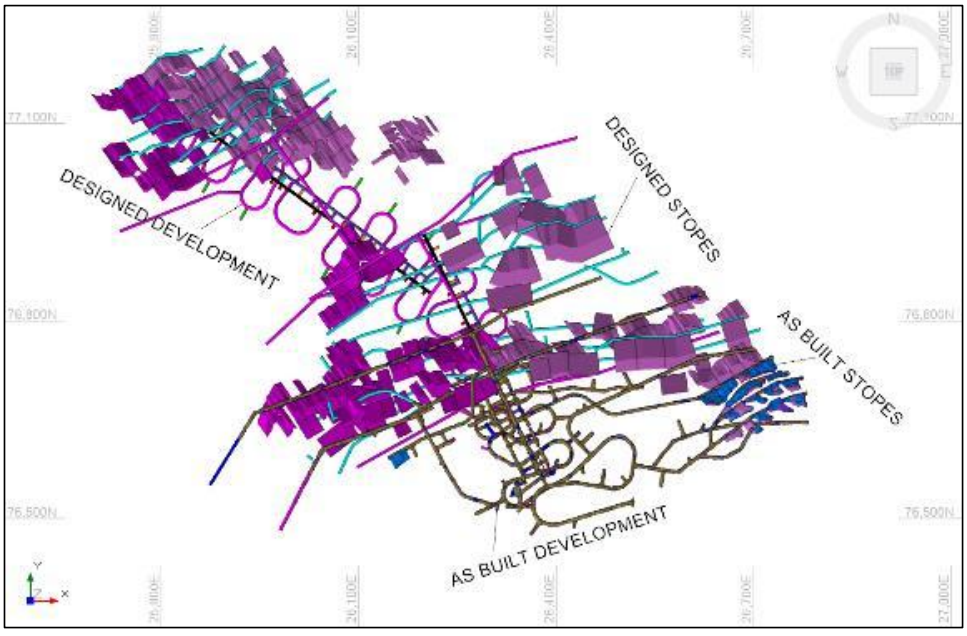
Sources: SRK

After review of the survey data, SRK considered it will not affect Ore Reserves estimation and mined-out area would be deducted.

11.5.2 Underground Design

The design has been updated by LXML based on updated block model, costs and other assumptions. The latest designs of tunnels and stopes are shown in Figure 11-9.

Figure 11-9: Underground Design for DSE UG



Sources: LXML

11.5.3 Cut-off Grade

The data in Table 11-13 provided, in SRK's opinion, was sufficient to verify cut-off grades to estimate Ore Reserves as of 31 March 2024, as it is shown in Table 11-14.

Table 11-13 Summary of Gold Production and Operating Cost

Item	Unit	Actual				Budget
		2021	2022	2023	2024Q1	2024
UG Mining	USD/mined ton	-	28.8	49.2	20.9	-
Processing Primary Gold	USD/milled ton	62.1	69.7	56.6	54.3	48.0
G&A	USD/milled ton	20.4	9.0	9.8	9.1	9.3
Overall Recovery Gold	%	54.6	63.8	64.1	65.3	68.4

Sources: LXML

Table 11-14: Gold Cut-off Grade Calculation

Item	Unit	Underground Primary
Gold Price	USD/Oz	2,050.0
Mining	USD/mined ton	30.0
Processing Cost for Primary Gold	USD/milled ton	55.0
Processing Recovery	%	65.0

Item	Unit	Underground Primary
G&A	USD/milled ton	9.0
Backfilling [1]	USD/mined ton	5.0
Cut-off Grade	g/t	2.6

Sources: SRK

[1] The backfilling cost is widely used for a simple study.

11.5.4 Ore Reserve model

During SRK's review of the data, it was found that the stope design is not appropriate for estimating of Ore Reserves. After discussing with LXML Technical Personnel, it was agreed that SRK re-ran the stope optimization to generate new stope wireframe to guide the Ore Reserves estimation. The key parameters for re-running the DSE UG stope optimization are summarised in Table 11-15.

Table 11-15: Key Parameters of Stope Optimization

Item	Description
Mining method	Underground Sub-Level Open Stope with Backfilling
Cut-off Au grade to optimize stope boundary	2.0 to 2.5g/t
Footwall angle	>=42°and following ore/waste boundary
Stope height	20m
Stope length	20m
Stope width	>=5m
Cut-off Au grade of feed ore	2.6g/t

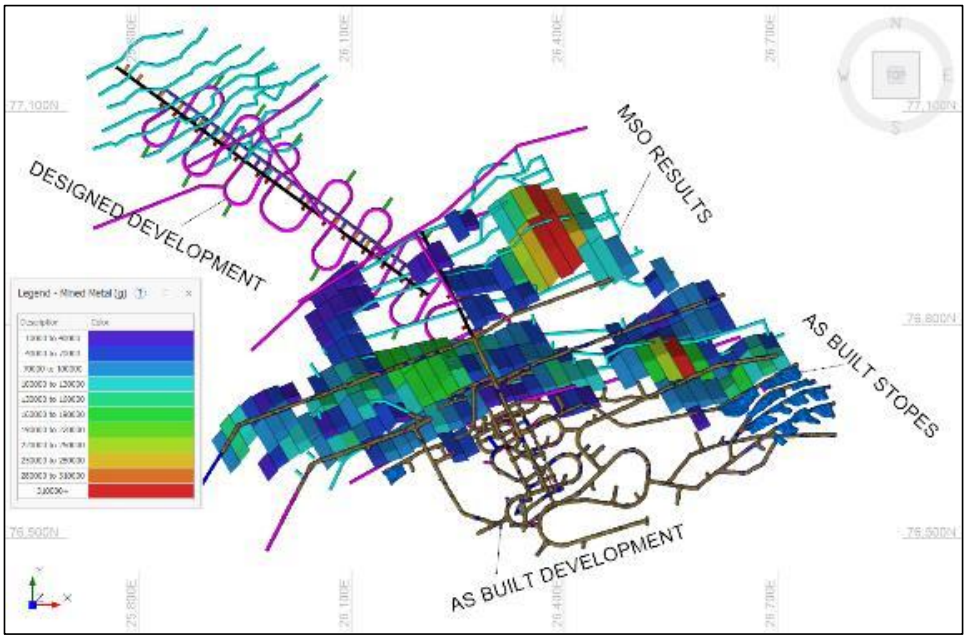
Sources: LXML

A stope optimisation exercise was then carried out using the Deswik Stope Optimizer ("SO") with stope design parameters showing in Table 11-15.

In addition, economic attributes and physical constrains of the sliced stopes with modifying factors include spatial location, unplanned mining dilution and loss, cut-off grade, were also considered to ensure stopes generated were technical feasible as well as economic.

Figure 11-10 graphically shows how the stopes (together with LXML's development design) look like.

Figure 11-10:Stope Optimization Results



Sources: SRK

11.5.5 Dilution and Loss

Table 11-16 summarizes the modifying factors used for Ore Reserves estimation.

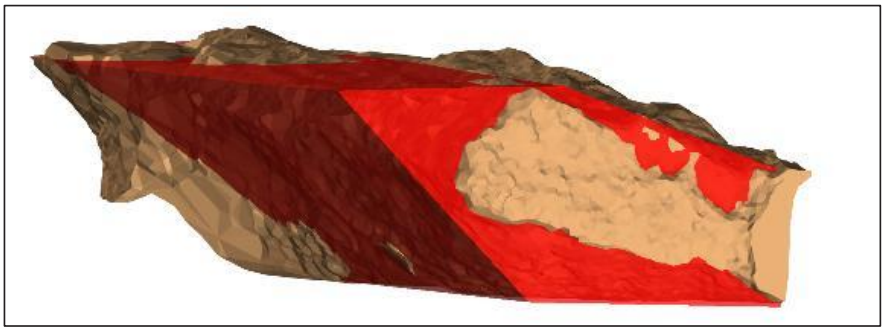
Table 11-16:Modifying Factors Used for Ore Reserves Estimation

Factors	Rate	Description
General Stope Recovery	95%	Planed loss: Backfilled stopes, with sharp corner and crown/sill pillar loss
Mining Dilution	15%	Unplanned dilution: overbreak, considering diluted material as waste with no grade.
Mining Recovery	95%	Unplanned loss: underbreak, based on reconciliation analysis.

Sources: SRK

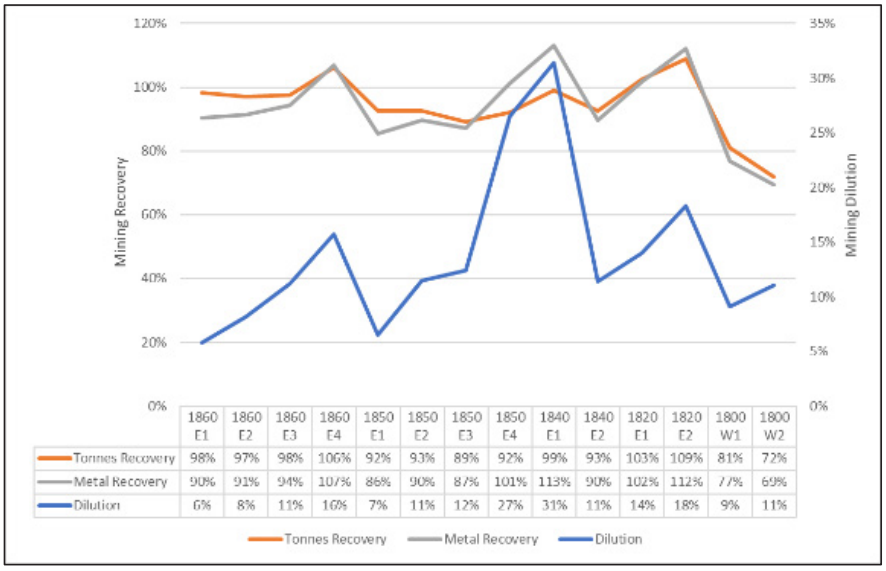
When making the underground designs, modifying factors including mining dilution (at 15%) and mining loss (at 10%) have been applied by LXML. After completing each stope, LXML conducted reconciliation to summarize the results of their underground mining performance. Figure 11-11 is showing the comparison of designed stope with as-built stope for DDE 1800 W1. The overbreak and underbreak were then calculated to be used for unplanned mining dilution and loss analysis. Figure 11-12 summarizes the stope performance after comparing designed stopes with as-built stopes.

Figure 11-11:Overbreak and Underbreak Analysis



Sources: LXML

Figure 11-12:Stope Performance Summary



	1860 E1	1860 E2	1860 E3	1860 E4	1850 E1	1850 E2	1850 E3	1850 E4	1840 E1	1840 E2	1820 E1	1820 E2	1800 W1	1800 W2
Tonnes Recovery	98%	97%	98%	106%	92%	93%	89%	92%	99%	93%	103%	109%	81%	72%
Metal Recovery	90%	91%	94%	107%	86%	90%	87%	101%	113%	90%	102%	112%	77%	69%
Dilution	6%	8%	11%	16%	7%	11%	12%	27%	31%	11%	14%	18%	9%	11%

Sources: SRK

The average of mining dilution is 14% and mining loss is 6%. When conducting estimation, unplanned mining dilution at 15% (same with LXML) and mining loss at 5% (compared with LXML at 10%) were applied.

11.5.6 Ore Reserve Estimates

According to JORC (2012), Measured Resources are typically converted into the Proved Reserve category, and Indicated Resources are converted into Probable Reserve.

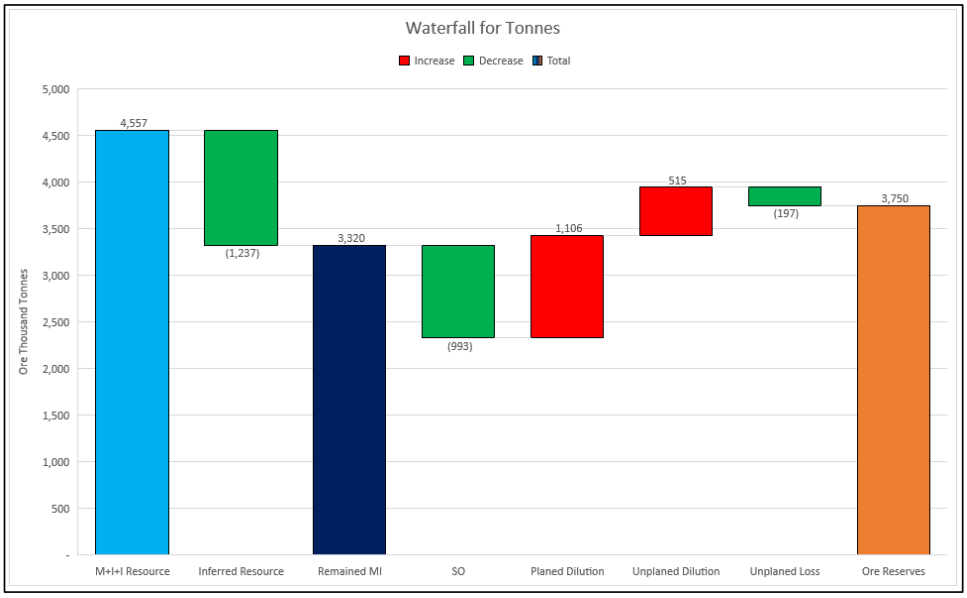
The estimated Mining Inventory based on Mineral Resources and modifying factors is summarized in Table 11-17 and the estimation process is illustrated in waterfall charts shown in Figure 11-13 and Figure 11-14.

Table 11-17: Estimates Process Summary

Process	Tonnes	Au Contained (kg)
M+I+I Resources	4,557,108	31,908
Inferred Resources	(1,236,722)	(8,678)
Remained MI	3,320,386	23,231
SO	(993,280)	(6,252)
Planned Dilution	1,105,594	(173)
Unplanned Dilution	514,905	-
Unplanned Loss	(197,380)	(840)
Ore Reserves	3,750,224	15,965

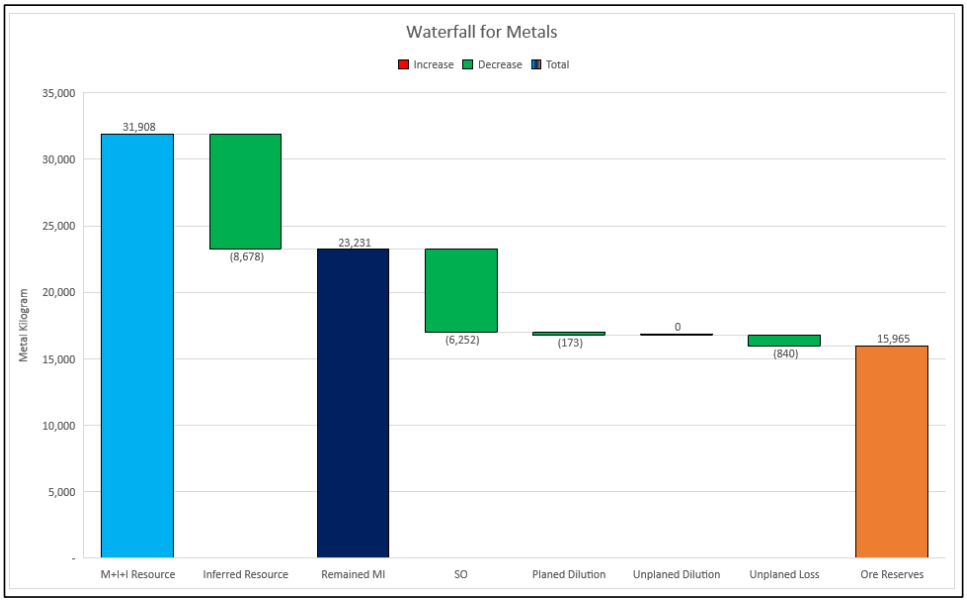
Sources: SRK

Figure 11-13:Estimates Process - Change in Tonne



Sources: SRK

Figure 11-14:Estimates Process - Change in Metal Contained



Sources: SRK

The Ore Reserves for the DSE UG are presented in Table 11-18 by reserve category. The primary reason why the Ore Reserves tonnes exceed the MI resources tonnes is due to both planned dilution during the Stope Optimizer (SO) process and unplanned overbreak dilution, as illustrated in Figure 11-13. As it is showed in Figure 11-14, Inferred Mineral Resources and SO (27% of total M+I+I Resources contained metal), is the key factors which affects to Ore Reserves conversion.

11.5.7 Ore Reserve Statement

The DSE UG statement of Ore Reserves is shown in Table 11-18. Total Ore Reserves contained metal (Proved plus Probable) is approximately 79% of Mineral Resources (Measured plus Indicated).

Table 11-18: Ore Reserves Estimate of DSE UG Deposit, as of 31 March 2024[1, 3]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
-	Probable	-	-	-	-
-	Sub-total[2]	-	-	-	-
Primary	Proved	257	5.25	1.35	43
-	Probable	3,493	4.18	14.62	470
-	Sub-total[2]	3,750	4.26	15.97	513
Total[2]	Proved	257	5.25	1.35	43
-	Probable	3,493	4.18	14.62	470

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
-	Total	3,750	4.26	15.97	513

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Persons as defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.6 Stockpiles

11.6.1 Cut-off Grade

For gold stockpiles, the same cut-off grade with open-pit mining was applied for oxide and primary gold stockpiles when estimating Ore Reserves.

For copper stockpiles, back to the time when TKM area was in operation, mineralization was classified into many stockpiles based on several attributes including copper grade and gangue acid consumption ("GAC"). And to define cut-off grade, LXML was using the lowest grade blocks included in the ore stockpiles which is 1.1%. TKM area is currently being re-modelled and will be subsequently re-assessed along with cut-off criteria but no update to this is available now.

By considering the current copper operation, only oxide copper stockpiles are being processed by using hydrometallurgy technique and there have not been enough studies to support how the primary copper stockpiles would be processed. Therefore, when estimating copper Ore Reserves, only oxide copper stockpiles would be considered.

Table 11-19 and Table 11-20 are showing the summary of copper production cost and how the oxide copper cut-off grade was calculated.

Table 11-19 Summary of Copper Production Cost

Item	Unit	Actual				Budget
		2021	2022	2023	1Q2024	2024
OP Mining	USD/Ore&Waste	3.1	-	-	-	-
Processing Copper	USD/milled ton	47.6	36.0	23.0	18.4	31.7
Overall Recovery Copper	%	68.4	59.2	52.5	41.0	41.5

Sources: LXML

Table 11-20: Copper Cut-off Grade Calculation

Item	Unit	Oxide Copper
Copper Price	USD/t Cu	8300.0
Processing	USD/milled ton	35.0
Processing Recovery	%	45.0
G&A	USD/milled ore	0.0

Item	Unit	Oxide Copper
Sales and transport	USD/t Cu	40.0
Cut-off Grade	%	0.9

Sources: SRK

[1] 2024Q1 CMF price was applied.

11.6.2 Gold Stockpile

SRK was provided with summary details of the LXML gold stockpiles ("WK13_All Stockpile Status survey 27 Mar 2024 EODS_Au_Ca_Mg_update.xls") as of 31 March 2024. There are 41 stockpiles on site, of which 15 are oxide gold stockpiles, and 26 are primary gold stockpiles that are available to process, and among these 41 stockpiles, 35 stockpiles were economically feasible to be converted to Probable Ore Reserves categories.

The gold stockpile statement of Ore Reserves is shown in Table 11-21.

Table 11-21: Ore Reserves Estimate of Gold Stockpile, as of 31 March 2024 [1, 3, 4]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	-	-	-	-
-	Probable	361	1.91	0.69	22
-	Sub-total [2]	361	1.91	0.69	22
Primary	Proved	-	-	-	-
-	Probable	2,341	2.40	5.63	181
-	Sub-total [2]	2,341	2.40	5.63	181
Total [2]	Proved	-	-	-	-
-	Probable	2,703	2.34	6.32	203
-	Total	2,703	2.34	6.32	203

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Person as defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] By reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

[4] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.6.3 Copper Stockpile

SRK was provided with summary details of the LXML copper stockpiles ("wk13_All Stockpile Status survey 27-Mar 2024 EODS _Cu_Update.xls") as of 27 March 2024. There are 20 stockpiles on site, of which 15 are oxide copper stockpiles, and 5 are primary copper stockpiles that are available to process, and among these 20 stockpiles, 9 oxide stockpiles were economically feasible to be converted to Probable Ore Reserves categories.

The copper stockpile statement of Ore Reserve is shown in Table 11-22.

Table 11-22: Ore Reserve Estimate of Copper Stockpile, as of 31 March 2024 [1, 3, 4]

Type	Category	Tonnage (kt)	Copper Grade (%)	Copper Content (kt)
Oxide	Proved	-	-	-
-	Probable	1,638	0.95	15.48
-	Sub-total [2]	1,638	0.95	15.48
Primary	Proved	-	-	-
-	Probable	-	-	-
-	Sub-total [2]	-	-	-
Total [2]	Proved	-	-	-
-	Probable	1,638	0.95	15.48
-	Total	1,638	0.95	15.48

Sources: SRK

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Person as defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] By reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

[4] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

11.7 Production Schedule

Production schedule prepared by SRK based on gold and copper minerals are shown in Table 11-23.

Table 11-23: Production Schedule of LXML

Type	Unit	Total	2024	2025	2026	2027	2028	2029	2030
Gold Production									
Open pit mining									
Ore tonnage	kt	2,891	1,641	829	421	-	-	-	-
Au grade	g/t	2.17	2.11	1.66	3.43	-	-	-	-
Au metal	kg	6,275	3,459	1,372	1,444	-	-	-	-
Waste tonnage	kt	19,509	9,909	3,180	6,420	-	-	-	-
Stockpile rehandling									
Ore tonnage	kt	2,703	436	1,230	1,036	-	-	-	-
Au grade	g/t	2.34	2.34	2.34	2.34	-	-	-	-
Au metal	kg	6,322	1,021	2,878	2,423	-	-	-	-
Underground mining									
Ore tonnage	kt	3,750	465	744	793	770	546	402	31
Au grade	g/t	4.26	4.37	4.94	4.53	3.61	3.81	4.25	3.21
Au metal	kg	15,961	2,031	3,676	3,592	2,774	2,082	1,705	101
Copper Production									
Stockpile rehandling									
Ore tonnage	kt	1,638	899	738	-	-	-	-	-
Cu grade	%	0.95	0.95	0.95	-	-	-	-	-
Cu metal	kt	15	8	7	-	-	-	-	-

Sources: SRK

11.8 Conclusions and Recommendations

The data provided by LXML to SRK was suitable in most cases to estimate the Ore Reserves. The summary outcomes are:

- The Ore Reserves estimation is primarily based on SGPS and LXML technical personnel's studies.
- Gold and copper cut-off grades are applied when estimating Ore Reserves.
- The modifying factors like mining loss, mining dilution are applied by using the design data collected from LXML with minimal adjustment.
- SRK noted that the production plan prepared by LXML assumed that Inferred Mineral Resources will be exploited together with those Measured and Indicated Mineral Resources in years between 2024 and 2026. Exclusive of most of Inferred Mineral Resources usually leads to a shorter operating period with estimation of Ore Reserves.

The LXML gold statement of Ore Reserves is shown in Table11-24.

Table11-24 Ore Reserves Estimate of Gold Minerals in Total, as of 31 March 2024 [1, 3,4]

Type	Category	Tonnage (kt)	Au (g/t)	Au (t)	Au (koz)
Oxide	Proved	36	1.09	0.04	1
-	Probable	2,341	1.49	3.48	112
-	Sub-total [2]	2,377	1.48	3.52	113
Primary	Proved	259	5.24	1.36	44
-	Probable	6,708	3.53	23.69	762
-	Sub-total [2]	6,967	3.60	25.05	805
Total [2]	Proved	295	4.73	1.40	45
-	Probable	9,049	3.00	27.17	873
-	Total	9,344	3.06	28.56	918

Sources: SRK

Notes:

[1] The information relates to Ore Reserve conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Person as defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

[4] For gold stockpiles, by reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

The LXML copper statement of Ore Reserves is shown in Table 11-25.

Table 11-25 Ore Reserves Estimate of Copper Minerals, as of 31 March 2024 [1, 3, 4]

Type	Category	Tonnage (kt)	Copper Grade (%)	Copper Content (kt)
Oxide	Proved	-	-	-
-	Probable	1,638	0.95	15.48
-	Sub-total [2]	1,638	0.95	15.48
Primary	Proved	-	-	-
-	Probable	-	-	-
-	Sub-total [2]	-	-	-
Total [2]	Proved	-	-	-
-	Probable	1,638	0.95	15.48
-	Total	1,638	0.95	15.48

Sources: SRK

Notes:

[1] The information relates to Ore Reserves conversion is based on information compiled by Mr. Erwei Lu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Both Dr Xu and Mr. Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Dr Xu is undertaking to qualify as Competent Person as defined in JORC (2012). Dr Xu supervised the work of Mr. Lu. Dr Xu and Mr. Lu consent to the reporting of this information in the form and context in which it appears.

[2] Total may not add due to rounding discrepancies.

[3] Only oxide copper stockpiles were considered during Ore Reserves estimation. By reviewing the data summary details and production records, especially the feed grade, which is showing reasonably reconcilable, therefore, SRK trusts the stockpiles data summary details provided by LXML have fair and adequate information to guide the estimation of Ore Reserves.

The Ore Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

12 Mining

12.1 Production History and Current Status

Historically, LXML (LXML Sepon) used to be an operational open-pit gold and copper mine. In 1992, Rio Tinto discovered Sepon. In 1999, Rio Tinto sold an 80% option over Sepon to Oxiana. In 2004, Oxiana bought Rio's remaining 20% stake in Sepon. In 2008, Oxiana merged with Zinifex to form OZ Minerals. In 2010, MMG acquired Sepon from OZ Minerals. In 2018, Chifeng acquired LXML (LXML Sepon) from MMG.

As for gold and copper operations:

- Gold production commenced in 2003 but ceased in 2013 due to price fluctuations and other factors. In 2020, gold operations resumed. Construction of the underground mine commenced in April 2022 at DSE UG, and the first gold ore was transported to the surface in 2023. Since then, the gold operation has transitioned to a combination of open-pit and underground mining.
- Copper production began in 2005, and in 2021, LXML ceased open-pit copper mining operations. Since then, the copper processing plant has only processed oxide copper stockpiles.

Production records since year 2018 are shown in Table 12-1 for copper ore and gold ore, respectively.

Table 12-1: Production Records of LXML

Item	Unit	2018	2019	2020	2021	2022	2023	1Q2024
Copper Operation (Surface Mining)								
Mined Ore	t	2,155,808	2,178,736	1,420,165	148,924	-	-	-
Waste	t	22,432,995	20,799,689	16,310,493	273,195	-	-	-
Gold Operation (Surface Mining)								
Mined Ore	t	-	322,309	1,888,956	4,237,161	3,794,464	2,274,715	784,539
Waste	t	-	3,653,397	11,473,595	37,118,432	32,790,592	28,678,086	5,416,877
Gold Operation (Underground Mining)								
Mined Ore	t	-	-	-	-	-	181,057	71,852

Sources: LXML

The life of a mining location (or an open pit) is typically several months due to small quantity of open pit.

As of 31 March 2024, the gold deposits that are being or to be exploited include DSE OP, DSW OP, NLU OP, NMK OP, SKM OP, Far West Area (Including MAI OP, NON OP, NKN OP), DSE UG, DSW UG.

The copper deposits that are to be exploited include KHN UG, TKM OPs.

In addition to these deposits, there are dozens of gold and copper stockpiles on site to feed to the processing plant.

LXML has successfully transitioned to a copper mining operation with the capability to process both gold and copper in 2019. This transition includes the expansion and redevelopment of existing approved gold pits to access gold reserves located at deeper levels.

For copper operations, LXML exclusively processes oxide copper inventory sourced from historical stockpiles. Major changes occurred in year 2023 and first quarter of 2024 include:

- DSE UG underground development has resulted in the excavation of approximately 512,467 tonnes of rock and the completion of 4,972 meters of total development during 2023. For the first quarter of 2024, DSE UG has excavated about 154,810 tonnes of rock and completed 1,706 meters of total development. As of 31 March 2024, mining has progressed to approximately 11 meters above sea level (mASL).
- In Far West Area, during a site visit in May 2024, it was observed that the road to the Far West Area had been constructed and the topography in the area had been cleared, as shown in the Figure 12-1 below. According to LXML, on-site geologists were preparing geological models based on the latest exploration results. LXML plans to commence production in the Far West Area in the last quarter of 2024.
- For DSW UG, LXML is conducting additional exploration work to increase geological confidence. Figure 12-1 below shows the exploration field during SRK's visit in November 2023.
- In the TKM OPs area, LXML has conducted pit optimization for these deposits, and the results indicate the possibility of open-pit mining exploitation.
- Regarding the KHN UG deposit, LXML has completed a scoping-level study which indicates that KHN UG will be exploited as an underground mine. During the site visit in May 2024, LXML was conducting geotechnical field investigations and studies.

Figure 12-1: Far West Area and DSW UG Exploration Field

Far West Area, as of 15 May 2024

DSW UG Exploration Field, as of 30 November 2023

Sources: SRK

12.2 Hydrology and Hydrogeology

LXML is located in a monsoonal climate, with a maximum rainfall of up to 170 mm per day.

The following study was reviewed by AMC in the SGPS:

- "Feasibility Study Report for Surface Water Drainage and Hydrogeology", which was prepared by the Golder Associates Pty Ltd ('Golder") and dated on 13 January 2020.

The studies included:

- A data gap assessment based on the pre-feasibility study and revised mine plan;
- Hydrogeologic field investigations to advance the knowledge of the local groundwater regime and geology features;
- Development of a hydrogeological conceptual model to support both the ESIA and the site water management requirements;
- Numerical groundwater modelling to quantify mine dewatering predictions based on phases of the mine plan development;
- The development of a calibrated surface water runoff model and two-dimensional flood model based on measured and observed data;
- Development of feasibility level of river realignment designs allowing the development of pits within flood plain and water course areas; and
- Development of the mine water management plan addressing potential water quality and quantity impacts, surface water management and pit dewatering requirements.

The realignment of two rivers is planned. The Namkok river will be diverted around the DSW OP in two stages and the Houay Khiang creek will be diverted around the NLU OP.

12.3 Open Pit Geotechnics

12.3.1 Studies and Data

The following studies were reviewed by AMC in the SGPS:

- "Rock Mechanics Evaluation of The Primary Gold Project Deposits, Sepon Gold Copper Operation, LAOS, P.D.R. (06641487-R01)", which was prepared by Golder Associates Pty Ltd ("Golder") and dated in December 2007.
- "MMG Sepon Primary Au Geotechnical Study - Open-Pit Review (1743_G\3156)", which was prepared by Mining One Consultants Pty Ltd ("Mining One") and dated on 20 July 2012.
- "Sepon Gold Project Geotechnical Study", which was prepared by Mining One and dated on 6 June 2019.
- "Geotechnical Review - Open Pit & Underground", which was prepared by MEC Mining Pty Ltd and dated on 4 December 2023.

Two geotechnical logging and testing campaigns have been completed to support pit design for mining the primary gold deposits. A summary of drill holes is shown in Table 12-2.

Table 12-2: Summary of Drill Holes for 2007 and 2018 Drilling Campaigns

Area	Number of holes in 2007	Number of holes in 2018	Total
Discovery Main	11	5	16
Discovery West	9	5	14
Nalou	15	4	19
Total	35	14	49

Sources: SGPS

Structural mapping was done during both campaigns, with the mapping done for the three main rock types encountered, i.e., calcareous shale ("CSH"), dolomite ("DOL"), and rhyodacite porphyry ("RDP").

Laboratory testing was also performed during both campaigns. The 2007 testing was done by AL Technologies (S) PTE LTD and the 2018 testing was carried out by Trilab.

The test data was validated by Mining One and the rock mass parameters shown in Table 12-3 were used in the stability analysis in the SGPS focused on Discovery Main ("DSM"), Discovery West ("DSW") and Nalou ("NLU") areas.

Table 12-3: Rock Mass Parameters Used for Geotechnical Analysis by Mining One

Material	UCS (median) (MPa)	Cohesion (kPa)	Internal friction angle (degrees)	Density (mean) (kN/m^3)	mi (Roclab)	GSI (35th percentile) DSM/DSW/NLU
Clay	-	11.1 (35th percentile)	25.5 (35th percentile)	17.3	-	-
Weathered	-	39.6 (lower bound)	40.8 (lower bound)	20.6	-	-
CSH Isotropic	35.8	-	-	27.6	6	55/52/56
CSH Anisotropic	-	-	-	27.6	-	-
DOL	51.2	-	-	28.2	9	56/55/60
RDP	49.7	-	-	27.0	20	57/53/57
Fault Zone	4.7/1/7/1.7	-	-	27.6	6	28/29/26

Sources: SGPS

12.3.2 Seismicity

LXML is situated in an area of low seismic risk, with peak ground acceleration less than 0.04g.

12.3.3 Modes of Failure

Batter-scale stability was assessed using a combination of limit equilibrium and kinematic analysis. Overall and inter-ramp slope stability was assessed using limit equilibrium methods. The potential failure modes identified by Mining One are shown below:

- Circular failure was considered the most likely mechanism in the upper clay slopes, whereas a combination of circular and structurally controlled failure was considered in the upper weathered slopes.
- In the fresh rock, failure was expected to be structurally controlled and would be plane, wedge, or toppling failures.

12.3.4 Geotechnical Domains

Selection of the geotechnical domains is based on the results of the limit equilibrium analyses, kinematic analyses, and anisotropic behaviour.

12.4 Open Pit Mining

The conventional mining cycle, comprising drilling, blasting, loading, and hauling, were employed for the extraction of ore and waste rocks. The mining operations were conducted on flitches with a height of 2.5 meters.

12.4.1 Grade Control

The proposed method of grade control is RC drilling on a 5m x 10m pattern to a depth of 20m.

12.4.2 Open-pit Design

Open pit design parameters are summarized in Table 12-4 and Table 12-5.

Table 12-4: Mine Design Parameters

Item	Unit	Value	Notes
Bench height	m	20	the height between two berms
Minimum mining width (bench floor)	m	25	
Dual-lane ramp width	m	16.5	
Single-lane ramp width	m	10.5	
Ramp gradient	%	12.5	

Sources: SGPS

Table 12-5: Rationalised Slope Design Parameters

Domain	Main Rock Units	Bench Height (m)	BFA (degrees)	Berm Width (m)	IRA (degrees)	Controls
		Discovery Main West				
All	All	/	27	0	27.0	
		Discovery Main East Weathered				
All	Clay and weathered	20	37.27	7	31.0	
		Discovery Main East Primary				
1, 2, 5	CSH and DOL	20	55	9	41.0	
3	CSH	20	65	7	50.8	

Domain	Main Rock Units	Bench Height (m)	BFA (degrees)	Berm Width (m)	IRA (degrees)	Controls
4	CSH	20	70	7	54.5	
		Discover West Main Weathered				
West	Clay and weathered	20	42.85	7	35.0	
		Discovery West Main Primary				
1	CSH	20	65	7	50.8	
2	CSH & DRP	20	60	7	47.2	
3	DOL	20	70	7	54.5	
Eastern section	Clay & weathered	20	42.85	7	35.0	
		Discover West Weathered				
All	Clay & weathered	20	29.12	7	25.0	
		Discover West Primary				
1	CSH	20	65	7	50.8	
2	CSH	20	50	7	40.1	
3	RDP	20	70	7	54.5	
4	CSH	20	65	7	50.8	
		Nalou Weathered				
All	Clay & weathered	20	34.51	7	29.0	-
		Nalou Primary				
1 & 8	CSH, DOL & RDP	20	70	7	54.5	
2	CSH, DOL & RDP	20	55	7	43.6	
3 & 4	CSH & DOL	20	70	7	54.5	
5, 6 & 7	CSH	20	60	7	47.2	

Sources: SGPS

12.4.3 Waste Dumps Design

Waste dumps design parameters are summarized in Table 12-6.

Table 12-6: Waste Dumps and Stockpile Design Parameters

Item	Unit	Value	Notes
Waste swell factor	%	25	
Ore stockpile swell factor	%	25	
Lift height	m	10	
Face/batter angle	deg	23-31	
Berm width	m	5-7	
Overall slope angle	deg	17-25	
Dual-lane ramp width	m	16.5	
Ramp grade	%	10.0	

Sources: SGPS

12.4.4 Ore Stockpiles Design

Stockpiles design parameters are summarized in Table 12-6.

The Gold ROM Pad development will be built on the current Eastern Copper ROM. The Gold ROM is estimated to have a total capacity of 1.6 Mt of ore.

12.4.5 Mining Equipment

Open pit mining was outsourced to seven contractors, which are HCD, KJL, KXN, VCC, VDC, Orica, and EIC. Open pit mining equipment are shown in Table 12-7.

It was planned to continue mining activity with the existing fleet unless there is a convincing reason to change.

Table 12-7: Open-pit Mining Equipment

Type	Size	Model	Quantity
Excavator	90t	CAT 390DL, XCMG XE900D, XCMG XE900C	13
Articulate Truck	40t	CAT 740B	64
Drill Rig	DPI1100/DX700	Sandvik DX700, Sandvik DP1100i	5
XCMG Truck	30T	XCMG NXG5650 DTQ	8
Dozer	D8 & D10	CAT D8R, CAT D10R	8
Small Excavator	20t – 45t	CAT 336DL, CAT 345, XCMG XE370CA, XCMG XE215C	9
Loader	930, 950, 996	CAT 966H, CAT 908K	4
Water Truck	40t	CAT 740B	5
Grader	16H	CAT 14M	5
Float (Trailer)	90t	MANTGA Prime Mover Trailer	1
Roller	15t	XCMG XS143	1

Sources: LXML

12.4.6 Conclusions and Recommendations

The open pit mining is going to be completed in near future (about three year). The final open pit designs have been applied by LXML to guide mining boundaries. Mining cycle and management have been practised for a long time. SRK considered no significant risk will be encountered for the open pit mining in future.

12.5 Underground Geotechnics

The following study was reviewed by AMC in the SGPS. It highlighted the stope stability parameters and ground support regime are obtained from a scoping study, as opposed to a pre-feasibility level work.

- "Discovery Deeps, High Level Geotechnical Assessment (2610_G\5803v2)", which was prepared by Mining One and dated on 17 June 2019.

- "Geotechnical Review - Open Pit & Underground", which was prepared by MEC Mining Pty Ltd and dated on 4 December 2023.

Drill hole data shown in Table 12-8 was used to construct the geotechnical model. The domains include global hanging wall, immediate hanging wall, ore, immediate footwall and global footwall.

Table 12-8: Diamond Drill Holes Used to Construct Geotechnical Model

Hole Collars (RQD data)	Hole Collars (Structural data)
DLK01-2	DIS602
DSM203-5	DIS604
DSM303-4	DIS628
DSM307-8	DIS631
DSM335	DIS642
DSM342-5	DSM203-5
LOL055	DSM285
LOL065-68	DSM303-4
LOL066	DSM307-8
LOL067	DSM342-5
LOL068	LOL015
LOL071-74	LOL020
LOL081	LOL055
LOL083	LOL065-68
LOL086	LOL071-74
LOL089	LOL072
LOL147	LOL073
	LOL074
	LOL081
	LOL083
	LOL086
	LOL089
	LOL147

Sources: SGPS

A statistical analysis was undertaken on logged rock mass classification factor (Q') in each domain. This analysis is summarised in Table 12-9.

Table 12-9: Q' Statistical Analysis for Each Domain

Domain	Minimum	Q'25	Median	Q'75	Maximum	Mean	Quality
Global Hanging wall	0.5	11.7	21.7	25.0	142.0	24.1	fair
Immediate hanging wall	1.0	10.0	17.5	25.6	138.8	24.5	fair to good
Ore	0.8	8.8	18.8	32.5	100.0	24.0	poor to good

Domain	Minimum	Q'25	Median	Q'75	Maximum	Mean	Quality
Immediate foot wall	2.0	8.9	18.8	35.0	150.0	30.0	poor to good
Global foot wall	0.9	29.0	67.0	137.5	270.0	77.3	good to very good

Sources: SGPS

AMC completed a geotechnical assessment to estimate stable stope spans and pillar dimensions for the DSE UG deposit. The limiting stope span was assessed to be the hanging wall or crown of the stope with a hydraulic radius ("HR") limit of 5.7.

12.6 Underground Mining

The exploitation of the DSE UG as an underground gold mine, commencing in 2023, was intended to extend the life of the mine

12.6.1 Development System

The design consists of twin declines, both developed from what would be the upper benches of the DSE OP. One decline, with a portal at 205 m ASL, provides an access to the eastern extent of the deposit and the other, with a portal at 215 m ASL, to the western extent. The design has divided the mine into 4 distinct zones – SE, NE, SW and NW. Isometric view of concept design for long-hole stoping with cemented paste backfill ("LHSB") is shown in Figure 12-2.

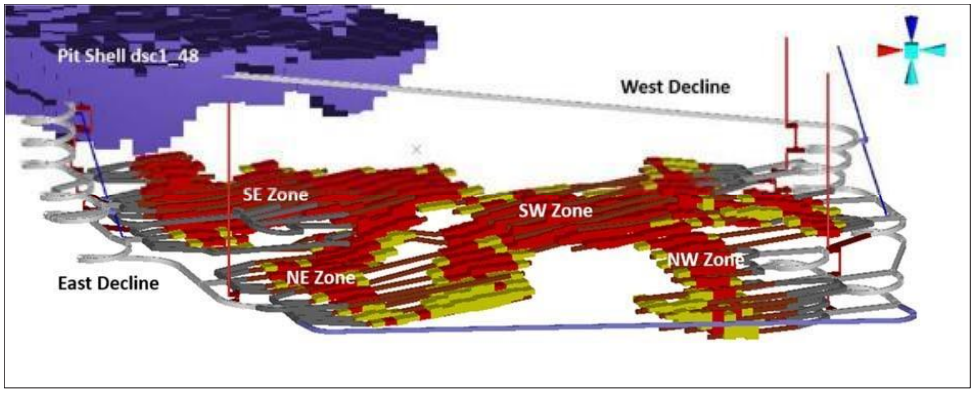
Typical lateral development dimensions are shown in Table 12-10. Vertical development dimensions are likely to be in the 2.0 to 4.0 m diameter range depending on the location and purpose and subject to positive stability assessment at those diameters.

Table 12-10: Lateral Development Profiles

Type	Dimensions
Decline and Access	arch 5.5m wide x 5.8m high
Deposit Access – Level	arch 5.5m wide x 5.5m high
Return Air Drives, Escapeway Accesses, Ore Development	square 5.0m wide x 5.0m high

Sources: SGPS

Figure 12-2: Isometric View of Concept Design (LHSP, looking south)



Sources: SGPS

Since commencing production at the DSE UG, LXML has revised the development design. The new design consists of only one decline, which continues development from the upper benches of the DSE OP. This decline, with a portal at 196 meters ASL, provides access for intake air, transportation of materials, waste & ore and personnel. Additionally, there are fresh air and return air raises located at approximately 220 meters ASL. The dimensions and development rates for different types are shown in Table 12-11 below. The plan view of this design for DSE UG is illustrated in the Section11.5.2.

Table 12-11: Lateral Development Profiles

Type	Dimension	Rate
Decline	arch 5.5m width x 6.0m height	60m/month
Electrical Drive	arch 5.0m width x 6.0m height	60m/month
Fresh Air Drive	arch 5.0m width x 5.0m height	60m/month
Fresh Air Raise	circle 4.0m/diameter	60m/month
Level Access	arch 5.5m width x 5.5m height	60m/month
Level Connection	arch 5.5m width x 5.5m height	60m/month
Ore Access	arch 5.0m width x 5.0m height	60m/month
Ore Drive	arch 5.0m width x 5.0m height	60m/month
Return Air Drive	arch 5.0m width x 5.0m height	60m/month
Return Air Raise	circle 4.0m/diameter	60m/month
Sump	square 5.0m width x 5.0m height	60m/month
Stockpile	arch 5.0m width x 5.0m height	60m/month
Dia Drill Drive	arch 5.0m width x 5.0m height	60m/month
Pumpstation	arch 5.0m width x 5.0m height	60m/month
Slot Drive	arch 5.0m width x 5.0m height	60m/month

Sources: LXML

12.6.2 Mining Methods

The proposed mining methods in the SGPS include long-hole stoping with cemented backfill ("LHSB"), long-hole stoping with pillars ("LHSP"), and post pillar cut and fill ("PPCF").

LHSB would be applied to areas where the deposit thickness is greater than 15 m. Long-hole stopes would be mined at suitable lengths then be filled and cured before mining adjacent stopes. Waste rock backfill could be used in the final secondary stope along strike. This method would require development at both the lower and upper levels of the stope to enable filling of the mined voids. The stope is 15 m wide and 45 m long after considering a hydraulic radius ("HR") limit of 5.7. Stope height varies with thickness of mineralisation domain. The mining recovery rate was assumed to be 90%. The mining dilution rate was assumed to be 15%.

LHSP would be applied to areas where the deposit thickness is greater than 10 metres. Stopes would be extracted by bottom level development and blind production up holes. Stopes would be left unfilled as the rib and sill pillars allow for ongoing stability. The stope is 20 m wide and 25 m long after considering an HR limit of 5.7. Stope height varies with thickness of mineralisation domain. The sill pillar is 10.5 m wide. The rib pillar is 11.5 m wide. The mining recovery rate was assumed to be 95%. The mining dilution rate was assumed to be 10%.

PPCF would be applied to all remaining inventory and would utilise waste rock backfill where the deposit thickness is greater than 7 metres. The bottom development style excavation would be taken at 5 to 7m height depending on the deposit thickness. Subsequent lifts would be taken in approximately 4-metre slices depending on the initial drive height. Drive width to pillar width ratio is 1:1. Opening length to pillar length (between drives) ratio is 6:5. Number of lifts varies with thickness of mineralisation domain. The mining recovery rate was assumed to be 77%. The mining dilution rate was assumed to be 5%.

Currently, LXML has revised the design based on LHSP method, with a mining recovery rate designed to be 90% and mining dilution at 15%.

After reviewing the design, SRK noticed that the stope shape designed by LXML should be updated based on the latest geological model. Consequently, SRK re-ran the Stope Optimizer (SO) based on the input parameters provided by LXML to report the Ore Reserves, with more details referred to in Section11.5.4.

12.6.3 Backfill

According to SPGS, the backfill study has not yet reached the pre-feasibility level. The decision on whether to utilize pumping (if reticulated) or truck hauls (if transported) has not been finalized. The operating cost of paste backfill and the capital forecast have been based on AMC benchmarks, set at 19.5 USD/m³ and 10.0 million USD, respectively.

Currently, LXML has prepared a report titled "Physical and Mechanical Properties and Proportioning Test of Copper-Gold Tailings of LXML Sepon Mine." This preliminary report indicates the following key points:

- Density Analysis: The report provides the density measurements of both historical and current operational tailings.

- Fineness Classification: The fineness classification of both historical and current tailings has been assessed.
- Tailings Classification: The report includes a comparison between full tailings and classified tailings.
- Cemented Material Comparison: A comparative analysis of two types of cemented materials is presented.
- Cement-Sand Ratio: The report discusses the cement-sand ratio used in the tailings.
- Material Consumption: An evaluation of material consumption is included in the findings.

Based on LXML's preliminary assumptions, the operating cost of paste backfill and the capital forecast would be 15-16 USD/m³ and 6.0 million USD, respectively, where LXML may take advantage of suitable budget-friendly options from China. However, LXML has acknowledged that these figures are still benchmarks, and more detailed studies by a third party will be presented by October 2024.

12.6.4 Mining Equipment

Underground mining equipment are shown in Table 12-12.

Table 12-12: Owner's Underground Mining Equipment Quantity

Type	Model	Quantity
Development Drills	Jumbo DD421	2
Production Drills	DRILL DL432, DRILL DL432i	2
Charge Rig	CHARMEC	2
Truck	TRUCK 740B	4
Loader	R2900	3
Grader	CAT 14M GRADER	1
Service Truck	Manitou MTX 1840, CAT 950 LOADER	2
Light Vehicles		12

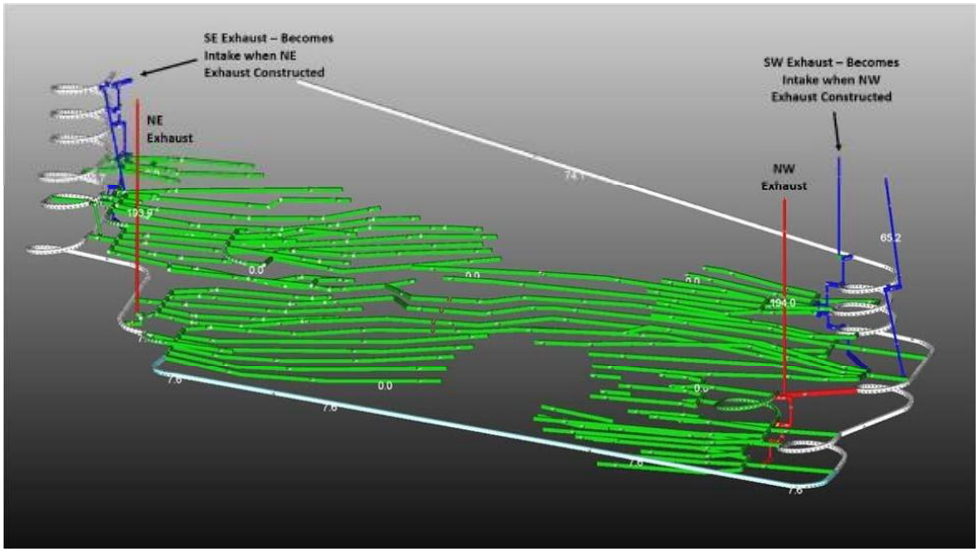
Sources: LXML

12.6.5 Ventilation

A primary ventilation flow requirement was assumed to be 390 m³/s in the SGPS.

Primary ventilation will be established initially in the SE and the SW zones and once the NE and NW shafts are constructed the primary ventilation fans would be moved from the southern shafts to the northern shafts. The southern shafts would then become intakes. Figure 12-3 provides an overview of the final primary ventilation network structure for the underground mine. Final exhaust shaft dimensions (subject to positive stability assessment) are estimated to be 3.5 m diameter with estimated fan power on each of 250 kW.

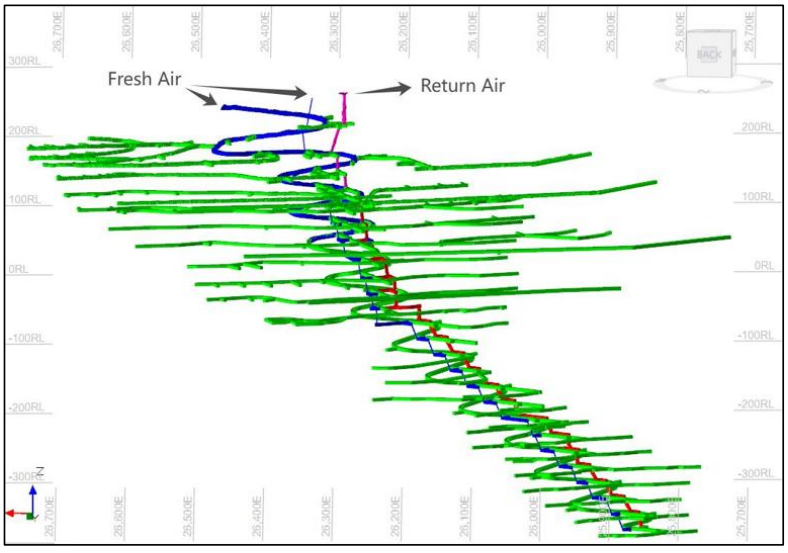
Figure 12-3: Primary Ventilation Layout



Sources: SGPS

As mentioned in Section 11.5, LXML has revised the development design, resulting in changes to the ventilation system. Figure 12-4 below illustrates the general layout of the updated ventilation.

Figure 12-4: Revised Primary Ventilation Layout



Sources: LXML

Generally speaking, fresh air enters through the main decline and fresh air raise, subsequently flowing into the fresh air drive or directly to the level access. A secondary fan is arranged to

pressurize the fresh air, directing it to the ore drive and then to the stope or development face end. The exhaust air follows a reverse path, moving from the stope or development face end to the level access, then to the return air drive, and finally to the return air raise.

Table 12-11 in Section 12.6.1 presents the design parameters for the ventilation drive and raise.

Figure 12-5 shows the secondary fan and vent tube arranged in the main decline to level access, as observed during the underground visit on November 28, 2023.

Figure 12-5: Secondary Fan in Main Decline

Secondary Fan in Main Decline

Vent tube in Main Decline

Sources: SRK

As a general comment on the underground visit, the areas were clean, reasonably well-ventilated.

SRK was also provided with the primary and secondary ventilation survey monthly records, as shown in Figure 12-6 below. Normally, the survey is conducted on a monthly basis.

Figure 12-6: Primary Ventilation Survey in January 2024

VENTILATION SURVEY

MINE Discovery Deeps East
BY Vinai/Soumata
DATE 1/23/2024
START 12:30 FINISH 13:30 WEATHER: Sunny

PRIMARY VENTILATION SURVEY

S.No	Vent Station	Location	Area (m^2)	V_1 (m/s)	V_2 (m/s)	Velocity (m/s)	Quantity (m^3/s)	Flow type: Forced	Flow type: Flow through	Wet Bulb	Dry Bulb (°C)	Relative Humidity	H^2S (ppm)	O^2(%)	CO(%)	SO^2(%)	Comments
1	PORTAL	At CH+30	42.22	6.90	6.05	6.48	273.35	Y		17.6	21.1	74%					
2	1900 RAR	At the vent wall_CH+5	39.80	0.77	0.74	0.76	30.05	Y		18.2	24.3	60%					2 DBRs Opened
3	1840 VA	At the vent wall_CH+5	25.23	0.75	0.76	0.76	19.05	Y		24	24	100%					4 DBRs Opened
4	1800 VA	At CH+ 15	29.82	3.56	3.49	3.53	105.12	y		20.7	23.5	77%					Opened
5	1820 VA	At vent wall	25.80	3.45	2.97	3.21	82.82	y		19.5	22.9	73%					Opened
6	DECLINE	At CH+1210	35.85	0.46	0.53	0.50	17.75	Y		24.6	28.5	72%					No Activity

Air voulume requirement	m^3/s
Bogger	15.25
ADT Truck	16.45

Reference
1 DBR: 1.31mL X 0.24mW=0.314m^2
2 DBR: 0.314*2 = 0.628m^2
3 DBR: 0.314*3 = 0.942m^2
6 DBR: 0.314*3 = 1.884m^2

Sources: LXML

12.6.6 Conclusions and Recommendations

In SGPS, the proposed mining methods in the DSE UG include long-hole stoping with cemented backfill ("LHSB"), long-hole stoping with pillars ("LHSP"), and post pillar cut and fill ("PPCA").

Construction of the underground mine commenced in April 2022 at DSE UG. As of 31 March 2024, SRK was provided with revised ventilation designs and underground designs by LXML.

SRK re-ran the stope optimization based on LHSB, as selected by LXML, then applied modifying factors and prepared the production schedule based on a review of LXML's data. SRK notes that LHSB has been widely practiced globally and is technically feasible.

SRK also noted that DSE UG would utilize cemented backfill to increase mining recovery, and more comprehensive study is on-going. Cemented backfill is widely used in various mines, it would not be a major risk which affecting Ore Reserves estimation

13 Recovery Methods

13.1 Gold Processing Plant

13.1.1 Introduction

The Sepon Gold Plant started operations during 2002 as a conventional processing plant for treating oxide ores by cyanide leaching. The plant was originally designed to process ore at 1.25 Mtpa. During 2006 the processing plant was expanded to achieve a processing throughput rate of 2.5 Mtpa. The plant was placed in care and maintenance in December 2013 due to unfavourable economic conditions driven by low grades and low gold prices. During 2016, a Scoping Study evaluated the option of re-allocating existing assets from both plants (Sepon Gold plant and Sepon Copper plant) to significantly minimize the required capital expenditure. This option was considered in later studies, as it was accepted that there were challenges for increasing the reserves for copper ores. The option of pre-concentration by flotation followed by pressure oxidation ("POX") was selected as "going-forward case" taking advantage of current POX facilities.

During 2020, the Sepon Gold Project Study was completed by LXML, focused on optimising the option evaluated during 2016, and maximising the utilisation of current assets. Since 2019, several assets from the Sepon Copper plant have been allocated to processing primary gold ores, including the flotation plant and the pressure oxidation circuit.

Currently, the plant has been expanded to process oxide ore and primary/transition ores in parallel mode. The overall plant capacity is 3.8 Mtpa, including the capacity at 2.2 Mtpa to process primary/transition ores and at 1.6 Mtpa to process oxide ore.

The oxidised ore is processed by carbon in leaching process ("CIL") and the primary/transition ore is processed by the "flotation - POX - CIL process". The final product is Gold Doré. Over the past three years, 3.08 to 3.55 Mtpa ore was processed and 6.01 to 6.26 tpa of gold was produced with the gold recovery of 55.1 to 65.2%.

The Sepon Gold Plant and Copper Plant are together in a complex. Figure 13-1 shows an aerial view of the complex.

13.1.2 Production Process

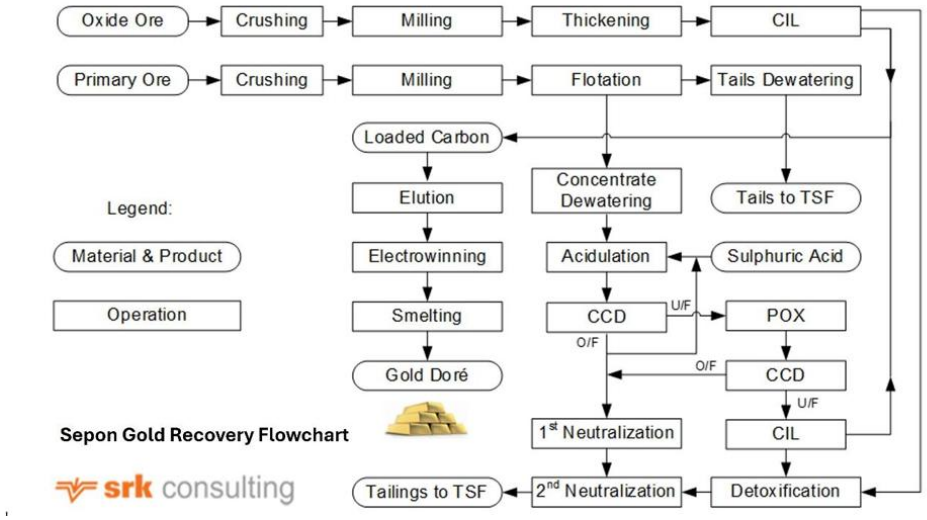
After crushing and grinding, the oxidised ore enters the CIL system. The primary and transitional ores are crushed and ground before entering the flotation system to produce a flotation concentrate and tailings, the tailings is discharged into the Flotation Tailing Storage Pit since cyanide free, while the concentrate enters the CIL system after acidification and POX. The gold-bearing carbon from the CIL systems is then sent to the elution-electrowinning-smelting system to produce Gold Doré. The leach residue from the CIL system is detoxified and discharged to the tailings storage facility ("TSF").

The production process is simplified in Figure 13-2 and described as follow:

Figure 13-1: Sepon Gold Plant and Copper Plant Complex

Source:LXML

Figure 13-2: Simplified Gold Recovering Flowchart



Source: SRK

- Oxide Ore Crushing and Grinding

Oxide ore is fragmental and crushed by a roller crusher then GOX Mill (2,000 kW installed capacity). The final sizing of the oxide milling circuit is P_{80}=90~125 microns. The milled ore is then pumped to TK01 and TK61 agitation tanks for cyanidation with air injection and lime addition. The slurry is then pumped into the back end of the CIL circuit.

- Primary Ore Crushing and Grinding

A single toggle jaw crusher (Jacques ST47) will reduce the top size from 600 mm to 90 mm. Crushed ore is stockpiled between the crushing and milling circuits. The crushed ore is then reclaimed by apron feeders and fed into the SAG Mill (2,600 kW installed capacity) and Ball Mill (1,800 kW installed capacity) circuit. The final sizing of the entire milling circuit is P_{80}=53~65 microns.

- Primary Ore Flotation

The milled primary ore is then pumped to the flotation facility. The flotation plant includes two Jameson cells and six 160 m^3 mechanical rougher-scavenger cells with prior flash flotation cells. The scavenger concentrate reports to the cleaning circuit which includes another Jameson cell and three 70 m^3 mechanical cells. The cleaner tails are recirculated to the rougher flotation cells. The scavenger flotation tails report to a tails thickener (CCD4) for thickening purposes prior to being pumped to the surge tank in CIL circuit or discharged to west TSF("WTSF") as well as to Khanong Tailing Storage Pit since it is cyanide free tailing slurry.

- Concentrate Acidulation and Pressure Oxidation (POX)

The final flotation concentrate is dewatered by a concentrate thickener (CCD5). Concentrate at 40% w/w density is then pumped into two agitation tanks (TK05 and TK06) for acidulation purposes. Concentrate sulphuric acid and POX residue CCD (counter current decantation in thickeners) wash solution provides the acid source for carbonate removal. The post acidulation slurry is dewatered by thickener (CCD7). Concentrate at 40% w/w density is then pumped into the pre-heater vessel at the Pressure Oxidation facility for increasing the temperature up to 90-95 °C. Heated concentrate slurry reports to an agitation tank (TK135) for feeding the pressure oxidation facility, POX1 and POX2. The heated concentrate slurry is then fed into the autoclave vessel, where the sulphides are oxidised under aggressive leaching conditions (220 °C, 2,900 kPa total pressure, 600 kPa oxygen overpressure). Pyrite is completely oxidised to hematite and basic ferric sulphate. The pressure oxidation vessel discharge reports to two tanks (TK101 and TK102) to start the hot cure process (dissolution of basic ferric sulphate). Hot slurry is then pumped into another tanks (TK07 and TK08) allowing enough residence time for complete basic ferric sulphate dissolution. The slurry is then washed through the front end of the CCD train. Four thickeners have been allocated for washing purposes (ALT1, CCD1, CCD2 and CCD3). The washed residue is then pumped from CCD3 to a tank (TK133), where pH is increased up to 10 ahead of the CIL circuit. The slurry is then pumped into the front end of the CIL plant at the Sepon gold plant.

A concentrate regrinding and cleaning facility is in construction for the concentrate upgrade and carbonatites decreasing to save the sulphuric acid consumption of concentrate acidulation.

- Carbon in Leach (CIL), Elution and Gold Room

The CIL circuit is operated considering two activated carbon circuits. Four large CIL tanks (1,800 m3 each) and three small CIL tanks (1,000 m3 each) are allocated for primary ore CIL, while three small CIL tanks (1,000 m3 each) are allocated for oxide ore CIL. This carbon configuration is based on minimising the cross contamination of preg-robbing material from the ore. Gold is leached by

conventional methods using sodium cyanide with air injection. Loaded carbon is transferred into the stripping facility for elution purposes and final gold pouring within the gold room. A new elution circuit is built in April 2022 to increase stripping capacity along with extension of gold room.

Mercury recovery system is included within the existing and new elution circuit and gold room, for regeneration kiln and electrowinning sludge drying. Mercury is recovered within liquid form, then storage onsite for latter exportation outside of the processing facility.

- Cyanide Destruction and Neutralization

The overall CIL residue reports to the detoxification stage, where sodium metabisulphite and copper sulphate are added for cyanide destruction. The final tails report to the neutralisation stage for increasing the pH up to 9 for final tailing disposal.

13.1.3 Production Performance

The·overall gold.recovery·ranges·from·54.6%·to·65.3%, as shown in Table 13-1..

Table 13-1: Sepon Gold Plant Historical Production Performance

Parameters	Unit	2021	2022	2023	1Q2024
Total Gold Grade	g/t	3.23	2.80	3.05	3.03
Total Gold Produced	kg	6,003	6,206	6,009	1,471
Overall Gold Recovery	%	54.6	63.8	64.1	65.3

13.1.4 Processing Facilities and Equipment

The main production facilities at Sepon Gold Plant include an oxide ore crushing and grinding system, a primary ore crushing and grinding system, a primary ore flotation system, a flotation concentrate acidulation and POX -CCDsystem, a POX post-concentrate CIL system, an oxide ore CIL system, a gold-loaded carbon elution-electrowinning-smelting-regeneration system, and auxiliary facilities including an oxygen plant, a metallurgical and assay laboratory, and a machine shop. The main processing equipment are described in the above process description. Figure 15-3 shows part of the gold facilities.

The cryogenic oxygen plant with a demonstrated capacity of 220 tonnes of oxygen per day supports the pressure oxidation facility. An existing vacuum pressure swing adsorption ("VPSA') oxygen has a capacity of 50 tonnes of oxygen per day and a new VPSA oxygen plant was built in 2021 with a demonstrated capacity of 160 tonnes of oxygen per day.

Figure 13-3: Facilities of Sepon Gold Plant

Source: SRK

13.1.5 Consumable

The Sepon Gold Plant Consumable of December 2022 is shown in Table 13-2, which is largely representative of the future consumption levels of the plant.

Table 13-2: Sepon Gold Plant Consumable

Reagents	Unit	Consumption
Total Grinding Media	kg/t dry ore milled	0.86
NaCN	kg/t dry ore milled	0.65
Hydrated lime	kg/t dry ore milled	12.8
Caustic Soda	kg/t dry ore milled	0.85
SMBS	kg/t dry ore milled	2.7
H_2O_2	kg/t dry ore milled	0.73

$CuSO_4$	kg/t dry ore milled	0.38
Diesel	kg/t dry primary ore milled	0.06
Sulfric Acid	kg/t dry primary ore milled	
Xanthate - SIAX and SIBX	kg/t dry primary ore milled	1.8
Frother	kg/t dry primary ore milled	0.07
Promoter - MBT	kg/t dry primary ore milled	0.76
Fresh Water	m^3/t dry ore milled	
Electricity	kWh/t dry ore milled	

13.1.6 Utilization of low-grade ore

There are plans to develop and utilize low-grade gold resources, but there is no technical studies, neither optionality tests and (pre-) feasibility studies, or specific plans to conduct feasibility studies.

13.1.7 Conclusion and Recommendation

The Sepon Gold Processing Plant uses the "flotation-POX-CIL" process for primary/transition ores to produce Gold Doré and the CIL process for oxide ores to produce Gold Doré, which is believed to be a suitable process by SRK.

In 2023, 2,111kt of primary ore was processed at a feed grade of 3.55g/t with 85.4% gold flotation recovery, 78.2% POX-CIL recovery. 5.021kg gold was produced from primary ore, the overall gold recovery is 67%.

In 2023, 974kt of oxide ore was processed at a feed grade of 1.96g/t with 51.8% gold recovery. The lower gold recovery rate is considered by SRK to be mainly due to the multiple ore types and the inherent refractory of the ore, while the reasons for the processing and operating parameters are of secondary importance. Total gold production is 6 tons from oxide an primary ores with overall gold recovery of 64%.

The primary and oxide ores will continue to be processed on existing facilities and the flowsheet is continuously upgrading. SRK proposes to forecast future production at an overall recovery of 65%. There are plans to exploit the low-grade gold resource, but no technical studies have been carried out yet in relation to this plan. It is recommended that verification and associated technical studies, including metallurgical tests and feasibility studies, be conducted on the low-grade resource.

13.2 Copper Processing Plant

13.2.1 Introduction

Copper processing is conducted at two different locations within the Sepon operation, utilsing components of the former copper process plant together with the more recently constructed Heap Leach Operation. Each facility runs parallel to the other with the heap leach operation lying northeast of the copper processing plant at the mining ROM pad area. Final metal production occurs within the processing plant area. Previous copper operations were transitioned from July 2020 to the new gold primary circuit which included transfer of the former copper mill, pressure autoclaves, & leaching tanks. Remaining processing assets (which have not been utilised in the primary gold conversion) will be utilised to treat residual low-grade copper ore stockpiles on the ROM. The former copper

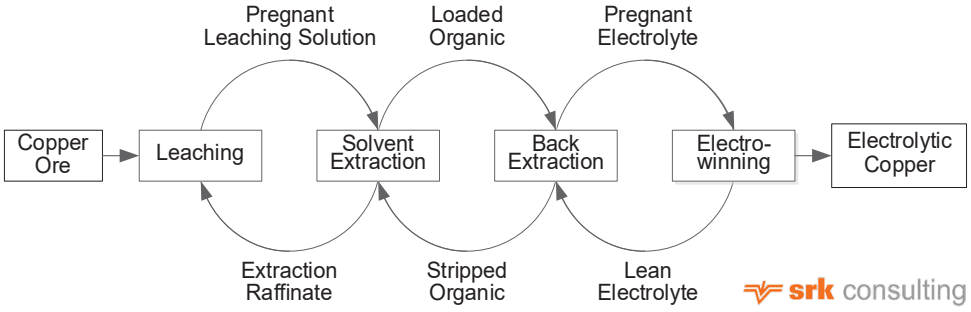
process plant assets retained for copper processing include the Scrubber, cold acid leach, CCD, and solvent extraction & electrowinning (SX/EW).

Figure 13-1 of Section 15.1 shows an aerial view of the complex of Gold Plant and Copper Plant.

13.2.2 Production Flowsheet

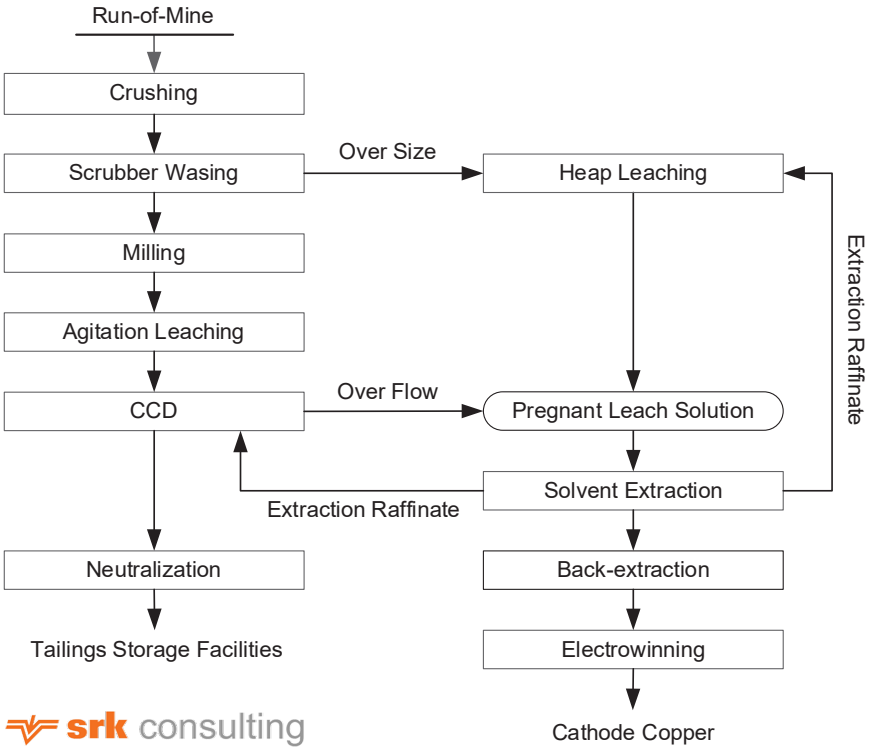
A typical hydrometallurgical process includes 3 circles as shown in Figure 13-4.

Figure 13-4: Schematic Diagram for Copper Hydrometallurgical Recovery



The Sepon copper production flowsheet is a typical hydrometallurgical process, including agitation leaching and heap leaching operations, and the final product is cathode copper. Simplified flow chart is presented in Figure 13-5, descripts as follows:

Figure 13-5: Simplified Copper Metallurgical Flow Chart



Source: SRK

- Crushing and Scrubbing

Low grade oxide and mixed oxide & sulfide copper ores are stored on the ROM pad. The ROM is then crushed by an impact crusher. The scrubber circuit washes the crushed ore with acidic process solution and then screens out the larger particles to produce a leach slurry that is sent to leach tank.

- Cold Acid Leach and CCD

Concentrated sulphuric acid is added to leach tank to dissolve the copper into solution. The leach slurry is then transferred to CCD train #2. The slurry is thickened in each of the atmospheric leach thickener (ALT2). Thickener overflow, termed pregnant leach solution (PLS), is pumped to a clarifier, and flows from there, by gravity, to the PLS pond. Underflow streams from the PLS clarifier and atmospheric leach thickeners are pumped to the first CCD thickener. CCD train comprises six thickeners arranged in series. The purpose of the CCD circuits is to wash copper, acid and iron from the atmospheric leach thickener underflow stream. In order to achieve this, solid underflow and clear overflow streams move in counter-current direction through each CCD train. The streams are mixed ahead of each thickener, in an agitated mix tank, to ensure efficient washing.

Flocculant is added to each thickener according to the settling characteristics of the ore blend. The flocculation and resulting settling rate is sensitive to thickener feed density. Internal dilution in the

feed well is used to control the feed density and the flocculated solids are injected into the feed well to improve settling rates.

Washing of the solid material in the first three CCD thickeners of each train is achieved by contacting the solid underflow from the atmospheric leach thickener with copper raffinate from solvent extraction, which enters the circuit in the second CCD mix tank. The wash ratio in this section of the CCD circuit is approximately 4:1. Due to the high levels of iron and acid in the copper raffinate, only copper is washed from the solid underflow in the first two CCD thickeners.

Overflow from each of the first CCD thickeners is stored in a surge tank. CCD overflow is returned to milling and atmospheric leaching, via the heat recovery exchangers and atmospheric leach pre-heater in Pressure Oxidation.

Underflow from each of the third CCD thickeners is pumped through the next three CCD stages of each train where it is contacted with dilution water from the flotation circuit, to further recover copper as well as iron and acid. The wash ratio in the next three thickeners is approximately 1:1. As the wash water reports with raffinate to the CCD overflow tank, the amount of water used is set to match the makeup water requirements of the overall circuit. The plant water balance limits the wash efficiency achieved in this section of the CCD circuit.

The final thickener in the CCD circuit is used to thicken the slurry, the returned underflow is pumped to Neutralisation. Process water is added to the dilution tank to make-up for the volume sent forward as wash water.

- Solvent Extraction

The solvent extraction plant consists of one train having three extraction mixer-settlers operating in series, two stripping mixer-settlers, one organic washing mixer-settler and a loaded organic tank. Each mixer-settler consists of one Dispersion Overflow Pump ("DOP") Unit, two Spirok mixing units and a settler.

The clarified and cooled PLS solution containing copper in solution is pumped from the PLS pond through two pipelines into the SX area into E1 DOP unit. The PLS flow rate is controlled with feed pump VFD.

In the E1 stage DOP, the PLS solution is mixed with semi-loaded organic coming from the E2 mixer-settler and a part of the PLS copper content is extracted into the organic phase by using copper selective organic reagent mixed with kerosene type diluent.

The formed dispersion flows through Spirok mixer units and via an uptake channel into the settler, where the dispersion flow is distributed across the full width of the settler by using a distributor fence. The organic and aqueous phases are separated by aid of set of picket fences. Because the organic phase has a lower density than the aqueous phase, it floats on top of the aqueous solution.

The extraction mixer-settlers are designed to operate with organic to aqueous phase ratio of close 1:1. The global O/A ratio is anyhow 1,7:1,0, thus the extraction mixer-settlers are furnished with aqueous inner circulations taken from the settler bulk.

There are two launder compartments at the discharge end of each settler. The copper loaded organic overflows into the first compartment and the aqueous phase flows under the organic launder into the

aqueous launder through pipes, which are furnished with bellows to control solution levels in the settler.

The aqueous phase from the E1 settler flows via an outlet box to E2 DOP unit and the copper loaded organic solution flows by gravity into a loaded organic tank. In the E2 DOP unit, the aqueous solution from the E1 stage is mixed with partly loaded organic solution from the E3 stage. The formed dispersion flows through the mixing units into the settler, where the phases are again separated.

The aqueous phase from the E2 stage continues into the E3 mixer-settler where it contacts with stripped organic coming from the S2 stage. About 88 to 95 % of the PLS copper content is now transferred from the aqueous phase into the organic phase. The extraction recovery varies depending on the PLS acidity and copper content. The raffinate copper solution flows from the E3 stage by gravity into the raffinate pond.

The loaded organic tank is furnished with scrub water circulation to enhance impurity control. The PLS solution contains impurities like iron and manganese, which are harmful for the electrowinning process. Transfer of these impurities into the copper electrolyte is minimized with aid of scrubbing in the loaded organic tank and using a washing mixer-settler. The scrub water in the loaded organic tank is circulated into the organic outlet of the E1 stage with centrifugal pumps. Acidic fresh water is taken into the circulation and corresponding amount is bled out into the aqueous outlet of the E2 stage.

The pre-scrubbed loaded organic is pumped by using VFD controlled centrifugal pump from the loaded organic tank through LO pump tank into the W stage DOP unit, where it is mixed with acidic water, coming from electrolyte filter backwashing. The objective of the W stage is to wash out and dilute impurities, which have been transferred in organic phase as chemical and aqueous entrainment. Used wash water flows to the E2 DOP. The W mixer-settler is designed to operate with organic to aqueous ratio of close 1:1. However the advance ratio is about 45:1, thus the washing mixer-settler is furnished with aqueous inner circulations taken from the settler bulk.

The washed loaded organic flows from the W stage to the first stripping stage S1, where it's contacted with semi-rich electrolyte solution from the second S2 mixer-settler. Copper is transferred back into the aqueous phase by aid of acidity difference between the phases. The rich electrolyte containing close to 50 g/l copper flows from the S1 stage by gravity to the rich electrolyte after settler, which is located at the tank farm. Partially stripped organic solution continues to the S2 stage, where it's mixed with lean electrolyte solution pumped from the electrolyte circulation tank, which is located at the tank farm. The lean electrolyte contains 33-35 g/l copper and 180 g/l sulphuric acid.

The stripping mixer-settlers are also designed to operate with organic to aqueous phase ratio of close 1:1. The global O/A ratio is about 2:1, thus the stripping mixer-settlers are furnished with aqueous inner circulations taken from the settler bulk. The stripped organic returns from the S2 stage back to the E3 stage.

- Electrowinning

Copper is recovered from the electrolyte solution by connecting direct current between the lead anodes and the stainless steel cathodes. The electrowinning layout is based on a double aisle configuration with 2 rows of cells. Two separate electrical and electrolyte circulation circuits are formed with 142 and 24 cells respectively. The electric current is fed to the electrolytic cells by two 60 kA transformer-rectifier. The bus bar system connects each group of cells together and to their

respective rectifier. During this process copper is deposited at the stainless steel cathodes and oxygen is liberated at the anodes.

The EW feed electrolyte is pumped from the electrolyte circulation tank into the electrolytic cells. Copper content of the electrolyte is 35 to 36 g/l and acid content 180 g/l. Electrolyte temperature is maintained at 45 to 50 °C. The change of the copper concentration in the electrolyte is 1.9 to 2.3 g/l. The electrolyte from the cells flows by gravity back to the circulation tank. Electrolyte outlet from the cells is equipped with screen to capture PP balls.

The Electrowinning process produces high purity 99.999% copper cathode metal. The cathodes are allowed to grow for certain days after which they are pulled from the cells. An operator controls the crane by using remote control. The crane bale is fine positioned to a cell by its positioning cones that meet the corresponding holes integrated into the cell, pulls every second cathode at a time, and during the pulling sprays the cathodes with water in order to rinse off the electrolyte.

Pulled cathodes are transferred from the cell to a cathode wash dip tank. Cathodes are washed and transferred to the receiving conveyor of the stripping machine. The Cathodes are again sprayed with hot water in a spray box fitted to the conveyor to remove any final traces of electrolyte. The Cathodes are then automatically stripped in the Cathode Stripping Machine. Stripped blanks are lifted from the discharge conveyor of the stripping machine and transferred back to the cells. The crane bale is equipped with cathode aligning combs that ensure that the cathodes are inserted safely between the anodes.

In the stripping machine, the stripped copper deposits move down and turn into horizontal position. The stacking unit automatically collects the deposits into stacks, which are discharged from the stripping machine by the stack discharge conveyor. The stacks are removed by a fork-lift truck for subsequent manual sampling station, weighing unit and strapping unit.

- Neutralisation

Thickened CCD tailings are pumped to neutralisation tanks. The tanks are arranged in a cascade such that pulp from each tank overflows to the next tank in the sequence. Upcomers are fitted to the overflow of each tank to limit short-circuiting and ensure that no build-up of large particulate material occurs. Bypass launders are provided for each tank in the train to allow individual tanks to be isolated and maintained while the rest remain online.

Spargers are installed in the first two tanks to provide oxygen for ferrous ion oxidation to maximize iron precipitation in these tanks. Air is supplied to these tanks from the atmospheric leach blowers. Limestone slurry is metered into the first three tanks and lime into the final two tanks, both from circulating ring mains. Water is added to the final tank to reduce the solid density to 35% to control slurry viscosity.

Gold plant tailings enter the second neutralisation tank and the combined tailings stream overflows into a pump hopper. The combined tailings are pumped to the western tailings storage facility by two sets of tailings pumps.

- Heap Leach

The heap leach copper processing plant was constructed in 2020 using a blend of primary copper ores, copper process scats and scrubber oversize. Ore has been stacked on 6 HDPE lined pads into heaps up to 12 metres high. The heaps are covered with plastic irrigation hosing to drip acidic

process solution from the copper process plant onto the top of the heap. The solution passes through the heap dissolving copper and is collected in HDPE lined ponds. Three (HDPE lined) ponds were also constructed in 2020 at the heap leach process plant to manage solution being fed to and from the copper heap leach pads. Pregnant Leach Solution from heap leach is transferred under gravity flow to the SX/EW PLS Pond to mix with scrubber leach solution prior to SX/EW.

13.2.3 Production Performance

The production process was modified in 2020 and 2021, with ore crushing followed by washing, coarse-grained fraction heap leaching, and fine-grained fraction grinding followed by stirred leaching. After 2020, heap leaching and stirred leaching simultaneously produced leach rich liquor (PLS) and copper cathode by extraction/electrolysis (SX/EW). The production performance is shown in Table 13-3. Stir leaching, with the decrease in leach grade, has a significant reduction in copper recovery, with a leach grade of 1.43% and a copper recovery of 57.2% in 2022. The integrated recovery from heap leaching for 2020,2021 and 2022 is 76.2%, including the copper brought back to the heap leach by the extraction poor solution. The integrated recovery is 78.4% in 2021, which suffered a reduction to 61.7% in 2022 due to the decrease in ore grade. SRK believes the recovery rate will gradually increase for the long heap leach cycle.

Table 13-3: Sepon Copper Plant Historical Production Performance

Items	Unit	2021	2022	2023	1Q2024
Total ore processed	t	492,062	812,852	1,293,760	378,299
Copper grade of ROM	%	1.49	1.31	1.02	0.90
Total copper production	t	5,020	6,433	6,485	1,259
Overall copper recovery	%	86.4	64.5	55.7	41

Note:

[1] heap leach recovery is calculated based on the total amount of copper stacked and produced.

13.2.4 Metallurgical Facilities

The main metallurgical facilities at Sepon Copper Plant include a crushing and scrubber washing system, a grinding system, a heap leaching system, an agitation leaching and CCD system, a SX/EW system, a residue neutralization system. Figure 13-6 shows main workshops of the copper plant.

Figure 13-6: Workshops of Copper Plant

Source: SRK site visit

13.2.5 Consumable

Table 13-4 lists the consumptions of the agitation leaching plant.

Table 13-4: Sepon Copper Plant Consumable

Reagents	Unit	Consumption
Grinding Media (Steel Balls)	kg/t dry ore milled	0.33
Sulphuric Acid	kg/t dry ore leached	85.00
Flocculant Addition	g/t dry ore milled	212
Lime	kg/t dry ore milled	18.58
Limestone	kg/t dry ore milled	86.80
Fresh Water	m3/t dry ore leached	
Electricity	kWh/t dry ore leached	

13.2.6 Utilization of Low-Grade Ore

Total copper potential for Sepon including tailings and stockpiles estimated is as 138Mt @ 0.68% grade for 940kt of contained copper. The resources for potential copper production is as follows:

- Tailings for leach potential 24Mt @ 0.37% for 88kt of contained copper.
- Tailings for flotation potential 1.45Mt @ 0.4% for 6kt of contained copper.
- Copper stockpile estimated as 4.65Mt @1.04% for 48kt contained copper.
- More than 85% contained copper from Thengkham (58%) and Khanong (27%) ,total primary copper potential estimated as 95Mt @ 0.57% for 538kt of contained copper.

There are plans to utilize the aforementioned low-grade resources by treating low-grade primary copper ore using a flotation process to produce a saleable copper concentrate. The flotation tests on primary copper ores confirmed satisfied results, the copper recovery is over 80% with a saleable grade of above 18%. A pre-feasibility study level *Thengkham Primary Copper Proof of Concept* has been finished in October 2023 ("POC"). The POC designed the primary copper plant adopts "crushing-milling-rougher flotation-regrinding-cleaning" process to produce saleable copper concentrate with gold and silver credit. The designed capacity of the flotation plant is 7.5 Mtpa with copper recovery no less than 80%. Copper concentrate is expected within 18% to 24%.

There are two options of the plant development scheme:

- Option 1 - Building an entire new processing facility at Thengkham
- Option 2 - Upgrading the existing processing plant

As a result of preliminary trade off study, the Option 2 is the preferred scheme, but the NPV is negative. The economic indicators for the option of upgrading the existing plant provide enough resolution for classifying this project within negative/marginal project minimum blue-sky potential. This option will breakeven at a copper recovery of 87%, or at a copper price of 9,119 USD/t copper. A minimum inventory of 137 Mt is required for breaking-even. A strong copper price outlook would support additional studies for this option.

The final recommendation from this study is to proceed with the update of the Resource model as a priority. The model update should be mainly focused on the primary mineralisation. The LXML Exploration team has already included additional drilling in this region for the 2024 plan. The upside potential for the Upgrading the existing processing plant case warrants this additional drilling and model update. Once the Resource model is updated, a detailed feasibility study is recommended.

13.2.7 Conclusion and Recommendation

Hydrometallurgy is a reliable process technology for treating copper oxide ores. The operation of Sepon copper mine for many years has shown that the copper recovery rate is greatly influenced by the leaching grade during the "Stirred Leaching-CCD-SX-EW" process. The leach grade is reduced from 2.71% in 2020 to 1.43% in 2022, and the copper recovery rate is reduced from 83.3% to 57.2%.

Heap leaching is a low-cost wet copper extraction process that can consume excess extractive solution. The combination of stirred leaching and heap leaching can better maintain the process water balance and also reduce the cost to treat lower grade ore. As a reference, the combined recovery of stirred leaching and heap is 61.7% in 2022. A recovery rate of 65% is recommended by

SRK as a parameter for subsequent deposit evaluation and economic analysis, taking into account the long heap leach cycle.

The primary copper ores are amenable to flotation process. Laboratory tests results in the copper recovery over 80% in the concentrate with copper grade ranging 18% to 24%. A Proof of Concept study shows the NPV is negative. A detailed feasibility study is recommended to be conducted once the Resource Model is updated and the copper price raises to above USD 9,119 per tonne.

14 Project Infrastructure

14.1 Tailings Storage Facilities

There are two Tailings Storage Facilities ("TSFs") at the Sepon copper mine and gold mine, TSF1 and the western TSF ("WTSF"). The blended tailings from Copper Plant and Gold Plant are deposited in the TSFs. The storage capacity of TSF1 has been exhausted, and WTSF is in its final raising stage (stage 8). A WTSF EXTENSION DETAILED DESIGN has been compiled by Knight Piesold Pty Ltd in August 2022, adding an extra of 44 Mt (37 Mm3@1.2t/m3) storage capacity serving 8 years from 2023 at approximate rate 5.52Mt per year.

14.1.1 TSF1

TSF1 is located approximately 1 km southeast of the Sepon processing plant. TSF1 was constructed in 2002. Gold tailings were deposited exclusively into the facility until March 2005 when both gold and copper tailings were co-disposed. Construction comprised six downstream stages undertaken between 2002 and 2008 to a crest level of RL 287.2 m with a storage capacity of 16 Mt. A final upstream lift was added in 2012.

TSF1 has a main embankment. The dam figures a drainage system constructed at upstream toe of the embankment designed to pump underdrainage from the tailings mass directly back into the supernatant pond, although this underdrainage system is currently not in use. TSF1 also has a southern and a northern saddle dam that both comprise low permeability homogenous fill. The maximum height of the main embankment is at RL 287 m, approximately 72 m. The saddle dams are approximately 5 m high. The crest length of the main embankment is approximately 850 m. The saddle dams range from 40 to 80 m in length.

The tailings beach level based on the September 2018 survey is RL 285 m. A well-developed beach is formed against the main embankment and the saddle dams. There has been minimal tailings discharge since 2018, so the 13.9 Mm^3 of tailings stored in TSF1 calculated by LXML in December 2017 is assumed to be still applicable.

The current spillway is located near the northern saddle dam, through the western abutment. The current spillway discharges via a rock-lined chute to a deep valley below the northern saddle dam.

A seepage collection system is located at the downstream toe of the main embankment, returning seepage back to the TSF or directly to the process plant.

Ponded water is removed from the dam by a barge-mounted pump decant system and associated HDPE decant return pipeline, pumping directly to the process ponds at the plant site.

Tailings were delivered to the dam via a HDPE tailings delivery pipeline located within a concrete culvert for the entire distance between the plant and TSF1. An emergency dump pocket / catch dam is located at a low point along the pipeline alignment (adjacent to Hinsom Creek). The tailings distribution pipeline had 4 operating spigots and droppers located across almost the full length of the embankment. Currently, tailings deposition is not taking place, but LXML is considering the possibility of reintroducing limited discharge as part of the conversion to gold tailings.

14.1.2 WTSF

The WTSF is situated approximately 10 km southwest of the existing plant site. The WTSF has been operational since January 2008, storing tailings generated from the gold and copper processing plants. The copper processing plant has a current throughput rate of 2.2 Mtpa but was scheduled to be closed in 2020. The gold processing plant has been in care and maintenance since 2013 but is currently being refurbished and expected to recommence processing this year.

Stage 8 construction is ongoing, and the raise is being completed in stages. The crest was initially raised to RL 307 m and now construction of the downstream portion of the raise is underway.

The principal components of the WTSF comprise the following elements:

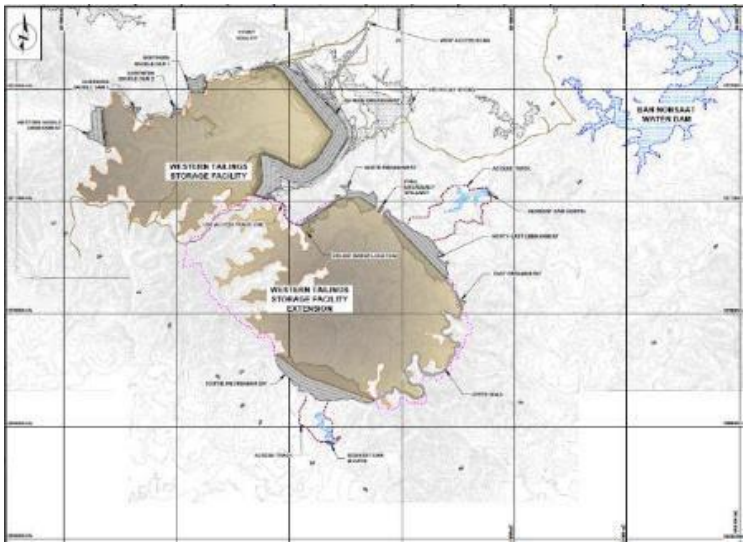
- Main Embankment.
- West Embankment: A major embankment located at the western side of the WTSF.
- Northern Saddle Dams: A series of saddle dams along the northern side of the WTSF.
- Spillway: The spillway is located at one of the northern saddle dams and is an overflow levee with erosion protection provided on the surface of the levee.
- Decant Facility: The decant facility is a pump barge located on the northern side of the WTSF.

The Main Embankment has a maximum height of just over 60 m with the western embankment at approximately 34 m and the saddle dams ranging in height up to approximately 7 m. The Stage 8 construction is reducing batter slopes on the downstream faces of both embankments with slopes of 1V:3.3H and 7 m wide benches at 10 m heights giving an overall slope of 1V:4H.

The crest length of the main embankment is approximately 2.4 km with the western embankment being approximately 300 m.

In February 2021, LXML conducted an optional study examining the potential to expand the WTSF to the west, north and southeast as part of ongoing extensions to the life of mine plan. Following this study, an expansion to the southeast was selected based on ultimate capacity, geological and embankment fill efficiency assessments. A tailings storage capacity of 17.4 Mt was required for the reserves nominated in the PFS, with an increased storage configuration up to 44 Mt developed for the final design. On the basis of LXML's study, Knight Piesold completed the WTSF extension design in August 2022. The extension capacity was designed to accommodate 44 Mt (37 Mm^3 at 1.2t/m^3) tailings which is scheduled to be deposited over 8 years, starting from year 2023 at annual volume of 5.52 Mt. Figure 14-1 is the WTSF and its extension drown by Knight Piesold in the *WTSF Extension Design*.

Figure 14-1: WTSF and Extension



14.2 External Transportation

Sepon site is located in central Eastern Laos, 235 km East North East of Savannakhet, 45 km North of Ban Nabo and 290 km from Da Nang in Vietnam, and centred at Co-ordinates 17° (1875000nM) N and 106° (607000nM) E with an Elevation of 260m above sea level Figure 14-2). Table 14-1 lists different access methods to the project area.

Figure 14-2: Location and Access to Sepon Project

Table 14-1: Accesses to Sepon Project

Road Access	From Bangkok via Savannakhet (possibly routes 2, 202,212), 9 + 28A to Ban Nabo
Air Access	▪ Regular chartered flights operated by Lao Skyway from Wattay Airport domestic terminal in Vientiane, with some flights via Savannakhet Airport. ▪ Helipad on site
Sea Access	▪ Via Bangkok or Laem Chebang ▪ Logistics of supply lines to the site will be established to suit particular packages. Most likely access will be via Bangkok where accumulation of goods will take place for road shipment to site. ▪ Via Vietnam

14.3 Other Facilities in the Sepon Mine site

Historically, Sepon Mine has about 20 years of production, and various facilities were well developed.

14.3.1 Industrial Sites

There are more than 20 open-pits associated with the waste dump sites and ore temporary storage sites near the pits. Now only a few of the open-pits are in operation, and some old pits have been used for waste dump sites.

There is an industrial site hosting ore processing plant and smelter, with ore dump and blending sites.

The whole mine site was separated from local communities with its own traffic control system of haulage roads and various internal roads.

14.3.2 Camps

There two camps within the mine site. One camp can host about people for expats and technical personnel, as well as visitors; the other can host about 2500 people for Lao nationals who work in the mine. Each camp has its own catering and laundry services, as well as being equipped with various sport facilities. Shuttle buses operate from 5:00am to 7:00pm in the morning and evening between working sites and camps.

14.3.3 Airstrip

There is an airport within the mine site, only minutes away from the mine's head office. Charter flights are available daily between Vientiane and the Sepon in weekdays.

15 Market Studies and Contracts

The final products from the Sepon project are cathode copper plates and gold bars. SRK was provided with copper sales agreement and gold refining agreement.

15.1 Copper Sales Contract

The copper sales agreement was signed on 14 January 2022 between LXML ("the seller") and Trafigura Pte Ltd, of Singapore ("the buyer"). The agreement sets that:

"The price shall be the LME Settlement price for Copper as quoted on the London Metal Exchange averaged over the market days of the quotational period (The quotational period shall be the month after the month of delivery (M+1) plus respective premium and minus any applicable discount below:

- **Premium:** The Codelco CIF Taiwan cathode benchmark for the respective year of delivery.
- In case the product does not meet the LME specifications, the **following discounts** shall be applicable:
  - OG 1 (max Pb 10ppm and max S 20ppm): USD 50.00 (US Dollar fifty) per Metric Tonne.
  - OG 2 (max Pb 30ppm and max S 30ppm): USD 80.00 (US Dollar eighty) per Metric Tonne.
  - OG 3 (max Pb 50ppm and max S 50ppm): USD 200.00 (US Dollar two hundred) per Metric Tonne.
- Freight Netback:
  - The price shall be further adjusted to EXW basis by an applicable freight netback from CIF CY Taiwan. Such freight netbacks shall be negotiated in good faith and mutually agreed between the parties for every six (6) month delivery period during the months of December and June prior to the scheduled delivery period. For 2022, Seller shall bear 1/3 of actual freight costs but no more than US Dollar 15 per Metric Tonne for cathodes shipped to countries other than Thailand."

15.2 Gold Refining Contract

A refining agreement was signed between ABC Refinery (Australia) Pty Ltd and LXML on 20 August 2020. The agreement defines that there is no charge on melt or assay of gold and silver Dorè, and refining charge is agreed as USD0.075/gross oz, with a retention (metal return) of 0.015% Au and 0.5% Ag.

16 Environmental Studies, Permitting, and Social or Community Impact

16.1 Environmental and Social Review Objectives

The objective of this environmental and social review is to identify and/or verify the existing and potential environmental and social liabilities and risks and assess any associated proposed remediation measures for the development and operation of the Sepon Project. During SRK's site visit in May 2024, the project was in commercial operation including multiple open pit mining, gold and copper ore processing, tailings storage facilities and waste rock dumps.

16.2 Environmental and Social Review Process, Scope and Standards

The process for the environmental and social preliminary review for the Project comprised a review of provided project environmental and social management documentation combined with site visit obseration against relevant criteria within:

- Laos national environmental regulatory requirements; and
- World Bank/International Finance Corporation ("IFC") environmental and social standards and guidelines and internationally recognised environmental management practices.

16.3 Status of Environmental and Social Approvals

SRK was provided with the following Environmental and Social Impact Assessment ("ESIA") reports for the Project, where the associated ESIA report approvals were issued by the Ministry of Natural Resources and Environment ("MoNRE"):

- NSR Environmental Consultants Pty Ltd and Earth Systems Lao (September 2001), *Sepon Project Environmental and Social Impact Assessment Report*, English Version;
- NSR Environmental Consultants Pty Ltd and Earth Systems Lao (November 2002), *Sepon Project Environmental and Social Impact Assessment Addendum Report*, English Version;
- Enesar Consulting Pty Ltd (April 2004), Sepon Project Gold Expansion Environmental and Social Impact Assessment Report, English Version;
- Coffey (January 2008), Sepon Gold and Copper Operations GPDA Gold Oxide Project Environmental and Social Impact Assessment Addendum Report, English Version;
- Coffey (July 2009), Sepon Copper Expansion Project Environmental and Social Impact Assessment Addendum Report, English Version;
- Sustainable Solutions Global and Earth Systems Lao (2020), Sepon Gold Expansion Project Environmental and Social Impact Assessment Report, English Version; and
- Earth Systems Lao (October 2022), Sepon Gold Expansion Project Stage II Environmental and Social Impact Assessment Report, English Version.

16.4 Environmental Compliance and Conformance

Please note that the following are the Laos environmental laws and regulations which the Company needs to comply with:

- The 9th Five-Year National Social-Economic Development Plan (2021 - 2025);
- National Environment Strategy to 2020 (2004);
- National Biodiversity Strategy and Action Plan for 2016-2025 (2016);
- Strategic Framework for National Sustainable Development Strategy for Lao People's Democratic Republic ("PDR") (2008);
- National Environment Action Plan ("NEAP");
- National Adaptation Programme of Action on Climate Change (2009); and
- MoNRE Vision toward 2030 and National Resources and Environment Strategy, 2016-2025 (2015).

Further than these strategies and action plans, Lao Government has also formulated draft policies and strategic frameworks relating to environment such as the Draft Strategy and Action Plan for Water Resources Management.

SRK notes that these ESIA reports mentioned above have been compiled in accordance with relevant Laos environmental laws and regulations, as well as Would Bank/IFC environmental and social standards and guidelines and internationally recognised environmental management practices. SRK has reviewed these ESIA reports with the associated approvals and conducted an environmental site visit against recognized international industry environmental management standards, guidelines and practices. In the following sections, SRK provides comments in respect to the Project's environmental management measures.

16.4.1 Water Aspects

Three classes of water are used in and around the mining, process plants and accommodation camp areas including raw water, process water and potable water.

Raw (untreated) water is pumped from the Nam Kok River through a water clarifier to a series of tanks to the east of the gold plant. Water is used to meet domestic and process water requirements. The process water is a combination of raw water from the Nam Kok River and recycled TSF decant water. Potable water for the offices and Padan Camp is supplied via a feed from the reverse osmosis plant, located at the Gold Plant, and an additional drinking water treatment plant for potable water supply at Padan camp. Potable water for Hinsom Camp is provided via a dedicated water treatment plant located adjacent to the camp supplied by a groundwater bore.

Water used at the site and surface water runoff has the potential to be impacted by process chemicals, hydrocarbons, eroded sediments, and Acid Rock Drainage ("ARD"). Effective water management is fundamental to minimising potential adverse effects to the downstream environment and community water and aquatic resource users.

A water management system is maintained at Sepon and comprises water management infrastructure such as diversion drains, settlement ponds, environmental wetlands and water

treatment facilities to remove heavy metals via lime precipitation, settlement and natural attenuation, supported by site operational procedures. The objectives of the Sepon water management system are to:

- Minimize extraction of raw water from the environment by reusing pit and process water where practical.
- Divert clean water around mining areas and mineral waste facilities to prevent impact.
- Collect all site effluent waters (runoff from mineral waste facilities, stockpiles, open pits, processing facilities and other general operations areas), test and treat to meet effluent discharge compliance criteria prior to discharge offsite.

16.4.2 Waste Rock and Tailings Management

Waste rocks are generated as part of mining activities and are dumped into various waste dump areas near the open pits. Based on an ARD assessment report dated September 2014, the recommended criteria for non-acid forming ("NAF") waste and potentially acid forming ("PAF") waste is that non-calcareous waste containing more than 0.3% S is assumed to be PAF, and calcareous rock units and non-calcareous waste containing less than 0.3% S are assumed to be NAF. Waste dump areas are generally located and constructed at the nearest proximity to mining areas to minimize haul distance. Mineral waste facilities are predominately valley fill construction, although several are mound or hill type of construction. The construction of waste dumps takes into account the acid-generating and acid-consuming characteristics of the waste rock material to ensure that the risk of acid rock drainage is reduced. The mitigation measures for the PAF waste dump area include low permeable layer on the bottom, blending with limestone, encapsulation with clay, and final dump covers with low permeable layers. PAF waste rock were also backfilled into exhausted open pits and were encapsulated with 5m thick NAF waste. NAF waste rock from any of the pits may be used for construction purposes such as the tailing storage facility embankment, haul roads and sediment control structures. Based on the observations and discussion during the site visit, this mine site generally contains significant levels of dolomines, which can nuetralize the ARD naturally and reduce the impacts to the environment.

Tailings are generated from the processing plant, which contain significant amount of sulfur concentrate. In order to reduce the risk of ARD, tailings are sent to the neutralization circuit where they are neutralized with lime to a pH of 7 prior to discharging into TSFs. Since primary gold is processed by pressure oxidation, associated sulfur is converted to acid and neutralized before sending to the TSF, ARD risk could be reduced significantly. Monthly water quality monitoring undertaken previously identified elevated levels of sulphate and manganese in the surface waters of Houay Nam Laeb and Houay Aria Creek, respectively, southwest of the WTSF. Inspection conducted identified that the elevated sulphate and manganese is likely from WTSF supernatant. Three seepage containment dams were constructed in 2017 to intercept, contain and return the seepage into WTSF, associated with lime treatment on the seepage water.

16.4.3 General Solid Waste Management

The Company states that the municipal solid waste is collected in designated areas and disposed of into an on-site landfill to keep all project sites in good housekeeping. The Company has a program

to recycle iron scraps, paper, plastic bottles, aluminum cans, and cardboards, and several identified local subcontractors come to the site to collect them.

16.4.4 Hazardous substance management

The main hazardous material management for the Project comprises the storage and handling of processing chemicals including cyanide, limestones, paints, lubricant oil, gasoline, diesel, etc. These materials will not only harm the environment, also impact the safety and health of the workers. The Company stores them with secondary containment, in compliance with various laws and regulations. In addition, some certain levels of fuels are stored onsite for mining and ore transporting, and they are stored properly. The Project site is equipped with a high temperature incinerator to treat medical waste. The oily waste and waste oil will be temporarily stored in the temporary storage of hazardous waste and then handed over to qualified organizations for disposal and treatment.

16.4.5 Site Ecological Assessment

The development of mining and mineral processing projects may also result in impacts to or loss of wildlife habitat. The project development ESIA reports determined the extent and significance of any potential impacts to wildlife. Where these potential impacts are determined significant, the ESIA reports proposed effective measures to reduce and manage them.

The Project is located in the Annamite Range Moist Forest ecoregion, which is one of Asia's largest contiguous natural forests, and supports a number of unique species, many of which are endemic and/or highly threatened. This region is listed as 'Vulnerable' as it is threatened by human impacts including logging, wildlife trade and unsustainable natural resource exploitation. In terms of aquatic biodiversity, the Project is located in the Greater Mekong ecoregion. including wetlands, peat swamps, subterranean streams, and crater lakes, which provide habitat for many other aquatic and terrestrial flora and fauna. This ecoregion is considered 'Vulnerable' due to existing threats.

The Company implements biodiversity management through a set of prioritised steps to avoid and minimise the potential impact of the Project on biodiversity. Specific commitments to biodiversity include:

- Do not explore, mine or cause environmental impact within the boundaries of the United Nations Educational, Scientific and Cultural Organization's ("UNESCO") "World Heritage List" properties;
- Avoid disturbance of biodiversity and other ecological values, and otherwise require an approved Mitigation Management Plan or Biodiversity Offset Management Plan prior to authorisation of disturbance; and
- Implement the common Land and Biodiversity Management Critical Control Design that considers topsoil management, erosion control, priority flora management, priority fauna and habitat management, and weed, exotic flora and pest animal management.

SRK notes that the site biodiversity management for the Project follows Lao laws and regulations, and internationally recognized guidance and practices.

16.4.6 Dust, Gas and Noise Emissions

Dust will be generated from the open pits, haul road and dry beach area of TSFs during dry season, and the Company uses water trucks to the open pits, haul road, and the dry beach area of the TSFs to mitigate the dust emission. In addition, the processing plant could be a significant dust and gas pollution source if without proper measures. The dust from the plant mainly comes from the coarse crushing room, medium and fine crushing room, and screening room. According to SRK's site visit, all pieces of equipment of processing plant for crushing and screening are not placed in enclosed spaces, and potentially causing fugitive dust pollution to the air. SRK recommends that all facilities of processing plant be placed in multiple warehouses equipped with dust collection systems and sprayers. Pressure Oxdation Plant ("POX") plant discharges vapor to the environment.

The main noise sources for the Project are from the operation of fixed plant (crushers, compressors, pumps, etc.) and mobile equipment (mainly ore haulage). SRK notes that the potential for significant off-site noise impact is low due to the site being remote (the nearest residence is approximately several kilometers away from the project site).

16.4.7 Environmental Protection and Management Plan

The purpose of an operational Environmental Protection and Management Plan ("EPMP") is to direct and coordinate the management of the project's environmental risks. The EPMP documents the establishment, resourcing and implementation of the project's environmental management programs. The site environmental performance is monitored and feedback from this monitoring is then utilised to revise and streamline the implementation of the EPMP. SRK notes that an operational EPMP has been developed and implemented for the Project. This EPMP incorporates operational monitoring programs for the monitoring of air emissions, groundwater quality, and soil and water conservation.

16.4.8 Site Closure Planning and Rehabilitation

Lao national legislation includes requirements for the closure of mining projects, including ecological rehabilitation and the continued sustainability and social development of local communities. These legislative requirements cover the need to conduct land rehabilitation, prepare a site closure report, and submit a site closure application for assessment and approval.

The recognised international industry practice for managing site closure is to develop and implement an operational site closure planning process and to document this through an operational Closure Plan. This operational closure planning process should include the following components:

- Identify all site closure stakeholders (e.g., government, employees, community);
- Undertake stakeholder consultation to develop agreed-upon site closure criteria and post-operational land use;
- Maintain records of stakeholder consultation;
- Establish a site rehabilitation objective in line with the agreed-upon post-operational land use;
- Define and describe any site closure liabilities (i.e., as determined against the agreed-upon closure criteria);

- Establish site closure management strategies and cost estimates (i.e., to address/reduce site closure liabilities);
- Establish a cost estimate and financial accrual process for site closure; and
- Describe the post site closure monitoring activities/program (i.e., to demonstrate compliance with the rehabilitation objective/closure criteria).

SRK was provided with a conceptual closure plan dated May 2020. SRK notes that the total mine closure cost estimate is around USD 255M, including rehabilitation of waste rock dumps, TSFs, roadways, industrial area, ancillary facility demolition, water management, community transition, etc. According to the MEPA between the Lao Government and the Company, the Company established a rehabilitation and mine closure fund in 2003 contributing USD 1/oz gold and an equivalent rate of all copper sales to the fund for the operational life of the mine. The rate has been increased to USD 3/zo since July 2021 according to the most recent MEPA. The Company provided a USD bank statement of a Lao national bank, and the balance was USD 8.3M in March 2023, which will be used for mine site rehabilitation exclusively. SRK notes that the amount of money provided as evidence is deficit for the total mine closure cost of USD 255M, and additional amount of money should be deposited into the bank account.

16.4.9 Social Aspects

The Sepon Mine is located in Vilabouly District, Savannakhet which has 73 villages with approximately 8,200 households and 44,000 people, the majority of whom is located in rural areas. These villages are populated by two main ethnic linguistic groups (Phou Thai and Mon-Khmer). This district has a low level of infrastructure to support local activities and the project was developed within an area of comparatively low socio-economic profile, primarily based on a subsistence economy.

Public participation and community consultation programs were confirmed as being undertaken for the Project operation as part of their ESIAs. SRK observed that the Company had a good understanding of the social dynamics and knowledge about the local society. This Project provides major employment opportunities for the locals and improves the local economy significantly. The Company stated they have social dispute resolution mechanism and reported to SRK that complains and grievance between the Company and local Laotians are resolved by communication. In addition, According to the MEPA, Community Trust Fund ("CTF") has been established to improve the livelihood of local communities, with an annual contribution of USD 750k by the Company.

Areas in and around the Sepon Mine have a rich archaeological history and the Company has been involved in archaeological and cultural heritage discovery and preservation in the area throughout mine operations. These include artefacts including bronze drums, bronze weapons potteries, and porcelains, cemeteries, spirit forests, caves and sites of local significance. One of the most significant sites is the Dragon Field, a significant cultural site with possible connections to ancient copper mining activities, which is declared as a national protected heritage site. This site is fenced by the Company and excluded from any mining activities. The Company implements cultural heritage management through the local authorities, universities and museums.

No non-compliance notices or other notices of a breach of environmental or social conditions for the Project from the Local or Provincial governments have been sighted as part of this review. The Company also stated to SRK that they maintain a strong relationship with the local, provincial and national governments along with the local police. As part of this review, SRK has not sighted any

documentation in relation to any actual or potential impacts of non-governmental organisations on the sustainability of Sepon Mine's mining and processing operations.

16.4.10 Occupational Health and Safety

During SRK's site visit, SRK observed that safety signs were in place, safety provisions and rules were also displayed within the work areas, moving machinery parts were appropriately guarded and covered, guard railings were installed on all gantries, and proper Personal Protection Equipment ("PPE") was provided and was being used by the workers, such as hardhats, traffic vests, and steel toed shows.

SRK has sighted the OHS management system and procedures, which provide the following summary in respect to the proposed OHS management measures for the Project:

- Mining, crushing, blasting and explosives handling,
- Side slope failure prevention,
- Waste rock disposal,
- Environmental dust and noise suppression,
- Emergency response,
- Fire protection and fire extinguishment,
- Sanitary provision,
- Power provision,
- Unexploded ordnance ("UXO") clearance;
- Labour and supervision, and
- Safety administration.

SRK notes that the above site occupational health and safety ("OHS") management measures are generally in line with recognised international industry practices and Laos safety regulations.

The Company's safety records indicate that there are 0, 0, 0, and 0 fatalities, 1, 1, 2, and 1 serious / lost time injuries, and 27, 32, 4, and 7 minor injuries respectively, in the past four years between 2021 and 2024, which were shown in Table 16-1. Incident descriptions for these injuries were also provided to SRK for review.

Table 16-1: OHS Incident Statistics

Years	Minor	Serious	Fatality
2021 OHS Incident Statistics	27	1	0
2022 OHS Incident Statistics	32	1	0
2023 OHS Incident Statistics	4	2	0
2024 OHS Incident Statistics	7	1	0

Reports analysing the cause of injuries and identifying measures to prevent a recurrence were provided to SRK. SRK notes that such analytical reports are prepared in line with internationally recognized OHS accident monitoring practice, as part of OHS management practice.

16.5 Evaluation of Environmental and Social Risks

The sources of environmental risk are project activities that may result in potential environmental impacts. These project activities have been previously described within this report. In summary, the most significant potential environmental and social risks for the development of the Project, currently identified as part of the project assessment and this SRK review, are:

- TSF seepage pollution;
- Fugitive dust pollution; and
- Deficit mine closure fund.

It is SRK's opinion that the above environmental risks are categorised as medium risks (i.e., requiring risk management measures) and they are generally manageable. Since various environmental protection measures are planned or conducted by the Company to solve these environmental issues, SRK considers that these environmental risks are controlled properly and not likely to develop into higher level of risks.

17 Capital and Operating Costs

17.1 Capital Expenditures

LXML has about 21 years of production history since 2003. Capital expenditures ("Capex") for construction of the mines, ore processing plants, on-site facilities etc. had been invested in the past.

LXML has made a plan for further capital expenditures as sustaining capital in next three years, as shown in Table 17-1. After reviewing the detailed sustaining capital forecast, SRK has observed that while no specific capital expenditure for the paste plant is listed, the overall capital forecast appears sufficient to cover these expenditures. Therefore, SRK has made the assumption that the capital forecast will adequately cover the capital expenditure required for the paste plant.

Table 17-1: Three Year Investment Plan Proposed by LXML

Item	Unit	Budget 2024Q2-Q4	Budget 2025	Budget 2026
Growth	USD	36,822,246	23,647,600	17,160,000
Exploration	USD	7,798,527	18,140,200	11,432,076
Sustain	USD	13,941,126	8,282,649	8,046,405
Total	USD	36,822,246	50,070,449	36,638,481

Source: LXML

Sustaining capital includes capital development and all costs related to the acquisition, replacement, or major overhaul of assets during the mine life required to sustain operations. According to the data provided by LXML, the capital expenditures for the last three year from 2021 to 2023 are shown in Table 17-2.

Table 17-2: LXML Sustaining Capital Expenditures from 2021 to 2023

Year	Unit	2021	2022	2023
Sustaining Capital Expenditures	USD	80,045,664	13,902,841	15,486,999

Source: LXML

The unit sustaining capital costs for past three years are shown in Table 17-3. Excluding the year 2021, SRK has developed a unit sustaining capital forecast based on the average expenditures for the years 2022 and 2023.

Table 17-3: LXML Unit Sustaining Capex from 2021 to 2023

Year	Unit	2021	2022	2023	Average [1]
Unit Sustaining Capital Expenditures	USD/milled tone	21.8	3.2	3.7	3.5

Source: LXML

[1] The average is based on the unit sustaining Capex in 2022 and 2023.

Table 17-4 summarises the further Capex needed for the LXML.

Table 17-4: Further Capex needed for LXML as of 31 March 2024

Item	Unit	2024	2025	2026	2027	2028	2029	2030
Growth	USD million	36.8	23.6	17.2				
Exploration	USD million	7.8	8.3	8.0				
Sustain	USD million	13.9	18.1	11.4	2.7	1.9	1.4	0.1
Total	USD million	58.6	50.1	36.6	2.7	1.9	1.4	0.1

Sources: LXML and SRK

SRK assumes that working capital has been incorporated into the sustaining capital. During the economic analysis, non-current assets will be considered for amortization and depreciation. Together with further Capex, they will adhere to the amortization and depreciation rates as proposed in Table 18-2. It is reasonable to expect that the operation of the Sepon project will be extended with further exploration and feasibility studies, the mine closure fees and the residual value of the project will not be considered in the economic projection.

17.2 Operating Costs

SRK was provided with production and financial records for three year of 2021, 2022, and 2023, 1Q2024 and summaries of historical production costs in various cost centres. Table 17-5 summarizes the unit operating costs.

Table 17-5: Unit Operating Costs in 2021, 2022, 2023 and 1Q2024

Item	Unit	2021	2022	2023	1Q2024
Open pit mining					
OP Mining	USD/Ore&Waste	3.1	3.0	2.7	3.2
OP Mining	USD/mined ton	29.7	29.3	37.1	25.0
Underground mining					
UG Mining	USD/mined ton	-	-	28.8	49.2
Processing					
Processing Oxide Gold	USD/milled ton	17.1	18.5	16.9	11.0
Processing Primary Gold	USD/milled ton	62.1	69.7	56.6	54.3
Processing Gold	USD/milled ton	43.3	48.3	44.1	40.4
Processing Copper	USD/milled ton	47.6	36.0	23.0	18.4
General & Administration					
G&A	USD/milled ton	20.4	9.0	9.8	9.1

Sources: LXML

Table 17-6 presents the operating costs forecast.

Table 17-6: Operating Cost Forecast

Item	Unit	2024	2025	2026	2027	2028	2029	2030
Gold Operation (unit cost)								
OP mining (Ore & Waste)	USD/mined ton	3.0	3.0	3.0	-	-	-	-
UG mining (Ore)	USD/mined ton	35.0	35.0	35.0	35.0	35.0	35.0	35.0

Processing	USD/milled ton	45.0	45.0	45.0	45.0	45.0	45.0	45.0
G&A	USD/milled ton	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Gold Operation (total cost)								
OP Mining	USD million	16.3	26.0	27.7	26.9	19.1	14.1	1.1
UG Mining	USD million	20.9	33.5	35.7	34.6	24.6	18.1	1.4
Processing	USD million	4.2	6.7	7.1	6.9	4.9	3.6	0.3
G&A	USD million	41.4	66.2	70.6	68.5	48.6	35.7	2.8
Copper Operation (unit cost)								
Processing Copper	USD/milled ton	35.0	35.0	-	-	-	-	-
Copper Operation (total cost)								
Processing	USD million	31.5	25.8	-	-	-	-	-
G&A	USD million	8.1	6.6	-	-	-	-	-
Total Opex	USD million	227.8	221.9	169.7	68.5	48.6	35.7	2.8

Sources: SRK

Below is the discussion about administration, mining and processing costs.

17.2.1 Administration

Administration cost includes controllable cost and uncontrollable cost.

- Controllable cost: salary; welfare; travel expense; repair cost, etc.
- Uncontrollable cost: depreciation and amortization; board fees; insurance; and fund.

Table 17-7 summarize the administration cost from 2021 to 2024Q1. The average unit cost of administration for the last three year is about 13.1 USD/milled ton. SRK takes the average unit cost of the past two years with minimum optimistic forecasting at 9.0 USD/milled ton as an estimate for the future.

Table 17-7: LXML Administration Cost from 2021 to 1Q2024

Item	Unit	2021	2022	2023	2024Q1
MTS	USD	12,464,592	10,172,677	10,024,943	3,293,351
UXO	USD	-	-	11,794	-
Rare Earth	USD	-	20,976	2,117,089	-
Commercial	USD	1,188,355	1,128,053	1,140,086	429,952
IT	USD	2,660,772	2,665,367	2,662,800	386,546
Management	USD	2,476,267	2,000,279	4,450,957	921,845
Office Services	USD	442,543	586,040	395,392	94,933
Project Delivery	USD	-	-	-	-
Sales	USD	72,626	54,085	59,411	11,537
Supply & Contracts	USD	2,811,387	2,703,892	2,230,611	541,760
Community & Stakeholders	USD	3,916,203	3,259,349	2,897,949	553,150
Human Resources	USD	2,526,347	1,912,689	2,220,103	450,647
Infrastructure	USD	5,905,648	4,244,401	3,722,922	642,970
Infrastructure Maintenance	USD	1,874,663	2,458,222	2,069,037	455,625

Item	Unit	2021	2022	2023	2024Q1
Route 28A Maintenance	USD	1,800,009	306,587	278,008	35,376
Air Transport Services	USD	-	-	-	112,263
Camp Catering	USD	-	-	-	73,672
Clinic	USD	-	-	-	293,809
Health & Safety	USD	3,245,982	3,601,687	2,789,405	130,245
Security	USD	2,314,203	2,507,231	2,657,319	962,454
Environment	USD	1,012,084	1,411,596	1,179,663	306,977
Sub-total	USD	44,711,682	39,033,130	40,907,492	9,697,113
Milled Ore	t	3,665,614	4,326,557	4,190,134	1,070,070
G&A	USD/milled ton	12.20	9.0	9.8	9.1

Sources: LXML

17.2.2 Open Pit Mining

Table 17-8 shows the open pit mining cost for the last three years. SRK takes the average unit cost 3.0 USD/Ore&waste for past three years as an estimate for the future.

Table 17-8: LXML Open Pit Mining Cost from 2021 to 1Q2024

Item	Unit	2021	2022	2023	2024Q1
SFC Mining	USD	90,994,885	76,639,963	56,516,329	13,522,138
SFC Mining Maintenance	USD	39,158,387	34,362,939	27,806,777	6,062,661
Total Material Movement	t	41,777,711	36,585,056	30,952,801	6,201,416
Mined Ore	t	4,386,084	3,794,464	2,274,715	784,539
OP Mining	USD/Ore&waste	3.1	3.0	2.7	3.2
OP Mining	USD/mined ton	29.7	29.3	37.1	25.0

Sources: LXML

17.2.3 Underground Mining

Table 17-9 shows the underground mining cost for the last three years. The average unit cost is 28.8 USD/ore&waste for past one years. SRK takes 35.0 USD/mined ton (5.0 USD/mined ton for backfilling) as an estimate for the future.

Table 17-9: LXML Underground Mining Cost from 2021 to 1Q2024

Item	Unit	2021	2022	2023	1Q2024
UGD Mining	USD	-	-	3,896,980	2,608,416
UGD Mining Maintenance	USD	-	-	1,325,171	927,208

Item	Unit	2021	2022	2023	1Q2024
Mined Ore	t	-	-	181,057	71,852
UG Mining	USD/mined ton	-	-	28.8	49.2

Sources: LXML

17.2.4 Processing

Table 17-10 shows the processing cost for the last three years. The average unit costs for gold and copper are 45.2 and 35.5 USD/milled ton for past three years. SRK takes processing cost for gold at 45.0 USD/milled ton as an estimate for the future. SRK takes processing cost for copper at 35.0 USD/milled ton as an estimate for the future.

Table 17-10: LXML processing cost from 2021 to 1Q2024

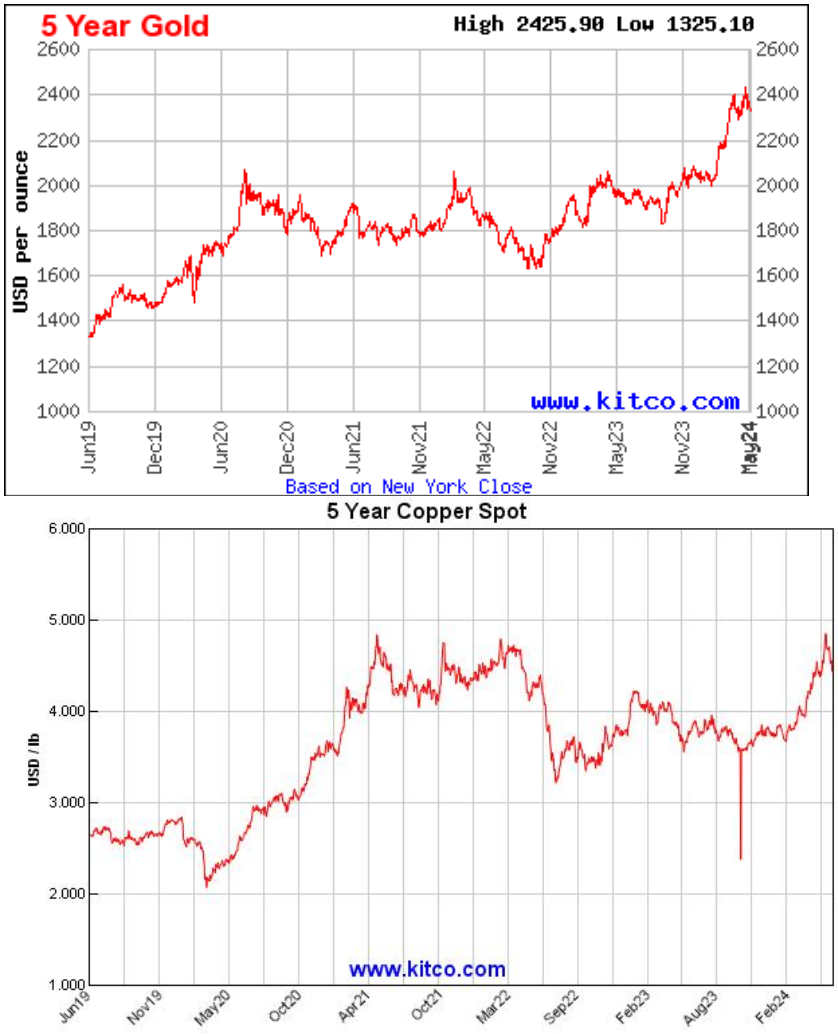
Item	Unit	2021	2022	2023	1Q2024
Processing Copper	USD	12,136,688	27,831,096	25,422,870	5,727,564
Processing Oxide Gold	USD	24,360,120	27,515,940	16,431,122	2,694,835
Processing Primary Gold	USD	123,323,930	144,338,563	119,519,206	27,980,733
Milled Oxide Gold	t	1,423,552	1,483,549	974,224	243,935
Milled Primary Gold	t	1,986,988	2,070,955	2,110,735	515,507
Total Milled Gold	t	3,410,540	3,554,504	3,084,959	759,442
Total Milled Copper	t	255,074	772,053	1,105,175	310,628
Processing Oxide Gold	USD/milled ton	17.1	18.5	16.9	11.0
Processing Primary Gold	USD/milled ton	62.1	69.7	56.6	54.3
Processing Gold	USD/milled ton	43.3	48.3	44.1	40.4
Processing Copper	USD/milled ton	47.6	36.0	23.0	18.4

Sources: LXML

17.3 Metal Prices

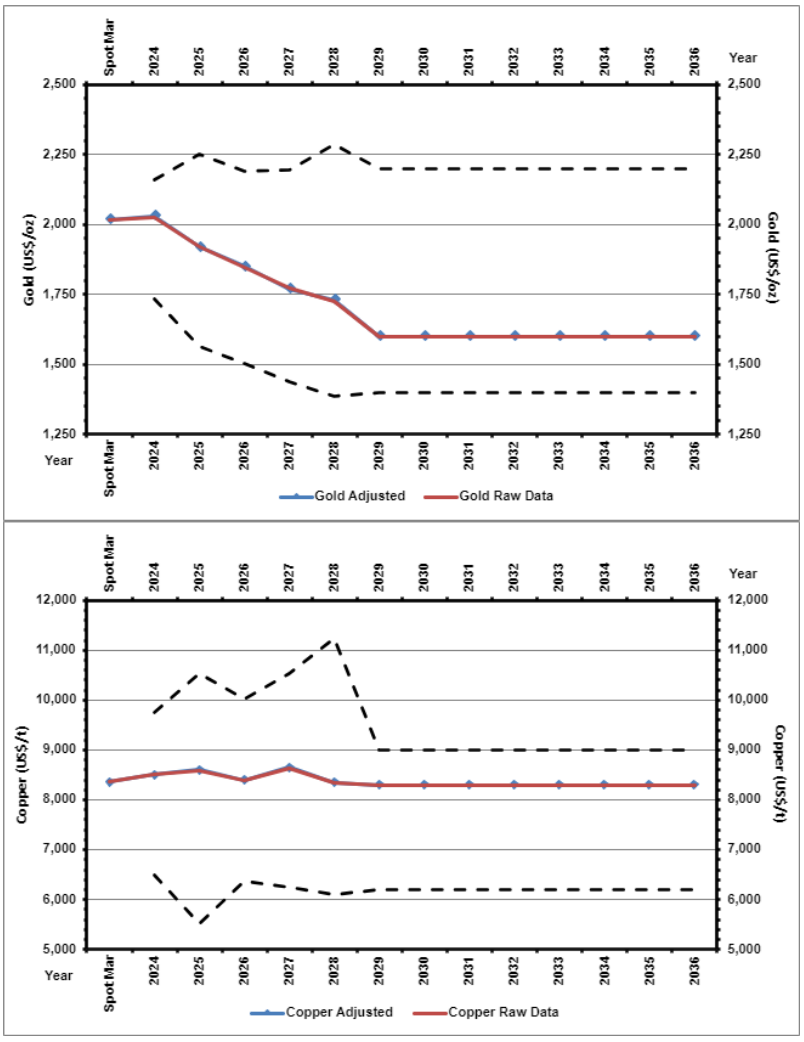
The primary project revenue is from gold and copper, Figure 17-1 shows the historic gold and copper price. Price forecast of CMF is shown in Figure 17-2.

Figure 17-1: Gold and Copper 5 Years Historic Price



Sources: Kitco

Figure 17-2: Gold and Copper Price Forecast



Sources: SRK

Notes: 2024Q1 CMF, Spot in 19 February 2024.

Table 17-11 shows the annual gold and copper price forecasts used by SRK, which is a consensus market forecast, considering various forecasts made by other professional institutions.

Table 17-11: Forecasted Gold and Copper Prices by SRK in the 1st Quarter of 2024

Item	Unit	2024	2025	2026	2027	2028	2029	2030
Copper price	US/t	8,500	8,600	8,400	8,650	8,350	8,300	8,300
Gold price	US/oz	2,030	1,920	1,850	1,770	1,730	1,600	1,600

Sources: SRK

17.4 Tax Obligations

Based on the documents signed between Laos Government and the MEPA's previous owner, CRA, the owner of the mining licenses and exploration permits has following tax obligations.

Company Income tax: once the project produces profit, the company will have a two year tax free period, and have to pay 16.67% income tax of taxable income for the third year, and then will pay full tax rate of 33.33% afterwards.

Royalty: 5% of the net amount of sales of mineral products.

18 Economic Analysis

The economic analysis presented in this section is based purely on the results of the technical review provided above and some key assumptions and is provided for technical evaluation and Ore Reserve estimation purposes only.

The economic analysis was conducted using conventional Discounted Cash Flow ("DCF") techniques. The Net Present Value ("NPV") was determined from the project's cash flow using a 10% discount rate. It should be noted that SRK's DCF modelling and NPV calculation are carried out with the purpose of testing the "economic viability" of the Project which is required to a reasonable Ore Reserve reporting. Additionally, a sensitivity analysis was performed to examine the effects of changes in Capex, Opex, and gold price (revenue).

18.1 Principal Assumptions

The assumptions used to carry out the economic analysis are listed below:

- The discounted cash flow method (the "DCF") is selected as the foundation of economic analysis. The discount rate is 10%, which is a widely used value for a simple economic analysis.
- The base date is assumed to be 31 March 2024, and all the operations related data are subject to conditions obtained at the base date.
- The production schedules are shown in Table 11-23.
- The Capex are shown in Section 17.1.
- The working capital is assumed to be incorporated into the sustaining capital. The mine closure fees and the residual value of the project will not be considered in the economic projection.
- The capital forecast would cover the expenditures for the paste plant.
- The Opex are shown in Section17.2.
- The taxes and their rates are shown in Table 18-1.
- The financial interests were not considered (i.e. 100% interest), as it's an internal cash flow among investors for a project. It has nothing to do with a project's economic viability.
- The final product will be sold entirely in a calculating year, with no inventory at the end of each year.

Table 18-1: Taxes and Surcharges Assumption

Item	Unit	Value
Royalties	% revenue	5
Corporate income tax (CIT)	% taxable income	33.33

Sources: LXML

18.1.1 Technical and Economic Parameters

For the economic analysis of the Projects, SRK adopted a discount cashflow analysis based on previous assumptions and parameters as presented in Table 18-2.

Table 18-2: Technical and Economic Parameters

Item	Unit	Amount	Remarks
Gold Production			
Open Pit			
Proved+Probable	kt	2,891	
Grade	g/t	2.17	
Production Plan	ktpa	1,600/800/400	As mine plan
LoM	years	3	2024-2026
Underground			
Proved+Probable	kt	3,750	
Grade	g/t	4.26	
Planned Production Capacity	ktpa	800	As mine plan
LoM	years	7	2024-2030
Stockpiles			
Proved+Probable	kt	2,703	
Grade	g/t	2.34	
Planned Production Capacity	ktpa	1,200	As mine plan
LoM	years	3	2024-2026
Copper Production			
Proved+Probable	kt	1,638	
Grade	g/t	0.95	
Planned Production Capacity	ktpa	700-900	As mine plan
LoM	years	2	2024-2025
Processing and Metallurgy			
Capacity			
Gold Capacity	ktpa	3,800	Enough for oxide and primary ore
Copper Capacity	ktpa	1,300	Enough for oxide copper only
Overall Recovery			
Gold Processing	%	65.0	
Copper Processing	%	45.0	
Opex			
OP mining (Ore & Waste)	USD/mined ton	3.0	
UG mining (Ore)	USD/mined ton	35.0	5.0 USD/mined ton for backfill cost
Processing for gold	USD/milled ton	45.0	
G&A cost	USD/milled ton	9.0	
Processing for copper	USD/milled ton	35.0	
Working Capital	%	30.0	Section 17.1
Capex			
Tangible Assets	USD million	250.3	Section 17.1
Intangible Assets	USD million	67.1	Section 17.1
Others Assets	USD million	13.3	Section 17.1
Growth in Three Years	USD million	77.6	As mine plan
Exploration in Three Years	USD million	24.1	As mine plan
Sustain	USD million	49.6	As mine plan with SRK's Assumption
Sustain Unit Cost	USD/milled ton	3.5	Based on 2022 and 2023
Mine Closure	USD million	255.0	Section 16.4.8, exclusive in this analysis
Taxation			
Royalty	%	5	Based on revenue

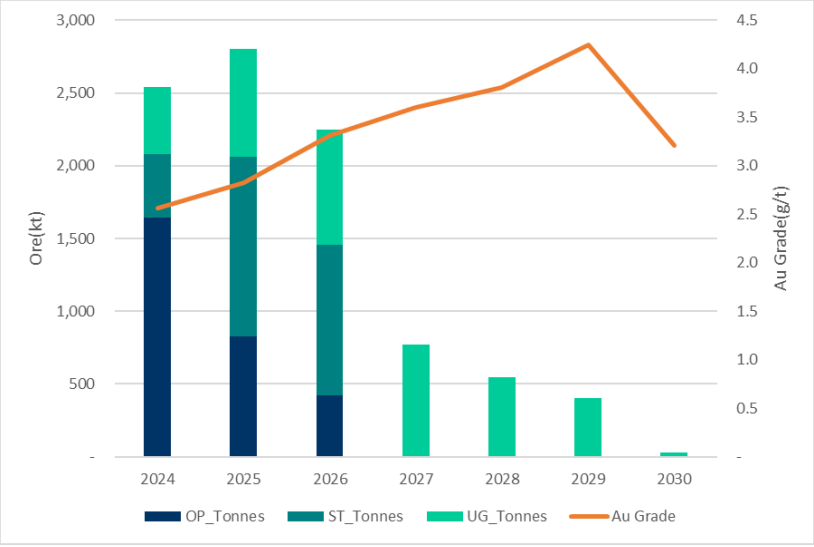
Item	Unit	Amount	Remarks
Enterprise income tax	%	33.33	Based on taxable income
Other Parameters			
Amortization of intangible Capex and other Capex	years	10	
Depreciation of tangible Capex	years	10	
Discount rate	%	10	

Sources: SRK

18.1.2 Production Schedule

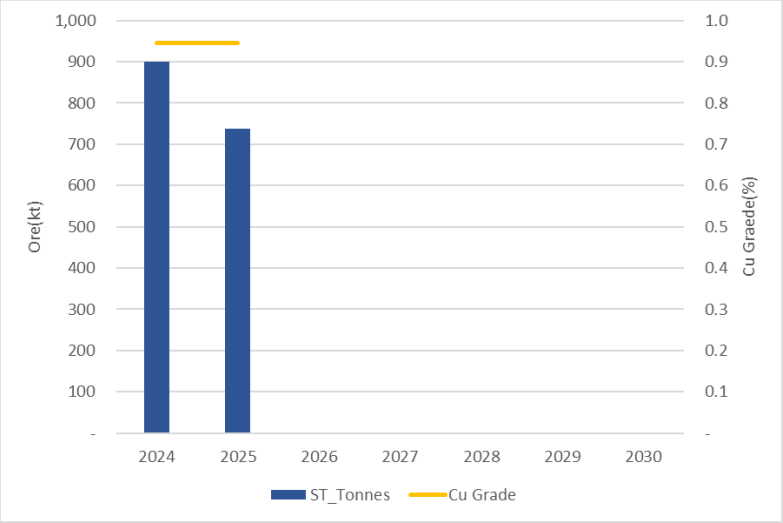
Figure 18-1 and Figure 18-2 are the production schedule for gold and copper.

Figure 18-1: Gold Production Schedule



Sources: SRK

Figure 18-2: Copper Production Schedule

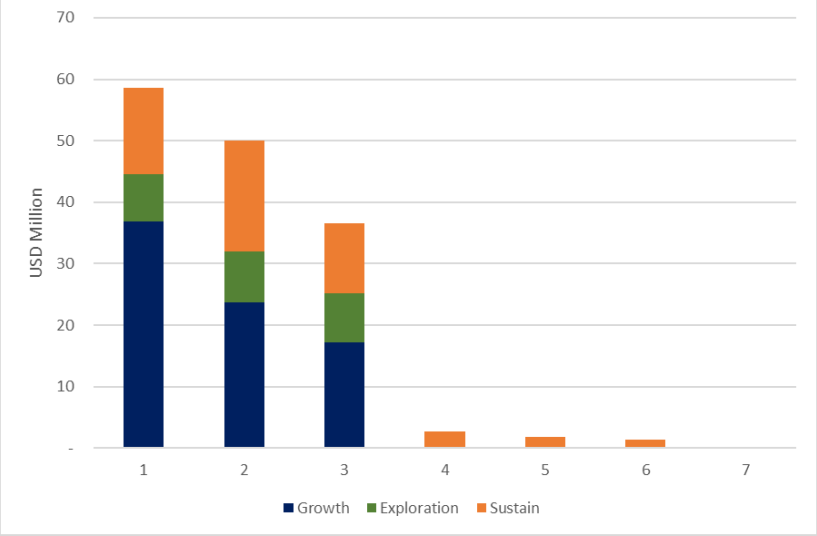


Sources: SRK

18.1.3 Capital Costs

Figure 18-3 is Annual Capex over the LoM.

Figure 18-3: Annual Capex over the LoM

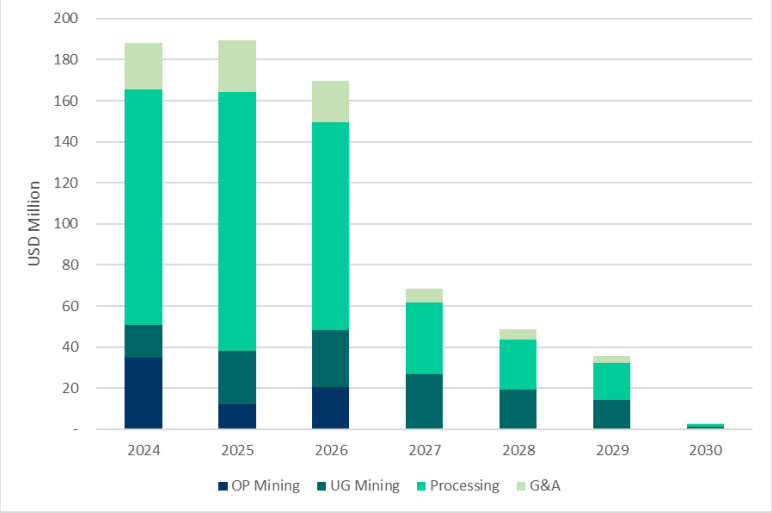


Sources: SRK

18.1.4 Operating Costs

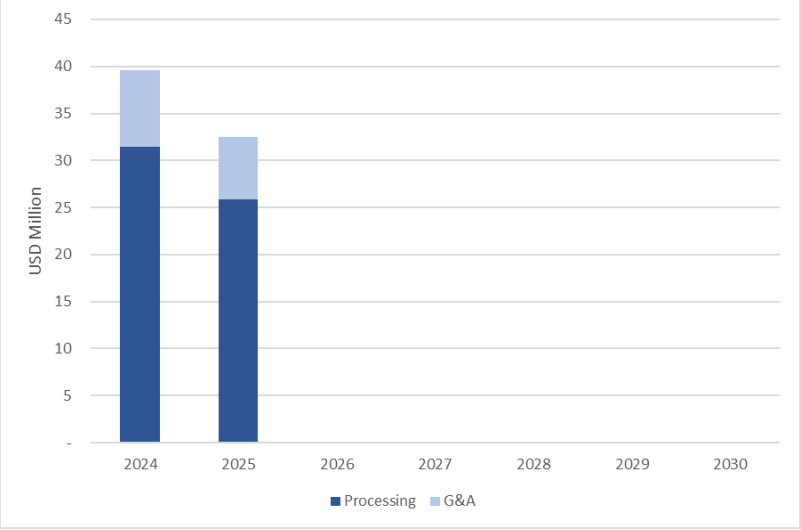
Figure 18-4 and Figure 18-5 are annual Opex over the LoM for gold and copper.

Figure 18-4: Gold Annual Opex over the LoM



Sources: SRK

Figure 18-5: Copper Annual Opex over the LoM



Sources: SRK

18.1.5 Tax and Surcharges

SRK used 5.0% for royalty for the technical economic model (TEM) and the income tax for LXML is 33.3%. There are no other surcharges considered.

18.1.6 Amortization and Depreciation

SRK uses the straight-line depreciation method as the economic analysis assumption, and the amortization and depreciation period are 10 years. Salvage value of invested Capex will NOT be considered to be reclaimed at the end of the mine's life.

18.2 Financial Net Present Value

The annualised net cash flow ("NCF") was calculated and shown in Table 18-3.

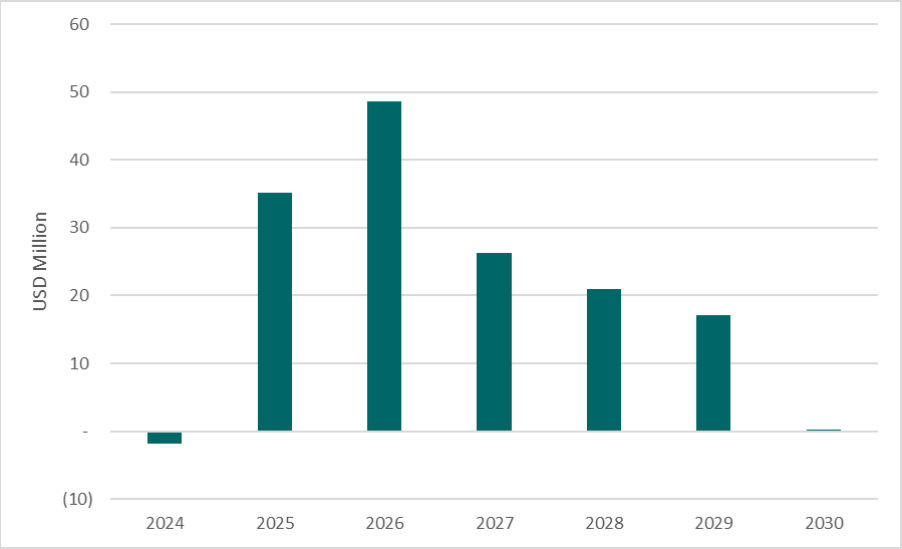
Table 18-3: NCF Calculation

Item	Unit	Total	2024	2025	2026	2027	2028	2029	2030
Cash inflow									
Revenue	USD million	**1,180.4**	308.7	345.0	288.4	102.6	75.3	57.0	3.4
Sub-total	USD million	**1,180.4**	308.7	345.0	288.4	102.6	75.3	57.0	3.4
Cash outflow									
Opex	USD million	**775.1**	227.8	221.9	169.7	68.5	48.6	35.7	2.8
Royalties	USD million	**59.0**	15.4	17.3	14.4	5.1	3.8	2.9	0.2
Corporate Income Tax	USD million	**48.4**	8.9	20.6	18.9	-	-	-	-
Working Capital	USD million	**-**	-	-	-	-	-	-	-
Capex	USD million	**151.3**	58.6	50.1	36.6	2.7	1.9	1.4	0.1
Mine Closure	USD million	**-**	-	-	-	-	-	-	-
Sub-total	USD million	**1,033.8**	310.6	309.9	239.7	76.3	54.3	40.0	3.1
NCF									
NCF Total	USD million	**146.6**	(1.9)	35.1	48.7	26.3	21.0	17.0	0.3

Sources: SRK

Figure 18-6 shows the net cash flow over the LoM.

Figure 18-6: Annual Net Cash Flow



Sources: SRK

The net present values at a 10% discount rate ("NPV10") are USD 104.7 million. NPVs at various discount rates are shown in Table 18-4. SRK considered the Projects are economically viable for the future operations.

Table 18-4: NPV Projections

Discount Rate (%)	NPV (USD million)
5	123.2
6	119.1
7	115.3
8	111.6
9	108.1
10	104.7
11	101.5
12	98.4
13	95.5
14	92.6
15	89.9

Sources: SRK

18.3 Sensitivity Analysis

SRK applied a single factor method for the sensitivity analysis to the combined open-pit, underground gold production, and stockpile rehandling copper production of LXML. Many parameters can affect

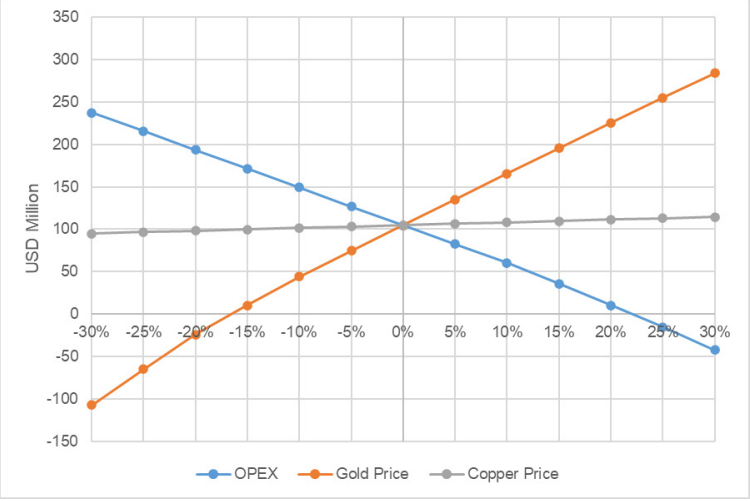
the Project's NPV. To simplify the calculations, the Opex, and the gold and copper prices were selected as the essential variable factors on cash flow. The effects of these essential factors on the NPV were analysed within a ±30% range. The results are shown in Table 18-5 and Figure 18-7.

Table 18-5: Sensitivity Study of NPV (at 10% Discount Rate, in USD Million)

Change	Opex	Gold Price	Copper Price
30%	(42.4)	284.1	114.6
25%	(15.5)	254.9	112.9
20%	10.2	225.7	111.3
15%	35.8	195.6	109.6
10%	60.3	165.3	108.0
5%	82.5	135.0	106.3
0%	104.7	104.7	104.7
-5%	126.9	74.4	103.1
-10%	149.1	44.1	101.4
-15%	171.3	10.0	99.8
-20%	193.5	(24.3)	98.1
-25%	215.7	(65.3)	96.5
-30%	237.5	(107.2)	94.9

Sources: SRK

Figure 18-7: NPV (at 10%) Vs. Gold Price or Copper Price or Opex



Sources: SRK

As shown in the Figure 18-7 above, changes in Opex and gold prices have bigger effect on the Project's NPV than copper prices.

A risk analysis shows that when the gold' prices decrease about 16%, and the Opex increases about 22%, the NPV10 of the project will be negative.

Preliminary analysis indicates that high mine closure costs are the major negative factor affecting the project's economic feasibility.

19 Conclusions and Recommendations

19.1 Geology, Exploration and Mineral Resources

Mineralization styles of the Sepon district can be classified as an intrusion-centred hydrothermal system with the majority of known Cu and Au mineralization spatially associated with the Padan and Thengkham porphyry centres. Mineralisation typically displays a zoned pattern in both mineralization type and metal content. Porphyry Mo-Cu systems occur at the core zoning outward through skarn and carbonate replacement Cu deposits to the Au dominated sediment-hosted systems which show Carlin type deposit characteristics.

A total of 1,022 DD (117,495m), 2,3732 RC (no Grade Control) (175499.2m) RC drill holes and 45,635 RC Grade Control holes (764,831.8m) for a total of 1,057,826m were used to construct the Discovery region block model. After Chifeng Gold took over the Sepon project, the exploration programs mainly focused on discovering new gold deposits in brownfield to supply the processing plant and keep on the production, as well as discovering new types of mineralization in green field.

Although the majority of discovered gold and copper deposits had been mined out, there are still some mineral resources of oxidized and primary gold, as well as low grade copper in the Sepon project area.

LXML pays a great attention to further explore new oxide gold and copper resources suitable for open-pit operation, and the primary type of resources is possible at the deep extensions of previous and current open-pits.

19.2 Mining and Ore Reserves

19.2.1 Gold Operation

For surface mining:

The gold open pit mining is going to be completed in near future (about three year). Based on SGPS, the final open pit designs have been applied by LXML to guide mining boundaries. Mining cycle and management have been practised for a long time. SRK considers the significant risk will be low for the open pit mining in future.

There are still 35 gold stockpiles that are economically feasible to buffer and supply the gold processing plant during periods of low production rates from open-pit mining.

In the meantime, SRK noted that LXML has already started some internal technical preliminary studies for exploitation of Far West Area to provide inventory.

For underground mining:

In SGPS, the proposed mining methods in the DSE UG include long-hole stoping with cemented backfill ("LHSB"), long-hole stoping with pillars ("LHSP"), and post pillar cut and fill ("PPCA").

Construction of the underground mine commenced in April 2022 at DSE UG. As of March 31, 2024, SRK was provided with revised ventilation designs and underground workings designs by LXML.

SRK re-ran the stope optimization based on LHSB, as selected by LXML, then applied modifying factors and prepared the production schedule based on a review of LXML's data. SRK notes that LHSB has been widely practiced globally and is technically feasible.

For DSW UG, LXML is still conducting additional exploration work to increase geological confidence.

19.2.2 Copper Operation

As of 31 March 2024, only hydrometallurgical process was in operation for oxide copper stockpiles.

Based on the fact mentioned above, only oxide copper stockpiles which were above cut-off grade were estimated to Ore Reserves.

In the meantime, SRK noted that LXML has already started some internal technical preliminary studies for exploitation of TKM OP to provide more oxide copper inventory and of KHN UG to provide more primary copper inventory.

19.3 Ore Processing and Metallurgy

Sepon gold ores are refractory due to the ultra-fine deportment, arsenic and organic carbon. The oxide ore is processed using CIL process in the Sepon Gold Plant, with historical throughput varying between 1.0 and 1.5 Mtpa. The gold recovery varies between 51.8% and 68.9%.

The Sepon Gold Plant adopts a complex flowsheet to process primary gold ore. The gold is first concentrated in a flotation circuit after crushing and grinding to obtain a gold concentrate, then POX process is applied to the concentrate. The post POX residue is CCD washed and then leached in CIL circuit. Gold loaded carbon from both oxide ore and primary ore is processed by elution, electrowinning, and smelting to produce Gold Doré. The historical throughput ranges from 1.9 to 2.1 Mtpa, and gold recovery ranges from 55% to 67%.

The yearly gold production of the gold plant is exceeds 6 t. Most of the facilities and equipment of the gold plant were converted from the copper plant. Historical production proves it is practicable.

The Sepon Copper Plant has a flexible capacity using heap leach and agitation leach processes. The coarse ore is sent to heap leach while the fine ore goes to agitation leach. A conventional sulfuric acid leach-CCD-SX/EW process is adopted in the plant to process oxide ore, producing electrolytic copper or cathode copper. Historical production data of the copper plant shows that 0.5 to 1.3 Mtpa of oxide copper ore is processed; cathode copper production is around 6,000 tpa with the copper recovery varying from 50% to 78%.

The well-quipped metallurgical laboratory on site strongly supports the normal operation of the plants.

Low grade primary copper ore is amenable to the flotation process. Flotation tests indicated that copper recovery above 80% with concentrate grade of 18% to 24% can be achieved using conventional flotation process. A Proof-of-Concept study has been completed for the purpose of primary copper resource development. By using the existing facilities of the current gold plant and a throughput of 7.5 Mtpa, the NPV is negative. The break-even price is USD 9119 per tonne of copper. The primary copper resource development would need a higher copper price and reliable resource volume. A detailed feasibility study is recommended in due time.

19.4 Mine Economy

Based on the information provided by LXML, SRK carried out preliminary review and analysis indicating that the mine plans about three years of open-pit gold operation, seven years of underground gold operation, three years of gold re-handling operation and two years of copper re-handling operation. Based on the parameters reviewed and summarized in the report, an economic analysis was conducted indicating that the operation of open-pit gold production, rehandling stockpiles and underground mine will be profitable.

20 Project Qualitative Risk Analysis

Mining is a relatively high-risk industry. In general, the risk may be expected to decrease from exploration, development, through to production stage. The Sepon Project is a production project. Risks exist in different areas. SRK considered various technical aspects which may affect the feasibility and future cash flow of the Project, and conducted a qualitative risk analysis which has been summarised in Table 20-1. In this risk analysis, various risk sources/ issues have been assessed for Likelihood and Consequence, and then a Risk Rating has been assigned. The qualitative risk analysis uses the following definitions for likelihood and consequence:

In the risk assessment, various risk issues have been assessed for Likelihood, Consequence, and Overall Rating. SRK has used a matrix as follows:

The Likelihood of a risk is considered within a certain time frame, e.g. 5 years, as:

Likely: will probably occur;

Possible: may occur; and

Unlikely: unlikely to occur.

The Consequence of a risk is classified into:

Major Consequence: the factor poses an immediate danger to the Project, if uncorrected, will have a material effect on the Project cash flow and performance and could lead a project failure;

Moderate Consequence: the factor, if uncorrected, will have a significant effect on the Project cash flow and performance; and

Minor Consequence: the factor, if uncorrected, will have little or no effect on the Project cash flow and performance.

The overall risk assessment combines the Likelihood and Consequence of a risk and be classified as **Low** (unlikely and possible minor risks and unlikely moderate risk)**, Medium** (likely minor, possible moderate and unlikely major risks), and **High** (likely moderate and major and possible major risks).

Below is the qualitative risk analysis summary table of the Sepon Project.

Table 20-1: Project Risk Assessment of the Sepon Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Lack of Significant Ore Reserves	Possible	Major	High
Unexpected Groundwater Ingress	Unlikely	Minor	Low
Mining			
Significant Production Shortfalls	Unlikely	Major	Medium
Significant Geological Structure	Possible	Minor	Low
Excessive Surface Subsidence	Unlikely	Minor	Low
Poor Ground Conditions	Possible	Moderate	Medium
Ore Processing			
Lower Recovery	Unlikely	Moderate	Low
High Production Cost	Possible	Minor	Low
Poor Plant Reliability	Unlikely	Minor	Low
Capital and Operating Costs			
Project Timing Delays	Possible	Minor	Low
Capital Cost Increases	Unlikely	Minor	Low
Operating Cost Underestimated	Likely	Minor	Medium
High mine closure cost	Likely	Moderate	High
Environmental, Social and Permitting			
Impact to the ecological system	Possible	Moderate	Medium
Poor waste rock management	Possible	Moderate	Medium
Poor hazardous substances management	Possible	Minor	Low
Dust Pollution	Possible	Minor	Low
Renewal of mining licence	Unlikely	Major	Medium

Some medium and high risks have been identified for the Project. Two high risks are "Lack of significant Ore Reserves" and "High mine closure cost". To manage the risks, SRK recommends the Company should further conduct feasibility studies to develop currently available mineral resources in order to extend the mine life of the project, as well as proactively manage the environmental and mine closure issues during the production, in order to reduce the high mine closure cost at the end of the mine.

21 References

1. Lane Xang Minerals Limited, 2021; LXML Sepon – Fact sheet; LXML PowerPoint presentation
2. Lane Xang Minerals Limited, June 2022; Sepon LoM Project Review; LXML PowerPoint presentation
3. Lane Xang Minerals Limited, August 2022; Report on General Prospect of the Rare Earth Elements Deposit in the southern portion of Sepon Mine in Savannakhet Province, Laos
4. Lane Xang Minerals Limited, October 2022; 2022 Sepon Mineral Resource Statement; LXML internal report
5. Lane Xang Minerals Limited, December 2022; DSE Deeps Underground mine Overview; LXML PowerPoint presentation
6. Lane Xang Minerals Limited, December 2022; Exploration Overview; LXML PowerPoint presentation
7. Lane Xang Minerals Limited, December 2022; LoM Mine Production Plan-2022; LXML PowerPoint presentation
8. Lane Xang Minerals Limited, December 2022; LXML Sepon-Environmental management – Social responsibility; LXML PowerPoint presentation
9. Lane Xang Minerals Limited, December 2022; LXML Sepon – Growth Opportunities; LXML PowerPoint presentation
10. Lane Xang Minerals Limited, December 2022; Sepon Copper Flotation-TKM and KHN Optimisation; LXML PowerPoint presentation
11. Lane Xang Minerals Limited, December 2022; YTD 2022 Environment Performance Report; LXML PowerPoint presentation
12. Porter Geo Consultancy, 2006; Khanong-Sepon Geology; www.portergeo.com.au
13. Tony Manini and Peter Albert, 2001(?); Exploration and development of the Sepon Gold and Copper Deposits, Laos. (Oxiana Limited), from the Internet

Closure

This report, Independent Competent Person's Report for the Sepon Gold and Copper Project, Lao People's Democratic Republic, was prepared by

Anshun Xu (Corporate Consultant))
Project Manager

and reviewed by

Yonglian Sun (Corporate Consultant)
Contributing Peer Review

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

Appendix A Copy of the Mining License

ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

ກະຊວງພະລັງງານ ແລະ ບໍ່ແຮ່
ກົມຄຸ້ມຄອງບໍ່ແຮ່

ເລກທີ 24-23/ພບ.ກຄບ
ລະຫັດໃບອະນຸຍາດ **ML0002**

ໃບອະນຸຍາດ
ຂຸດຄົ້ນບໍ່ແຮ່
(ສະບັບສືບຕໍ່ ເທື່ອທີ 2)

- ອີງຕາມ ກົດໝາຍວ່າດ້ວຍແຮ່ທາດ (ສະບັບປັບປຸງ) ສະບັບເລກທີ 31/ສພຊ, ລົງວັນທີ 3 ພະຈິກ 2017;
- ອີງຕາມ ຂໍ້ຕົກລົງຂອງລັດຖະມົນຕີກະຊວງພະລັງງານ ແລະ ບໍ່ແຮ່ (ສະບັບສືບຕໍ່ ເທື່ອທີ 2) ສະບັບເລກທີ 0837/ພບ, ລົງວັນທີ 10 ພຶດສະພາ 2023.

ກົມຄຸ້ມຄອງບໍ່ແຮ່ ອອກໃບອະນຸຍາດຂຸດຄົ້ນບໍ່ແຮ່ ໃຫ້ແກ່: ບໍລິສັດ ລ້ານຊ້າງ ມິເນໂຣນສ໌ ຈຳກັດ.

ຜູ້ຖືໃບອະນຸຍາດ: ທ່ານ ສະໝານ ອະເນກາ, ສັນຊາດ ລາວ, ເລກບັດປະຈຳຕົວ: 01-22 026932, ຕຳແໜ່ງ: ຜູ້ອຳນວຍການບໍລິສັດ.

ສຳນັກງານຕັ້ງຢູ່: ເຮືອນເລກທີ........, ຖະໜົນ: ບຸຣີຈັນ, ບ້ານໂພນສີນວນ, ເມືອງສີສັດຕະນາກ, ນະຄອນຫຼວງວຽງຈັນ, ໂທລະສັບ: 021 268206, ແຟັກ: 021 268201, ອີເມວ: saman.aneka@lxml.la.

ແຮ່ທາດທີ່ອະນຸຍາດ: ຄຳ-ທອງ ໃນເນື້ອທີ່ 11.696 (ສິບເອັດພັນຫົກຮ້ອຍເກົ້າສິບຫົກ) ເຮັກຕາ, ຕັ້ງຢູ່ເຂດບ້ານໜອງກະແດັງ, ເມືອງວິລະບຸລີ, ແຂວງສະຫວັນນະເຂດ.

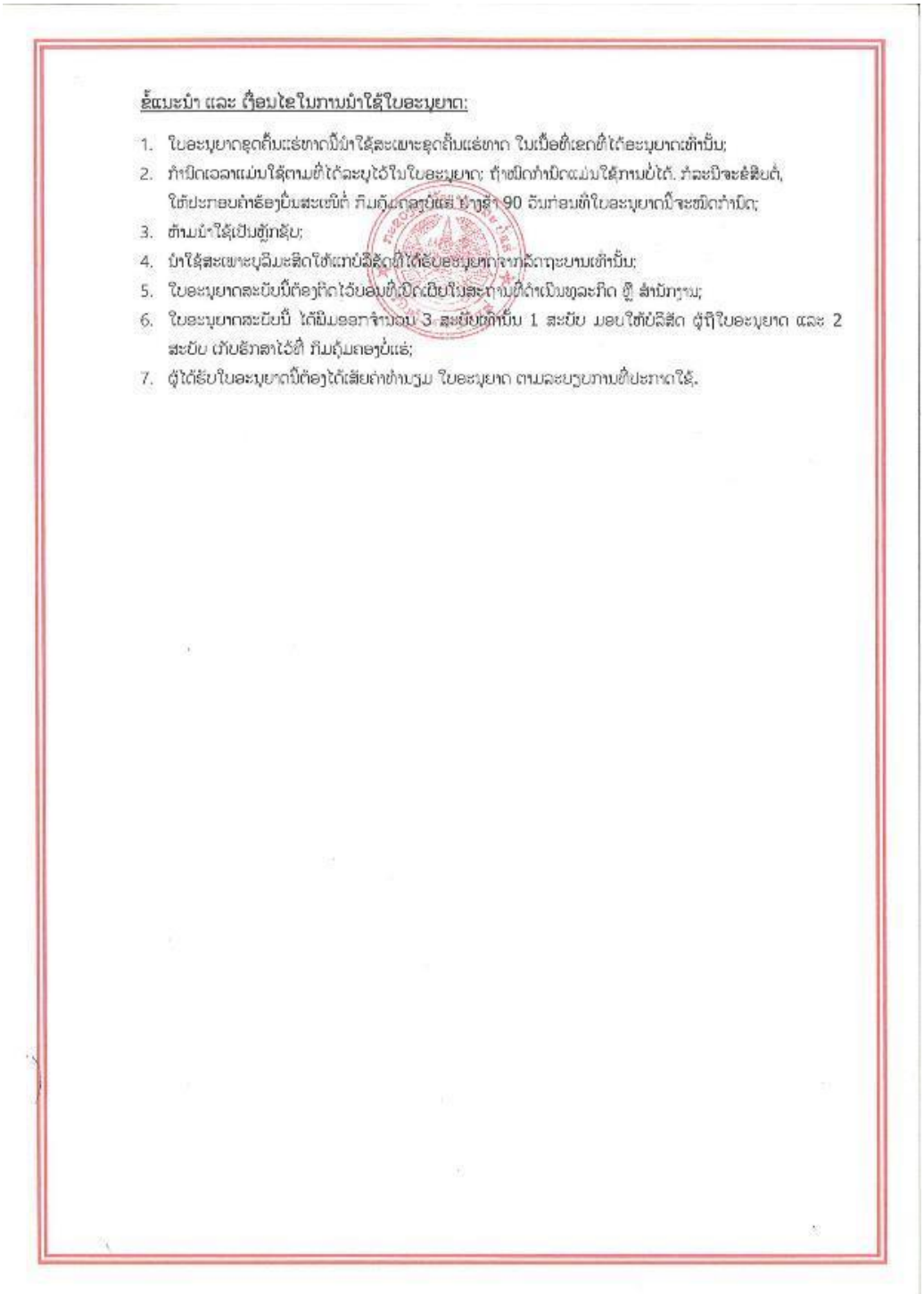
ທຶນໃນການດຳເນີນໂຄງການ: 169.000.000 USD (ໜຶ່ງຮ້ອຍຫົກສິບເກົ້າລ້ານ ໂດລາສະຫະລັດ).

ກຳນົດເວລາດຳເນີນໂຄງການ: 10 (ສິບ) ປີ ນັບແຕ່ວັນທີ 30 ກັນຍາ 2023 ຮອດ 29 ກັນຍາ 2033.

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ 2.4 MAY 2023.....
ຫົວໜ້າກົມ

ຈັນທະລາ ແກ້ວທາວົງ

ໝາຍເຫດ:
ຫ້າມປອມແປງ ຫຼື ດັດແກ້ຂໍ້ຄວາມໃດໆໃນ
ໃບອະນຸຍາດສະບັບນີ້ໂດຍທີ່ບໍ່ໄດ້ຮັບອະນຸຍາດ
ຜູ້ກະທຳຜິດຕ້ອງໄດ້ຮັບໂທດຕາມກົດໝາຍຂອງ ສປປ ລາວ.
ໃບອະນຸຍາດສະບັບນີ້ໃຊ້ລົບລ້າງ ແລະ ປ່ຽນແທນໃບອະນຸຍາດສະບັບເກົ່າ ເລກທີ 013-19/ພບ.ກຄຂ, ລົງວັນທີ 9 ກັນຍາ 2019.



ຂໍ້ແນະນຳ ແລະ ເງື່ອນໄຂໃນການນຳໃຊ້ໃບອະນຸຍາດ:

1. ໃບອະນຸຍາດຂຸດຄົ້ນແຮ່ທາດນີ້ນຳໃຊ້ສະເພາະຂຸດຄົ້ນແຮ່ທາດ ໃນເນື້ອທີ່ເຂດທີ່ໄດ້ອະນຸຍາດເທົ່ານັ້ນ;
2. ກຳນົດເວລາແມ່ນໃຊ້ຕາມທີ່ໄດ້ລະບຸໄວ້ໃນໃບອະນຸຍາດ; ຖ້າໝົດກຳນົດແມ່ນໃຊ້ການບໍ່ໄດ້. ກໍລະນີຈະຂໍຂະຫຍາຍ, ໃຫ້ປະກອບຄຳຮ້ອງຍື່ນສະເໜີຕໍ່ ກົມຄຸ້ມຄອງຊັບແຮ່ ຢ່າງຊ້າ 90 ວັນກ່ອນທີ່ໃບອະນຸຍາດນີ້ຈະໝົດກຳນົດ;
3. ຫ້າມນຳໃຊ້ເປັນສູ່ກັນ;
4. ນຳໃຊ້ສະເພາະບຸລິມະສິດໃຫ້ແກ່ບໍລິສັດທີ່ໄດ້ຮັບອະນຸຍາດຈາກລັດຖະບານເທົ່ານັ້ນ;
5. ໃບອະນຸຍາດສະບັບນີ້ຕ້ອງຕິດໄວ້ຢ່ອນທີ່ເປີດເຜີຍໃນສະຖານທີ່ດຳເນີນທຸລະກິດ ຫຼື ສຳນັກງານ;
6. ໃບອະນຸຍາດສະບັບນີ້ ໄດ້ພິມອອກຈຳນວນ 3 ສະບັບເທົ່ານັ້ນ 1 ສະບັບ ມອບໃຫ້ບໍລິສັດ ຜູ້ຖືໃບອະນຸຍາດ ແລະ 2 ສະບັບ ເກັບຮັກສາໄວ້ທີ່ ກົມຄຸ້ມຄອງຊັບແຮ່;
7. ຜູ້ໄດ້ຮັບໃບອະນຸຍາດນີ້ຕ້ອງໄດ້ເສັຍຄ່າທຳນຽມ ໃບອະນຸຍາດ ຕາມລະບຽບການທີ່ປະກາດໃຊ້.

(English Translation)

Lao People's Dem

Peace Independence Democracy Unity Prosperity

Ministry of Energy and Mines No. 24-23/MEM.DMM

Department of Mines Management License No **ML0002**

MINING LICENSE

(2nd Extension)

—Pursuant to the Minerals Law (amended version) No 31/NA dated 3 November 2017;

—With reference to the Minister of Energy and Mines' Decision (2nd Extension) No 0837/MEM, dated 10 May 2023.

The Department of Mines Management issues this permit to LANE XANG MINERALS LIMITED under the name of Mr Saman Aneka, Lao National, ID number: 01-22 026932, Director of the company.

Headquarter of the company is located at: House Number……., Bourichanh Road, Phonsinouan Village, Sisattanak District, Vientiane Capital, Tel. 021-268206; Fax. 021-268201, email. saman.aneka@lxml.la.

Authorized minerals: gold and copper ore; within: 11,696 (Eleven thousand six hundred and ninety-six) hectares, located in Nong Kadaeng Village, Vilabouly District, Savannakhet Province.

Operational costs: USD169,000,000 (One hundred sixty-nine million US Dollars).

Project timeframe: 10 (ten) years from 30 September 2023 to 29 September 2033.

Vientiane Capital, 24 May 2023

Director General

Department of Mines Management

Signed and Sealed

Mr Chanthala Keohavong

Note:

It is forbidden to alter or modify any wording in this license without proper authorization. Wrongdoers will be punished as provided by the law of Lao PDR.

This license replaces the previous License No 013-19/MEM.DMM, dated 9 September 2019.

Application guidelines and conditions of this license:

1. This mining license is applicable to mining of minerals within the authorized area only;
2. The timeframe shall be as indicated in this license; this license is no longer valid upon itsexpiry. In the event of renewal, an application is to be lodged to the Department of Mines Management within 90 days prior to expiration of this license;
3. This license may not be placed as security;
4. This license applies exclusively to the company authorized by the government;
5. This license must be displayed at an open space at the business operation site or in the office;
6. This license was printed 3 copies only, 1 copy handed to the authorized company and 2 copies kept at the Mines Management Department;
7. The recipient of this license is required to pay a license fee in accordance with rules andregulations to be enacted.

Appendix B JORC Table 1

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	Diamond drill core was sampled as half core at nominal 1-metre intervals to geological contacts. All 1-metre intervals start again immediately after the geological contact. Minimum samples of 0.3 metres were taken. Reverse Circulation (RC) chip samples were routinely collected in calico bags and chip box trays at 1-metre intervals. No field composites were created. To ensure representative sampling, industry standard practice has been applied. The laboratory has applied appropriate QA-QC to sample preparation and appropriate calibration to analytical instruments. Oriented diamond core was marked for recovery and samples considering mineralization intensity and veining orientations, then sawn, with half core being sampled. RC chip samples were collected using either a three-tiered riffle splitter, with either two or three tiers used, depending on sample size, or a rotary cone splitter. Cyclone and splitter was routinely inspected and cleaned as a minimum between each drill rod. Industry standard work has been undertaken for both diamond and RC samples: RC drilling was used to obtain 1m samples from which approximately 3kg was dried and pulverized then sub-sampled to produce a 30g charge for analysis. Diamond drilling was used to obtain drill core that was sampled on nominal 1m lengths except for adjustments around lithological boundaries. Most core has been sampled as half core. In early 2023, UG drill core has been sampled as whole core. Core samples (generally 3 to 6kg) are dried and pulverized then sub-sampled to produce a 30g charge for analysis. Until August 2021, Resource drill samples collected (both RC and DD) were analysed by ALS laboratories, using both their Lao and

Criteria	Explanation	Commentary
		Australian facilities. ALS standard analysis methods were used: Au-AA25 Au (Fire Assay Gold) Prepared sample with a 30g charge is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required and then cupelled to yield a precious metal bead. The bead is digested in 0.5 mL dilute nitric acid in the microwave oven. 0.5 mL concentrated hydrochloric acid is then added, and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 10 mL with de-mineralized water, and analyzed by atomic absorption spectroscopy (AAS) using matrix-matched standards. ME-ICP61 multi-element analysis (4 Acid Digest; Atomic Emission Spectroscopy Finish) A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). Results are corrected for spectral interferences. Since August 2021, all samples including resource drilling samples have been analysed in the LXML Sepon assay laboratory applying industry standard methods as follows: Fire assay Au: 30g charge with 150g flux (lead oxide, sodium carbonate, borax, silica, iron, flour, silver nitrate), fusion (1 hour), cupellation (1 hour), digestion with 50% nitric and hydrochloric acid, followed by AAS finish. ICP for Ag and As using .25g charge, digested with aqua regia (hydrochloric and nitric acid) AAS for Ca, Cu, Fe, Mg, Mn using a 0.3g charge and digested with hydrochloric, nitric and perchloric acid. Sulphur and Carbon analyser using a 0.3g charge digested with hydrochloric, nitric and perchloric acid.

Criteria	Explanation	Commentary
		Leachwell Au using a 35g charge adding 10g cyanide tablet and water, tumbled (1 hour) with AAS finish. PRI analysis with a 35g charge with 1.7ml of spike and 10g cyanide tablet added, tumbled (1 hour) with AAS finish.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Diamond drilling was carried out predominantly using HQ3 and PQ3 core-sized equipment with standard coring tube. Triple tube coring was applied historically for recovering samples in minerlised clay materials. Approximately 86% of the core at Sepon is HQ3 size. For RC drilling, a face sampling bit (121 mm) was used. All core has been oriented using predominantly the ACE orientation system or an Eastman single-shot system
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Recoveries from core drilling were measured and recorded in the database. Core recovery averaged 91% whilst RC recovery averages 80% by mass. Higher core loss occurred in oxide, karst infill and highly fractured (unmineralised) chert units. Historically RC samples were weight for the entire sample to check sample recovery. Currently the spilt sample is weighed, which indicates the total mass of the material recovered. Ground conditions at Sepon are generally good and drilling practices have been consistent for many years, leading to experience in gaining high core and sample recoveries. • Diamond drilling used drill muds and short runs in broken ground to maximize recovery. • Drilling is undertaken using auxiliary compressors and boosters to keep the hole dry and maximise sample lift. • Several twin hole programs assessed results obtained from both RC and core holes.

Criteria	Explanation	Commentary
		In general, the repeatability for gold was confirmed. An overall bias was not seen. • Diamond holes may be drilled using RC pre-collars to ensure good sample recovery of poorly or semi-consolidated rock. • In places, RC holes have been twinned with diamond holes to determine if any bias is detected regarding recovery between mineralised and barren material, to date it has not been deemed materially biased.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.	All RC and DD core was logged on paper log sheets and entered manually into the Sepon database until 2015. Post 2015 logging is predominantly carried out on tablets and automatically linked to the database. Several quality control (QC) triggers are set in the database to validate data as entered. Drill core was logged in detail for stratigraphy, lithology, alteration, mineralization, oxidation state, structure and veining. RC cuttings were logged for various geological attributes including rock type by the mineral composition, mineralization by veining and visible minerals, and alteration including oxidation. Logging is considered sufficient to support geologic modelling and Mineral Resource estimates. Rock Quality Designation (RQD) and Rock Mass Quality (RMQ) logs were kept for geotechnical purposes only for purposely designated geotechnical holes. RC and diamond core logging is both qualitative and quantitative in nature depending on the feature being logged; geology, rock types, alteration and structure are recorded based on visual determination. All diamond core is routinely photographed, both wet and dry. More than 90% of all drill holes were logged in full regardless of mineralization. Since 2007, all holes have been routinely logged.

Criteria	Explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	Diamond core was cut in half using an electrically powered diamond blade core saw in competent ground and hand split in clay at either 1 m intervals or to geological contacts. Since March 2023, underground grade control diamond drill core was sampled as whole core. RC samples were collected from a cyclone and, if dry, put through a three-stage riffle splitter for a 12.5% sub-sample. A 3-5kg (1 m) sample was collected into pre-numbered sample bags for analysis. Before 2006, if RC samples were wet, then sampling was by quartering. Due to changing to diamond drilling, after 2006 wet RC samples were no longer taken. The RC and DD sample preparation techniques are considered appropriate. All samples contain a waterproof sample ID tag in numbered calico bags and are weighed. The samples were stacked and wrapped on a pallet before being transported by truck to the laboratory. Industry standard diamond and RC drilling techniques were used and are considered appropriate for use in Mineral Resource estimation. Sample preparation is to industry standard involving drying, crushing and pulverizing of the entire sample from which a sub-sample using a scoop is selected and stored in pulp packets. A 30g subsample is selected from each pulp packet for analysis. For RC drilling, sample quality was maintained by monitoring sample volume and by cleaning the splitters, cyclones and hoses on a regular basis. Sub-sampling in the laboratory is only carried out after size reduction in the grinding process. Field duplicates were taken at 1 in 15 or 1 in 20 for RC drilling. Quarter splits of core have been taken and recorded as duplicates in the database.

Criteria	Explanation	Commentary
		Sample sizes are considered appropriate to the gold mineralization based on the style of mineralization (fine-grained gold with no visible gold), the thickness and consistency of the intersections, the sampling methodology, and assay value ranges for gold. This has been checked during a separate gold deportment study which examined the grain size distribution and the liberation size.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Following sample preparation, a 110g pulp aliquot for Au Fire Assay and 20g pulp aliquot for ICP multi element was taken. The 20g pulp aliquots were transported to other ALS laboratories (usually ALS Brisbane) for ICP and Lecco furnace analysis. The analytical procedure is as follows: If Au grade > 10g/t Au, re-assayed by Fire Assay Gravimetric. If Au grade > 0.4g/t Au, re-assayed using CN Leachwell technique. Detection limit for Fire Assay is 0.01ppm. A multi-element suite (varying through time from 30 – 40 elements, but always including Cu, Ag, S, Mo) was analysed by ICP-AES. The copper multi-element suite analysed by ICP-AES (ALS laboratory code ME-ICP61) contains Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W and Zn. Copper samples above 0.2% Cu are sent for sequential copper analysis. If Cu > 0.5% Cu, the sample was re-assayed using an Ore Grade technique (either AAS or diluted ICP). These methods are considered total methods. For some samples total sulphur, sulphide sulphur, sulphate sulphur, total carbon, carbonate carbon and organic carbon were analyses by Lecco Furnace following appropriate digestion, this sample selection is based on a Cu trigger that has varied overtime.

Criteria	Explanation	Commentary
		The fire assay gold analysis undertaken is considered to be a total assay method. Multi-element analyses of 31 elements by four acid digestion via ICP-AES are considered total assay methods except where they exceed the upper detection limit. In this case samples were re-assayed using a four-acid digest with HCl leach, and ICP-AES or AAS finish. Leachwell assays are a partial assay method used to estimate the percentage of gold in mineralisation recoverable in the standard CIL plant. This is supported by a separate gold deportment study and is a suitable indicator of gold recovery. No geophysical tools, spectrometers, handheld XRF instruments or similar tools were used for assays included in the Sepon database. Industry standard certified reference materials (CRMs) including matrix matched and CRM's made from drill core supplied from the Sepon mine were utilized to check laboratory assay quality control. The insertion rate for CRMs is a nominal 1 in 30, and 1/3 of CRMs are blanks. Different CRMs have been selected for use at varying gold grades over the life of the project. The combined insertion rate of pulp blanks and CRMs is a nominal 1 in 20 samples. The QA/QC program includes CRMs, blanks, preparation duplicates and field duplicates and is acceptable according to industry standards. Overall relative bias for the CRMs is within 5% and is acceptable. The assay precision determined from field duplicate samples was found to be acceptable. Blank sample results do not indicate any sample contamination issues. Assay results are acceptable for use in supporting Mineral Resource estimates. At a minimum, every drill hole contains at least one coarse blank, one pulp blank and one CRM standard. At a minimum 1 in 15 samples is a control sample (earlier programs vary from 1 in 25 to 3 in 25). Checks of the laboratory results and data import procedures are undertaken to identify any

Criteria	Explanation	Commentary
		spurious results for verification and re-assay. Acceptable levels of accuracy and precision have been established. Any suspect data is excluded from the Mineral Resource estimate. Independent / round robin laboratory checks were conducted on a quarterly or half yearly basis until 2010. The results were generally unbiased with respect to each other. Between 2010 and 2016, no independent laboratory checks were undertaken, however since 2016, an external umpire lab and round robin system have been used to validate results. To date 1841 samples have been sent for umpire review. In December 2015 a 3-month trial of the Sepon lab was carried out, the results at that time concluded that due to turnaround times, inability to complete all desired analysis and higher detection limits, the ALS lab would continue to be used for Mineral Resource analysis. However, Since August 2021, the Sepon Lab has been used for all analysis including resource samples.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Intersections were reviewed by the senior geologist or superintendent on-site following receipt of the assay results. Monthly internal reviews are carried out for all assay batches returned. Any CRM samples that exceed 3 standard deviations from the expected value, or showing other issues such as significant bias or trends will have its batch returned for re-analysis. Sample swaps, mislabeling and incorrect control sample insertion related to human error have been identified by checking procedures and photos and are rectified. There are no known deficiencies in the assay data quality from ALS and Sepon laboratories that affect the resource confidence. Twinned or nearby holes have been undertaken throughout the history of mining at Sepon. Most

Criteria	Explanation	Commentary
		holes provide reasonable agreement with pre-existing drilling. Some twinned diamond drill holes previously found RC drilling in wet conditions to produce variably smeared and positively biased results. Areas affected by this occurrence have been mined out and do not contribute to the current Mineral Resource. Current practice is only to use DD in wet drilling conditions. RC drill holes with suspected smearing have not been used in the mineral resource estimation. Several deep surface holes in the DSE UG Mineral Resource were excluded from the estimate where shorter holes drilled from underground provided more accurate positioning of the deposit. Laboratory result files are directly uploaded into the database with no manual data entry. Below detection limit assay results are stored in the database as the detection limit (negative) with appropriate metadata. No other modification of the assay results is undertaken. All data is stored and validated within an electronic database. Drill collars and down-hole surveys are recorded by company staff and entered into a spreadsheet and then loaded into the database. Assays from the laboratory are received and loaded electronically. No adjustments were made to assay values. Where data was deemed invalid or unverifiable it was excluded from the Mineral Resource estimation.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	Drill hole collars locations are located by differential GPS or total station survey instrument. Downhole surveys have been carried out using a variety of tools over the history of Sepon. Magnetic based surveys: Eastman single-shot cameras, Reflex EZ or Axis Magshot tools. Surveys were taken at depths of 12 m, 30 m and

Criteria	Explanation	Commentary
		then every 30 m to the bottom of hole. Additional surveys are carried out at the request of the supervising geologist where significant hole deviation is noticed. North Seeking Gyro: Currently used in preference for surface collared resource drill holes. All drill hole collars are converted from UTM / India-Thai 1960 projection to SPG06 local grid coordinate systems. In 2008 a LiDAR (Light Detection and Ranging) survey was completed providing an accurate topographic surface. Drill hole collar locations have been validated through a process of database and spatial checking for both historical and recent data and by comparing the collar locations to the LIDAR topographic surface. Several holes were identified as having suspected locations and resolved prior to modelling of the data. Holes with collars above the topography were excluded.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	Resource drill hole spacing varies from less than 25m up to 100m to centres. Drill spacing is adequate to define the geological and grade continuity for Mineral Resource estimation. Classification has considered data quality, drill spacing, geological continuity and production data. DD samples are not composited prior to being sent to the laboratory. RC samples are 1m intervals but compositing up to 4m has occurred in the past in areas known to be waste. Sample lengths within the database are not composited. Compositing as part of the estimation process has been undertaken in the modelling software (Vulcan or Leapfrog). Composite lengths selected were set to 1-metre which is comparable to the actual sample length. Composited data was then used for statistical, geostatistical and estimation purposes.

Criteria	Explanation	Commentary
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drill orientation varies by year drilled and location within the deposit. Geological mapping and interpretation show that mineralisation generally strikes 060º - 090º (deposit dependent); hence drilling is conducted on north -south sections to intersect the mineralised zone at a high angle. Most drill holes dip -60º to -90º, depending on the expected dip of the target mineralisation and surface site access for drill pads. In parts of the project area, drill holes were drilled at -60º along 090º or 270º from 50m spaced sections in order to reduce the need for vegetation clearance and ground disturbance in areas of extremely steep topography. Drilling orientation is not considered to have introduced any sampling bias. This has been confirmed through variogram reviews using the varying orientation data. No orientation-based sampling bias has been identified to date in the data.
Sample security	The measures taken to ensure sample security.	Adequately trained and supervised sampling personnel, with monthly inspections and verification of training. Core yard facility with security fence, security guards and well-maintained sampling sheds. Cut core is sampled and stored in calico bags tied and clearly numbered in sequence using a tear-resistant, waterproof, pre-printed tag. Calico sample bags are transported on wrapped pallets to the assay laboratory. The laboratory checks sample dispatch numbers against submission documents, advises of any discrepancies, and signs off on receipt of each batch. Sample bags are photographed prior to shipment Assay data returned separately in both spreadsheet and PDF formats.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No recent audits or reviews have been undertaken.

Criteria	Explanation	Commentary
		Historic reviews include the following: A review of assay services involving a trial of the Sepon Laboratory for Resource sample analysis was undertaken in 2015-2016. All samples >=0.2% Cu and QAQC samples were sent to ALS laboratory for comparison during the trial period. The decision was made to remain with ALS laboratory on the basis of available analytical methods, better QA/QC results and turn-around time. REFLEX Geochemistry completed a QC review on data from 1 January 2011 – 31 May, 2014. The conclusions indicate that the control samples have provided a satisfactory guide to the accuracy and precision of the analyses. Procedures have not significantly changed since then. The ALS laboratory in Vientiane has been audited on a quarterly basis by site personnel. No material issues have been identified at the laboratory. The ALS laboratory in Brisbane was audited in March 2016 by MMG Resource estimation personnel. No material issues were identified. In 2008 a QC review of assay data at the Thengkham South deposit and Phabing area was undertaken (Hackman & Associates) and found that there were no obvious grade biases in the dataset, there were however quality discrepancies that required follow up. These have been addressed. A 2008 external audit (IO Global) of the database found post-2006 analytical data to be of appropriate integrity. In 2007 a twin drill hole study undertaken by QG comparing RC samples to DD samples, found that the use of all the available RC drilling is likely to be biased and overestimate tonnes above a gold cut-off. This was due to the presence of wet RC samples. Measures have been taken since this report to exclude wet RC samples from the estimate.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	LXML Mineral Resources are located within the bounds of the Mineral Exploration and Production Agreement (MEPA), a direct agreement with the Laos Government. The MEPA provides for exploration, development and extraction of any Mineral Resources discovered. The MEPA provides for exploration, development and extraction of any Mineral Resources discovered. The Sepon MEPA occupies portions of both Savannakhet Province, and Khammouane Province to the immediate north. The Sepon MEPA originally occupied 5212 km2. Various relinquishments have occurred since it was granted in 1993, the most recent relinquishment in early 2005 has resulted in the current retained area of 1247 km². A royalty is payable to the Government of Laos, representing 4.5 % of the FOB value of minerals received by LXML. The Lao Government also owns a 10% share in LXML. Tenement rental is payable at US$500 per square kilometer per annum (for operational and mining areas) in accordance with Annex D of the MEPA. Taxes and other obligations are set out in Article 13 of the MEPA. The operating period in accordance with the MEPA is thirty (30) years, from commencement of operations. As defined in Article 10, Paragraph 2 of the MEPA for Sepon Gold Stage 1, the operating period commenced on 1 March 2003. The terms of the agreement provide for the right to apply for two extensions of the operating period with each extension for a period of 10 years. There are no known impediments to operating in the area. The licenses are in good standing with no known impediment to the

Criteria	Explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	granted mining permit.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	CRA Exploration first identified the Sepon Mineral District as an area of interest in 1990 and formed Lane Xang Minerals Limited (LXML) as holder of the MEPA. Between 1995 and 1999 RTZ (RTZ was formed from the merger of CRA and Rio Tinto in 1997) discovered and defined several gold only Mineral Resources and copper and gold Mineral Resources at the Khanong prospect. Oxiana became manager of the Sepon Project in 2000 through the purchase 80% of LXML before later buying the remaining 20% interest from RTZ. The Laos Government exercised its option to acquire a 10% interest in LXML in 2006. In 2008 Oxiana merged with Zinifex Ltd to form OZ Minerals. In 2009 MMG acquired LXML from OZ Minerals. In 2018, Chifeng acquired the majority ownership of LXML from MMG The Sepon exploration and resource geology groups have been maintained throughout the OZ Minerals, MMG and Chifeng takeovers.
Geology	Deposit type, geological setting and style of mineralisation.	The Sepon project area is situated near the eastern margin of the intra-continental Khorat Basin and on the western flank of the Anamite Range fold belt. It lies within the Troungson geological region covering a broad spectrum of rocks ranging in age from Upper Proterozoic to Jurassic. The regional geology is dominated by an Upper Palaeozoic sedimentary belt of arkosic and feldspathic sandstone, variably calcareous

Criteria	Explanation	Commentary
		and carbonaceous siltstone, shale and limestone which is variably dolomitized and locally marble. There are lesser volcanic rocks, typically comprised of agglomerate, conglomerate, tuffaceous sandstone, and rare coherent volcanics. The belt is cut by plutonic to sub-volcanic bodies of granite, monzodiorite, granodiorite, quartz porphyry, rhyodacite porphyry (RDP) and andesite porphyry. The intrusive rocks are preferentially emplaced along either east or north-west trending well-developed structures. Several styles of mineralisation have been recognised within the Sepon Mineral District: porphyry-like Cu-Mo-Au mineralisation, skarnoid Cu-Mo-Au mineralisation adjacent to porphyry intrusive, distal skarn related Cu-Au-Ag+/- Pb+/-Zn massive sulphide veins, Carlin type carbonate hosted gold mineralisation and carbonate hosted Mississippi Valley type Pb-Zn-Ag mineralisation. In addition, weathering and supergene re-mobilisation has created supergene copper, exotic supergene copper, oxide gold and alluvial gold in karst fill deposits. Gold mineralisation mostly occurs in the fault zones and adjacent to the fault zones at the contact between the dolomite of the Nalou formation and the overlying shales and nodular carbonate of the Discovery Formation. Mineralisation occurs in association with decalcification and partial silica replacement of calcareous mudstones, and typically is best developed within the Discovery formation. But can also occur as a karst-controlled residual or collapse breccia deposit within the underlying Nalou formation, with mineralised jasperoid boulders occurring within a matrix of decomposed rock and clays. Regional WNW-striking, steeply NNE-dipping normal faults are believed to have been the major pathway for ascending mineralizing fluids. Primary gold mineralisation occurs as Carlin style gold forming distally to the copper skarn systems. Mineralisation occurs in

Criteria	Explanation	Commentary
		association with decalcification and partial silica replacement of calcareous mudstones ('jasperoid') along steep faults and is typically best developed at the contact of the Nalou Formation (dolomite) and the overlying Discovery Formation (nodular calc-shale). Oxide gold mineralisation shows further control by weathering processes with very high-grade zones developed as karst fill (mineralised jasperoid boulders occurring within a matrix of decomposed rock and clays) on chemically weathered carbonate rocks. Copper mineralisation is associated with nearby skarn-hosted intrusives. Copper has subsequently migrated to the peripheries of the intrusive centre and concentrated through a supergene process.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth Hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Due to the advanced nature and extensive drilling completed for this project, no individual drill hole is material to the Mineral Resource estimate and hence this geological database is not supplied.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	This is a Mineral Resource Statement and is not a report on exploration results hence no additional information is provided for this section.

Criteria	Explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	This is a Mineral Resource Statement and is not a report on exploration results hence no additional information is provided for this section. No metal equivalent values have been used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	Mineralisation true widths are captured by interpreted mineralisation 3D wireframes. Most drilling was at -60° to -90° dip angles in order to maximise exposure to the true width of intersections. Geometry of mineralisation is interpreted as sub-horizontal in the supergene and sub-vertical in the hypogene material and as such current drilling allows true width of mineralisation to be determined.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	A drill collar location plan and geological sections are not included, as the Project is an operating mine, and not an exploration discovery. A summary geological map of the Sepon Mineral District and a generalized east - west cross section of Sepon deposit are provided to illustrate the gold mineralization style at Sepon.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	This is a Mineral Resource Statement and is not a report on exploration results hence no additional information is provided for this section.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	This is a Mineral Resource Statement and is not a report on exploration results hence no additional information is provided for this section. This is a Mineral Resource Statement and is not a report on exploration results hence no additional information is provided for this section.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Mining activities at all deposits as and when scheduled require additional infill drilling as part of grade control work to deliver the

Criteria	Explanation	Commentary
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	required definition for detailed mine design and mining extraction. Mineral Resource definition drilling is also planned within most deposits to improve geological confidence and support the ongoing conversion of Inferred and Indicated Mineral Resources to higher classifications. Exploration drilling from October 2022 to September 2023 has successfully delivered new Mineral Resources at: Ban Mai Ban Non Nakachan Khanong Primary Copper (underground) Discovery West Underground And extended Mineral Resources at: Discovery East Underground, and Nalou Exploration drilling beyond 2023 is planned to focus on target around Discovery West, Discovery East Underground Thenkham and other nearby tenements.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	A digital field logging system (with lookups and referential integrity (RI)) or paper-based system for exploration both transferring to a data entry database (DataEntryDB), (with lookups and further RI) then transferring to the master database (LaosDB) where assays are loaded and approved. A senior geologist reviews all new drill data logged in exploration logging view and sign off occurs after all corrections are made prior to loading into LaoDB which is done via SQL Server with stored procedures to detect and hold any errors on import. Micromine Geobank software provides a front end to an SQL database for the Mineral Resource and grade control data. Analytical data is uploaded directly from laboratory SIF files. The measures described above ensure that transcription or data entry errors were minimized. Validation routines by database personnel check for overlapping sample depths, lithological and alteration information, as well as reject criteria such as logging information past EOH depth. Further validation is performed in Leapfrog software once the database is imported during the modelling process. Any errors flagged are fixed in the database then the data is reimported into Leapfrog. Data used in the Mineral Resource has passed several validation checks both visual and software related prior to use in the Mineral Resource. The gold database used in the Mineral Resource is a merger of several databases and represents the best data for the gold mineral resources, which is separate to the master database. Several major data transfers, with inherent risks, have occurred over the life of the project, several suspect holes (assays) exist within the master drill hole database. Further work is required to verify and update the master database.

Criteria	Explanation	Commentary
		There is spatial confidence in the occurrence of gold grades, however the accuracy of those grades is unknown. The database currently being used in the gold estimates is deemed to be appropriate for an Indicated Mineral Resource.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	Dr. Anson Xu and Dr. Tony Guo from SRK team visited the Sepon property from 8 December 2022 to 14 December of 2022
Geological interpretation	Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	Prior to Mineral Resource estimation an underlying three-dimensional geological model (stratigraphy, structure and intrusives) was made for all deposits. All domains used for estimation were interpreted using known controls on the domain variable with the geological model as a framework. For example, the gold grade domains, whilst interpreted at a nominal gold grade, follow favorable stratigraphic contacts and controlling fault structures. Confidence in the geological (domain) interpretation for all Sepon Mineral Resource estimates is high. Geological models were interpreted from logged drilling data and deposit scale surface geological mapping. If new drill programs contradict the geological model, the model is updated to reflect new drill data. The geological continuity of mineralisation and mineralogy is a key input into Mineral Resource classification and targeted drilling has been conducted to ensure geological continuity rather than solely exploring for mineralised continuity. Sepon hosts several deposit along a 14km long belt of carbonaceous rocks. Typical widths of Sepon deposits range from five to thirty-five metres wide and all have surface expressions. The current Mineral Resource has been simplified from previous years where deposits were split and modelled separately, for example, Discovery West and Discovery East is now

Criteria	Explanation	Commentary
		modelled in a single Discovery model whilst Nalou, Namkok East and Namkok West have similarly been merged to form a single model as they are geologically continuous across the span of the model with interaction between controlling structures.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping.	Mineral Resource estimation was undertaken in Leapfrog Edge and Vulcan mining software with the following key assumptions and parameters: Ordinary Kriging interpolation has been applied for the estimation of Cu, Au, Ag, Ca, Mg, Mn, Total S, Total C, and PRI are also estimated in the gold models. Inverse distance to the power of two interpolation has been applied where there was insufficient data to model spatial continuity for kriging weights within the gold block model estimates. This is considered appropriate for the estimation of Mineral Resources at Sepon. Extreme grade values were managed by upper grade capping. The typical upper cap used is the 99th percentile to contain outliers. The estimates of gold were predominantly undertaken using hard domain boundaries and a series of elliptical search passes orientated in the plane of mineralisation. These search orientations and sizes were supported by variogram analysis. A composite length of 1m downhole was chosen and the compositing process validated. Exploratory data analysis, variography and search neighborhood optimization for each domain was performed. Total sulphur and carbon are estimated to assist with gold speciation and in the Mineral Resource estimation was undertaken in Leapfrog Edge and Vulcan mining software with the following key assumptions and parameters:

Criteria	Explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Ordinary Kriging interpolation has been applied for the estimation of Cu, Au, Ag, Ca, Mg, Mn, Total S, Total C, and PRI are also estimated in the gold models. Inverse distance to the power of two interpolation has been applied where there was insufficient data to model spatial continuity for kriging weights within the gold block model estimates. This is considered appropriate for the estimation of Mineral Resources at Sepon. Extreme grade values were managed by upper grade capping. The typical upper cap used is the 99th percentile to contain outliers. The estimates of gold were predominantly undertaken using hard domain boundaries and a series of elliptical search passes orientated in the plane of mineralisation. These search orientations and sizes were supported by variogram analysis. A composite length of 1m downhole was chosen and the compositing process validated. Exploratory data analysis, variography and search neighborhood optimization for each domain was performed. Total sulphur and carbon are estimated to assist with gold speciation and in the determination of the primary domain. The minimum and maximum number of composites allowable to interpolate a block was typically set at 4-10 and 15-24 based on KNA. Octant searches were used for the first two passes for ancillary elements only. No assumptions about the recovery of by-products have been made. Parent block sizes are 15m x6m x 5m (XYZ). The parent block size has considered: data spacing, mining methods and variography. Sub-blocks honoring relevant shapes and surfaces were used. The parent block size delineates mineralized zones without compromising the block variance.

Criteria	Explanation	Commentary
		Search distances in general for most estimates are the length of the first variogram structure in pass 1 and doubled in subsequent passes. Larger passes were used to interpolate less well-informed blocks. No further assumptions have been made regarding modelling of selective mining units. Block models are validated by: Visual inspections for true fit with the high and low grade wireframes (to check for correct placement of blocks and sub-blocks), block model to wireframe volume differences are checked, visual comparison of block model grades against composite file grades, global statistical comparison of the estimated block model grades against the composite statistics and raw data, global and local (on key sections) swath plots are used to check for bias. determination of the primary domain
Moisture	Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	For OP Au the Mineral Resources are reported at a cut-off grade of 0.6 g/t Au of oxidized gold ore and a cut-off grade of 1.5 g/t Au of primary gold ore. For UG Au the Mineral Resources are reported at a cut-off grade of 3 g/t Au of primary gold ore. For OP Cu the Mineral Resources are reported at a cut-off grade of 1.1% Cu of oxidized copper ore and a cut-off grade of 0.5 % Cu of primary copper ore. For UG Cu the Mineral Resources are reported at a cut-off grade of 0.8% Cu of oxidized copper ore.

Criteria	Explanation	Commentary
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Sepon is an active open pit and underground mining operation and mining methods, minimum mining widths and internal dilution is well understood and documented on site. conceptual pit shells. Underground Mineral Resources are reported within minable panels based on long-term plan shapes and or Mine Stope Optimizer (MSO) shapes. The assists in demonstrating that the Mineral Resource meets the requirement of having reasonable prospects for eventual economic extraction criteria.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Sepon Gold Mine and Copper Mine is a production project, both metallurgical testing and historical production performance data are available, providing reliable data to Metallurgical Factors. The oxide gold ore is amenable to CIL process, final product is Gold Doré. The gold recovery ranges from 51.8% to 68.9% in actual production. The primary gold ore is amenable to the process of flotation-POX-CIL, final product is Gold Doré. The gold recovery ranges from 78% to 85% in laboratory tests. The oxide copper ore is amenable to the process of sulfuric acid leaching-SX/EW, the copper recovery ranges from 62% to 78% in actual production. The primary copper ore is amenable to flotation process, final product is copper concentrate. The concentrate grade and copper recovery are affected by the sulphur grade and ASCu/TCu ratio. A general copper recovery of 80% can be achieved.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project,	See Section 18.

Criteria	Explanation	Commentary
	may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Samples for bulk density determination are taken from diamond drill core every 6 m using the wax coated core immersion method. The bulk density determinations were estimated into the block models by either ordinary kriging, or where limited data exists as direct assignment from average values. All estimates are based on oxide vs primary division and then further on lithology. Previous reconciled mined gold ore tonnages demonstrate these values are robust in the oxide zones. Previous models created using the same method have been proved accurate by reconciliation of actual versus mine claim.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	Mineral Resource classification is directly linked to the geological confidence based on drill hole spacing, degree of variability of shape and grade of mineralization and associated geological units and structures. Each mineral deposit has been reviewed separately. Unless an entire deposit or area was classified at a uniform level, then wireframes of classification where applied to demarcate the classification. Measured Mineral Resources include materials that have been grade controlled, having drilling that is spaced approximately 15m or less, and exhibits low levels of variability in shape (volume and tonnes), and grade. This confidence is sufficient to confirm geological and grade continuity of the mineralisation and supports detailed mine planning. Indicated Mineral Resources include materials that have drill spacing up to 50m with multiple intersections on each section and consistency of size and grade of mineralised intersections sufficient to assume geological and grade continuity, and to support mine planning and evaluations of economic viability.

Criteria	Explanation	Commentary
		Inferred Mineral Resources include materials with a drill spacing up to 100m showing mineralisation in several holes on each section over several sections. Mineralising shape and grade may be variable between holes and sections. Evidence is sufficient to imply geological and grade continuity, and it is expected that with additional exploration that the majority of the resource would upgrade to Indicated Mineral Resources. In the Competent Person's view the classification is appropriate to the deposits at Sepon given the available data for estimation.
Audits or reviews.	The results of any audits or reviews of Mineral Resource estimates.	The input data, including geological mapping and drillhole data are comprehensive in their coverage of the mineralisation. The Mineral Resource estimate appropriately reflects the view of the Competent Person. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code. The statement relates to global volumetric estimates.

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

It's not applicable for estimation and reporting of Ore Reserves for the Project to date due to many fatal flaws have been observed in the available feasibility study. Just pit inventory was converted at the time of this reporting. The following table is just a check list of pit inventory reporting.

Criteria	Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserves estimate is based on the Mineral Resource model developed by LXML, which was subsequently reviewed by an SRK geologist. Inferred Resources have been excluded from this estimate. The Ore Reserves are reported inclusive of Mineral Resources.
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	For Open Pit Mining, the Ore Reserves estimate is derived from pit optimization and pit design, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the ROM Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant. For Stockpiles, the Ore Reserves estimate is derived from data provided by LXML, which has been reviewed by SRK. This review includes a detailed summary of the data and production records, particularly the feed grade. The reference point for the Ore Reserves estimates is within the stockpiles before processing and/or the hydrometallurgy plant. For Underground Mining, the Ore Reserves estimate is derived from stope optimization and underground design, accounting for mining dilution and loss. The reference point for the Ore Reserves estimates is the ROM Pad before the primary crusher and/or stockpiles at the processing and/or hydrometallurgy plant.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	SRK engineers, including specialists in geology discipline, visited the site in December 2022. SRK engineers, including specialists in mining and geology disciplines, visited the site in December 2023. SRK engineers, including specialists in mining, processing, geology, and environmental disciplines, visited the site in May 2024.

Criteria	Explanation	Commentary
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	Sepon Gold Project Study ("SGPS") revised by AMC Consultants Pty Ltd ("AMC") on 18 March 2020. The LXML project encompasses gold and copper open-pit mining operations that have been active since the beginning of the 21st century. LXML has been overseeing the mine's operations since 2018. In 2021, LXML discontinued copper open-pit mining activities. In 2022, LXML commenced gold underground mining operations. Presently, the processing plants are engaged in processing gold extracted from open pits, underground sources, and stockpiles, as well as oxide copper from historical stockpiles. The operating practices, data, and records available are considered to be at a Pre-Feasibility Study (PFS) level, providing a reasonable basis for assessment. After reviewing the feasibility study and operating data, SRK opines that the project could meet the international PFS level in general and could serve as a basis for Ore Reserves conversion.
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The feasibility study, operational data, and production plan form the basis for Ore Reserves conversion.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The ORE is defined as the three main types as practical for the treatment flowsheet, by LXML. Gold processing plant: Oxide gold Primary gold Copper hydrometallurgical plant: Oxide copper The marginal cut-off grade (MCOG) is applied for review the cut-off grades.

Criteria	Explanation	Commentary
		The costs are based on LXML's operation records with SRK's analysis. For gold processing: the processing costs are USD17.0 per ton milled and USD 55.0 per ton milled for oxide gold and primary gold respectively. For gold mining costs: the underground mining cost is USD 30.0 per ton mined. For the general & administrative costs are USD 9.0 per ton milled. The reference gold and copper metal prices are USD 1,850 per ounce and USD 8,300 per ton, respectively. Those prices were based on the HSBC long-term forecast price and CMF long term price forecasting, released in 2024Q1. The processing recovery is considered the production data as 65% and 45% for gold and copper, respectively. The MCOG is estimated to be 0.6 g/t oxide gold and 1.5 g/t primary gold for open pit mining and gold stockpiles, which differ from the ore types applied by LXML. The MCOG for underground mining is estimated to be 2.6 g/t for primary gold, which is lower than the 2.9 g/t applied by the mine. The MCOG is estimated to be 0.9% oxide copper for copper stockpiles, which differs from the ore types applied by LXML. The Ore Reserves were reported based the SRK's MCOG estimation.
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	For gold open-pit mining, the detailed design provided by LXML was used as the estimation boundary. For gold underground mining, Stope Optimization was carried out in alignment with LXML's input parameters as the estimation boundary. For gold deposits, all deposits with estimated Ore Reserves are currently under operation. There are associated designs for both open pit and underground mining.For gold underground

Criteria	Explanation	Commentary
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.	mining, AMC completed a scoping-level geotechnical assessment to estimate stable stope spans and pillar dimensions for the DSE UG deposit. The limiting stope span was assessed to be the hanging wall or crown of the stope with a hydraulic radius (HR) limit of 5.7. MEC conducted an audit of the geotechnical aspects for DSE UG and concluded that geotechnical risks are well managed in LXML. The major assumption proposed is that backfilling will be applied for gold underground mining, which is expected to increase mining recovery. For gold open-pit mining, the dilution factor is 7.5%, consistent with LXML's estimate. For gold underground mining, the dilution factor is 15%, also consistent with LXML's estimate. For gold open-pit mining, the recovery factor is 95.0%, consistent with LXML's estimate. For gold underground mining, the recovery factor is 95.0% higher than LXML's estimate after reviewing the reconciliation data. For gold open pit mining, the minimum mining width is 25.0 meters. No Inferred Mineral Resources are included in the Ore Reserves. Historically, LXML has approximately 20 years of production, and various facilities are well developed. A 220 KV power line traverses the area and supplies electricity. Telephones and mobile communication are also available.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	
	The mining dilution factors used.	
	The mining recovery factors used.	
	Any minimum mining widths used.	
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions (Coal Preparation and Coal Quality)	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements.	Sepon Gold Mine is a production project, both metallurgical testing and historical production performance data are available, providing reliable data to Metallu • rgical Factors. The gold ore, both oxide and primary, is refractory. The oxide gold ore is amenable to CIL. The gold recovery ranges 51.8% to 68.9% in historical production. Flotation-POX-CIL process is applied to treat primary gold ore for producing Gold Doré. The gold recovery ranges 55% to 67% in historical production

Criteria	Explanation	Commentary
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	The oxide copper ore is amenable to the process of sulfuric acid leaching-SX/EW, the copper recovery ranges from 62% to 78% in historical production. The primary copper ore is amenable to flotation process, final product is copper concentrate. The concentrate grade and copper recovery are affected by the sulphur grade and ASCu/TCu ratio. A general copper recovery of 80% can be achieved in laboratory tests.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The sources of environmental risk are project activities that may result in potential environmental impacts. These project activities have been previously described within this report. In summary, the most significant potential environmental and social risks for the development of the Project, currently identified as part of the project assessment and this SRK review, are: TSF seepage pollution; Fugitive dust pollution; and Deficit mine closure fund.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The operation is established, and all required infrastructure is in place.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. The source of exchange rates used in the study. Derivation of transportation charges.	Capital costs for 1Q2024 to 2026 were provided by LXML, including: Growth: USD 77.6 million Exploration: USD 24.1 million Sustain: USD 49.6 million. (The unit sustaining cost was estimated based on data from 2022 and 2023, amounting to 3.5 USD/ milled ton. This estimate was used for forecasting the years 2027 to 2030.) SRK assumed that working capital has been incorporated into the sustaining capital.

Criteria	Explanation	Commentary
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private.	SRK considers it reasonable to expect that the operation of the Project will be extended with further exploration and feasibility studies. Consequently, mine closure fees and the residual value of the project will not be considered in the economic projection. Operating costs were categorized into the following components: administration costs, open pit mining costs, underground mining costs, and processing costs. These were based on the historical production costs from the past three years. Administration costs: 9.0 USD/milled ton. Open pit mining costs (ore & waste): 9.0 USD/mined ton. Underground mining costs: 35.0 USD/mined ton (including 5.0 USD/mined ton as for backfilling cost assumption). Gold processing costs: 45.0 USD/milled ton. Copper processing costs: 35.0 USD/milled ton. No metallurgical allowances have been made for the effect of deleterious elements since none have been detected. The exchange rate was not utilized, as all related costs are based in USD. The treatment and refining charge have been included in the processing costs. Government royalties are charged 5.0% of the revenue.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	For economic analysis, SRK's CMF metal prices were used. There are no other revenue factors applied.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	CMF's copper and gold prices vary in different years, considering the trends.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and	Sepon has developed and has steady buyers of its products, copper and gold.

Criteria	Explanation	Commentary
	factors likely to affect supply and demand into the future.	
	A customer and competitor analysis along with the identification of likely market windows for the product.	Ditto.
	Price and volume forecasts and the basis for these forecasts.	The basis of prices are the CMF forecast, and the volume are based on the production schedules.
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	N/A.
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	The discount rate used for NPV calculation ranges from 5.0% to 15.0%, with increments of 1.0%. All results indicate a positive NPV. The operating costs, along with gold and copper prices, were selected as the essential variable factors affecting cash flow. These essential factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The NPV is most sensitive to changes in the gold price, followed by operating costs. Copper price is the least sensitive factor affecting NPV.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	See Section 18.4.9.
Other	To the extent relevant, the impact of the following on the Project and/or on the estimation and classification of the Ore Reserves:	Two high risks have been identified: "lack of significant Ore Reserves" and "high mine closure cost." The project is located within the current mining license, which is valid until 29 September 2033, thereby covering the entire Life of the Mine (LoM).
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	The status of governmental agreements and approvals critical to the viability of the Project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved	

Criteria	Explanation	Commentary
	matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	For gold open pit and underground mining, Measured Mineral Resources in the mine designs are classified as Proved Ore Reserves. Indicated Mineral Resources in the mine designs are classified as Probable Ore Reserves. For gold and copper stockpiles, only the materials above MCOG are considered as Probable Ore Reserves based on reviewing the data provided by LXML. The classification of Ore Reserves appropriately reflects the Competent Person's view of the deposits. There is no Measured Mineral Resources are classified as Probable Ore Reserves.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	
	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The Ore Reserves estimates have been peer reviewed internally and is in line with current industry standards.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	The Ore Reserves estimates are based on SGPS and ongoing operations. The Ore Reserves estimates are at a PFS level. All modifying factors have been applied for Ore Reserves estimates on a global estimate. SRK noted that LXML proposed the use of cemented backfill for gold underground mining to increase mining recovery, although no study is available to date. While cemented backfill is widely used in various mines, it would be prudent to conduct an individual backfilling feasibility study to support further operations.
	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	SRK considers the level of sampling work carried out by the client is sufficient for Probable Ore Reserves in accordance with the JORC Code.
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The Sepon mine has a long history of production for the open-pit production. The historical resource models are not available to SRK. The underground mine started its production, with the

Criteria	Explanation	Commentary
		accumulated production, the comparison will be possible later.

Appendix C Compliance with Chapter 18

Chapter 18				Section in SRK's Report
18.01	**DEFINITIONS AND INTERPRETATION**			**Not applicable.** [1]
18.02-18.04	**CONDITIONS FOR [REDACTED] OF NEW APPLICANT MINERAL COMPANIES**			
18.02	In addition to satisfying the requirements of Chapter 8, a Mineral Company which has applied for [**REDACTED**] must also satisfy the requirements of this Chapter.			
18.03	A Mineral Company must:—			
	(1)	establish to the Exchange's satisfaction that it has the right to participate actively in the exploration for and/or extraction of Natural Resources, either:—		Section 3.1
		(a)	through control over a majority (by value) of the assets in which it has invested together with adequate rights over the exploration for and/or extraction of Natural Resources; or	
			Note: 'control over a majority' means an interest greater than 50%.	
		(b)	through adequate rights (arising under arrangements acceptable to the Exchange), which give it sufficient influence in decisions over the exploration for and/or extraction of the Natural Resources;	
	(2)	establish to the Exchange's satisfaction that it has at least a portfolio of:—		Section 10.7
		(a)	Indicated Resources; or	
		(b)	Contingent Resources, identifiable under a Reporting Standard and substantiated in a Competent Person's Report. This portfolio must be meaningful and of sufficient substance to justify a [REDACTED];	
	(3)	if it has commenced production, provide an estimate of cash operating costs including the costs associated with:—		Section 17.2. [2]
		(a)	workforce employment;	
		(b)	consumables;	
		(c)	fuel, electricity, water and other services;	
		(d)	on and off-site administration;	
		(e)	environmental protection and monitoring;	
		(f)	transportation of workforce;	
		(g)	product marketing and transport;	
		(h)	non-income taxes, royalties and other governmental charges; and	
		(i)	contingency allowances;	
		Note: A Mineral Company must: • *set out the components of cash operating costs separately by category;* • *explain the reason for any departure from the list of items to be included under cash operating costs; and* • *discuss any material cost items that should be highlighted to* [**REDACTED**].		

Chapter 18				Section in SRK's Report
	(4)	demonstrate to the Exchange's satisfaction that it has available working capital for 125% of the group's present requirements, that is for at least the next 12 months, which must include:—		Section 17.1 [3]
		(a)	general, administrative and operating costs;	
		(b)	property holding costs; and	
		(c)	the cost of any proposed exploration and/or development; and	
		Note:	*Capital expenditures do not need to be included in working capital requirements. Where they are financed out of borrowings, relevant interest and loan repayments must be included.*	
	(5)	ensure that its working capital statement in the [**REDACTED**] document under Listing Rule 8.21A states it has available sufficient working capital for 125% of the group's present requirements, that is for at least 12 months from the date of its [**REDACTED**] document.		Section 17.1 [3]
18.04	If a Mineral Company is unable to satisfy either the profit test in rule 8.05(1), the market capitalisation/revenue/cash flow test in rule 8.05(2), or the market capitalisation/revenue test in rule 8.05(3), it may still apply to be [**REDACTED**] if it can establish to the Exchange's satisfaction that its directors and senior managers, taken together, have sufficient experience relevant to the exploration and/or extraction activity that the Mineral Company is pursuing. Individuals relied on must have a minimum of five years relevant industry experience. Details of the relevant experience must be disclosed in the [**REDACTED**] document of the new applicant.			Not applicable. [4]
	Note: *A Mineral Company relying on this rule must demonstrate that its primary activity is the exploration for and/or extraction of Natural Resources.*			
18.05-18.08	**CONTENTS OF [REDACTED] DOCUMENTS FOR NEW APPLICANTS**			
18.05	In addition to the information set out in Appendix 1A, a Mineral Company must include in its [**REDACTED**] document:—			
	(1)	a Competent Person's Report;		Section 1.1
	(2)	a statement that no material changes have occurred since the effective date of the Competent Person's Report. Where there are material changes, these must be prominently disclosed;		Section 1.7
	(3)	the nature and extent of its prospecting, exploration, exploitation, land use and mining rights and a description of the properties to which those rights attach, including the duration and other principal terms and conditions of the concessions and any necessary licences and consents. Details of material rights to be obtained must also be disclosed;		Section 3; Section 16.3
	(4)	a statement of any legal claims or proceedings that may have an influence on its rights to explore or mine;		Section 2
	(5)	disclosure of specific risks and general risks. Companies should have regard to Guidance Note 7 on suggested risk analysis; and		Section 20
	(6)	if relevant and material to the Mineral Company's business operations, information on the following:—		
		(a)	project risks arising from environmental, social, and health and safety issues;	Section 20
		(b)	any non-governmental organisation impact on sustainability of mineral and/or exploration projects;	Section 16.4.9
		(c)	compliance with host country laws, regulations and permits, and payments made to host country governments in respect of tax, royalties and other significant payments on a country by country basis;	Section 16.3
		(d)	sufficient funding plans for remediation, rehabilitation and, closure and removal	Section 16.4.8, Section 17.1[5]

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			of facilities in a sustainable manner;	
		(e)	environmental liabilities of its projects or properties;	Section 16.4
		(f)	its historical experience of dealing with host country laws and practices, including management of differences between national and local practice;	Section 16.4.9
		(g)	its historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements; and	Section 16.4.9
		(h)	any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims.	Section 16.4.9
18.06-18.08	***Additional disclosure requirements that apply to certain new applicant Mineral Companies***			
18.06	If a Mineral Company has begun production, it must disclose an estimate of the operating cash cost per appropriate unit for the minerals and/or Petroleum produced.			Section 17.2
18.07	If a Mineral Company has not yet begun production, it must disclose its plans to proceed to production with indicative dates and costs. These plans must be supported by at least a Scoping Study, substantiated by the opinion of a Competent Person. If exploration rights or rights to extract Resources and/or Reserves have not yet been obtained, relevant risks to obtaining these rights must be prominently disclosed.			Not applicable. [6]
18.08	If a Mineral Company is involved in the exploration for or extraction of Resources, it must prominently disclose to [**REDACTED**] that its Resources may not ultimately be extracted at a profit.			Section 10
18.09-18.13	**RELEVANT NOTIFIABLE TRANSACTIONS INVOLVING THE ACQUISITION OR DISPOSAL OF MINERAL OR PETROLEUM ASSETS**			**Not applicable. [1]**
18.09	A Mineral Company proposing to acquire or dispose of assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must:—			
	(1)	comply with Chapter 14 and Chapter 14A, if relevant;		
	(2)	produce a Competent Person's Report, which must form part of the relevant circular, on the Resources and/or Reserves being acquired or disposed of as part of the Relevant Notifiable Transaction;		
		Note: The Exchange may dispense with the requirement for a Competent Person's Report on disposals where shareholders have sufficient information on the assets being disposed of.		
	(3)	in the case of a major (or above) acquisition, produce a Valuation Report, which must form part of the relevant circular, on the Mineral or Petroleum Assets being acquired as part of the Relevant Notifiable Transaction; and		
	(4)	comply with the requirements of rules 18.05(2) to 18.05(6) in respect of the assets being acquired.		
	Note: Material liabilities that remain with the issuer on a disposal must also be discussed.			
18.10-18.11	***Requirements that apply to listed issuers***			
18.10	A listed issuer proposing to acquire assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must comply with rule 18.09.			
18.11	On completion of a Relevant Notifiable Transaction involving the acquisition of Mineral or Petroleum Assets, unless the Exchange decides otherwise, a listed issuer will be treated as a Mineral Company.			
18.12-18.13	***Requirements that apply to Mineral Companies and listed issuers***			
18.12	The Exchange may dispense with the requirement to produce a new Competent Person's Report or a Valuation Report under rules 18.05(1), 18.09(2) or 18.09(3), if the issuer			

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	has available a previously published Competent Person's Report or Valuation Report (or equivalent) which complies with rules 18.18 to 18.34 (where applicable), provided the report is no more than six months old. The issuer must provide this document and a no material change statement in the [**REDACTED**] document or circular for the Relevant Notifiable Transaction.	
18.13	An issuer must obtain the prior written consent of a Competent Person(s) or Competent Evaluator for their material to be included in the form and context in which it appears in a [**REDACTED**] document or circular for the Relevant Notifiable Transaction, whether or not such person or firm is retained by the [**REDACTED**] applicant or the issuer.	
18.14-18.17	**CONTINUING OBLIGATIONS**	**Not applicable.** [7]
18.14	***Disclosure in reports***	
18.14	A Mineral Company must include in its interim (half-yearly) and annual reports details of its exploration, development and mining production activities and a summary of expenditure incurred on these activities during the period under review. If there has been no exploration, development or production activity, that fact must be stated.	
18.15-18.17	***Publication of Resources and Reserves***	
18.15	A listed issuer that publicly discloses details of Resources and/or Reserves must give an update of those Resources and/or Reserves once a year in its annual report, in accordance with the reporting standard under which they were previously disclosed or a Reporting Standard.	
18.16	A Mineral Company must include an update of its Resources and/or Reserves in its annual report in accordance with the Reporting Standard under which they were previously disclosed.	
18.17	Annual updates of Resources and/or Reserves must comply with rule 18.18.	
	Note: Annual updates are not required to be supported by a Competent Person's Report and may take the form of a no material change statement.	
18.18-18.27	**STATEMENTS ON RESOURCES AND/OR RESERVES**	
18.18	***Presentation of data***	
18.18	Any data presented on Resources and/or Reserves by a Mineral Company in a [**REDACTED**] document, Competent Person's Report, Valuation Report or annual report, must be presented in tables in a manner readily understandable to a non-technical person. All assumptions must be clearly disclosed and statements should include an estimate of volume, tonnage and grades.	Section 10.7 Section 11.8
18.19	***Basis of evidence***	
18.19	All statements referring to Resources and/or Reserves:—	Not applicable. [1]
	(1) in any new applicant [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction, must be substantiated in a Competent Person's Report which must form part of the document; and	
	(2) in all other cases, must at least be substantiated by the issuer's internal experts.	
18.20	***Petroleum Competent Persons' Reports***	**Not applicable.** [8]
18.20	A Competent Person's Report for Mineral Companies involved in the exploration for and/or extraction of Petroleum Resources and Reserves must include the information set out in Appendix 25.	
18.21-18.22	***Competent Person***	
18.21	A Competent Person must:—	
	(1) have a minimum of five years experience relevant to the style of mineralization	Section 1.4

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		and type of deposit under consideration or to the type of Petroleum exploration, reserve estimate (as appropriate), and to the activity which the Mineral Company is undertaking;	
	(2)	be professionally qualified, and be a member in good standing of a relevant Recognised Professional Organisation, in a jurisdiction where, in the Exchange's opinion, the statutory securities regulator has satisfactory arrangements (either by way of the IOSCO Multilateral MOU or other bi-lateral agreement acceptable to the Exchange) with the Commission for mutual assistance and exchange of information for enforcing and securing compliance with the laws and regulations of that jurisdiction and Hong Kong; and	Section 1.4
	(3)	take overall responsibility for the Competent Person's Report.	Section 1.4
18.22	A Competent Person must be independent of the issuer, its directors, senior management and advisers. Specifically the Competent Person retained must:—		Section 1.4
	(1)	have no economic or beneficial interest (present or contingent) in any of the assets being reported on;	
	(2)	not be remunerated with a fee dependent on the findings of the Competent Person's Report;	
	(3)	in the case of an individual, not be an officer, employee or proposed officer of the issuer or any group, holding or associated company of the issuer; and	
	(4)	in the case of a firm, not be a group, holding or associated company of the issuer. Any of the firm's partners or officers must not be officers or proposed officers of any group, holding or associated company of the issuer.	
18.23	***Additional requirements of Competent Evaluators***		**Not applicable. [9]**
18.23	In addition to the requirements set out in rules 18.21(2) and 18.22, a Competent Evaluator must:—		
	(1)	have at least ten years relevant and recent general mining or Petroleum experience (as appropriate);	
	(2)	have at least five years relevant and recent experience in the assessment and/or valuation of Mineral or Petroleum Assets or securities (as appropriate); and	
	(3)	hold all necessary licences.	
	Note:	*A Competent Person's Report or Valuation Report may be performed by the same Competent Person provided he or she is also a Competent Evaluator.*	
18.24	***Scope of Competent Persons' Reports and Valuation Reports***		
18.24	A Competent Person's Report or Valuation Report must comply with a Reporting Standard as modified by this Chapter, and must:—		
	(1)	be addressed to the Mineral Company or listed issuer;	Section 1.1
	(2)	have an effective date (being the date when the contents of the Competent Person's Report or Valuation Report are valid) less than six months before the date of publishing the [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction required under the Listing Rules; and	Section 1.7
	(3)	set out what Reporting Standard has been used in preparing the Competent Person's Report or Valuation Report, and explain any departure from the relevant Reporting Standard.	Section 1.2
18.25-18.26	***Disclaimers and Indemnities***		
18.25	A Competent Person's Report or Valuation Report may contain disclaimers of sections or topics outside their scope of expertise in which the Competent Person or Competent Evaluator relied upon other experts' opinions, but must not contain any disclaimers of the report in its entirety.		Section 1.7
18.26	The Competent Person or Competent Evaluator must prominently disclose in the		Section 1.7,

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	Competent Person's Report or Valuation Report the nature and details of all indemnities provided by the issuer. Indemnities for reliance placed on information provided by issuers and third party experts (for information outside the Competent Person's or Competent Evaluator's expertise) are generally acceptable. Indemnities for fraud and gross negligence are generally unacceptable.			Section 2
18.27	***Obligations of sponsor***			**Not applicable**[1]
18.27	Any sponsor appointed to or by a new applicant Mineral Company under Chapter 3A must ensure that any Competent Person or Competent Evaluator meets the requirements of this Chapter.			
18.28-18.34	**REPORTING STANDARD**			
18.28-18.30	***Mineral reporting standard***			
18.28	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting mineral Resources and Reserves must also satisfy rules 18.29 and 18.30.			
18.29	A Mineral Company must disclose information on mineral Resources, Reserves and/or exploration results either:—			Section 1.2
	(1)	under:		
		(a)	the JORC Code;	
		(b)	NI 43-101; or	
		(c)	the SAMREC Code,	
		as modified by this Chapter; or		
	(2)	under other codes acceptable to the Exchange as communicated to the market from time to time, provided the Exchange is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.		
	Note: *The Exchange may allow presentation of Reserves under other reporting standards provided reconciliation to a Reporting Standard is provided. A Reporting Standard applied to specific assets must be used consistently.*			
18.30	A Mineral Company must ensure that:—			
	(1)	any estimates of mineral Reserves disclosed are supported, at a minimum, by a Prefeasibility Study;		Section 11.2
	(2)	estimates of mineral Reserves and mineral Resources are disclosed separately;		Section 10; Section 11
	(3)	Indicated Resources and Measured Resources are only included in economic analyses if the basis on which they are considered to be economically extractable is explained and they are appropriately discounted for the probabilities of their conversion to mineral Reserves. All assumptions must be clearly disclosed. Valuations for Inferred Resources are not permitted;		Section 11, Section 11.7, Section 11.8 Section 18.1
	(4)	for commodity prices used in Pre-feasibility Studies, Feasibility Studies and valuations of Indicated Resources, Measured Resources and Reserves:—		Section 17.3
		(a)	the methods to determine those commodity prices, all material assumptions and the basis on which those prices represent reasonable views of future prices are explained clearly; and	Section 17.3
		(b)	if a contract for future prices of mineral Reserves exists, the contract price is used; and	Section 15
	(5)	for forecast valuations of Reserves and profit forecasts, sensitivity analyses to higher and lower prices are supplied. All assumptions must be clearly disclosed.		Not applicable. [9]

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18.31-18.33		***Petroleum reporting standard***	**Not applicable. [8]**
18.31	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting Petroleum Resources and Reserves must also satisfy rules 18.32 and 18.33.		
18.32	A Mineral Company must disclose information on Petroleum Resources and Reserves either:—		
	(1)	under PRMS as modified by this Chapter; or	
	(2)	under other codes acceptable to the Exchange if it is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.	
	Note:	*A Reporting Standard applied to specific assets must be used consistently.*	
18.33	A Mineral Company must ensure that:—		
	(1)	where estimates of Reserves are disclosed, the method and reason for choice of estimation are disclosed (i.e. deterministic or probabilistic methods, as defined in PRMS). Where the probabilistic method is used, the underlying confidence levels applied must be stated;	
	(2)	if the NPVs attributable to Proved Reserves and Proved plus Probable Reserves are disclosed, they are presented on a post-tax basis at varying discount rates (including a reflection of the weighted average cost of capital or minimum acceptable rate of return that applies to the entity at the time of evaluation) or a fixed discount rate of 10%;	
	(3)	Proved Reserves and Proved plus Probable Reserves are analysed separately and principal assumptions (including prices, costs, exchange rates and effective date) and the basis of the methodology are clearly stated;	
	(4)	if the NPVs attributable to Reserves are disclosed, they are presented using a forecast price as a base case or using a constant price as a base case. The bases for the forecast case must be disclosed. The constant price is defined as the unweighted arithmetic average of the closing price on the first day of each month within the 12 months before the end of the reporting period, unless prices are defined by contractual arrangements. The basis on which the forecast price is considered reasonable must be disclosed and Mineral Companies must comply with rule 18.30;	
		Note: In the forecast case under PRMS, the economic evaluation underlying the investment decision is based on the entity's reasonable forecast of future conditions, including costs and prices, which will exist during the life of the project.	
	(5)	if estimated volumes of Contingent Resources or Prospective Resources are disclosed, relevant risk factors are clearly stated;	
		Note: Under PRMS, wherever the volume of a Contingent Resource is stated, risk is expressed as the chance that the accumulation will be commercially developed and graduate to the reserves class. Wherever the volume of a Prospective Resource is stated, risk is expressed as the chance that a potential accumulation will result in a significant discovery of Petroleum.	
	(6)	economic values are not attached to Possible Reserves, Contingent Resources or Prospective Resources; and	
	(7)	where an estimate of future net revenue is disclosed, whether calculated without discount or using a discount rate, it is prominently disclosed that the estimated values disclosed do not represent fair market value.	
18.34		***Mineral or Petroleum Asset Valuation Reports***	**Not applicable. [8, 9]**

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18.34	A Mineral Company must ensure that:—		
	(1)	any valuation of its Mineral or Petroleum Assets is prepared under the VALMIN Code, SAMVAL Code, CIMVAL or such other code approved by the Exchange from time to time;	
	(2)	the Competent Evaluator states clearly the basis of valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate, having regard to the nature of the valuation and the development status of the Mineral or Petroleum Asset;	
	(3)	if more than one valuation method is used and different valuations result, the Competent Evaluator comments on how the valuations compare and on the reason for selecting the value adopted; and	
	(4)	in preparing any valuation a Competent Evaluator meets the requirements set out in rule 18.23.	

Note：

1. It's not the work scope of SRK.
2. Operating cost is breakdown according to cost center, instead of cost element.
3. Without considering current assets and current liabilities, SRK made the assumption that the working capital has been incorporated into the sustaining capital.
4. The simple economic analysis shown in "18 Economic Analysis" provides an indication that the Sepon Mine is economically viable.
5. It is reasonable to expect that the operation of the Project will be extended with further exploration and feasibility studies, the mine closure fees, and the residual value of the project will not be considered in the economic projection.
6. Sepon Mine is a producing project.
7. Upon [**REDACTED**], Chifeng Gold/LXML will comply with the relevant requirements under the Listing Rules.
8. Mineral Resources and Ore Reserves of LXML are Au and Cu minerals.
9. The report prepared by SRK is not an Evaluation Report.

Appendix D Chapter 2.6 of the Guide for New Listing Applicants

	Chapter 2.6	Section in SRK's Report
(i)	The cut-off grade (which should be an industry standard commonly used), minimum mining width, economic parameters (e.g. waste to ore ratio, stope productivity), specific gravity derivation, prevailing commodity price assumptions;	Section 10.4, 11.4, 11.5, 12.4, 12.6, 17.3
(ii)	If the Competent Person has a different view on certain assumptions (e.g. processing recovery rate) made by the applicant, both views should be disclosed in the [**REDACTED**] document, with differences highlighted and underlying reasons for the different views, and the impact on the applicant if the more conservative view is adopted;	Not applicable.
(iii)	Detailed analysis for harmful elements identified at mines (e.g. mercury or arsenic at lead and zinc mines) to give a better picture of whether there are material concentrations of these elements within particular lodes, and the impact on the saleability of the minerals;	Not applicable.
(iv)	Clear and meaningful drawings and diagrams, shown to scale, of the location of the applicant's principal Mineral or Petroleum Assets;	Section 4
(v)	The procedures, amount of testing, assessment and time required to ascertain the amount of Reserves, and the existing Reserves of the mine over its entire mine life, expected average Resource and Reserve grades of ore that can be extracted in future years (preferably covering the whole economic life of the mine), depletion charges and hedging activities;	Section 11 and Section 12
(vi)	Whether the historical or expected improved recovery rate is used for estimating the net present value ("NPV"), and the basis on which the discount rates are considered appropriate;	Section 18
(vii)	If the Competent Person did not conduct a site visit, the applicant should disclose in the "Business" section of the [**REDACTED**] document the basis on which the Reserves/Resources, cost forecasts and other data relating to the mines/ oilfields as disclosed in the CPR are arrived at, how the lack of a site visit would affect the reliability of the information, and an appropriate risk factor 3; and	Section 1.5
(viii)	All material risks mentioned in the CPR should be disclosed in the "Risk Factors" section of the [**REDACTED**] document.	Section 20

Final

Independent Competent Person's Report for Wassa Gold Mine, Akyempim, Western Region, Ghana

Spring Rain Project, Akyempim, Ghana
Golden Star Wassa Limited

SRK Consulting (China) Ltd. ▪ SCN849C ▪ 27 August 2024

srk consulting

Final

Independent Competent Person's Report for Wassa Gold Mine, Akyempim, Western Region, Ghana

Spring Rain Project, Akyempim, Ghana

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Report Effective Date: 31 March 2024

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SRK Consulting (China) Ltd. ■ SCN849C ■ 27 August 2024

Acknowledgments

The opinions expressed in this Report have been based on the information supplied to SRK Consulting (China) Ltd. ("SRK") by Golden Star Wassa Limited (the "Client"). The opinions in this Report are provided in response to a specific request from the Client to do so. SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

Contents

Tables

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Appendices

Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

%	Percent/percentage
/	Per
′	Minute of arc
°	Degree(s) of arc
°C	Degree(s) Centigrade
3D	Three-dimensional
2020 PEA	Preliminary Economic Assessment of potential expansion of the underground mine to extract the Inferred Mineral Resource in the Southern Extension zone (dated 2020)
AAS	Atomic adsorption spectroscopy (sampling)
AC	Air-core (drilling)
ADK	Adoikrom and Dabokrom (deposit)
Ag	The chemical symbol of silver element
Ai	Bond abrasion index (metallurgical testing)
AIG	Australian Institute of Geoscientists
AISC	All in sustaining cost
ALS	ALS Minerals
ARD	Acid rock drainage
ARO	Asset retirement obligations (closure planning)
ASL	Above sea level
Au	The chemical symbol of gold element
AusIMM	Australasian Institute of Mining and Metallurgy
BDG	BD Goldfields (company)
BIF	Banded iron formation
BLEG	Bulk leach extractable gold (assaying)
BWi	Bond ball mill work index (metallurgical testing)
Capex	Capital cost
Chifeng Gold	Chifeng Jilong Gold Mining Co., Ltd.
CIL	Carbon in leach (processing method)
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CMCC	Community Mine Consultative Committee
Conc.	Concentrate
CP	Competent Person

CPR	Competent Person's Report
CRM	Certified reference material (sampling QA/QC)
CSL	Compacted soil liner (civil construction)
CSR	corporate social responsibility
Cut-off grade	The grade threshold above which a mineral material is considered potentially economic and is selectively mined and processed as ore
CWi	Bond low impact crushing work index (metallurgical testing)
CYAP	Community Youth Apprenticeship Program
DCF	discounted cash flow
DMH	Dead Man's Hill
DD	Diamond (core) drilling
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental and social management system
EPA	Environmental Protection Agency (Ghana)
ESR	Excavation support ratio (geotechnical)
FAusIMM	Fellow of the AusIMM
FB	Father Brown (deposit)
FOS	Factor of safety
FS	Feasibility study
HW	Footwall
g	gram
G&A	General and administration
GAI	Geochemical abundance index (geochemistry)
GC	Grade control
Ghana	Republic of Ghana
g/t	gram per tonne
GSI	Geological strength index (geotechnical)
GSOPP	Golden Star Oil Palm Plantation
GSR / Golden Star	Golden Star Resources (Ghana) Ltd
GSSTEP	Golden Star Skills Training and Employability Program
GSWL	Golden Star Wassa Limited
Halo	the mineralisation halo

HARD	Half absolute relative difference (statistics)
HBB	Hwini Butre Benso (deposit group)
HBM	Hwini Butre Minerals (company)
HG	High grade
HKEx	Stock Exchange of Hong Kong Limited
HL	Heap leach (processing method)
HW	Hanging wall
ICOLD	International Committee on Large Dams
ICMC	International Cyanide Management Code
IFC	International Finance Corporation
ILR	In-line reactor (processing method)
Indicated Mineral Resource	An Indicated Mineral Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	An Inferred Mineral Resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
IP	Induced Polarization, which is an exploration technique whereby an electrical current is pulsed through the ground and the response from the sub surface measured in order to identify minerals of interest. Strong IP responses may be a result of sulphide which may be associated with gold mineralisation
[**REDACTED**]	[**REDACTED**]
IRR	internal rate of return
ITCZ	Inter Tropical Convergence Zone
Jn	Joint number (geotechnical)
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition, as published by the Joint Ore Reserves Committee.
JORC Committee	Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
Jr	Joint roughness (geotechnical)
Jw	Joint alteration (geotechnical)
kg	kilogram(s), equivalent to 1,000 grams
kg/t	kilogram(s) per tonne
km	kilometre(s), equivalent to 1,000 metres
km^2	square kilometre(s)
koz	thousand ounces
kt	Thousand tonne(s)
ktpa	Thousand tonne(s) per annum
kV	kilovolt(s)
kW	kilowatt(s)
kWh/t	kilowatt(s) hour per tonne

L.I.	Legal Instrument
LG	Low grade
LHD	load-haul-dump machine
LHOS	Long hole open stoping (mining method)
LOM (or LoM)	Life of mine
LR (model)	Long-range model (geological modelling)
LVA	Locally variable anisotropy (geological modelling)
m	Meter(s)
MAusIMM	Member of the AusIMM
Measured Mineral Resource	A Measured Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes
Mineral Resources	A concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction, as defined in JORC Code. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge
mm/yr	Millimetre(s) per year
MOU	Memoranda of Understanding
M.Eng.	Master of Engineering
M.Sc.	Master of Science
MSG	Modified Stability Graph (geotechnical)
MSO	Mineable Stope Optimiser (mine planning)
Mt	million tonnes (metric tons)
NAG	Not acid generating (geochemistry)
NI 43-101	National Instrument 43-101, which is a national instrument for the (Canadian) Standards of Disclosure for Mineral Projects, including Companion Policy 43-101 as amended from time to time.
NPV	Net present value
OHS	occupational health and safety
OK	Ordinary kriging (grade estimation)
OP	open pit
Opex	operating cost
Ore Reserves	The economically mineable part of a Measured and/or Indicated mineral resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out including consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and government factors, as defined in the JORC definition standards. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves
oz	Ounce
PCP	Practical closure plan (closure planning)
PRC	People's Republic of China

Probable Ore Reserve	A Probable Ore Reserve is the economically mineable part of an Indicated, and in some circumstances Measured Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out including consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Proved Ore Reserve	A Proved Ore Reserve is the economically mineable part of a Measured Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of and modification by realistically assumed mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.
PVC	Poly-vinyl chloride
Q	Quarter: a fixed period of three months
QA/QC	Quality assurance, quality control
RAB	Rotary air blast (drilling)
RC	Reverse circulation (drilling)
RGI	Ryal Gold Inc (company)
RGLD	RGLD Gold AG (company)
RL	Reduced level
RMR	Rock mass rating (geotechnical)
RMS	Resource Modelling Solutions (company)
ROM	Run of mine
RPEEE	Reasonable prospects for eventual economic extraction
RQD	Rock quality description (geotechnical)
SGL	Satellite Goldfields Limited (company)
SJR	Saint Jude Resources (company)
SR (model)	Short-range model (geological modelling)
SRK	SRK Consulting China Ltd.
t	Tonne(s)
TMM	Total material movement
TSF	Tailings storage facility
UCS	Unconfined compressive strength
UG	underground
US$	United States dollar/s, same as USD
VAT	value-added tax
VRA	Volta River Authority (Ghana)
WGM / Wassa Mine	Wassa Gold Mine
WRD	waste rock dump
WSL	Wassa site laboratory (assaying)
WUC	Western University College, Tarkwa (Ghana)
WUG	Wassa underground mine
XRD	X-ray diffraction
XRF	X-ray fluorescence

Executive Summary

SRK Consulting China Ltd.("SRK") was requested by Golden Star Wassa Limited ("GSWL", the "Company" or the "Client") to prepare a Competent Person's Report ("CPR" or the "Report") for its mining property (the "Project") operated by GSWL in the Republic of Ghana ("Ghana") in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition (the "JORC Code", 2012 edition) and the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (the "HKEx"), including the Chapter 18 requirements (Appendix C), Chapter 2.6 of the Guide for New Listing Applicants (Appendix D) and other relevant regulations of the HKEx. GSWL's primary asset is the Wassa Gold Mine (the "Wassa Mine" or "WGM"), and 90% equity interest of GSWL is owned by Golden Star Resources (Ghana) Ltd ("Golden Star" or "GSR") which is a direct subsidiary of Chifeng Jilong Gold Mining Co., Ltd. ("Chifeng Gold"), and the Ghanaian government owns the remaining 10% equity interest of GSWL.

This report consists of an independent review of the geology, exploration, Mineral Resources, Ore Reserves, mining, mineral processing, capital expenditure, operating cost, and environmental and social aspects of the Project. It is understood that the Report will enable potential [**REDACTED**] and possible [**REDACTED**] to understand the Project's operations.

Property Description and Ownership

The mineral concessions belonging to GSWL are listed below.

- Wassa mining lease: The Wassa Mine is an operating gold mine comprising principally underground operations comprising mainly underground operations with the following mineralisation domains: F Shoot, 419, B Shoot, Zone 242, Starter, South-East, Mid-East and Dead Man's Hill (the "DMH").
- Benso mining lease: comprising the Subriso East, Subriso West, G-Zone, C-Zone and I-Zone deposits.
- Hwini Butre mining lease: comprising the Father Brown, Adoikrom and Dabokrom deposits.
- Benso (Chichiwelli) exploration property: comprising two mineralised zones, Chichiwelli West and Chichiwelli East.
- Manso exploration property: located east of the Benso and Hwini Butre Concessions.

The properties and leases are spread along a trend of approximately 80 kilometres (km) southwest of the Wassa Mine. There are sufficient access and surface rights for GSWL's operations.

Geology and Mineralisation

The Wassa Mine property lies within the southern portion of the Ashanti Greenstone Belt along the eastern margin of the belt within a volcano-sedimentary assemblage proximal to the Tarkwaian basin contact. The eastern contact between the Tarkwaian basin and the volcano-sedimentary rocks of the Sefwi group is faulted, but the fault is discrete as opposed to the Western contact of the Ashanti belt where the Ashanti fault zone can be several hundred meters wide. Deposition of the Tarkwaian sediments was followed by a period of dilation and the intrusion of late mafic dykes and sills.

The lithologies of the Wassa assemblage predominantly comprise mafic to intermediate volcanic flows which are interbedded with minor horizons of volcaniclastics, clastic sediments such as wackestone and magnetite rich sedimentary layers, most likely banded iron formations ("BIF"). The volcano-sedimentary sequence is intruded by syn-volcanic mafic intrusives and felsic porphyries.

The Wassa deposit is located on the eastern flank of the northeast trending Ashanti Belt, a Paleoproterozoic greenstone belt which was formed and deformed, along with the dividing Birimian and Tarkwaian sedimentary basins during the Eoeburnean and Eburnean orogeny. Most deposits found within the Ashanti belt can be classified as lode gold deposits or orogenic mesothermal gold deposits, with the exception of the Tarkwaian paleoplacer deposits which have a sedimentary origin. Orogenic gold deposits are the most common gold systems found within Archean and Paleoproterozoic terrains, in the West African shield, these deposits are typically underlain by geology considered to be of Eburnean age and are generally hosted by volcano-sedimentary sequences.

Host rocks in the Wassa mine area have been affected by at least four phases of ductile deformation, producing a polyphase fold pattern at the mine scale. Discrete high-strain zones locally dissect this fold system. The structural history of the Wassa area is important in that the various deformational events have been responsible for the emplacement of the gold mineralisation as well as the geometry of the zones themselves. Mineralised zones at the Wassa Mine are related to vein swarms and associated sulphides that formed during the Eoeburnean deformational event. All rock types underlying the Wassa Mine appear to be altered to variable degrees with the most common alteration consisting of a carbonate-silica-sulphide assemblage.

Exploration

Systematic exploration work has been conducted on the GSWL properties over a couple of centuries as the earliest record of gold business within the Hwini-Butre mining lease dates back to the late 15th century with the Portuguese colonial explorers. Evidence of colonial mining and local small-scale mining still remains with pits and adits mapped within all the mining leases and prospecting licenses.

Drilling is carried out by a combination of Diamond Drill ("DD"), Reverse Circulation ("RC") and Rotary Air Blast ("RAB") techniques. In general, the RAB method is used at early stages for follow up to soil geochemical sampling and testing contacts and mineralisation extensions around the production areas and has a maximum drilling depth of around 30 meters (m).

The Wassa, Benso and Hwini Butre Mining Leases are advanced properties, and details of all drill results have been reported in early staged reports. Recent updated technical reports provided an overview of drilling and representative plans and cross-sections.

DD and RC drilling are used as the main method for obtaining samples for Mineral Resource estimation and the resource drilling at Wassa deposit is generally carried out along drill lines spaced between 25 and 50 m along prospective structures and anomalies defined from soil geochemistry and RAB drilling. RC drilling is typically extended to depths in the order of 100-125 m. The DD method is used to obtain more detailed geological data where more structural and geotechnical information is required. Generally, the deeper intersections are also drilled using DD and as a result, most section lines contain a combination of RC drilling and DD.

Mineral Resource Estimates

Mineral Resource Estimates conducted for the Project include underground ("UG") mines and open pits ("OP"). SRK has reviewed the drill hole databases, definition of mineralisation domains, grade estimate parameters based on the received data and information for the footprints of Wassa Main (B Shoot UG and 242 UG), DMH and Benso's I Zone OP. The wireframe and block models were compiled by GSR personnel and SRK performed validations on these models. The reporting of validated Mineral Resource models was done by SRK. Through cross check and validation of the procedure and key parameters, SRK is of opinion that the reviewed models and Mineral Resource estimates have been performed in line with a standard approach which is generally accepted by international practice.

At Wassa Main B Shoot UG deposit, the database with a total of 4,240 DD and RC holes with aggregated drilling length of 781,448 m was used to model and estimate the Mineral Resources. Mineralised domains were created and estimated using indicator approach and set parameter. Wireframes for mineralised zone(s) were modelled with a cut-off at 0.4 gram per tonne gold (g/t Au) for the low grade ("LG") or the mineralisation halo (the "Halo") domain, and a cut-off at 1.2 g/t Au for the high grade ("HG") or the Mineralised domain. SRK has reviewed and cross validated the sample composition and sample outliers outlined for grade estimation. Variograms were modelled and the Ordinary Kriging ("OK") method was used for grade estimation.

At Wassa Main 242 UG deposit, the database with a total of 4,601 DD and grade control ("GC") RC boreholes with aggregated drilling length of 143,655 m were used for wireframe modelling and grade estimation. The mineralised domains are constrained within two envelopes (the "Halo" and the "Mineralised") using semi explicit method. The Halo Zone was modelled at a cut-off grade of 0.4 g/t Au with Leapfrog™ vein modelling technique. The Mineralized Zone was modelled at a cut-off grade of 1.0 g/t Au, with the same method as the Halo Zone. Variograms were modelled accordingly for each domain and the OK method was used for grade estimation.

At DMH deposit, a total of 2,137 DD and GC RC holes with an aggregated drilling length of 73,039 m were used in domain modelling and grade estimation. The domains (zone) were modelled using the intrusive technique in Leapfrog™ software by GSR. The Halo Zone was modelled at a cut-off grade of 0.4 g/t Au and the Mineralized Zone was generated with a cut-off of 1.0 g/t Au. Variograms were modelled and the OK method was applied for grade estimation.

I Zone Pit is within the Benso open pit mine. The database for I Zone Pit contained 254 DD and (GC) RC holes totalling 15,574 m. The solid model of I Zone Pit was constructed by GSR with Leapfrog™ vein modelling technique. The intervals used in the veins modelling were generated by Leapfrog™ implicit modelling technique, at a cut-off of 0.5 g/t. Assay data was composited to 2 m by GSR for statistics, estimation and model validation. The OK method was used for grade estimation.

With respect to Father Brown (FB)/ Adoikrom and Dabokrom (ADK) and Chichiweilli Zone, the Mineral Resources as of 31 March 2023 remain unchanged from the statement presented in the NI 43-101 Technical Report (issued in March 2021). A drilling program was initiated at Father Brown/ Adoikrom during 2022-2023, and 10,287.4m of drilling has been completed at Father-Brown/ Adoikrom. This additional drilling information has not been included in the resource estimate.

Below is a summary of GSWL's Mineral Resource Statement as of 31 March 2024, in accordance with JORC Code classifications.

Table ES-1: GSWL Mineral Resource Statement, as of 31 March 2024

Deposit/Category		Tonnage	Grade	Contained Au	Contained Au
		Kt	Au g/t	koz	t
DMH OP					
	Measured	569	1.18	22	0.67
	Indicated	227	1.16	8	0.26
	Measured and Indicated	796	1.17	30	0.93
	Inferred	19	1.25	0.8	0.02
I Zone OP					
	Measured	37	1.28	2	0.05
	Indicated	21	1.65	1	0.03
	Measured and Indicated	58	1.41	3	0.08
	Inferred	1	1.22	0.03	0.00
Chichiwelli OP					
	Measured				
	Indicated	1,110	1.75	62	1.94
	Measured and Indicated	1,110	1.75	62	1.94
	Inferred	50	2.22	4	0.11
FB/ADK UG					
	Measured				
	Indicated	1,310	7.96	335	10.42
	Measured and Indicated	1,310	7.96	335	10.42
	Inferred	2,660	5.30	454	14.12
242 UG					
	Measured	158	3.48	18	0.55
	Indicated	217	2.75	19	0.60
	Measured and Indicated	376	3.06	37	1.15
	Inferred	48	2.37	4	0.11
B Shoot UG					
	Measured	6,689	3.05	656	20.41
	Indicated	7,613	2.50	612	19.02
	Measured and Indicated	14,301	2.76	1,268	39.43
	Inferred	58,305	3.28	6,157	191.50
Stockpile (Measured)					
	DMH Stockpile	50	0.88	1.4	0.04
	UG Stopepile	2	1.33	0.09	0.00
Total					
	Measured	**7,505**	**2.89**	**698**	**21.73**
	Indicated	**10,498**	**3.07**	**1,038**	**32.28**
	Measured and Indicated	**18,003**	**3.00**	**1,736**	**54.00**
	Inferred	**61,084**	**3.37**	**6,619**	**205.88**
	Total	**79,086**	**3.29**	**8,355**	**259.88**

Notes:

[1] The Mineral Resource is reported in accordance with the JORC Code guidelines.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Mr Pengfei Xiao who are full time employees of SRK Consulting. Mr Huaixiang Li is a Member of the Australian Institute of Geoscientists (the "AIG") and Mr Pengfei Xiao is a Member of the Australasian Institute of Mining and Metallurgy (the "AusIMM") and a Member of the AIG. Both Mr Li and Mr Xiao have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the "Competent Persons" as defined in JORC (2012). Mr Li and Mr Xiao consent to the reporting of this information in the form and context in which it appears.

[3] Mt – million tonnes (metric tons), oz- ounce; koz – thousand ounces.

[4] Mineral Resources for B Shoot and 242 underground deposits are reported within mineable stope optimiser (the "MSO").

[5] Open Pit Mineral Resources are reported at a cut-off grade of 0.43 g/t for DMH, 0.73 g/t for I Zone and 0.55 g/t for Chichiwelli.

[6] Underground Mineral Resources are reported at a cut-off grade of 1.34 g/t for B Shoot and 242; and 1.40 g/t for FB/ADK.

[7] FB/ADK and Chichiwelli Mineral Resources were sourced from the Wassa NI 43-101 Technical Report (March 2021), based on a US$1,500/ ounce (oz) gold price. No material change has been aware since then.

[8] All composites have been capped where appropriate.

[9] All figures are rounded to reflect the relative accuracy of the estimate.

[10] It should be noted that the Mineral Resource Statement is made for GSWL on the basis of 100% ownership of the properties.

[11] The conversion between ounce and gram used herein is 1 oz = 31.1035 g.

[12] Mineral Resources are inclusive of Ore Reserves that have been converted from Measured and Indicated Mineral Resources.

Ore Reserve Estimates

SRK has estimated the Ore Reserves of Wassa Mine for open pit, underground, and stockpiles and reported them in compliance with the JORC Code. The Ore Reserve statement for GSWL as of 31 March 2024 is in Table ES-2.

The total Ore Reserve for the Wassa Mine is estimated at about 10,297 thousand tonnes ("kt") at an average grade of 2.11 g/t Au, containing approximately 695 thousand ounces ("koz") of gold. This includes Proved Ore Reserve estimated at 4,216 kt with an average grade of 2.17 g/t gold, containing 294 koz of gold; and Probable Ore Reserve estimated at 6,029 kt at an average grade of 2.07 g/t gold, containing 401 koz of gold. The stockpile are the ore that have spilled from conveyor belts and accumulated over time and are subsequently returned to the ROM Pad.

Table ES-2: Combined Ore Reserve Statement of Wassa Mine as of 31 March 2024

Deposit/Category		Tonnage kt	Grade Au g/t	Contained Au koz	Contained Au t
Open Pit					
	Proved	267	0.99	8	0.26
	Probable	519	0.94	16	0.49
	Total	786	0.96	24	0.75
Underground					
	Proved	3,949	2.25	285	8.88
	Probable	5,510	2.17	385	11.97
	Total	9,460	2.20	670	20.85
Combined					
	Proved	4,216	2.17	294	9.14
	Probable	6,029	2.07	401	12.46

Deposit/Category	Tonnage	Grade	Contained Au	Contained Au
	kt	Au g/t	koz	t
Total	10,245	2.11	694	21.60
Stockpile (Measured)				
DMH Stockpile	50	0.88	1.4	0.04
UG Stopepile	2	1.33	0.1	0.003
Total				
Proved	**4,216**	**2.17**	**294**	**9.14**
Probable	**6,029**	**2.07**	**401**	**12.46**
Proven+Probable	**52.00**	**0.87**	**1**	**0.05**
Stockpile	**10,297**	**2.10**	**696**	**21.64**

Notes:

[1] The Ore Reserve is reported in accordance with the JORC Code guidelines.

[2] The information in this report which relates to Ore Reserve is based on information compiled by Mr. Alex Thin and Ms. TzuHsuan Chuang who are full time employees of SRK Consulting. Mr. Thin is a Fellow of the Australasian Institute of Mining and Metallurgy (the "AusIMM"), and Ms. Chuang is a Member of the AusIMM. Both Mr. Thin and Ms. Chuang have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the "Competent Persons" as defined in JORC (2012). Mr. Thin and Ms. Chuang consent to the reporting of this information in the form and context in which it appears.

[3] Ore Reserves in the table above and in this Report are estimated/converted from Measured and Indicated Mineral Resources, therefore double accounting of tonnage should be avoided.

Open pit

[1] No mining recovery and dilution applied.

[2] Only Measured and Indicated Mineral Resource considered.

[3] Cut-off grades of 0.5 g/t Au for DMH.

Underground

[1] Ore Reserves are reported at a cut-off grade of 1.34 g/t Au.

[2] Ore Reserves are reported with Modifying Factors. (Development Overbreak: 5%; Stope Recovery: 95%; Stope Dilution: 10%)

Mining

Open Pit Mining

The mining at Wassa Main area was initiated mostly by open pit in 2001, with underground development commencing in 2015. The underground and open pit mining continued at the Wassa Main deposit while the underground mining has been the main ore source since 2018. From these domains, DMH and Benso (I Zone) are currently two open pits while others are depleted or planned for underground mining.

A final open pit design utilised a gold price of United State Dollars (USD or US$) 2,050 / oz, with optimised angles of 45° and 52° for the oxide and fresh rock masses, respectively. Detailed engineering design was based on the following nominal bench and berm configurations:

- Oxides: Bench height: 6 m, bench face angle: 65°, berm width: 4 m (Inter-ramp angle:41°).
- Fresh Rocks: Bench height: 12m, bench face angle: 75°, berm width: 4 m (Inter-ramp angle: 59°).

The overall final open pit design slopes are stable; however, the main geotechnical problem at Wassa historically has been lack of berm retention due to the well jointed nature of the rock mass and the relatively narrow berms required to achieve steep inter-ramp angles.

A conventional mining method is utilised; excavators and trucks which is considered typical for this type and style of gold mineralisation. The mining will be carried out by a contract mining company who will supply equipment, manpower and supervision services. The 12 m bench hights with 72° bench face angle were designed while drilling and blasting will be conducted over bench heights of 6 m and explosives delivered to the hole by the manufacturer. Oxide or weathered material is generally only required to be lightly blasted or in some areas can be excavated as 'free dig'. Hydraulic excavators are used in conjunction with conventional blasting practices, to mine a 3.0 m flitch height. Broken rock is loaded into 60t capacity off highway haul trucks to a central stockpile or to the waste dump.

Geovia MineSched™ software is used by GSR to plan the open pit production schedule. All criteria as detailed in mining section of this Report has been employed plus 10% dilution and 5% ore loss to the gold grade and ore amount to make up the production schedule.

Underground Mining

The Wassa Underground Mine commenced development in 2015 and declared commercial production in January 2017 when the open pits operation were nearly completed. The Long Hole Open Stoping ("LHOS") is the selected method for Wassa underground mining. In this method the stopes are mined with blastholes drilled vertically upwards, from the level below. The primary stope is extracted in a top-down sequence; and each stope lift is extracted below the open stope void above. Up to three stope lifts are extracted to create a continuous excavation up to 75 m high. Primary stope length is 20 m and by the width of the orebody with 20 m pillars left between, with the pillars to be mined as secondary stopes after filling the voids with waste rocks or by paste filling. When the voids are filled with paste material, the secondary stopes are mined in a bottom-up sequence to minimize paste exposure in the sidewalls. The primary stopes will be filled when the four stopes are extracted but in secondary stopes each stope lift is planned to be filled before extracting the lift above. A sill pillar is then left when the stope excavations are up to 100 m high.

The mine is accessed via declines from within the completed open pit mines and then access to surface via the available open pit ramps. There are three portals and surface facilities. The main portal named the Daniel Owiredu Portal, located in Starter Pit at approximately 905m Reduced Level ("RL"). This portal is used as the main entrance to the underground mine. Portal 2 was established in the southern end of the Main Pit at approximately 845m Reduced Level and connects to the main decline at 820mRL. Duplication of the main decline forms part of a haulage loop system. Portal 3 was established within the 242 open pit, at approximately 930m Reduced Level. This portal gives access to the 242 mine.

The mining method depends on the orebody thickness and grade distributions that may chose differently for each panel. In panels 1 & 3, the mined voids are generally left open with some loose rock fill, to dispose of waste or for opportunistic pillar recovery. Narrower ore zones (<15 m) are mined as longitudinal stopes (>25 m length) with progressive placement of rock fill to minimize ore loss in pillars. In panel 2, the voids will be filled with paste material when primary stopes were mined out, to allow the extraction of the pillars between (called "secondary stopes"). Also, in this panel the

sill pillars can be extracted after the secondary stopes are backfilled. The sill pillar extraction assumes 60% recovery of the full stope. Secondary stopes follow the primary stope front with a lag distance of between120-140m along strike to create a sufficient buffer from active primary stopes; and development and extraction of the sill pillar commences when there is a sufficient distance from secondary stopes in the blocks above and below.

GSWL completed the mining production schedule (including mine optimisation, design and scheduling), referred to as version #13 (the "Wassa Design"), and was reviewed by SRK. The production schedules based on the Wassa Design, and is shown in Table ES-3 below, which forms the Ore Reserve reporting for the Wassa Project.

Table ES-3: Wassa Ore Reserves Plan (Based on Wassa Design)

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
OPEN PIT							
OPEN PIT - Ore Tonnes	t	785,551	327,491	458,061			
OPEN PIT - Au Grade	g/t	0.96	1.04	0.90			
OPEN PIT - Au Metal	oz	24,172	10,974	13,198	-	-	-
OPEN PIT - Waste Tonnes	t	2,548,826	1,502,686	1,046,140			
OPEN PIT - Total Material Movement	t	3,334,377	1,830,177	1,504,200			
UNDERGROUND							
Development	t	554,122	254,356	190,949	83,529	23,156	2,132
Au Grade	g/t	2.82	2.53	2.96	3.46	2.45	3.42
LHOS	t	8,905,468	1,830,519	2,559,850	2,433,348	1,591,067	490,686
Au Grade	g/t	2.17	2.16	2.06	2.25	2.24	2.04
UNDERGROUND - Ore Tonnes	t	9,459,590	2,084,874	2,750,799	2,516,877	1,614,222	492,818
UNDERGROUND - Au Grade	g/t	2.20	2.21	2.13	2.29	2.24	2.05
UNDERGROUND - Au Metal	oz	670,222	147,888	187,961	185,510	116,452	32,411
UNDERGROUND - Waste Tonnes	t	2,835,259	994,274	1,123,668	574,812	132,779	9,726
UNDERGROUND - Total Material Movement	t	12,294,849	3,079,149	3,874,466	3,091,689	1,747,002	502,543
Total (OP + UG)							
Ore Tonnes	t	10,245,142	2,412,365	3,208,859	2,516,877	1,614,222	492,818
Au Grade	g/t	2.11	2.05	1.95	2.29	2.24	2.05
Au Metal	oz	694,394	158,862	201,159	185,510	116,452	32,411
Waste Tonnes	t	5,384,085	2,496,961	2,169,807	574,812	132,779	9,726
Total Material Movement	t	15,629,227	4,909,326	5,378,667	3,091,689	1,747,002	502,543
Development Meters							
Lateral Operating Development	m	18,541	7,394	5,372	3,945	1,635	194
Lateral Capital Development	m	26,013	8,994	11,067	5,123	828	-

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
Vertical Capital Development	m	2,307	1,079	733	414	82	-
Backfill							
Pastefill	m^3	2,502,708	561,533	678,193	731,515	449,982	81,484
Rockfill	t	1,798,083	216,813	592,791	358,842	341,201	288,436

Source: SRK

Notes: Scheduling start date: 1 April 2024

Mineral Processing

The ores of Wassa Mine are amenable to cyanide leaching. The processing plant adopts gravity and carbon-in-leach ("CIL") process to extract gold, and the gold recovery is higher as 95% to 97% in recent years production.

The current plant circuit for GSWL is capable of processing up to 3.5 Mtpa of total mill feed, while the processing capacity may decrease with the increase of the primary ore feed. The underground ore (fresh or primary ore) is the major source of feed into the plant whilst a blend of surface material may be added depending on availability in a ratio that averaged at 67% (OP) and 33% (UG) for 2021, 87% and 13% for 2022, and 83% and 17% for 2023, respectively. The surface ore may contain transition ore in addition to the oxides. Despite these average blend ratios, there will also periods that underground ore may be the sole feed into the plant based on the mining schedule. The blending ratio is maximised by the grade control to maintain recoveries at optimal levels throughout each year.

The processing flowsheet to treat ores from both open pit and underground operations in the Wassa Project has been proved to be mature. Recovery methods in the processing plant and forward recovery assumptions are supported by test work and plant history. The designed processing plant capacity is able to accommodate all mined ores from the mining production in all years of the life of mine (the "LoM") for the Ore Reserve plan, therefore no plant upgrades nor additional processing production lines are required to process the mine production plan.

There are no material risks identified in relation to the tailings and water balance in this Project.

Environmental and Social Aspects

The Wassa Mine has obtained relevant environmental permits for its operations, including the environmental permit, environmental certificate, water use permits for dewatering and water abstraction for domestic purposes, mining, processing and dust suppression activities, as well as discharge. Two environmental impact statements for the expansion project and the No.2 tailings storage facility ("TSF 2"), dated March 2016 and September 2015 respectively, were reviewed by SRK. The Wassa project's haulage route crosses 12 km within the Subri River Forest Reserve, but it does not impact the reserve's Globally Significant Biodiversity Area, according to the Project Expansion Environmental Impact Statements ("EIS"). Dewatering water is partially reused to supplement fresh water for underground mining operations and the processing plant, with the remainder being discharged. All processing wastewater is recycled internally and not released externally. The project conducts comprehensive environmental monitoring regularly, covering water quality, cyanide content, noise, and dust emissions. The monitoring results are generally within the

reporting limits. GSWL is a member of *International Cyanide Management Code ("ICMC")*, and Eagle Environmental conducted the most recent certification audit in April 2023.

GSWL actively engaged in a range of corporate social responsibility ("CSR") strategies, such as Stakeholder Engagement planning and consultation, foster harmonious relationships and coexistence with local communities, supporting community skills training, and contributions to foundations. Moreover, it offers a variety of employment opportunities for residents in the local communities. In 2023 the direct GSWL related CSR funding amounted to an investment of approximately US$463,198 in their host communities.

GSWL encounters a challenge with small-scale artisanal mining activities ("galamsey"), particularly in the Hwini-Butre and Benso (HBB) concessions. GSWL intensified its security monitoring activities to drive away galamsey miners that operated close to its mining areas. Several stakeholder meetings were conducted with opinion leaders and youths from both Wassa and HBB communities, especially those involved in galamsey, emphasizing the importance of refraining from such actions to preserve rehabilitated sites and the environment. GSWL is of the opinion that galamsey around Wassa Mine has little potential to impact current or future operations. SRK recommends implementing stronger security measures including surveillance and well-trained personnel and providing alternative livelihood programs such as vocational training and microfinance support to reduce dependency on illegal mining.

Capital Cost and Operating Cost

The capital expenditures (the "Capex") for deeper development (depth extension to the current mine) and sustainability are estimated by GSWL. The Wassa Mine has relative stable operations, allowing the forecasting of operating expenses (the "Opex") based on historical records and current performance. All the Capex and Opex are calculated and reviewed in USD basis. The summary of Capex is presented in Table ES-4 below.

Table ES-4: Summary of Capex for Wassa Mine

Capex	Unit	LOM Total
Capital Development	Million USD	103
Other Sustaining Capex	Million USD	102
Closure	Million USD	27
Total Capex	**Million USD**	**232**

Sources: Wassa Mine, summarized by SRK

The Opex are categorised into open pit mining, underground mining, processing, general and administration (the "G&A"). Table ES-6 shows the total cost and unit cost of each category.

The overall cost trends from 2022 to the 2024 Q1 actual and Q2 forecast, indicate a shift in unit costs across various mining operations. The Total Cash Unit Cost denotes the cash cost in USD per tonne of ore feed, which has decreased from $67.6 in 2022 to $58.2 in the 2024 Q1 actual and Q2 forecast. The main reason for the declining Opex is the increased allocation of capitalized Opex and the rise in diamond drilling, which is logical due to the deeper development and in-fill drilling plan.

Table ES-5: Summary of Opex Historical & Forecasted for Wassa Mine

Item	Unit	2022	2023	2024 Q1 Actual	2024 Q1 Actual + Q2 Forecast	Weighted Average as Forecast
Open Pit Mining	USD/t TMM	4.7	6.5	6.8	7.4	6.2
Underground Mining	USD/t ROM	41.8	45.4	38.5	40.0	42.6
Processing	USD/t Feed	19.1	13.6	14.0	13.4	15.5
G&A	USD/t Feed	9.6	6.7	6.0	5.7	7.5
Total Cash Unit Cost	USD/t Feed	67.6	58.2	55.3	56.2	61.0
OP Mine TMM	kt	1,392	3,024	570	1,065	
UG Mine ROM	kt	1,816	1,701	560	1,148	
Plant Feed	kt	2,117	2,551	719	1,449	

Sources: Wassa Mine, summarized by SRK

Project Economics

The economic analysis was conducted using conventional Discounted Cash Flow ("DCF") techniques. The Net Present Value ("NPV") was determined from the project's cash flow using a 10% discount. It should be noted that SRK's DCF modelling and NPV calculation are carried out with the purpose of testing the "economic viability" of the Project which is required to be reasonable for Ore Reserve reporting.

The cash flow estimate includes only the revenue, costs, taxes, and other factors directly associated with the Project. The assumptions are as follows:

- The currency used for the Project is US dollars.
- Annual gross revenue is calculated by applying the estimated gold price and payables to the annual recovered metal for each operating year.
- The "nominal" values are applied. SRK does not consider future inflation of currency or cost fluctuations; the cost remains constant over the LoM without any adjustments are factored in.
- Financing is assumed to be on a 100% equity basis; no debt or related financing costs have been included in the technical economic analysis.
- Neither corporate obligations nor financing costs is considered.
- Sustaining capital for future exploration, which is aimed at discovering additional Mineral Resources that is outside the Ore Reserves estimates, is not considered during this analysis, as the current project economic analysis has not employed any additional potential tonnage or grade.
- No salvage value has been included in the technical economic analysis.
- The reference date or effective date is 31 March 2024.

The projection for Ore Reserve (only) plan shows a positive economic prospect. At a discount rate of 10%, the NPV of the Project is USD 94.38 million, which is shown in Table ES-6.

Table ES-6: Wassa Mine NPV versus Discount Rate

Discount Rate (%)	NPV (Million US$)
5%	113.60
6%	109.46
7%	105.47
8%	101.64
9%	97.94
10%	**94.38**
11%	90.95
12%	87.64
13%	84.44
14%	81.36
15%	78.39

Source: SRK

SRK conducted a single-factor sensitivity analysis for the Project to determine which factors most significantly impact its economics when considered independently. The analysis focused on gold price, Capex, and Opex, each tested within a ±30% range. The results showed that the Project is most sensitive to changes in gold prices.

The break-even gold prices occur when the gold price drops by approximately 12.95%, resulting in an NPV of USD 0 at a 10% discount rate.

Risk Assessment

The results of the risk assessment rating are presented in Table ES-7 below. The rating of the risks is presented before implementation of control recommendations.

Table ES-7: Project Risk Assessment of the Wassa Gold Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Overestimate of Mineral Resource Grade	Possible	Moderate	Medium
Unknown Significant Geological Structure	Unlikely	Moderate	Low
Mining			
Subsidence and Ground Stability	Unlikely	Moderate	Low
Hydrogeological Modeling Uncertainties	Possible	Minor	Low
Significant Production Shortfalls	Unlikely	Major	Medium
Lack of Significant Ore Reserves	Unlikely	Major	Medium
Unexpected Groundwater Ingress	Possible	Moderate	Medium
Ore Processing			
Significantly Lower Recovery	Unlikely	Moderate	Low
Higher Processing Cost	Possible	Moderate	Medium
Poor Plant Reliability	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delays	Unlikely	Moderate	Low
Capital Cost and Operating Cost Increases	Possible	Moderate	Medium
Higher Mine Closure Liability	Possible	Moderate	Medium

Risk Source/Issue	Likelihood	Consequence	Overall
Environmental, Social and Governance			
Water Management	Possible	Moderate	Medium
Waste Rock and TSF Management	Possible	Moderate	Medium
Hazardous Materials Management	Unlikely	Moderate	Low
Social Licensee to Operate	Possible	Moderate	Medium
Infrastructure			
Poor TSF Management	Unlikely	Moderate	Low
Shortfall of Water Supply	Possible	Moderate	Medium
Shortfall of Power Supply	Possible	Moderate	Medium
Poor Condition of the Site Road	Possible	Minor	Low

The Wassa Project is an operating project with constant open pit and open pit production. The geology, mining methods and metallurgical flowsheet have been partly verified and proved by historical operation. Overall ratings of technical risks of the Project are low and some medium risks exist in different aspects. The risks and recommended management measures are discussed below.

- The geological risks relate to the uncertainty of underground hydrogeology associated with local geological structures. SRK recommends to maintaining and enhancing the geological exploration, such as mapping the underground tunnels, especially for faults and fractures, and monitoring the underground water discharges.
- The geological risks also related to the grade estimation of underground Mineral Resources. SRK noted there are abundant Inferred Mineral Resources for the underground mine and further exploration potential, and the current Inferred Mineral Resources in deeper zones have been estimated on primarily drill core interceptions with sparse distance so there is possibility of underestimate or overestimate. SRK recommends continuous exploration to be carried out for the upgrade the underground Mineral Resources.
- The risk in relation to mining could be possible poor planning, as it is an underground mine with a relatively high production rate. Consequently, possible risk will result to production shortfall or Ore Reserve overstatement. SRK recommends carrying out in-depth engineering studies associate to LoM planning and the use of professional mine planning software. Professional services may be sourced and retained, if needed.
- The risk in relation to ore processing and metallurgy could be the possibility of high operating cost, as the current production is transitioning from underground production solely. Proper management in grade control and planning will help reduce operating costs.
- The measures and practices to manage environmental risks relating to surface water and groundwater may include separate drainage systems for production wastewater, domestic sewage, and stormwater systems; storage of hazardous materials in a dedicated area could be planned to control the risk of hazardous materials pollution. The environmental risk of land disturbances could be controlled by limiting the waste rock storage and other disturbances; scrap iron and other industrial waste collection and recycling activity may control the risks resulting from waste generation. SRK notes a conceptual closure plan should be updated with ceasing open pit production and further underground operation. TSF management associates to social responsibility, and should be taken into account.

The risks in relation to capital and operating costs include underestimates of project costs. Proper management and detailed mine scheduling may help the underground development of the Project in a proposed schedule. SRK recommends updating or adjusting the project's costs estimation from time to time according to production data in the future.It is SRK's opinion that the risks identified above are generally under control and not likely to develop into higher level of risks, as noted the Company and Wassa Project team has tracked record in production and risk management.

Conclusions and Recommendations

Conclusions

Geology and Exploration

- The Wassa deposit can be classified as an Eoeburnean folded vein system and is the only such deposit recognised to date within the Ashanti belt.
- The core drilling, geological logging etc. are implemented to a standard ensuring that the gathered data and information adequately underpin the objectives of subsequent geological modelling and Mineral Resources estimations.
- The procedures for sampling, preparation, analysis, and QA/QC are following the industry standards. SRK considers that they are acceptable for Mineral Resources estimations.

Mineral Resources Estimation

The Mineral Resources have been prepared in accordance with the JORC Code guidelines. Mining is assumed by open pit methods at DMH, I Zone and Chichiwelli, and underground methods at Wassa (242 and B Shoot) and Hwini Butre (FB/ADK).

The Mineral Resources have a RPEEE, with estimates constrained as follows:

- Open Pit: constrained by open pit shell and cut-off grade.
- Underground (FB/ADK): constrained by cut-off grade.
- Underground (242 and B Shoot): constrained by the MSO.

As of 31 March 2024, the Mineral Resources are estimated as:

- Measured and Indicated Mineral Resource: 17.70 Mt at 3.03 g/t, containing 1,724 Koz gold metal.
- Inferred Mineral Resources: 61.20 Mt at 3.37 g/t, containing 6,624 Koz gold metal.

Metallurgical Testing and Recovery Method

- Metallurgical tests were carried out before and after the construction of the processing plant in 2004. Both oxide and fresh ores have negligible preg-robbing effect and are amenable to CIL process. The gold recovery of Gravity-CIL process is as high as 90% to 95%.
- The capacity of the processing plant is 2.7 Mtpa. A traditional Crushing-Milling-CIL process with assistance of Gravity-Acacia operation in milling circuit is applied. The plant is well managed and achieved good historical performance. The gold recovery is 95.3% to 97.1% with gold production (in gold doré bars) of 4.84 to 5.31 tons per year.

Infrastructure

- The rehabilitation of TSF 1 is complete and is operated by the GSOPP for palm oil trees. The construction and management of TSF 2 is conducted properly. The planed extension of TSF 2 can meet the required capacity for tailings storage.
- The current two electricity resources (Ghanian grid power and mine generated) are sufficient for operations and domestic needs. If the solar system is implemented, it could significantly reduce power costs for offices and domestic use.
- The water balance is carefully managed. The facilities of backwater, surface water and underground water can fully support the operations of mining and processing.

Recommendations

SRK has made a number of recommendations during the review and/or site visits which have been discussed among SRK consultants and client staff. Key recommendations include:

- The large Inferred Mineral Resources need drilling programs.
- Improve the quality of grade control model and incorporate it into the Mineral Resource/ Ore Reserve model.
- Exploration potential and opportunities to be further analyzed.
- Additional technical studies to examine the Measured and Indicated Mineral Resources excluded from the current Ore Reserve estimate.
- Further test works on the deep underground veins may be needed to assure the processing procedures and laboratory protocols being used are appropriate and suitable.
- It is a feasible plan for using renewable energy such as solar to replace the electricity used in offices and residential facilities in the mine camp.

1 Introduction and Terms of Reference

SRK Consulting China Ltd.("SRK") was requested by Golden Star Wassa Limited ("GSWL", the "Company" or the "Client") to prepare a Competent Person's Report ("CPR" or the "Report") for its mining property (the "Project") operated by GSWL in the Republic of Ghana ("Ghana") in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("JORC Code") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "HKEx"), including the Chapter 18 requirements (Appendix C), Chapter 2.6 of the Guide for New Listing Applicants (Appendix D) and other relevant regulations of the HKEx. GSWL's primary asset is the Wassa Gold Mine (the "Wassa Mine" or "WGM"), and 90% equity interest of GSWL is owned by Golden Star Resources (Ghana) Ltd ("Golden Star" or "GSR") which is a direct subsidiary of Chifeng Jilong Gold Mining Co., Ltd. ("Chifeng Gold"), and the Ghanaian government owns the remaining 10% equity interest of GSWL.

This Report consists of an independent review of the geology, exploration, Mineral Resources, Ore Reserves, mining, mineral processing, capital expenditure ("Capex"), operating expenses ("Opex"), and environmental and social aspects of the Project. It is understood that the Report will enable potential [**REDACTED**] and possible [**REDACTED**] to understand the Project's operations.

1.1 Scope of Work

The scope of work, as defined in letters of engagement executed in May 2024 between Golden Star and SRK, includes the preparation of a CPR in compliance with the JORC Code and the [**REDACTED**] requirements of the HKEx. This work typically involves the assessment of the following key aspects of this project:

- Geology and exploration review;
- Review of exploration data quality;
- Review of Mineral Resource estimation and validation;
- Review of Ore Reserves and mining assessment;
- Ore processing flowsheet and mineral recovery assessment;
- Environmental, social aspects and permitting review;
- Preliminary economic analysis; and
- Interpretation and Conclusions.

1.2 Work Program

The technical review was jointly undertaken by SRK as well as SRK Consulting Practises in Ghana and South Africa (collectively the "SRK Team"). The technical review involves multiple disciplines covering all fundamental aspects including geology, Mineral Resource estimation, Ore Reserve estimations, mining, processing, environmental and social assessment as well as project evaluation.

The Mineral Resource statement reported herein is a collaborative effort between Golden Star and SRK personnel. The exploration database and Mineral Resource models were compiled and maintained by Golden Star, and audited by the SRK Team.

The geological model and wireframes for the gold mineralisation were constructed by Golden Star. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralisation at the current level of sampling. The review of geostatistical analysis, variography and grade models were completed by the SRK Team during April and June 2024.

The review of Modifying Factors including mining and processing operations, underground design and constructions, environmental and social assessment, infrastructure, capital expenditure and operating costs were conducted by the SRK Team.

The draft version of technical report was jointly compiled by the SRK Team from April to June 2024.

1.3 Basis of Technical Report

This report is based on information collected by the SRK Team during the period of the review from April to June 2024, among which a site visit has been performed, and the technical review has also included additional information provided by Golden Star throughout the course of the SRK Team s investigations.

The SRK Team has exercised due care and checked the supplied information according to the team's experience and best knowledge of the Project. SRK has no reason to doubt the reliability of the information provided by Golden Star. Other information was obtained from the public domain. Besides information collected during the SRK Team's site visits, this technical report is based on the following sources of information:

- Data provided by Golden Star prior to the site visit;
- Discussions with Golden Star personnel;
- Inspection of the open pit and underground operations;
- Review of additional exploration data and Mineral Resource models supplied by Golden Star; and
- Additional information from public domain sources.

This report has been prepared to accommodate the requirements of HKEx, and the Mineral Resources and Ore Reserves are reported according to the JORC Code (2012) which is binding upon all members of the Australasian Institute of Mining and Metallurgy ("AusIMM") and the Australian Institute of Geoscientists ("AIG").

1.4 Qualifications of SRK and SRK Team

The SRK Group comprises more than 1,800 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is ensured by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven track record in undertaking independent assessments of Mineral Resources and Ore

Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies, and financial institutions worldwide. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The SRK team contributed to this Report includes consultants as follows.

Pengfei Xiao, *MSc, MAusIMM, MAIG,* is the Managing Director of SRK China. He is a Principal Consultant (Geology) with a specialty in mineral exploration applying comprehensive geological and geophysical methods; and his expertise also includes resource modelling and estimation as well as project evaluation in the past 15 years. He is familiar with both theory and practice in sampling, sample preparation and chemical analysis. As a consulting geoscientist, he has been active in over 200 projects including due diligence reviews, exploration design, data verification, resource estimation, project evaluation and technical studies in over 60 countries. His experience relates precious metal (Au, Ag, PGE), base metal (Cu, Ni, Pb, Zn) and other metal deposits (Fe, Mn, V, Mo, Co), and also includes a few non-metal projects (phosphorite, potash, gypsum). *Mr Pengfei Xiao is the Project Manager and Competent Person for this Report and takes overall responsibility of the SRK team. Mr Xiao has been actively involved in the project assessment since 2022.*

Huaixiang (Hubert) Li, *MEng*, *MAIG,* is a senior consultant (geology) with SRK China. He graduated from the China University of Geosciences (Beijing). He has been worked in the China Railway Resources Group for 6 years and has gained lots of experiences and expertise in geological and mineral resources exploration. He is familiar with the Chinese principles and methods for metal ore deposits prospecting and exploration including gold, silver, copper, lead, zinc, molybdenum and bauxite. He is proficient in geological modelling, mineral and ore resources estimation, data processing and GIS/RS application. Besides, he also has 5 years experiences in project management. *Mr Hubert Li assists Mr Xiao in geology and Mineral Resource review and he is the Competent Person who evaluates the Mineral Resources in this Project. He visited the Wassa Project in May 2024.*

Ivan Doku, *Pr Eng (South Africa), MSAIMM*, Principal Resource Geologist and Country Manager for SRK Ghana. Ivan's expertise is in due diligence studies and Mineral Resource estimation. With 16 years' experience spanning a range of commodities including gold, PGEs, and base metals, he has worked as a mine geologist at Driefontein Gold Mine, and as a resource geologist at South Deep Gold Mine. At SRK, Ivan has been involved with due diligent audits of several Mineral Assets, compilation of MREs, assay QA/QC analysis within South Africa and Africa in general. He has as acted as Competent/Qualified Person for mining projects and operations on multiple technical studies. Ivan is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professionals (Reg: 400513/14). Ivan holds a BSc in Geological Engineering, MSc and GDE in Civil and Mining Engineering respectively. *Mr Ivan Doku reviewed the Mineral Resource estimation of the Project and he performed the site visit in February 2024.*

Paul Blaber, Associate Geological consultant SRK Consulting Ghana. Paul's expertise is in generative exploration, exploration development and due diligence studies. With 20 years' experience, mostly in gold and limited base metals in DRC and Cote D'Ivoire, working as Exploration geologist with Red Back Mining Inc in Ghana and Mauritania, Exploration geologist with Newmont Gold Ghana at Ahafo North, AVOCET Mining PLC in Guinea and Barrick Gold (Holdings) Ltd in

Bulyanahulu, Tanzania. At SRK, Paul has been involved with due diligence audits of the Beoumi Polymetallic deposit in Cote D'Ivoire and other Projects in Tarkwa along the Ashanti Belt margins. He has acted as Competent/Qualified Person for a number of exploration projects and technical studies. Paul is a registered member with Australian Institute of Mining and Metallurgy (Reg: 305289). Paul holds a BSc in Geological Engineering and MSc Geological Engineering. *Mr Paul Blaber drafted the section of geology and exploration assessment and he performed site visit in 2022.*

John Kwofie is an Associate Principal Geotechnical Engineer with SRK Consulting Ghana Limited. He has a B.Sc. in Geological Engineering and an M.Sc. in Civil Engineering Construction Materials. He has over 30 years' experience in surface mining geotechnics predominantly in West African gold mines. His work experience includes open pits slope design, geotechnical risk management in fresh rock and saprolitic environments, tailings dams' operational management, and earthworks quality assurance. He has worked on multidisciplinary projects including gold mine construction, heap leach pads, raise boring, tailings and freshwater dams, metallurgical plant foundations, buildings, and road construction. He worked as an independent consultant and part-time lecturer prior to joining SRK as Country Manager in May 2011. John has many years' experience in mining operations, notably as Geotechnical Manager of AngloGold Ashanti - Mali (Sadiola, Yatela and Morila Mines) from 2008 to 2010. Prior to that, he was the General Manager - Rock Mechanics for Hindustan Zinc Limited, a member of Vedanta Resources Group in India. He is a registered member of the Southern African Institute of Mining and Metallurgy (SAIMM) and also the South African National Institute of Rock Engineering (SANIRE). *Mr John Kwofie visited the project site in 2022 and he provided geotechnical assessment to the project team.*

Seth Owusu-Sarpong is a holder of MSc degree in Finance and MSc Degree in Mining Engineer with specialization in Mining Rock Mechanics. He has over 30 years' experience in underground hard rock mining and has been involved in many underground operations of varying ground conditions ranging from very shallow room and pillar mining, Cut and Fill mining to very deep and seismically active Vertical Crater Retreat, Open Stope and Sub-Level Caving environments. His experience includes numerical modelling, ground control management, ground conditions characterization for large underground excavation designs (stopes, workshops, pump chambers, etc.,), mine shaft raise boring, training of mine personnel in underground geotechnics, consultancy services, as well as lecturing in Mining Principles and Rock Mechanics. His working experience covers 15 years of gold mining with AngloGold Ashanti, Obuasi Mine, Ghana; 8 years of copper mining with Mopani Copper Mines, (Mufulira, SOB Kitwe and Mindolo SV - underground and surface) in Zambia, and 8 years of consultancy service and lecturing in Ghana. *Mr Seth Owusu-Sarpong visited the Project in 2022 and contributed in geotechnical assessment.*

Ali Rudaki, ***BSc (Mine Exploitation Engineering), Pr Eng (South Africa), MSAIMM,*** Principal Mining Engineer of SRK Consulting (South Africa), he has been involved in the field of open pit mining engineering for the past 28 years. His expertise includes: open pit optimisation and strategic mine planning and scheduling; strategic risk management in mine design, from life of mine to global optimisation; mining and mineral processing optimisation; mining feasibility studies; and mining operations. *Mr Ali Rudaki visited the project site in 2023 and he has reviewed the mining aspects and Ore Reserves for Open Pit since 2022.*

TzuHsuan (Shan) Chuang, ***M.Eng., MAusIMM,*** is a Senior Consultant (Mining) at SRK China. She has experience in consulting and operation management. After graduating from Colorado School of Mines, she conducted scoping studies, pre-feasibility, feasibility studies, and project valuation in Zijin

mining design company, with projects in China, Serbia, Tajikistan, Australia, Colombia, and Guyana. She then worked at Buritica underground gold mine of Continental Gold in Colombia, and was responsible for life of mine (LoM) plan, production operation, and grade control optimisation. Her expertise includes pit optimisation, mine design, and scheduling in metal mine, and is skilled in using Deswik, Whittle, Surpac, Minesched, and AutoCAD. *Ms Shan Chuang assists Mr Xiao in mining and Ore Reserve assessment and she is the Competent Person who evaluates the Underground Ore Reserves in this Project. She visited the Wassa Project in May 2024.*

Lanliang Niu, ***BEng, MAusIMM, Member of MCAMRA,*** is a Principal Consultant (Processing) with SRK Consulting China Ltd. He has 10 years' experience in processing research and 10 years in plant operation management and 15 years in mining technical consultancy. He has specific expertise in the processing of precious metal, nonferrous metal, ferrous metal, and some non-metallic minerals, as well as processing test, plant design and operation management, and mining project evaluation. He is actively involved with the new development of processing technologies, equipment, and reagents and has received two national awards for his achievements in this area. Since joining SRK, Lanliang has played a pivotal role in in the due diligence and technical evaluation of nearly 200 mining financing or M&A projects within China and internationally. *Mr Lanliang reviews the processing part and he is the Competent Person of gold processing. He visited the Wassa Project in May 2024.*

Xiangfeng (Freda) Yang, ***M.E; MAusIMM, Registered Qualification Certificate of Constructor (Mining Engineering and Mechanical & Electrical Engineering), Registered Qualification Certificate of Cost Engineer (Civil Engineering);*** is a Senior Consultant (Processing) with SRK China. Ms Yang acquired specialized knowledge of non-ferrous and non-metallic ore processing and plant design during her undergraduate studies and graduate education at Wuhan University of Technology. Since graduating in 2010, she has been engaged in feasibility study, preliminary design and construction drawing design while employed with Bluestar Lehigh Engineering Institute Co., Ltd. and Nanchang Mineral Systems Co., Ltd., published several papers and models, and led and participated in the design of many medium and large phosphate ore, potash and sulfide ore processing plants. Ms Yang also has rich experience in processing equipment selection and procurement, processing scheme design and plant configuration. *Ms Freda Yang assists in mineral processing assessment.*

Lawrence Darkwah is a Senior Lecturer in Chemical Engineering at Kwame Nkrumah University of Science and Technology, Kumasi and has vast experience working as an operation metallurgist and a consultant. His expertise in Mineral Processing is in operations, technology development, and implementation for the maximisation of resource recovery. He has been involved with diligent auditing of processing assets cutting across the chemical engineering discipline in Ghana. He has also served as a panellist at a National Policy Summit in Kumasi where his knowledge and experiences in the mineral processing industries were seen in advocating solutions to the small-scale mining canker in Ghana. He has presented technical papers at various meetings and conferences on mining practices and the potential menace from untreated mine water at national and international fora. Lawrence is registered with the Ghana Institution of Engineers (GhIE) (Reg: 08263) since 2015 and holds a BSc. (Hons.) in Metallurgical Engineering, an MSc. in Industrial Biotechnology and a PhD. in Chemical Engineering respectively. *Mr Lawrence Darkwah visited the Project in 2022 and he provided additional support to the metallurgical review.*

Hongchen (Cynthia) Huang*, B.A.,* is a consultant (ESG) at SRK China, possessing 10 years of expertise in marketing, technical translation and project management within the mining industry. Currently she is transitioning her focus towards environmental, social, and governance aspects, actively contributing to environmental and social assessments while playing a key role in supporting SRK's carbon accounting program. Since joining SRK, Cynthia has provided project co-ordination and management, technical translations, and environmental review for a diverse range of projects, including Guizhou Union Coal Project, Hanking Indonesian Nickel Project, Mongolian Sujishan Graphite Project, Australian Greenbushes Lithium Project, Chilean Salar Project, Angola Binga Copper Project, and Zijin Group Tajik Gold Project. *Ms Cynthia Huang assists in environmental and social review. She visited the Wassa Project in May 2024.*

Ekua Semuah Odoom, *BSc (Environmental Science), Msc (Climate Change and Sustainable Development), PhD (Environmental Science).*Ekua Semuah Odoom is an environmental scientist and the Director of Systems Environ-Tech Ltd, an environmental consulting firm based in Accra, Ghana. She has over 7 years expertise in the areas of climate change adaptation and mitigation, natural resource management, environmental assessment and auditing. Ekua has a broad understanding of environmental legislation relevant to development projects, including Ghana EIA process, legislation and standards, and has over the years worked on environmental assessment for the mining, oil and gas, hospitality, healthcare and manufacturing sectors of Ghana. She has undertaken tasks in the domain of Environment Impact Assessment (EIA), Environmental Management Plan (EMP), Annual Environmental Report (AER), and dialogue facilitation among project stakeholders. She also provides advisory services and manages corporate environmental compliance portfolio for companies and industries in Ghana. Ekua is currently in the process of acquiring certification and membership with IEMA for practitioner level in Environmental Management. *Mr Ekua Semuah Odoom visited the Wassa Project in 2022 and he assisted in environmental and social review.*

Alexander (Alex) Thin, *BEng, FAusIMM(CP), FIMMM, FSAIMMA,* Principal Consultant (Mining) at SRK China, he is an experienced mining professional with over 30 years' experience. His strategy and leadership experience spans feasibility studies, mineral asset audits and evaluations, independent technical reports, techno-economic studies, capital raising, merger and acquisitions, managing joint ventures, local and international stock exchange compliance, business development and investor/ stakeholder relations. Alex's industry experience spans operational (underground and open pit), technical consulting and corporate within the metalliferous resources sector, covering precious metals, base metals and bulk commodities. *Mr. Alex Thin peer reviewed the Report and he supervised the mining and Ore Reserve reviewing.*

1.5 Site Visit

Four site visits were carried out by SRK with assistance from Golden Star personnel during preparation of the Report.

- December 7 to 10, 2022, by geologist, geotechnical engineer, processing engineer and environment scientist;
- January 10 to 14, 2023, by mining engineer and underground geotechnical engineer;
- February 11 to 16, 2024, by geologist; and

- May 27 to 29, 2024, by geologist, mining engineer, processing engineer and environmental consultant.

1.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Golden Star and its holding company - Chifeng Jilong Gold Mining Co., Ltd. (Chifeng Gold) for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

1.7 Declaration

SRK's opinion, contained herein and effective as of **31 March 2024**, is based on information collected by SRK throughout the course of its investigations. The information in turn reflects various technical and economic conditions at the time of writing this Report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable after date of this Report.

This Report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Golden Star or Chifeng Gold, and neither SRK nor any affiliate has acted as advisor to Golden Star, its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

2 Reliance on Other Experts

SRK trusts the information from Golden Star regarding mine ownership, legal and financial liability. SRK did not carry out independent verification of the information regarding licenses and permits of the Project as summarized in Section 3 of this Report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties but has relied on the Client. SRK was informed by Golden Star that there are no known litigations potentially affecting the Project.

Golden Star provided the digital database used for geological modelling. SRK verified this database and removed repeated samples. It is SRK's opinion that the database used for the Mineral Resource estimation has been validated and was collected and built in a professional manner.

The topography used in estimating the Mineral Resource statement in this report relies on the topographic survey map from the geological report prepared by local geological brigade. SRK trusts the results of this survey.

3 Operational Licenses and Permits

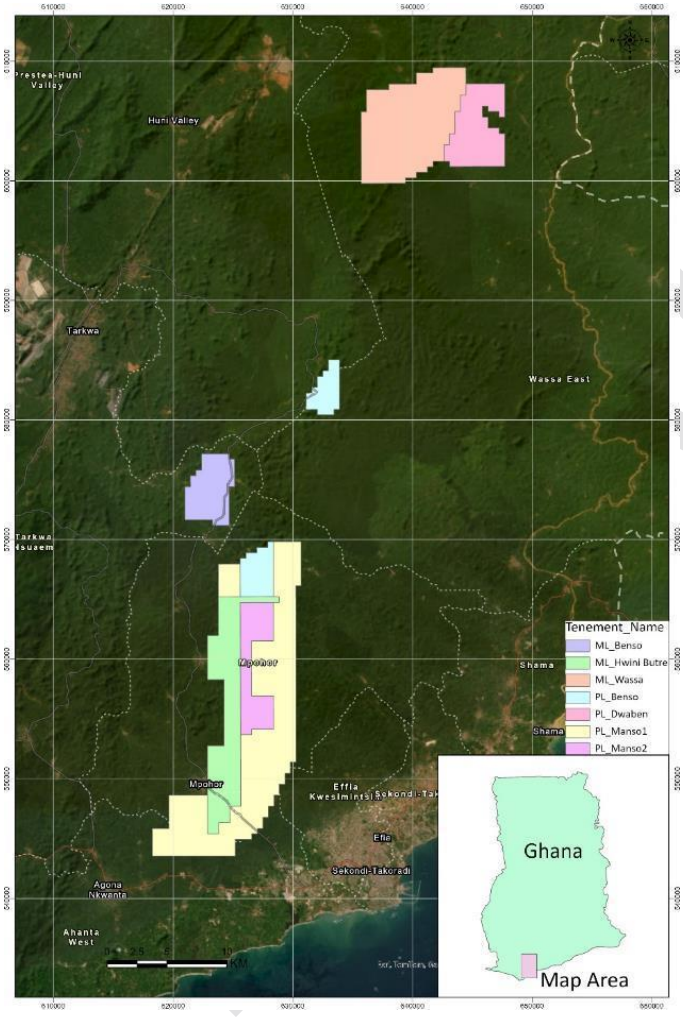
The Wassa mine is located near the village of Akyempim in the Wassa East District, in the Western Region of Ghana. It is located about 80 kilometers (km) north of Cape Coast and about 150 km west of Accra, the capital city of Ghana. The property is situated between latitudes 5°25' and 5°30' north, and between longitudes 1°42' and 1°46' east. The location of the Wassa mine is shown in Figure 3-1.

Figure 3-1: Location of Wassa Mine

Source:SRK.

The Wassa mine is operated under the Wassa mining lease which was issued on 17 September 1992. The total surface area of the Wassa Mining Lease is 63 km^2.In addition to the Wassa mining lease, GSWL holds the Hwini Butre and Benso mining leases, and several prospecting licences in the Western Region of Ghana. GSWL's mineral properties are shown in Figure 3-2.

Figure 3-2: GSWL's Mineral Properties Location in Ghana



Source: GSR.

The mineral concessions belonging to GSWL are listed below.

- Wassa mining lease: The Wassa Mine is an operating gold mine comprising principally underground operations with following mineralisation domains: F Shoot, 419, B Shoot, 242, Starter, South-East, Mid-East and Dead Man's Hill.
- Benso mining lease: comprising the Subriso East, Subriso West, G-Zone, C-Zone and I-Zone deposits.

- Hwini Butre mining lease: comprising the Father Brown, Adoikrom and Dabokrom deposits.
- Benso (Chichiwelli) exploration property: comprising two mineralised zones, Chichiwelli West and Chichiwelli East.
- Manso exploration property: located east of the Benso and Hwini Butre Concessions.

The properties and leases are spread along a trend of approximately 80 km southwest of the Wassa mine. There are sufficient access and surface rights for GSWL's operations. This section summarises related operational licences and permits. SRK relied on the information provided by the Company, and SRK understands that a legal due diligence review of this Project has been undertaken by the Company's legal advisors.

3.1 Mineral Tenure

Table 3-1 sets out the mineral rights held by GSWL (or those in which GSWL has an interest). GSR will from time to time seek a title opinion from its legal counsel in Ghana to confirm its title in its material mineral properties, and the good standing of the underlying mineral rights. SRK viewed the copies of the mining licenses and prospecting licenses of Wassa project, while the licensing information in relation to the project needs to be further relied on legal due diligence opinions. The summary of the mineral tenure information is as below:

Table 3-1: Mineral Tenure Information

License Type	Lease/Permit Name	Current Lease No.	Current Grant Date	Current Expiry Date	Current Status	Area (km^2)
Mining Lease	WASSA ML	LVDGAST35364682022	26-Jan-2022	25-Jan-2047	Active	63.00
	HWINI-BUTRE ML	LVDGAST37993462020	25-Aug-2020	24-Aug-2031	Active	43.00
	BENSO ML	LVDGAST38000372020	25-Aug-2020	24-Aug-2031	Active	19.45
Prospecting License	BENSO PL	LVB 9113/1994 & PL 2/155	30-Dec-2020	Pending Renewal	Awaiting Minister's Approval	24.81
	MANSO 1 PL	LVB 5528/2005 & PL 2/378	3-Apr-2022	3-Mar-2025	Active	101.57
	DWABEN (SAFRIC) RL	LVB1624/2006 & RL2/117	12-Mar-2020	Pending Renewal	Awaiting Minister's Approval	26.92
	MANSO 2 PL	LVB 8461/2003 & PL 2/337	5-Apr-2022	3-May-2025	Active	23.41

Source: GSR

Notes: The Benso PL and Dwaben RL are awaiting for the approval of Minister of Lands and Natural Resources

The Wassa Mine sits within the Wassa mining lease which comprises an area of 63.00 km^2 lying to the north and south of latitudes 5°25'30" and 5°30'45", respectively and bounded to the east and west by longitudes 1°41'45" and 1°46'30", respectively.

The Wassa mining lease was entered between the Government of Ghana and Satellite Goldfields Limited (SGL) on 17 September 1992 for a term of 30 years, renewable. In 2002, the mining lease was assigned by SGL to GSWL with the written consent of the Government of Ghana. GSWL is the

registered legal and beneficial holder of the Wassa mining lease. The Government of Ghana holds 10% of GSWL share capital.

3.2 Underlying Agreements

GSWL pays to the Government of Ghana within thirty days from the end of each quarter a royalty at a rate of 5% determined based on the total revenue of minerals produced during the quarter. This royalty is payable prior to any adjustments from the Royal Gold stream (see below). Royalties are paid through the Commissioner of Internal Revenue.

Payment of annual ground rent is made to the owner of the land except in the case of annual ground rent in respect of mineral rights over stool lands, which are paid to the Office of the Administrator of Stool Lands. A holder of a mineral right must also pay to the Minerals Commission an annual mineral right fee determined based on the type of tenure. GSWL pays annual ground rate and annual fees in relation to all the mineral rights it holds.

GSR is party to a gold purchase and sale agreement with Royal Gold, Inc. through its wholly owned subsidiary RGLD Gold AG (RGLD). The agreement was initiated on 6 May 2015, amended on 29 June 2018, 17 October 2019 and most recently 30 September 2020 before Chifeng Gold's takeover. The stream covers all gold produced within GSWL's mineral concessions and requires GSR to deliver according to two tiers:

- Tier 1: 10.5% of all production to RGLD at a cash purchase price of 20% of spot gold until 240,000 ounces have been delivered; and
- Tier 2: thereafter, to deliver 5.5% of all production to RGLD at a cash purchase price of 30% of spot gold.

Pursuant to the terms of the gold sale and purchase agreement, GSR is restricted from granting encumbrances on the Wassa gold project without RGLD's consent. In 2019, GSR entered into a credit facility agreement with Macquarie Bank Limited pursuant to which GSWL's mineral rights were, with the approval of the Minister of Lands and Natural Resources and RGLD, encumbered to secure the repayment of the loan.

SRK is not aware of legacy issues associated with the GSWL site.

3.3 Permits and Authorisation

In addition to the mineral rights specified in Table 3-1, GSWL requires certain permits and licenses to carry out its activities, including:

- Mining operating permit:

The Minerals and Mining (Health, Safety and Technical) Regulations, 2012 (L.I. 2182) prescribe technical and health and safety standards for mining operations and requires a person who is granted a mining lease to, before the commencement of operation of the mine, obtain a mining operating permit from the Inspectorate Division of the Minerals Commission.

- Licence to export, sell or dispose of minerals:

The exportation, sale or disposal of minerals requires a licence from the Minister for Lands and Natural Resources. Pursuant to section 46 of the Minerals and Mining Act., a mining lease authorises the holder to, inter alia, "take and remove from the land the specified minerals and to dispose of them in accordance with the holder's approved marketing plan." Under the Minerals and Mining (General) Regulations, 2012 (L.I. 2173), an application by a holder of a mining lease for a licence to export, sell or dispose of gold or other precious minerals produced by the holder must be accompanied by a refining contract and a sales and marketing agreement.

- Operating licence and permit for the acquisition, use, transportation and storage of explosives:

Under Regulation 23 of the Minerals and Mining (Explosives) Regulations, 2012 (L.I. 2177), the construction of a building or other structure to be used as a magazine for the storage of explosives is subject to an operating license delivered by the Minerals Commission. As required under Regulation 32 of L.I. 2177, the storage of explosives in a magazine is also subject to a permit from the Minerals Commission; the latter is valid for one year and is renewable upon application. Under L.I. 2177, an operating licence is required for the purchase and use or transportation of explosives. There are separate operating licences for the purchase and use of explosives and for transportation. Each is valid for a period of one calendar year and is renewable on application made one month before the end of each year. Additionally, a permit is required for each occasion on which explosives are being transported in respect of which the specific type and quantity of explosives must be indicated.

- Licence to use water resources:

The use of water resources is regulated by the Water Resources Commission Act, 1996 (Act 522) and the Water Use Regulations, 2001. Act 522 provides that no person shall (a) divert, dam, store, abstract or use water resources; or (b) construct or maintain any works for the use of water resources except in accordance with the provisions of the Act. Subject to obtaining the requisite approvals or licences, a holder of a mineral right may, for purposes of or ancillary to the mineral operations, obtain, divert, impound, convey and use water from a river, stream, underground reservoir or watercourse within the land the subject of the mineral right.

- Fire permit:

The Fire Precaution (Premises) Regulations, 2003 requires that a fire certificate be issued by the Chief Fire Officer in respect of premises used as a place of work or for a purpose which involves access to the premises by members of the public, whether on payment or not. The certificate is valid for 12 months and is renewable.

GSWL conducts its operations in accordance with applicable laws and regulations in Ghana and is in compliance with its permitting obligations in relation to its activities. With regards to environmental matters, GSWL has undertaken environmental impact assessment studies on its concessions to support the permitting of its mining projects and has considerable background data to support required environmental permitting processes.

3.4 Environmental Considerations

The Environmental Assessment Regulations, 1999 (L.I. 1652) require that all developmental activities likely to impact adversely on the environment be subject to environmental assessments.

Pursuant to these regulations, an undertaking which in the opinion of the Environmental Protection Agency (EPA) has or is likely to have an adverse effect on the environment cannot commence unless the undertaking has been registered and an environmental permit has been issued by the EPA. The Minerals and Mining Act requires that all necessary approvals and permits required to be obtained from the Forestry Commission and the EPA for the protection of natural resources, public health and the environment.

The major environmental permits in place for the Wassa mine are:

- Wassa operations (EPA/EIA/112) and expansions (EPA/EIA/322) including South Akyempim pits (EPA/EIA/190);
- Hwini Butre and Benso operations (EPA/EIA/175) and expansion (EPA/EIA/247);
- Wassa tailings storage facility ("TSF") 2 (EPA/EIA/383) and renewal (EPA/EIA/442); and
- Wassa Expansion project, including Wassa underground, Main pits and waste dump expansion (EPA/EIA/508).

3.5 Mining Rights in Western Region of Ghana

There are a number of mining licenses granted for companies operating in Ghana.

The Constitution of Ghana vests title in every mineral in its natural state to the Government of Ghana. The exercise of any mineral right in Ghana requires an appropriate mineral title to be issued by the Government of Ghana acting through the Minister responsible for Lands and Natural Resources. The Minister of Lands and Natural Resources administers, promotes and regulates Ghana's mineral wealth through the Minerals Commission, a governmental organization designed in accordance with the Minerals Commission Act 1993 and the Minerals and Mining Act, 2006 Act 703 (Minerals and Mining Act).

A person must apply to the Minerals Commission and be granted a mineral right by the Minister of Lands and Natural Resources before they can search, survey, prospect, explore or mine for a mineral anywhere in Ghana. There are different types of licenses (namely, reconnaissance and prospecting licenses, and mining leases) for the different mining activities. Each type of licence details the activities that are permitted.

The Government of Ghana holds a 10% free-carried interest in all companies holding mining leases. The 10% free-carried interest entitles the Government to a pro-rata share of future dividends. The Government has no obligation to contribute development capital or operating expenses.

4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

4.1 Accessibility

The Wassa Mine is located near the village of Akyempim in the Wassa East District in the Western Region of Ghana. It is 62 km north of the district capital, Daboase, and 40 km east of Bogoso. It is located 80 km north of Cape Coast and 150 km west of the capital Accra. The main access to the site is from the east, via the Cape Coast to Twifo-Praso road, then over the combined road-rail bridge on the Pra River. There is also an access road from Takoradi in the south via Mpohor.

4.2 Local Resources and Infrastructure

There are four other mines in the vicinity of Tarkwa; namely, Ghana Manganese Company – Nsuta Mine, Anglo Gold Ashanti Iduapriem Gold Mine and Goldfields Ghana Limited - Damang and Tarkwa mines.

The Wassa Mine itself is located in the Wassa Mining Lease within the Subri-Akyempim Concession, which covers an area of 63 km^2.

Wassa Mine is currently an operating open pit and underground mining complex yielding approximately 480kt of total material (ore and waste) per month, and the required services, infrastructure, and community support are already in place. The following are relevant to the assessment of resources and infrastructure:

- Access to the project is via the public road network that extends on to the site;
- Electricity and water are available;
- Surface infrastructure in the area consists of a variety of government, municipal, and other roads with good overall access;
- Processing will be carried out at the existing GSWL processing plant;
- Tailings will be stored in the existing GSWL TSF and the new TSF approved in April 2013;
- Waste rock generated at the site will be placed in existing waste dumps, adjacent to the Wassa open pit; and
- The extensive history of mining in Ghana provides opportunities to obtain skilled underground mine workers.

4.3 Climate

The climate in the project area is classified as wet semi-equatorial. The Inter Tropical Convergence Zone ("ITCZ") crosses the area twice a year, resulting in a bi-modal rainfall pattern, with peaks in March to July and September to October. During the dry season months of November to February, the climate is heavily influenced by the dry, dust-laden, northwest trade wind, known locally as the Harmattan, which blows from the Sahara Desert.

Analysis of available rainfall data, obtained from the Ateiku Meteorological survey (1944 to 2009) indicates that the average annual rainfall is 1,996 ± 293 millimetres ("mm"). The wettest month of the year is generally June, with an average rainfall of about 241 ± 85 mm, whilst January is the driest month of the year with an average rainfall of about 31 ± 35 mm. The wettest month on record was June 2009, when 475 mm of precipitation was recorded. Rainfall is mainly influenced by south-west monsoon winds, which blow from the south-western part of the country towards the north-east.

Using data from the GSWL weather station, the average annual rainfall has been estimated at about 1,750 mm. A drier period, which is influenced predominantly by a sweep of the North-east traded winds, is experienced between the month of November and February.

Annual potential evapotranspiration is estimated to be approximately 1,337 millimetres per year ("mm/yr"), indicating a minimum precipitation excess of 288 mm/yr. Rainfall exceeds potential evapotranspiration from March to July and September to October, and groundwater recharge is most likely to be prevalent during these periods. Relative humidity is fairly constant throughout the year, ranging from 88% to 90%.

Under such climatic conditions surface mining operations can continue year-round with short breaks during storms, most of which are short-term and may be experienced throughout most of the year. Underground mining operations will not be directly affected by storms as long as effective storm water management infrastructure is in place at surface to divert runoff from mine's accesses.

4.4 Physiography

The project area is characterised by gently rolling hills with elevations up to 1,100 mRL, incised by an extensive drainage network. The natural vegetation is an ecotone of the moist, semi-deciduous forest and wet rainforest zones. It has been degraded due to anthropogenic activities, giving way to broken forest, thickets of secondary forest, forb re-growth, swamps in the bottom of valleys, and cleared areas.

Extensive subsistence farming occurs throughout the area, with plantain, cassava, pineapple, maize, and cocoyam being the principal crops. Some small-scale cultivation of commercial crops is also carried out, with cocoa, teak, coconut and oil palm the most common. Forest patches are present on the steep slopes and in areas unsuitable for agriculture.

Environmental assessments carried out in the project area over the last two decades (SGS 1996 and 1998, WGL 2004, GSR 2015, Geosystems 2013, and Golder 2016) indicate that the biodiversity of the Wassa operational area is of low ecological significance and conservation status.

5 History

5.1 Wassa

5.1.1 Historical Mining

The Wassa area has experienced local small-scale and colonial mining activity since the beginning of the 20th century with numerous small open pits and adits evident.

From 1988, the property was operated as a small-scale mining operation with a gravity gold recovery circuit by WMRL, a Ghanaian company.

5.1.2 Satellite Goldfields Limited (1993-2002)

In 1993 WMRL formed SGL with the Irish companies Glencar Exploration Ltd. and Moydow Ltd., assigning the Wassa mining lease to SGL.

Extensive satellite imagery and geophysical interpretations were carried out which identified a strong gold target. Exploration drilling commenced in February 1994 and by March 1997, 58,709 m of drilling had been completed. Construction of the Wassa Mine was initiated in September 1998, after Glencar secured a US$42.5 M debt-financing package from a consortium of banks and institutions.

The operation was originally developed as an open pit mine with heap leach treatment of 3.0 Mtpa and planned production of 100,000 oz/yr. First ore was mined from the open pit in October 1998.

During the first year of production, planned gold recovery of 85% from oxide ore in the heap leach was not achieved due to high clay content of the ore and poor solution management. Attempts were made to increase recovery, including doubling the leach solution application rate but recoveries for the oxide ores above 55-60% could not be achieved.

The low gold recovery resulted in debt servicing issues and Wassa was marketed for sale. GSR started negotiations to purchase Wassa in mid-2000. As part of due diligence, GSR initiated a drilling program in March 2001 to test their geological model and extensions to some of the high-grade orebodies.

SGL was placed into receivership in November 2001 and in April 2002, GSR concluded that the mineable reserve at Wassa was 30% below the 648,000 oz stated by SGL. Negotiation continued until September 2002 when the agreement for GSR to purchase the 90% share of Wassa was announced.

5.2 Hwini Butre, Benso and Chichiwelli

5.2.1 Historical Mining

Early European reports indicate the Dabokrom area, around Hwini Butre, may have been a major source for gold sold to Portuguese explorers when they first arrived in Ghana in the late 1400's.

European interest grew in the 1800's with the presence of gold and proximity to Sekondi-Takoradi, which had developed as a port to service mines at Tarkwa, Prestea and Obuasi. Many exploration licences were granted during the gold boom of 1898-1902 and by the 1930's most of the area was under license to various local and European interests.

At Dabokrom, a shaft was sunk by Oceania Consolidated in the 1930's to follow the shallow dipping quartz veins. The property was worked for several years but stopped in 1939 at the start of World War 2.

At Chichiwelli, a shaft was sunk in 1918 following a quartz vein at the very north end of the Benso concession, close to the Subri River Forest Reserve. Mining progressed to the 260 ft level but was abandoned in 1924 after the mine was flooded.

The whole area has many historic workings which evidence mining activity, mostly from the 1930's.

5.2.2 Modern Exploration (1980's-2005)

The Dabokrom concession was acquired by BD Goldfields (BDG) during the 1980's who invited Danish company Lutz Resources Limited to carry out preliminary exploration on the property. The property transferred to Hwini Butre Minerals (HBM) in the early 1990's, which was controlled by Lutz.

HBM entered a joint venture with Placer-Outukumpu who drilled several holes around Dabokrom in 1993 to assess potential of the vein systems. They concluded that potential was limited by widely spaced veins and little gold in the diorite host rock. Saint Jude Resources (SJR) acquired Dabokrom in 1994 and explored the area until 2002 when work was suspended due to a legal dispute between SJR, BDG and the Government of Ghana. The matter was resolved in 2005 before acquisition of the project by GSR.

SJR began exploring the concession in February 1995 which represented the first sustained exploration program on the concession. SJR undertook ground geophysical surveys which included magnetic, radiometric and induced polarization surveys; soil geochemical surveys were also completed on the concession area, resulting in the identification of numerous targets. Trenching and pitting were conducted in areas of geophysical and geochemical anomalies and over historical prospects or old workings in an attempt to outline near surface mineralisation. Subsequent drilling of the surface targets resulted in the delineation of the Adoikrom, Father Brown and Dabokrom prospects along a combined strike length of 900 m. Further exploration conducted in 2005 identified the Adoikrom North prospect. A total of some 22,100 m over 267 drill holes were completed on the main mineralised zones and the exploration targets.

Reconnaissance work at Chichiwelli, Subriso, Denerawah and Amantin was conducted by BHP Billiton from 1989-92, on what is now the Benso concession. This identified soil geochemical anomalies and follow-up drilling was completed at Chichiwelli but results did not meet targeting criteria and the concessions were relinquished. Tenure was then acquired by a local company, Architect Co-Partners, with a 150 km^2 prospecting concession which covered Amantin, Subriso and Chichiwelli, as well as a large part of the Subriso River Forest Reserve that was closed to exploration from 1996.

Canadian company Fairstar Exploration Ltd. ("Fairstar") took over the Benso concession in 1995 and carried out extensive work, particularly at Subriso and Amantin, where considerable drilling was

completed, but ceased by the end of the decade due to funding constraints. An agreement was reached in 2001 for SJR to take over the exploration work.

In 2001, SJR completed an agreement with Fairstar and took over the exploration work. From early 2002 to about mid-2004, SJR focused mainly on the Subriso area where substantial mineralisation was outlined at two prospects, Subriso East and West. Numerous other prospects, namely Subriso Central, I Zone and G Zone were identified, and drill tested, as was the Amantin area, which had also been drilled to a considerable extent by Fairstar.

5.3 Production History, Previously Declared Resources and Reserves

Since acquiring Wassa in 2003 GSR has produced 2.4 million ounces of gold and the mine has a remaining life of five years (2024 to 2028) as defined by the current Ore Reserve.

Milestones at Wassa under GSR management are:

- 2003: definition drilling ahead of feasibility study for a carbon-in-leach (CIL) plant.
- 2004: feasibility study completed, and construction commences on CIL plant with open pit mining.
- 2005: CIL plant commissioned.
- 2006: acquired St Jude Resources (Hwini Butre and Benso concessions). Connected to grid power.
- 2007: commenced open pit mining at South Akyempim. Construction of haul road to Hwini Butre.
- 2008: commenced open pit mining at Benso, processing at Wassa.
- 2009: commenced open pit mining at Hwini Butre and drilling to test underground potential.
- 2011: Hwini Butre mining moves from Adoikrom to Father Brown open pit.
- 2012: commenced drilling to test underground potential below Wassa.
- 2013: upgraded plant to 2.7 Mtpa capacity with fresh ore, consolidated mining at Wassa Main open pit.
- 2014: released positive Preliminary Economic Assessment for Wassa Underground and completed Hwini Butre mining at Father Brown.
- 2015: completed positive Feasibility Study for Wassa UG and commenced development, along with starting construction of TSF 2.
- 2016: mined first stope ore from Wassa UG in July and definition drilling continued to define wide zones of mineralisation in B Shoot.
- 2017: commercial production declared at Wassa UG and deep definition drilling program defines what was later to become the Southern Extension zone. UG averages 1,865 ore t/d.
- 2018: open pit mining of Main pit completed and UG ore mining rate increases to 2,945 t/d. Wassa UG Inferred Mineral Resource reported growth to 5.2 Moz with addition of Southern Extension zone.
- 2019: completed positive Feasibility Study for paste backfill commenced development. UG ore mining rate increased to 3,895 t/d (1.4 Mtpa).

- 2020: completed construction of paste backfill plant and on-site gas-fired power generation. UG ore mining rate increased to 4,480 t/d (1.6 Mtpa).
- 2023: commenced construction of B Shoot South and 242 decline

Production peaked in 2013 at 187 koz gold with the plant operating at full capacity and high-grade ore being mined from the Father Brown open pit at Hwini Butre. From 2014, open pit ore was sourced solely from the Wassa Main pit until its completion in 2017. Lower grades resulted in gold production of around 100 koz/yr.

Mining transitioned to underground from 2016, with commercial production realized in 2017 and the underground becoming the main production source by 2018. Since 2018, underground production has steadily increased to maintain and exceed 150 koz/yr, with the addition of minor amounts of low-grade ore from open pit stockpiles.

6 Geological Setting and Mineralisation

6.1 Regional Geology

The regional geological setting of the Ashanti belt has been extensively described by several authors.

The Ashanti greenstone belt in the Western Region of Ghana is composed primarily of paleoproterozoic metavolcanic and metasedimentary rocks that are divided into the Birimian Supergroup (Sefwi and Kumasi Groups) and the Tarkwa Group. Both units are intruded by abundant granitoids (Figure 6-1) and host numerous hydrothermal gold deposits such as the Wassa, Obuasi, Bogoso and Prestea mines and paleoplacer deposits such as the Tarkwa and Teberebie Mines, Perrouty et al, (2012).

Allibone et al. (2002) separated the Paleoproterozoic Eburnean orogeny into two distinct phases known as Eburnean I and II, this classification was revised by Perrouty et al. in 2012 and proposed two distinct orogenic events, the Eoeburnean orogeny and the Eburnean orogeny. The Eoeburnean orogeny predates the deposition of Tarkwaian sediments and is associated with a major period of magmatism and metamorphism in the Sefwi Group basement. The Eburnean event is associated with significant post-Tarkwaian deformation that affected both the Birimian Supergroup and overlying Tarkwaian sediments. The Eburnean orogeny is associated with major northwest to southeast shortening that developed major thrust faults, including the Ashanti Fault along with isoclinal folds in Birimian metasediments and regional scale open folds in the Tarkwaian sediments. These features are overprinted by phases of sinistral and dextral deformational events that reactivated the existing thrust faults and resulted in shear zones with strong shear fabrics.

The Birimian series was first described by Kitson (1918) based on outcrops located in the Birim River (around 80 km east of the Ashanti Belt). Since this early interpretation, the Birimian stratigraphic column has been revised significantly. Before the application of geochronology, the Birimian super group was divided in an Upper Birimian group composed mainly of metavolcanics and a Lower Birimian group corresponding to metasedimentary basins. Subsequent authors have proposed synchronous deposition of Birimian metavolcanics. Most recently, Sm/Nd and U/Pb analyses have reversed the earlier stratigraphic interpretation with the younger metasediments overlying the older metavolcanics. Proposed ages for the metavolcanics vary between 2,162 ± 6 Ma and 2,266 ± 2 Ma. Detrital zircons in the metasediments indicate the initiation of their deposition between 2,142 ± 24 Ma 2,154 ± 2 Ma. The Kumasi Group was intruded by the late sedimentary Suhuma granodiorite at 2,136 ± 19 Ma (U/Pb on zircon, Adadey et al., 2009).

The Tarkwa super group was first recognised by Kitson (1928) and consists of a succession of clastic sedimentary units, which have been divided in four groups by Whitelaw (1929) and Junner (1940). The Kawere Group located at the base of the Tarkwaian super group is composed of conglomerates and sandstones with a thickness varying between 250 m and 700 m. The unit is stratigraphically overlain by the Banket Formation, which is characterized by sequences of conglomerates interbedded with cross-bedded sandstone layers, the maximum thickness of this group being 400 m. The conglomerates are principally composed of Birimian quartz pebbles (>90%) and volcanic clasts (Hirdes and Nunoo, 1994) that host the Tarkwa Placer deposits. The Banket formation is overlain by approximately 400 m of Tarkwa Phyllites.

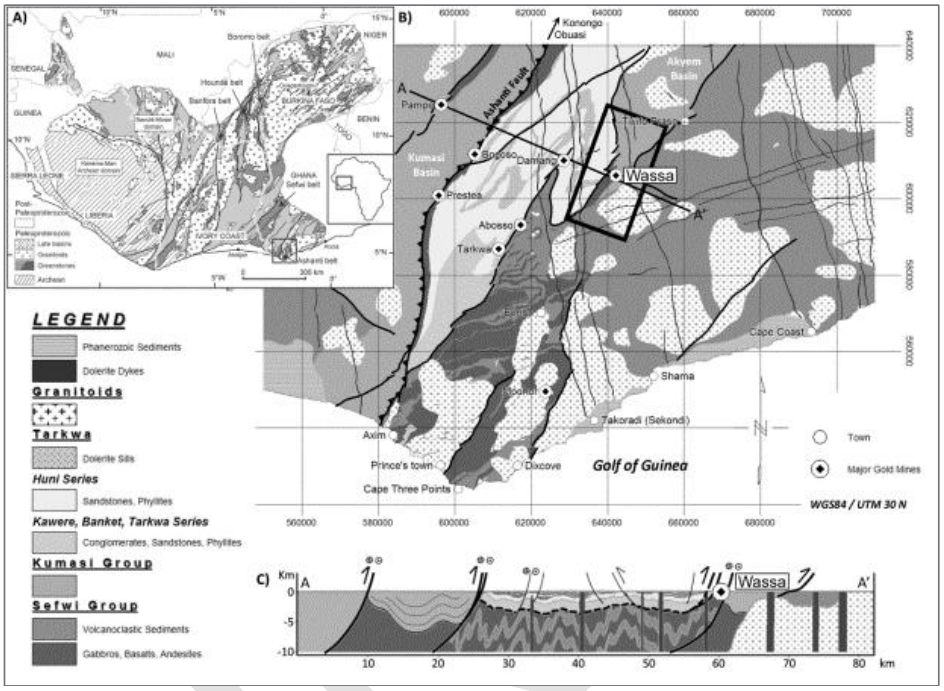
The uppermost unit of the Tarkwa super group is the Huni Sandstone, comprised of alternating beds of quartzite and phyllite intruded by minor dolerite sills that form a package up to 1,300 m thick (Pigois et al., 2003). U/Pb and Pb/Pb geochronology dating of detrital zircons provide a maximum depositional age of 2,132 ± 2.8 Ma for the Kawere formation and 2,133 ± 3.4 Ma for the Banket formation (Davis et al., 1994; Hirdes and Nunoo, 1994). These ages agree with the study by Pigois et al. (2003) that yielded maximum depositional age of 2,133 ± 4 Ma from 71 concordant zircons of the Banket formation. According to all concordant zircon histograms (161 grains) and their uncertainties, a reasonable estimation for the start of the Tarkwaian sedimentation could be as young as 2,107 Ma.

Abundant granites and granitoids intruded the Birimian and Tarkwaian units during the Paleoproterozoic. Eburnean plutonism in southwest Ghana can be divided into two phases between 2,180 to 2,150 Ma (Eoeburnean) and 2,130 to 2,070 Ma (Eburnean) that is supported by the current database of U/Pb and Pb/Pb zircon ages. Most of the granitoids which intruded during both phases correspond to typical Tonalite–Trondhjemite–Granodiorite ("TTG") suites. However, in the southern part of the Ashanti Belt, intrusions within the Mpohor complex have granodioritic, dioritic and gabbroic compositions.

Dolerite dykes oriented north-south and East northeast to West southwest that are generally less than 100 m in thickness are abundant across the West African craton where they cross-cut Archean and Paleoproterozoic basement. In southwestern Ghana these dykes are well defined in magnetic data where they are characterised by strong magnetic susceptibility. Dolerite dykes are observed to cross-cut undeformed K-feldspar rich granites that formed during the late Eburnean, and are overlain by Volta basin sediments with a maximum depositional age of 950 Ma (Kalsbeek et al., 2008). These relationships constrain dyke emplacement to between 2,000 Ma and 950 Ma. In contrast some older dolerite/gabbro dykes and sills were deformed during the Eburnean orogeny and are dated at 2,102 ± 13 Ma (U/Pb on zircon, Adadey et al., 2009).

With the exception of some late Eburnean granitoids, dolerite dykes and Phanerozoic sediments, all other lithologies have undergone metamorphism that generally does not exceed upper greenschist facies. Studies on amphibole/plagioclase assemblages suggest the peak temperature and pressure was 500 to 650 ◦C and 5 to 6 kbar (John et al., 1999), dated at 2092 ± 3 Ma (Oberthür et al., 1998).

Figure 6-1: Location of the Wassa Mine with the Geology of the Ashanti Belt



Source: Perrouty et al,, 2012.

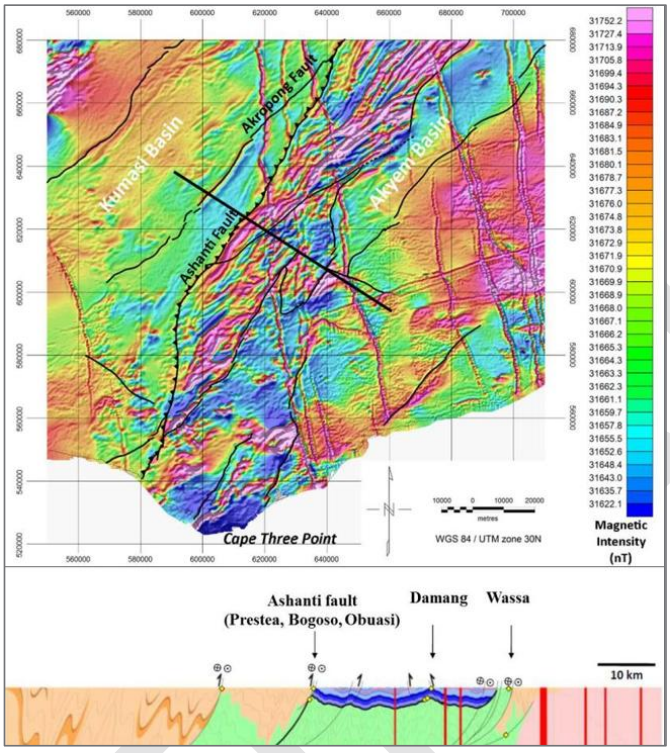
6.2 Property Geology

The Wassa Mine property lies within the southern portion of the Ashanti Greenstone Belt along the eastern margin of the belt within a volcano-sedimentary assemblage located at proximity to the Tarkwaian basin contact. The eastern contact between the Tarkwaian basin and the volcano-sedimentary rocks of the Sefwi group is faulted, but the fault is discrete as opposed to the western contact of the Ashanti belt where the Ashanti fault zone can be several hundred meters wide. Deposition of the Tarkwaian sediments was followed by a period of dilation and the intrusion of late mafic dykes and sills.

The lithologies of the Wassa assemblage are predominantly comprised of mafic to intermediate volcanic flows which are interbedded with minor horizons of volcaniclastics, clastic sediments such as wackes and magnetite rich sedimentary layers, most likely banded iron formations. The volcano-sedimentary sequence is intruded by syn-volcanic mafic intrusives and felsic porphyries.

The magnetic signature of the Ashanti belt is relatively high in comparison to the surrounding Birimian sedimentary basins such as the Kumasi basin to the west of the Ashanti belt and the Akyem Basin to the East as illustrated in Figure 6-2.

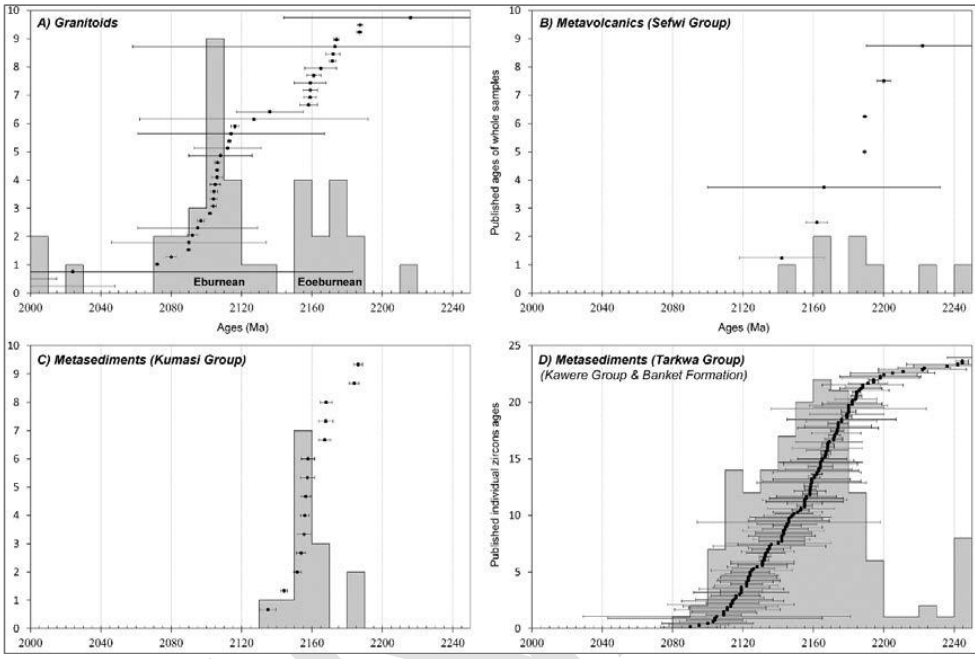
Figure 6-2: Total Magnetic Intensity Reduced to Pole of the Ashanti Belt



Source: Modified form Perrouty et al., 2012.

Rock assemblages from the southern area of the Ashanti belt were formed between a period spanning from 2,080 to 2,240 Ma as illustrated in Figure 6-3 with the Sefwi Group being the oldest rock package and the Tarkwa sediments being the youngest. The Ashanti belt is host to numerous gold occurrences, which are believed to be related to various stages of the Eoeburnean and Eburnean deformational event. Structural evidence and relationships observed in drill core and pits at Wassa would suggest the mineralisation to be of Eoeburnean timing while other known deposits in the southern portion of the Ashanti belt such as Chichiwelli, Benso and Hwini Butre are considered to be of Eburnean age.

Figure 6-3: Compilation of Geochronology Dating from the Ashanti Belt



Source: Perrouty et al., 2012.

The Eoeburnean deformation is best observed at Wassa where the deformational event has produced a penetrative foliation with an associated lineation which is defined by mineral alignments. A period of extension occurred between the Eoeburnean and Eburnean deformational events which resulted in the formation of the Akyem Basin (Kumasi Group) to the northeast of the Wassa Mine and the Tarkwa group to the west of the Wassa concession. Both metasedimentary sequences of the Takwa and Kumasi group have not been affected by the penetrative foliation observed at Wassa.

The Eburnean deformation is divided in multiple events which vary in number depending on the authors as summarized in Table 6-1. All deposits underlying the Wassa concession have been affected by the Eburnean deformational events, the main penetrative foliation has been affected by at least three Eburnean folding events which have resulted in a large scale refolded synform. The main foliation is sub-vertical and oriented northeast to southwest on the south-eastern flank of the Wassa mine fold whereas it is dipping at around 45° to the south-southeast on the northwest flank of the Wassa mine fold.

Table 6-1: Compilation of Deformational History of the Ashanti Belt

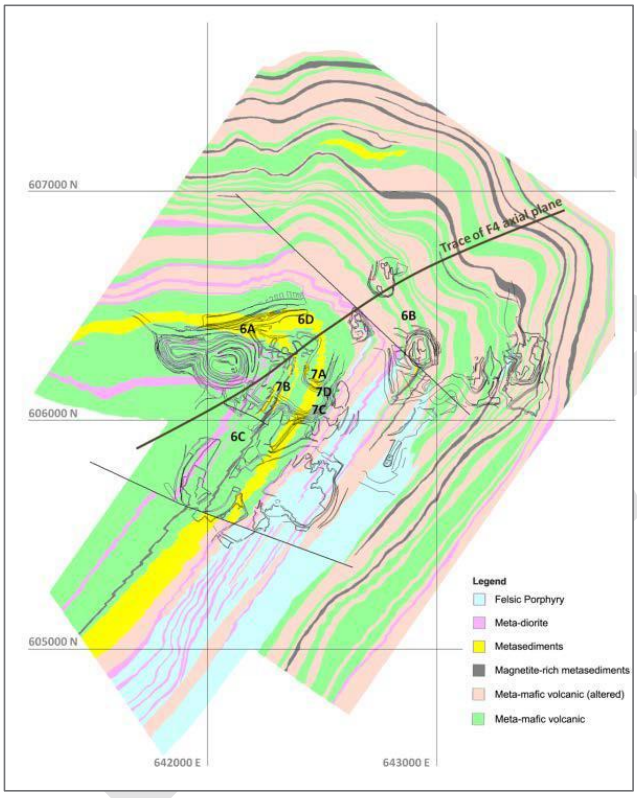
	Regional Interpretation (This Study)	In Birimian *Obusai/Bogoso* (Allibone et al., 2002a, b)	In Tarkwaian *Damang* (Tunks et al., 2004)	Regional (Eisenlhor et al., 1992)	Regional (Feybesse et al., 2006) (Milesi et al., 1992)
Eburnean 1 >2150 Ma	Early Birimian volcanism and sedimenation	Volcanism Granitoids intrusion Regional metamorphism		Birimian sediments and volcanics penecontemporaneous Plutonism (Dixcove type granitoids)	Magmatic accretion Plutonism Birimian sedimentation
	D1, N-S shortening Regional scale folding in the Early Birimian unit Syn-tectonic plutonism before 2170 Ma Possible gold mineralisation			Onset of deformation in a "foreland thrust" and Tarkwaian deposition	
	D2, Extension Phase Late Birimian sedimentation S2 parallel to bedding (S0) in Birimian sediments Tarkwaian basin formation	D1, S1 parallel to bedding Flat-lying bedding parallel shearing			
Eburnean 2 2120-2060 Ma	**D3, NW-SE shortening** Km scale folds in Birimian and Tarkwaian S3 subvertical crenulation cleavage NE-SE Thrust faults (Ashanti, Damang, …) Peak of metamorphism (Low Amphibolite)	D2, NW-SE shortening Isoclinal folds with axial surface parallel to the regional faults and shear zones Ashanti thrust fault	D1, NW-SE shortening Km scale foles (with subvertical axial surface (S1)) Damang thrust fault	D1, NW-SE shortening S1 (NE-SE) subvertical and subparallel to bedding in both Birimian and Tarkwaian Regional folds (light to isoclinal)	D1, NW-SE shortening Thrust faults Tarkwaian sediments depostion (Syn D1) Metamorphism (6 kbar/550-650℃)
		D3 Low dip axial surface fold at Obuasi S3 crenulation cleavage overprinting S2 Final stage of D2?		D2, Continuting Compression S2 (NE-SE) fabrics overprint S1 foliation S2 is defined by aligned muscovite and elongate recrystallised quartz veins Metamorphism Syn-teconic plutonism (Cape-Coast type granitoids)	D2/D3, NW-SE shortening Tarkwaian folds Strike-slip faults and shearing Gold mineralisations Metamorphism (2-3 kbar/200-300℃)
	D4, NNW-SSE shortening Sinistral shear reactivation of D3 thrust S4 crenulation cleavage ENE-WSW Greenschist retrograde metamorphism Remobilization and concentration of gold particle along the shear zones and at the base of Tarkwaian	D4, NNW-SSE shortening Hm scale fold at Obuasi	D2, NNW-SSE shortening Thrust faults and minor folds		
		D5 or syn-D4 Sinistral strike-slip faults and shearing Gold mineralisation			
	D5 Recumbant folds (<m) Subhorizontal crenulation cleavage Last pyrite/gold mineralisation associated with quartz vein		D3, ESE-WNW shortening Folds with shallowly dipping axial surfaces and mineralised quartz veins, post-dating the peak of metamorphism	K-rich plutonism (cross-cutting all previous structures)	Late plutonism
	D6, NE-SW shortening, Panafrican (600 Ma)?? Low amplitude folds + crenulation cleavage ≈ N320 / 70 (RH) Reverse faults oriented NW-SE		D4 Faults oriented NW-SE		

Source: Perrouty et al., 2012.

The Wassa lithological sequence is characterized by lithologies belonging to the Sefwi Group and consisting of intercalated meta-mafic volcanic and meta-diorite dykes with altered meta-mafic volcanic and meta-sediments which are locally characterized as magnetite rich, Banded Iron

Formation ("BIF") like horizons (Bourassa, 2003), as illustrated in Figure 6-4. The sequence is characterized by the presence of multiple ankerite-quartz veins which are sub-parallel to the main penetrative foliation. The lithological sequence is also characterized by Eoeburnean felsic porphyry intrusions on the south-western flank of the Wassa mine fold.

Figure 6-4: Lithology of the Deposit Area



The first deformational event (D1) at Wassa is of Eoeburnean timing and consists of North-South shortening. This pre-Tarkwaian event resulted in a penetrative foliation which transposed lithological contacts along this main foliation. Early, gold bearing, synD1 quartz-ankerite veins were also formed during the Eoeburnean event.

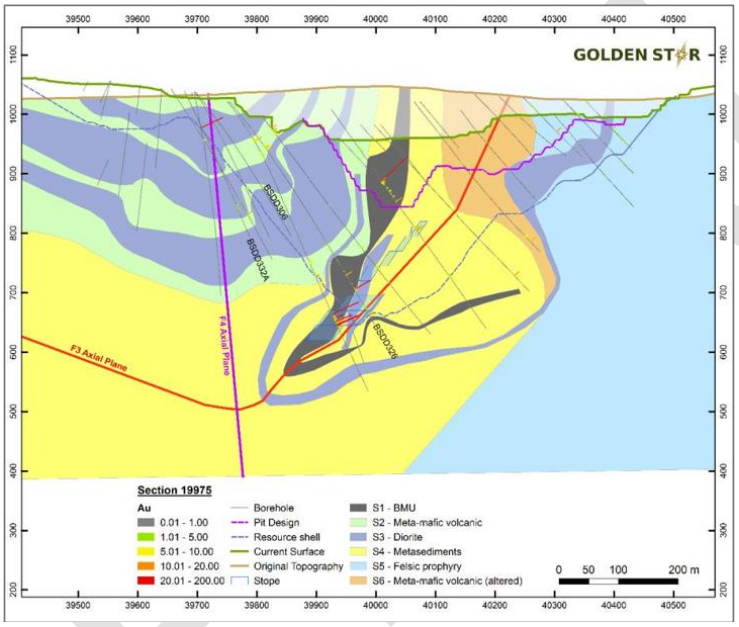
The second event of deformation (D2) is an extension period with no local deformation at the mine scale at Wassa. Regionally, this event separates the Eoeburnean and Eburnean orogeny by an extension period of approximately 40 Ma which resulted in the sedimentation of the Birimian and Tarkwaian basins.

The Eburnean orogeny is divided in three distinct deformational events, D3 is a Northwest-Southeast shortening event which resulted in the inversion of regional detachment faults into thrust faults. At the mine scale, this event generated a second penetrative foliation at Wassa and a first phase of Eburnean folding. The D4 deformational event, a North Northwest-South Southeast shortening event

resulted in the sinistral reactivation of earlier faults at the regional scale and severely buckled the Wassa stratigraphic sequence into moderately steeply dipping, tight fold patterns (F4 Fold) and a third penetrative foliation (S4).The last deformational event, D5, is the result of sub-vertical compression which resulted in open recumbent folds at Wassa and a fourth foliation located in the axial plane of the F5 folds and is generally sub-horizontal, shallowly plunging to the South.

Folded nature of the lithological sequence due to deformation is presented in vertical sections of the Wassa Main deposit (Figure 6-5).

Figure 6-5: Vertical Section 19975N of the Wassa Main Deposit Showing Folded Nature of the Lithological Sequence during the Eburnean D3 and D4 Deformational Events

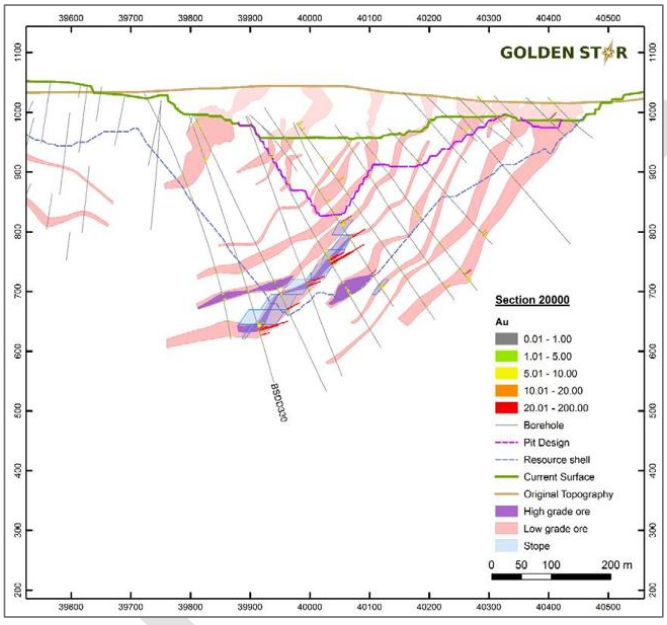


The Wassa mineralisation is subdivided into a number of domains; namely F Shoot, B Shoot, 242, South-East, Starter, 419, Mid-East,and Dead Man's Hill. Each of these domains, except for Dead Man's Hill, represents discontinuous segments of the main mineralised system which extends for approximately 3.5 km along strike and is still open at depth. Dead Man's Hill sits to the north-east of the main trend, proximal to the projected F4 axial fold trace. The SAK deposits are located approximately 2 km to the southwest of the Wassa Main deposit on the northern end of a well-defined mineralised trend parallel to the Wassa Main trend. The mineralisation is hosted in highly altered multi-phased greenstone-hosted quartz-carbonate veins interlaced with sedimentary pelitic units. The SAK mineralisation is subdivided into a number of domains as well, SAK 1, 2 and 3.

Mineralisation within the Wassa Mine is structurally controlled and related to vein densities and sulphide contents. In detail, the mineralisation generally consists of broadly tabular zones containing dismembered and folded ribbon-like bodies of narrow quartz vein material, zones are typically 10 m to 50 m wide within a 900 m mineralised corridor as illustrated in Figure 6-6. Three vein generations have been distinguished on the basis of structural evidence, vein mineralogy, textures and

associated gold grades. Evidence further relates the majority of gold mineralisation to the earliest recognised vein generation which is believed to be syn-Eoeburnean. Gold grades broadly correlate with the presence of quartz-dolomite/ankerite-tourmaline bearing quartz veins and the presence of sulphide minerals (predominantly pyrite) within and around the quartz veins. Gold grades appear to be spatially restricted to the quartz veins, vein selvages and the immediate wall rocks. The alteration haloes developed around the veins and pervasively developed within the core of the Wassa Fold contain lower grade mineralisation. The combined and overprinted Eburnean deformational events (D3 to D5) render precise prediction of the vein geometries and localities difficult in areas remote from drillhole data. While the general peripheries of the mineralised zones can be defined reasonably well with the drillhole data, the internal geometry is difficult to resolve with confidence.

Figure 6-6: Vertical Section 20000N of the Wassa Main Deposit Showing the Tabular Nature of Ore Zones



6.3 Deposit Types

6.3.1 Wassa

The Wassa deposit is located on the eastern flank of the northeast trending Ashanti Belt, a Paleoproterozoic greenstone belt which was formed and deformed, along with the dividing Birimian and Tarkwaian sedimentary basins during the Eoeburnean and Eburnean orogeny. Most deposits found within the Ashanti belt can be classified as lode gold deposits or orogenic mesothermal gold deposits, with the exception of the Tarkwaian paleoplacer deposits which have a sedimentary origin. Orogenic gold deposits are the most common gold systems found within Archean and Paleoproterozoic terrains, in the West African shield, these deposits are typically underlain by

geology considered to be of Eburnean age and are generally hosted by volcano-sedimentary sequences.

B. Dubé and P. Gosselin of the Geological Survey of Canada described these deposits as greenstone-hosted quartz-carbonate vein deposits in the 2007 special publication No. 5 entitled Mineral Deposits of Canada. The authors described these deposits as typically occurring in deformed greenstone belts and distributed along major compressional crustal scale fault zones commonly marking the convergent margins between major lithological boundaries. The greenstone-hosted quartz-carbonate vein deposits correspond to structurally controlled complex deposits characterized by networks of gold-bearing, laminated quartz-carbonate fault-fill veins. These veins are hosted by moderately to steeply dipping, compressional brittle-ductile shear zones and faults with locally associated shallow-dipping extensional veins and hydrothermal breccias. In these deposits, gold is mainly confined to the quartz-carbonate veins but can also occur within iron-rich sulphidized wall rocks or within silicified and sulphide-rich replacement zones.

The Ashanti belt is considered prospective for orogenic mesothermal gold deposits and hosts numerous lode gold deposits and paleoplacer deposits. Several major gold deposits are found within the Ashanti belt which can be classified into six different deposit types:

- Sedimentary hosted shear zones;
- Fault fill quartz veins;
- Paleoplacer;
- Intrusive hosted;
- Late thrust fault quartz veins; and
- Folded veins system.

The sedimentary hosted shear zone deposits are localized principally along a steep to sub-vertical major crustal structures located along the western margin of the Ashanti belt referred to as the Ashanti trend. The Ashanti trend shows a range of mineralisation styles associated with graphitic shear zones, which represents the principal displacement zone of a regional-scale shear zone that defines the mineral belt. These styles include highly deformed graphitic shear zones containing disseminations of arsenopyrite as the principal gold bearing phase and disseminations of sulphides in mafic volcanic rocks generally found in the footwall of the main shear zones. The sedimentary hosted shear zone deposits which occur along the Ashanti trend include Bogoso, Obuasi, Prestea and Nzema.

The second type of deposit found within the Ashanti belt are laminated quartz vein deposits containing free gold. Fault filled quartz vein deposits also occur along the Ashanti trend but are only present at Obuasi and Prestea. The third type of deposit are paleo-placer deposits within the Tarkwaian sedimentary basin which are hosted within narrow conglomerate horizons intercalated with sandstone units characterized by iron oxides cross beddings. Paleoplacer deposits occur in the southern portion of the Tarkwa basin and examples include Tarkwa, Teberebie and Iduaprim. The fourth type of deposit found within the Ashanti belt are intrusive hosted deposits which occur along second order structures such as the Akropong trend in the Kumasi basin and the Manso trend in the Southern portion of the Ashanti belt. These deposits can be hosted both within felsic and mafic intrusives and are characterized by a penetrative fabric where gold is associated with pyrite and

arsenopyrite. Examples of such deposits include Edikan and Pampe along the Akropong trend and Benso and Hwini Butre along the Manso trend. The fifth type of deposit found within the Ashanti belt is late thrust fault associated quartz vein deposits. The Damang mine which is located just west of Wassa is the only known thrust fault related deposit in the Ashanti belt. The deposit is characterized by low angle; undeformed extensional and tensional veins associated with low angle thrust faults. This type of deposit contrasts with the last type of deposit found with the belt, the multi-phase folded Wassa vein deposit. The Wassa mineralisation consists of greenstone-hosted, low sulphide hydrothermal deposits where gold mineralisation occurs within folded quartz-carbonate veins. The Wassa deposit can therefore be classified as an Eoeburnean folded vein system and is the only such deposit recognised to date within the Ashanti belt.

Host rocks in the Wassa mine area have been affected by at least four phases of ductile deformation, producing a polyphase fold pattern at the mine scale. Discrete high-strain zones locally dissect this fold system. The structural history of the Wassa area is important in that the various deformational events have been responsible for the emplacement of the gold mineralisation as well as the geometry of the zones themselves. Mineralised zones at the Wassa Mine are related to vein swarms and associated sulphides that formed during the Eoeburnean deformational event. All rock types underlying the Wassa Mine appear to be altered to variable degrees with the most common alteration consisting of a carbonate-silica-sulphide assemblage.

6.3.2 Hwini Butre

The Hwini Butre deposits can be characterized as mafic intrusive hosted, orogenic shear zones. The deposits are hosted within diorite and granodiorite intrusive rocks of the Mpohor complex. The Father Brown deposit is characterized by well-developed fault-filled quartz veins , whereas the Adoikrom deposit is a shear zone hosted deposit characterized by intense potassium and silica alteration assemblage.

Analysis of geophysical surveys and topographical features have identified several north to north-northeast trending regional features running through the area which are tentatively interpreted as boundary faults along the margins of the Ashanti Belt. The Mpohor complex exhibits the underlying north-south trends but also has extensive cross cutting features present particularly in the north-west orientation. These structural features are second order or subsidiary structures splaying from primary structures.

The Adoikrom, Father Brown and Dabokrom deposits occur in the south portion of the Mpohor complex and appear to be controlled by a series of shallow to moderately dipping faults and shear structures with dips varying from 20° to the south at Dabokrom and steepening to 65° to the northwest at Adoikrom.

6.3.3 Benso

The Benso deposits can also be characterized as mafic intrusive hosted, orogenic shear zones deposits, which are hosted by Birimian metavolcanics into which coarse plagioclase porphyry units have intruded and are generally conformable with the volcaniclastic units.

At Subriso East, the metavolcanics host complex quartz vein systems associated with intense shearing and abundant sulphide mineralisation. At Subriso West, the presence of intermediate

porphyry intrusive appears to play a more significant role and quartz veining is less extensive and broad scale silicification is more common. The contacts between metavolcanics and porphyry have been identified as potential targets for higher grade gold mineralisation.

The mineralisation hosting structures generally dip steeply towards the west with foliation generally parallel to the bedding. The aeromagnetic interpretation reveals a north to north-northeast striking fault system along the course of the Ben River with several other fracture systems also evident with strikes varying between the northwest and northeast. The Subriso East deposit is interpreted to dip less steeply to the west at approximately 50°.

Oxidation associated with weathering is variable but generally limited. The weathering forms a layer of lateritic clay rich material grading into a soft saprolite. The vertical depth is generally 10 m or less but can reach depths of 30 m in places. There is a sharp boundary between oxide and fresh material with a narrow and poorly developed transition zone.

6.3.4 Chichiwelli

The Chichiwelli deposits can also be characterized as mafic intrusive hosted, orogenic shear zones, the deposits are hosted within diorite and granodiorite intrusive rocks. The mineralisation zones at Chichiwelli are similar to those observed at Benso, with the mineralised hosting structures generally dipping to the east.

The Chichiwelli deposit consists of two sub-parallel mineralised trends which hosts two distinct types of mineralisation. Mineralisation at the Chichiwelli West zone is shear zone hosted with a carbonate, sericite and potassic alteration assemblage, while mineralisation along the Chichiwelli East trend is quartz vein associated with an ankerite and sericite alteration assemblage. Mineralisation is spatially associated with pyrite at both deposits.

7 Exploration, Sampling, and Assaying

SRK has not participated in the exploration conducted for Wassa gold project. The information regarding the exploration is derived from the data provided by the client and through discussions with geologists engaged in the fieldwork.

7.1 Exploration

Systematic exploration work has been conducted on the GSWL properties over a couple of centuries as the earliest record of gold business within the Hwini-Butre mining lease dates back to the late 15th century with the Portuguese colonial explorers. Evidence of colonial mining and local small-scale mining still remains with pits and adits mapped within all the mining leases and prospecting licenses. A layout of current GSWL mining leases and prospecting licenses is shown in Figure 7-1.

Airborne and ground geophysical surveys consisting of aero-magnetics, radiometrics and Induced Polarization (IP) were conducted on these properties. Strong gold targets have been prioritised from these satellite imagery and geophysical interpretations followed with geochemical anomalies, which had previously been identified following multiple stream and soil geochemical sampling programs. To date, these various geophysical techniques continue to aid re-ranking of prospective targets within the various landholdings.

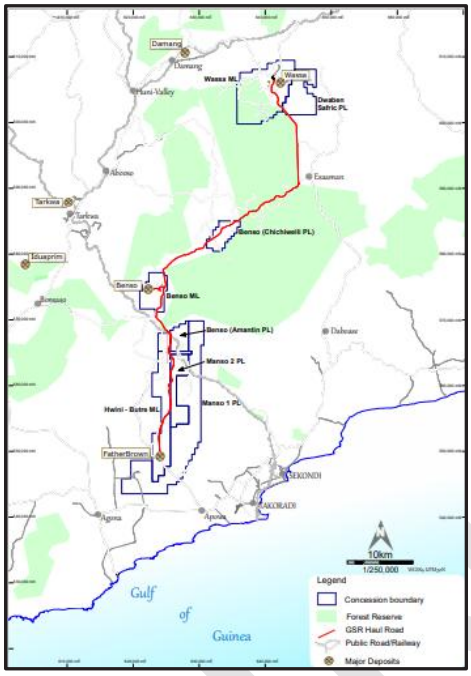
Detailed geochemical surveys over the mining leases and prospecting licenses has been an effective tool in locating mineralisation. Records of various geochemical surveys has been progressively reviewed since 1988 to date, around the mined-out open pits and adits.

GSWL has continued with exploration aimed at re-interpretation of geophysical and geochemical targets. Moreso, testing of surficial and historical anomalies around the mined-out open pits and along strike of known mineralisation zones.

GSWL has refocused exploration to expand the existing resources beyond the current mined out areas by following up on the prioritised and re-ranked geochemical targets along strike of known mineralisation and up/down dip of the mined-out open pits.

Untested greenfield geochemical targets are being reviewed along with surficial and up-dip potential mineralisation of underground operations. Historical brownfields targets like Dead Man Hill have been identified and prepped to contribute oxide ore for processing.

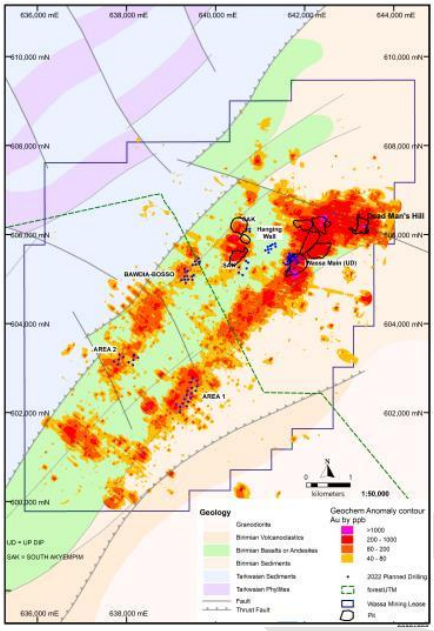
Figure 7-1: Layout of GSWL Mining Leases and Prospecting Licences Linked by Laterite Sheeted Haul Road



7.1.1 Wassa

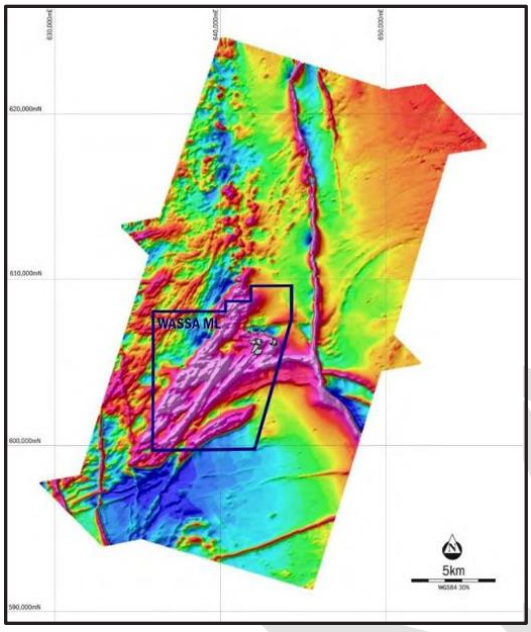
Modern exploration programs on the Wassa concession began in the early 1990s with satellite imagery and geophysical surveys which identified geophysical lineaments and anomalies over small scale and colonial mining areas. Stream and soil geochemistry sampling programs were conducted over the geophysical anomalies and identified multiple linear gold in-soil anomalies as illustrated in Figure 7-2.

Figure 7-2: Wassa Au-in-Soil Anomalies with Prioritised Targets and Deposits



A high resolution, helicopter geophysical survey was conducted over the entire Wassa Mining Lease to generate different derivatives (namely, Electromagnetic, Resistivity, Magnetic, Radiometrics and Horizontal gradient of the Magnetic).

Figure 7-3: Layout of Wassa Airborne Magnetic Survey Coverage



Source: GSR, 2004.

Grassroots exploration was conducted concurrently during the various phases of the resource expansion drillings within the open pit areas. Areas south of the main open pit like 419 and South Akyempim open pits (SAK) were discovered through conventional exploration as a result. These phased exploration to date include:

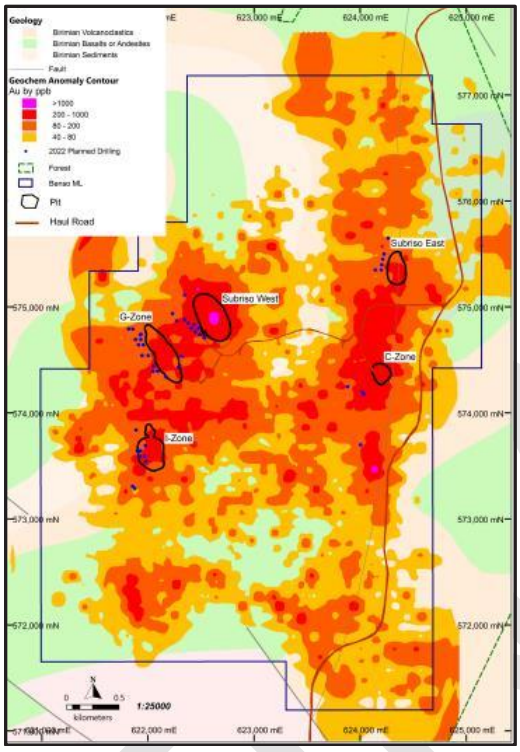
- 1994 to 1997 Exploration for the Feasibility study by Pincock, Allen and Holt
- 2002 to 2003 Due diligence for Mineral Resource/ Ore Reserve upgrade and feasibility study update
- 2011 to 2019 Wassa underground High-Grade definition + brownfields exploration
- 2021 to 2022 Chifeng Gold group, refocused and re-interpretation of geophysical and geochemical targeting alongside upgrading of known underground resources

After the acquisition of Golden Star (Wassa) by the Chifeng Gold Group, the geochemical data review within the Wassa Mining Lease has caused re-optimisation of oxide mineralisation around the mined out Dead Man Hill open pit. Untested gold-in-soil anomalies along the multiple linear trends in Figure 7-2 above is being evaluated to generate pipeline of oxide mineralisation for the processing plant.

7.1.2 Benso and Chichiwelli

Golden Star acquired the Benso and Chichiwelli concessions from St Jude Resources in 2005 and began with regional exploration programs. A number of geophysical and geochemical anomalies previously identified by St Jude were followed up per the labelled targets within Figure 7-4 below.

Figure 7-4: Au-In-Soil Anomalies with Pit Outlines within the Benso Mining Lease



Structural mapping and interpretation commenced in 2012 within the mining lease to aid in defining the controls of mineralisation and to determine the underground potential beneath the mined-out pits.

Induced Polarisation geophysical surveys were conducted over the Benso concessions in 2009 and the program generated targets that were coincident with lithological trends and gold in soil anomalies. Re-evaluation of surface geology and geochemical anomalies after the Chifeng Gold Group acquisition has produced the latest open pit mine within the Benso Mining Lease, namely the I-Zone pit which is a product of grassroot exploration and favourable gold price on the international market. Further re-interpretation is ongoing to further understand the surface mineralisation and underground potential beneath the mined-out pits, particularly Subriso West pit.

Benso (Chichiwelli) prospecting licence was expired on December 30th 2020, awaiting for Minister of Lands and Natural Resources's approval for renewal. The satellite imagery and coincident au in soil anomaly within the Prospecting Licence (PL) has led to the delineation of Chichiwelli East and Chichiwelli West mineralised zones. After the Chifeng Gold Group takeover, no exploration work has been done on the concession due to the virtual besieging of the property by illegal artisanal miners.

7.1.3 Hwini Butre

Early European reports indicate the Dabokrom area, Hwini Butre mining lease, may have been a major source for gold sold to Portuguese explorers when they first arrived in Ghana in the late 1400's.

European interest grew in the 1800's with the presence of gold and proximity to Sekondi-Takoradi, which had developed as a port to service mines at Tarkwa, Prestea and Obuasi. Many exploration licences were granted during the gold boom of 1898-1902 and by the 1930's most of the area was under license to various local and European interests.

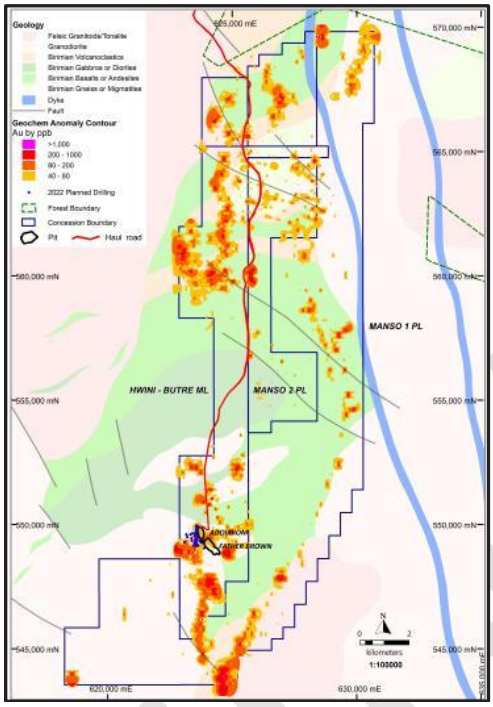
At Dabokrom within Hwini Butre Mining Lease (HBML) a shaft was sunk by Oceania Consolidated in the 1930's to follow the shallow dipping quartz veins. The property was worked for several years but stopped in 1939 at the start of World War 2.

Golden Star acquired St Jude and the Hwini Butre concession in late 2005 and commenced exploration work in early 2006. Exploration activities concentrated on the previously defined mineralisation at Adoikrom North, Adoikrom, Dabokrom and Father Brown.

Regional exploration programs over the concession were conducted by targeting a number of geochemical and geophysical anomalies previously identified by St Jude, these anomalies were mainly tested by the use of Rotary Air Blast ("RAB") drilling. A combination of 4 m deep auger and shallow auger at a grid spacing of 400 m by 50 m was also carried out to further test the existing gold-in-soil anomalies and gaps in the geochemistry sampling over the Hwini Butre concessions.

Hwini Butre exploration activities were focused on the northern parts of the concession where several colonial gold occurrences such as Breminsu, Apotunso (per Figure 7-5), Abada, Whinnie and Guadium are located. Previous soil sampling in these areas identified several anomalies and the follow up programs included deep auger and RAB drilling. The Mineral Resource definition drilling program continued in 2010 at Father Brown, Adoikrom and Dabokrom. The Mineral Resource/ Ore Reserve delineated was mined out by 2014 but exploration along strike continued to discover the continuity of mineralisation from geophysical targets and geochemical surveys on the Hwini Butre Mining Lease (HBML).

Figure 7-5: Gold in Soil Anomaly within Hwini Butre Mining Lease with Adoikrom and Father Brown Open Pits



Chifeng Gold Group has refocused brownfields prospects, grass roots exploration targets and untested greenfields targets. Re-interpretation of structural controls, geophysical targets and geochemical anomalies is being done to test five additional targets along the Hwini Butre Benso (HBB) corridor.

The regional exploration within the eastern blocks of Manso 1 PL, Manso 2 PL and Chichiwelli PL is focusing on geochemical anomalies and geophysical targets review to follow up on the fold closure, east of the mining leases.

7.2 Drilling

Drilling is carried out by a combination of Diamond Drill ("DD"), Reverse Circulation ("RC") and RAB techniques. In general, the RAB method is used at early stages for follow up to soil geochemical sampling and testing contacts and mineralisation extensions around the production areas and has a maximum drilling depth of around 30 m. Exploration continues across multiple leases with mapping and soil sampling. Prospective targets may be drill tested with either air core or RC drilling.

The Wassa, Benso and Hwini Butre Mining Leases are advanced properties, so details of all drill results are not required in this report. This section provides an overview of drilling and representative plans and cross-sections as shown in Figure 7-6 to Figure 7-8.

Concurrent grass root exploration and Mineral Resource definition drilling has been conducted between 2006 and 2012.

As of 31 March 2024, the summary of the exploration data used in the Mineral Resources Estimates is listed in Table 7-1.

Table 7-1: Summary of Explration Data used in the Mineral Resources Estimates

Location	Type	Holes	Drill Meters(m)
B Shoot	DD	3,755	731,162.9
	RC	485	50,314.9
242	DD	190	42,023.4
	RC	79	8,773.0
	GCRC	4,332	92,859.0
DMH	DD	32	4,453.8
	RC	205	15,618.4
	GCRC	1,900	52,967.0
I Zone	DD	21	2,245.4
	RC	42	4,114.7
	GCRC	191	9,214.0
FB/ADK	DD	435	66,229.0
	RC	214	16,323.0
	GCRC	3,087	72,037.0
Chichiwelli	DD	23	3,692.0
	RC	483	29,802.0
Total	**DD**	**4,456**	**849,806.5**
	RC	**1,508**	**124,946.0**
	GCRC	**9,510**	**227,077.0**

Figure 7-6: Wassa Main Deposit Vertical Section 19975mN Showing Folded Lithological Sequence

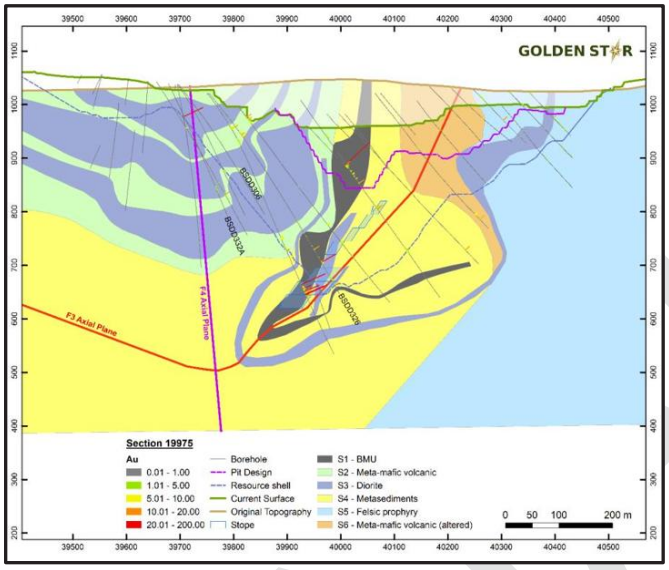


Figure 7-7: Wassa Main Vertical Section 19925mN Showing Interpretation with Tight Spaced Drilling

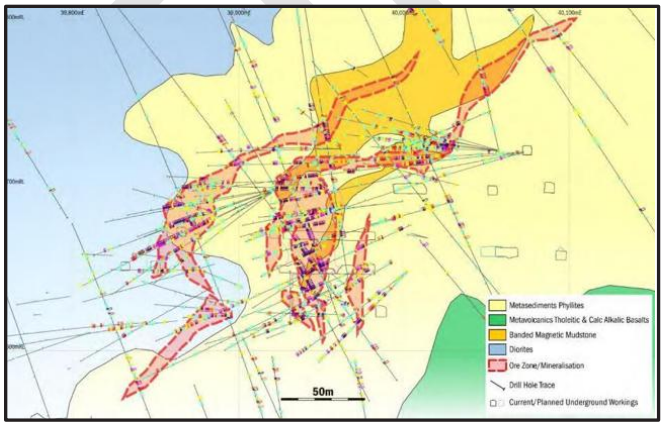
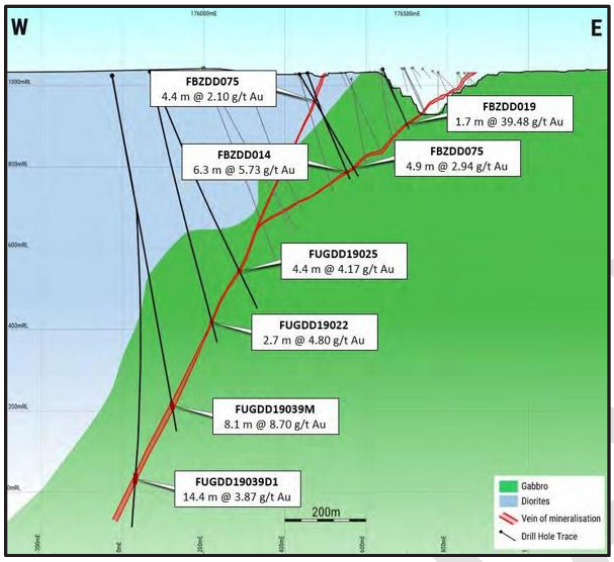


Figure 7-8: Hwini Butre Drill Section through 33100 mN



7.2.1 Surface Drilling

RC pre-collar with DD core tail drilling is used as the main method for obtaining samples for Mineral Resource estimation and is carried out along drill lines spaced between 25 and 50 m along prospective structures and anomalies defined from soil geochemistry and RAB drilling. RC drilling is typically extended to depths in the order of 100-125 m. The DD method is used to provide more detailed geological data and where more structural and geotechnical information is required. Generally, the deeper intersections are also drilled using DD and, as a result, most section lines contain a combination of RC and DD drilling.

RC and DD drilling is conducted with a geologist on site to align the drill rig and check the drill head dip and azimuth. Downhole surveying is conducted using a single shot camera, for RC and DD holes at the bottom of holes exceeding 30 m depths and then taken progressively every 30 m up hole. The single shot camera records the dip and azimuth for each survey which is validated and recorded by the geologists or is recorded by a Reflex survey instrument and captured in the database as well as being filed in the respective drillhole file folders on site.

Drilling depths within the mining leases do not generally exceed 250 m but with the discovery of higher grades below the mined-out open pits after 2011, hole depths have increased. In the 1st half of 2014, two gyro survey instruments were utilized to resurvey several of the deeper holes. In total, 153 holes, drilled during 2012 to 2014, were resurveyed. The gyro survey readings were conducted every 10 m both in and out of the hole and the values were then averaged. The 153 gyro surveyed holes were updated in the database and subsequently used for the Mineral Resource estimates. The gyro surveys showed that there was some deviation in the holes below 250 m drilled depth. Deviations varied from location to location depending on drill orientation with a general tendency for the hole to steepen and swing to the north.

Drilling of some of the deeper targets required the use of directional drilling methods. The deeper holes, often exceeding 1,000 m, are drilled from surface using HQ (63.5mm) sized core and this initial hole (referred to as the "mother" hole) is drilled to the depth where the first directional hole would be started. The directional hole (or "daughter" hole) is drilled using a smaller core size, NQ (47.6 mm) and is deviated from the mother hole initially using a casing wedge which is oriented in the direction of the mineralised target. Once the initial deflection has been achieved with the wedge, the hole deviation is controlled using a down hole directional motor which can change the dip and azimuth of the hole by approximately plus or minus 1.5 degrees over a 10-metre run. The direction of the hole can also be controlled by using various combinations of down hole stabilisers and drill bits. The step-wise deeper drilling fences typically involve mother holes with three to four daughter holes from each of these. The deeper holes are surveyed, down hole with either a Reflex multi-shot or gyro survey instrument. The surveys are taken while the hole is being drilled as well as every 10 to 15 m from the bottom of the hole once it has been completed.

The majority of the drilling has been conducted by Golden Star (Wassa), although there are some drillholes completed by previous concession owners that have been used to inform the Wassa long-range model (by SGL) and Hwini Butre and Benso models (by SJR). The drill data from prior ownership has been validated and checked in the NI 43-101 Technical Report (GSR, 2021) to the satisfaction of the QP for inclusion in interpretation and grade estimates.

All drillhole collars were surveyed using a Nikon Total Station (DTM-332) or Sokkia Total Station by a Golden Star (Wassa) surveyor. Individual RC and DD holes are identified and marked in the field with poly-vinyl chloride (PVC) pipes. RAB drill holes were surveyed in the field and identified and marked with wooden pegs.

7.2.2 Underground Drilling (Wassa Main)

Underground DD is performed using electric-hydraulic diamond drills utilizing the underground mine's 1,000 V power supply. Core drilled underground is HQ, NQ or NQ2 (50.6 mm) in core size. The final drilling density for classification as Measured Mineral Resource is designed to be 15 m along strike and 13 m down dip, or tighter. With the orebody generally striking north-south (on the mine grid), typical drilling azimuths range +/-30 degrees each side of 090˚ or 270˚ azimuth, depending on whether the drills are set up on the hanging wall or footwall side of the orebody. Dips generally range between +30˚ to -60˚.

Downhole surveying is conducted using a Reflex multi-shot downhole surveying tool. When collaring, a single survey is taken at 10-12m depth. At the first survey, the drill hole orientation must fall within ±2º azimuth and ±1.5º dip tolerance, when compared to design. For any hole where the first survey falls outside of tolerance, the geologist has the discretion to either terminate the drill hole and re-collar at the drilling company's expense, or to continue the hole. At the completion of the drill hole, multi-shot surveys are collected at 15 m intervals on the way out.

Drill hole collar locations are captured by the underground mine surveying team. The surveyors use either a Leica TS15 total station, or a Leica TS16 total station to record the collar position in X, Y, Z location. The total station is accurate to less than two seconds in azimuth. In cases where the mine surveyors cannot identify the drill hole collar site, the designed collar coordinates are recorded in the databases.

7.2.3 RAB/AC Drilling

RAB and AC drilling is used for exploration but is not used to inform any of the current Mineral Resource estimates.

7.3 Sample Preparation, Analyses, and Security

The measures implemented by GSR related to sample preparation, analysis and security are considered by the Competent Person to be consistent with standard industry practice and of sufficient quality to include in the estimation of Mineral Resources. Golden Star (Wassa) has a standard approach to drilling and sampling on all mining leases and prospecting licenses in Ghana. Sampling is typically carried out along the entire mineralised drilled length. Sample recovery is good across all deposits drilled to date. Ground conditions are generally good and air drilling techniques (AC/ RAB and RC) are avoided below the groundwater table where DD is applied.

7.3.1 Sampling

For RC drilling, samples are collected every 1 m. Where DD holes have been pre-collared using RC, the individual 1 m RC samples are combined to produce 3 m composites which are then sent for analysis. Should any 3 m composite sample return a significant gold grade assay, the individual 1 m samples are then sent separately along with those from the immediately adjacent samples.

Resource definition drill core samples are collected, logged, and then cut in half along the foliation axis using diamond core saws. Sample length range from 0.3m minimum length to 1.5m maximim length, with the standard sample length being 1.0m. The core is cut according to mineralisation, alteration, or lithology. The sampling concept is to ensure that a representative sample of the core is assayed. The remaining half core is retained in the core tray, for reference and additional sampling, if requried. Grade control core is whole core sampled.

RC sampling protocols were established in 2003. The composite length of 3 m has been established to allow a minimum of at least two composites per drillhole intersection based on experience from exploration drilling and mining. The hanging wall and footwall intersections can generally be easily recognised in core from changes in pyrite content and style of quartz mineralisation.

The 3 m composite sampling methodology is:

- A sample of each drilled meter is collected by fitting a plastic bag on the lower rim of the cyclone to prevent leakage of material;
- The bag is removed once the "blow-back" for the meter has been completed and prior to the commencement of drilling the subsequent meter;
- Both the large plastic sample bags and the smaller bags are clearly and accurately labelled with indelible ink marker prior to the commencement of drilling. This is to limit error and confusion of drilling depth while drilling is proceeding;
- 3 m composite samples are taken by shaking each of the 1 m samples (approximately 20 kg) and taking equal portions of the 3 consecutive samples into a single plastic bag to form one composite sample (approximately 3 kg);

- Composite samples are taken using tube sampling, which uses a 50 mm diameter PVC tube which has been cut at a low oblique angle at one end to produce a spear of approximately 600 mm length;
- The technique assumes that a sample from the cyclone is stratified in reverse order to the drilled interval. A representative section through the entire length of the collected sample is considered to be representative of the entire drilled interval;
- The PVC tube is shuffled from the top to bottom of the sample, collecting material on the way. The "shuffling" approach ensures sample accumulated in the tube does not just push the remaining sample away; and
- Material in the tube is emptied into the appropriately labelled sample bag and in the case of 3 m composite samples, stored separately from the 1 m samples.

The 1 m sample collection methodology is:

- 1 m re-sampling of selected mineralised composite zones using the 20 kg field samples is undertaken with a single stage riffle splitter;
- Splitter is clean, dry, free of rust, and damage is used to reduce the 20 kg sample weight to a 3 kg fraction for analysis;
- Care is taken to ensure that the sample is not split when it is transferred to the splitter, and is evenly spread across the riffles;
- When considered necessary, the sample is assisted through the splitter by tapping the sides with a rubber mallet;
- Excessively damp or wet samples are not put through the splitter, but tube-sampled or grab-sampled in an appropriate manner. Alternatively, the sample is dried before splitting. A common-sense approach to wet sampling is adopted on a case-by-case basis;
- Clods of samples are not forced through the splitter, but apportioned manually in a representative manner; and
- Splitter is thoroughly cleaned between each sample using a brush. Where possible, the splitter is cleaned using an air gun attached to the drill rig compressor.

RAB and AC samples are collected and bagged at 1 m intervals. As the samples are generally smaller in size than the RC samples, 3 m composites are prepared by shaking the samples thoroughly to homogenize the sample, before using the PVC tube to collect a portion of the three individual 1 m samples. After positive results from the 3 m composites, the individual 1 m samples are split to approximately 2 to 3 kg using the Jones riffle splitter and then submitted to the laboratory for analysis.

7.3.2 Sample Prepatation

Sample preparation on site is restricted to core logging and core cutting or RC and RAB sample splitting. The facilities consist of enclosed core and coarse reject storage facilities, covered logging sheds and areas for the splitting of RC and RAB samples. Sub-sampling of RC and RAB samples is carried out using a Jones Riffle splitter.

7.3.3 Sample Dispatch and Security

Samples are collated at the mine site after core cutting or sample splitting, and then transported to the primary laboratory (Intertek Minerals Ltd, Tarkwa: ISO/IEC 17025) for the completion of the sample preparation and chemical analysis. Samples are trucked by road to the laboratories in Tarkwa.

Sample security involves two aspects, namely, maintaining the chain of custody of samples to prevent inadvertent contamination or mixing of samples, and rendering active tampering of samples as difficult as possible.

The transport of samples from site to the laboratory is by road using a truck dispatched from the laboratory. As the samples are loaded, they are checked, and the sample numbers are validated. The sample dispatch forms are signed off by the driver and a company representative. The sample dispatch dates are recorded in the sample database as well as the date when results are received.

No specific security safeguards have been put in place by GSR to maintain the chain of custody during the transfer of core between drilling sites and sample preparation and assaying facilities. Core and rejects from the sample preparation are archived in secure facilities at the core yard and remain available for future testing.

7.3.4 Laboratory Procedures

Sample assays have been performed at the Wassa Site Laboratory (WSL), SGS Tarkwa or Intertek Minerals Ltd (formerly named Transworld Ltd. ("TWL")). The two commercial laboratories are located at Tarkwa. Golden Star (Wassa) submits quality control samples to every batch of primary samples sent to laboratory for testing purposes.

Both SGS and Intertek laboratories are independent of Golden Star (Wassa) and are accredited for international certification for testing and analysis.

- SGS, Minerals Division – Tarkwa: ISO 17025 and ISO 9001; and
- Intertek Minerals Ltd, Tarkwa: ISO/IEC 17025.

The sample preparation and analytical processes at the WSL, Intertek, and SGS differ slightly. WSL prior to July 2007 operated as a metallurgical sample processing laboratory at the Wassa mine site. Subsequently, WSL has been used as the primary laboratory for grade control open pit drilling samples and mine grab samples. The WSL is prone to contamination as the jaw crusher and secondary crushing areas are dusty. Moreso, the manual capture of assay values from the desktop computers at WSL gives room for transcription errors. For these reasons, the WSL does not assay samples related to exploration or resource definition drilling.

Wassa Site Laboratory

The sample preparation and analysis process at the WSL is as follows:

- Sample reception, sorting, labelling and loading;
- Dry entire sample (3 kg) at 110°C for between 4 and 8 hours;

- Jaw crush entire sample to 3 mm, and secondary Keegor crusher to 1 mm;
- Split 3 kg sample and pulverize for 3 to 8 minutes to 95% passing 75 µm;
- Sample homogenization using a mat rolling technique, and sub-sample 1 kg into bulk leach extractable gold (BLEG) roll bottle;
- Bottle roll for 12 hours with LeachWellTM accelerant. Allow to settle for 30 to 60 minutes;
- Filter 20 ml aliquot from bottle;
- Di-isobutyl Ketone extraction and atomic absorption spectroscopy (AAS) determination of gold content; and
- 1 in 10 residue samples are retained for gold determination using fire assay.

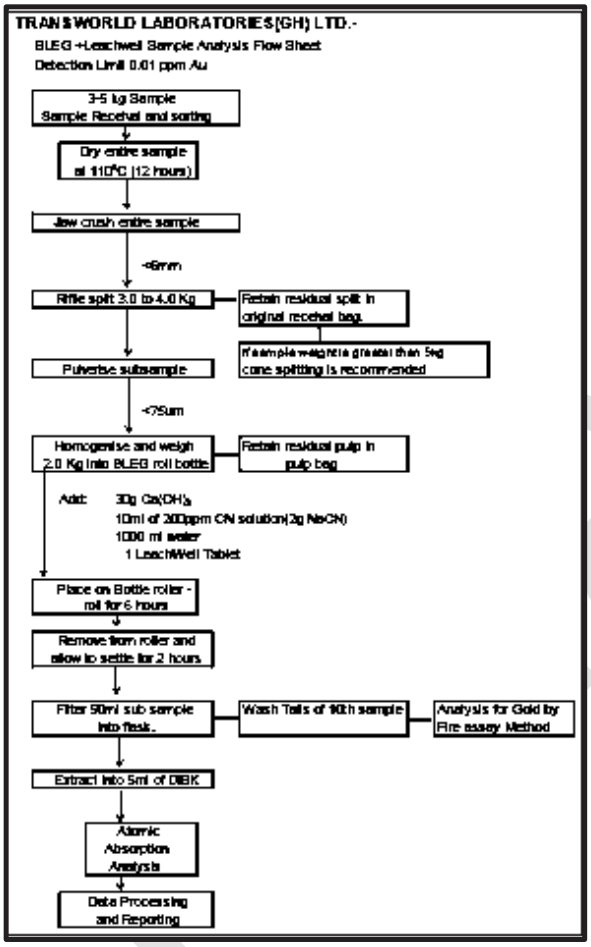
Transworld

TWL (now Intertek) was the primary laboratory for core samples until July 2007, when it was discontinued due to the following issues:

- Contamination due to poor dust control in pulverizing area of the laboratory. Use of dust attracting cloth gloves for sample handling. BLEG aliquot preparation area containing dirt and liquids, which may result in sample cross-contamination.
- Large fluctuation in employee numbers (60 to 180), which resulted in a risk of training and quality control issues when increasing employment numbers over a short period of time.
- The use of a manual data tracking and capture system, which increased risk of data entry errors. Golden Star (Wassa) considered this to be a sub-optimal process for a commercial laboratory.

The sample preparation and analysis process used by TWL is illustrated in Figure 7-9 below.

Figure 7-9: Transworld Laboratories Sample Processing Flow Sheet



SGS Tarkwa

The SGS laboratory (Tarkwa) was used for drill core samples from July 2007 to August 2017, with the sample preparation and analysis process as follows:

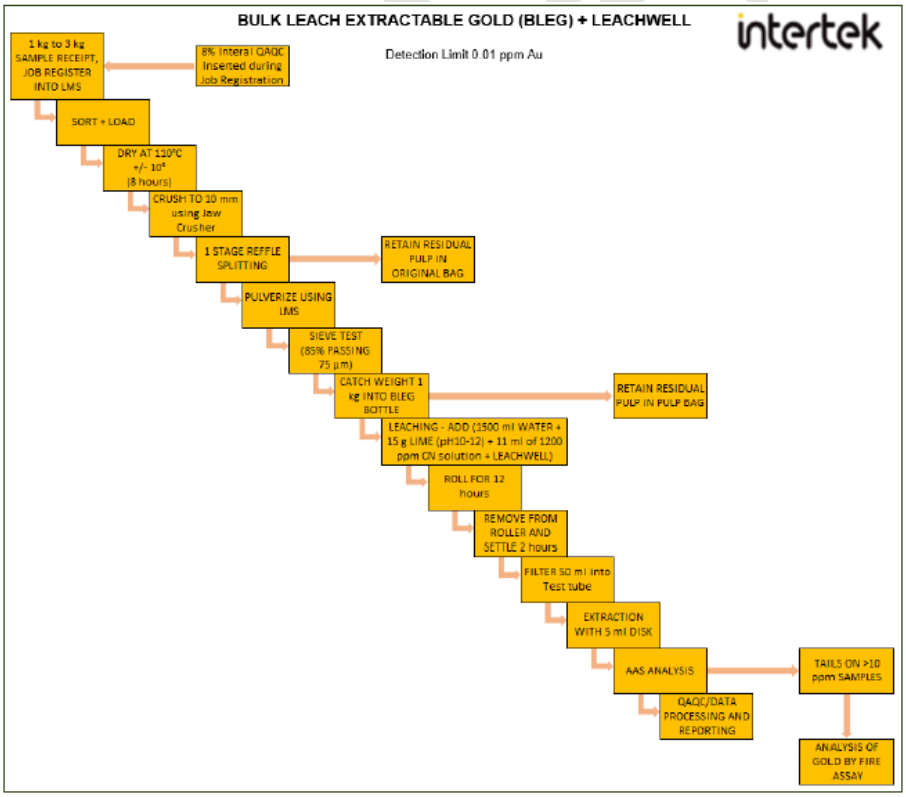
- Sample received, entered in LIMS, worksheets, printed and samples sorted;
- Samples emptied into aluminium dishes;
- Dry entire sample at between 105 and 110°C for 8 hours;
- Jaw crush entire sample to 6 mm;
- Split sample using a single stage riffle splitter, to result in a 1.5 kg sub-sample;
- Pulverize sub-sample for 3 to 5 minutes, to give 90% passing 75 µm;

- Sample homogenization using a mat rolling technique, and put 1 kg of sample into the BLEG roll bottle;
- Remaining sample is retained as pulp and crushed sample duplicates;
- Bottle roll for 12 hours with LeachWell™ accelerant. Allow to settle for 2 hours;
- Filter 50 ml of aliquot; and
- Di-isobutyl Ketone and AAS for gold grade determination.

Intertek Tarkwa

Subsequent to 2017, Golden Star (Wassa) discontinued using SGS, Tarkwa laboratories and began shipping samples to Intertek, Tarkwa Laboratories. The Intertek lab sample flow sheet is shown in Figure 7-10 below. The reason for the change was attributed to poor turn-around time in assay results. Since the prior issues with Transworld/ Intertek, ownership of TWL had changed to Intertek who had implemented internationally recognised standards with changes in management and procedures.

Figure 7-10: Intertek Sample Processing Flow Sheet



7.3.5 Quality Control and Quality Assurance

Quality control measures are set in place to ensure the reliability and trustworthiness of assay data, and to ensure that it is of sufficient quality for inclusion in the subsequent Mineral Resource estimates. Quality control measures include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management and database integrity. Appropriate documentation of quality control measures and analysis of quality control data are an integral component of a comprehensive quality assurance program and an important safeguard of project data.

The field procedures implemented by Golden Star (Wassa) are comprehensive and cover all aspects of the data collection process such as surveying, drilling, core and RC cuttings handling, description, sampling and database creation and management. At Wassa, each task is conducted by appropriately qualified personnel under the direct supervision of a qualified geologist. The measures implemented by Golden Star (Wassa) are considered to be consistent with industry best practice.

The quality controls employed by Golden Star (Wassa) include:

- Field duplicates used to check sampling precision and deposit variability. Two separate samples are collected at the drill site and bagged separately from which two individual samples are produced. The results of these checks can be useful in highlighting natural variability of the grade distribution.
- Pulp duplicates used as a check of sampling precision and coarse gold in pulps. Two separate pulp samples are prepared from a single coarse reject after sample splitting and on-site preparation. The results are useful in indicating problems with sample preparation and splitting.
- Repeats as a check of analytical precision and coarse gold. Two separate aliquots are prepared from separate samples taken from the original coarse reject and the two samples' results are compared.

  Blanks for highlighting contamination problems and cross labelling when samples are mislabelled in the laboratory.
- Standards as a check of analytical precision and accuracy.

Golden Star (Wassa) relies on both the laboratory operators Quality assurance, quality control (QA/QC) processes for assaying, as well as Golden Star (Wassa)' own independent QA/QC program. The Golden Star (Wassa) program includes inserting blanks, Certified Reference Materials (CRMs), and pulp or coarse reject duplicates into sample batches, before sample submission to the lab. Golden Star (Wassa) also provides sample dispatch lists to the laboratories, to ensure that all samples dispatched from site are received at the lab.

Golden Star (Wassa) has supplied QA/QC reports to various consultants over the numerous drilling campaigns since 2004, and a summary of the historical and current QA/QC results is included here.

7.3.6 Comparison of Assay Methodologies

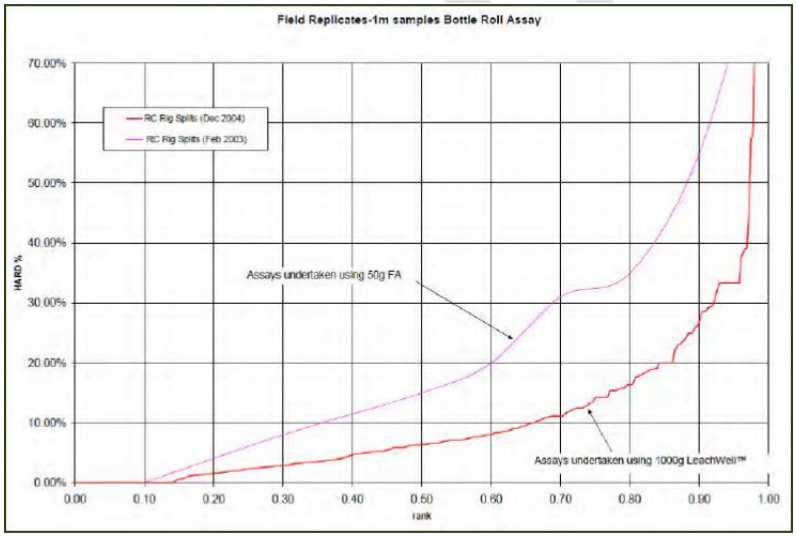
In 2003, during open-pit operations, it was recognised that there was a variance between primary and duplicate assay grades of the same sample, as well as a variance between the planned mine grade to the mill reconciled grade. The conventional 50g fire assay being used at the time displayed

poor reproducibility between field duplicates. This effect was also evident between pulp duplicates, although not as marked. The conclusion was that a component of coarse gold was present in the samples and contributed to poor reproducibility between samples. It was recommended to switch to an analytical process that made use of significantly larger sample masses, such as LeachWell™ assays.

To address this, Golden Star (Wassa) changed the assay procedure from the 50-gram fire assay method to a 1kg BLEG assay, with a LeachWell™ accelerant. Gold grade was determined using an AAS finish. Initially, samples were split by a rotary splitter and leached for six hours. Following the analysis of the leach tailings, the leach time was extended to 12 hours.

Due to time constraints, the use of the rotary splitter was discontinued, and a Jones Riffle splitter was used to split sub-samples from the larger RC drill hole samples. The difference between the reproducibility of fire assay versus larger BLEG assays is illustrated in Figure 7-11. It shows a significant improvement with respect to sample reproducibility between the fire assay and the BLEG methodologies. Using BLEG, 80% of pairs report Half Absolute Relative Difference (HARD) precisions of less than 17%, compared to the 35% precision attributable to the fire assay method. SRK recommended that Golden Star (Wassa) continue to monitor the reproducibility of the sample grades from the paired data analysis.

Figure 7-11: ARD Plot Comparing Fire Assay and BLEG for Field Duplicates



8 Data Verification

SRK has not carried out any independent collection and verification of individual samples or assay results. SRK has, however, obtained and reviewed the QA/QC results produced by Golden Star (Wassa), its consultants and the laboratories themselves.

SRK reviewed the core and samples available on site (core shed) and cross-checked them against the geological logs and assay records.

The quality of the results is generally considered good. Golden Star (Wassa) frequently sends samples with known values but "blind" test samples to the laboratory and monthly batch results are analysed, and any anomalous results are queried immediately. A small number of anomalous and/ or poor results have been noted over the years, but these have been identified and the reasons fall into two main categories, namely:

- Mislabelling of individual samples, standards and blanks.
- Individual batch issues corresponding to changes in the laboratory setup or calibration, in these cases re-assay has been carried out.

The results of the current QA/QC program indicate that performance is consistent with industry standards. The QA/QC program includes check samples which show reasonable duplicate performance. The duplicates are selected from coarse rejects from the initial preparation.

8.1 Verifications by Golden Star (Wassa)

The field procedures implemented by Golden Star (Wassa) involve several steps designed to verify the collection of exploration data and minimise the potential for inadvertent data entry errors. The data entry and database management involve two steps punctuated by validation steps by the logging geologist. All data is thoroughly checked prior to the incorporation into the project database.

Analytical data is also routinely checked for consistency by Golden Star (Wassa) personnel. Upon receipt of digital assay certificates, assay results together with the control samples are extracted from the certificates and imported into the Acquire database. Failures and potential failures are examined and depending on the nature of the failure, re-assaying is requested from the primary laboratory. Analysis of quality control data is documented along with relevant comments or actions undertaken to either investigate or mitigate problematic control samples.

8.2 Verifications by SRK (Between 2019 and 2022)

8.2.1 Duplicates

SRK has reviewed the supplied QA/QC reports, and a summary of the historical and current QA/QC results is included here.

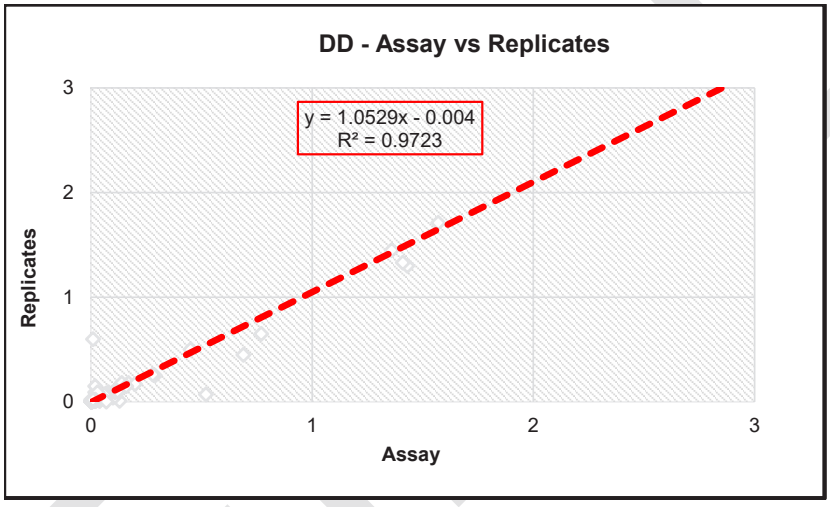
Historical data on field duplicates, from between 2003 and 2007 were poorly correlated. Supplied documentation from the time indicates that the field sampling techniques were identified as the likely cause. Improvements since 2008 are thought to be due to increased sample splitting training and

awareness amongst Golden Star (Wassa) sampling crew members, rather than improvements at the laboratory.

From 2011, Golden Star (Wassa) discontinued the use of pulp samples for determining repeatability. Instead, coarse reject material (leftover material from the laboratory primary crush stage) was used as duplicate sample material.

During the sample prep stage, after the drill core passed through primary crushing, the excess coarse reject material was collected and returned to Wassa. This material was then re-numbered and re-submitted to the laboratory for repeat analysis. Coarse reject replicates were used to monitor the sample preparation processes of the laboratory.

Figure 8-1: Correlation Plot of Coarse Reject Replicates and Original Assays



Laboratory coarse reject replicates pair analysis for all samples generated between 2019 and 2022 shows improved assay grade reproducibility. About 3% of the replicates below 1g/t do not correlate with the original assays but these are within acceptable limit for a gold deposit like Golden Star (Wassa).

8.2.2 CRMs and Blanks

CRM was introduced by GSR into the sample stream to monitor the accuracy, precision and reproducibility of the assay results. CRMs were sourced from Geostats Pty Ltd ("Geostats"), and from Gannet Holding Pty Ltd ("Gannet"). Although the CRM could be easily identified by the laboratory, the actual grade of the standard would be difficult to determine due to the large number of different CRM types used. The summary results of CRM types in use between 2019 and 2022 as supplied by both Geostats and Gannet are shown in Table 8-1 and Table 8-2; overall the results are satisfactory indicating that there are no concerns with the analytical method employed by the laboratories.

Table 8-1: CRM from Geostats Used within HBB between 2019 and 2022

Standard	Number analyzed	Certified Value	Analytical average	Lower limit	Upper limit	Failures	Bias	% Failures
G307-1	45	3.350	3.375	2.84	3.86	0	negative	0%
G307-4	51	1.360	1.324	1.15	1.57	0	negative	0%
G912-3	192	2.100	2.037	1.74	2.46	0	negative	0%
G913-2	33	2.420	2.334	1.97	2.87	0	negative	0%
G913-3	1	2.420	2.330	1.97	2.87	0	negative	0%
G913-4	1	2.420	2.400	1.97	2.87	0	negative	0%
G914-2	21	2.450	2.373	2.15	2.75	0	negative	0%
G915-2	50	4.940	4.968	4.34	5.54	0	positive	0%
G916-2	12	1.960	1.905	1.75	2.17	0	negative	0%
G916-3	9	1.000	0.979	0.85	1.15	0	no	0%
G918-6	56	3.400	3.333	3.04	3.76	0	negative	0%

Table 8-2: CRM from Geostats Used within Wassa Main between 2019 and 2022

Standard	Number analyzed	Certified Value	Analytical average	Lower limit	Upper limit	Failures	Bias	% Failures
G307-4	206	1.360	1.337	1.15	1.57	0	no	0
G312-5	172	1.560	1.610	1.23	1.89	0	no	0
G314-5	22	5.300	5.030	4.34	6.26	0	negative	0
G314-7	58	2.430	2.381	2.01	2.85	0	negative	0
G318-4	26	5.790	5.501	4.98	6.6	0	negative	0
G912-3	180	2.100	1.998	1.74	2.46	0	negative	0
G913-2	363	2.420	2.328	1.97	2.87	0	negative	0
G914-2	181	2.450	2.378	2.15	2.75	0	negative	0
G916-2	111	1.960	1.945	1.75	2.17	0	no	0
G916-3	283	1.000	0.978	0.85	1.15	0	negative	0
G918-6	179	3.400	3.352	3.04	3.76	0	negative	0
G918-7	6	5.870	5.798	5.12	6.62	0	negative	0

Blank samples are routinely inserted into the sample stream to check for possible sample contamination during the preparation and assaying process. Typically, blanks are inserted prior to the delivery of samples for preparation and analyses. Between 2019 and 2022, the blank assay data include 752 assays for HBB and 3,047 assays for Wassa main; all assays for these blanks are summarised in Table 8-3 and Table 8-4; overall, there is no indication of material cross contamination during the sample preparation stage.

Table 8-3: Blank from Hwini Butre Benso Assays

Standard	Number analyzed	Certified Value	Analytical average	Lower limit	Upper limit	Failures	Bias	% Failures
Blank	752	0.010	0.010	0.001	0.08	0	no	0

Table 8-4: Blank from Wassa Main Assays

Standard	Number Analyzed	Certified Value	Analytical Average	Lower Limit	Upper Limit	Failures	Bias	% Failures
Blank	3,047	0.010	0.010	0.0001	0.44	1	no	<0.5

8.2.3 Comments

SRK has conducted similar validation exercises on the historical assay QA/QC since 2014 and found no material flaws that impacts on the reliability of the assay dataset for Mineral Resource estimation.

8.3 Verifications by SRK (Between 2023 and March 2024)

GSR regularly inserted certified standards, blanks and coarse field duplicates for the period between 2023 and March 2024. The QA/QC summary is listed in Table 8-5.

Table 8-5: QA/QC Summary Between 2023 and March 2024

Zone	Category	QC samples	Total N of samples	%Coverage
B Shoot	CRMs	4,070	90,474	4.50%
	Blanks	4,362		4.82%
	Field Duplicates	4,148		4.58%
	Lab Check Duplicates	688		0.76%
242	CRMs	359	5,862	6.12%
	Blanks	337		5.75%
	Field Duplicates	1,193		20.35%
DMH	CRMs	469	9,924	8.00%
	Blanks	425		7.25%
	Field Duplicates	442		4.45%

8.3.1 B Shoot

For B Shoot, SRK was provided with 4,070 CRMs sample, 4,362 blanks samples,4,147 coarse field duplicates and 688 lab check duplicates.

CRMS

The pass rate within 2 standard deviations ranges from 80.82% to 100% and the average is 96%. Most of the CRMs pass rate are greater than 95%. Only three CRMs pass rate are less than 90%, G319-5 is 84%, G916-1 is 80.82% and G918-2 is 87.27%, detailed in Table 8-6 and Figure 8-2

Table 8-6: B Shoot CRMs Summary Between 2023 and March 2024

CRM	Element	Expected	CRM SD	Samples	Samples_ Mean	2SD	
						Samples outside	Pass Rate
G918-6	Au	3.40	0.12	817	3.33	5	99.39%
G916-2	Au	1.96	0.07	580	1.94	19	96.72%
G913-2	Au	2.42	0.15	28	2.39	0	100.00%
G319-5	Au	3.94	0.13	25	3.76	4	84.00%
G912-3	Au	2.10	0.12	823	2.03	6	99.27%

CRM	Element	Expected	CRM SD	Samples	Samples_ Mean	2SD	
						Samples outside	Pass Rate
G312-5	Au	1.56	0.11	524	1.57	19	96.37%
G908-2	Au	0.21	0.02	103	0.21	0	100.00%
G912-4	Au	1.95	0.14	50	1.82	1	98.00%
G915-3	Au	9.22	0.55	78	8.66	0	100.00%
G916-3	Au	1.00	0.05	171	1.00	0	100.00%
G916-1	Au	1.70	0.06	73	1.62	14	80.82%
G918-2	Au	1.43	0.05	110	1.38	14	87.27%
G918-7	Au	5.87	0.25	423	5.74	6	98.58%
G314-7	Au	2.43	0.14	59	2.28	4	93.22%
G314-5	Au	5.30	0.32	206	5.07	0	100.00%

Figure 8-2: B Shoot CRM Samples Between 2023 and March 2024

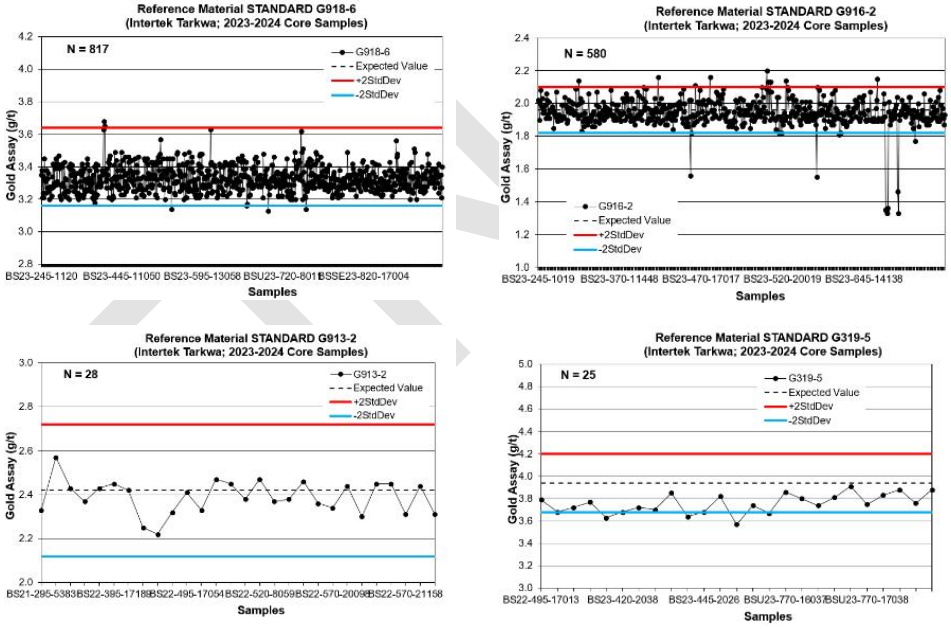


Figure 8-2: B Shoot CRM Samples Between 2023 and March 2024

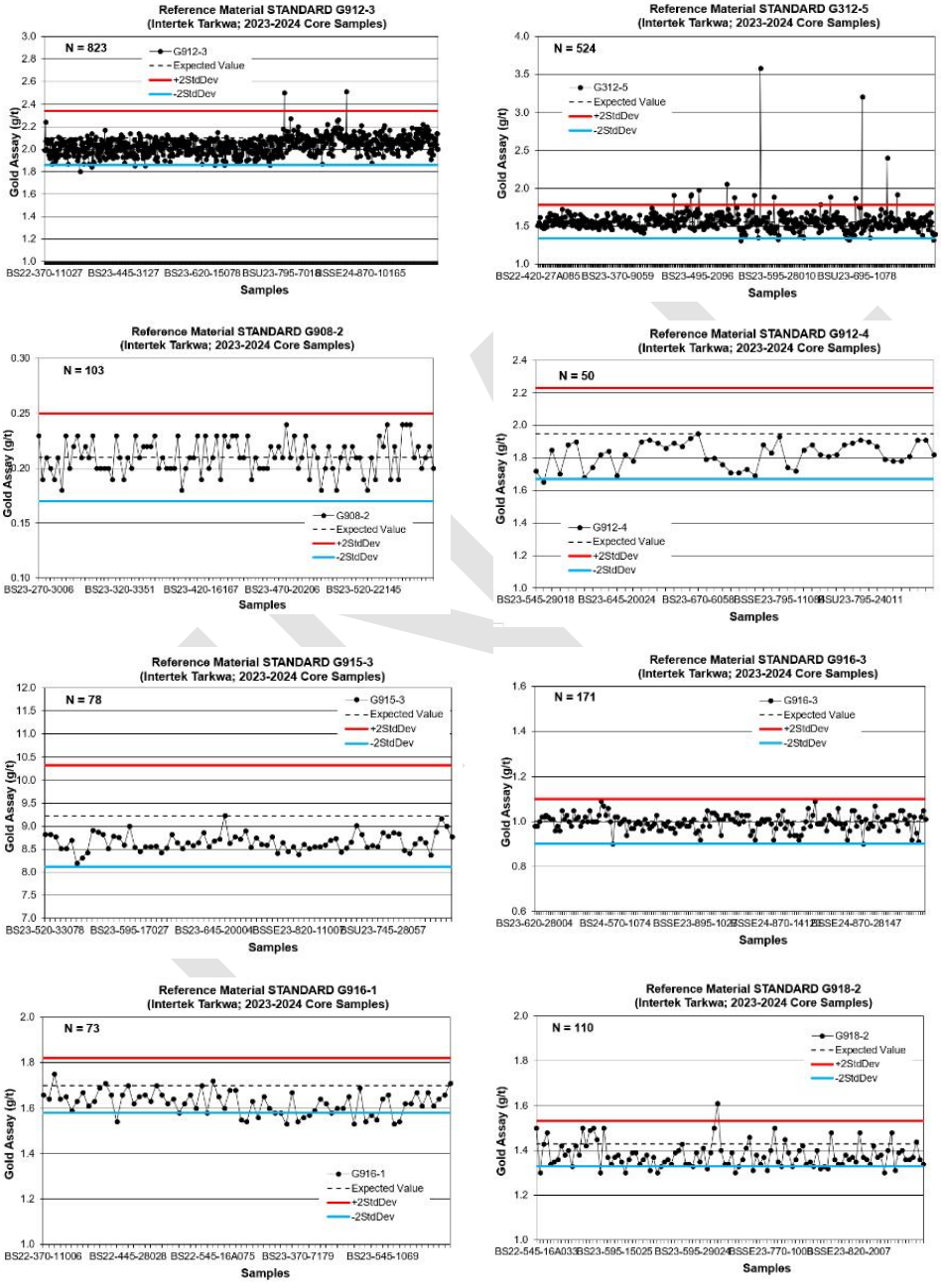
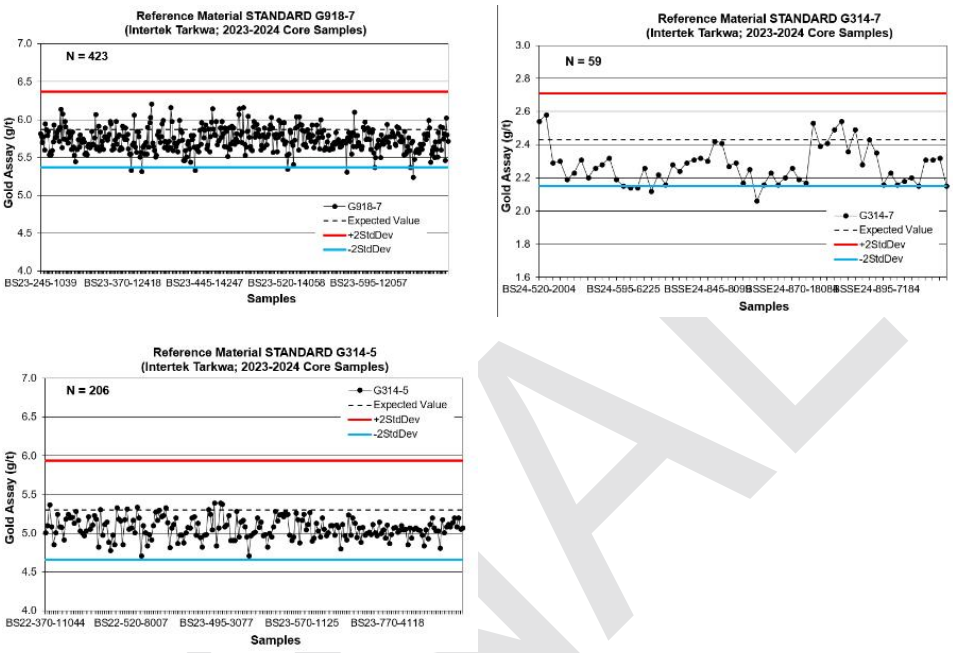


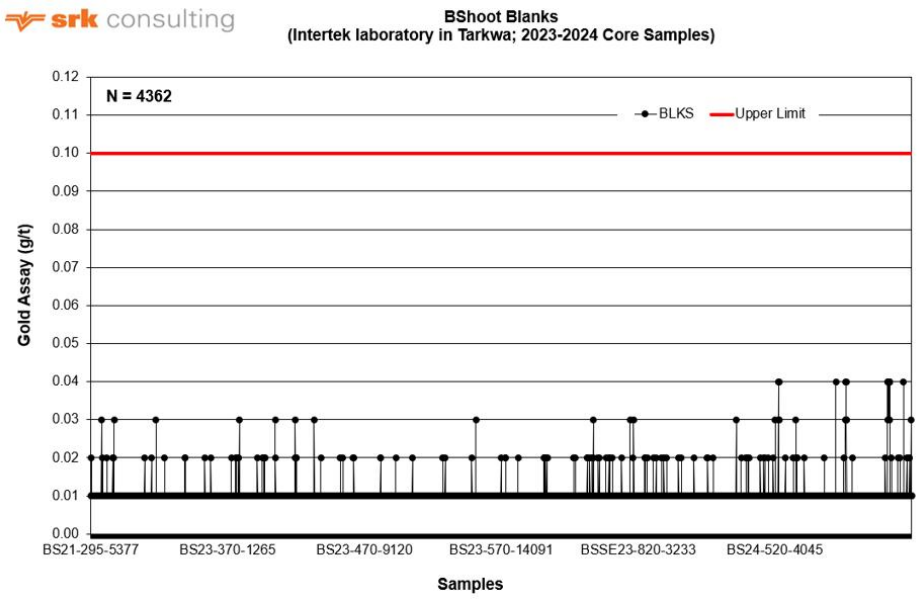
Figure 8-2: B Shoot CRM Samples Between 2023 and March 2024



Blanks

As shown in Figure 8-3, all samples result of gold are falling with 10X detection limit.

Figure 8-3: B Shoot Blank Samples Between 2023 and March 2024



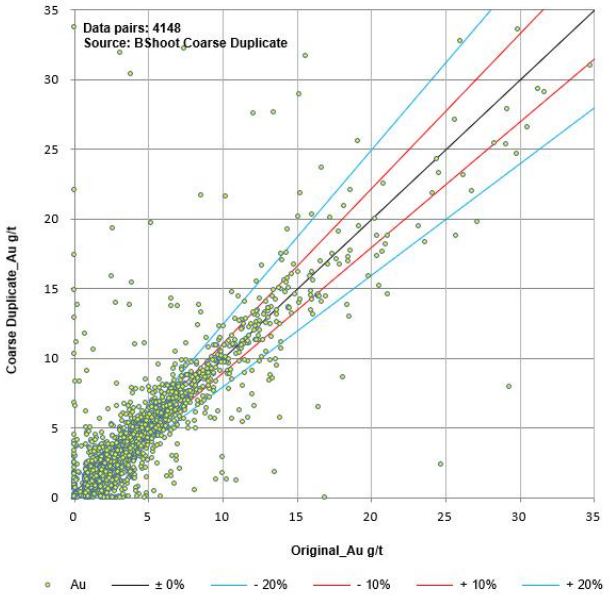
Field Duplicates

Detailed in Table 8-7 and Figure 8-4, about 62% duplicate pairs are within 20% limits, however this is not uncommon with precious metals due to the nugget effect for coarse duplicates.

Table 8-7: B Shoot Field Duplicates Summary Between 2023 and March 2024

Element	Data Pairs Count	Relative Difference					
		<10%		10% - 20%		> 20%	
Au	4,148	1,589	38%	984	24%	1,575	38%

Figure 8-4: B Shoot Field Duplicates Between 2023 and March 2024



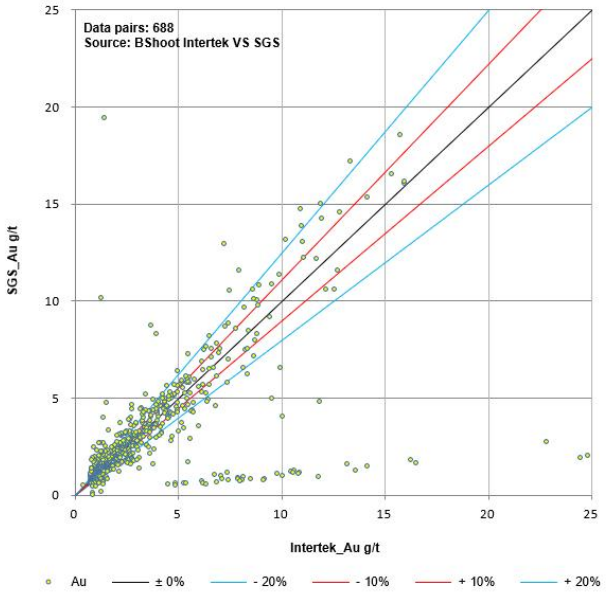
Lab Check Duplicates

GSR used SGS to check the gold grade. About 58% duplicate pairs are within 20% limits.

Table 8-8: B Shoot Lab Check Duplicates Summary Between 2023 and March 2024

Element	Data Pairs Count	Relative Difference					
		<10%		10% - 20%		> 20%	
Au	688	241	35%	159	23%	288	42%

Figure 8-5: B Shoot Lab Check Duplicates Between 2023 and March 2024



8.3.2 242

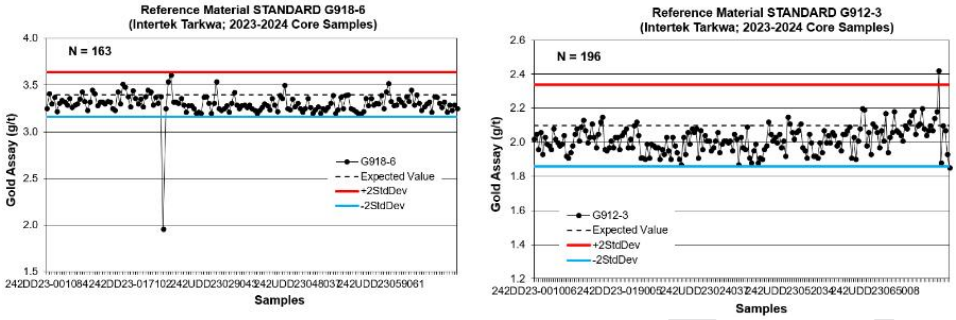
CRMS

As shown in Table 8-9 and Figure 8-6, the pass rates within 2 standard deviations are 99.39% for G918-6 and 98.98% for G912-3.

Table 8-9: 242 CRMs Summary Between 2023 and March 2024

CRM	Element	Expected	CRM SD	Samples	Samples_ Mean	2SD	
						Samples Outside	Pass Rate
G918-6	Au	3.40	0.12	163	3.30	1	99.39%
G912-3	Au	2.10	0.12	196	2.02	2	98.98%

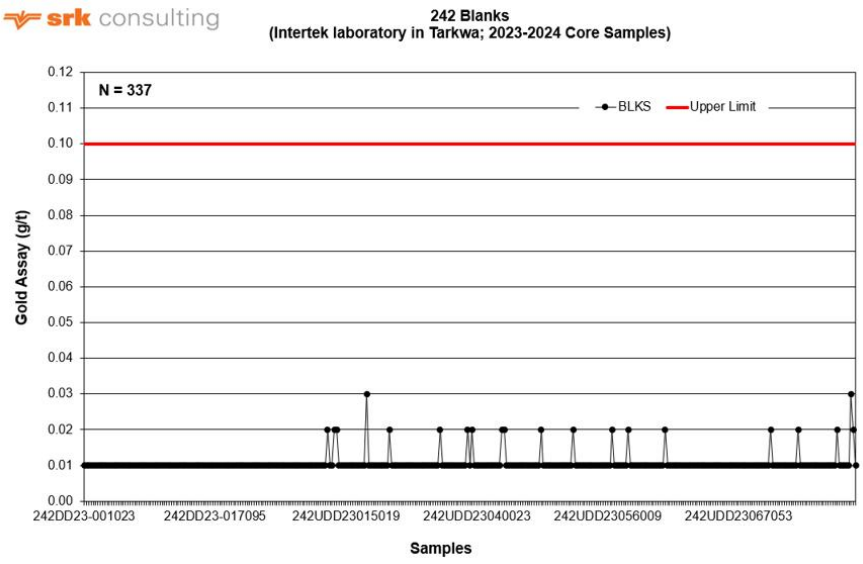
Figure 8-6: 242 CRM Sample Between 2023 and March 2024



Blanks

As shown in Figure 8-7, all samples result of gold are falling with 10X detection limit.

Figure 8-7: 242 Blank Samples Between 2023 and March 2024



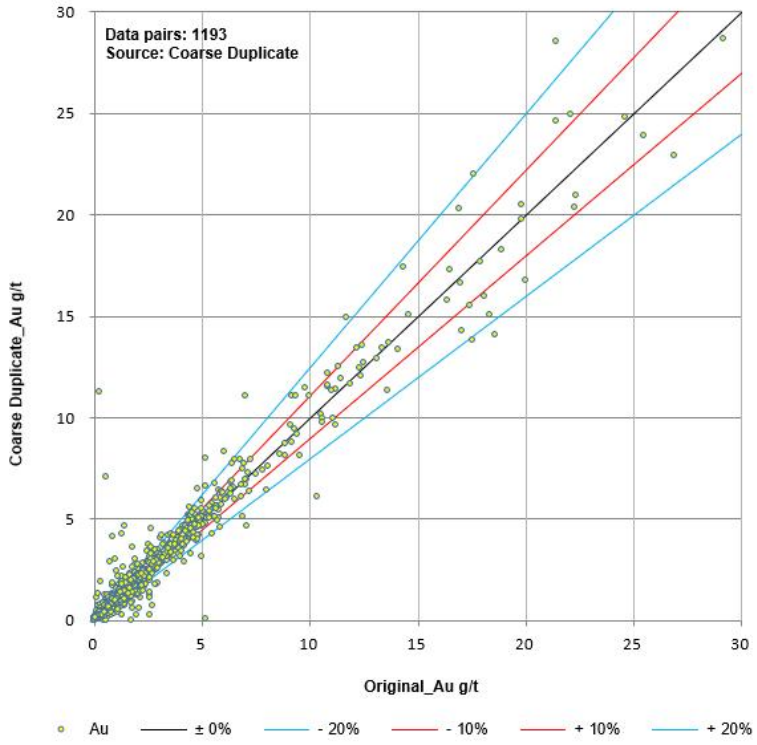
Field Duplicates

Detailed in Table 8-10 and Figure 8-8: , about 67% duplicate pairs are within 20% limits.

Table 8-10: 242 Field Duplicates Summary Between 2023 and March 2024

Element	Data Pairs Count	Relative Difference					
		<10%		10% - 20%		> 20%	
Au	1,193	522	44%	282	24%	389	33%

Figure 8-8: 242 Field Duplicates Between 2023 and March 2024



8.3.3 DMH

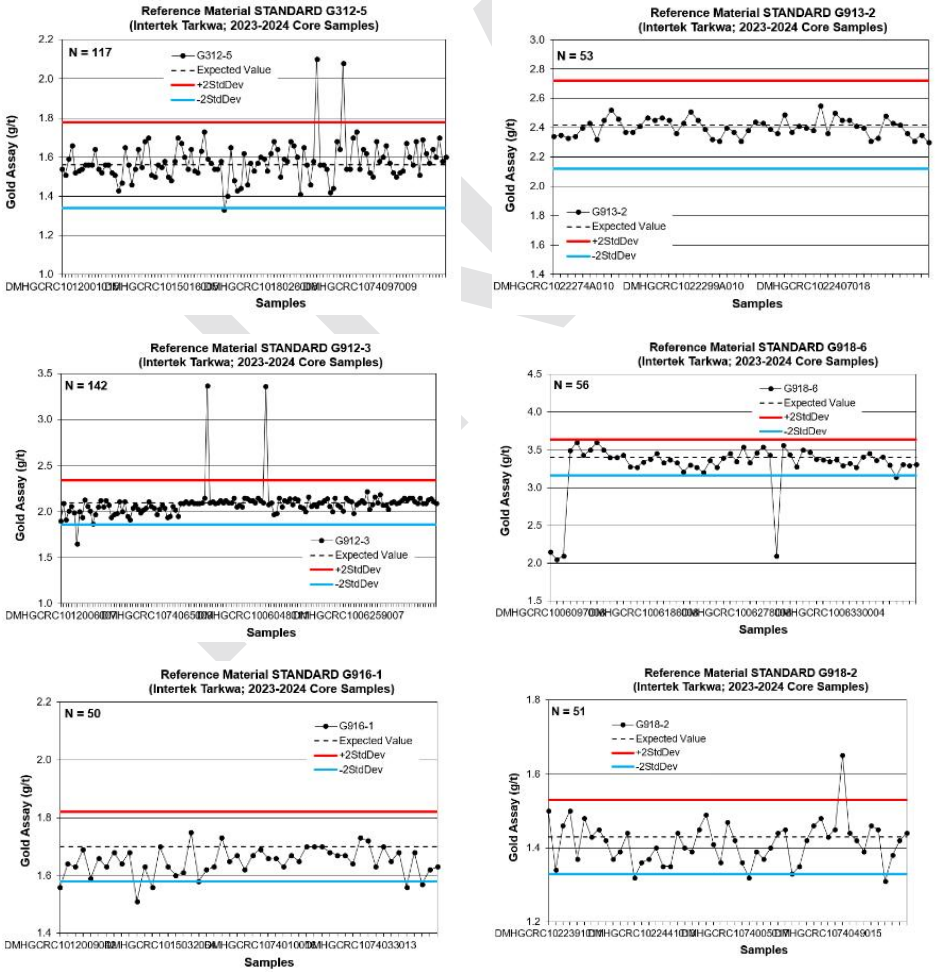
CRMS

Detailed in Table 8-11 and Figure 8-9, the pass rates within 2 standard deviations range from 90% to 100%, the average is 95%.

Table 8-11: DMH CRMs Summary Between 2023 and March 2024

CRM	Element	Expected	CRM SD	Samples	Samples_Mean	2SD	
						Samples Outside	Pass Rate
G312-5	Au	1.56	0.11	117	1.58	3	97.44%
G913-2	Au	2.42	0.15	53	2.40	0	100.00%
G912-3	Au	2.10	0.12	142	2.09	3	97.89%
G918-6	Au	3.40	0.12	56	3.29	5	91.07%
G916-1	Au	1.70	0.06	50	1.65	5	90.00%
G918-2	Au	1.43	0.05	51	1.41	4	92.16%

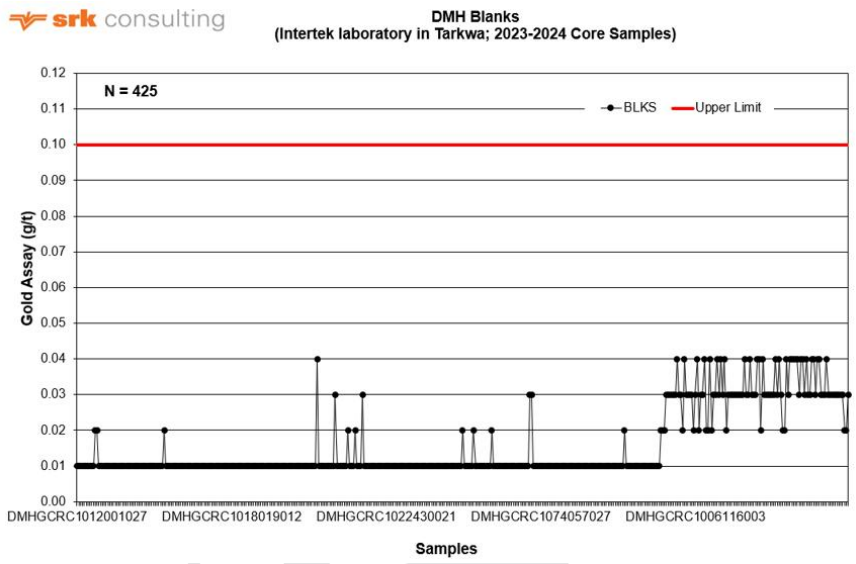
Figure 8-9: DMH CRM Samples Between 2023 and March 2024



Blanks

As shown in Figure 8-10, all samples result of gold are falling with 10X detection limit.

Figure 8-10: DMH Blank Samples Between 2023 and March 2024



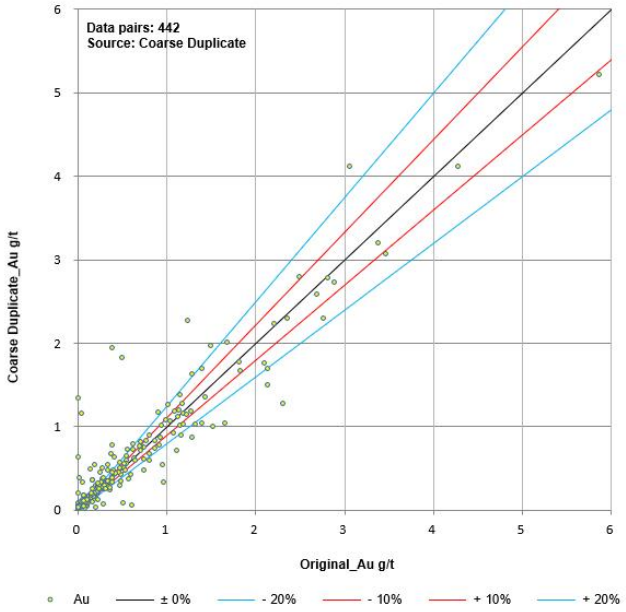
Field Duplicates

Detailed in Table 8-12 and Figure 8-11, about 68% duplicate pairs are within 20% limits.

Table 8-12: DMH Field Duplicates Summary Between 2023 and March 2024

Element	Data Pairs Count	Relative Difference					
		<10%		10% - 20%		> 20%	
Au	442	253	57%	49	11%	140	32%

Figure 8-11: Correlation Plot of Coarse Reject Replicates and Original Assays



8.3.4 Comments

Based on the verification of the data, SRK is of opinion that the QA/QC samples' performance are of industrial standard, which provides sufficient confidence for the mineral resource estimation.

9 Mineral Processing and Metallurgical Testing

9.1 Metallurgical Test works of 2003

Metallurgical Process Development Pty Ltd. (now known as MDM) carried out the Process Engineering aspect of the feasibility study ("FS") for a CIL commissioned by GSR when the latter took ownership of the Project in 2002. The FS was completed in 2003. The metallurgical test work was conducted on samples from the Wassa area. Samples were originally sent to SGS Lakefield in Johannesburg for both variability and bulk sample test work. Further variability test work was conducted at AMMTEC in Perth.

A total of 24 variability samples were tested: 10 of fresh mineralised material, six of oxide, and eight samples taken from the decommissioned and reclaimed Heap Leach operation ("HL"). Four bulk samples were also tested, representing fresh, oxide, HL phase 1 and HL phase 2. All these samples were taken from the Wassa Main area.

The test work also quantified the metallurgical grindability, gravity recovery and leachability that could be attained within the milling circuit. The Bond Ball Mill Work Index ("BWi") for the fresh bulk sample was 14.8 kWh/t. That sample achieved a leach recovery of 92% on a grind size of 75% passing 75 µm when leached over a 24-hour period. However, the reported values for the BWi and leach recovery are 8 kWh/t and 93% respectively under same conditions. The potential plant gravity circuit recoveries ranged between 30 to 40% and an indicative minor preg-robbing behaviour was also noted.

These were reported as per NI 43-101 Technical Report on A Feasibility Study of the Wassa Open Pit Mine and Underground Project in Ghana (SRK, 2014) and NI 43-101 Technical Report on the Wassa Gold Mine - Mineral Resource & Mineral Reserve Update and Preliminary Economic Assessment of the Southern Extension Zone (GSR, 2021).

9.2 Metallurgical Testwork of 2015

Further metallurgical test work was completed in 2015 as part of the Wassa Underground FS. This test work was undertaken by SGS (Cornwall, UK) and the samples were delivered and logged in the middle of December 2014 with this initial phase of test work completed and the draft report issued in early April 2015.

The scope of the test work covered evaluation of the performance of feed from underground with a series of half-core samples from definition drilling. The physical characteristics and metallurgical response of these samples were compared to those of a reference sample of the then plant feed (i.e., open pit material).

A representative of the underground feed material was obtained from the exploration decline and bulk sample from underground. The bulk sample treatment through the plant resulted in a reduced test work program that included a series of six variability and four crushability samples that were compared to a reference sample taken from the open pit ore feed.

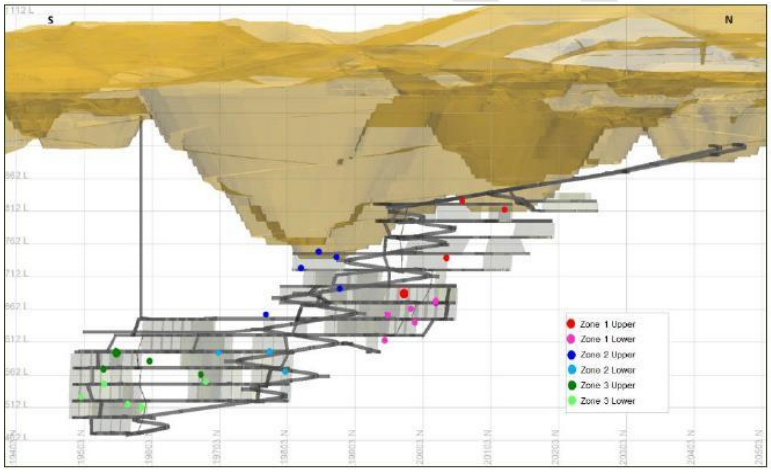
9.2.1 Variability, Crushability and Reference Sample

GSR differentiated spatially the material envisaged to be processed into six underground domains or zones for processing. Six variability samples were selected, one for each zone from available HQ and NQ half cores. These are depicted in Figure 9-1 with further details presented in Table 9-1.

Table 9-1: Ore Zones Represented by the Variability Samples

Zone	Northing		Relative Level		Tonnes ('000 t)	Grade (g/t Au)	cont.Au (koz)	Tonnes share %	Metal share %
	from mN	to mN	from mRL	to mRL					
Zone 1 upper	20,200	19937.5	857	682	598	4.74	91.2	15%	14%
Zone 1 lower	20,200	19937.5	682	607	707	6.78	154.1	18%	23%
Zone 2 upper	19,937.5	19690	782	632	723	6.28	146.1	18%	22%
Zone 2 lower	19,937.5	19690	632	507	538	4.32	74.7	14%	11%
Zone 3 upper	19,690	19500	657	557	772	5.02	124.6	20%	19%
Zone 3 lower	19690	19500	557	482	613	4.2	82.8	16%	12%
Total Processing Inventory					**3,952**	**5.3**	**673.5**	100%	100%

Figure 9-1: Locations of 2015 Metallurgical Samples (GSR, 2015)



These core sections were further cut in half, with one section used for the metallurgical test work and the remaining quarter core sections retained for reference. Each sample of quarter core, weighed between 50 and 60 kg.

Four full core samples were selected for the crushability tests since samples with a minimum of 35 mm in two dimensions are required. As a result, quarter core samples were not suitable for such investigations due to the limited physical size of each sample. Each crushability sample consisted of seven lengths of HQ drill core each approximately 200 mm in length. Three of these samples were prepared for the uniaxial compressive strength ("UCS") tests with the remaining core sections and material from UCS testing prepared for the Bond crushability index (low energy crushing) tests.

The reference sample used was obtained from the workings in the Starter open pit area at around the 910 m level by hand selection. Around 100 kg of material was taken, and this sample was used for both metallurgical and crushability test work. Some of the crushability samples selected were adjacent to rather than completely within the representative ore zone. The full description of each sample is given in Table 9-2.

Table 9-2: Summary of Location of 2015 Testwork Samples

Sample Type	Detail	Northing		Easting		Relative Level			Sub-samples / Intersections no.
		from	to	from	to	from	to	avg.	
		mN	mN	mE	mE	m	m	m	
Reference		20,420	20,396	40,004	39,974	910	910	910	6
Variability	Z1U	19,972	20,043	40,113	39,984	828	682	763	6
Variability	Z1L	19,947	19,988	39,994	39,912	678	615	664	7
Variability	Z2U	19,770	19,846	40,084	39,930	753	653	713	5
Variability	Z2L	19,700	19,757	40,079	39,931	602	530	575	6
Variability	Z3U	19,531	19,576	40,023	39,979	602	562	585	4
Variability	Z3L	19,497	19,565	40,040	39,945	555	510	533	5
Crushability 1	BSDD347MET	19,492	19,489	40,024	39,999	587	514	553	8
Crushability 2	WMET4	20,053	20,050	40,014	39,999	767	748	753	8
Crushability 3	WMET5	20,036	20,036	39,980	39,975	722	713	719	8
Crushability 4	WMET6	20,017	20,016	39,976	39,964	716	652	700	8

9.2.2 Programme of Metallurgical Test works

The following constituted the requisite metallurgical tests performed:

- Scope of work for reference and variability samples:
  - elemental scan: ICP multi-element analysis;
  - analysis of sulphide and total sulphur;
  - analysis of carbonate and graphitic carbon;
  - Bond Ball Mill Work Index; and
  - Bond Abrasion Index (Ai).
- diagnostic leach (gold deportment tests);
- Scope of work for crushability and reference samples:
  - UCS;
  - Bond Low Impact Crushing Work Index (CWi);
  - BWi; and
  - Ai.
- Standard flowsheet treatment tests – to confirm recoveries and reagent consumptions:
  - grind calibration tests;

- gravity concentration;
- cyanide leaching of the gravity tails with pre-aeration; and
- settling tests.

9.2.3 Findings of Metallurgical Test works

Head Grade and Analyses

Milled head samples were screened over an aperture of 106 µm. The gold and silver contents of the two fractions were determined using fire assay and the values are stated in Table 9-3.

Table 9-3: Head Grades of Screened Samples

Sample	Overall Grade		Size fraction					Gold Distribution		Silver Distribution	
			+106 micron			-106 micron					
	Au g/t	Ag g/t	Share	Au g/t	Ag g/t	Au g/t	Ag g/t	+106µm	-106µm	+106µm	-106µm
Reference	1.53	0.1	1.9%	11.32	0.2	1.14	0.1	13.9%	86.1%	3.7%	96.3%
Zone 1 Upper	6.51	0.4	2.4%	28.29	1.6	7.03	0.4	10.3%	89.7%	8.8%	91.2%
Zone 1 Lower	7.99	0.6	2.3%	42.29	4.2	7.31	0.6	12.0%	88.0%	15.0%	85.0%
Zone 2 Upper	5.11	0.4	1.3%	17.26	1.0	4.38	0.3	4.2%	95.8%	3.5%	96.5%
Zone 2 Lower	4.64	0.2	2.4%	9.94	0.8	4.52	0.2	5.0%	95.0%	8.8%	91.2%
Zone 3 Upper	4.07	0.5	1.6%	9.45	0.6	4.42	0.5	3.6%	96.4%	2.1%	97.9%
Zone 3 Lower	5.26	0.6	2.2%	25.3	2.8	5.29	0.5	10.3%	89.7%	10.9%	89.1%

In all cases, the gold and silver content in the coarse fraction (+106 µm) is higher than those in the finer fraction (-106 µm).

Elemental analyses were carried out using an Inductively Coupled Plasma (ICP) spectroscopy. Total carbon, organic carbon, total sulphur and sulphide sulphur contents of the reference and variability samples were determined using the Leco Furnace method. The results are indicated in Table 9-4.

Table 9-4: Elemental and Chemical Analyses

Sample (%)	1010A REF1	2008A Z1U	3008A Z1L	4008A Z2U	5008A Z2L	6007A Z3U	7007A Z3L
Cu	0.003	0.019	0.011	0.01	0.01	0.008	0.01
Pb	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	0.002
Zn	0.006	0.009	0.01	0.008	0.009	0.008	0.007
As	<0.001	0.001	0.003	0.001	0.001	0.001	<0.001
Cd	<0.0001	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002
Ni	0.002	0.004	0.004	0.002	0.002	0.005	0.003
Co	<0.001	0.003	0.004	0.004	0.003	0.003	0.003
Mn	0.07	0.14	0.18	0.2	0.15	0.1	0.13
Bi	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sb	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Hg	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Te	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Se	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
SiO_2	78.46	74.96	65.39	66.51	59.42	65.39	57.55
Al	3.32	3.48	4.46	4.37	5.22	4.65	5.24
Fe	2.83	5.57	6.46	5.48	4.67	3.92	4.62
Mg	0.74	0.88	1.09	1.27	1.53	1.47	1.8
Cr	0.03	0.06	0.05	0.03	0.02	0.01	0.01
Ca	1.82	1.1	1.81	2.14	3.47	2.71	3.77
S	0.46	0.86	1.56	0.98	1.3	1.17	0.9
Na	0.92	0.96	1.46	1.93	1.98	1.57	2.16
K	1.36	1.7	1.79	1.57	1.38	2.11	1.6
% S (total)	0.46	0.86	1.56	0.98	1.3	1.17	0.9
% S (soluble)	0.02	0.03	0.04	0.04	0.04	0.03	0.03
% S (sulphide)	0.44	0.83	1.52	0.94	1.26	1.14	0.87
% C (total)	1.4	1.42	1.89	1.99	2.22	1.86	2.52
% C (organic)	0.03	0.02	0.03	0.02	0.03	0.02	0.02
% C (CO_3)	1.37	1.4	1.86	1.97	2.19	1.84	2.5

In all cases, a higher-grade variability sample registered higher contents of sulphide sulphur, iron and base metals compared to the reference sample, although the levels for the base metals were relatively lower values.

The low levels of graphitic carbon measured in all the samples is indicative of the minimal preg-robbing potential.

Diagnostic Leach

Diagnostic leaching is a method for determination and distribution of gold among the minerals. It is commonly utilised because of its simplicity, speed and relatively low cost. It consists of a series of cyanidation steps in between a series of progressively more aggressive acid-digestion steps. Thus, it apportions a gold assay into water-soluble, cyanidable-exposed gold, and gold enclosed in carbonates, in sulphides and in silicates.

However, diagnostic leaching is also carried out, ensuring that the various leach stages are carried out correctly and the results analysed properly.

The aim for this testwork was to determine whether the increased level of sulphide minerals was resulting in the samples being more refractory to treatment for the recovery of gold.

Each of the samples was prepared by grinding 75% passing 75 µm and was subjected to the following steps:

- Step 1. Cyanidation to determine the amount of free and exposed gold.
- Step 2. Leach with hydrochloric acid to define gold bound to carbonates, pyrrhotite, galena, goethite and other iron hydroxide minerals

- Step 3. Leach with sulphuric acid to determine amount of gold associated with uraninite, sphalerite, labile copper sulphates, labile base metal sulphides, and labile pyrite.
- Step 4. Leach with nitric acid to determine amount of gold associated with pyrite, arsenopyrite and marcasite.
- Step 5. Carbon combustion to burn off any organic carbon releasing gold previously adsorbed by the carbon and therefore not amenable to recovery by direct cyanidation.

Steps 2 to 5 constitute separate pre-treatment stages and residual gold and silver present after the above tests represent gold encapsulated in silica and other non-reactive gangue minerals inherently present in the sample.

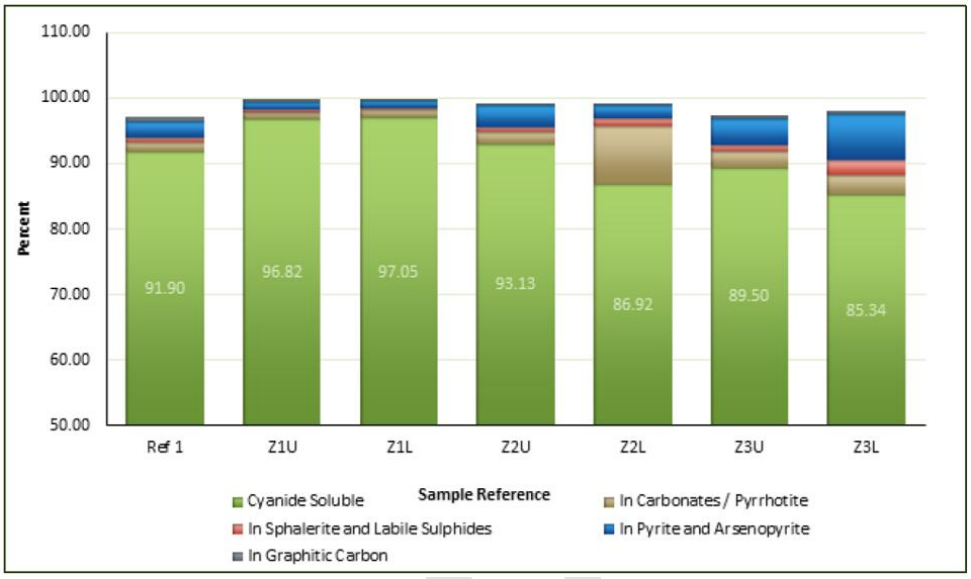
Table 9-5 shows a summary of results of the diagnostic leaching tests for gold and the deportment of gold in the samples.

Table 9-5: Summary of Gold Deportment Using Diagnostic Leaching

Gold Deportment	Sample Reference						
	Ref 1	Z1U	Z1L	Z2U	Z2L	Z3U	Z3L
	%	%	%	%	%	%	%
Cyanide Soluble	91.9	96.82	97.05	93.13	86.92	89.5	85.34
In Carbonates / Pyrrhotite	1.38	0.88	1.1	1.7	8.83	2.37	2.99
In Sphalerite and Labile Sulphides	0.66	0.58	0.23	0.73	1.22	0.97	2.18
In Pyrite and Arsenopyrite	2.53	1.22	1.26	3.3	1.91	4.01	7.01
In Graphitic Carbon	0.59	0.27	0.1	0.35	0.38	0.45	0.4
Residual Gold	2.93	0.23	0.25	0.79	0.74	2.71	2.08
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**

The mineralogy and metallurgy of the samples when compared to the reference sample, appear to have potentially more occluded gold or associated with different sulphide minerals and others less. Low levels of preg-robbing potential are indicated from the gold liberated in the burn off stage. Two samples (Z3U and Z3L) showed potentially higher levels of gold encapsulated in pyrite while sample Z2L showed higher levels of gold potentially associated with more reactive minerals such as pyrrhotite as seen in the graphical display of same data in Figure 9-2.

Figure 9-2:: Gold Deportment in Samples Using Diagnostic Leaching



It should be noted that due to assay detection limits some of the lower deportments may be marginally inaccurate. Given a detection limit of 0.01 g/t Au, measurements below this level were assigned a nominal assay of 0.005 g/t Au; hence on the lower levels the deportment in these fractions could be possibly overstated.

It was reported that during the hydrochloric acid digestion, a reasonably vigorous reaction took place on the majority of the variability samples with the generation of green foam. This would tend to indicate a high level of carbonate and acid soluble iron, possibly pyrrhotite.

Crushability

Metallurgical operations in size reduction including both crushing and grinding are determined by the feed characteristics of the ore into the circuit. Key parameters needed are the "crushability or grindability", also called Work Index (Wi) and the "Wear Profile" or Ai.

Crushability is the ease of crushing a sample under standard conditions. Various testing procedures may be used to measure crushability. The low energy crushing work index laboratory test is conducted on ore specimens larger than 50 mm, determining the CWi or impact work index (IWi).

The uniaxial UCS and the Bond CWi tests were undertaken to determine the material strength and crushability of a material. In the UCS test, a sample is prepared by cutting to pre-set dimensions (re-coring) and then subjected to a compressive load to measure the strength at which the sample fails. The Bond CWi test involves two swinging weighted pendulums which are allowed to fall and impact simultaneously on the sample in order to measure from what height the pendulum needs to fall to crush the sample.

Both tests (UCS and CWi) were undertaken on multiple individual samples notably three prepared samples in the case of the UCS tests and about 20 sample pieces for the Bond CWi test. The results of the tests are presented in Table 9-6.

Table 9-6: Results of Crushability Tests using UCS and CWi

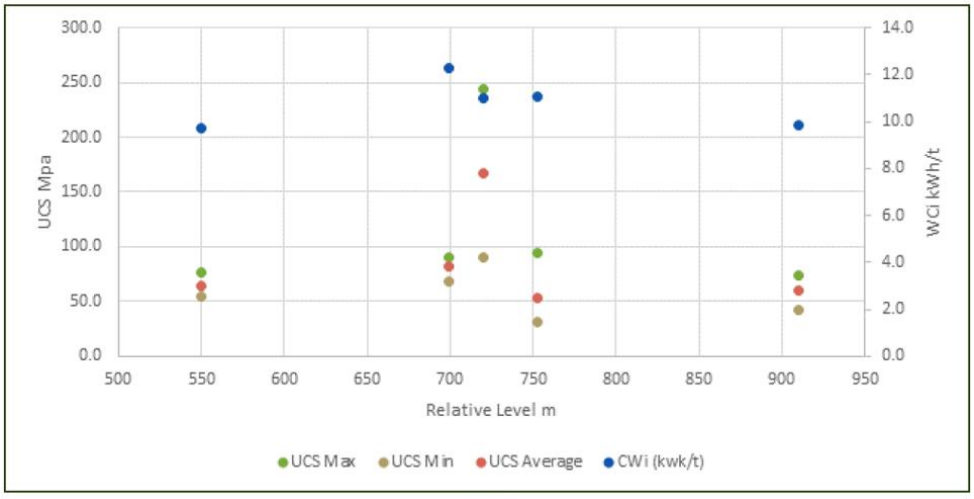
	Density	Depth	UCS Result (Mpa)			CWi (kwh/t)		Depth
	t/m³	RL m	Average	Max	Min	Average	Std Dev	m RL
Reference	2.67	910	59.5	73.7	41.8	9.8	1.6	910
Crushability 1	2.93	550	64.7	76.9	54.3	9.7	1.3	550
Crushability 2	2.87	753	53.9	94.4	31.1	11.1	1.2	753
Crushability 3	2.71	720	167.4	244	90.7	11	2.1	720
Crushability 4	2.84	699	82.4	90	68.9	12.3	2.9	699

A relatively large variation between the maximum and minimum measurements on the different samples were recorded during the UCS tests. There is no correlation between the UCS results and the depth of the sample.

The values of work indices obtained are indications of the efficiencies of the machines. The general trend of samples UCS values to be within the 30 to 95 MPa range, indicating that the materials tested were medium strong to strong. One sample (Crushability 3) recorded a very strong measurement of around 240 MPa. The mineralogy of that sample appears to be consisting of quartzite (massive quartz vein), rather than schist which had been associated with the majority of the other samples tested.

The CWi test results show the samples to be in the easy to medium classification. Similar to the UCS results, the CWi test results are also relatively variable with the reference sample (910mRL). No real correlation can be seen between the CWi results and relative level of the sample tested as shown in Figure 9-3.

Figure 9-3: Scatter Diagram of the UCS and CWi Results with Relative Levels of Samples



Thus, the ores having the highest indices are the largest energy consumers followed by intermediate and the smallest consumers. The smallest consumers of energy are those machines that apply a steady, continuous, compressive stress on the material to crush them.

Ball Mill Work Index and Abrasion Index

The most widely used parameter to measure ore hardness is the Bond BWi. The abrasion index is a measure of the anticipated wear on components and consumables in the comminution circuit and is applicable to wear in both crushers and mills (media and liners).

Calculations involving BWi are generally divided into steps with a different Wi determination for each size class.

The rate of production in a mill, Shell liner and lifter design and simulation are dependent among other parameters on the grindability in the ball mills.

The BWi tests were undertaken at a closing screen size of 106 µm to give a mill product of around 75-80% < 75 µm. The BWi values for the primary and oxide ores were reported to be in the region of 14.6 and 8 kWh/t respectively in the FS of 2003.

The findings of the BWi and Ai investigations from the 2015 tests are presented in Table 9-7 and are shown as a function of the average sample depth in Figure 9-4 and Figure 9-5, respectively.

Table 9-7: Bond Work Indices and Abrasion Indices from the 2015 Testwork

Sample Description	BWi	Ai	Avg. Depth
	kWh/t		RL m
Reference	15.7	0.394	910
Z1U Zone 1 Upper	15.3	0.33	763
Z1L Zone 1 Lower	14.7	0.276	664
Z2U Zone 2 Upper	14.9	0.228	713
Z2L Zone 2 Lower	14.5	0.175	575
Z3U Zone 3 Upper	14.4	0.229	585
Z3L Zone 3 Lower	13.9	0.152	533
Crushability 1 (347MET)	14	0.182	553
Crushability 2 (MET4)	15	0.205	753
Crushability 3 (MET5)	14.8	0.398	719
Crushability 4 (MET6)	14.8	0.326	700

From the 2015 testwork, fresh open pit ore feeding the two ball mills were expected to draw power between 14.5 and 16.5 kWh/t treated. This results in a calculated BWi of around 14 – 16 kWh/t, based on the reported mill feed and product sizes and power draw on the ball mills. An allowance was made in the calculations for mechanical and other losses between the drive motor and mill.

The experimental data of the samples does not support the suspected increasing BWi with further depth with the reference sample (910 mRL) showing the highest BWi reading.

Figure 9-4: Plot of 2015 Ball Mill Bond Work Index Against Sample Depth

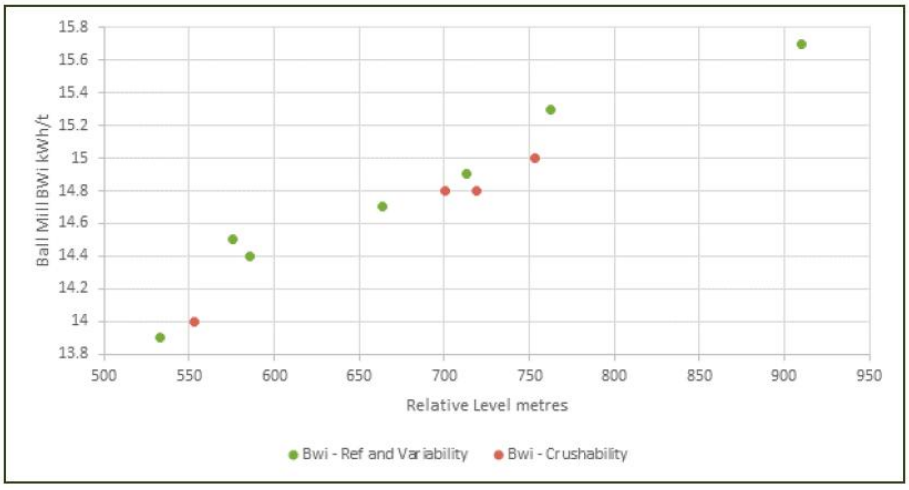
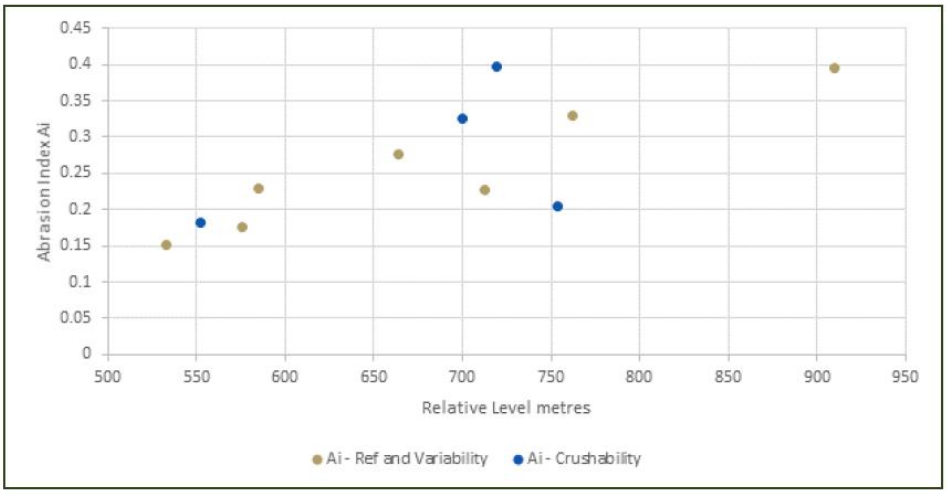


Figure 9-5: Plot of 2015 Abrasion Index Against Sample Depth



Ai has generally shown not to be increasing with depth and it appears Ai is slightly lower on deeper samples. With the exception of one sample (MET 5) of massive quartz vein, measured Ai for the reference sample is higher than all the other samples tested. This lower indicated abrasion index with depth may result in the reduced consumption of grinding media and mill crusher liners as mining proceeds deeper into the underground areas. All the samples fall into the slightly abrasive classification.

The Ai determined values are utilised in modelling and simulation of plants designed.

Gravity Gold and Leaching Tests

Each 1 kg representative sample from each zone or category with a grind of 75% passing 75 µm passes through a Falcon centrifugal concentrator for gravity separation of any free gold. Each batch of concentrate from the Falcon was further processed on a Mozley shaking table, with the final concentrate weighed and sent for assay. Tailings from the centrifugal concentrator and shaking table were subjected to cyanide leach testing.

Table 9-8 shows the results of the gravity tests.

Table 9-8: Gravity Gold Recovery Test Results

Sample Ref	Gravity Con Mass		Assay				Metal Recovery to Gravity Con	
	g	Wt %	Au (g/t)	Ag (g/t)	% Fe	% S (total)	Au %	Ag %
Ref1	3.3	0.33	84.33	8.0	19.59	15.61	18.19	26.4
Z1U	2.1	0.21	322.6	18.8	37.28	21.86	10.41	9.18
Z1L	4.9	0.49	322.3	19.3	38.24	26.92	19.77	15.01
Z2U	2.5	0.25	324.3	26.3	37.05	31.09	15.87	18.26
Z2L	3.0	0.30	211.6	13.4	35.84	44.15	13.68	19.14
Z3U	2.7	0.27	199.2	14.8	34.31	38.32	13.21	8.88
Z3L	2.4	0.24	282.8	24.1	28.80	29.76	12.90	10.52

The results of the gravity recoveries were lower than in previous reports however the recovery from the reference sample is generally higher than on the variability samples.

In all the tests, a strong rare earth magnet was able to separate the magnetic components of the slurry but not for iron magnet. This magnetic component was suspected by SGS to be pyrrhotite (SRK, 2021). The claim was attributed to the sulphur to iron ratios measured in the feed analyses.

Carbon-in-Leach Tests

These sets of CIL tests were undertaken to investigate the effective leaching conditions and reagent consumption is determined for each sample. Concurrently, any preg-robbing effect is also evaluated for each sample. A comparative assessment is designed with leach test undertaken on the reference sample with and without carbon as well.

The results obtained from the experiments are indicated in Table 9-9.

Table 9-9: Summary of CIL Results

	Solution (24h/48h)		Solid tails		Gold on Carbon		Overall Recovery		Back Calc. Head Grade	
	Au g/t	Ag g/t	Au g/t	Ag g/t	Au g/t	Ag g/t	Au %	Au %	Au g/t	Ag g/t
Leach Test	1.13	0.08	0.105	0.05	-	-	-	-	1.55	0.15
Distribution	93.2%	67.0%	6.8%	33.0%	-	-	93.2%	67.0%	-	-
CIL Test	0.14	0.01	0.1	0.05	93.4	12.7	-	-	1.21	0.19
Distribution	14.3%	6.5%	8.3%	26.4%	77.4%	67.1%	91.7%	73.6%	-	-

Preg-robbing effect was not deducible during the leaching of the sample since the difference in recoveries of gold with and without carbon in the slurry is not significant. This is impacted by the situation with a higher gold recovery for the Carbon-in-Pulp ("CIP") at 93.2% compared to the 91.7% for CIL. However, the gold reconciliation showed a significant difference for the case of head grades for CIL (Table 13-9 refers) and screened head grade (Table 13-3 refers) with values of 1.55 g/t Au and 1.53 g/t Au respectively. The worst reconciliation case was for the back-calculated value of 1.21 g/t Au for same sample under CIL (Table 13-9 refers).

Gravity Gold and Leaching Tests

The combined gravity tails from the centrifugal concentrator and concentrate cleaning table were subjected to cyanide leaching using the BLEG protocol.

Based on the potential presence of pyrrhotite in the gravity tails samples, the pH had to be pro-condition to values between pH 10.5 - 11 using lime and aerated until the pH and dissolved oxygen levels stabilized generally in line with the plant practice of injecting oxygen into the transfer line from milling to CIL. Pyrrhotite is highly reactive and can result in high consumptions of oxygen and cyanide in leach if not preconditioned.

Leach tests were conducted for up to 48 hours with samples taken at 2, 4, 6, 24 and 48h and analysed for gold and silver in solution. An initial cyanide level of 1 g/l was used and cyanide levels in solution were maintained at >0.5 g/l by dosing additional cyanide as required. The tails solids were analysed for silver and gold. No lead nitrate was added in this leach tests.

A summary of the test results is shown in Table 9-10.

Table 9-10: Gold Recoveries from Samples, Cyanide and Lime Consumption Rates

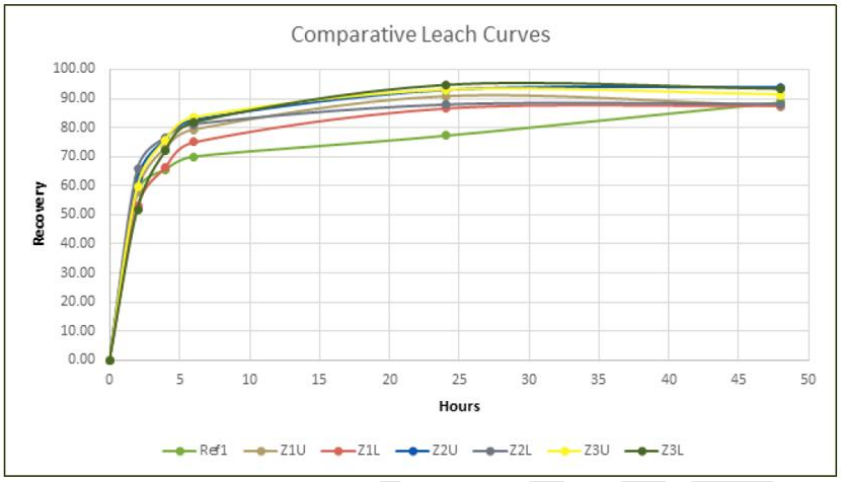
Sample Reference	Gold Recovery %		Assayed Tails	Consumption kg/t		
	24h	48h	g/t Au	NaCN 24h	NaCN 48h	Lime as CaO
Ref1	77.22	88.69	0.09	0.43	1.31	0.88
Z1U	90.69	87.35	0.44	0.51	1.48	0.89
Z1L	86.72	87.64	0.68	0.40	1.15	0.75
Z2U	92.81	93.80	0.20	0.43	1.05	0.92
Z2L	87.81	88.06	0.42	0.15	0.91	0.88
Z3U	92.95	91.33	0.23	0.63	0.89	1.16
Z3L	94.57	93.25	0.18	0.63	1.01	1.11

It could be observed that the extended leaching period had three samples (Z1U, Z3U and Z3L) showing slightly decreased recoveries. Nonetheless, for the other 4 samples, the extra 24 hours of leaching time did not result in any significant improvement in their recoveries. The lowered recoveries could be attributed to analytical error or discrepancy. It could also arise from a desorption activity or process. Should the latter arise on the field, the gold would be re-adsorbed by the activated carbon present in the CIL circuit.

However, the cyanide consumption rates were markedly higher for the extended leaching.

A plot of the data in Figure 13-5 reveals that the rates and kinetics of leaching each of the samples were consistent and close with the exception of the reference sample after 24 hours of leaching. Nevertheless, the final recovery after 48 hours was consistent for all the samples.

Figure 12-6: Leaching Curves



Overall Gravity / Leach Recoveries

Comments on the gravity/ CIL testwork results are as follows:

- Gravity recoverable gold content ranges from 15% to 26% with an average of 20%.
- Overall recovery ranged from 90% to the highest at 96% whilst the average 93%.

The corresponding recoveries as determined from the sample routes are shown in Table 9-11.

Table 9-11: Recoveries of Gold from Samples via Gravity-Leach Routes

Sample Reference	Gold Recovery %		
	Gravity	Leach	Overall
Ref1	26.41	88.69	91.68
Z1U	16.38	90.69	92.22
Z1L	22.69	87.64	90.44
Z2U	20.19	93.80	95.05
Z2L	15.37	88.06	89.90
Z3U	16.91	92.95	94.15
Z3L	20.41	94.57	95.68

It can be seen that Z1L recoveries were outliers compared to similar trends for all the other samples except for the reference sample. It rather compared very well with the reference sample. There was also a strong positive correlation between gravity and leach recoveries without Z1L sample. Similarly, positive strong correlations were seen between the leaching and overall recoveries. These observations could lead to the conclusion that the overall recoveries were extremely dependent on the recoveries obtained during leaching. The extended leach period to 48 hours alone did not appear

to have a significant impact on the overall recoveries and therefore such factors would have to be subjected to further assessment to make a direct implication to that effect.

It was observed that there appeared to be discrepancies in the head grade based on the fire assay methodology and the back-calculated approach as shown in Table 9-12.

A better correlation between the diagnostic and the gravity leach test grades however could be observed.

Table 9-12: Reconciliation of Assay and Back-Calculated Head Grades

Sample	Assay Head Grade		From Diagnostics		From Gravity / Leach	
			Grade		Grade	
	g/t Au	g/t Ag	g/t Au	g/t Ag	g/t Au	g/t Ag
Reference	1.53	0.10	1.35	0.22	1.08	0.13
Z1U	6.51	0.43	6.74	0.89	4.18	0.31
Z1L	7.99	0.63	8.71	1.06	7.08	0.46
Z2U	5.11	0.36	5.10	0.62	4.03	0.38
Z2L	4.64	0.21	4.84	0.46	4.14	0.32
Z3U	4.07	0.45	4.12	0.33	3.20	0.30
Z3L	5.26	0.55	4.28	0.27	3.36	0.29

Settling Tests

Anionic flocculants have very wide application in the mining industry. A single variability sample was chosen and tested along the reference sample to determine the settleability of these materials. Nasaco anion flocculants N2132 and N2326 were used for the tests following the earlier trials with five different flocculants. The test results are presented in Table 9-13.

Table 9-13: Comparative Settling Tests using Anionic Flocculants NZ2132 and NZ2326

Sample	Feed Solids	pH	Flocculant	Flocculant Dosage	Initial Settling Rate	Final Solids Content	Thickener Underflow Unit Area
	%			g/t	$m^3/m^2/day$	%	$m^2/t/d$
Reference Test 1	9.43	10.5	N2132	50.04	1335.26	59	0.235
Reference Test 2	10.08	10.5	N2326	46.62	2897.86	61.8	0.261
Z1L Test 1	9.04	10.5	N2132	52.21	2414.88	56.5	0.225
Z1L Test 2	9.13	10.6	N2326	51.69	2637.79	56.9	0.223

Normal dosage rates for these applications are in the range 2.5-50 g/t.

The results show very similar settling performance on the reference samples and the sample with the generation of a thickened slurry from about 10% solids in the feed compared to about 59% solids content which is in the region required for good cyanide leaching without the carbon settling to the bottom of the CIL tanks.

9.3 Metallurgical Testwork of 2018

In August 2018, GSR commissioned another metallurgical study to profile the mining zones so as to develop a plant operations strategy. University of Mines and Technology, Tarkwa in Ghana undertook the geometallurgical characterisation of each of seven samples submitted by GSR. The scope of the study covered:

- Head assays
- BWi
- Gravity recoverable gold
- Effects of particle size on cyanidation
- Consumption of reagents such as cyanide, lime and lead nitrate; and
- Diagnostic leaching.

The head assays of the samples ranged from 3.91 g/t to 5.25 g/t whilst Bond BWi's ranged from 13.6 kWh/t to 15.7 kWh/t. Five samples (constituting 71%) were classified as hard rocks because their BWi were above 14 kWh/t whilst two other samples were classified to be of medium hardness. The details are shown in Table 9-14.

Table 9-14: Summary of Bond Ball Work Indices

SN	Sample Name	Feed/Product size, µm		Net grams per revolution, g/rev	Bond Index, kWh/t
		F_{80}	P_{80}		
1	WUG-SLC-18 MET 001	2606	71	0.971	15.7
2	WUG-SLC-18 MET 002	2534	72	1.103	14.4
3	WUG-SLC-18 MET 003	2796	72	1.057	14.8
4	WUG SLC 18 MET 004	2340	65	1.089	13.8
5	WUG-SLC-18 MET 005	1962	71	1.070	15.0
6	WUG-SLC-18 MET 006	2711	67	1.106	13.6
7	WUG-SLC-18 MET 007	2268	75	1.117	14.7
	Test aperture - 106 µm				

Most often cyclone underflow material moving for gravity concentration may be of size -1 mm however this may not be the liberation size. The results of gravity studies done at 40% passing 106 µm is presented in Table 9-15.

Table 9-15: Gravity Gold Recovery at different P80s

SN	Sample Name	Particle size distribution/Gravity gold recovery, %	
		-1 mm (80% passing 700 µm)	40% passing 106 µm
1	WUG-SLC-18 MET 001	40.6	41.8
2	WUG-SLC-18 MET 002	29.1	42.3
3	WUG-SLC-18 MET 003	15.1	27.7
4	WUG-SLC-18 MET 004	19.1	28.0
5	WUG-SLC-18 MET 005	24.0	31.2
6	WUG-SLC-18 MET 006	16.5	21.6
7	WUG SLC 18 MET 007	19.7	26.8

The concentrate grades were from 50 g/t to 120 g/t with gravity concentration at particle size 40% passing 106 µm generated gold recoveries in the range of 26% to 44% with an average recovery of 32%. The study clearly substantiated that CIL performance was superior to direct cyanidation. However, gold extraction by leaching was very sensitive to grind size. At 40%, 60% and 80% passing 106 µm the recoveries were 76%, 84.2% and 89.2% respectively.

All the samples had a basic paste pH within the range of 9.1 and 9.6. The calcium oxide consumption was 0.8 kg/t and cyanide consumption ranged between 0.13 and 0.19 kg/t. These consumption values were deemed moderate.

The overall recoveries based on gravity gold and cyanidation at 80% passing 106 µm, were between 90% and 96% as shown in Table 9-16.

Table 9-16: Metal Accounting

Sample name	Gold in 1 kg of ore, mg					Overall recovery, %
	Gravity	Solution	Carbon	Tails	Total	
WUG-SLC-18 MET 001	2.1964	0.05	2.39	0.35	4.9864	93.0
WUG-SLC-18 MET 002	2.1701	0.06	2.81	0.49	5.5301	91.1
WUG-SLC-18 MET 003	1.2491	0.05	2.60	0.42	4.3191	90.3
WUG-SLC-18 MET 004	1.3794	0.04	3.11	0.21	4.7394	95.6
WUG-SLC-18 MET 005	1.2211	0.03	2.51	0.26	4.0211	93.5
WUG-SLC-18 MET 006	1.0782	0.03	2.93	0.23	4.2682	94.6
WUG-SLC-18 MET 007	1.0565	0.02	2.73	0.29	4.0965	92.9

Diagnostic leaching of these samples revealed that the residual gold was distributed in all the other minerals with sulphides generally having higher gold values of up to 6.3%. Gold extraction in the first stage ranged between 85% and 94%.

10 Mineral Resource Estimates

10.1 Introduction

The Mineral Resource Statement presented herein represents a Mineral Resource evaluation prepared for the Wassa Main (B Shoot UG and 242 UG) deposit and the satellite deposits Dead Man's Hill (DMH), Benso's I Zone, Hwini Butre and Chichiwelli. The Mineral Resource Statement is presented in accordance with the JORC Code guidelines. SRK has reviewed, but not re-modelled or re-estimated the Mineral Resources and the mineral resource models were prepared by GSR.

At Wassa B Shoot deposit, GSR provided SRK with borehole database, structural control lines, grade wireframes, variogram models, resource classification footprints and block models. Mineralised wireframes were created by the Indicator radius basis function (RBF) Interpolant in Leapfrog™ software and the estimation technique was Ordinary Kriging (OK).

At Wassa 242 deposit, GSR provided SRK with borehole database, grade wireframes, variogram models, resource classification footprints and block models. Mineralised wireframes were created by the semi-explicit method in Leapfrog™ software and the estimation technique was OK.

At DMH deposit, SRK was provided with topographic surface, database, mineralised wireframe, and block models. The mineralisation domains were modelled using the intrusive technique in Leapfrog™ software and the estimation technique was OK.

At Benso, four estimation domains, Subriso East (including C Zone), Subriso West, G Zone and I Zone, were modelled. OP mining finished for Subriso East (including C Zone), Subriso West , G Zone and I Zone Pit. For I Zone Pit, GSR provided topographic surface, database, composites, mineralised wireframe, and a grade control model. The wireframes were created using Leapfrog™ software vein modelling technique and the estimation technique was OK.

At Hwini Butre, two estimation models, Father Brown (FB) and Adoikrom (ADK), were modelled. A drilling program was initiated at FB/ADK during 2022-2023, and 10,287.4m of drilling has been completed. But the additional drilling information has not been included in this resource estimate. For Chichiwelli, there has been no exploration or mining activity since 2020. Therefore, the Mineral Resources for FB/ADK and Chichiweilli remain unchanged from the previous NI 43-101 Technical Report (March 2021). The descriptions for Hwini Butre and Chichiwelli are thus based on the NI 43-101 Technical Report (March 2021).

The effective date of the current Mineral Resource Statement is 31 March 2024.

This section describes the Mineral Resource estimation methodology and summarizes the key parameters and assumptions considered by GSR. In the opinion of SRK, the Mineral Resource evaluation reported herein is a reasonable representation of the global gold Mineral Resources found in the Wassa project at the current level of sampling. The Mineral Resources estimates are reported in accordance with the JORC Code. Mineral Resources are not Ore Reserves and there is no certainty that all or any part of the Mineral Resource will be converted into Ore Reserve. It should be noted that the Mineral Resources reported in this Report are inclusive of, not in addition to, the Ore Reserves.

The database used to estimate the Mineral Resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for gold mineralisation and that the assay data are sufficiently reliable to support Mineral Resource estimation.

SRK has reviewed the databases, wireframes, grade estimation parameters, resource classification footprints and reported the Mineral Resource.

10.2 Resource Estimation Procedures

The Mineral Resources review and validation methodology involved the following procedures:

- Database verification
- Review of the definition of resource domains
- Data conditioning (compositing and capping) for data analysis
- Grade estimation review
- Mineral Resource classification review and model validation
- Assessment of "reasonable prospects for eventual economic extraction" (RPEEE) and selection of appropriate cut-off grades
- Preparation of the Mineral Resource Statement

10.3 Resource Database

10.3.1 Zone B Shoot

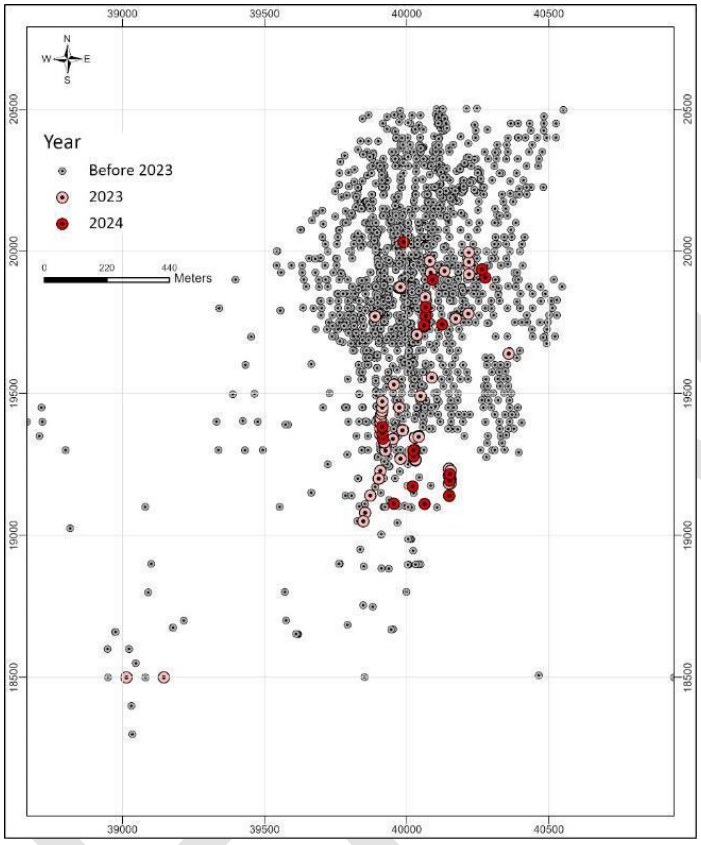
The database SRK received consist of assay, collar, density, lithological and weathering logs, and downhole survey data. They were loaded into Surpac software for the following validations:

- Checks for holes without samples
- Checks for duplicate samples
- Checks and adjusts the missing or wrong intervals

Only DD and RC holes were included in the grade estimate.

Figure 10-1 shows the locations of the DD and RC holes and Table 10-1 summaries the database statistics.

Figure 10-1: DD and RC Holes Plane Projection Map of Zone B Shoot



Source: Arcgis Mapping by SRK

Table 10-1: Mineral Resource Database Statistics of B Shoot

Location	Type	Holes	Drill Meters (m)	Assay Samples
Zone B Shoot	DD	3,755	731,162.9	559,927
	RC	485	50,314.9	37,484
	Total	4,240	781,477.8	597,411

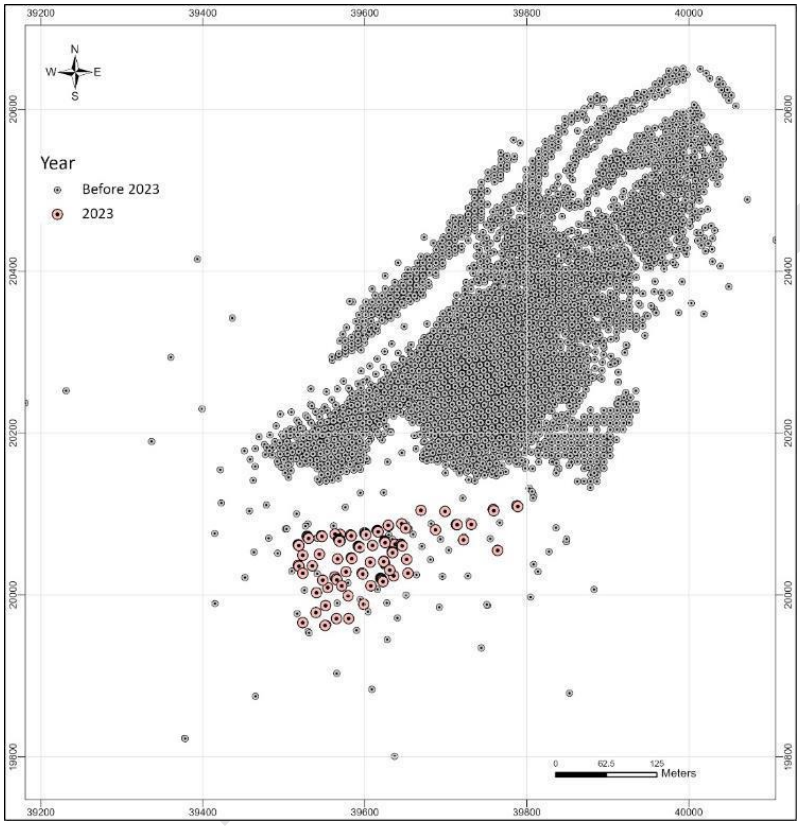
10.3.2 Zone 242

The database SRK received consist of assay, collar, density, lithological and weathering logs, and downhole survey data. They were loaded into Surpac for the following validations:

- Checks for holes without samples
- Checks for duplicate samples
- Checks and adjusts the missing or wrong intervals

DD, RC and grade control RC (GCRC) holes were included in the grade estimate. Figure 10-2 shows the locations of the DD, RC and GCRC holes and Table 10-2 summaries the database statistics.

Figure 10-2: DD, RC and GCRC Holes Plane Projection Map of Zone 242



Source: Arcgis Mapping by SRK

Table 10-2: Mineral Resource Database Statistics of Zone 242

Location	Type	Holes	Drill Meters (m)	Assay Samples
	DD	190	42,023.4	18,794
Zone 242	RC	79	8,773.0	8,020
	GCRC	4,332	92,859.0	83,430

Location	Type	Holes	Drill Meters (m)	Assay Samples
	Total	4,601	143,655.4	110,244

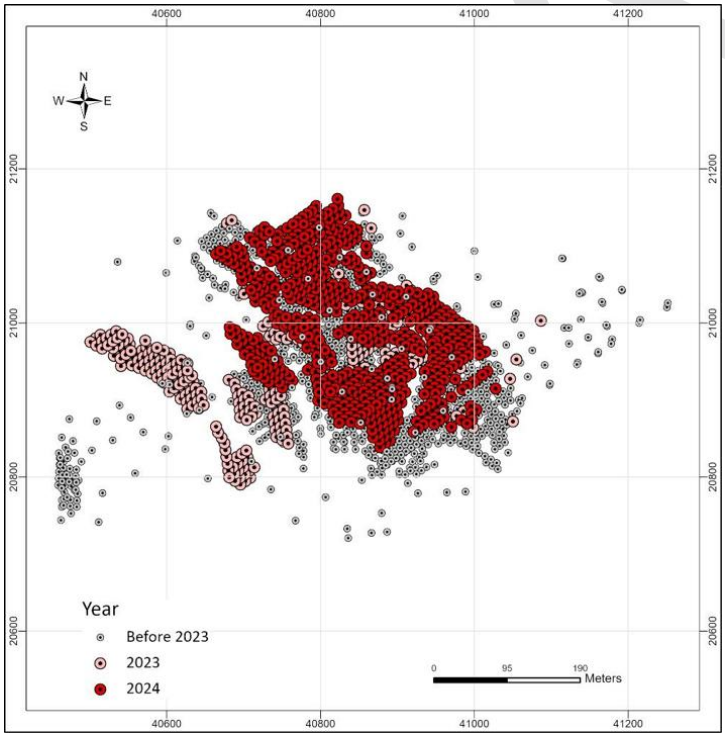
10.3.3 DMH

The database provided to SRK contain assay, collar, lithological logs, weathering, structure and downhole survey data. They were loaded into Surpac software for the following validations:

- Checks for holes without samples
- Checks for duplicate samples
- Checks and adjusts the missing or wrong intervals

DD, RC and grade control RC (GC-RC) holes were included in the grade estimate. Figure 10-3 shows the locations of the holes. Table 10-3 summaries the database.

Figure 10-3: DD, RC and GC-RC Holes Plane Projection Map of DMH



Source: Arcgis Mapping by SRK

Table 10-3: Mineral Resource Database Statistics of DMH

Location	Type	Holes	Drill Meters (m)	Assay Samples
DMH	DD	32	4453.8	2,678
	RC	205	15,618.4	7,195
	GC-RC	1,900	52,967.0	30,034
	Total	2,137	73,039.2	39,907

10.3.4 I Zone

The database (hbb_database.accdb) consists of assay, collar, lithological and weathering logs, and downhole survey data, covering the areas of Benso, Hwini Butre, and so on. SRK extracted the data used for I Zone and reconstructed the database. They were loaded into Surpac software for validation, which included:

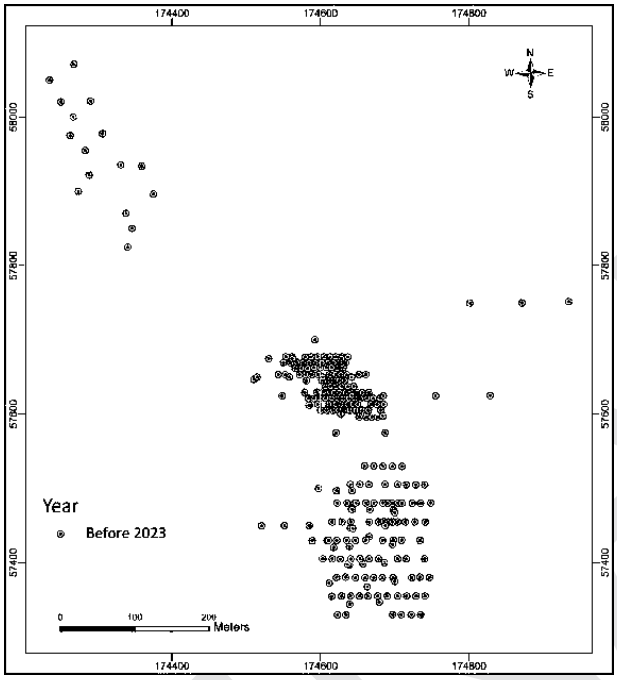
- Checks for holes without samples
- Checks for duplicate samples
- Checks and adjusts the missing or wrong intervals

DD, RC and GCRC holes were included in the grade estimate. Table 10-4 summaries the database statistics and Figure 10-4 shows the locations of the DD and (GC) RC holes.

Table 10-4: Mineral Resource Database Statistics of I Zone

Location	Type	Holes	Drill Meters(m)	Assay Samples
I Zone	DD	21	2,245.4	1,192
	RC	42	4,114.7	4,878
	GCRC	191	9,214.0	4,594
	Total	254	15,574.1	10,664

Figure 10-4: DD, RC and GCRC Holes Plan Projection Map of I Zone



Source: Arcgis Mapping by SRK

10.3.5 Hwini Butre

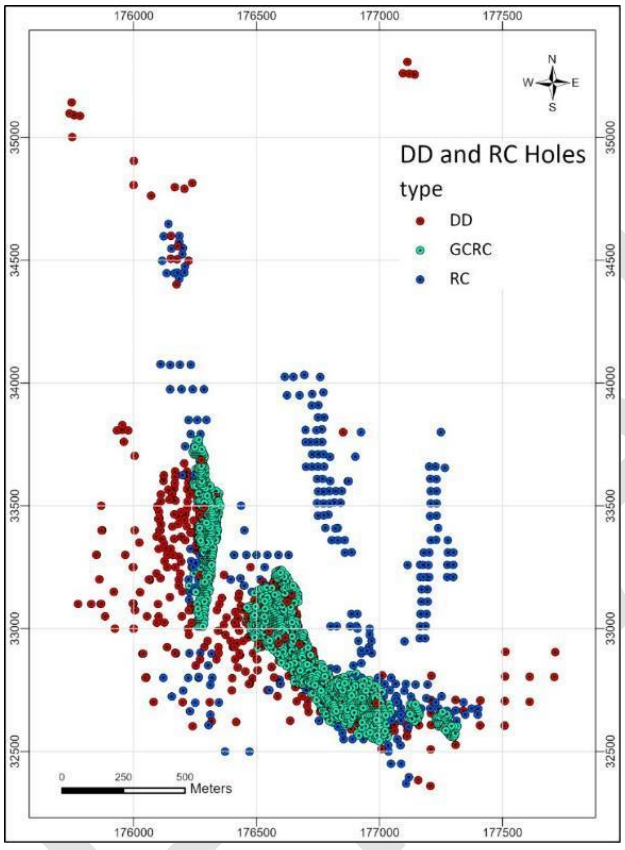
The database used in 2020-year-end Mineral Resource estimate is made up of DD, RC and GCRC holes, as summarized in Table 10-5 and Figure 10-5.

Table 10-5: Mineral Resource Database Statistics of Father Brown/Adoikrom

Location	Type	Holes	Drill Meters (m)
Father Brown/Adoikrom	DD	435	66,229
	RC	214	16,323
	GCRC	3,087	72,037
	Total	3,736	154,589

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

Figure 10-5: DD, RC and GCRC Holes Plan Projection Map of Father Brown/Adoikrom



Source: Arcgis Mapping by SRK

GSR has performed validation to the database and in SRK's opinion the database is appropriate for the Mineral Resource estimate.

10.3.6 Chichiwelli

The database used in 2020-year-end Mineral Resource estimate is made up of DD and RC holes, as summarised in Table 10-6. No exploration has taken place at Chichiwelli since 2012, the database has no changes.

Table 10-6: Mineral Resource Database Statistics of Chichiwelli

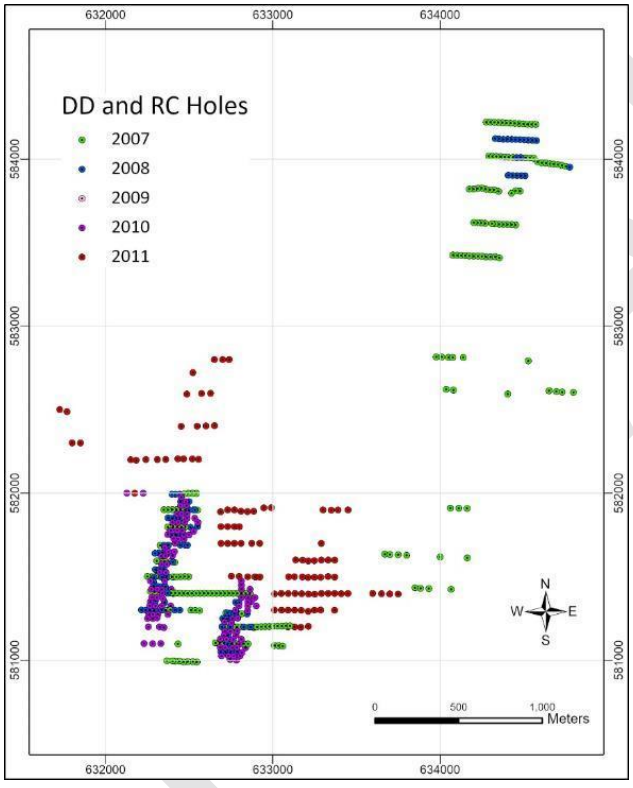
Location	Type	Holes	Drill Meters (m)
Chichiwelli	DD	23	3,692
	RC	483	29,802

Location	Type	Holes	Drill Meters (m)
	Total	506	33,494

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

GSR has performed validation to the database and in SRK's opinion the database is appropriate for the Mineral Resource estimate.

Figure 10-6: DD and RC Holes Plan Projection Map of Chichiwelli



Source: Arcgis Mapping by SRK

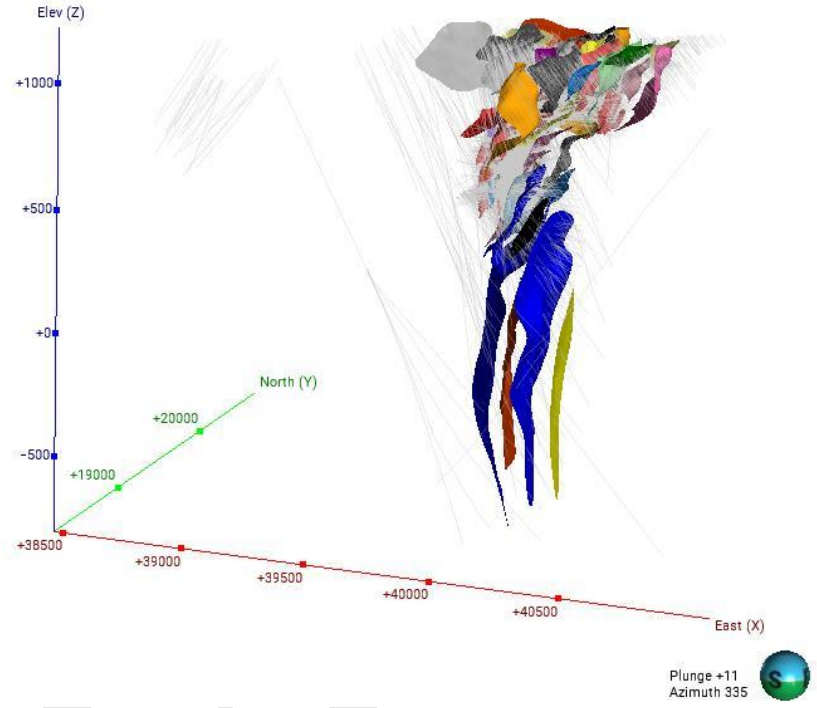
10.4 Solid Body Modelling

10.4.1 Zone B Shoot

For the model "wug_bm_eng_20240409.mdl", the wireframe modelling was carried out by GSR using Leapfrog™ software. The mineralisation wireframes are constrained within two mineralisation envelopes (Halo and Mineralised). A Halo zone at 0.4g/t cut-off at an ISO value of 0.35 have a hard boundary with each other modelled based on Leapfrog™ implicit modelling technique. The mineralisation zone was modelled at 1.20 g/t, with domains for (3101 & 4101) modelled with

Leapfrog™ Vein option whilst the other lodes were based on implicit modelling approach with same parameters as the Halo zone. The structural trend surfaces used for grade shell modelling are shown in Figure 10-7.

Figure 10-7: Structural Trend Surfaces Used for Wassa Grade Shell Modelling



Source: SRK, Leapfrog Mapping Using the Surfaces Provided by GSR

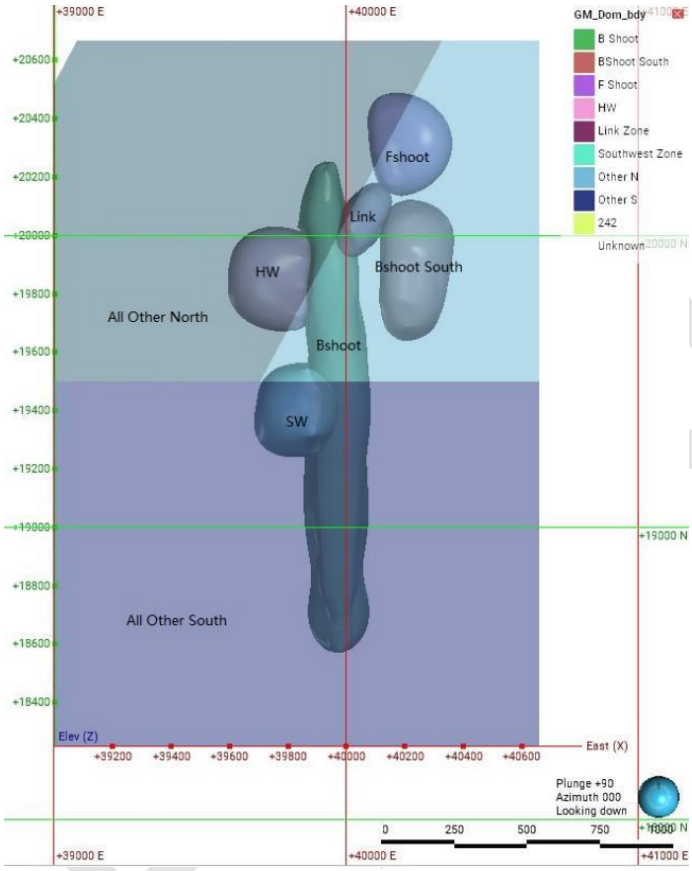
Prior to generating the indicator RBF interpolant shells, the raw assay file was composited to 2 m, with a minimum end composite length of 1 m. Any composite less than the end composite length of 1 m was added to previous interval for HG domain but discarded for LG domain. Indicator interpolants were defined at 0.4 g/t Au and 1.2 g/t Au threshold.

Table 10-7: B Shoot Grade Shell Modelling Parameters

Domain	Interpolant Type	Range	Nugget	Iso Value	Resolution	Volumes Excluded
LG (Halo)	Spheroidal	200	0.5	0.35	3.5 m	/
HG (Mineralised)	Spheroidal	200	0.3	0.35	2.5 m	10,000 m^3

GSR used different zones to classify mineralised domains, detailed in Figure 10-8. All mineralised domains were shown in Figure 10-9 and detailed in Table 10-8.

Figure 10-8: Estimation Zones Used to Classify Mineralised Domains



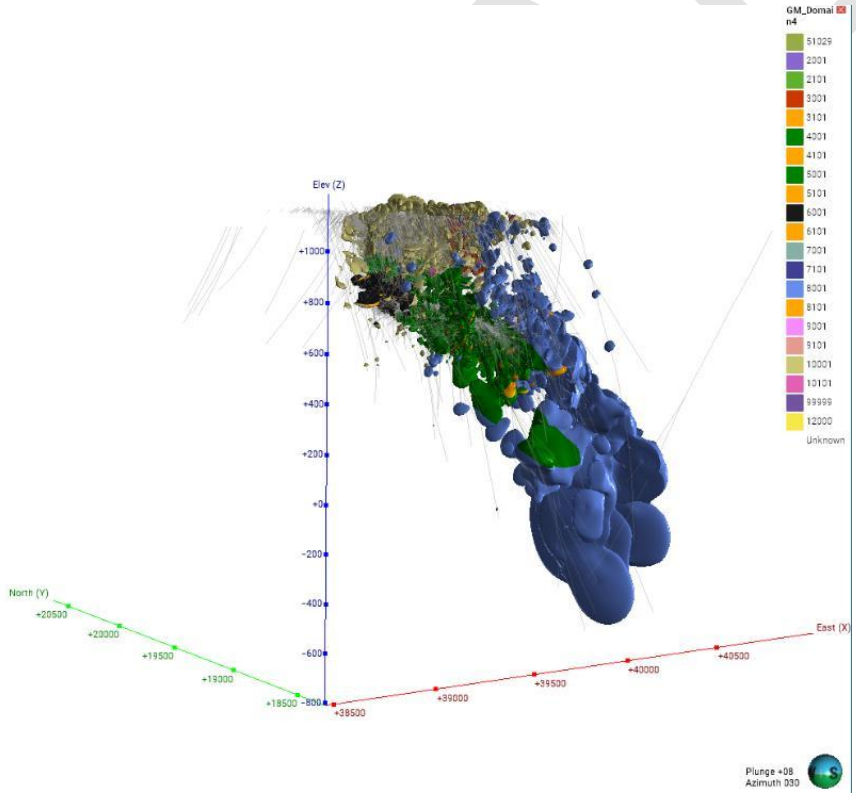
Source: GSR

Table 10-8: Descriptions for Zone B Shoot Mineralised Domains

Domain Code	Description
2001	F Shoot Halo Domain
2101	F Shoot Mineralised Domain
3001	B Shoot South Halo Domain
3101	B Shoot South Mineralised Domain
4001	Southwest Zone Halo Domain
4101	Southwest Zone Mineralised Domain
5001	B Shoot Halo Domain
5101	B Shoot Mineralised Domain

Domain Code	Description
6001	HW Zone Halo Domain
6101	HW Zone Mineralised Domain
7001	Link Zone Halo Domain
7101	Link Zone Mineralised Domain
8001	All Other South Zone Halo Domain
8101	All Other South Zone Mineralised Domain
10001	All Other North Zone Halo Domain
10101	All Other North Zone Mineralised Domain

Figure 10-9: All Mineralised Domains for Zone B Shoot



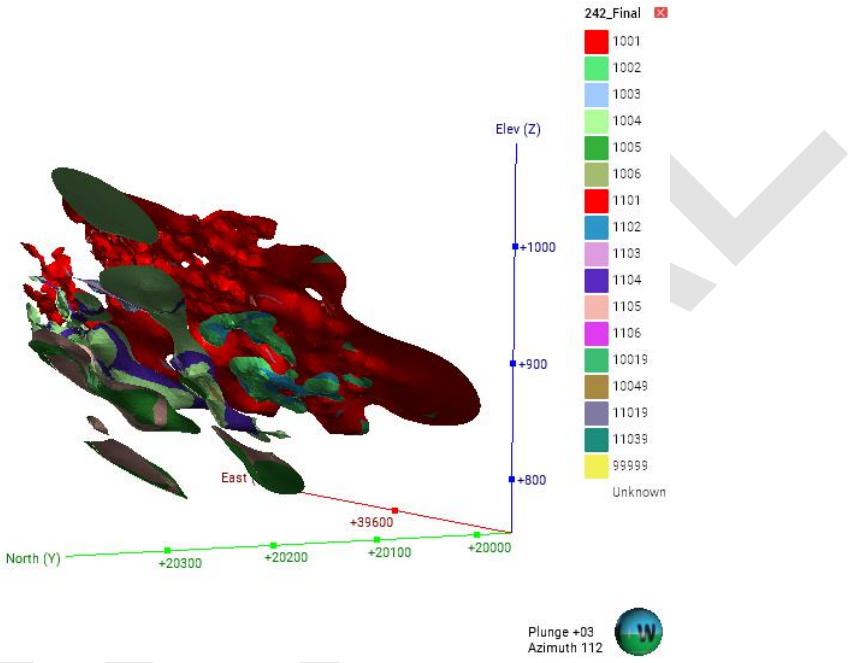
Source: SRK, Leapfrog Mapping Using the Solids Provided by GSR

SRK has reviewed the grade shells, displayed in Figure 10-9 and believes that they are reasonable and can be used for a Mineral Resource estimation.

10.4.2 Zone 242

For the model "242_bm_gc_231019.mdl", the wireframe modelling was carried out by GSR using Leapfrog™ software. The mineralised domains are constrained within two envelopes (Halo and Mineralised) using semi explicit method. The Halo zone was modelled at 0.4 g/t Au cut-off grade based on Leapfrog™ vein modelling technique. The mineralisation zone was modelled at 1.0 g/t Au cut-off grade, with the same method as the Halo zone.

Figure 10-10: Mineralised Domains for Zone 242



Source: SRK, Leapfrog Mapping Using the Solids Provided by GSR

The description of all mineralised domains is listed in Table 10-9 below.

Table 10-9: Descriptions for Zone 242 Mineralised Domains

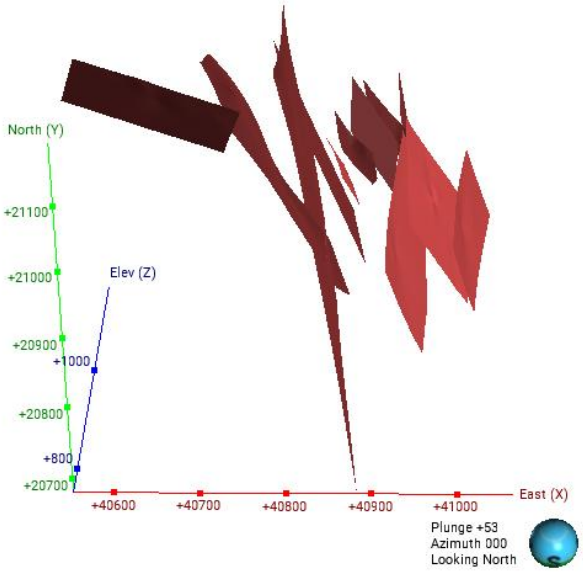
Domain Code	Description
1001, 1002, 1003, 1004, 1005, 1006	Halo Domain
1101, 1102, 1103, 1104, 1105, 1106	Mineralised Domain
10019, 10049	Internal Dilution Zone of Halo Domain
11019, 11039	Internal Dilution Zone of Mineralised Domain

SRK has reviewed the grade shells, displayed in Figure 10-10, and believes that they are reasonable and can be used for a Mineral Resource estimation.

10.4.3 DMH

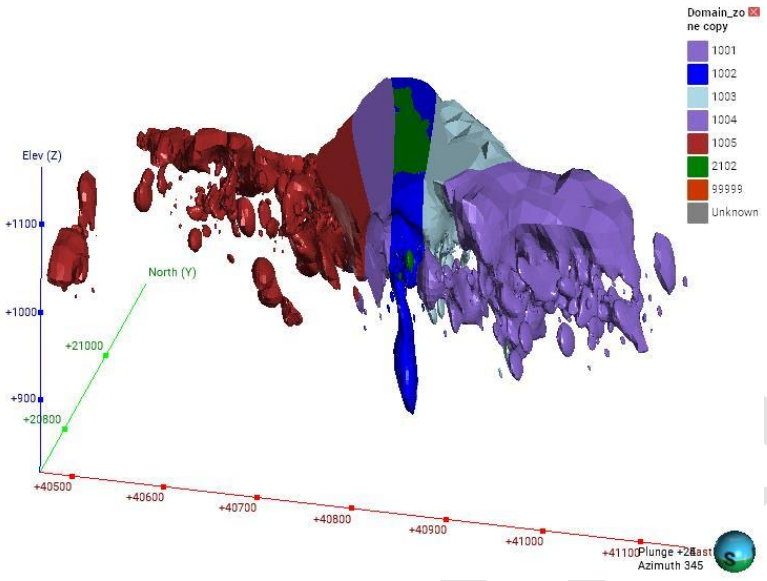
For the model "dmh_gc_model_20240518.mdl", the mineralisation domains were modelled using the intrusive technique in Leapfrog™ software by GSR. The Halo domains, 1001, 1002, 1003, 1004, and 1005, were modelled with an Au cut-off grade of 0.4 g/t. The mineralised domain 2102 was generated with a cut-off of 1.0 g/t. A total of 12 structural trends was developed to guide the intrusive implicit modelling, as shown in Figure 10-11.

Figure 10-11: Structural Surfaces Used in Mineralised Domain Modelling for DMH Pit



Source: SRK, Leapfrog Mapping Using the Surfaces Provided by GSR

Figure 10-12: Mineralised Domains for DMH Pit



Source: SRK, Leapfrog Mapping Using the Solids Provided by GSR

SRK has reviewed the solid models as shown in Figure 10-12 and believes that they are reasonable and can be used for the Mineral Resource estimation.

10.4.4 I Zone

For the model "izone_bm_res_20230901.mdl", mineralised domains were developed using Leapfrog™ vein modelling technique by GSR. The intervals used in the veins modelling were generated by Leapfrog™ implicit modelling technique, at 0.5 g/t gold cut-off at an ISO value of 0.35 have a hard boundary.

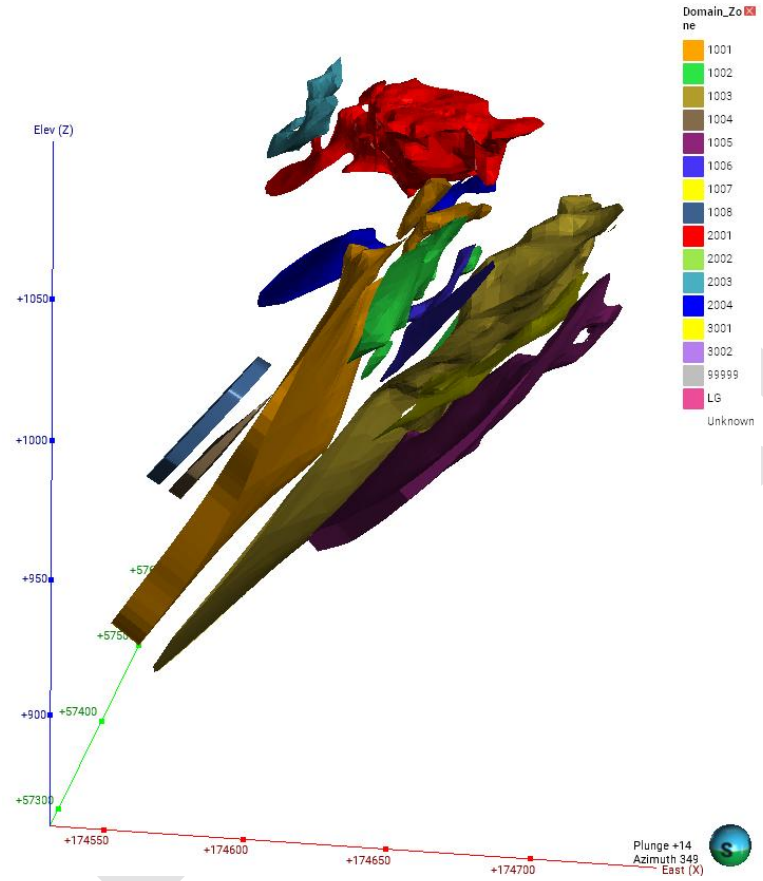
Prior to generating the indicator RBF interpolant shells, the raw assay file was composited to 2 m, with a minimum end composite length of 0.5 m. Any composite less than the end composite length of 0.5 m was discarded. Indicator interpolants were defined at 0.5 g/t gold threshold. The global trend dips to 270° with a dip angle of 50°.

Table 10-10: I Zone Pit Grade Shell Modelling Parameters

Domain	Interpolant Type	Range	Nugget	Iso Value	Resolution	Volumes Excluded
I Zone	Spheroidal	100	0.2	0.35	5 m	/

SRK reviewed the solid models (1001, 1002, 1003, 1004, 1005, 1006, 1007,1008,2001,2002,2003 and 2004, Figure 10-13) and is of the opinion that they are reasonable and can be used for Mineral Resource estimation.

Figure 10-13: Solid Models for I Zone



Source: SRK, Leapfrog Mapping Using the Solids Provided by GSR

10.4.5 Hwini Butre

The solid models for Father Brown (FBZ) and Adoikrom (ADK) were created by GSR and Resource Modelling Solutions (RMS). They were modelled using a vein modelling technique, with estimating both vein thickness and grade.

GSR provided RMS with drill hole intercepts with hanging wall (HW), main mineralised zone (ADK or FBZ) (HG) and footwall (FW) 'from' and 'to' intervals.

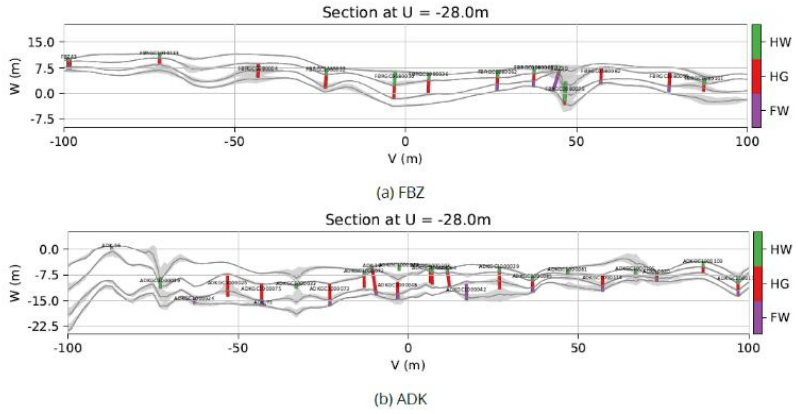
Each vein unit is created by estimating the position of the vein and each one of the thicknesses, HW, HG and FW. The position of the vein is defined by the intercept with the top of HW unit, the first thickness is the difference between the intercept of the contact between HW and HG with the top of

HW, the second thickness is defined by the difference between the contact HW and HG and the contact between HG and FW and the third thickness is defined by the base of the FW contact.

Intercepts within a horizontal distance tolerance of 2.0 m are used to calculate position and thicknesses to check any possible relationship between these variables and determine whether independent modelling is adequate for the modelling of each vein unit. The scatterplots between each variable showed no significant correlation between the variables, therefore, the independent modelling of each one of these variables in a stepwise manner is deemed appropriate.

The final vein model is defined by stacking the modelled thicknesses below the vein position model. A cross section at U = -28.0 m in transformed space is shown in Figure 10-14. Note that these sections are shown in transformed coordinates, after gold estimations models were rotated back to the original Easting-Northing-Elevation coordinates.

Figure 10-14: Model section at U=-28.0 in Transformed Space Generated with 2.0 Tolerance in V Direction



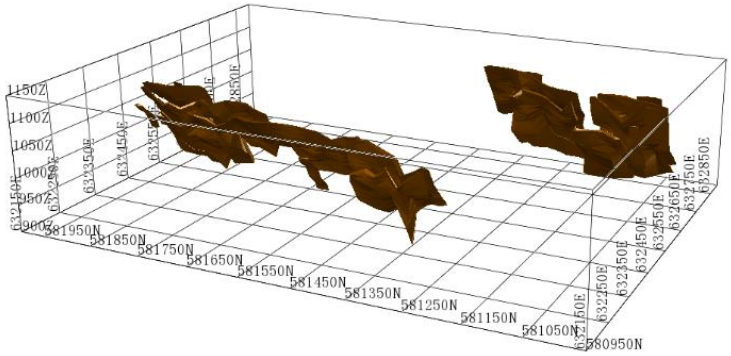
Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

10.4.6 Chichiwelli

Mineralisation solids were undertaken by GSR, and the mineralised zone modelling was conducted by GSR with the 2D polylines being snapped to drill hole grade intercepts using a cut-off grade of 0.5 g/t Au. The 2D polylines were then linked together to create a 3D mesh for grade estimation. The modelled wireframe solids are shown in Figure 10-15.

The mineralisation zones of Chichiwelli are structurally controlled with gold emplacement related to the density of quartz veining and sulphide content. The mineralisation hosting structures generally trend north-south and dip moderate-steeply to the east at 60°.

Figure 10-15: Solid Models for Chichiwelli



Source: Surpac Mapping, SRK

SRK has reviewed the solid models and is of the opinion that they are reasonable and can be used for a Mineral Resource estimation.

10.5 Compositing

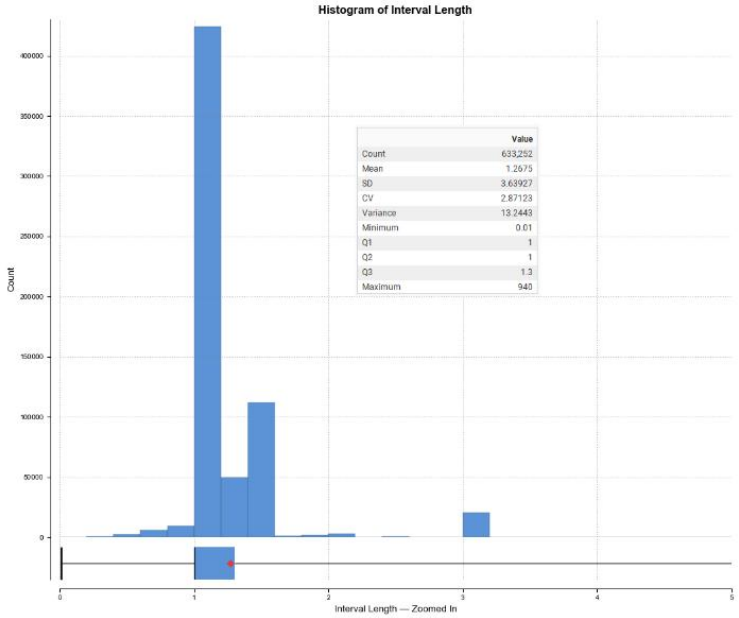
Prior to the statistical analysis, the samples were generally combined so the length of each sample was basically equivalent.

10.5.1 Zone B Shoot

The average distribution was generally around 1 m and raw sample assay data was composited to 2 m intervals by GSR in Leapfrog™ (Figure 10-16). The 2 m interval composite was applied by GSR for subsequent statistic, geostatistical analysis, and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 10-11.

Figure 10-16: Histogram of Interval Length for Zone B Shoot



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-11: Summary Statistics of Composites against Raw Samples for Zone B Shoot

	Count	Min	Max	Mean	Variance	Std Dev	CoV
Raw	630,884	0.005	1,547.97	0.73	15.36	3.92	5.38
Composite	387,782	0.05	314.05	0.73	9.37	3.06	4.18

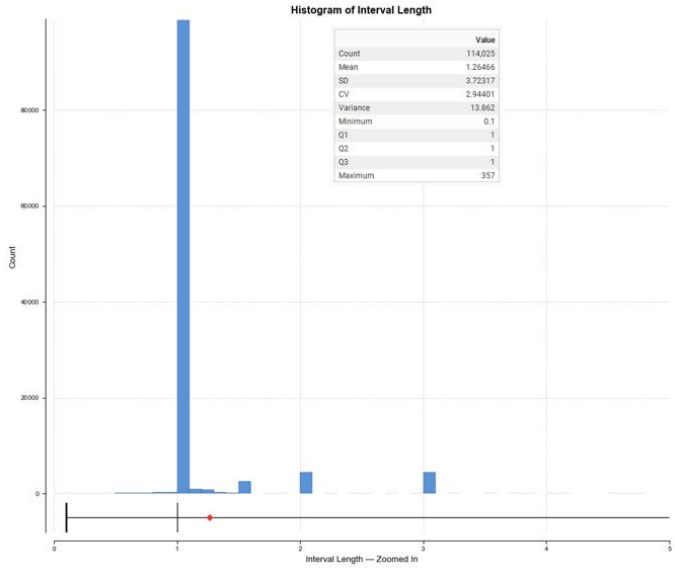
Based on the above results, SRK notes that there is a good correspondence in the basic statistics between the raw assay dataset and composites.

10.5.2 Zone 242

The average distribution was generally around 1 m and raw sample assay data was composited to 2 m intervals by GSR in Leapfrog™ software (Figure 10-17). The 2 m interval composite was applied by GSR for subsequent statistic, geostatistical analysis, and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 10-12.

Figure 10-17: Histogram of Interval Length for Zone 242



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-12: Summary Statistics of Composites against Raw Samples for Zone 242

Domain	Type	Count	Min	Max	Mean	Variance	Std Dev	CoV
1001	Raw	1,918	0.005	28.46	0.82	2.16	1.47	1.54
	Composite	1,143	0.005	28.46	0.82	1.59	1.26	1.54
1002	Raw	130	0.03	5.89	0.72	0.55	0.74	1.03
	Composite	79	0.04	3.46	0.72	0.26	0.51	0.70
1003	Raw	27	0.01	1.72	0.46	0.19	0.43	0.92
	Composite	16	0.035	1.16	0.46	0.14	0.37	0.82
1004	Raw	286	0.01	7.95	0.83	1.18	1.09	1.32
	Composite	167	0.04	5.78	0.82	0.67	0.82	1.00
1005	Raw	85	0.01	62.3	1.47	44.84	6.70	4.56
	Composite	49	0.01	3.15	0.76	0.45	0.67	0.89
1006	Raw	14	0.05	1.1	0.49	0.08	0.28	0.58
	Composite	9	0.29	0.82	0.49	0.02	0.15	0.31
1101	Raw	2,248	0.005	193.6	4.00	74.28	8.62	2.16
	Composite	1,362	0.015	98.34	4.01	45.65	6.76	1.69
1102	Raw	120	0.03	30.15	3.23	17.17	4.14	1.28
	Composite	68	0.32	14.18	3.23	8.17	2.86	0.88
1103	Raw	25	0.03	13.55	3.32	10.78	3.28	0.99
	Composite	17	0.71	7.54	3.32	5.08	2.25	0.68
1104	Raw	286	0.05	122	3.19	73.43	8.57	2.69
	Composite	151	0.15	68.14	3.23	42.69	6.53	2.02
1105	Raw	111	0.03	80.00	3.28	62.61	7.91	2.41
	Composite	60	0.615	42.52	3.28	33.79	5.81	1.77
1106	Raw	19	0.28	11.30	4.20	11.94	3.46	0.82
	Composite	14	0.56	8.54	4.20	7.48	2.74	0.65
10019	Raw	76	0.10	0.82	0.18	0.03	0.17	0.99
	Composite	43	0.025	0.525	0.15	0.01	0.11	0.73

Domain	Type	Count	Min	Max	Mean	Variance	Std Dev	CoV
10049	Raw	7	0.02	0.59	0.12	0.05	0.22	1.73
	Composite	4	0.023	0.37	0.12	0.03	0.16	1.32
11019	Raw	260	0.005	11.34	0.44	0.86	0.93	2.09
	Composite	149	0.02	5.69	0.44	0.36	0.60	1.37
11039	Raw	15	0.05	4.27	1.06	1.56	1.25	1.17
	Composite	9	0.16	2.73	1.02	1.18	1.08	1.07

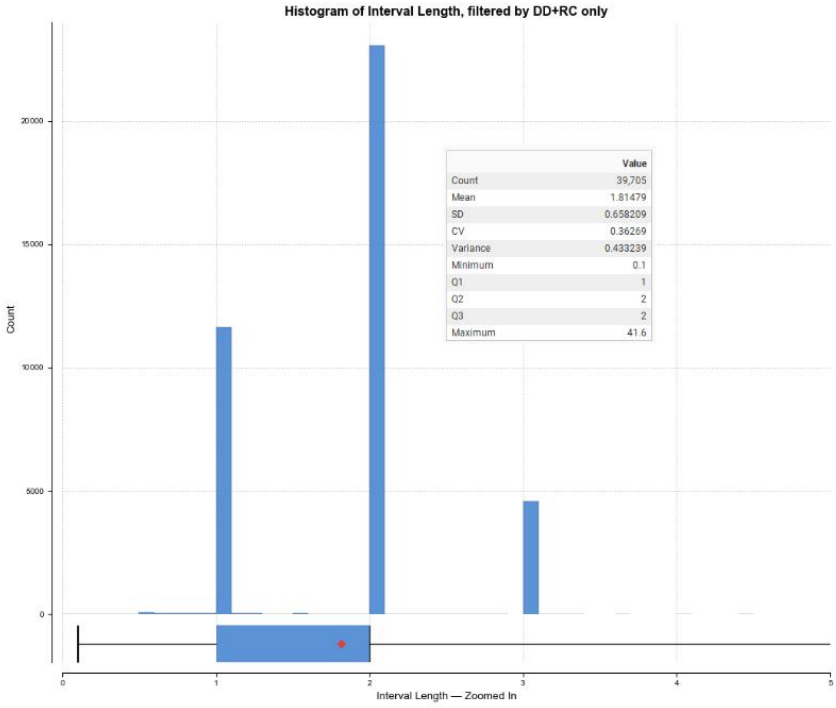
Based on the above results, SRK notes that there is a good correspondence in the basic statistics between the raw assay dataset and composites.

10.5.3 DMH

The average distribution for DMH was generally around 2 m and raw sample assay data was composited to 2 m intervals by GSR in Leapfrog™ software (Figure 10-18). The 2 m interval composite was applied by GSR for subsequent statistic, geostatistical analysis, and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 10-13.

Figure 10-18: Histogram of Interval Length for DMH



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-13: Summary Statistics of Composites against Raw Samples for DMH

	Count	Min	Max	Mean	Variance	Std Dev	CoV
Raw	43,597	0.005	44.34	0.39	0.95	0.98	2.53
Composite	39,965	0.005	39.78	0.39	0.84	0.92	2.36

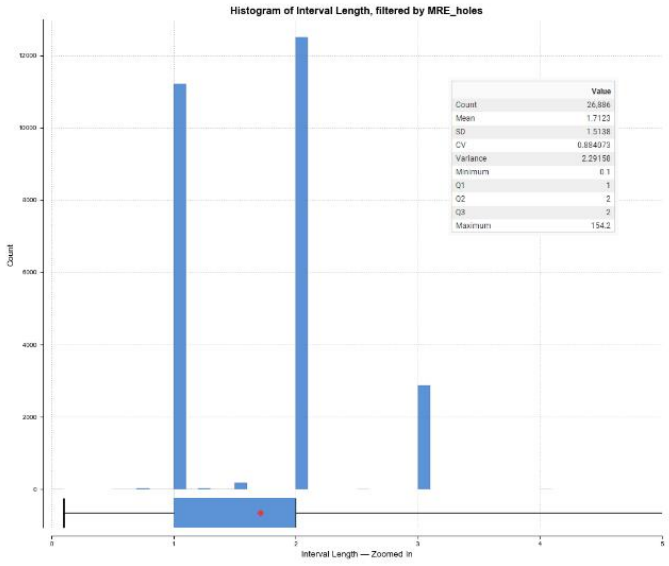
Based on the above results, SRK notes that there is a good correspondence in the basic statistics between the raw assay dataset and composites.

10.5.4 I Zone

The average distribution for I Zone was generally around 2 m and raw sample assay data was composited to 2 m intervals by GSR in Leapfrog™ software (Figure 10-19). The 2 m interval composite was applied by GSR for subsequent statistic, geostatistical analysis, and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 10-14.

Figure 10-19: Histogram of Interval Length for I Zone



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-14: Summary Statistics of Composites against Raw Samples for I Zone

	Count	Min	Max	Mean	Variance	Std Dev	CoV
Raw	44,135	0.005	357.12	0.62	19.98	4.47	7.18
Composite	25,958	0.005	166.00	0.53	4.26	2.06	3.91

Based on the above results, SRK notes that there is a good correspondence in the basic statistics between the raw assay dataset and composites.

10.5.5 Chichiwelli

Assay data was composited to 2 m by GSR. The 2 m composites were applied for grade estimation, statistic, and model validation.

10.6 Evaluation of Outliers

10.6.1 Zone B Shoot

SRK has reviewed the sample outliers used for the grade estimation by GSR. Outliers of pre mineralised domain were determined using Leapfrog statistical tool by GSR. The coefficient of variation (CV), histograms, probability plots and cumulative metal plots were analysed carefully to select the appropriate top cuts for all domains.

Table 10-15: Zone B Shoot Au Grade Capping

Domain Code	Capped	Mean before Capped	Mean after Capped	Difference (%)
2001	10.0	0.78	0.75	-3
2101	31.6	3.04	2.99	-1
3001	14.6	0.78	0.76	-3
3101	29.3	3.82	3.62	-5
4001	9.4	0.76	0.72	-7
4101	30.4	3.74	3.50	-6
5001	20.5	0.83	0.79	-4
5101	50.2	4.40	4.22	-4
6001	9.5	0.84	0.79	-6
6101	30.01	3.40	3.35	-1
7001	8.7	0.80	0.76	-5
7101	25.5	3.80	3.70	-3
8001	18.4	0.92	0.91	-1
8101	33.7	3.47	3.35	-3
10001	15.1	0.99	0.96	-3
10101	27.6	3.16	3.09	-2

In SRK's opinion, the grade capping is appropriate.

10.6.2 Zone 242

SRK has reviewed the sample outliers used in grade estimation by GSR. Outliers of pre mineralised domain were determined using Leapfrog statistical tool by GSR.

Table 10-16: Zone 242 Grade Capping

Domain Code	Capped	Mean before Capped	Mean after Capped	Difference (%)
1001	10	0.81	0.79	-3
1002	1.16	0.71	0.65	-8
1003	0.87	0.49	0.46	-7
1004	2	0.80	0.71	-11
1005	1.1	1.92	0.60	-69
1006	0.6	0.49	0.46	-5
1101	30	3.88	3.66	-6
1102	9	3.18	3.06	-4
1103	6	3.17	3.02	-5
1104	17	3.08	2.67	-13
1105	7	3.23	2.53	-22
1106	6	4.03	3.60	-11
10019	0.75	0.20	0.20	0
10049	0.065	0.12	0.05	-62
11019	0.7	0.44	0.36	-16
11039	0.94	1.07	0.54	-50

In SRK's opinion, the grade capping is appropriate.

10.6.3 DMH

SRK has reviewed the sample outliers used in grade estimation by GSR. Outliers of pre mineralised domain were determined using Leapfrog statistical tool by GSR.

Table 10-17: DMH Grade Capping

Domain Code	Capped	Mean before Capped	Mean after Capped	Difference (%)
1001	8.91	1.30	1.27	-2
1002	4.4	0.71	0.70	-1
1003	6.05	1.10	1.09	-1
1004	10.44	1.08	1.07	-2
1005	10	1.08	1.06	-2
2102	11.44	2.07	2.05	-1

In SRK's opinion, the grade capping is appropriate.

10.6.4 I Zone

SRK has reviewed the sample outliers used in grade estimation by GSR. Outliers of pre mineralised domain were determined using Excel statistics by GSR. SRK noticed a big mean difference of Domain 1004, 1005, 1006, 1007 and 1008. The reason was that each domain has a small amount of samples but has a very high grade of gold.

Table 10-18: I Zone Grade Capping

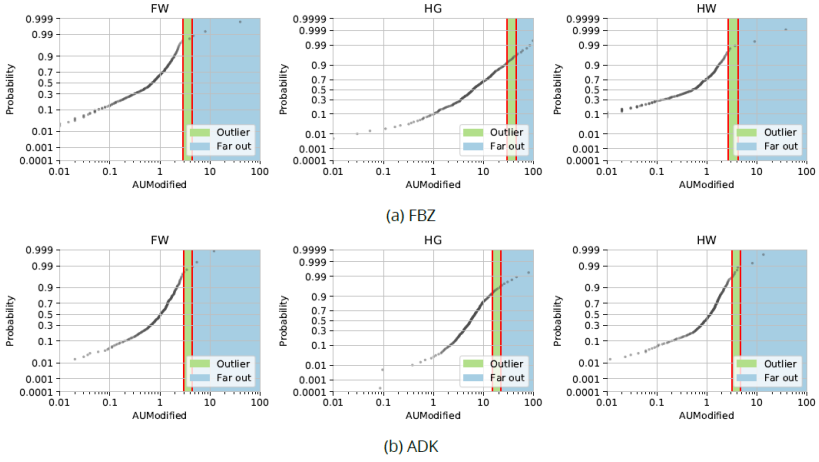
Domain Code	Capped	Mean before Capped	Mean after Capped	Difference (%)
1001	2.64	1.04	1.00	-4
1002	3.01	1.21	1.16	-4
1003	15	2.38	2.35	-1
1004	2	2.07	1.39	-33
1005	4.4	2.09	1.57	-25
1006	2.75	1.35	0.83	-16
1007	2	1.26	1.08	-14
1008	1.43	1.55	1.2	-22
2001	10	1.05	1.01	-4
2002	3.64	1.34	1.20	-10
2003	2.88	1.00	0.93	-7
2004	4	1.77	1.6	-10

In SRK's opinion, the grade capping is appropriate.

10.6.5 Hwini Butre

Probability plots for each vein unit for each domain are generated and shown in Figure 10-20. The capping values selected from the probability plots are summarized in Table 10-19.

Figure 10-20: Au Grade Probability Plot with Outliers and Far Out Thresholds Highlighted



(a) FBZ

(b) ADK

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-19: Capping Values Selected from Analysis of the Probability Plot

Deposit	Vein Unit	Capped Values Used	Mean Grade before Cap	Mean Grade after Cap	Percentage Difference
FBZ	FW	5	1.02	0.74	-27.45
FBZ	HG	46	11.41	9.28	-18.67
FBZ	HW	5	0.81	0.60	-25.93
ADK	FW	5	1.19	0.95	-20.17
ADK	HG	23	7.58	5.90	-22.16
ADK	HW	5	1.31	1.03	-21.37

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

10.6.6 Chichiwelli

The caps were determined based on the shape of the tail of the log histogram and the log probability plots. Details are listed in Table 10-20. In SRK's opinion, the capping is appropriate.

Table 10-20: Chichiwelli Au Grade Capping

Domain	Cap Applied	Mean Grade before Cap	Mean Grade after Cap	Percentage difference
	g/t	g/t	g/t	%
East	25	1.75	1.65	-6.06
West	15	1.69	1.59	-6.29

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

10.7 Statistical Analysis and Variography

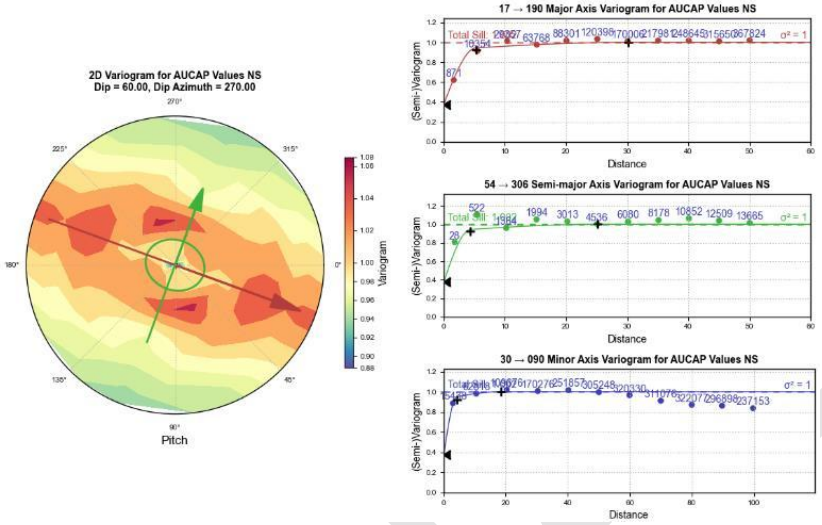
10.7.1 Zone B Shoot

The variogram models for each mineralised domain were developed by GSR for grade estimation. Domain 5101 and 8101 variogram models are shown in Figure 10-21 and Figure 10-22. The variogram models are listed in Table 10-21.

Table 10-21: Variogram Structure of Au for B Shoot Domain 5101 and 8101

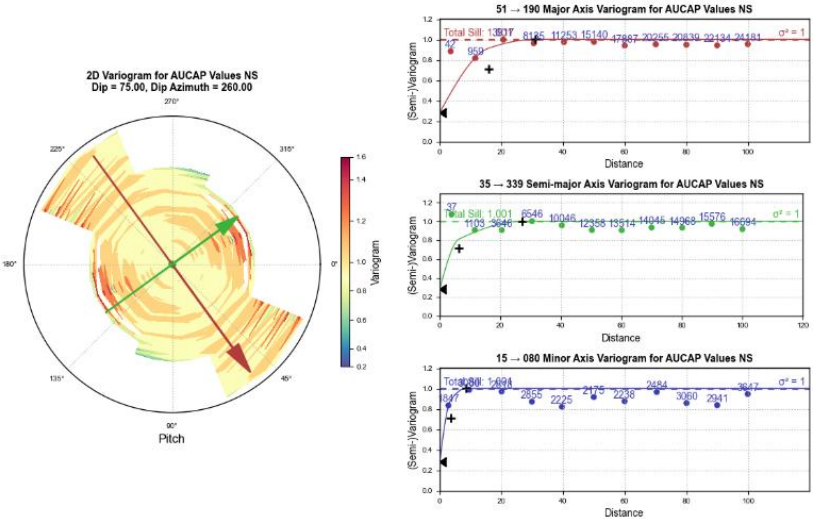
Domain		Nom.Sill	Type	Major	Semi-Major	Minor
	Nugget	0.38				
5101	Structure 1	0.55	Spherical	5.259	4.357	4.266
	Structure 2	0.07	Spherical	30.21	25.2	18.36
	Nugget	0.28				
8101	Structure 1	0.43	Spherical	15.9	6.39	3.49
	Structure 2	0.29	Spherical	31.09	27.36	8.45

Figure 10-21: Variogram Model of Au for Domain 5101



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-22: Variogram Model of Au for Domain 8101



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

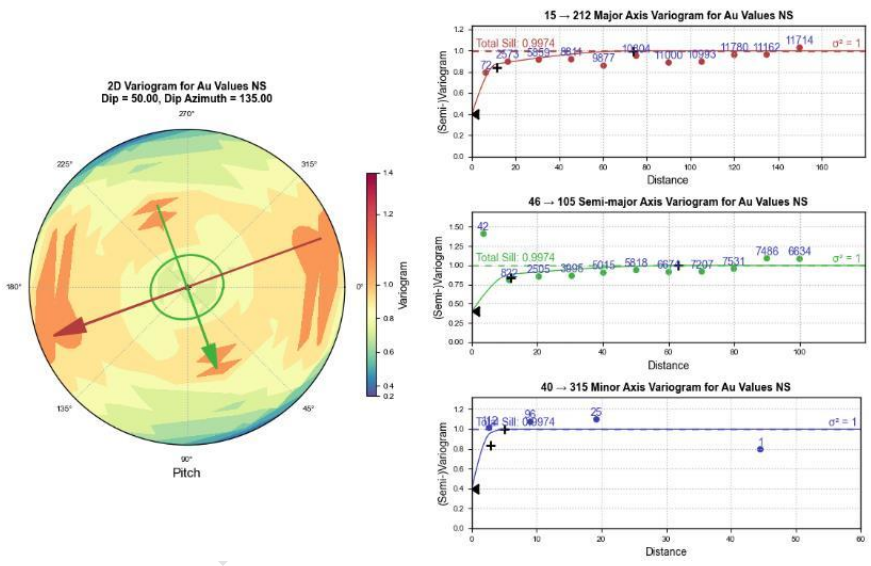
10.7.2 Zone 242

The variogram models for each mineralised domain were developed by GSR using Leapfrog™ software. Domain 1001 and 1101 variogram models are shown in Figure 10-23 and Figure 10-24. The variogram models are listed in Table 10-22.

Table 10-22: Variogram Structure of Au for 242 Domain 1001 and 1101

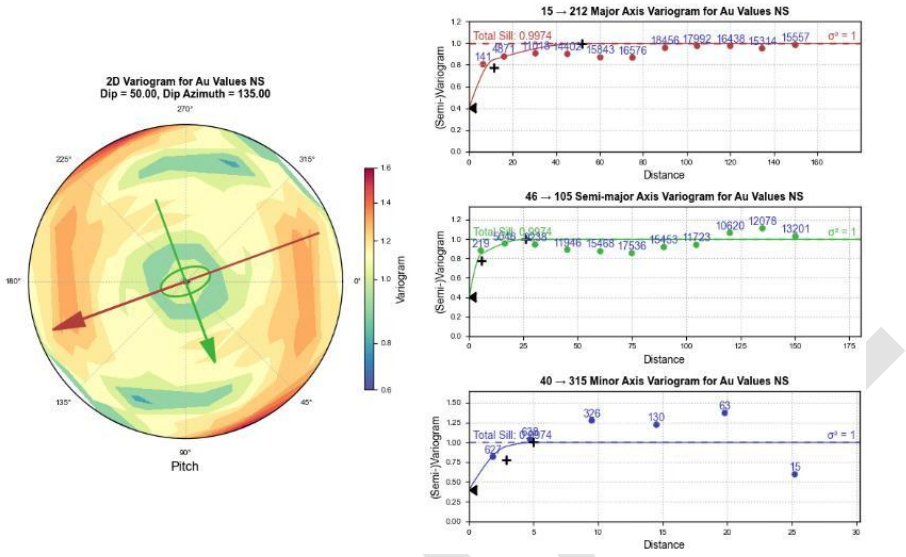
Domain		Nom.Sill	Type	Major	Semi-Major	Minor
	Nugget	0.40				
1001	Structure 1	0.44	Spherical	11.42	11.77	2.89
	Structure 2	0.16	Spherical	73.89	62.81	5.0
	Nugget	0.40				
1101	Structure 1	0.38	Spherical	11.32	5.62	2.89
	Structure 2	0.22	Spherical	51.84	26.01	5.0

Figure 10-23: Variogram Model of Au for Domain 1001



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-24: Variogram Model of Au for Domain 1101



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

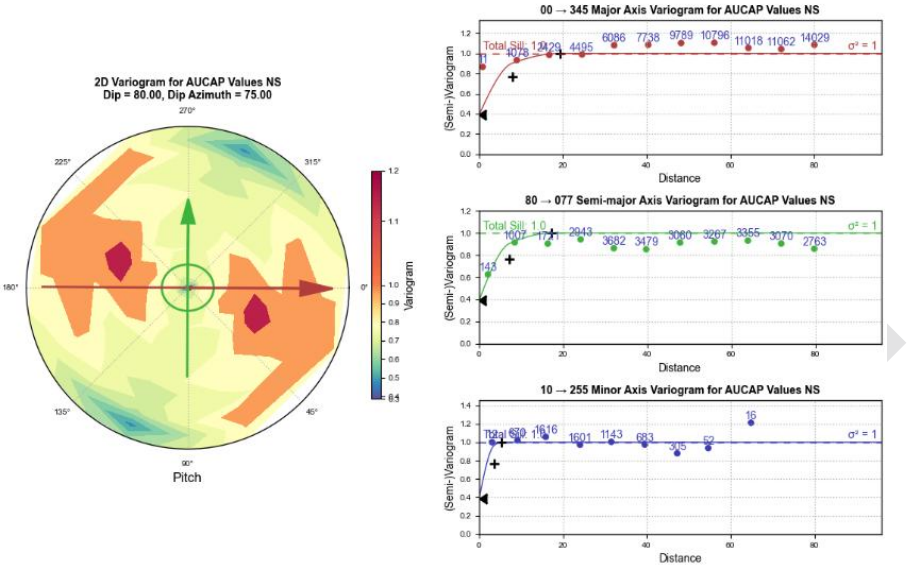
10.7.3 DMH

The variogram models for each mineralised domain were developed by GSR using Leapfrog™ software. Domain 1001 and 2102 variogram models are shown in Figure 10-25 and Figure 10-26. The variogram models are listed in Table 10-23.

Table 10-23: Variogram Structure of Au for DMH Domain 1001 and 2102

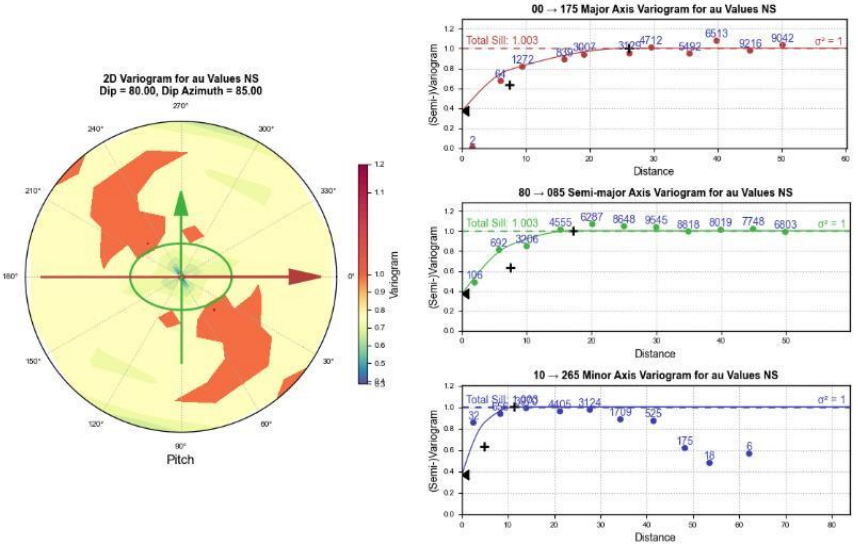
Domain		Nom.Sill	Type	Major	Semi-Major	Minor
	Nugget	0.39				
1001	Structure 1	0.38	Spherical	7.96	7.27	3.57
	Structure 2	0.23	Spherical	19.32	17.22	5.39
	Nugget	0.37				
2102	Structure 1	0.26	Spherical	7.47	7.43	4.86
	Structure 2	0.37	Spherical	26.1	17.12	11.37

Figure 10-25: Variogram Model of Au for Domain 1001



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-26: Variogram Model of Au for Domain 2102



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

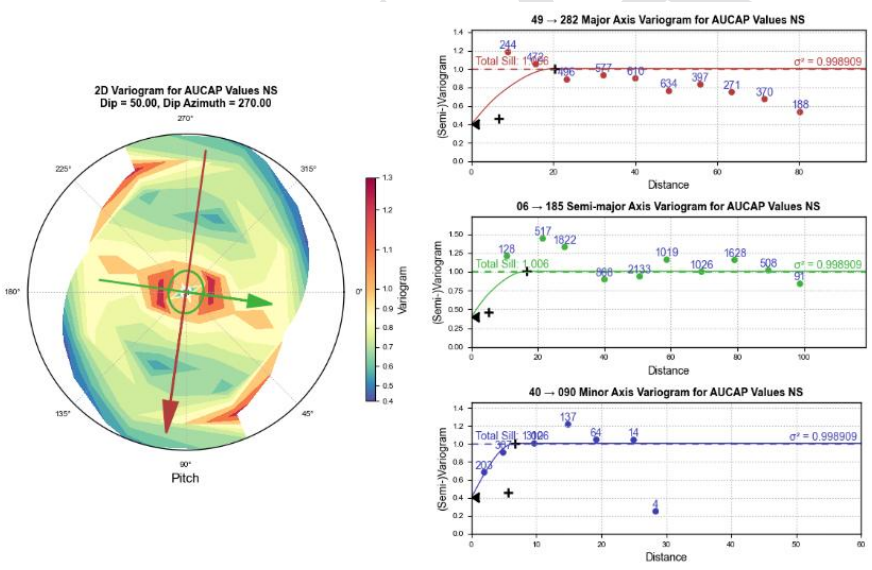
10.7.4 I Zone

The variogram models n were developed by GSR using Leapfrog™ software. Domain 1003 and 2001 variogram models are shown in Figure 10-27 and Figure 10-28. The variogram models are listed in Table 10-24.

Table 10-24: Variogram Structure of Au for I Zone Domain 1003 and 2001

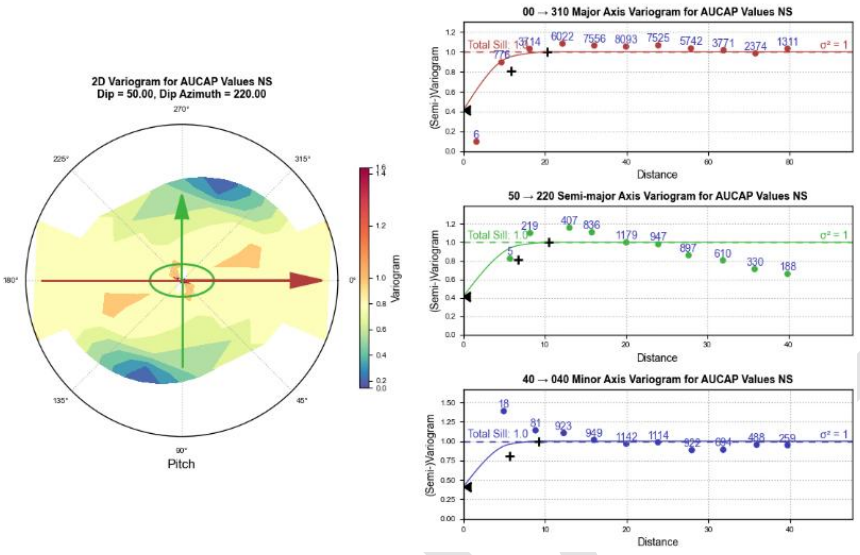
Domain		Nom.Sill	Type	Major	Semi-Major	Minor
	Nugget	0.40				
1003	Structure 1	0.06	Spherical	6.70	5.25	5.66
	Structure 2	0.54	Spherical	20.26	16.55	6.72
	Nugget	0.42				
2001	Structure 1	0.39	Spherical	11.69	6.72	5.66
	Structure 2	0.19	Spherical	20.48	10.48	9.22

Figure 10-27: Variogram Model of Au for Domain 1003



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-28: Variogram Model of Au for Domain 2001



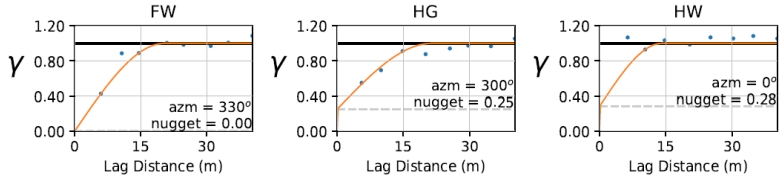
Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

10.7.5 Hwini Butre

The variography was performed for each deposit and for each vein unit (FBZ and ADK) with capped values. Experimental semi variograms were calculated for full range of possible azimuths with steps of 15 degrees totalling 24 directions. The direction with most continuous experimental points from visual inspection of the 24 directions were utilised for nugget inference. These directions may not coincide with the final major continuity direction when considering all experimental points for final model fit. The nugget was inferred by fitting a single structure spherical variogram to the first few (up to three) experimental semi variogram points.

The variogram nugget inference for all veins in FBZ are shown in Figure 10-29. The directions used for nugget inference are detailed in each plot in Figure 10-29.

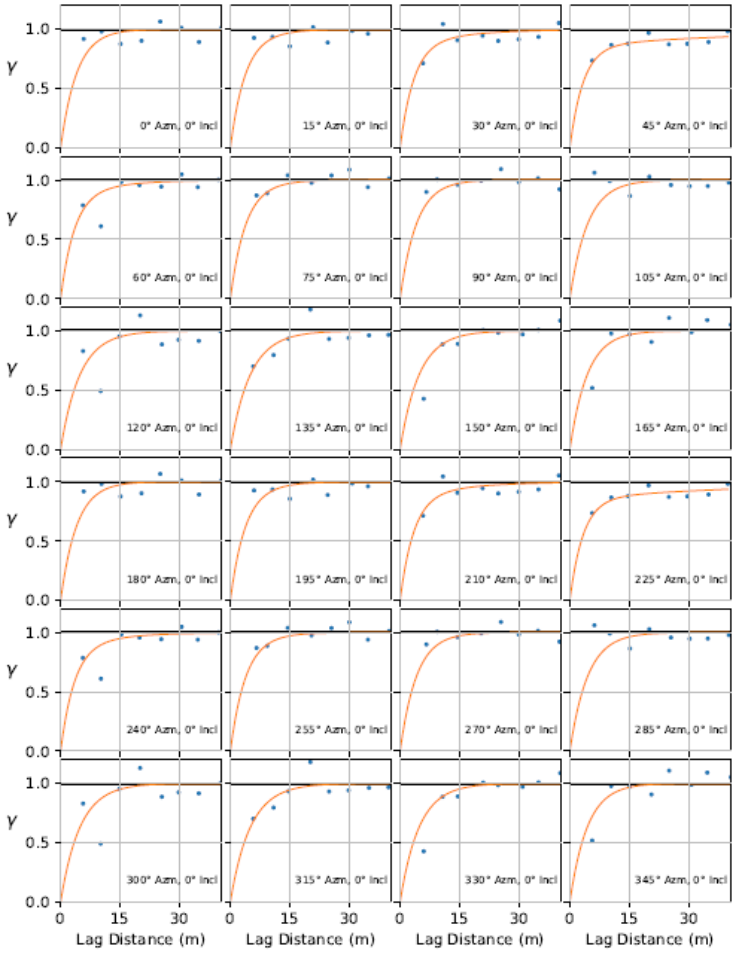
Figure 10-29: Inferred Nugget Effect for Au in Each Vein for FBZ



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

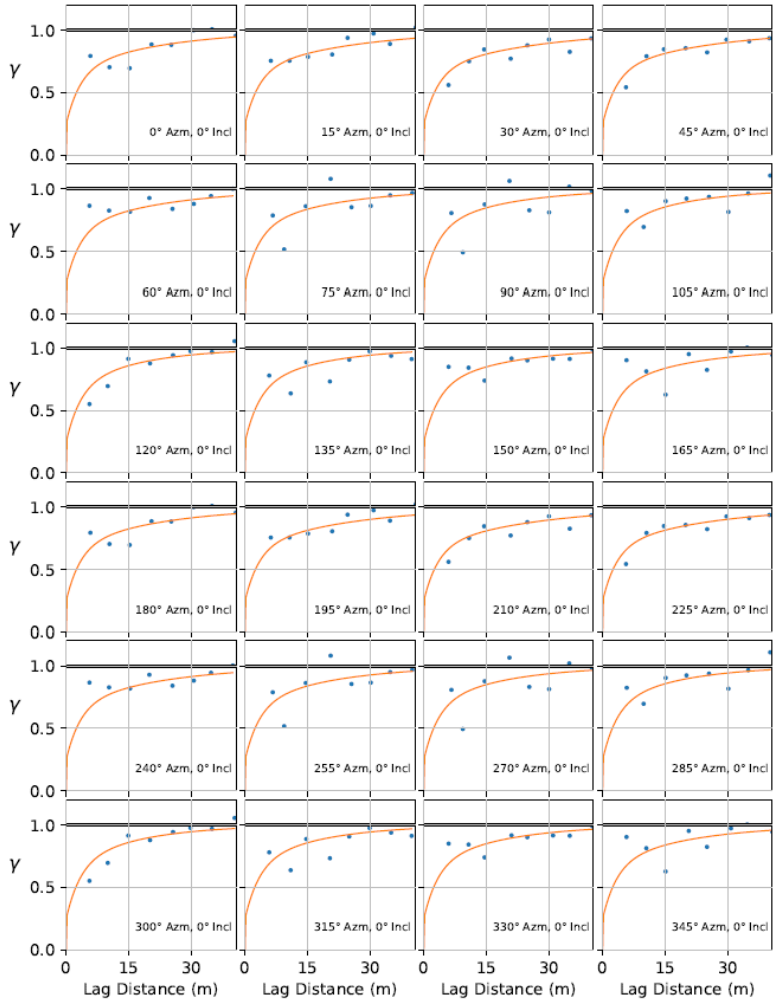
The experimental semi variogram and fitted model for FW unit in FBZ is shown in Figure 10-30. The parameters of the fitted model are summarised in Table 10-25. The experimental semi variogram and fitted model for HG unit in FBZ is shown in Figure 10-31. The parameters of the fitted model are summarised in Table 10-26. The experimental semi variogram and fitted model for HW unit in FBZ is shown in Figure 10-32. The parameters of the fitted model are summarised in Table 10-27.

Figure 10-30: Fitted Experimental semi variogram Points for Au in FW for FBZ



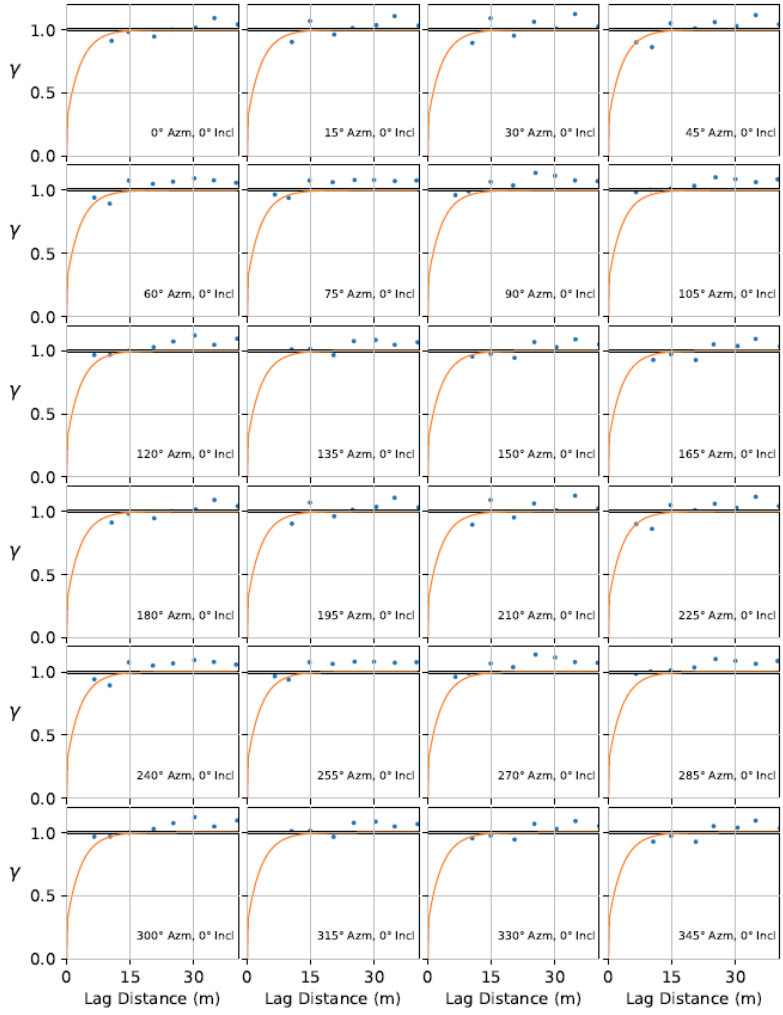
Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Figure 10-31: Fitted Experimental semi variogram Points for Au in HG for FBZ



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Figure 10-32: Fitted Experimental semi variogram Points for Au in HW for FBZ



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-25: Fitted Variogram Parameters for Au in FW for FBZ

Item	Nugget	Structure1	Structure2
Contribution	0.000	0.851	0.149
Model Shape		Exponential	Exponential
Angle1		43.3	43.3
Angle2		0.0	0.0

Item	Nugget	Structure1	Structure2
Angle3		0.0	0.0
Range1		10.0	155.9
Range2		16.3	10.0
Range3		1.0	1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-26: Fitted Variogram Parameters for Au in HG for FBZ

	Nugget	Structure1	Structure2
Contribution	0.250	0.416	0.334
Model Shape		Exponential	Exponential
Angle1		29.1	29.1
Angle2		0.0	0.0
Angle3		0.0	0.0
Range1		10.0	77.3
Range2		10.0	50.0
Range3		1.0	1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

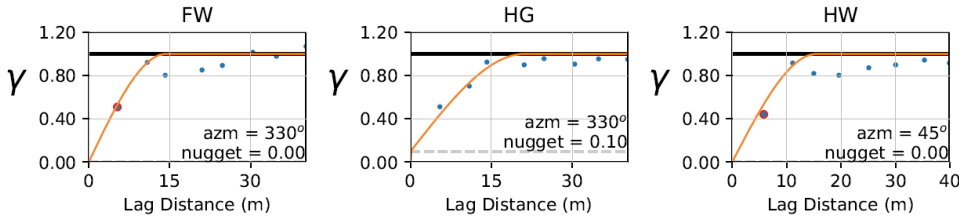
Table 10-27: Fitted Variogram Parameters for Au in HW for FBZ

	Nugget	Structure1
Contribution	0.283	0.717
Model Shape		Exponential
Angle1		72.6
Angle2		0.0
Angle3		0.0
Range1		10.0
Range2		10.0
Range3		1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

The variogram nugget inference for all veins in ADK are shown in Figure 10-33. The directions used for nugget inference are detailed in each plot in Figure 10-33.

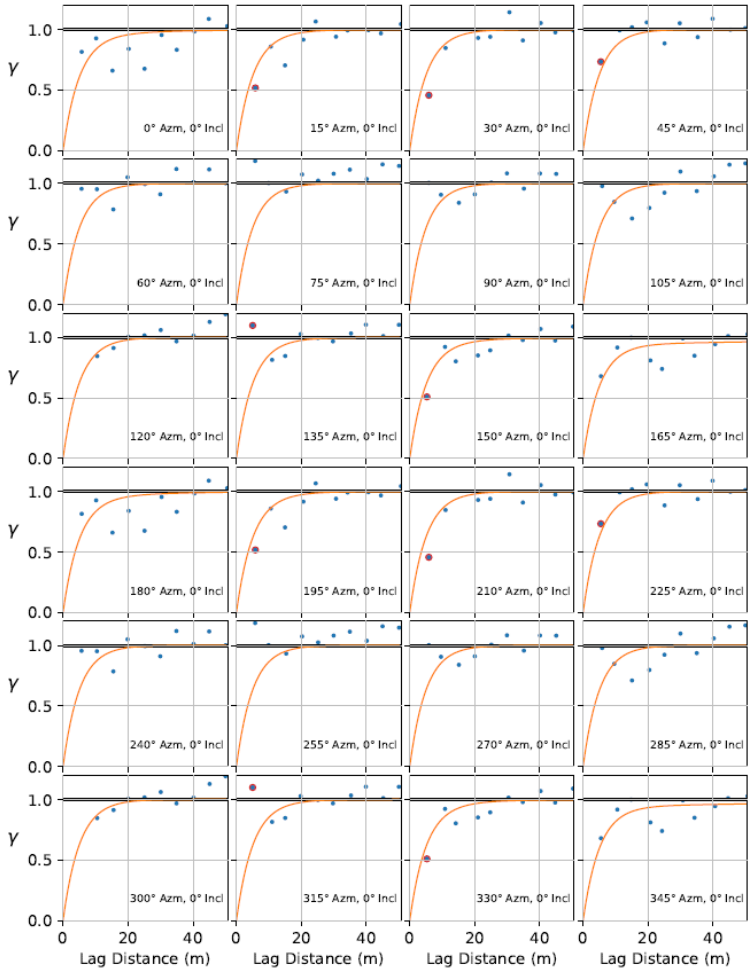
Figure 10-33: Inferred Nugget Effect for Au in Each Vein for ADK



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

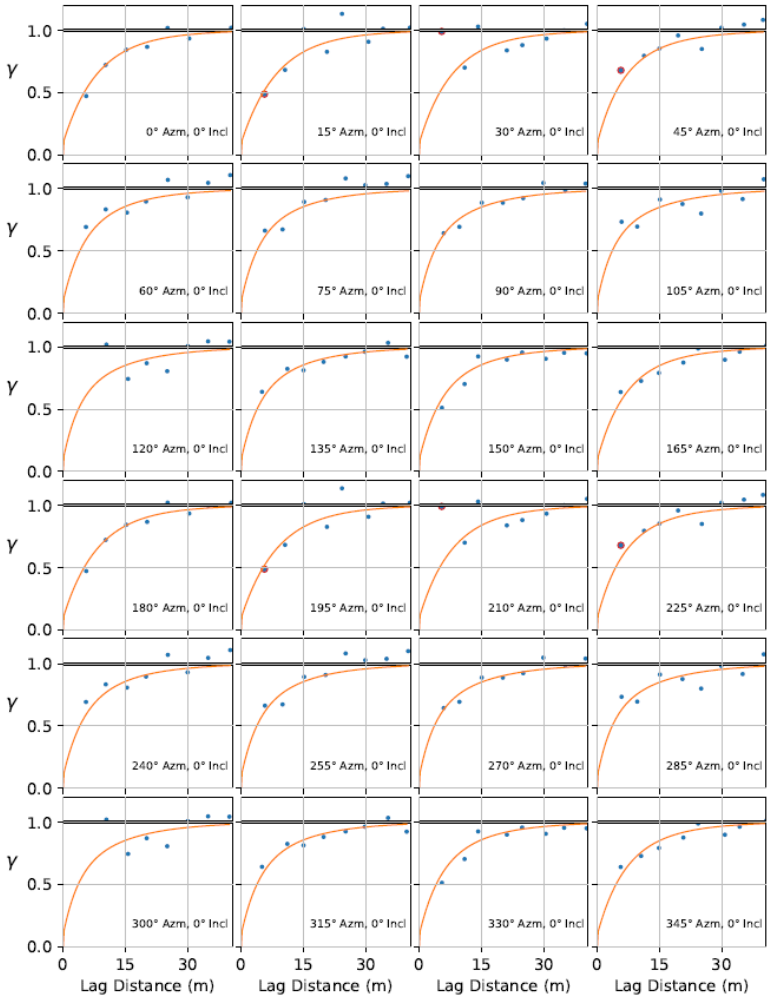
The experimental semi variogram and fitted model for FW unit in ADK is shown in Figure 10-34. The parameters of the fitted model are summarised in Table 10-28. The experimental semi variogram and fitted model for HG unit in ADK is shown in Figure 10-35. The parameters of the fitted model are summarised in Table 10-29. The experimental semi variogram and fitted model for HW unit in ADK is shown in Figure 10-36. The parameters of the fitted model are summarised in Table 10-30.

Figure 10-34: Fitted Experimental Semi Variogram Points for Au in FW for ADK



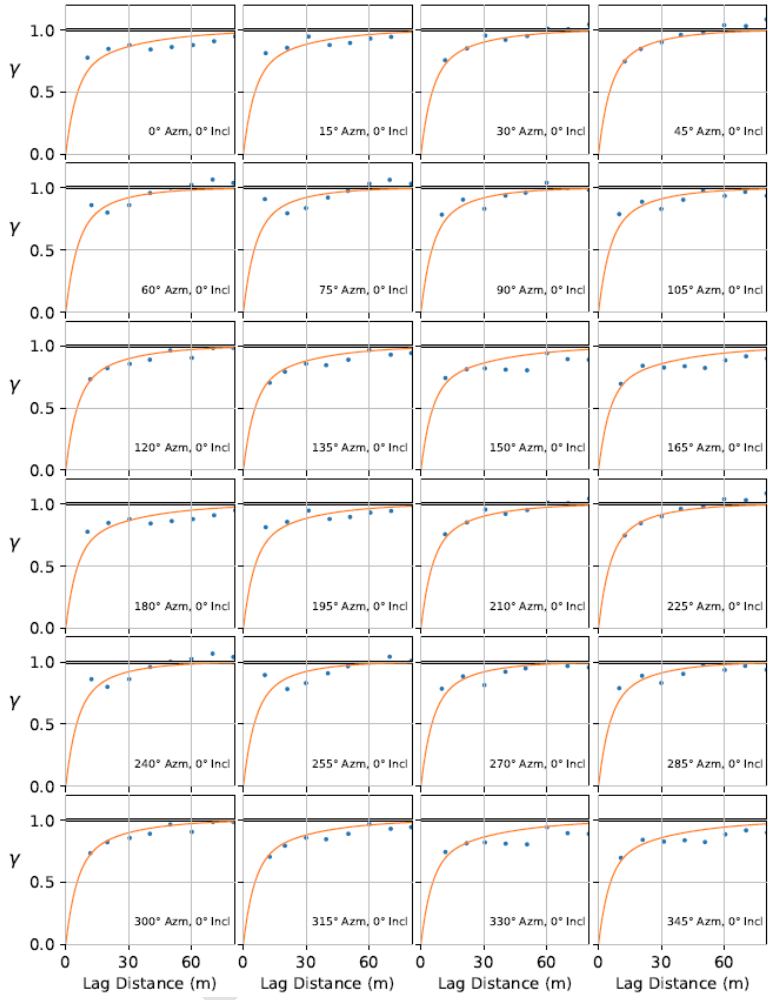
Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Figure 10-35: Fitted Experimental Semi Variogram Points for Au in HG for ADK



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Figure 10-36: Fitted Experimental Semi Variogram Points for Au in HW for ADK



Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-28: Fitted Variogram Parameters for Au in FW for ADK

	Nugget	Structure1	Structure2
Contribution	0.000	0.062	0.938
Model Shape		Exponential	Exponential
Angle1		77.8	77.8
Angle2		0.0	0.0
Angle3		0.0	0.0

	Nugget	Structure1	Structure2
Range1		15.0	15.0
Range2		929.5	15.0
Range3		1.0	1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-29: Fitted Variogram Parameters for Au in HG for ADK

	Nugget	Structure1	Structure2
Contribution	0.097	0.460	0.443
Model Shape		Exponential	Exponential
Angle1		13.1	13.1
Angle2		0.0	0.0
Angle3		0.0	0.0
Range1		32.8	21.9
Range2		38.9	10.0
Range3		1.0	1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-30: Fitted Variogram Parameters for Au in HW for ADK

	Nugget	Structure1	Structure2
Contribution	0.000	0.650	0.350
Model Shape		Exponential	Exponential
Angle1		73.1	73.1
Angle2		0.0	0.0
Angle3		0.0	0.0
Range1		15.0	58.4
Range2		15.0	99.9
Range3		1.0	1.0

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

The major direction of continuity for each variogram model for each deposit is inferred from the weighted ranges of each variogram structure utilising their contribution as weights. The major direction is rotated back to original space and the results are summarised in Table 10-31.

Table 10-31: Fitted Major Variogram Directions in Original Space

Deposit	Vein	Azimuth	Dip	Weighted Anisotropy
FBZ	FW	118.9	26.5	2.1
FBZ	HG	131.6	18.5	1.4
FBZ	HW	86.9	38.5	1.0
ADK	FW	172.9	10.9	4.8
ADK	HG	4.1	11.7	1.1
ADK	HW	170.7	15.1	1.5

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

10.7.6 Chichiwelli

Variograms were modelled for the East and West domains separately. The experimental semi variogram in real space is poorly structured, and so a Gaussian transformation was applied to the data. The first stage was to define the nugget effect from a short-lag omnidirectional variogram, which was calculated along the drillhole, and then modelled the variogram ranges from directional variograms from along strike, down-dip and across dip directions. The directional variograms were then back transformed into "real" space and used for subsequent estimation. The back transformed variograms and resultant variogram parameters are as shown in Table 10-32.

Table 10-32: Variogram Parameters for Chichiwelli

Parameter	East	West
C0	7.94	3.06
C1	3.60	1.59
Nugget Effect (%)	68.8	65.81
Range (m)		
a1 (strike)	25	4
a1 (dip)	25	35
a1 (normal to strike)	5	4.7

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

10.8 Block Model and Grade Estimation

10.8.1 Zone B Shoot

For the model "wug_bm_eng_20240409.mdl", the block size of 5 m easting (X) by 10 m northing (Y) by 5 m elevation (Z) was used. A summary of the block model specifications is listed in Table 10-33. The attribute and description of the block model are presented in Table 10-34.

Table 10-33: Specifications of Zone B Shoot Block Model

	Min	Max	Block Size	Sub Block Size	Rotation
N	18,200	21,050	10	2.5	0
E	39,275	40,575	5	1.25	0
Z	-975	1,100	5	2.5	0
Total Blocks			9,735,066		

Table 10-34: Attribute and Description of Zone B Shoot Block Model

Attribute	Description
au_ok	Au grade.
density	Density.
domain	All Mineralised Domains.
resclass	1=Measured, 2=Indicated, 3=Inferred.

For Zone B Shoot UG, the bulk density in the model was set to 2.8 g/cm^3 (fresh rock) as before.

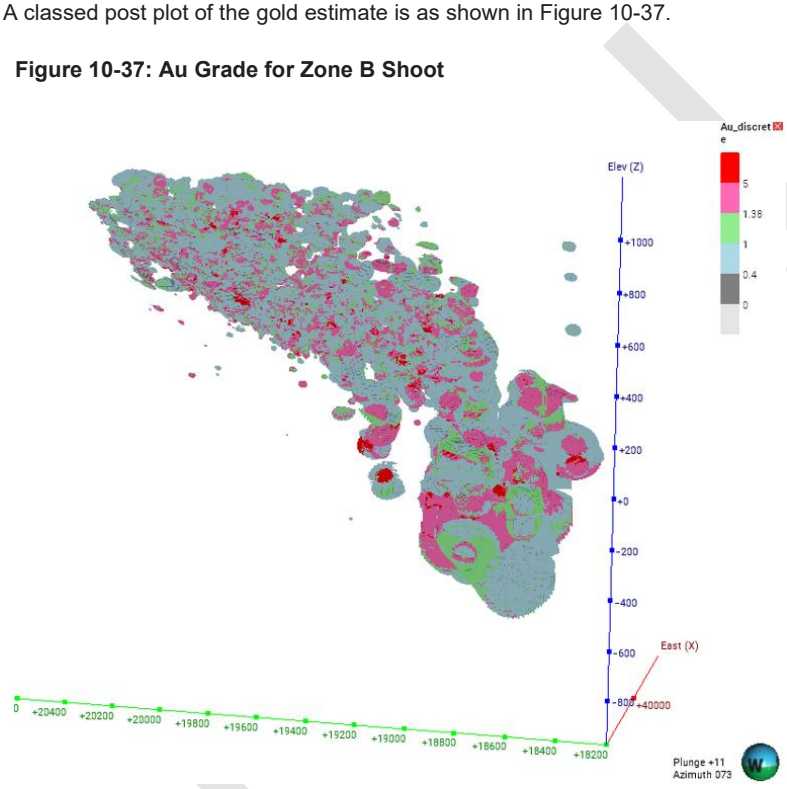
The OK method was used for grade estimation by GSR. As shown in Figure 10-7, variable search orientations were developed for each mineralised domain. The parameters are summarised in Table 10-35.

Table 10-35: Grade Estimation Parameters Used in Zone B Shoot

Pass	Major	Semi-Major	Minor	Min Samples	Max Samples	Max Samples Per Hole
1	25	25	10	3	8	2
2	50	50	20	2	12	4
3	150	150	50	1	15	

A classed post plot of the gold estimate is as shown in Figure 10-37.

Figure 10-37: Au Grade for Zone B Shoot



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

10.8.2 Zone 242

For the model "242_bm_gc_231019.mdl", the block size of 5 m easting (X) by 10 m northing (Y) by 5 m elevation (Z) was used. A summary of the block model specifications is listed in Table 10-36. The attribute and description of the block model are presented in Table 10-37.

Table 10-36: Specifications of Zone 242 Block Model

	Min	Max	Block Size	Sub Block Size	Rotation
N	20,179	20,709	10	2.5	50

	Min	Max	Block Size	Sub Block Size	Rotation
E	39,198	39,768	5	1.25	50
Z	740	1,090	5	2.5	0
Total Blocks			240,654		

Table 10-37: Attribute and Description of Zone 242 Block Model

Attribute	Description
au_ok	Au grade.
density	Density.
domain	All Mineralised Domains.
res_class	1=Measured, 2=Indicated, 3=Inferred.

For 242 UG, the bulk density in the model was set to 2.8 (fresh rock).

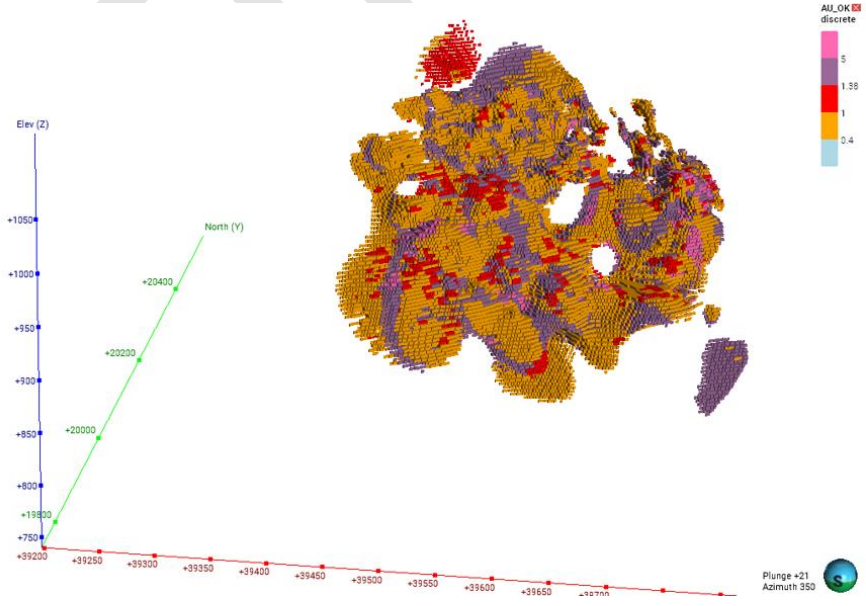
The OK method was used for grade estimation by GSR. Variable search orientations were developed for each mineralised domain. The parameters are summarised in Table 10-38.

Table 10-38: Grade Estimation Parameters Used in Zone 242

Pass	Major	Semi-Major	Minor	Min Samples	Max Samples	Max Samples Per Hole
1	40	30	2.5	3	12	2
2	70	60	5	2	12	4
3	150	100	50	1	15	

A classed post plot of the gold estimate is as shown in Figure 10-38.

Figure 10-38: Au Grade for Zone 242



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

10.8.3 DMH

For the model "dmh_gc_model_20240518.mdl", the block size of 5 m easting (X) by 5 m northing (Y) by 3 m elevation (Z) was used. A summary of the block model specifications is listed in Table 10-39. The attribute and description of the block model are presented in Table 10-40.

Table 10-39: Specifications of DMH Block Model

	Min	Max	Block Size	Sub Block Size	Rotation
N	20,705	21,210	5	1.25	0
E	40,500	41,110	5	1.25	0
Z	724	1,132	3	1.5	0
Total Blocks			1,175,800		

Table 10-40: Attribute and Description of DMH Model

Attribute	Description
Au_ok	Gold grade.
density	Densitiy.
est_domains	All Mineralised Domains.
weathering	1=Fresh, 2=Trans, 3=Oxide.
res_class	1=Measured, 2=Indicated, 3=Inferred, 4=Bluesky

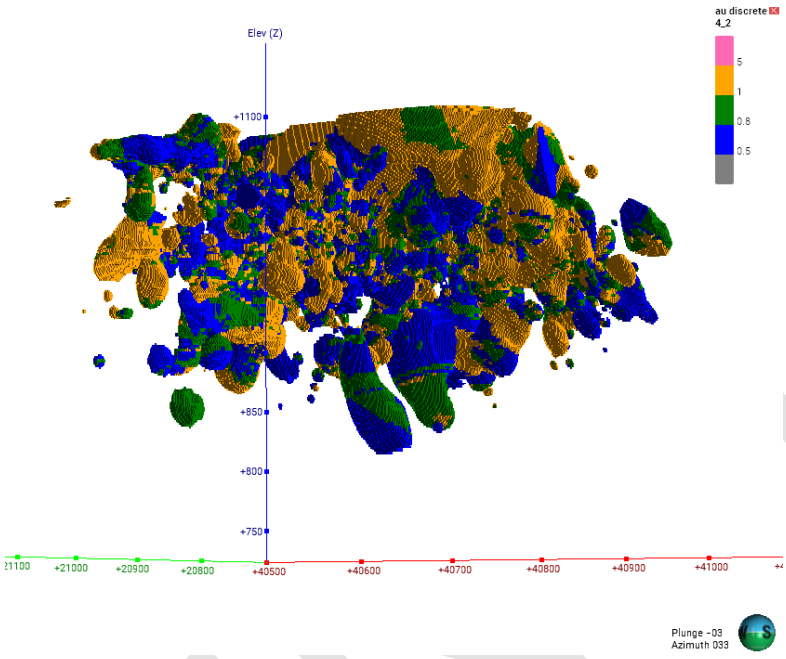
The density values for the tonnage estimation were coded to 1.8 g/cm^3 for oxide, 2.25 g/cm^3 for transition and 2.7 g/cm^3 for fresh by GSR. The OK method was used for grade estimation by GSR. Variable search orientations were developed for each mineralised domain. Parameters are listed in Table 10-41.

Table 10-41: Grade Estimation Parameters Used in DMH

Pass	Major	Semi-Major	Minor	Min Samples	Max Samples	Max Samples Per Hole
1	10	5	5	9	15	3
2	15	9	9	9	15	3
3	22.5	13.5	13.5	6	12	3
4	45	27	27	6	10	
5	90	54	54	4	8	

A classed post plot of the Au estimate is as shown in Figure 10-39.

Figure 10-39: Au Grade for DMH



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

10.8.4 I Zone

For the model "zone_bm_res_20230901.mdl ", the block size of 10 m easting (X) by 20 m northing (Y) by 6 m elevation (Z) was used. A summary of the block model specifications is listed in Table 10-42. The attribute and description of the block model are presented in Table 10-43.

Table 10-42: Specifications of I Zone Block Model

	Min	Max	Block Size	Bub Block Size	Rotation
N	57,180	57,740	20	2.5	0
E	174,470	174,880	10	1.25	0
Z	764	1,100	6	1.5	0
Total Blocks			199,693		

Table 10-43: Attribute and Description of I Zone Model

Attribute	Description
au_ok	Gold grade.
density	Density.
domain	All mineralised domains.

Attribute	Description
oxidation	1=Fresh, 2=Trans, 3=Oxide.
res_class	1=Measured, 2=Indicated, 3=Inferred.

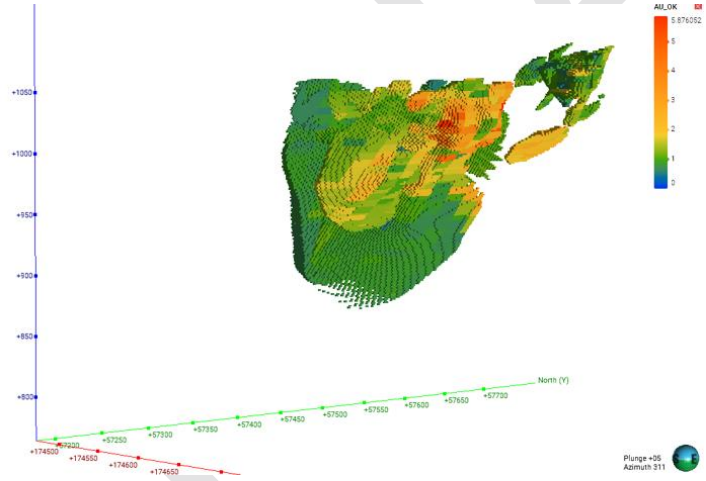
The density values for the tonnage estimation were coded to 1.8 g/cm^3 for oxide, 2.25 g/cm^3 for transition and 2.7 g/cm^3 for fresh by GSR. The OK method was used for grade estimation by GSR. Variable search orientations were developed for each mineralised domain. Parameters are listed in Table 10-44.

Table 10-44: Estimation and Search Parameters for I Zone

Pass	Major	Semi-Major	Minor	Min Samples	Max Samples	Max Samples Per Hole
1	25	15	10	4	16	2
2	50	30	20	3	12	
3	100	60	40	2	10	
4	200	120	80	1	8	

A classed post plot of the gold estimate is as shown in Figure 10-40.

Figure 10-40: Au Grade for I Zone



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

10.8.5 Hwini Butre

Two block models were created; one for FBZ and the other for ADK. No rotation was applied to the models. Block sizes were chosen to reflect the geometry of the deposits. Grade data for each of the modelled units was interpolated into the individual structures only. Block model parameters for FBZ and ADK are shown in Table 10-45 and Table 10-46.

Table 10-45: FBZ Block Model Parameters

Coordinate	Origin	Boundary Size	Block Size (m)
X	175,681.47	1,443	1
Y	32,345.73	683	2
Z	1,176.72	482	2

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

Table 10-46: ADK Block Model Parameters

Coordinate	Origin	Boundary Size	Block Size (m)
X	175,731.38	718	1
Y	32,394.43	804	2
Z	1271.61	721	2

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

The density used for estimation was provided by GSR with the value of 2.7 g/cm^3.

The estimation was performed using OK with uncapped and capped gold grades. The number of composites and maximum search radius utilized for each vein unit in each deposit are shown in Table 10-47.

Table 10-47: Kriging Search Parameters for Each Vein in Each Deposit

Deposit	Vein	Max Search (m)	Max Composites
FBZ	FW	250	8
FBZ	HG	500	4
FBZ	HW	500	4
ADK	FW	250	4
ADK	HG	1,000	24
ADK	HW	1,000	2

Source: A Report to Golden Star Father Brown Resource Model, RMS, 2020

10.8.6 Chichiwelli

A block model was created by GSR for the whole Chichiwelli area. Block sizes were chosen to reflect the average spacing of drill lines along the strike. Grade data for each of the modelled units was interpolated into the individual structures only, with soft boundaries between oxidation states, and subsequently reported as oxide or fresh. Block model parameters for Chichiwelli are summarized in Table 10-48.

Table 10-48: Chichiwelli Block Model Parameters

Coordinate	Origin	Block Size (m)	No. of Blocks
X	631,093.64	12.5	100
Y	580,787.20	25	60
Z	1216(Max)	8	65

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

GSR modelled the oxidation surface to determine the boundary between oxide and fresh material. No transition zone was modelled. The density values used for the estimation were provided by GSR with the values of 1.8 g/cm^3 for oxide and 2.68 g/cm^3 for fresh.

Block grades for each of the mineralised zones were estimated using OK. OK was carried out in four passes for each mineralised zone, and the search parameters for the individual domains shown below in Table 10-49. Octants were used on the 1st and 2nd pass searches with three consecutive empty sectors; however, they were not applied on the 3rd search pass, hence the same number of minimum and maximum samples for the 2nd and 3rd searches.

Table 10-49: Chichiwelli Estimation Parameters

Domain		Pass1	Pass2	Pass3	Rotation
	X	60	120	120	Azimuth 20
	Y	60	120	120	Dip 60
East	Z	20	40	4	
	Min Samples	3	3	3	
	Max Samples	80	80	80	
	X	80	160	120	Azimuth 20
	Y	80	160	120	Dip 60
West	Z	10	20	20	
	Min Samples	3	3	3	
	Max Samples	80	80	80	

Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

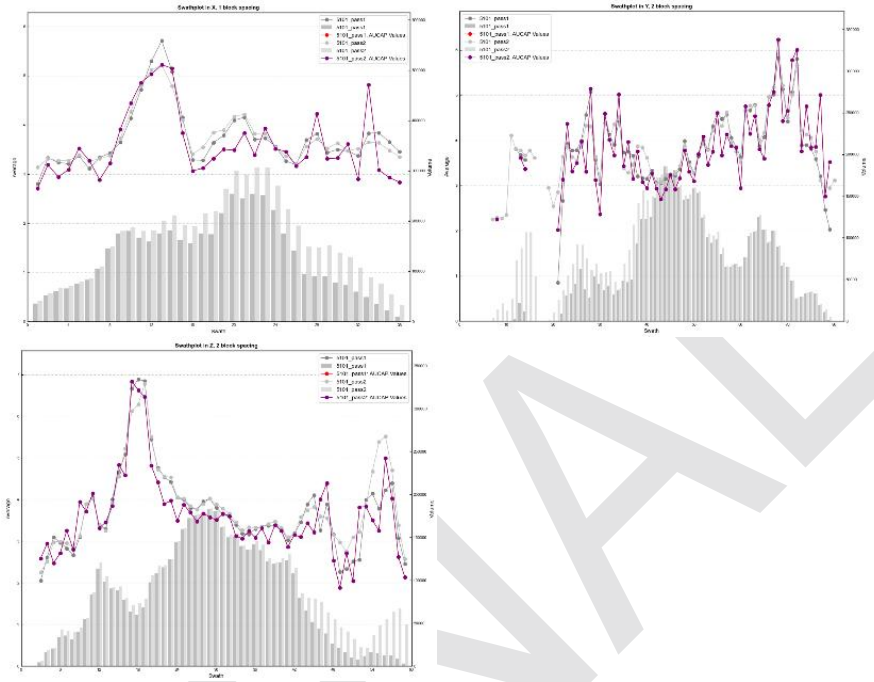
10.9 Model Validation and Sensitivity

Model validation is a common approach for determining whether grade estimation has performed as expected. An acceptable or preferred validation result does not necessarily imply that the model is correct or derived from the right estimation approach. It suggests only that the model is a reasonable representation of the Mineral Resource data used and of the estimation method applied. Other issues such as the relationship between the model-selective assumptions and mining practices are equally important when determining the appropriateness of the Mineral Resource estimate.

SRK adopted the swath plot validation approaches to validate the model for B Shoot, 242, DMH and I Zone.

Swath plots of gold were created in three orthogonal directions (easting, northing, and vertical, as X, Y, and Z) in particular slice thicknesses in each direction to validate the resultant block models.

Figure 10-41: Au Swath Plot for Domain 5101 of B Shoot



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-42: Au Swath Plot for Domain 8101 of B Shoot

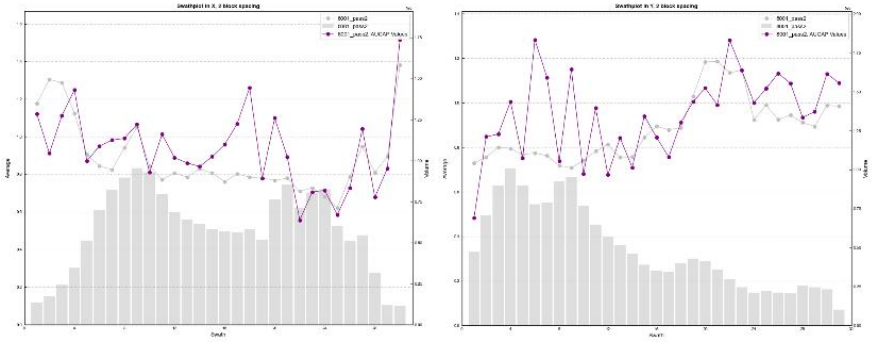
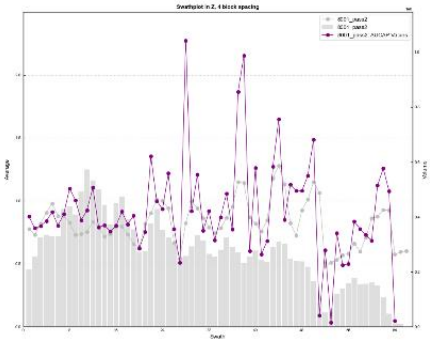


Figure 10-42: Au Swath Plot for Domain 8101 of B Shoot



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-50: Comparison of Composites and Block Model (B Shoot)

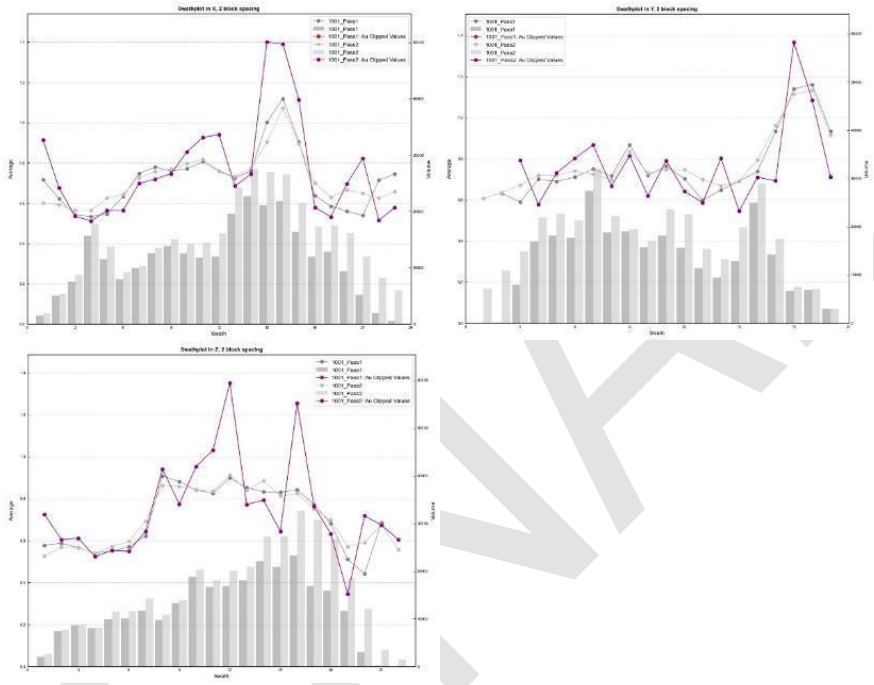
Domain Code	Mean Grade (Composites)	Mean Grade (Block Model)	Difference
2001	0.73	0.72	-1.13%
2101	3.14	2.65	-15.79%
3001	0.94	0.88	-6.18%
3101	3.68	3.84	4.39%
4001	0.77	0.77	0.64%
4101	3.68	3.65	-0.85%
5001	0.82	0.81	-1.27%
5101	4.35	3.78	-13.14%
6001	0.80	0.72	-9.50%
6101	3.39	3.04	-10.34%
7001	0.84	0.73	-12.69%
7101	3.91	3.37	-13.75%
8001	0.96	0.84	-12.92%
8101	3.52	3.37	-4.36%
10001	1.03	0.90	-12.84%
10101	3.14	2.83	-9.87%

For the model "wug_bm_eng_20240409.mdl", as shown in Figure 10-41 and Figure 10-42, the block models and composites match reasonably well in all orthogonal directions. This comparison shows close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location. The gold grade comparison of composites and global mean are listed in Table 10-50. The estimation method and parameters are appropriate. The data indicates that the block models constructed by GSR are reliable.

For the model "242_bm_gc_231019.mdl", as shown in Figure 10-43 and Figure 10-44, the block models and composites match reasonably well in all orthogonal directions. This comparison shows

close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location. The comparison of the composites and global gold grade of the block model are listed in Table 10-51. The estimation method and parameters are appropriate. The data indicates that the block models constructed by GSR are reliable.

Figure 10-43: Au Swath Plot for Domain 1001 of 242



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-44: Au Swath Plot for Domain 1101 of 242

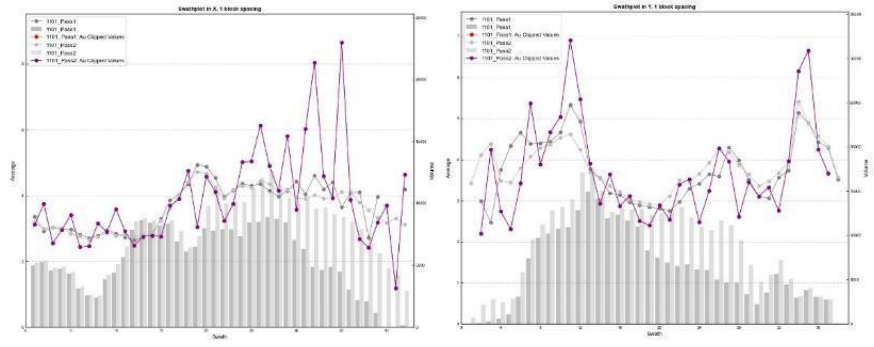
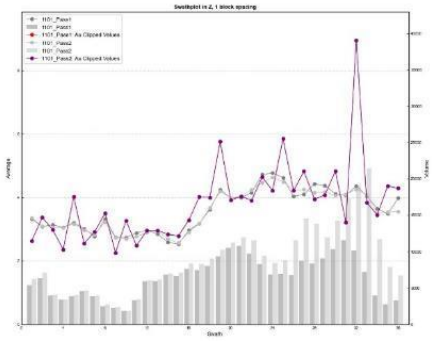


Figure 10-44: Au Swath Plot for Domain 1101 of 242



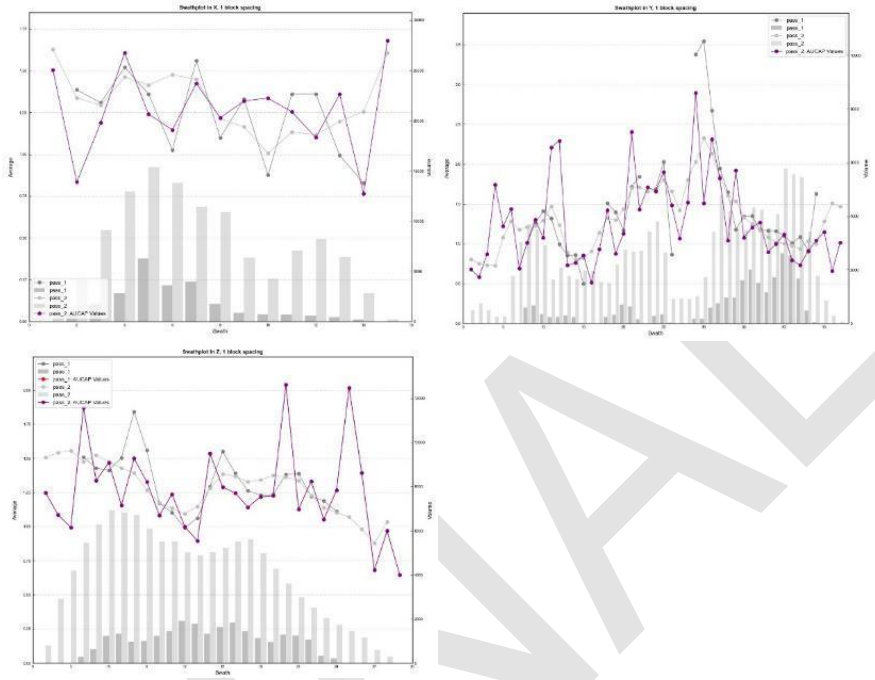
Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-51: Comparison of Composites and Block Model (242)

Domain Code	Mean Grade (Composites)	Mean Grade (Block Model)	Difference
1001	0.80	0.75	-5.71%
1002	0.65	0.64	-1.09%
1003	0.44	0.39	-11.43%
1004	0.72	0.67	-7.75%
1005	0.60	0.49	-18.41%
1006	0.46	0.45	-2.40%
1101	3.75	3.75	0.01%
1102	3.10	2.97	-4.30%
1103	3.11	2.88	-7.62%
1104	2.74	2.63	-4.18%
1105	2.51	2.34	-6.79%
1106	3.79	3.93	3.64%
10019	0.18	0.17	-3.82%
10049	0.05	0.05	-0.37%
11019	0.36	0.35	-2.68%
11039	0.54	0.58	6.93%

For the model "dmh_gc_model_20240518.mdl", as shown in Figure 10-45 and Figure 10-46, the block models and composites match reasonably well in all orthogonal directions. This comparison shows close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location. The comparison of the composites and global gold grade of the block model are listed in Table 10-52. The estimation method and parameters are appropriate. The data indicates that the block models constructed by GSR are reliable.

Figure 10-45: Au Swath Plot for Domain 1001 of DMH



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-46: Au Swath Plot for Domian 2101 of DMH

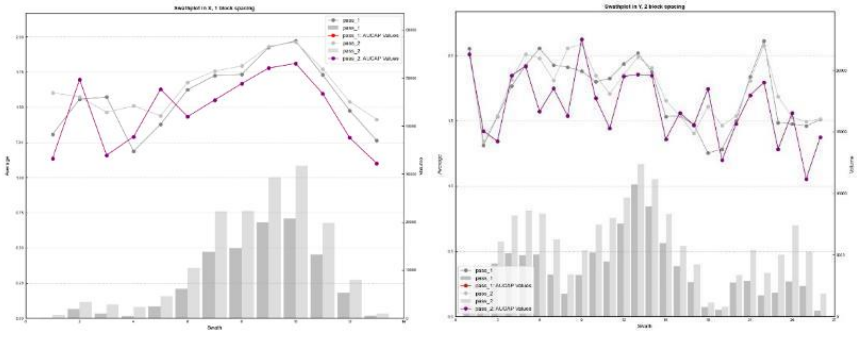
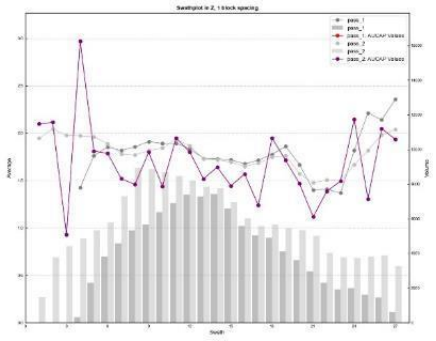


Figure 10-46: Au Swath Plot for Domian 2101 of DMH



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-52: Comparison of Composites and Block Model (DMH)

Domain Code	Mean Grade (Composites)	Mean Grade (Block Model)	Difference
1001	1.20	1.24	4.05%
1002	0.71	0.66	-6.86%
1003	1.06	1.00	-6.17%
1004	1.05	1.07	1.91%
1005	1.06	1.01	-4.91%
2102	1.93	1.82	-5.60%

For the I Zone model, as shown in Figure 10-47 and Figure 10-48, the block models and composites match reasonably well in all orthogonal directions. This comparison shows close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location. The comparison of the composites and global gold grade of the block model are listed in Table 10-53. The estimation method and parameters are appropriate. The data indicates that the block models constructed by GSR are reliable.

Figure 10-47: Au Swath Plot for Domain 1003 of I Zone

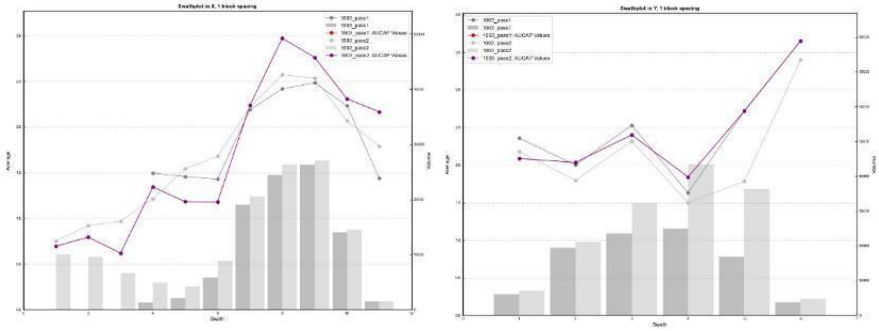
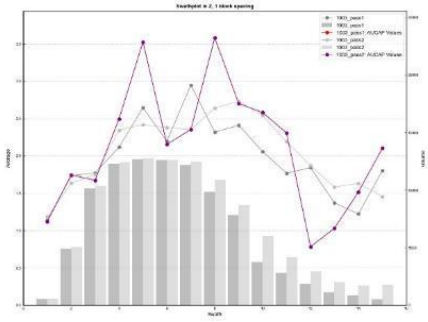
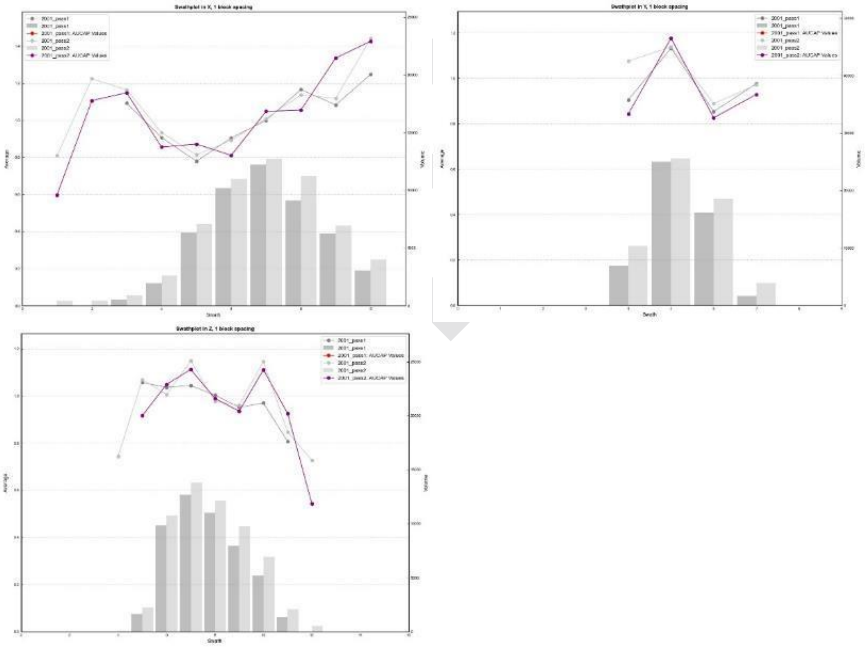


Figure 10-47: Au Swath Plot for Domain 1003 of I Zone



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Figure 10-48: Au Swath Plot for Domian 2001 of I Zone



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

Table 10-53: Comparison of Composites and Block Model (I Zone)

Domain Code	Mean Grade (Composites)	Mean Grade (Block Model)	Difference
1001	1.01	1.01	-0.01%
1002	1.16	1.12	-3.16%

Domain Code	Mean Grade (Composites)	Mean Grade (Block Model)	Difference
1003	2.35	2.28	-2.72%
1005	1.58	1.57	-0.73%
1006	1.07	0.87	-18.41%
1007	1.04	1.07	2.88%
2001	1.03	1.00	-2.34%
2002	1.19	1.23	3.48%
2003	0.92	0.92	-0.52%
2004	1.62	1.70	5.09%

For the FBA/ADK model, thickness and gold grade were both checked. For the thickness, the difference ranges from -6.34% to 7.67% for FBZ and ranges from 0.93% to 12.41% for ADK. The scatterplot of measured and estimated gold grades at data locations for FBZ and ADK. The scatter plots for both FBZ and ADK indicate good data reproduction.

For the Chichiwelli model, block model was validated by comparing the block model mean grades with the declustered composite mean grades and through validation slices through the block models. The block model was also compared to the composite grades within defined sectional criteria in a series of validation slices, the results of which are displayed on graphs to check for visual discrepancies between grades along the defined coordinate line. The expected outcome of the estimation process is to observe a relative smoothing of block model grades around the composite values. Overall, the estimation of the Chichiwelli domains is robust and the results have been verified to a reasonable degree of confidence. Globally, the block model average grade is relatively like that of the de-clustered input data, indicating that no biases have been found.

10.10 Mineral Resource Classification

Block model quantities and grade estimates for the Wassa project were classified according to the JORC Code guidelines.

Mineral Resource classification is typically a subjective concept. Industry best practices suggest that Mineral Resource classification should consider the confidence in the geological continuity of the mineralised structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar Mineral Resource classification.

GSR has considered the following general criteria:

- Confidence in the geological interpretation.
- Knowledge of the grade continuities gained from observations and geostatistical analyses.
- Number, spacing, and orientation of drillhole intercepts through mineralised domains.
- Quality and reliability of the raw drillhole data (i.e., sampling, assaying and surveying).

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data primarily by DD and (GC)RC are sufficiently reliable to support the Mineral Resource evaluation.

Using the above criteria, 3D surfaces and solids were created by GSR to delineate the respective Mineral Resource categories.

For the B Shoot model, Mineral Resource classification was performed by wireframing the Measured and Indicated Mineral Resources by GSR, based on drill spacing displayed on sections, which were spaced every 15 m along northing.

For Measured Mineral Resources: as detailed in Figure 10-49, defined in areas where the drill intercepts were consistently no greater than 15 m apart, up dip or down dip.

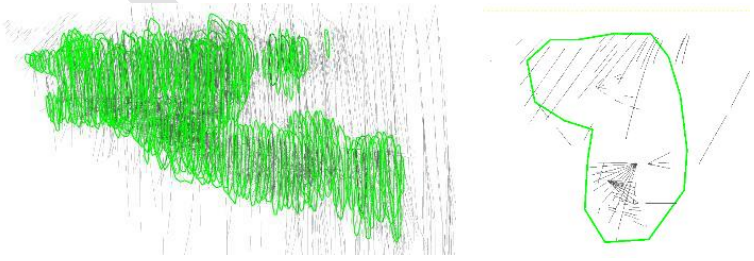
Figure 10-49: B Shoot Measured Areas in both Plane and Section Map

Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

For Indicated Mineral Resources: as detailed in Figure 10-50, defined in areas where the drill intercepts were consistently no greater than 50 m apart.

The rest within each domain with little known information is classified as Inferred Mineral Resources, as their reliability is not sufficient to apply meaningful economic and technical parameters or to evaluate economic feasibility.

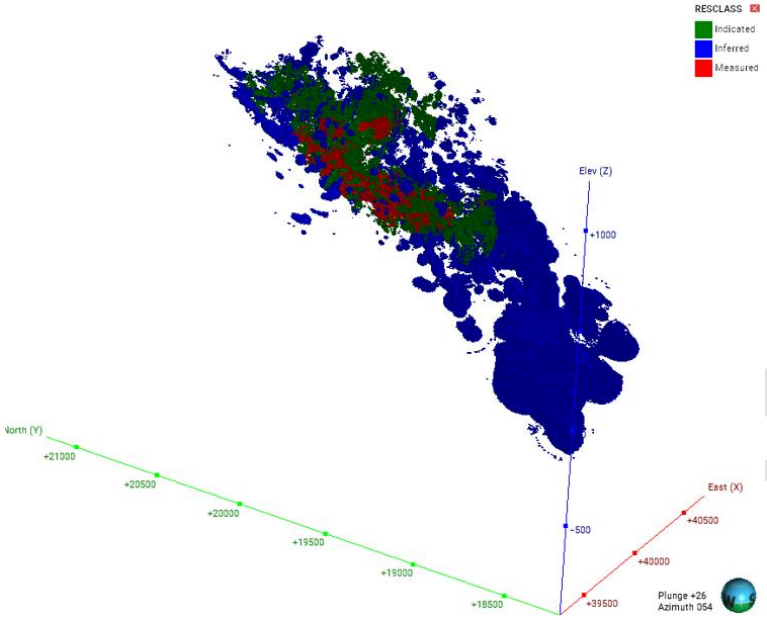
Figure 10-50: B Shoot Indicated Areas in both Plane and Section Map



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

The Mineral Resource classification is as shown in Figure 10-51.

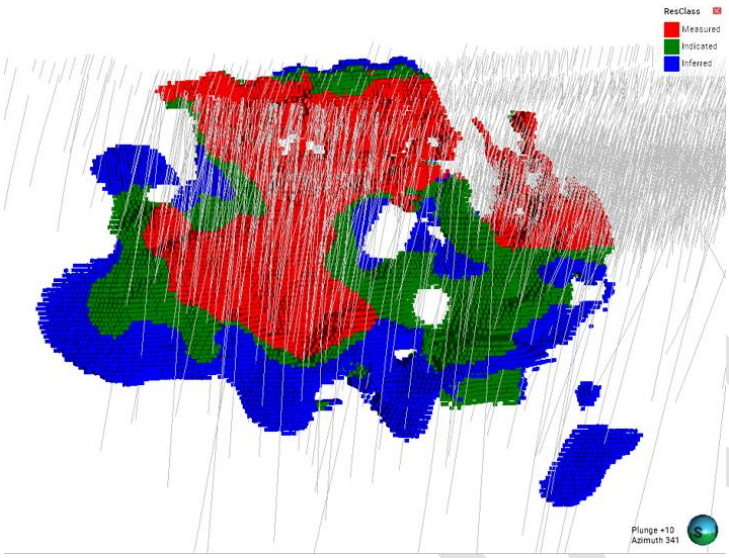
Figure 10-51: B Shoot Mineral Resource Classification Distribution



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

For the 242 model, blocks in the areas with drill hole spacing not more than 15 m were classified as Measured Mineral Resources, those with drill hole spacing not greater than 30 m were classified as Indicated Mineral Resources and those with drill hole spacing not greater than 45 m were classified as Inferred Mineral Resources, detail in Figure 10-52.

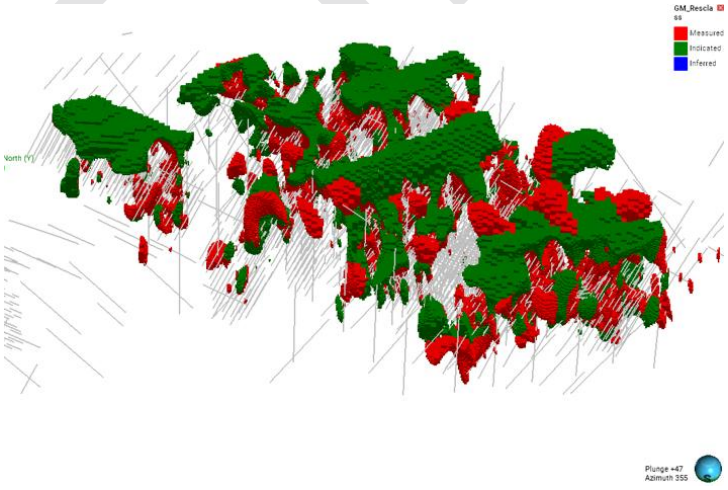
Figure 10-52: 242 Mineral Resource Classification Distribution



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

For the DMH model, blocks in the areas with drill hole spacing not more than 15 m were classified as Measured Mineral Resources, those with drill hole spacing not greater than 30 m were classified as Indicated Mineral Resources and the rest within mineralised domains were classified as Inferred Mineral Resources, detail in Figure 10-53.

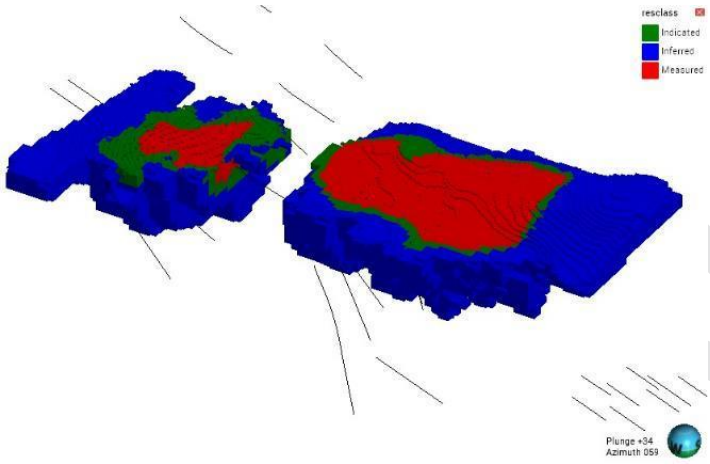
Figure 10-53: DMH Mineral Resource Classification Distribution



Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

For I Zone model, as shown in Figure 10-54, Measured Mineral Resource was defined by the area with an average sample distance of 15 m. Indicated Mineral Resource was defined by the area with a sample distance of 30 m. And the rest within the mineralised domain was defined as Inferred Mineral Resources.

Figure 10-54: I Zone Mineral Resource Classification Distribution



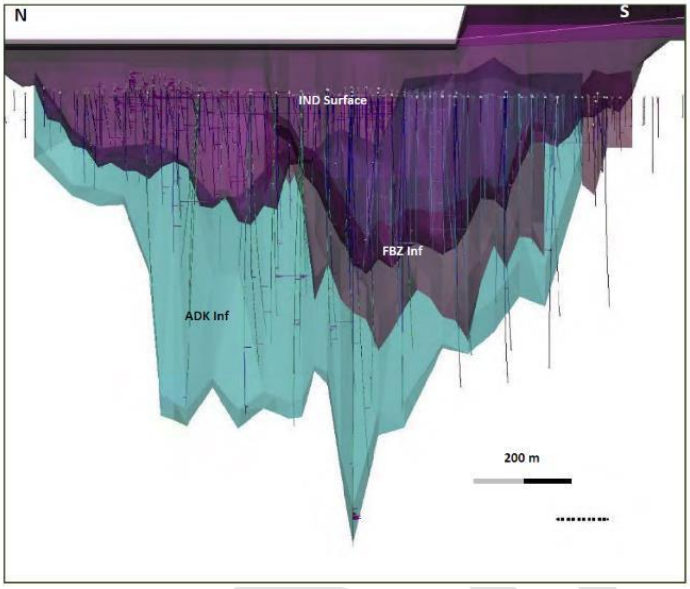
Source: SRK, Leapfrog Mapping Using the Data Provided by GSR

For the FAB/ADK models, delineation of the Mineral Resource categories was based on a combination of criteria involving drillhole spacing, geological and confidence in mineralisation interpretation, as well as slope of regression values from the estimation process. The classification was modelled visually by digitizing a wireframe to define contiguous zones of confidence.

Indicated Mineral Resources were classified in the areas of Father Brown and Adoikrom where drilling is sufficient to demonstrate geological and grade continuity to a reasonable level.

Inferred Mineral Resources were classified by two 3D solids that included the wider spaced drilling at depth (100 to 200m spacing), shown in Figure 10-55. All other material outside of the 3D mesh/ surface constraints remained unclassified.

Figure 10-55: Mineral Resource Classification Distribution For FBZ/ADK



Source: NI 43-101 Technical Report on the Wassa Gold Mine, GSR, 2021

For Chichiwelli, delineation of the Mineral Resource categories was based on a combination criteria drillhole spacing, geological and wireframe confidence, and was modelled visually by digitizing a wireframe.

Wireframes were digitized for East Domain and West Domain, with the areas inside the modelled solids considered to be Indicated Mineral Resources, and outside, Inferred Mineral Resources.

10.11 Mineral Resource Statement

The JORC Code defines a Mineral Resource as:

"*a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories*."

Mineral Resources are reported inclusive of Ore Reserves.

The RPEEE requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries.

For DMH and I Zone, in order to determine the quantities of material offering RPEEE by an open pit, GSR used an open pit optimiser, based on a US$2,050/ ounce (oz) gold price, and reasonable mining assumptions to evaluate the proportions of the block model that could be "reasonably expected" to be mined from an open pit. The optimisation parameters were selected based on actual costs from the operations. The reader is cautioned that the results from the open pit optimisation are used solely for the purpose of testing RPEEE by an open pit and do not represent an attempt to estimate Ore Reserves. SRK considers that the blocks located within the conceptual open pit shells and above the cut-offs (based on a US$2,050/ ounce (oz) gold price) show "reasonable prospects for economic extraction" and can be reported as a Mineral Resource.

For Wassa B Shoot and 242 underground operations, the underground Mineral Resources were reported within Mineable Stope Optimiser ("MSO"), generated by GSR based on a US$2,050/ oz gold price and mining, processing and general administrative costs that were adjusted from actual costs.

Other factors and assumptions in relation to environment, permitting, legal, taxations, socio-economic, marketing, and political facts have been considered for Mineral Resource and Ore Reserve statements in this Report.

There is no exploration and mining activities for Chichiwelli since 2020. Whilst a drilling program was initiated at FB/ADK during 2022-2023, and 10,287.4m of drilling has been completed. Despite this, the additional drilling information has not been included in the resource estimate. Therefore, the Chichiwelli and FB/ADK Mineral Resources are reported the same as the previous 2021 Mineral Resource Estimate. The Chichiwelli Mineral Resources were reported at a cut-off grade of 0.55 g/t gold, within the open pit shell calculated at a US$1,500/ oz gold price. The FB/ADK Mineral Resources were reported above a gold cut-off grade of 1.4 g/t based on a US$1,500/ oz gold price.

Table 10-54 shows the Mineral Resource statement for the Wassa Operation/Project.

Table 10-54: Mineral Resource Statement, Wassa Project, as of 31 March 2024

Deposit/Category		Tonnage	Grade	Contained Au	Contained Au
		Kt	Au g/t	koz	t
DMH OP					
	Measured	569	1.18	22	0.67
	Indicated	227	1.16	8	0.26
	Measured and Indicated	796	1.17	30	0.93
	Inferred	19	1.25	0.8	0.02
I Zone OP					
	Measured	37	1.28	2	0.05
	Indicated	21	1.65	1	0.03
	Measured and Indicated	58	1.41	3	0.08
	Inferred	1	1.22	0.03	0.00
Chichiwelli OP					
	Measured				
	Indicated	1,110	1.75	62	1.94

Measured and Indicated	1,110	1.75	62	1.94
Inferred	50	2.22	4	0.11
FB/ADK UG				
Measured				
Indicated	1,310	7.96	335	10.42
Measured and Indicated	1,310	7.96	335	10.42
Inferred	2,660	5.30	454	14.12
242 UG				
Measured	158	3.48	18	0.55
Indicated	217	2.75	19	0.60
Measured and Indicated	376	3.06	37	1.15
Inferred	48	2.37	4	0.11
Bshoot UG				
Measured	6,689	3.05	656	20.41
Indicated	7,613	2.50	612	19.02
Measured and Indicated	14,301	2.76	1,268	39.43
Inferred	58,305	3.28	6,157	191.50
Stockpile (Measured)				
DMH Stockpile	50	0.88	1.4	0.04
UG Stopepile	2	1.33	0.09	0.00
Total				
Measured	**7,505**	**2.89**	**698**	**21.73**
Indicated	**10,498**	**3.07**	**1,038**	**32.28**
Measured and Indicated	**18,003**	**3.00**	**1,736**	**54.00**
Inferred	**61,084**	**3.37**	**6,619**	**205.88**
Total	**79,086**	**3.29**	**8,355**	**259.88**

Notes:

[1] The Mineral Resource is reported in accordance with the JORC Code guidelines.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Mr Pengfei Xiao who are full time employees of SRK Consulting. Mr Huaixiang Li is a Member of the Australian Institute of Geoscientists (the "AIG") and Mr Pengfei Xiao is a Member of the Australasian Institute of Mining and Metallurgy (the "AusIMM") and a Member of the AIG. Both Mr Li and Mr Xiao have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the "Competent Persons" as defined in JORC (2012). Mr Li and Mr Xiao consent to the reporting of this information in the form and context in which it appears.

[3] Mt – million tonnes (metric tons), oz- ounce; koz – thousand ounces.

[4] Mineral Resources for B Shoot and 242 underground deposits are reported within mineable stope optimiser (the "MSO").

[5] Open Pit Mineral Resources are reported at a cut-off grade of 0.43 g/t for DMH, 0.73 g/t for I Zone and 0.55 g/t for Chichiwelli.

[6] Underground Mineral Resources are reported at a cut-off grade of 1.34 g/t for B Shoot and 242; and 1.40 g/t for FB/ADK.

[7] FB/ADK and Chichiwelli Mineral Resources were sourced from the Wassa NI 43-101 Technical Report (March 2021), based on a US$1,500/ ounce (oz) gold price. No material change has been aware since then.

[8] All composites have been capped where appropriate.

[9] All figures are rounded to reflect the relative accuracy of the estimate.

[10] It should be noted that the Mineral Resource Statement is made for GSWL on the basis of 100% ownership of the properties.

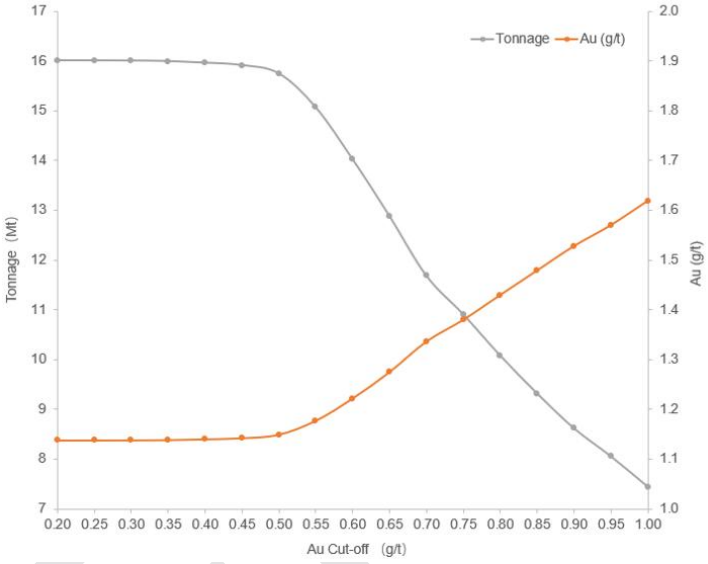
[11] The conversion between ounce and gram used herein is 1 oz = 31.1035 g.

[12] Mineral Resources are inclusive of Ore Reserves that have been converted from Measured and Indicated Mineral Resources.

10.12 Grade Sensitivity Analysis

The Mineral Resources are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Figure 10-56 to Figure 10-59 at different gold cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of gold cut-off grades.

Figure 10-56: DMH Grade Tonnage Curve

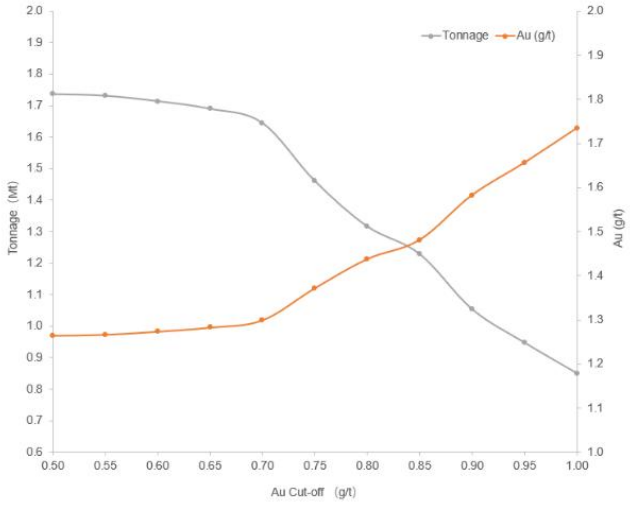


Source: SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of gold cut-off grades.

Figure 10-57: I Zone Grade Tonnage Curve

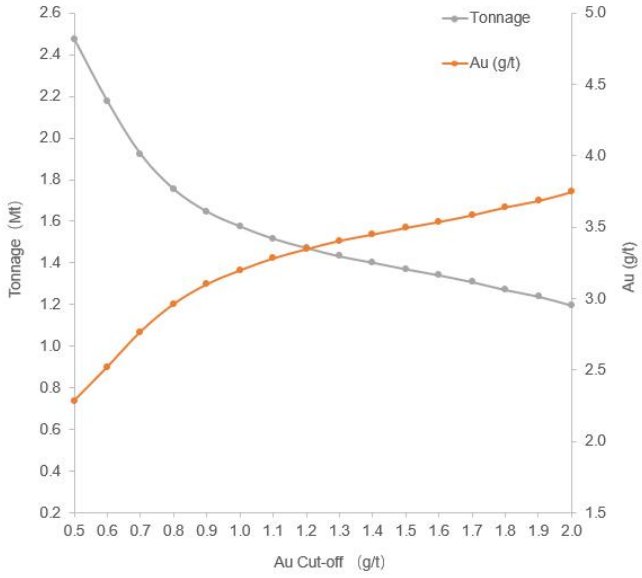


Source: SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of gold cut-off grades.

Figure 10-58: 242 Grade Tonnage Curve

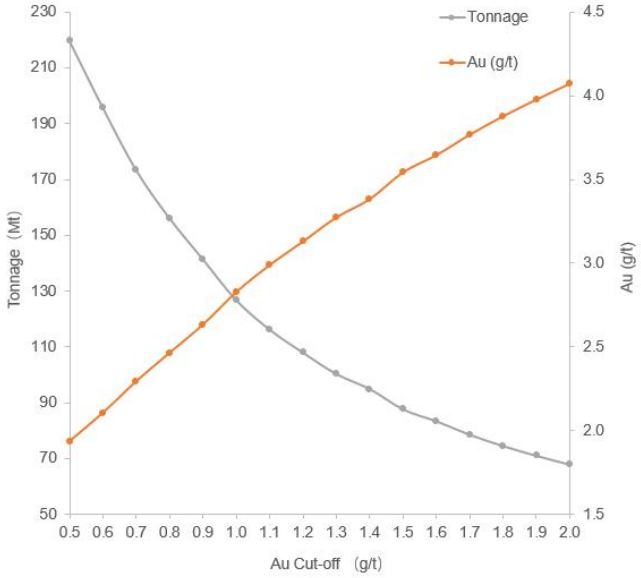


Source: SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of gold cut-off grades.

Figure 10-59: B Shoot Grade Tonnage Curve



Source: SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of gold cut-off grades.

10.13 Previous Mineral Resource Estimates

GSR carried out the Mineral Resource Estimate in March 2021 and the statement is shown in Table 10-55.

Table 10-55: Wassa Mineral Resource Statement, as of December 31, 2020

Deposit/Category	Tonnage Mt	Grade Au g/t	Contained Au koz
Wassa Main UG			
Measured	5.90	4.45	843
Indicated	18.96	3.55	2,162
Measured and Indicated	24.85	3.76	3,005
Inferred	70.50	3.39	7,689
HBB Other OP			
Measured	/	/	/
Indicated	0.62	1.21	24
Measured and Indicated	0.62	1.21	24
Inferred	24	0.77	1.31

Deposit/Category	Tonnage Mt	Grade Au g/t	Contained Au koz
FB/ADK UG			
Measured	/	/	/
Indicated	1.31	7.96	335
Measured and Indicated	1.31	7.96	335
Inferred	335	2.66	5.30
Benso OP			
Measured	/	/	/
Indicated	1.38	2.50	111
Measured and Indicated	1.38	2.50	111
Inferred	0.05	3.37	5
Chichiwelli OP			
Measured	/	/	/
Indicated	1.11	1.75	62
Measured and Indicated	1.11	1.75	62
Inferred	0.05	2.22	4
Total			
Measured	**5.90**	**4.45**	**843**
Indicated	**23.37**	**3.59**	**2,694**
Measured and Indicated	**23.37**	**3.59**	**2,694**
Inferred	**74.02**	**3.44**	**8,183**

Sources: Matthew Varvari, S. Mitchel Wasel and Philipa Varris. NI 43-101 Technical Report on the Wassa Gold Mine, Golden Star Resources, Wassa Gold Mine, Ghana.

Notes:

[1] The Mineral Resource estimate complies with the requirements of National Instrument 43-101 and has been prepared and classified in accordance with the 2014 CIM Definition Standards and 2019 Best Practice Guideline.

[2] Underground deposits within the Mineral Resource are reported at a gold cut-off grade of 1.4 g/t.

[3] Open pit deposits within the Mineral Resource are reported at a gold cut-off grade of 0.55 g/t, within optimised open pit shells calculated at a $1,500 /oz gold selling price.

[4] Mineral Resources are reported in-situ without modifying factors.

[5] All figures are rounded to reflect the relative accuracy of the estimate.

SRK Canada updated the Year End 2021 resource estimate in Feb 2022 as detailed in Table 10-56.

Table 10-56: Mineral Resource Statement of Wassa Main (UG), as of December 31, 2021

Category	Tonnage Mt	Grade Au g/t	Contained Au koz
Measured	8.76	3.38	951
Indicated	22.52	2.99	2,166
Measured and Indicated	31.28	3.10	3,117
Inferred	61.73	3.47	6,893

Source: Golden Star Wassa Resource Model Update, SRK Consulting (Canada) Inc.

Notes:

[1] Mineral Resources are not Ore Reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. Reported at underground resource cut-off grades of 1.4 g/t gold considering a gold price of US$1,500 per troy ounce and assuming metallurgical recoveries of 95% for fresh rock.

SRK reviewed and report the 2022 year-end Mineral Resources, as detailed in Table 10-57.

Table 10-57: Mineral Resource Statement of Wassa Project, as of 31 December 2022

Category	Tonnage Mt	Grade Au g/t	Contained Au koz
Total			
Measured	**9.56**	**3.02**	**929**
Indicated	**21.30**	**3.18**	**2,175**
Measured and Indicated	**30.86**	**3.13**	**3,104**
Inferred	**66.11**	**3.52**	**7,484**

Notes:

[1] The Mineral Resource estimate complies with the requirements of National Instrument 43-101 and has been prepared and classified in accordance with the 2014 CIM Definition Standards and 2019 Best Practice Guideline.

[2] Underground deposits within the Mineral Resource are reported at a cut-off grade of 1.4 g/t gold.

[3] Open pit deposits within the Mineral Resource are reported at a cut-off grade of 0.55 g/t gold.

[4] All composites have been capped where appropriate.

[5] All figures are rounded to reflect the relative accuracy of the estimate.

[6] It should be noted that the Mineral Resource Statement is made for GSWL on the basis of 100% ownership of the properties.

[7] The conversion between ounce and gram used herein is 1 oz = 31.1035 g.

10.14 Mineral Resource Risks and Opportunities

Risks:

- At Wassa, the gold mineralised bodies are complex and will require additional drilling to ensure robustness of the grade profile.

Opportunities:

- Exploration works are ongoing to estimate Benso's UG resource potential.
- At ADK south, Abada and C3PR, Mineral Resource was report in the 2021 NI 43-101 report. Additional exploration may result in larger resource footprint.

11 Ore Reserve Estimates

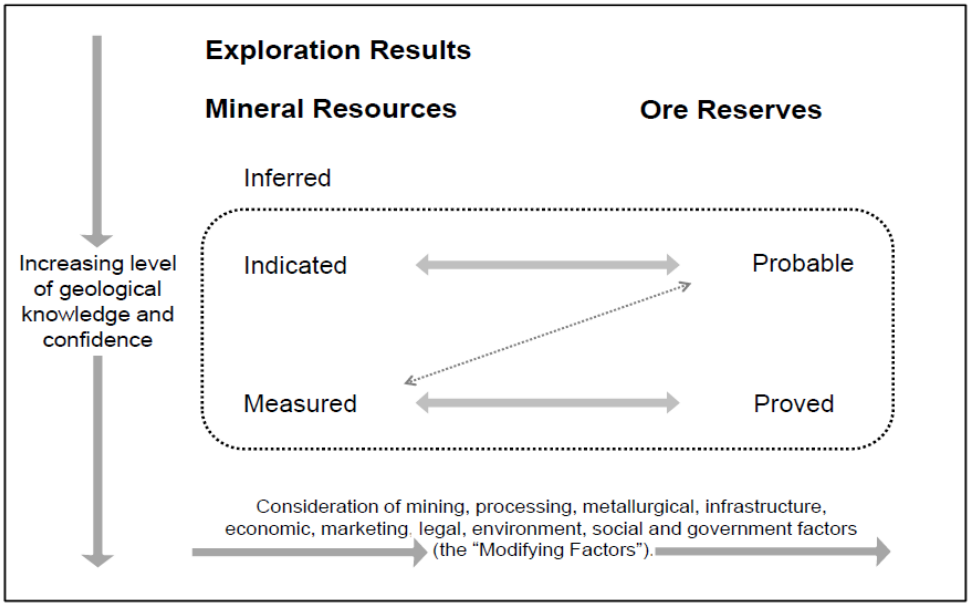
According to the JORC Code:

an 'Ore Reserve' is the economically mineable part of a Measured and/ or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably by justified.

The Modifying Factors are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental. Social and governmental factors.

Figure 11-1 provide for a direct relationship between Indicated Mineral Resources and Probable Ore Reserve and between Measured Mineral Resources and Proved Ore Reserve.

Figure 11-1: Relationship Between Mineral Resources and Ore Reserve



Sources: JORC Code, page 9

According to the JORC Code, a Probable Ore Reserve is the economically mineable part of an Indicated, and in some cases, a Measured Mineral Resource. The confidence in the modifying factors for a Probable Ore Reserve is lower compared to a Proved Ore Reserve. A Proved Ore Reserve, on the other hand, is the economically mineable part of a Measured Mineral Resource and implies a high degree of confidence in the "Modifying Factors" as the term is defined in the JORC Code.

The Ore Reserve estimates for the Wassa Mine have been prepared in accordance with the JORC Code guidelines. These estimates were derived by applying modifying factors to the Mineral

Resource Estimate, with only Measured and Indicated Mineral Resources being converted to Ore Reserve. Inferred Mineral Resources were treated as waste with zero grade. Wassa Mine is an operational mine, the designs and operating practices were reviewed to at least a pre-feasibility study ("PFS") level.

11.1 Open Pit Mining

11.1.1 Source of Information

The major files and information provided by Wassa Open Pit Mine are listed below:

- DMH Reserve block model: "dmh_bm_eng_20230901.mdl"
- DMH surface topo: "eom-oct23-with-dump.dtm"
- DMH mine practical pit design: "dmh_pit_design2023_opt9b_clipped.str"
- DMH cut-off grade and optimisation parameters: "Cut_off Grade Calculation – DMH.xls"
- DMH Pit shell: "dmh-export-25-shell-final.dtm"
- Open Pit 2023 production records: "Wassa_Public Stats_2023.xls"
- Open Pit 2023 production records: "Mining Data_Jan-Mar 2024.xlsx"
- Open Pit Production plan: "GSR_2024 LOM PLAN_DMH.xls".
- Open Pit Production plan: "OP_Pit_Budget_2024.minesched"

11.1.2 Cut-off Grade

The economic parameters, along with a gold price of USD2,050/ oz provide a cut-off grade of 0.5 g/t gold for the DMH open pit as shown in Table 11-1.

Table 11-1: Cut-off Grades and Parameters

Parameter	Unit	DMH
Revenue		
Au price	USD/oz	2,050
Government and stream royalty	% of revenue	13.5
Mining Parameters		
Dilution	%	10
Processing Parameters and Costs		
Haul to Plant	USD/t	0.3
Process plant recovery	%	95.5
Process Cost	USD/t	15.09
G&A Cost	USD/t	7.35
Au Cut-off Grade	**g/t**	**0.5**

Source: GSR and SRK

11.1.3 Ore Reserve Statement

The results of the open pit design have been utilised in conjunction with the Ore Reserve block model, surface topography (October 2023), March 2024 production, and densities as defined within the model to determine the contained Proved and Probable Ore Reserve (using the Measured and Indicated Mineral Resource categories only). The open pit Ore Reserve (the data was provided by Golden Star, but re-run by SRK) as per Table 11-2 includes the application of the cut-off grade (0.5 g/t Au). No mining dilution and recovery was applied because of the regularised model used which includes both dilution and mining recovery. The surface topography was dated October 2023; however, there was no mining activity recorded within the DMH open pit in November and December 2023. SRK deducted the quarter one production in 2024.

Table 11-2: Ore Reserve Statement, Wassa OP Mine, as of 31 March 2024

Deposit/Category		Tonnage	Grade	Contained Au	Contained Au
		kt	Au g/t	koz	t
Open Pit					
	Proved	267	0.99	8	0.26
	Probable	519	0.94	16	0.49
	Total	786	0.96	24	0.75

Source: GSR, and re-run by SRK based on the following data

Notes:

[1] DMH Resource block model: "dmh_bm_eng_20230901.mdl"

[2] DMH surface topo: "eom-oct23-with-dump.dtm" (note: no mining activity in November and December 2023)

[3] DMH practical pit design: "dmh_pit_design2023_opt9b_clipped.str"

[4] No mining recovery and dilution applied.

[5] Only Measured and Indicated Mineral Resource considered.

[6] Cut-off grades of 0.5 g/t Au for DMH.

[7] The accuracy of the Ore Reserve depends on the accuracy of Mineral Resource estimation and data provided.

11.2 Underground Mining

11.2.1 Source of Information

SRK has received the following information from Wassa Mine as below:

1. Geological models

- 242_bm_eng_230913.gmdlb
- 242bm_240806_dep_MI.gmdlb
- wug_bm_eng1_20230928_dep.gmdlb
- WUDBM_240806_dep_MI.gmdlb

2. As-builts/Production records

- WUG_CMS_Mar2024.zipm

- Mining Data_Jan-Mar 2024.xlsx
- Wassa_Public Stats_Q2_2024.xlsx

3. Stopes

- 240724_Wassa_SO_MI_ProdSch2024.duf
- 242_gc_231019_stopes.dcf

4. Design and Schedules

- Wassa_ProdSch2024.duf, hereinafter referred to as "Wassa Design"
- Wassa_ProdSch2024.dsf, hereinafter referred to as "Wassa Sched"

5. Assumptions and COG calculations

- Client_feedback_Wassa_LOM_Project_Parameters_2024.xlsx

6. Others

- Ventsim™ model (LOM B SHOOT & MAIN COMBINED_2024.vsm)
- Wassa Geotechnical studies
- 0424026 Golden Star Wassa - Simple Financial Model v3arev1.xlsx

11.2.2 Cut-off Grade

The cut-off grade for Wassa Underground Mine is based on historical cost data and processing recovery rates, as summarised in Table 11-3. It is reviewed and updated on an annual basis. As of the latest update, the current mining cut-off grade is 1.34 g/t Au.

- Gold price of USD 2,050 / oz;
- Mining royalty of 5% and gold royalty of 8.3%;
- Gold processing recovery of 95.5%; and
- Total cash cost 72.71 USD/ t.

Table 11-3: Gold Cut-off Grade Calculation

Description	Units	Value
Revenue Parameters		
Gold Price	USD/oz	2,050
Process Plant Gold Recovery	%	95.5%
Mining Royalty	USD/oz	102.5
Gold Royalty	USD/oz	170.15
Cost Parameters		
Mine Production	USD/t	42.47
Sustaining Capital	USD/t	8.08
Processing	USD/t	14.93
Site G&A	USD/t	7.23

Description	Units	Value
Total unit Cash costs	USD/t	72.71
Mining Cut Off Grade	g/t Au	1.34

Sources: GSR

Stope Optimisation

Stope optimisations were run with a 1.34 g/t Au cut-off grade in Deswik's Stope Optimiser™ software. Both 242 area and B Shoot area were optimised with the same parameters. Stope orientation of 242 area is run with a 45- degree rotation along the Z-axis.

A summary of the MSO parameters is presented in Table 11-4.

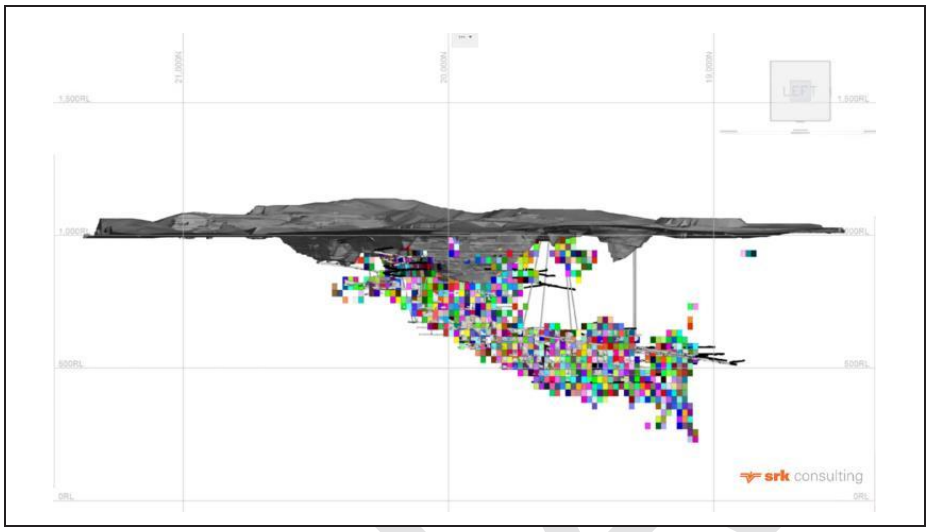
Table 11-4: Stope Optimisation Parameters

MSO Parameters	Value
Vertical Method	**YZ plane**
Minimum Mining Width	5m
Maximum Mining Width	60m
Stope Pillar	10m
Cut-off grade	1.34 g/t Au
Wall Minimum Dip	80º
Wall Maximum Dip	100º
Variable Overbreak or Slough (VOS)	
Bottom	0.2
Midpoint	0.4
Top	0.8
Section (length) Intervals	20m
Level (Height) Intervals	25m
Sections (U)	Variable based on mining method and mining lode

Sources: GSR

The stope optimisation result is shown in Figure 11-2.

Figure 11-2: Stope Optimisation Results (View from West)



Source: GSR, organized by SRK

11.2.3 Modifying Factors

The mining dilution and recovery rate for stopes and development varies depending on the production performance. In this report, the dilution rate and recovery rate are shown in Table 11-5. It should be noted that any diluted material is considered waste and is assumed to contain no gold (zero grade).

Table 11-5: Dilution and Loss

Development	Dilution	Recovery
Development (Au>= Development CoG)	0%	100%
Development (Au< Development CoG)	14%	100%
Stope	10%	95%

Source: GSR

11.2.4 Ore Reserve Statement

Modifying factors such as mining, metallurgical, economic, and marketing factors are considered and applied when converting a Mineral Resource (only Measured and Indicated Mineral Resource categories) to an Ore Reserve.

When applying the modifying factors, SRK estimated the Ore Reserves of Wassa Underground Mine in compliance with the JORC Code guidelines. Ore Reserve Estimates as of 31 March 2024 is in Table 11-6.

Table 11-6: Ore Reserve Statement, Wassa UG Mine, as of March 31, 2024

Deposit/Category		Tonnage kt	Grade Au g/t	Contained Au koz	Contained Au t
Underground					
	Proved	3,949	2.25	285	8.88
	Probable	5,510	2.17	385	11.97
	Total	9,460	2.20	670	20.85

Source: GSR, and re-run by SRK

Notes:

[1] The Ore Reserve estimate complies and has been prepared and classified in accordance with the JORC code guidelines.

[2] Ore Reserves within the underground mine are reported at a cut-off grade of 1.34 g/t Au.

[3] Ore Reserves are reported with modifying factors.

[4] All figures are rounded to reflect the relative accuracy of the estimate.

11.3 Combined Ore Reserves Statement

SRK has estimated the Ore Reserves of Wassa Mine for open pit, underground, and stockpiles in compliance with the JORC Code guidelines. The Ore Reserve Estimates as of 31 March 2024 is in Table 11-7. The total Ore Reserve for the Wassa Mine is estimated at about 10,297 thousand tonnes ("kt") at an average grade of 2.11 g/t Au, containing approximately 695 thousand ounces ("koz") of gold. This includes Proved Ore Reserve estimated at 4,216 kt with an average grade of 2.17 g/t gold, containing 294 koz of gold; and Probable Ore Reserve estimated at 6,029 kt at an average grade of 2.07 g/t gold, containing 401 koz of gold. The stockpile are the ore that have spilled from conveyor belts and accumulated over time and are subsequently returned to the ROM Pad.

Table 11-7: Combined Ore Reserve Statement of Wassa Mine as of 31 March 2024 by SRK Consulting China Ltd

Deposit/Category		Tonnage kt	Grade Au g/t	Contained Au koz	Contained Au t
Open Pit					
	Proved	267	0.99	8	0.26
	Probable	519	0.94	16	0.49
	Total	786	0.96	24	0.75
Underground					
	Proved	3,949	2.25	285	8.88
	Probable	5,510	2.17	385	11.97
	Total	9,460	2.20	670	20.85
Combined					
	Proved	4,216	2.17	294	9.14
	Probable	6,029	2.07	401	12.46
	Total	10,245	2.11	694	21.60

Deposit/Category	Tonnage kt	Grade Au g/t	Contained Au koz	Contained Au t
Stockpile (Measured)				
DMH Stockpile	50	0.88	1.4	0.04
UG Stopepile	2	1.33	0.1	0.003
Total				
Proved	**4,216**	**2.17**	**294**	**9.14**
Probable	**6,029**	**2.07**	**401**	**12.46**
Proven+Probable	**52.00**	**0.87**	**1**	**0.05**
Stockpile	**10,297**	**2.10**	**696**	**21.64**

Notes:

[1] The Ore Reserve is reported in accordance with the JORC Code guidelines.

[2] The information in this report which relates to Ore Reserve is based on information compiled by Mr. Alex Thin and Ms. TzuHsuan Chuang who are full time employees of SRK Consulting. Mr. Thin is a Fellow of the Australasian Institute of Mining and Metallurgy (the "AusIMM") and Ms. Chuang is a Member of the AusIMM. Both Mr. Thin and Ms. Chuang have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the "Competent Persons" as defined in JORC (2012). Mr. Thin and Ms. Chuang consent to the reporting of this information in the form and context in which it appears.

[3] Ore Reserves in the table above and in this Report are estimated/ converted from Measured and Indicated Mineral Resources, therefore double accounting of tonnage should be avoided.

Open pit

[1] - No mining recovery and dilution applied.

[2] - Only Measured and Indicated Mineral Resource considered.

[3] - Cut-off grades of 0.5 g/t Au for DMH.

Underground

[1] - Ore Reserves are reported at a cut-off grade of 1.34 g/t Au.

[2] - Ore Reserves are reported with modifying factors

12 Mining Methods

12.1 Open Pit Mining

There is one operational open pit (DMH) with a LoM until mid-2025. The open planning process is a conventional (drill, blast load & haul) best practise industry standard. The open pit mining plan employed an optimisation technique that utilised the key practical and economic elements and with a practical open pit design to estimate the Ore Reserves.

12.1.1 Pit Optimisation

An open pit optimisation was undertaken by Wassa Mine utilizing Whittle™ software (Whittle). For the DMH open pit, the updated Mineral Resource model was imported, along with input assumptions, including:

- Gold price of USD 2,050/ oz;
- Selling cost of 13.3% of the revenue including a government gross revenue royalty of 5%;
- A process plant recovery for oxide and fresh material of 95.5%;
- Mining Factors of 10% dilution and 5% ore loss;
- General and administration (G&A) cost of USD 7.23/ t, hauling cost of USD 0.3/ t, and treatment costs of USD 15.09/t;
- Mining cost of USD 3.1/ t for weathered material and USD 4.2/ t fresh rock; and
- Open pit slope angle: 52° in fresh rock and 39° in the weathered zone.

SRK found the parameters used in optimisation is from the historical mining database and therefore are reasonable. SRK was unable to access the Whittle source files but assumed that the parameters were allocated appropriately.

Table 12-1 summarises the DMH open pit optimisation parameters.

The open pit shell from this practice as shown in Figure 12-1 and is a guide for practical open pit design.

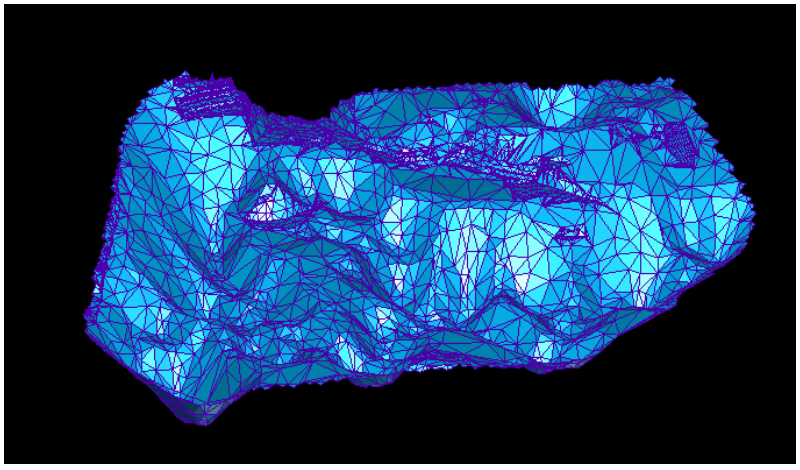
Table 12-1: DMH open pit Optimisation Parameters

Parameter	Unit	DMH
Revenue		
Au price	USD/oz	2,050
Government and stream royalty	% Revenue	13.5
Mining Parameters and Costs		
Mining recovery	%	95.5
Dilution	%	10
Overall slope angle (Ox/ Fr)	deg.	39/ 52
Base mining cost (Ox/ Fr)	USD/t	3.1/ 4.2
Processing Parameters and Costs		

Parameter	Unit	DMH
Haul to plant	USD/t	0.3
Process plant recovery	%	95.5
Process cost	USD/t	15.09
Other Costs		
G&A cost	USD/t	7.3
Rehab cost	USD/t treat	0.12

Source: GSR and SRK

Figure 12-1: An Isometric View of the DMH Pit Shell from the Optimisation Practice



Source: GSR and SRK

12.1.2 Practical Open Pit Design

The DMH deposit is to the north-east of the Wassa old open pits, and Wassa are carrying out preparation by removing the topsoil (pre-stripping) from the outcrop quartz veins. The mining method is currently quarrying that starts on the hill and will convert to an open pit in time.

Figure 12-2 provides a plan view of the DMH final open pit design. SRK evaluated the design and did not identify any critical flaws; however, it does recommend some modifications to improve the mining capabilities:

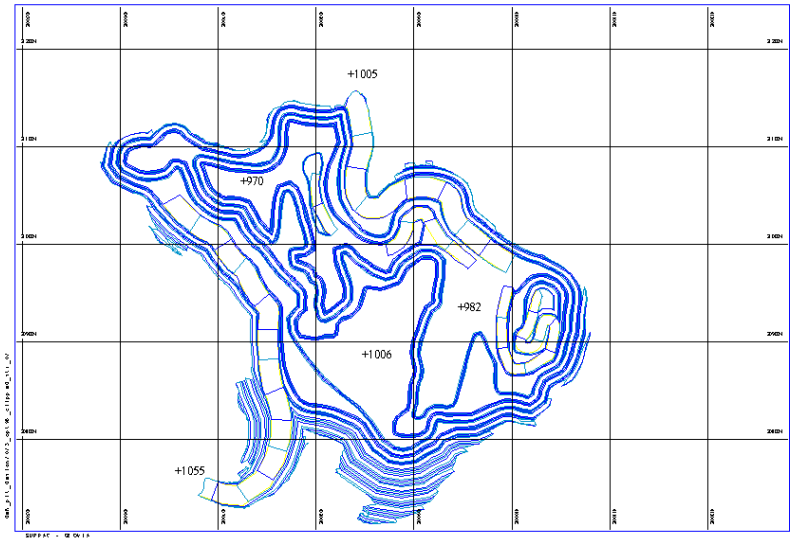
- When designing the open pit, the minimum mining width should be incorporated. Certain areas have extremely restricted access, which poses a significant challenge for mining equipment; and
- The removal of a permanent ramp situated in the western section of the open pit could result in a reduction of mining waste.

The 20 m ramp width with a gradient of 10% was utilised to access the open pit levels; this is wide enough for two-way hauling with 60 t capacity off-highway haul trucks. A conventional open pit mining method is used by employing excavators and trucks (load and haul) which are considered typical for

this type and style of gold mineralisation. Mining will be conducted by a contract mining company who will supply equipment, workforce and supervision services.

SRK did not review the open pit slope angle designs (supporting design analysis); however, the open pit design slopes and benches are based on the historical geotechnical parameters for the open pits in the area, with an overall angle of 40° in the weathered zone and 52° in fresh rock. The 12 m bench height, with a 72° bench face angle designed, while drilling and blasting will be conducted over bench heights of 6 m. Oxide or weathered material is generally only required to be lightly blasted or in some areas can be excavated as 'free dig'. Hydraulic excavators are used in conjunction with conventional blasting practice, to mine a 3.0 m flitch height. Broken rock is loaded into the haul trucks to a central stockpile or to the waste dump.

Figure 12-2: DMH Practical Open Pit Design General View



Source: GSR and SRK

12.1.3 Production Schedule

Geovia MineSched software was employed by Wassa Mine to schedule the open pit production. The ore within the open pit plus 10% dilution and 4.5% ore loss (mining recovery 95.5 %) were applied to the gold grade and ore tonnage.

Wassa Mine intends to deplete the open pit by June 2025, with an average total mining rate of around 275 kt per month. The ore mined from the open pit will initially be stockpiled and blended with the ore recovered from the underground mines to feed the processing plant. The other material will be sent to the nominated waste dump area or stockpiled separately if required.

Table 12-2: Wassa OP Mining Production Schedule

Mine Production & Development	Unit	Total	2024	2025

OPEN PIT				
OPEN PIT - Ore Tonnes	t	785,551	327,491	458,061
OPEN PIT - Au Grade	g/t	0.96	1.04	0.90
OPEN PIT - Au Metal	oz	24,172	10,974	13,198
OPEN PIT - Waste Tonnes	t	2,548,826	1,502,686	1,046,140
OPEN PIT - Total Material Movement	t	3,334,377	1,830,177	1,504,200

Source: GSR

12.1.4 Conclusion and Recommendation

This report has been prepared using block models and data supplied by Wassa Mine. It was assumed that the economic parameters utilised in the optimisation and cut-off grade calculation are from historical data from the mining database. As such, the report was deemed reasonable. Nevertheless, the accuracy of the outputs is reliant upon the economic parameters and the accurate estimation of the Mineral Resource. Any changes in the Mineral Resource estimations, also in the economic parameters such as gold price may cause the changes in open pit limits and therefore in the estimated Ore Reserves.

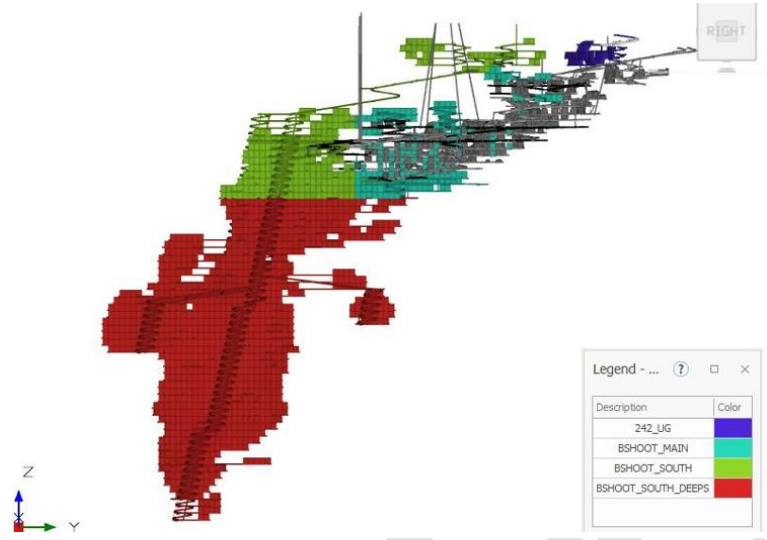
12.2 Underground Mining

12.2.1 Introduction

Development of the Wassa Underground Mine began in 2015, and it started commercial production in January 2017.

Wassa has provided SRK the Wassa Design and Wassa Sched, utilising Deswik™ software. The mine consists of two primary mining areas: Zone 242 and Zone B Shoot, with Zone B Shoot comprising the main, south, and south deep sections (refer to Figure 12-3). The majority of the Measured and Indicated Mineral Resources are within the Zone 242 and the main/ south areas of Zone B Shoot.

Figure 12-3: Wassa Underground Mining Areas (Zone 242 and Zone B Shoot)



Source: GSR and SRK

12.2.2 Geotechnics

The geotechnical analysis presented in section 12.2.2, is based on the studies and analyses undertaken by SRK Consulting South Africa ("SRK ZA"), and reported in March 2021 ("SRK ZA, March 2021").

Geotechnical Domain and Characterisation

Previous SRK reports classified the Wassa deposit into three main geotechnical domains as:

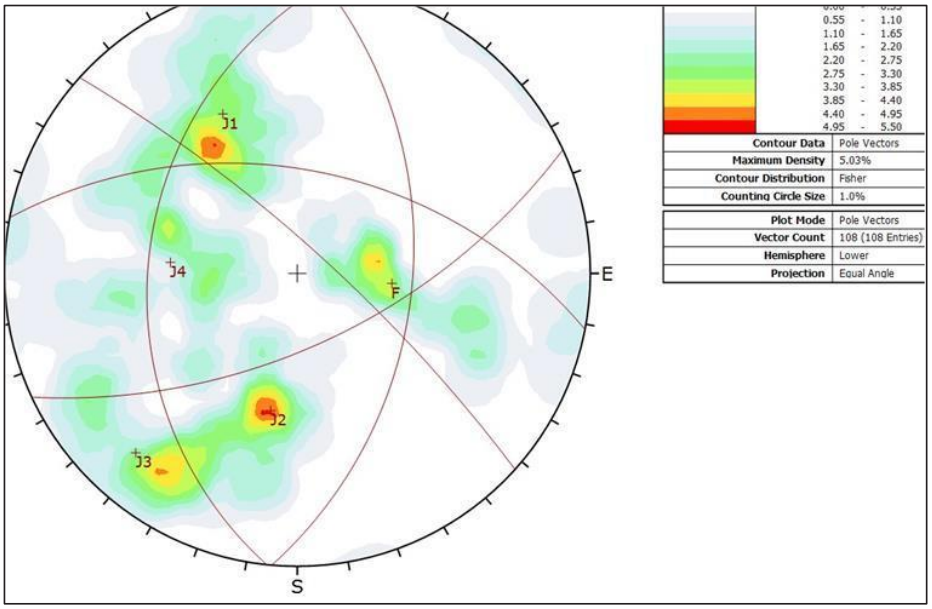
- Footwall Domain;
- Orebody Domain; and
- Hanging wall Domain.

The geotechnical characterisation has been based on the following data sources:

- Geotechnical data available in the GSWL surface exploration and underground drilling geological logs;
- Logs of the underground boreholes that had been subject to detailed geotechnical logging;
- A limited set of laboratory strength and deformation test results; and
- Review of underground mapping data.

The joint sets presented in the stereonet plot shown in Figure 12-4 and summarized in Table 12-3 form the basis for the stope stability assessment. The structural information at the mine site has not been updated since last reported.

Figure 12-4: Stereonet Plant of Wassa Joint Set Database



Source: SRK ZA, March 2021

Table 12-3: Joint Sets Used for Stope Design

Discontinuity Set	Dip (°)	Dip Direction (°)	Comments
Foliation	52	275	Tightly healed foliation planes
J1	45	11	Set of tightly healed North-east trending joints
J2	62	155	Set of tightly healed South-east trending joints
J3	15	276	Set of sub-Horizontal North-west trending joints
J4	79	42	Set of steeply dipping North trending joint

Source: SRK ZA, March 2021

In-Situ Stress

In September 2019, Wassa mine conducted an Over-Coring stress measurements to measure in-situ stress levels in the mine. The measurement was carried out from the footwall of the 570 decline and the hanging-wall at 645-DD7. The 645-DDT was discarded due to its closeness to and the potential influence from the open pit mining with regards to stress redistribution.

The results from the 570 decline are shown in Table 12-4 and the interpreted depth gradient is shown in Figure 12-5.

Table 12-4: 570 Decline Stress Measurement

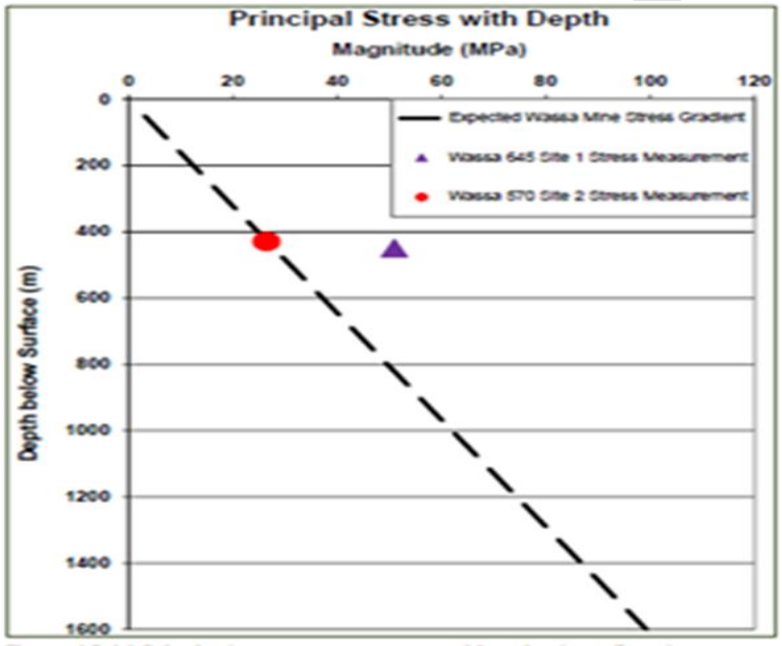
Principal Stress	Magnitude (Mpa)	Depth (m)	Ratio	Gradient (MPa/m)	Dip	Direction
Major	26.5	430	2.23	0.062	4°	339°

Principal Stress	Magnitude (Mpa)	Depth (m)	Ratio	Gradient (MPa/m)	Dip	Direction
Intermediate	18.9	430	1.59	0.044	6°	69°
Minor	11.9	430	1.00	0.028	83°	219°

Source: SRK ZA, March 2021

The In Situ stress measurement indicates that the major principal stress is horizontal and parallel to the main orebody. The intermediate principal stress is perpendicular to the strike of the orebody, and the minor Principal stress corresponds to the overburden stress. These orientations have been applied in principle to the design of the Huni Butre and Benso underground projects – particularly the Adoikrom and Father Brown underground project. These projects lay with the proximity of the Wassa main.

Figure 12-5: Principal Stress Measurement Magnitude vs Depth



Source: SRK ZA, March 2021

Rock Mass Characteristics

The geotechnical cores and underground exposures were mapped as per CSIR Rock Mass Rating. The data was then processed to produce the modified NGI (Norwegian Geotechnical Institute) Rock Mass Quality Q-system and the Geological Strength Index. These rock mass parameters were then employed in the development and stope support designs. The representative rock mass parameters are based on laboratory testing. The rock mass condition data of the Wassa geotechnical domains used for geotechnical analyses or numerical modelling are shown in Table 12-5.

The rock mass quality is classified Very Good, using Barton's (Barton et al, 1974) classification and Geological Strength Index (GSI) rating systems.

Table 12-5: Wassa Rock Mass Characterization Parameters (Barton et al, 1974)

Parameter		Footwall / Orebody / Hanging Wall			Source
		MIN	MAX	Average	
Rock Quality Desc.	RQD%	85	90	85	Geotechnical and mapping
Joint Number	Jn	6	9	6	Borehole structural data and mapping
Joint Roughness	Jr	3	4	3	Detailed geotechnical logs & mapping
Joint Alteration	Ja	1	0.75	1	Detailed geotechnical logs & mapping
Q'		43	53	48	
Rock Mass Quality		Very Good	Very Good	Very Good	
Geol. Strength Index	GSI	78	80	78	Underground mapping & inspections
Unconfined Compressive Strength	UCS Mpa	110	160	135	Rocklab laboratory test result
Unconfined Tensile Strength	UTS MPa	16	18	17	Rocklab laboratory test result
Young's Modulus	GPa	70	80.5	75.3	Rocklab laboratory test result
Poisson's Ratio		0.28	0.32	0.3	
Density	t/m^3	2.79	2.81	2.8	Rocklab laboratory test result

Source: SRK ZA, March 2021

Development Support

The ground support design for Wassa underground operations is based on Barton's Q-Index support chart. The designed width of major long-term excavations is 5.5 m. As long term mine excavations (main access ramp/ decline, footwall drive and level access drive) an Equivalent Support Ratio ("ESR"), of 1.6 is assumed, Barton and Grimstad (1993). The estimated Equivalent dimension is plotted on the Q-Index support chart and the support requirement read from it. Based on the rock mass characterisation the excavations within the Wassa mine, will not require systematic ground support.

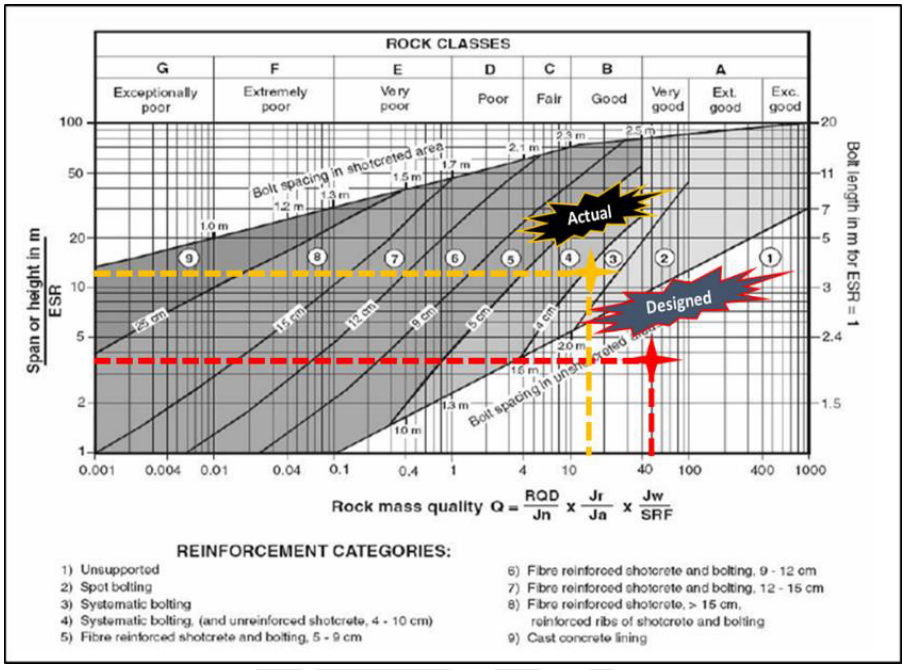
As part of management's risk aversion all excavations are supported. The actual support plots in category 3 whilst the designed plots in category 1 as shown in Figure 12-6.

Wassa has two systematic support patterns for good and poor ground conditions. The support for poor ground conditions is actioned by the geotechnical engineer, otherwise the good ground condition support pattern applies to all excavations.

The standard support pattern consists of galvanized 2.4 m long, 46mm diameter Split Sets (a form of friction stabilizer) and 3.5 x2.4 m sheets of wire meshing. Wire mesh is installed on the roof, from corner to corner, for good ground conditions with an additional two split sets installed below the top corners on either side. The wire mesh extends from grade line to grade line for poorer ground conditions. Any change in the support standards may have to be based on fall-out measurements and minimum bond length required to hold such fall-outs.

The empirical support design is supported with numerical analysis with software such as UNWEDGE™, (analysis of structurally controlled instability), and PHASES 2D™, (analysis of stress induced failure).

Figure 12-6: Support, Barton's Q-Index Chart (Barton and Grimstad, 1993)



Source: Geotechnics, GSR

Modified Stability Number

The Q' value derived from the geotechnical characterisation has been used in conjunction with the stability graph parameters A, B and C to determine the Modified Stability Number (N') for stope roof, end walls and hanging walls. Stress parameter A has been estimated by calculating the gravitational stress generated from the weight of the overburden rock above the mining.

The structural parameters B and C were derived from an assessment of the interaction of the dominant joint sets with the stope boundaries. The Table 12-6 and Table 12-7 show the Modified stability number (N) for the transverse and longitudinal stopes as applied to the Wassa main orebody.

Table 12-6: Modified Stability Number (N') for Panels 1-3, Transverse Stopes (Potvin, 1988)

Parameters		Stope Wall, Transverse			Comments
		Back	Side	End	
Q'		47.9	47.9	47.9	
UCS, Sigma C	Mpa	130	130	130	Average intact rock strength
Depth	m	500	500	500	Average depth below Panel 2
Max. Principal Stress, Sigma 1	Mpa	13.5	13.5	13.5	Estimated overburden stress
Stress: Strength Ratio		0.9	0.9	0.9	
Factor A		1.9	1.0	1.0	
Angle between Stope Face & Daylighting Joint		15°	15°	15°	Critical Joint for all back and side-walls is J3, end-wall is J4.
Factor B		0.2	0.2	0.5	

Parameters	Stope Wall, Transverse			Comments
	Back	Side	End	
Potential Failure Mode	Gravity	Slabbing	Gravity	Gravity or Slabbing
Dip of face	0°	90°	64°	
Factor C	2	8	5	
N=Q' x A x B x C	19.2	76.7	119.8	N-value for all stopes >=64° slope

Source: SRK ZA, March 2021

Table 12-7: Modified Stability Number (N') for Panels 1-3, Longitudinal Stopes (Potvin, 1988)

Parameter		Stope Wall, Longitudinal			Comments
		Back	Side	End	
Q'		47.9	47.9	47.9	Average Intact rock strength
UCS, Sigma C	Mpa	130	130	130	Average intact rock strength
Depth	**m**	500	500	500	Average depth below surface, Panel 2
Max. Principal Stress, Sigma 1	**Mpa**	14.6	14.6	14.6	Estimated overburden stress
Strength- Stress Ratio	**1:**	8.1	8.1	8.1	
Factor A		0.9	0.9	0.9	
Angle between Stope face & Daylighting Joint		15°	45°	15°	Critical Joint for all back and side-walls is J3, end-wall is J4
Factor B		0.2	0.2	0.5	
Potential Failure Mode		Gravity	Slabbing	Slabbing	Gravity / Slabbing
Dip of Stope Face		0°	64°	90°	
Factor C		2	4.9	8	
N=Q' x A x B x C		17.3	106.3	69	N-value for all stopes >=64° slope

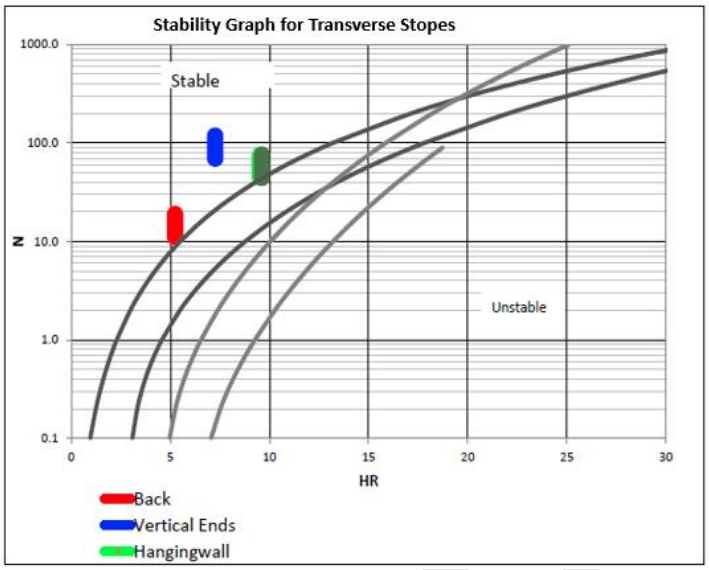
Source: SRK ZA, March 2021

Modified Stability Graph

The calculated stability number, 'N', for each stope surface is plotted on N' vs Hydraulic Radius, (HR), chart to determine its stability. The stope back, hanging wall, footwall and end wall all plotted in stable without support envelop. Figure 12-7 and Figure 12-8 show the stability graph of the transverse and longitudinal stopes.

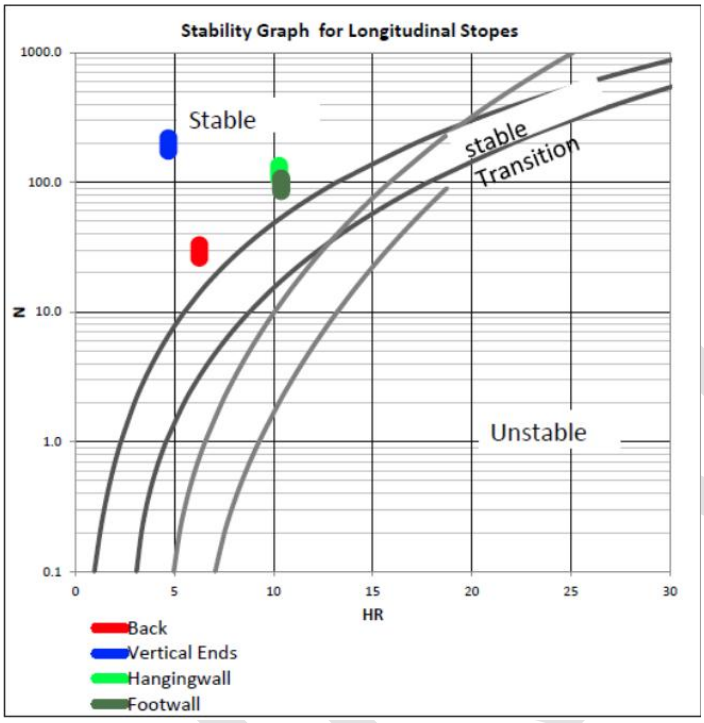
The hanging wall stability number plotted in Figure 4.5 take a range of 40 to 76.7. Plotting the stability graph in a different style using N=40, as shown in Figure 12-9, gives different combinations of stope strike lengths and hanging wall vertical heights for any given HR value. This indicates that a stope of 20 m strike length can be mined to an infinite depth with a stable hanging wall exposure. This supports the field observations in S12 which has a height of 125 m after damaging the 520 10 m sill pillar. It is reported that many of the 100 m high stopes remain stable with minimum wall failures from Cavity Monitoring System (CMS) surveys. (Wassa Site Engineer).

Figure 12-7: Matthews Stability Graph, Transverse Stopes (Mathews et al, 1981)



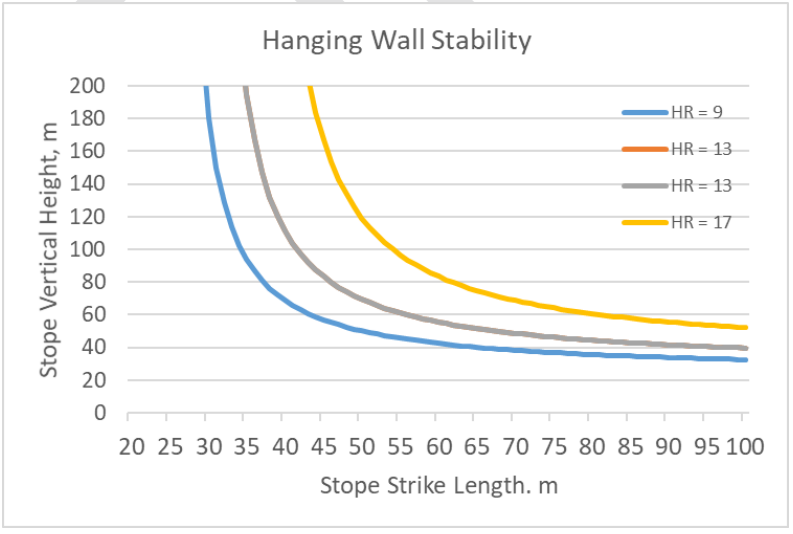
Source: SRK ZA, March 2021

Figure 12-8: Matthews Stability Graph, Longitudinal Stopes (Mathews et al, 1981)



Source: SRK ZA, March 2021

Figure 12-9: Matthews Stability Graph, Longitudinal Stopes (Mathews et al, 1981)



Source: SRK ZA, March 2021

Stable Slope Design Geometry

The Wassa mine operates within a certain range of stable stope dimension as detailed in Table 12-8. These parameters were computed from the stability graph and cover both transverse and longitudinal mining for Wassa main. Panel 2 is currently active and employs both mining methods. Panels 4 to 8 will employ mainly longitudinal mining method.

Table 12-8: Stable Stope Dimensions, Panels 1-8

Stope Dimension		Transverse Stope			Longitudinal Stope		
		MIN	MAX	DESIGNED [M]	MIN	MAX	DESIGNED [M]
Height	m	25	100	100	<15	25	25
Strike Length	m	25	25	25	<60	70	70
Width across Strike	m	15	30	25	<15	15	15
Dip, end/sidewall		65°	65°	65°	65°	65°	65°

Source: Geotechnics, GSR

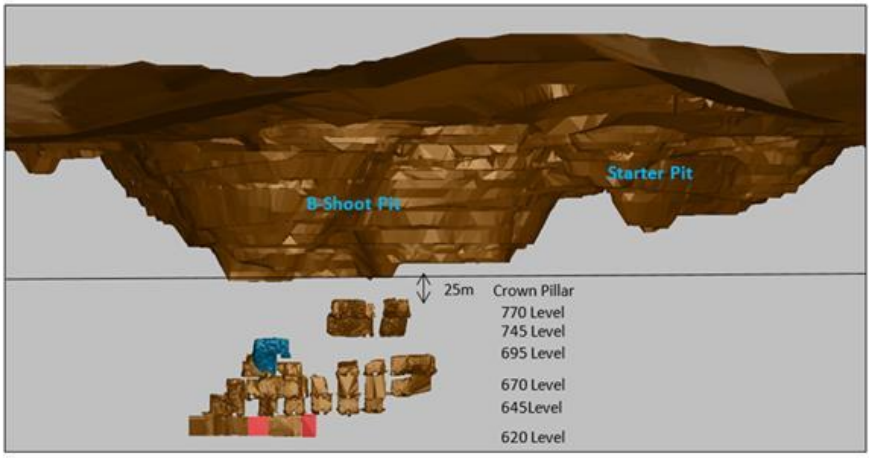
Major Pillars

- B Shoot Crown Pillar

A 25 m crown pillar separates the main orebody, B Shoot, and the bottom of the open pit. See Figure 12-10. The stability of the Crown Pillar between the B Shoot Main open pit and 720-N1 stope was assessed during the FS by SRK using Phases 2D software. A factor of Safety of 1.58 was assigned.

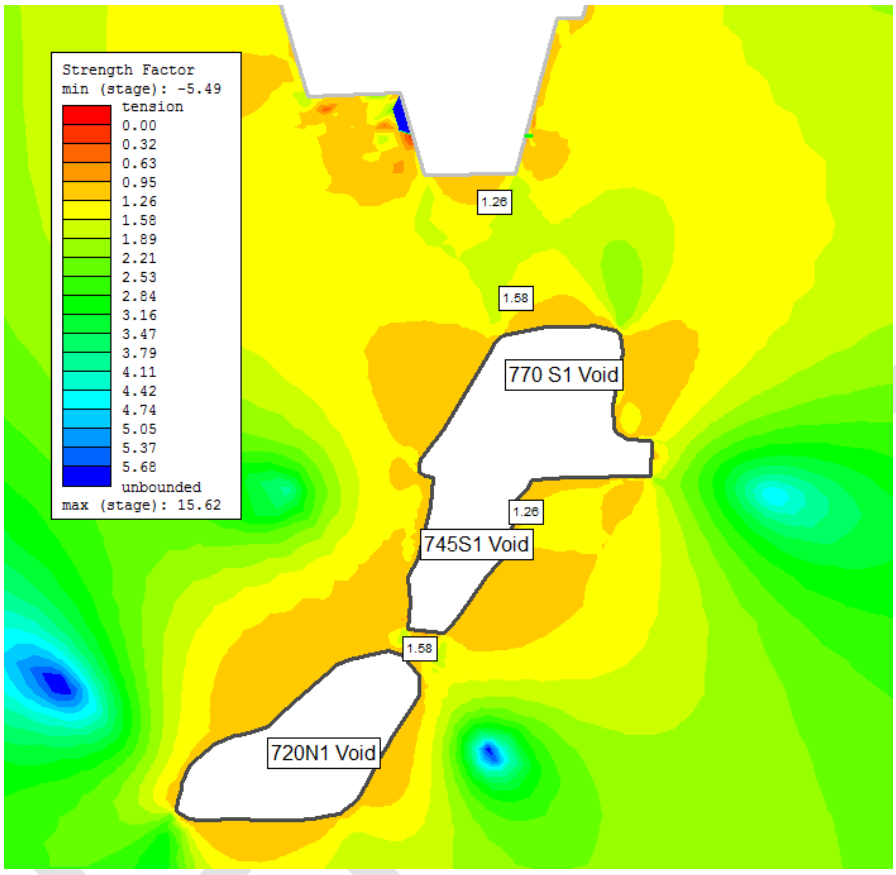
There are also several 10 m sill pillars separating mined out stopes in Panels 1 & 2 which are loaded with either waste rock fill or pastefill. Similarly, the sill Pillar between 720-N1 and 745-S1 was assigned a Safety factor of 1.58. See Figure 12-11.

Figure 12-10: Longitudinal View Showing the Main Crown Pillar



Source: Geotechnics, GSR

Figure 12-11: B Shoot Pillars, Modelled Factors of Safety from Phase 2 Software, (GSR, 2018)



Source: SRK ZA, March 2021

Geotechnical Assessment for Wassa Design

During the development of the Wassa Design, a geotechnical assessment was conducted by Mr. Amir Karami, Principal Geotechnical Engineer and Competent Person in Geotechnical Discipline, from BGC Engineering Inc. ("BGC"). The assessment primarily focused on two aspects:

- GSR reduced the crown pillar thickness from the previously recommended 30 m to 20 m. This involved evaluating the stability of the proposed 20 m thick crown pillar for the planned openings immediately below and adjacent to the existing open pits.
- Reviewing the stability of the proposed permanent footwall drives near the planned open stopes.

The empirical Scaled Crown Span methodology was used for the crown pillar stability assessment, leading to the following conclusions:

- For the Q rock mass rating, with a crown pillar thickness of 20 m, a stope span of 20 m, and a stope length of 30 m, the crown pillars immediately below the open pit bottom and adjacent to open pit walls remain stable (FoS > 1.6) with a low probability of failure.
- Increasing the stope span to 25 m reduces the FoS to below 1.5 and increases the probability of failure, though it remains low.
- Increasing the stope length to 50 m also reduces the FoS and increases the probability of failure, but the impact is less pronounced than increasing the stope span.
- Increasing the crown pillar thickness enhances stability (FoS > 1.9) and reduces the probability of failure to approximately 4%, but this comes at the cost of sterilizing ore within the crown pillar.

BGC provides the following considerations for rib pillar design between the footwall drives and the open stopes:

- Stopes with at least a 10 m offset from footwall drives can be mined, but ground conditions and support performance should be monitored and evaluated, with proper remediation carried out as needed before commencing open stope mining near footwall drives.
- Although GSR has not experienced instability issues in footwall drives from nearby stope blasting, future damage may occur due to rock mass variability and stope blasting.
- If there are concerns about the stability of the footwall drive, GSR should consider delaying the mining of nearby open stopes. A potential option is to mine these stopes on retreat or at the end of the mine life.

12.2.3 Mining Method

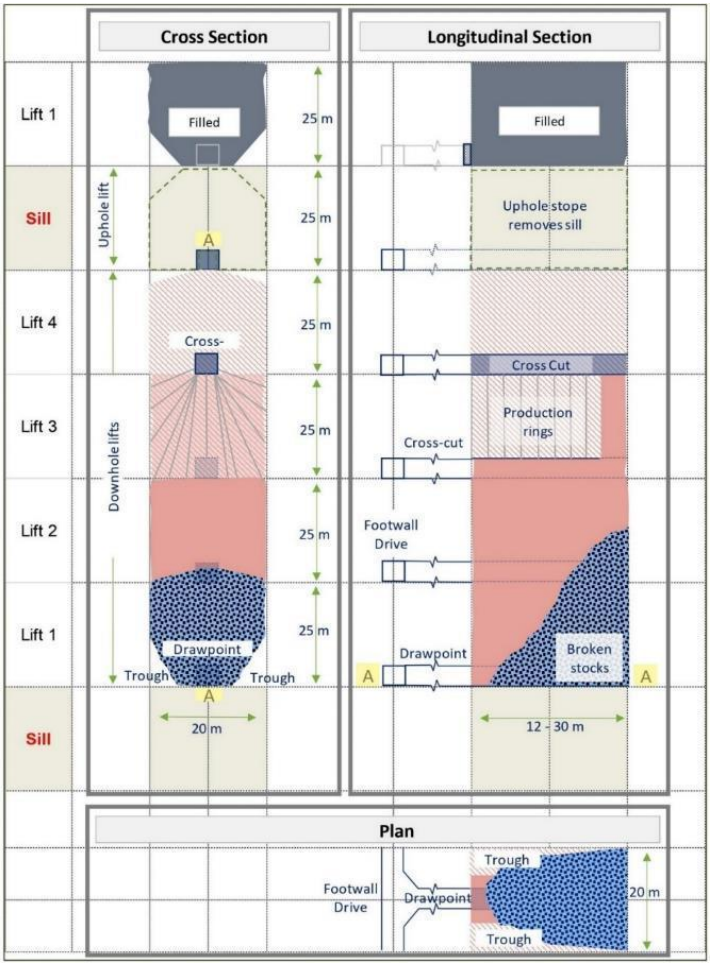
The Wassa Mine operations started as an open pit and transitioned into an underground mine in 2015. It will continue to be mined by underground methods using a top down long-hole open stoping (LHOS) method.

Stoping Methodology

The stopes are mined using transverse stoping, with longitudinal stoping. Stope dimensions are 20 m along strike, various width depending to the stope shapes and 25 m height (level spacing).

- Transverse stoping: Stopes are defined as primary and secondary. The primary stopes would be mined and then paste backfilled. Once mined, the secondary stopes would be backfilled with either paste or waste rock. Generic sections for a primary transverse stope are shown in Figure 12-12. The Wassa Mine assumes that no sill pillar would be left behind.
- Longitudinal stoping: Stopes are be mined in a backward direction from the end. Once the first stope has been mined, the paste wall would be built away from the open stope in two cuts (6m). This is followed by a "plug pour" and then a "main pour." There will be a 7-day curing delay from the "plug pour" to allow the plug strength to develop. To mine the subsequent stope, the paste wall would be broken, and two cuts (6m) would be made back into the previously paste-filled stope to allow a production drill to come in and set up on the first ring. After this slot drive development, cable bolting of the stope and production drilling of the slot and rings begin.

Figure 12-12: Schematic of Primary Transverse Stope (Illustration Not to Scale)

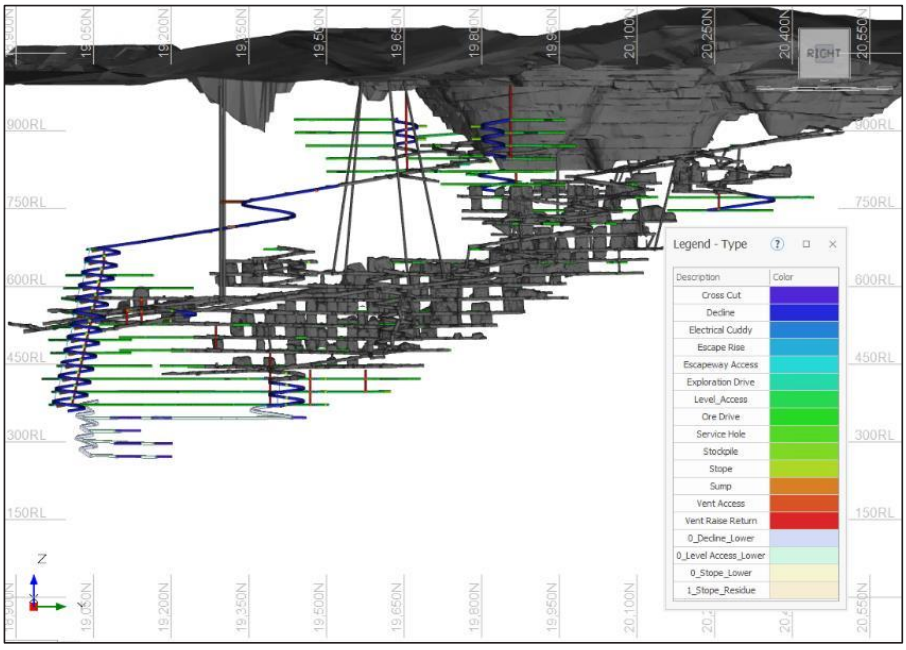


Source: 02Tec Report-Wassa-Dec2020-NI43-101-Tech-Report-DRAFT-v20210301-(final)-CONFORMED.pdf

12.2.4 Development Design

In Figure 12-13, the main decline portals (including 242 Portal, B Shoot Portal and Portal 3) are from the open pit and are designed with a cross-section of 5.8 m (H) by 5.5 m (W) to allow 45 t capacity haul truck to haul ore and waste.

Figure 12-13: Wassa Underground Development Design (Looking East)



Source: GSR and SRK

12.2.5 Production

The current ore production target from the stopes and developments is between 7,000 and 8,000 tonnes per day. The ore is transported by 45 t articulated dump trucks ("ADT") to the stockpile designated at Portal 3. Waste material is primarily used for backfilling voids or is transported to waste rock dumps on surface.

Blasting operations occur twice daily, at 6AM and 6PM. These times also mark the shift changes, with workers transitioning from the day shift to the night shift and vice versa.

Mining operations at the Wassa Main are conducted by the owner, while the 242 and Wassa South areas are managed by contractors.

12.2.6 Equipment

The Wassa underground equipment is listed in Table 12-9. The model of production drill rig is DL 411, DL421 and DL 431. The model of jumbo is DD421-60. There are several LHD (load-haul-dump) models: R2900; LH517; LH 621. The model of the ADT is A45G. The availability of the equipment is above 80%. The contractor equipment is listed in Table 12-10.

Table 12-9: Wassa Underground Equipment List

Equipment	Model	Quantity	Availability
Truck	Volvo A45G ADT	9	85%
Loader	CAT R2900G	3	80%
Loader	Sandvik LH517	1	80%
Loader	Sandvik LH621	2	80%
Loader	Sandvik LH621i	1	80%
Jumbo	Sandvik DD421	7	85%
Solo	Sandvik DL411	1	85%
Solo	Sandvik DL421	1	85%
Solo	Sandvik DL431	1	85%
Solo	Sandvik DL431	1	85%
Normet	Normet 1610B Charmec	1	
Normet	UCT	2	
Manitou	MT-X1840	1	
Integrated Telehandler		4	85%
Grader	CAT 12H	1	
Grader	CAT 12M	1	

Source: Wassa Mine

Table 12-10: Contractor Equipment List

Equipment	Model	Quantity	Contractor
Trucks	Volvo A45G ADT	3	Edgate
Jumbo (Boomer)	BOOMER282	3	Setters
Production Drill Rig	SIMBA 1354	1	Setters
Loaders	ST18	2	Setters
Loaders	ST18	2	Setters
Trucks	MT54	2	Setters
Trucks	MT55	3	Setters

Source: GSR

12.2.7 Production Schedule

There are two main components in the production schedule: development and stopes. For development, the main activity types, their respective scheduled rates, and section sizes are presented in Table 12-11 below.

Table 12-11: Development Tasks in Schedule

Development Tasks	Task Rate	Section
Decline	50m/mo& 90m/mo	5.5mW x 5.8mH
Level Access	50m/mo & 60m/mo	5.0mW x 5.0mH
Escapeway Access	50m/mo	5.0mW x 5.0mH
Electrical Cuddy	50m/mo	5.0mW x 5.0mH
Exploration Drive	50m/mo	5.0mW x 5.0mH
Ore Drive	50m/mo	5.0mW x 5.0mH
Stockpile	50m/mo	5.5mW x 5.8mH
Sump	50m/mo	5.0mW x 5.0mH
Vent Access	50m/mo	5.5mW x 5.8mH

Source: GSR

The Table 12-12 below indicates the primary activities during stoping and the designed rates.

Table 12-12: Stope Task in Schedule

Stope Tasks	Task Rate
Backfill Development	1.5 days
Slot Drive	60m/mo
Cable Bolt Support	230m/d
Boxhole Rise	3m/d
Stope Rise	1.3d
Production Drilling	250m/d
Boggering	1700t/d
Backfill Preparation	13.9d
Backfill Paste	1200m3/d
Backfill Wate Rock	600m3/d
Backfill Cure Delay	7d

Source: GSR

Ore Reserves Plan

Ore Reserves Plan (Only Measured and Indicated Mineral Resources, as per the JORC Code guidelines for the reporting of Ore Reserves) is based on the Wassa Design and Wassa Sched, with a LoM of five years, as shown in Table 12-13. Ore Reserve schedule will be used in the technical economic analysis.

Table 12-13: Ore Reserves Plan

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
OPEN PIT							
OPEN PIT - Ore Tonnes	t	785,551	327,491	458,061			
OPEN PIT - Au Grade	g/t	0.96	1.04	0.90			
OPEN PIT - Au Metal	oz	24,172	10,974	13,198	-	-	-

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
OPEN PIT - Waste Tonnes	t	2,548,826	1,502,686	1,046,140			
OPEN PIT - Total Material Movement	t	3,334,377	1,830,177	1,504,200			
UNDERGROUND							
Development	t	554,122	254,356	190,949	83,529	23,156	2,132
Au Grade	g/t	2.82	2.53	2.96	3.46	2.45	3.42
LHOS	t	8,905,468	1,830,519	2,559,850	2,433,348	1,591,067	490,686
Au Grade	g/t	2.17	2.16	2.06	2.25	2.24	2.04
UNDERGROUND - Ore Tonnes	t	9,459,590	2,084,874	2,750,799	2,516,877	1,614,222	492,818
UNDERGROUND - Au Grade	g/t	2.20	2.21	2.13	2.29	2.24	2.05
UNDERGROUND - Au Metal	oz	670,222	147,888	187,961	185,510	116,452	32,411
UNDERGROUND - Waste Tonnes	t	2,835,259	994,274	1,123,668	574,812	132,779	9,726
UNDERGROUND - Total Material Movement	t	12,294,849	3,079,149	3,874,466	3,091,689	1,747,002	502,543
Total (OP + UG)							
Ore Tonnes	t	10,245,142	2,412,365	3,208,859	2,516,877	1,614,222	492,818
Au Grade	g/t	2.11	2.05	1.95	2.29	2.24	2.05
Au Metal	oz	694,394	158,862	201,159	185,510	116,452	32,411
Waste Tonnes	t	5,384,085	2,496,961	2,169,807	574,812	132,779	9,726
Total Material Movement	t	15,629,227	4,909,326	5,378,667	3,091,689	1,747,002	502,543
Development Meters							
Lateral Operating Development	m	18,541	7,394	5,372	3,945	1,635	194
Lateral Capital Development	m	26,013	8,994	11,067	5,123	828	-
Vertical Capital Development	m	2,307	1,079	733	414	82	-
Backfill							
Pastefill	m^3	2,502,708	561,533	678,193	731,515	449,982	81,484
Rockfill	t	1,798,083	216,813	592,791	358,842	341,201	288,436

Source: GSR

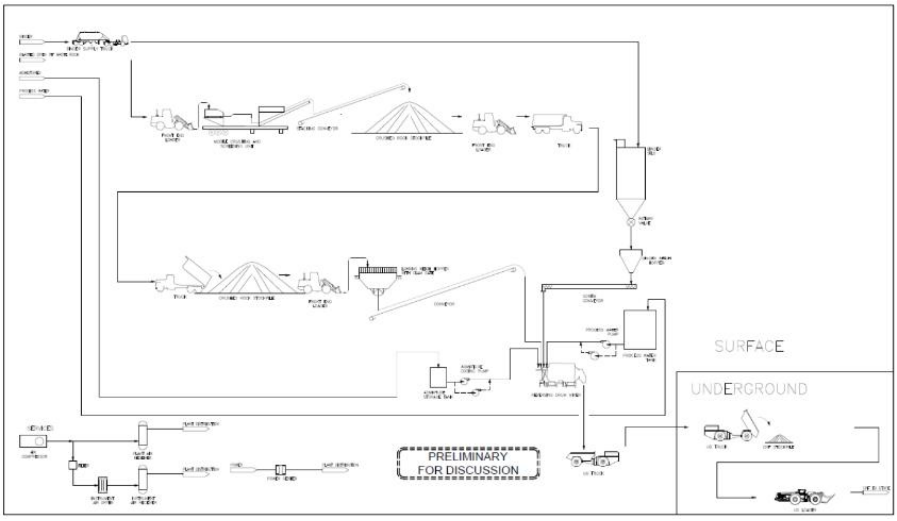
Notes: Scheduling start date: 1 April 2024

12.2.8 Mine Service

Paste Backfill

In 2015, Kovit Engineering ("Kovit"), based in Sudbury, Canada, undertook the design and cost estimates that formed the basis of the paste backfill system. The overall system is depicted in Figure 12-14.

Figure 12-14: Backfill system proposed by Kovit



Source: Kovit, 2015

According to the FS 2015, cement rock fill (CRF) and waste rock fill (RF) were nominated for transverse primary and secondary stopes, respectively. Later on, paste backfill studies were carried out by Outotec (Canada) Ltd. and competed in 2019. In 2020, the Wassa Mine completed the construction of the paste backfill plant.

In Wassa Design and Updated Wassa Design, paste backfill will be required to maintain support for mining the secondary transverse stopes and longitudinal stopes, thereby increasing the overall level of extraction. Secondary stopes for transverse stopes will be filled with RF as required.

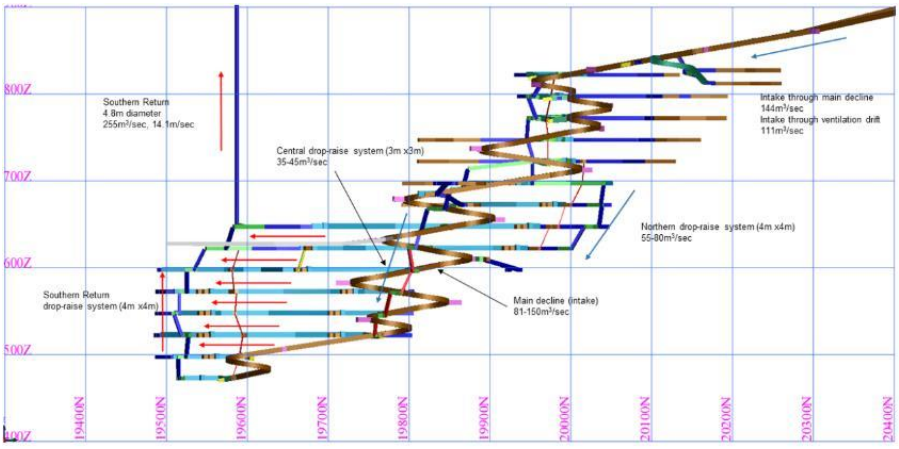
Ventilation

Ghanaian mining regulations stipulate the following:

- A maximum velocity of 6 m/ s in travelling roadways.
- For diesel engine equipment, a minimum airflow of 0.06 m³/ kW/ s.
- A minimum velocity of 0.2 m/ s in headings and 0.1 m/ s in large openings.
- A maximum wet bulb temperature of 32.5ºC for working conditions.
- Continuous monitoring of CO levels in return airways with information transmitted to the surface.

According to FS 2015, SRK conducted an analysis of ventilation requirements at Wassa using VENTSIM VISUAL™ software. The aim of this analysis was to determine the primary and secondary fan requirements, as well as duct and airway sizes. The analysis was carried out in two phases, depending on the mining panels and levels. The Figure 12-15 below indicates the Phase 2 ventilation system.

Figure 12-15: Phase 2 Ventilation System



Source: FS, 2015

Upon completion of the FS 2015, several changes occurred in the underground mine:

- The mine development in FS 2015 reached 412 mRL, while the lowest development levels for Wassa Design/ Sched and Updated Wassa Design have reached 370 mRL and 270 mRL, respectively.
- The production capacity has increased from 0.8 Mtpa to 2.8 Mtpa.
- The number of main production fleet units has correspondingly increased.
- For B Shoot, the main ventilation intake has changed from solely B Shoot Portal to both B Shoot Portal and Portal 3.

The mine continuously updates the ventilation systems as mining expands laterally and with depth.

During the site visit, SRK observed that the ventilation is adequate and effective, and mined-out areas have been properly barricaded. However, SRK recommends that Wassa Mine conduct a comprehensive ventilation assessment to support the ventilation design as the mine plans depth extension in the future.

Communication

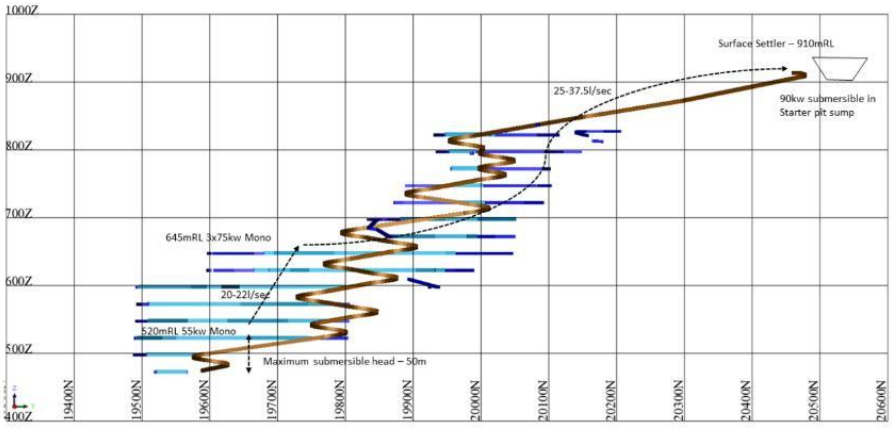
Frontline mine communication is facilitated via a leaky feeder VHF communications system and a two-way radio network. An antenna on the surface, along with cabling in the decline and all waste development headings, provides reliable communication to the working areas at Wassa.

All mobile equipment is equipped with radios in the operators' cabins, and portable handsets are available for mechanics, supervisors, and other personnel as required.

Dewatering

The mine dewatering system is designed to remove both groundwater and service water. The system is designed to handle a flow rate of 35 L/s. The Figure 12-16 indicates the final dewatering design as per the FS 2015.

Figure 12-16: Final Dewatering



Source: FS, 2015

The mine continuously updates the dewatering systems as mining expands laterally and with depth.

During the site visit, SRK observed that the tunnel and stoping areas were dry and clean, and that housekeeping has been well maintained.

SRK recommends that Wassa Mine conduct a comprehensive dewatering assessment to support the dewatering design as the mine plans depth extension in the future.

Water Supply

Water tanks are installed above the portal area to supply the underground mine with service water for drilling, dust suppression, and general use. Service water is sourced from either the starter open pit sump or the Dead Man Hill open pit sump. It is reticulated throughout the mine via 110 mm high-density polyethylene ("HDPE") lines installed in the primary headings, reducing to 63 mm HDPE lines for supply to end-use locations. Pressure reducers are installed as required to always maintain the pressure within the range of 4-12 bar.

Compressed Air

It is planned that compressed air will only be needed for minor service work. To this end, a 110 mm poly pipes are reticulated underground down the main decline. A single 90 kW compressor, providing pressure of 6.5 bar and a flow rate of 17.5 m³/min, is used.

Underground Magazines

Detonators, explosives and blasting agents are stored at the existing Wassa magazine on surface, delivered from existing suppliers in Ghana, currently African Explosives Limited ("AEL"). Utility vehicles transport the explosives underground for storage in approved underground magazines that are constructed to hold 3-4 days' worth of explosives.

Emergency Egress

A series of manways between levels, each approximately 15 to 20 m in length and inclined at 65-75º to the horizontal with a cross-sectional area of 1.2 m by 1.2 m, have been constructed. Each manway is fitted with ladderways and rest platforms in compliance with Ghanaian mining regulations.

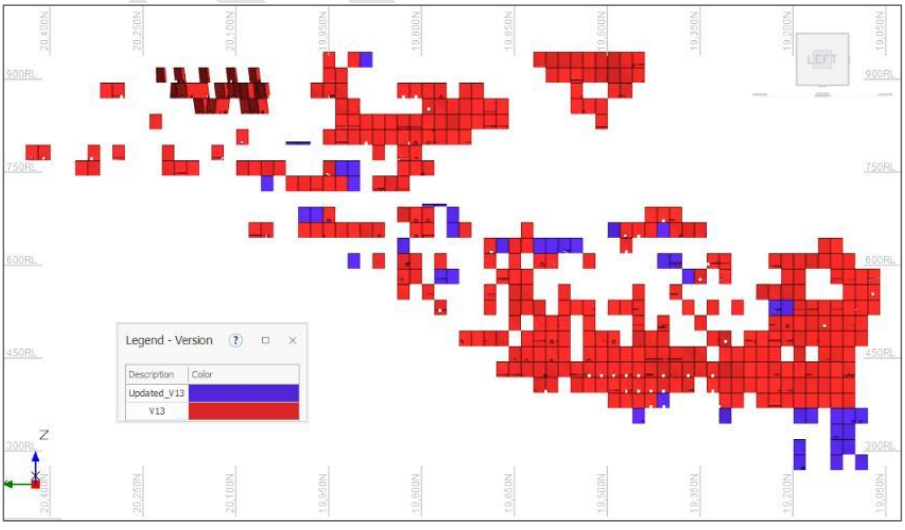
The escapeway system provides a secondary means of access from every sub-level and is separate from the main decline.

A number of Sixteen-person Refuge/ emergency chambers have been installed in the mine as development progresses.

12.2.9 Wassa Ore Reserves and Upside Plan

The Wassa Mine has provided SRK the Ore Reserves plan (Wassa Design/ Schedule) and an upside/ opportunities plan, based on the Wassa Design/ Schedule, but including immediately identifiable upside/ opportunities (though no classified as Ore Reserve in this evaluation). The comparison of the two is highlighted in Figure 12-17.

Figure 12-17: Stope comparison between Wassa Design and Updated Wassa Design



Source: GSR and SRK

Notes:

The purple blocks are the additional 'non Ore Reserve stopes'/ addition material included in Update Wassa Design

During discussions with the Wassa Mine, SRK understands that Updated Wassa Design includes Residual material in the upper area and Material in the lower area. Due to time limitation of preparing Updated Wassa Design, SRK would consider this as an opportunity for eventual economic material but does not regard it as Ore Reserve.

To classify the additional Mineral Resources as Ore Reserves, comprehensive technical studies across various disciplines (geotechnical, hydrogeology, ventilation, infrastructure, etc.) must be conducted to determine the feasibility of their exploitation. These studies should be at least at a PFS level, including an assessment of the methods of exploitation.

Although SRK cannot currently classify the Residual Material in upper area ("Residual Material (upper area)") and Material in lower area ("Material (lower area)") from Updated Wassa as Ore Reserves, SRK considers this material under a scoping study level and has reasonable grounds for disclosing a production target that includes this amount of Indicated Mineral Resource as an upside opportunity case.

The schedule is shown in Table 12-14.

Table 12-14: Wassa Ore Reserves and Upside Plan

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
OPEN PIT							
OPEN PIT - Ore Tonnes	t	785,551	327,491	458,061	-	-	-
OPEN PIT - Au Grade	g/t	0.96	1.04	0.90	-	-	-
OPEN PIT - Au Metal	oz	24,172	10,974	13,198	-	-	-
OPEN PIT - Waste Tonnes	t	2,548,826	1,502,686	1,046,140	-	-	-
OPEN PIT - Total Material Movement	t	3,334,377	1,830,177	1,504,200	-	-	-
UNDERGROUND							
Development	t	554,122	254,356	190,949	83,529	23,156	2,132
Au Grade	g/t	2.82	2.53	2.96	3.46	2.45	3.42
LHOS	t	8,905,468	1,830,519	2,559,850	2,433,348	1,591,067	490,686
Au Grade	g/t	2.17	2.16	2.06	2.25	2.24	2.04
Residual ROM Material (Upper Area)	t	436,138					436,138
Au Grade	g/t	1.75					1.75
ROM Material (Lower Area)	t	737,635					737,635
Au Grade	g/t	1.71					1.71
UNDERGROUND - ROM Tonnes	t	10,633,363	2,084,874	2,750,799	2,516,877	1,614,222	1,666,590
UNDERGROUND - Au Grade	g/t	2.15	2.21	2.13	2.29	2.24	1.82
UNDERGROUND - Au Metal	oz	735,317	147,888	187,961	185,510	116,452	97,506
UNDERGROUND - Waste Tonnes	t	3,193,029	994,274	1,123,668	574,812	329,310	170,965
UNDERGROUND - Total Material Movement	t	13,826,391	3,079,149	3,874,466	3,091,689	1,943,532	1,837,555

Mine Production & Development	Unit	Total	2024	2025	2026	2027	2028
Total (OP + UG)							
ROM Tonnes	t	11,418,914	2,412,365	3,208,859	2,516,877	1,614,222	1,666,590
Au Grade	g/t	2.07	2.05	1.95	2.29	2.24	1.82
Au Metal	oz	759,489	158,862	201,159	185,510	116,452	97,506
Waste Tonnes	t	5,741,855	2,496,961	2,169,807	574,812	329,310	170,965
Total Material Movement	t	17,160,769	4,909,326	5,378,667	3,091,689	1,943,532	1,837,555
Development Meters							
Lateral Operating Development	m	19,397	7,394	5,372	3,945	1,635	1,050
Lateral Capital Development	m	29,052	8,994	11,067	5,123	3,077	790
Vertical Capital Development	m	2,307	1,079	733	414	82	-
Backfill							
Pastefill	m^3	2,937,438	561,533	678,193	731,515	449,982	516,215
Rockfill	t	1,798,083	216,813	592,791	358,842	341,201	288,436

Source: GSR and SRK

12.2.10 Life of Mine Schedule

During the SRK site visit, GSR presented their in-fill drilling plan and budget aimed at upgrading the Inferred Mineral Resource to Indicated/ Measured Mineral Resource in the near future.

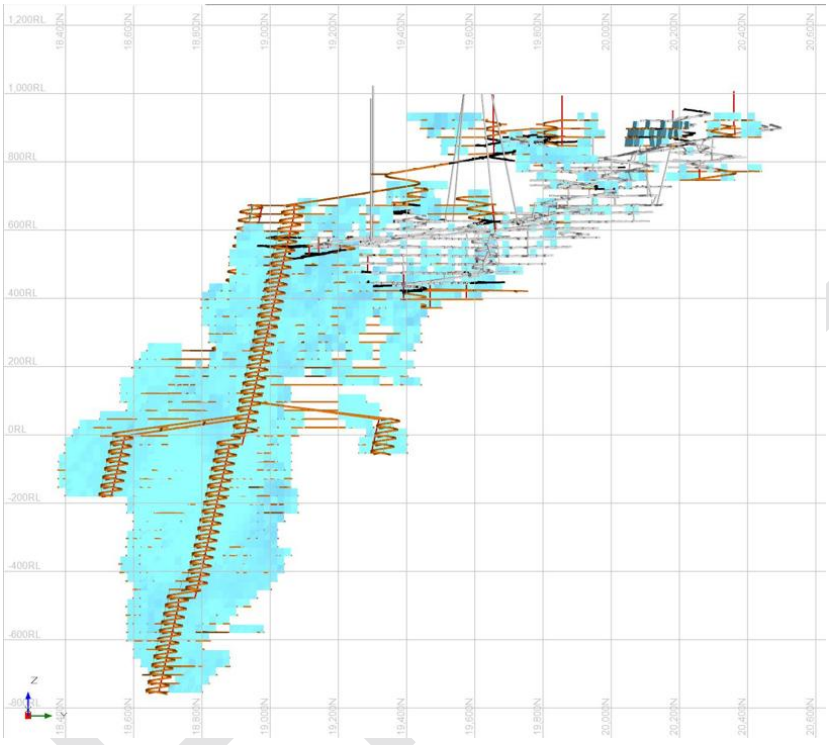
The Wassa Mine has developed a life of mine plan that includes Inferred Mineral Resource and outlines two designs/ studies for future expansion. SRK note that this cannot be considered as an Ore Reserve as it is based on Inferred Mineral Resource. In order to classify as Proved or Probable Ore Reserve category, technical studies need to be completed to at least a PFS level with an appraisal of how access would be achieved, mining methodology (including extraction and dilution factors), the geotechnical understanding as well as ventilation. Along with the technical understanding and extraction achievability, the economics of each area needs to be proved, i.e. with the application of Capex and Opex, is it economic to mine, cash flow positive.

The first design, with a Preliminary Economic Assessment ("PEA") for the Wassa's Southern Extension conducted by GSR in 2021, divides the Wassa Underground mine into 8 panels with the same stope optimization parameters but different other stope modifying factors such as dilutions and stope recoveries. The PEA has considered a long-term LoM scheduling, which is conceptual and outlines a mining inventory based on Inferred Mineral Resources. The term "run of mine ('ROM') material" is used in the PEA to describe potentially economic Mineral Resource included in the mining and processing plans. According to the PEA, a total of approximately 29.6 Mt of ROM material averaging about 3.9 g/t Au is scheduled for an additional 17-year LoM based on the Inferred Mineral Resources at Wassa underground (the Sothern Extension), including 2 years for definition drilling and 2 years for underground development.

The second design, developed using Deswik software and shown in Figure 12-18, estimates a 26-year mine life extending to 2049 with an annual mining capacity of approximately 3 Mt of ore, detailed

in Appendix B. This design includes the V13 Design, which is the Ore Reserve plan and schedule, employing a top-down LHOS method with either transverse or longitudinal stoping, depending on the orebody, and using pastefill for backfill for deeper stopes. The stope optimization parameters align with the Ore Reserve plan, except the gold grade for Inferred Mineral Resource is not set to zero.

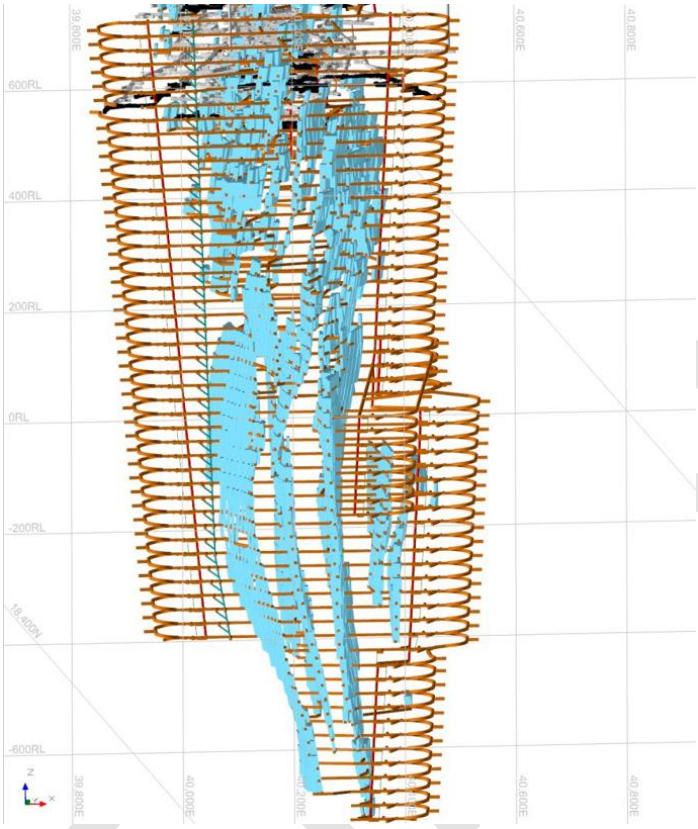
Figure 12-18: Wassa Underground Life of Mine Design (Looking East)



Source: GSR

The main decline is a spiral ramp on both sides of the ore body, extending to -800 mRL, as shown in Figure 12-19. However, during the discussions with GSR, it is suggested that a vertical shaft may be developed for deeper ore extraction due to the extensive travel distance for material transport via the decline.

Figure 12-19: Wassa Underground Life of Mine Decline Design (Looking East)



Source: GSR

12.2.11 Conclusions and Recommendations

SRK has reviewed the parameters for calculating cut-off grade, underground design, and schedules provided by the Wassa Mine and concludes that there are no significant inaccuracies in the data or procedures used.

It is important to highlight, however, that the Wassa Mine's overall design strategy is based on an operational perspective, and therefore Inferred Mineral Resources have been considered in the development design. This could lead to unnecessary capital expenditure if only Measured and Indicated Mineral Resources were considered.

The Updated Wassa Design has included additional Indicated Mineral Resource. Due to the time limitations in preparing the design by the Wassa Mine , this inventory is considered to be at a scoping study level. SRK would consider this inventory as an upper case for eventual economic extraction results.

Ore Reserves estimation has been conducted based on the mine design (Wassa Design), previous studies, and historical operating conditions. SRK suggests that the Wassa Mine conduct an independent study to compile such data to guide further production.

It is recommended to upgrade the Mineral Resource category in the B Shoot south deeps to extend mine life through in-fill drilling exploration and/or underground exploration.

13 Recovery Methods

13.1 Processing History

Wassa started exploiting gold from ores in 1998 utilising a heap leach ("HL") technology which is a well-established extractive metallurgical technology enabling the economic processing of various kinds of low-grade ores, which could not otherwise be exploited. However, the process remains limited by low recoveries and long extraction times. The process involved crushing, screening and agglomeration of the mined material before being stacked on leach pads which were irrigated with a weak cyanide solution to recover the gold. The solution was processed through carbon columns, stripped from the loaded carbon and smelted through to gold Doré bars. In 2001, the HL operation was suspended since the actual plant recoveries of 55-60% were far below the design and expected recovery of 85%, making the process non-economical.

A FS commenced to evaluate construction of a CIL plant in 2003. The positive outcome led to the construction of the existing plant in 2004 which was commissioned in 2005. The plant circuit has crushing, milling and CIL sections with new facilities for the mills and CIL circuit in that upgrade. A feed blend comprising 45% fresh material, 25% oxidized material and 30% reclaimed spent HL material was feed to the plant which had processing design capacity 3.5 Mtpa. Until 2014, the spent HL material reclaimed from the pads was added to the mill feed via a scrubber when it was exhausted. The plant was fed with only fresh material from the open pit until 2016 when underground material was added to the feed. Open pit mining was suspended in 2018 and since then, the predominant feed has been underground ore with supplementary addition of open pit stockpiles fresh, low-grade ore since 2021.

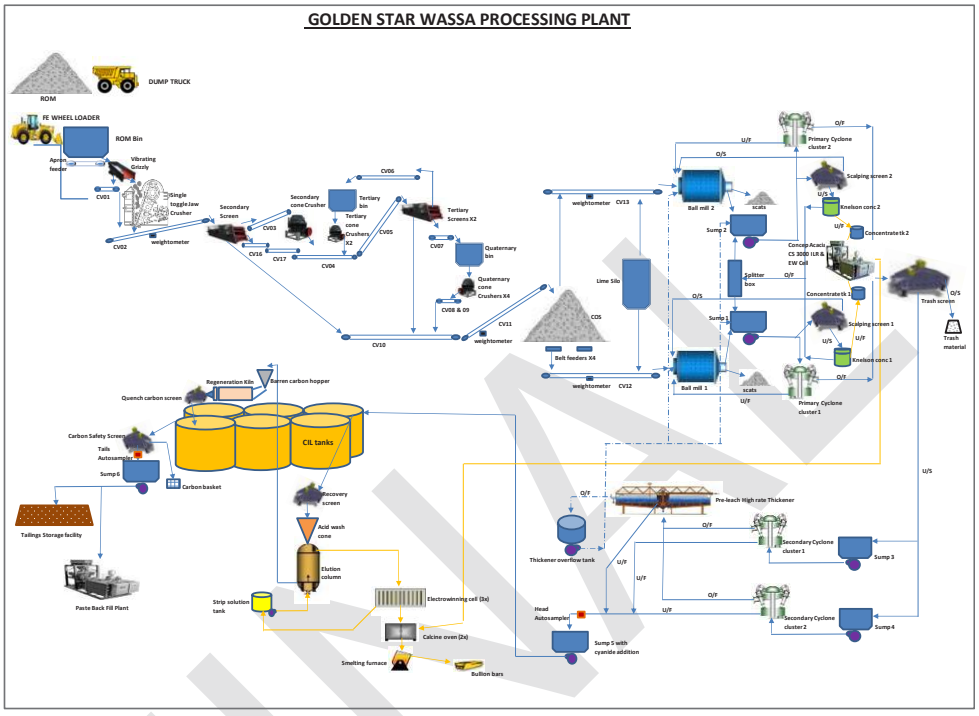
13.2 Process Description

The current plant circuit for GSWL is capable of processing up to 3.5 Mtpa of total mill feed but processed 2.55 Mtpa against a target of 2.7 Mtpa in 2023. As at the end of March 2024, processing stood at 0.72 Mtpa. The underground ore (fresh or competent ore) is the major source of feed into the plant whilst a blend of surface material may be added depending on availability in a ratio that averaged at 87% and 13% for 2022 and 83% and 17% for 2023 respectively. The surface ore may contain transition ore in addition to the oxides. Despite these average blend ratios, there are also periods that underground ore may be the sole feed into the plant. The blending ratio is maximised by the grade control to maintain recoveries at optimal levels throughout each year. The historical production records indicated that the ratio of oxide to primary has no obvious effect on the gold recovery.

The process flow diagram is shown in Figure 13-1. The operational circuit is made of the following sections:

- Crushing and Milling Circuit
- Gravity Gold Circuit
- Leaching Circuit
- Smelting

Figure 13-1: Current Process Flowsheet for GSWL



13.2.1 Crushing and Grinding

The Run-Of-Mine ("ROM") Pad receives ore from underground and surface via dump trucks such as CAT 777 and Volvo trucks (ADT).

A Front-end Wheel Loader transfers the dumped ore into the ROM bin under the guidance of a grade controller. An apron feeder underneath the ROM bin discharges the boulders into a Grizzly feeder that feeds a 150 mm Single toggle Jaw Crusher which is in an open circuit with series of Secondary and Tertiary Cone crushers which are fed through a network of screens with specified apertures and conveyors. Overall, eight (8) crushers are used in size reduction in the plant.

The tertiary screen is in closed circuit with the tertiary bin. Two weightometers are connected to the set of conveyors (CV2 and CV10) to be able to quantify the crushed ore.

The particles with size -12 mm (P_{80}=8mm) are heaped at the crushed ore stockpile ("COS") which has a space to store 18,900 tonnes of crushed ore but has a live stockpile of 4,400 t. Each of a pair of conveyors (CV12 and CV13) carries 165 tonnes per hour ("tph") of crushed ore to feed a 5.03 m diameter x 6.71 m long Ball mill each. Each of the Polymet lined mills is driven by a 3 MW motor and uses a combination of 60 mm and 80 mm steel balls in a ratio of 2:1 as grinding media. The mill product is about 70% passing 75 µm discharges into a hopper and is pumped into two sets of primary

cyclone cluster. Each cluster of cyclones has seven individual cyclones, each with their individual inlet valves for each of control and maintenance.

Pressure swing absorption ("PSA") oxygen plant located in the milling area.

13.2.2 Gravity Gold Extraction

One-seventh (1/7) portion of the cluster of cyclone feed is directed unto a scalping screen. The undersize feeds two 48" Knelson Concentrators ("KC"). The combined concentrates are fed into Concep Acacia CS 3000 Intensive Leach Reactor ("ILR") and Electrowinning Cell for gold recovery. This section accounts for between 28% and 30% of the total plant gold output.

The KC overflow discharges into the mill discharge hopper through a splitter box.

The Acacia Barren Solids ("ACBS") and the ILR residue are pumped back into the mills splitter box.

13.2.3 Leaching

Both overflow streams of the combined primary cyclone overflows are directed to another trash screen to remove further traces of debris. The screen undersize discharges into two sumps each of which feeds two secondary clusters of cyclones each with a 15% solids. The combined cyclone overflow feeds a 25 m Pre-Leach High Rate Thickener into which are added flocculants for dewatering purposes. The overflow is reused as the Ball mills water addition.

The thickener underflow is pumped by a 260 kW pump into a transfer vessel together with the secondary cyclone underflow where cyanide is added before the slurry is transferred to the CIL circuit. The year-to-date cyanide consumption rate is 0.48 kg/t against a budget of 0.44 kg/t. Oxygen which is generated from the PSA is injected into the transfer line after the transfer pumps. The transfer pipeline acts as an ILR, where most leaching occurs.

Six CIL tanks, each with a designed capacity of 2,500m^3 but a live volume of 2,250m^3 each constitutes a train for counter-current leaching of gold and adsorption unto activated carbon.

The slurry residence time in the CIL tanks is 36 hours whereas the carbon has a residence time of 24 hours. The gold loaded carbon is pumped from the third tank to a vibrating screen to separate the carbon from the slurry with water spraying washing. The washed loaded carbon is then transferred to the storage silo above the top of the elution column.

13.2.4 Elution, Electrowinning, Smelting and Regeneration

The gold is desorbed during elution and the loaded carbon is acid washed and then stripped of gold using caustic soda in an 11.5 t pressure Zadra elution system. Eluted carbon is thermally regenerated and returned to the last stage of the CIL circuit. The carbon is regenerated in a kiln with an operating temperature of 128℃ to 130℃ and a pressure of 220 kPa with a 12 tonnes quench tank.

The solution gold then precipitated during electrowinning in the gold house ahead of smelting. The CIL circuit accounts for the remaining 71% of the total gold output from the mine. The gravity gold concentrate and electrowon gold are smelted separately to produce gold doré bars.

13.3 Production Performance

The historical production performance of the plant for the past three years is shown in Table 13-1. The actual ore throughput is 2.12 to 2.55 Mtpa against the target of 2.7 Mtpa. The overall gold recovery including gravity and CIL is 95.3% to 97.1% with gold production of 4.84 to 5.31 tonnes per year.

Table 13-1: Wassa Gold Plant Historical Production Performance

Parameter	Unit	2021	2022	2023	1Q2024
Total Milled	t	2,256,725	2,117,237	2,550,842	719,540
Mill Feed Grade	g/t	2.216	2.583	2.057	2.084
Mill Feed Gold	oz	160,791	175,820	168,726	48,155
Mill Feed Gold	kg	5,001	5,469	5,248	1,498
CIL Feed Tonnage	t	2,256,725	2,117,237	2,550,842	718,681
CIL Feed Grade	g/t	1.580	1.842	1.474	1.509
CIL Feed Gold	oz	114,650	125,376	120,888	34,874
	kg	3,566	3,900	3,760	1,085
Tails Grade (Measured)	g/t	0.101	0.114	0.092	0.098
Gravity Gold Produced	oz	44,577	51,087	47,392	13,347
	kg	1,386	1,589	1,474	415
CIL Gold Produced	oz	110,864	119,640	114,065	32,551
	kg	3,448	3,721	3,548	1,012
Total Gold Produced	oz	155,441	170,727	161,457	45,899
	kg	4,835	5,310	5,022	1,428
Gravity Recovery	%	27.72	29.06	28.09	27.72
Total Recovery	%	96.67	97.10	95.69	95.32
Crusher Availability	%	89.84	93.61	93.30	92.11
Mill Availability	%	94.15	94.47	97.26	97.28
Mill Utilization	%	81.31	76.11	89.08	98.56
Crusher Utilization	%				79.90

13.4 Processing Facility

Wassa processing plant is a conventional CIL plant. Processing facilities include a ROM pad for ore blending and grade control, a complex crushing system, a crushed ore stockpile pad, two parallel grinding circuits with Knelson Concentrators, a standalone Accia intensive leach and electrowinning room for gravity concentrate, a standard CIL circuit and loaded carbon process circuit.

The main equipment is detailed in the description of the plant flowsheet. Figure 13-2 shows same facilities and equipment of the Wassa processing plant.

The crushing circuit is complex with four crushing stages, although performing normal function. If a semi-autogenous ("SAG") mill is used, the three-stage crushing after primary crushing can be replaced. The crushing circuit will be simplified.

There are six agitation leach tanks for CIL currently. An additional two CIL tanks are planned to be added to the existing tanks chain to extend the CIL time for enhancing gold recovery.

Figure 13-2: Photo of Wassa Processing Plant

13.5 Proposed Changes to the Treatment Circuit

- An additional two CIL tanks are expected to be added to increase recoveries and total gold output following several successful test work studies that confirms this again in extended leaching. The expansion requires additional installation of a 2 tonne Oxygen plant to meet the demand.
- The expected Mill Expansion project will incorporate the isolation and modernisation of the gold room by increasing the working space therein.
- Future metallurgical test works are to accompany the drilling programme scheduled for 2024 in expectation to meet the envisaged target of 3.5 Mtpa. However, the critical element is the availability of ores yielding additional 2,000 tph to the current 7,000 tph.
- The metallurgical test works are envisioned to cost around US$ 0.2 Million.

- The technical studies have commenced and are in progress. These findings have led to the acceptance and approved extension of the leaching time in the plant circuit by building two new CIL tanks.
- Considerations of the enhancement of the sustainability indicators for the mine through possible:
  - replacement of the secondary, tertiary and quaternary crushing units with SAG mill in order to improve upon performance and also reduce cost
  - haulage options for carriage of ore to the processing plant by using conveyor systems versus usage of electric trucks to improve the carbon footprint
- There has not been any water discharge from the processing circuit or TSF since the water balance for the plant is negative.
- The mine has an *International Cyanide Management Code* ("ICMC") certificate since 2010.

13.6 Laboratories Tests

13.6.1 Wet Chemistry and Assay

Routine samples from the exploration (muck samples), grade control, processing unit points including solid tailings samples are obtained for analyses.

Solid samples are crushed to obtain 74% passing 106 µm and then pulverised to 90% passing 75 µm.

Loaded and eluted carbon gold contents are also assessed.

The routine analyses carried out cover the determination of gold, silver, copper and some base metals using fire assay and BLEG protocols.

Periodically, comparative round robin assessments are carried out on blind samples with SGS (Tarkwa) and Intertek (Tarkwa). Preliminary data appear to compare very well.

QA/QC methods are followed which have also been certified by South African National Accreditation Service ("SANAS"), South Africa.

13.6.2 Metallurgical Laboratory

Routine metallurgical plant simulation test works (crush test, grinding/ milling and bottle roll tests) are carried out to determine head grade, reagents consumption and recoveries. The outputs compare well with the plant performance, within acceptable limits.

The simulated outcomes are claimed to match well with similar outcomes in a 2018 reference work by the University of Mines and Technology, Tarkwa ("UMaT").

An extended leach test works has proven and led to the approval for additional two CIL tanks to be added to the existing train.

The comprehensive metallurgical test works leading to an FS are carried out by the company with reference laboratories alongside drilling programmes.

14 Project Infrastructure

14.1 Tailings Storage Facility

There were two TSFs, TSF 1 and TSF 2, designed to accommodate the anticipated tailings produced. TSF 1 was stage-constructed with the most recent raise, Stage VI, in 2014, and it was raised to 1,039 mRL. The starter embankment was constructed in 2004. The raising of TSF 1 was to provide sufficient storage capacity until 2017 when TSF 2 was scheduled to be operational.

TSF 1 is located northwest of the processing plant at the head of a southerly draining valley and immediately adjacent to the historical leach pad area. The ground levels range from 1,000 mRL on the valley floor to above 1,060 mRL on the surrounding hills. It is a cross-valley impoundment created by the construction of a main embankment in the south with confining saddle embankments at the north of the facility. Containment to the east and west is provided by natural ridges. Access is via unsealed road west of the plant site area. The catchment area of TSF 1 is estimated to be approximately 140 Ha, of which 124 ha is covered with tailings as the facility proceeds through closure revegetation trials. Deposition into TSF 1 ceased in 2019 with paddock deposition completed to achieve the approximate closure surface topography requirements of the closure landform. Re-vegetation trials commenced in 2017 towards the next land use, and by the end of 2020, the revegetation planting was almost complete. TSF 1 has been replanted with palm oil trees under a scheme operated by Golden Star Oil Palm Plantation ("GSOPP"). The palm trees are growing well, and farm workers are harvesting the fruits as in Figure 14-1.

Figure 14-1: Reclaimed TSF 1

TSF 2 is close to TSF 1 in the valley that extends eastward from the north embankment of TSF 1. It is approximately 2.5 km from the processing plant and 1.3 km downstream of TSF 1 Saddle Dam 5. TSF 2 has a footprint of 260 ha, of which 72 ha has been developed to date, and lies within a total project area of 340 ha including the buffer zones. The remaining capacity of TSF 2 significantly exceeds the needs for processing of ore defined by the Ore Reserves, even after allowing for use of tails solids for paste backfill.

The TSF 2 has two cells currently with the first cell (TSF 2 Cell 1) under care and maintenance, and the secondary cell (TSF 2 Cell 2) in use and being filled. A safety audit report for 2022 issued by Geosystems Consulting Limited stated that the section is generally in compliance with the regulatory and design requirements. A third cell (TSF 2 Cell 3) is under geotechnical investigation by Knight

Piesold Consulting Limited ("KP"). The configuration of the three cells is as Figure 14-2. It is planned that the three cells will merge together in the future to enlarge the volume and for reclamation purposes.

The TSF 2 basin was to be entirely lined with high-density polyethylene ("HDPE") sheets and was to provide a storage capacity of 41 Mt by staged construction up to Stage 6, although only 19.5 Mt was required for the LOM at the time. It is designed as a downstream embankment, and future raises are planned to be downstream as well. All embankments are designed with 1V:2H upstream and 1V:3H downstream slopes, with 8 m wide crest. It is envisaged that the facility will be developed as follows:

- Cell 2 – Stages 1 to 3 through years 1, 2 and 3;
- Cell 3 – Stage 4 at year 4;
- Cell 1 – Stages 5 and 6 at years 5 and 6; and
- Cells 1 and 3 – Stages 7 to 11 through years 7 to 11.

Figure 14-2: TSF 2 Cells

GSWL has an on-site tailings management team that takes care of the day-to-day activities at the TSFs. The Environmental Department oversees the water quality testing at the TSFs. KP conducts quarterly TSF inspections and a consultancy named Glocal Engineering in Ghana conducts quarterly independent reviews. Geotech Systems conducts an annual safety audit.

There is currently no detoxification plant at GSWL. However, mine personnel report that this does not hamper the TSF operation as the general water balance on the mine is negative. Occasionally when excess supernatant water must be pumped off the TSF, a lined holding pond with 200,000m^3 capacity is used for storage. The holding pond was part of the former Heap Leach facilities. The stored supernatant water is ultimately used by the treatment plant. The use of this holding pond has enabled GSWL to continue to operate the TSFs without discharging contaminated water into the environment.

The new Global Industry Standard on Tailings Management (GISTM) is yet to be implemented at GSWL.

14.2 Water Supply

The processing plant has a negative water balance and therefore does not discharge process water into the environment. However, it reuses the dam return water (current TSF 2) for processing whilst part of the underground dewatering section is pumped to the plant as supplementary raw water. The

rest of the underground water is used to suppress dust in the mine environment, and also utilised in the Backfill Paste plant.

There are two surface ponds in the mine area to collect and store the surface water and groundwater for processing plant supplement, mining and dust depression. The ground water comes from the mining section. Figure 14-3 shows the two catchment ponds. The 2nd pond is adjacent to the Genser Generator, and the water is also used as cooling water of the Generator.

Figure 14-3: Catchment Ponds in Wassa Mine Site

14.3 Power Supply

There are two sources of electricity, the National Grid of Ghana ("GRIDCO") and Genser Energy. The Genser generator is in the vicinity of Wassa mine. GSWL has the objective of providing a continuous, stable and cheaper supply of power. Genser Energy meets GSWL's monthly average need of 14.2 MW power. Genser Energy produces its power from natural gas and sells the power to GSWL at $0.11/ kWh. It has an installed capacity of 23-24 MW with additional space to add another system. GSWL currently uses GRIDCO power as an alternative source of power for its operations.

It is planned to set up a 1 MW solar power plant to supply cheaper energy to offices and living areas, but SRK didn't get the details. Figure 14-4 is a photo of the main transformer station between the mine offices.

Figure 14-4: Main Transformer Station

15 Market Studies and Contracts

15.1 Market Studies

All gold product from the Wassa Project is shipped to a South Africa based gold refinery under a long-term sales contract. Shipping is in the form of gold doré bars, which average approximately 90% gold by weight with the remaining portion being silver and other metals. The sale price is generally set with reference to the London p.m. fix on the day of the shipment to the refinery.

SRK has used a fixed gold price of US$2,050/ oz for cut-off grade calculation and the technical economic analysis for the Wassa Mine. Table 15-1 shows the prices trend and long-term price for Gold from Deutsche Bank, which issued in April 2024. The commodity price forecast is considered to reflect a reasonable outlook for the future.

Table 15-1: Gold Price Forecasts

Year	2021	2022	2023	2024	2025	2026	Long-term Price
Gold Price	1,800	1,798	1,940	2,025	2,100	2,141	2,050

Source: Deutsche Bank

15.2 Contracts

SRK has not reviewed any contracts relating to the product market, and SRK is aware of gold is a freely traded commodity on the world market and whilst the selling price is subject to fluctuation, and the volume of gold produced at Wassa will not be material to the supply/ demand balance and will not influence the selling price.

16 Environmental Studies, Permitting, and Social or Community Impact

16.1 Environmental and Social Review Objective

The objective of this due diligence review is to identify and/or verify the existing and potential environmental, social and occupational safety liabilities and risks, and assess any associated proposed remediation measures for the Wassa Project.

16.2 Review Process, Scope and Standards

The process for the verification of the environmental compliance and conformance for the Project comprises a review and inspection of the project's environmental management performance against:

- Ghanaian national environmental regulatory requirements; and
- Equator Principles (World Bank/ International Finance Corporation ("IFC") environmental standards and guidelines) and internationally recognised environmental management practices.

The methodology applied for this environmental review of the Project consists of a combination of desktop review and interviews with GSWL technical representatives.

16.3 Relevant Legislation and Required Approvals

The mineral and mining sector between 1986 and 2005 was governed by the *Minerals and Mining Law, 1986 (P.N.D.C.L. 153)* and this was the basic mining legislation in Ghana. While it was regarded as the trendsetter in terms of mining legislation in Sub-Saharan Africa, major changes in the international mining sector led to its revision. After a protracted review in the early 2000s, the current *Minerals and Mining Act, Act 703 of 2006* became the governing legislation for the country's minerals and mining sector.

The Minerals and Mining Act, 2006 (Act703), and its related mining regulations and other relevant regulations such as the *Environmental Assessment Regulations,1999, L.I 1652* and mining–related guidelines and standards constituted the legal framework and regulations for the mining sector.

16.3.1 Permitting Requirements in Ghana

Environmental Assessment Requirements

The Environmental Protection Agency ("EPA") Act, 1994 (Act 490) established the authority, responsibility, structure and funding of the EPA. Part 2 of the Act mandates the EPA, with the formulation of environmental policies, issuing of environmental permits and pollution abatement notices and prescribing standards and guidelines. The Act defines the requirement and responsibilities of the environmental protection inspectors and empowers the EPA, to request that the EIA process be undertaken. The EIA process is legislated through the *Environmental Assessment Regulations, 1999 (L.I. 1652)*, which is the main legal framework used by EPA, for regulating and monitoring mineral operations which cover requirements for:

- Environmental Impact Assessment (EIA);
- Preparation of Environmental Impact Statements (EIS);
- Environmental permitting;
- Environmental Management Plan (EMP); and
- Reclamation bonding.

The EPA grants environmental approval to all undertakings through an Environmental Permit, which is issued subject to the submission of a well-documented Environmental Impact Statement. For a mine, an EIS must include a reclamation plan and a provisional EMP. Prior to formal review by the EPA, the EIS may be subject to public exhibition and hearing, with responses from regulators and community to be incorporated into the EIS before an Environmental Permit is granted.

Two years from receipt of an Environmental Permit, an Environmental Certificate is required from the EPA to confirm:

- Acquisition of all permits and approvals;
- Compliance with mitigation commitments in the EIS and/or EMP; and
- Submission of annual Environmental reports.

Within 18 months of commencement of work an EMP is to be submitted to and approved by the EPA. The provisional EMP in the EIS is updated and incorporated into the mine's active EMP which is subjected to update every three years renewal cycle. Reclamation plans are a necessary document for all mines in Ghana (*Regulation 14 of L.I. 1652*) and mining operations submit annual environmental reports (*Regulation 25 of L.I. 1652*) and monthly environmental quality monitoring results to EPA, with notes where values exceed thresholds and response plans as required.

Minerals and Mining Requirements

Act 703 establishes laws on the process for obtaining mineral rights, the administration and management of these rights and protection of the environment. Supporting *Act 703* are the *Minerals and Mining Regulations, 2012* which cover:

- General aspects (L.I. 2173);
- Compensation and resettlement (L.I. 2175);
- Explosives (L.I. 2177).
- Support services (L.I. 2174); and
- Health, safety and technical requirements (L.I. 2182).

Water Resource Legislation Requirements

The Water Resources Commission Act, 1996 (Act 552) establishes the Water Resources Commission as a body corporate, responsible for the regulation, management, and coordination of policies related to water resources. Key functions include developing water use and conservation plans, granting water rights, coordinating water resource development and utilisation, and advising

on water pollution control. Additionally, the *Water Use Regulations, 2001 (L.I. 1692)*, and *Drilling Licence and Groundwater Development Regulations, 2006 (L.I. 1827)*, complement the Act by specifying the requirements for obtaining permits for water use, water rights, and priorities for water use; and water drilling licences, and well construction requirements; respectively.

16.3.2 Status of Environmental Approvals and Permits

In accordance with the Environmental Assessment Regulations, 1999 (LI 1652), Regulation 25, as well as Articles 28 to 30 of the Minerals and Mining (Health, Safety and Technical) Regulations, 2012 (LI 2182) and the conditions of the GSWL Environmental Certificate and various Environmental Permits, GSWL is required to submit an Annual Environmental Report initially twelve months after the start of operations and thereafter, every calendar year.

In addition to the Annual Environmental Report, GSWL is required to submit an EMP after 18 months from the commencement of operations, and thereafter every 3 years. Based on the EMP 2022-2025 and Annual Environmental Report 2023, the key environmental approvals held by GSWL are summarized in Table 16-1.

Table 16-1: Key Environmental Approvals Obtained for Wassa Mine

Approval	Permit No.	Date of Issue	Expiry Date	Comments
Environmental Permit to pursue operations	EPA/EIA/112	18-Mar-2004	None	Based on Wexford Goldfields Limited Wassa project EIS (2004)
Gold Mining Project at Mpohor	EPA/EIA/175	24-Feb-2006	None	Issued to St Jude Resources (Ghana) Limited based on Hwini Butre EIS and Subriso EIS
South Akyempim Environmental Permit	EPA/EIA/190	2-Jun-2006	None	Based on EIS on South Akyempim Project (2005)
Hwini Butre / Benso Project Environmental Permit	EPA/EIA/247	2-Oct-2007	None	Based on the Hwini Butre and Benso EIS (2005)
Wassa Pits Expansion Project Environmental Permit	EPA/EIA/322	20-Dec-2010	N/A	Based on Wassa Pits Expansion EIS (2010)
TSF 2 Environmental Permit	EPA/EIA/383	5-Apr-2013	N/A	Based on corresponding EIS (2013); Transitioned to EPA/EIA/442
TSF 2 (re-design) Environmental Permit	EPA/EIA/442	25-Nov-2015	N/A	Based on TSF 2 EIS (2015)
Wassa Expansion Project Environmental Permit	EPA/EIA/508	30-Oct-2017	N/A	Based on Wassa Expansion EIS (2016)
Environmental Certificate	EPA/EMP/278	Dec-2022	Dec-2025	2022-2025 EMP

GSWL operates under Environmental Certificate EPA/EMP/278 issued on 22nd December 2022. The Environmental Certificate for the EMP 2022-2025 expires in December 2025.

SRK also reviewed eight copies of water use permits for the Wassa mine, covering domestic purposes, pit dewatering, processing, mining, and dust suppression. All permits are currently within their valid periods.

In this environmental review, SRK viewed the following documents on the environmental and social impact assessment of the Project:

- Draft Environmental Impact Statement on Wassa Expansion Project ("Expansion Project EIS") dated March 2016 and its approval;
- Environmental Impact Statement on Updated TSF 2 Project ("TSF 2 EIS") dated September 2015 and its approval;
- Environmental Management Plans for Surface and Underground Operations (2022-2024) and its approval;
- Annual Environmental Reports (2021, 2022, and 2023);
- NI 43-101 Report for the Golden Star Wassa Mine Project Akyempim Ghana dated April 2023 (2023 NI 43-101 Report); and
- Other related documents.

SRK viewed the above EIS reports, and concluded that the Wassa Mine prepared the EIS reports in accordance with the relevant laws, regulations and decrees of Ghana. In the following sections, SRK provides comments in respect to the study and management measures from the EIS reports and other related documents.

16.4 Environmental and Social Aspects

16.4.1 Ecological Impact

Based on the EIS reports, comprehensive baseline studies were carried out in Wassa during 1996, 2010, and 2012. Wassa is situated in a region transitioning between moist, semi-deciduous forests and wet rainforest zones. Initial observations highlighted vegetation degradation due to impacts from logging and farming. The studies recorded 73, 214, and 70 floral species in the years 1996, 2010, and 2012, respectively. A 2016 review by the International Union for Conservation of Nature (IUCN) identified Tieghemella heckelii as endangered and listed several species as vulnerable, including Mitragyna stipulosa, Turraeanthus africanus, and Guarea cedrata, among others. Additionally, three species identified at the Genus level in the baseline studies — Terminalia, Entandrophragma, and Pterocarpus sp — may have updated conservation statuses due to their overexploitation for timber and other uses. The Wassa project also includes a haulage route (12 km of the Hwini Butre Benso access road) that traverses the Subri River Forest Reserve, however, the Globally Significant Biodiversity Area within the Subri River Forest Reserve is not impacted by the road based on the Project Expansion EIA.

Baseline studies in the project area have documented a diverse array of fauna, including small and large mammals, bats, birds, butterflies, herpetofauna, amphibians, and aquatic species. Indiscriminate hunting and clearing of forest for agricultural purposes have both played major roles in causing the decline and extinction of wildlife species in the area. The 2016 IUCN classifications highlight several notable species and their conservation statuses: the Hooded Vulture (Necrosyrtes monachus) is critically endangered, facing threats from indiscriminate poisoning, traditional medicine, hunting, and persecution. The Hinge-back Tortoise (Kinixys homeana) and the African White-bellied Pangolin (Phataginus tricuspis) are classified as vulnerable. The Grey Parrot (Psittacus erithacus),

also vulnerable, is primarily threatened by the international pet trade. Additionally, the Pohle's Fruit Bat (Scotonycteris ophiodon) is listed as near threatened, and the Pel's Flying Squirrel (Anomalurus pelii) was considered near threatened in 1996 but has since been updated to data deficient, indicating a need for more current data to assess its status accurately.

SRK believes that due to the construction of mine road, open pit, processing plant, waste rock dump, TSF, and etc., the surface land in some areas of the Wassa project are disturbed and destroyed, which would result in impact to or loss of habitat for the local flora and fauna. If these damaged areas are not effectively managed and restored, the land will be polluted and the function of the land will be changed, which will lead to soil erosion. The Project EIS should determine the scope and importance of any potential impacts on the flora and fauna. If the above impacts are identified to be significant, the EIA should propose effective measures to reduce and manage them. SRK reviewed the EIS reports and EMPs of the project, and the EIS also pointed out the main impacts of the project construction, operational, and decommissioning/ closure phases on terrestrial and aquatic organisms, and measures to reduce these impacts. SRK believes that the ecological protection measures mentioned in the EIS reports and EMPs are reasonable and feasible, but SRK also recommends that the ecological baseline study of the project in the EIS should include on-site surveys of multiple seasons to assess the local ecological environment status more comprehensively. Furthermore, in addition to the protection measures mentioned in the EIS and EMPs, methods, such as the establishment of biological corridors, restoration of habitats, and implementation of biodiversity compensation, can be adopted to reduce the impact of project on ecological environment.

16.4.2 Water Management

The GSWL mining concessions are located within the Pra River Basin, one of three major river basins in southwestern Ghana. The Wassa concession area is drained by the Toe, Kubekro, and Petetwum, which are tributaries of Pra. The Benso concession is near the Ben River and a stream informally called the "Subri River". The Hwini Butre concession lies in the Butre River catchment area and is drained by streams such as the Pamaa, Besama, and Whanawhana.

The project's drinking water comes from boreholes. In 2023, 18 out of 31 monitoring boreholes at Wassa served as sources of drinking water for Tara Camp, Camp II, the mine site, and surrounding communities. The remaining boreholes were for monitoring at the TSFs. At HBB, 3 out of 8 monitoring boreholes served as sources of drinking water for the Benso residential site and the HBB mine site, while the others were for monitoring at the G-Zone open pit. Drinking water boreholes at Wassa and HBB are monitored monthly for Escherichia coli, total coliform, and fecal coliform bacteria. A quarterly disinfection program was carried out for all community drinking water boreholes as part of the GSWL community outreach programs.

Service water for mining and supplementary raw water for the processing plant comes from open pit dewatering. Water is pumped from the Starter Open Pit sump to the processing plant via a settling sump to augment supply during the dry season, combined with return water from the TSF to minimize groundwater extraction. In 2023, 198,290 m^3 of open pit water was reused at the processing plant, and a total of 157,508m^3 and 1,751,726 m^3 of open pit water was discharged from Wassa Akyempim and Hwuni Butre Benso project sites, respectively. Water for dust suppression typically comes from raw water along the haul road and open pit dewatering, totalling 118,664 m^3. All open pit water usage,

dewatering discharge, and water used for dust suppression were well below the permitted volumes specified in the water use permit.

SRK recommends that the project should implement a sustainable water supply management plan to minimize its impact on natural systems through the management of water use, avoid the depletion of aquifers, and reduce the impact on water users. Meanwhile, GSWL shall consult with major stakeholders (i.e., government, civil society, and potentially-affected communities) to learn about any conflicts that may arise from water use requirements, community dependence on water resource, and/ or existing local protection requirements.

Routine analyses of cyanide and nitrates in surface waters were undertaken at selected sites. Free cyanide is analysed bi-weekly, whilst Weak Acid Dissociable ("WAD") and total cyanide analyses were completed monthly. All GSWL surface water monitoring locations are within the EPA guidelines for free, WAD and total cyanide. All cyanide concentrations were less than their method reporting limits of 0.005 mg/L.

The water quality monitoring programme at Wassa includes monitoring of water in boreholes, surface water, TSF supernatant pond, and seepage wells. The water quality results obtained showed no notable variations from the baseline conditions, although elevated total suspended solids (TSS) were detected on a few occasions at some sites, due to illegal mining, overnight downpour, and run off rainwater into the borehole. Piezometers located in the vicinity of the Father Brown open pit at Hwini Butre are monitored monthly.

Based on the EIS reports, the groundwater and hydrogeological impact assessment showed that the project has limited potential for impact on groundwaters; the host rock is highly impermeable and leachate qualities are good. As a result, impacts of dewatering are highly localised to the mining areas and are not expected to have any effect on existing community groundwater supply sources, and groundwater levels will substantially recover at closure, and without impact to the receiving environment.

The main wastewater pollution of the Wassa Project may be derived from open pit dewatering water, processing wastewater, TSF return water, waste dump/ ore stockpile leaching water, machine repair wastewater, industrial site rainwater, and domestic sewage. Sewage from the mine site and residential areas is removed by a third-party contractor for disposal at a designated area close to the TSF at Wassa, and to Subriso West at Benso and treated. A stream diversion around the processing plant and administration area, TSF drainage diversions, and a French drain are set up to prevent water inflow to the southern end of the Main open pit area. Additionally, secondary drainage works are in place around the site to direct water runoff from dumps and roads away from active mining areas or toward dewatering infrastructure. Supernatant water from the TSF is pumped back to the processing plant for use as process water. Regular monitoring of surface waters in the vicinity of the TSF embankments is carried out to check for any potential discharge.

SRK recommends that monitoring programs on environmental quality of surface water and groundwater within the project area (including upstream and downstream areas) and wastewater discharges shall be carried out during the operation stage. The water environment monitoring should form part of a comprehensive site environmental monitoring plan. SRK also suggests that the project should establish an effective rain and sewage diversion system to separate surface runoff from contaminated area and clean area. In addition, SRK recommends measures such as ground

hardening, cofferdam, water collecting ditch, leachate collection pool and accident pool in the processing plant area, temporary storage of hazardous waste, topsoil dump and TSF to mitigate the contamination risk of surface water and groundwater.

16.4.3 Waste and Tailings Management

The waste rocks from the Underground and Surface operations of Wassa are transported to the 419 dump. Sections of the dump are currently on 1,040 mRL and 1,030 mRL on the west while the eastern stretch is on 1,020 mRL and 1,010 mRL. As part of waste management for economic value, part of waste rock was recycled as aggregates for construction and road works. The waste dump is continuously monitored according to relevant environmental requirements. For specific information on waste rock output and the waste dump, please refer to the mining chapter.

One potential risk to the environment from waste rock and TSF is acid rock drainage ("ARD"), that is created when reducing sulphide minerals are exposed to air, precipitation and bacteria and, through an oxidation reaction, produce sulphuric acid, during mining, transportation, processing, waste rock discharge, and tailings storage, etc. ARD has the potential to introduce acidity and dissolved metals into water, which can be harmful to surface and groundwater. A comprehensive ARD experiment can help the Company predict problems and avoid long-term environmental risks.

According to the EIS, the geochemical characterization was undertaken to determine the acid rock drainage/metal leaching potential of ore and waste rock lithologies. Classification of acid rock drainage potential showed that all previous rock samples from the different open pits and waste rock dumps were not acid generating (NAG). Additionally, acid base accounting of rocks to be mined in the future mine development, demonstrated that the geochemical characteristics continue at depth, with limited to no potential for ARD. Synthetic precipitation leaching procedure (SPLP) and NAG leach tests, a worse case indication of drainage quality, indicate that underground mine drainage is likely to be neutral to alkaline with no constituents expected to exceed the EPA guidelines. Furthermore, on the studies conducted for the EIS, GSWL continues to assess the geochemical characteristics of the ore, waste and tailings materials annually. These assessments consistently demonstrate a low potential for acid generation.

The Wassa project includes two TSFs. TSF 1 is currently under maintenance, while TSF 2 is actively used for tailings discharge. During operation, tailings are distributed via a HDPE pipeline, and the TSF 2 basin is lined with HDPE sheets to meet the regulatory requirement. For detailed information on tailings emissions and the TSFs, refer to processing (Section 13) and TSF (Section 14.1). A series of environmental protection measures are in place, including a spillway, decant barge, secondary confinement, and groundwater drains for containment. As part of GSWL's environmental monitoring plan, regular monitoring of water quality within the catchment of the mine's TSFs is carried out to ensure early detection of impacts on water resources due to the operations of the TSFs and its ancillary facilities. SRK suggests monitoring surface water, groundwater and soil downstream of the waste dump and TSF to ensure that it is not affected.

16.4.4 Air and Noise Pollution

The dust emission sources of the Project mainly come from open pit mining, blasting, loading and unloading, ore stockpile, crusher, waste dump, topsoil dump, TSF, and movement of vehicles and

mobile equipment. The project carried out monthly monitoring of air quality for inhalable particulate matter ("PM_{10}") and total suspended particulate ("TSP"). In 2023, all the communities monitored were within the EPA guidelines of 70 µg/m^3 and 150µg/m^3 for PM10 and TSP respectively. However, the expansion project EIS reported based on the history monitoring data that periodic seasonal peaks exceed the guideline, as the seasonal Harmattan brings dry and dusty winds from the Sahara across West Africa. Consequently, the operations have employed an array of dust suppression mitigations throughout dry season conditions. Besides, SRK suggests adding the monitoring of $PM_{2.5}$, which is in line with current international industry practice. Moreover, SRK notes that the EIS did not address the management of greenhouse gas (GHG) emissions, which is required by some international standards. In the 2023 Environmental Monitoring Report, GSWL provided data on electricity consumption and total direct CO_2 emissions, calculated from the total amount of diesel used each month. However, this approach does not provide a comprehensive calculation of GHG emissions, as it excludes indirect emissions from electricity use and other potential sources of GHGs, such as fugitive emissions from mining activities and emissions from the transportation of materials and personnel. SRK proposes conducting research on the energy consumption coefficient per unit output, GHG emission levels, and intensity.

The main noise emissions of the Project is from mining equipment, blasting, crushing and screening equipment, various types of pumps, fans, vehicles and mobile machinery equipment. During the noise status monitoring conducted for the EIS, the ambient noise of the project site was rarely exceeded the EPA guidelines, which was caused by the church worship activities, animals, vehicular movements, and the operation of machines in the community. The noise levels peaked in the evening, as a result of increased noise from wildlife towards sunset. Mining-related noise, such as truck movements and waste rock dumping, was periodically audible at this time. In 2023, all blast events at Wassa were monitored in the Akyempim and Kubekro communities. Out of 1,263 blast events and 2,723 monitoring readings, 52 blasts (0.59%) recorded air blast values above the 117 decibel ("dB") limit, and 9 blasts (0.003%) resulted in ground vibration levels greater than 2 mm/s. Measures have been put in place by the Technical Service Department to mitigate this by considering the amount of explosive used, number of holes, hole depths, and pattern size. GSWL has developed and implemented an atmospheric and noise monitoring plan. SRK believes that the air and noise pollution management measures proposed in the project EIS and EMPs are reasonable and feasible. It is recommended that the project shall implement the above measures during operation.

16.4.5 Hazardous Materials Management

Hazardous materials have the characteristics of corrosive, reactive, explosive, toxic, flammable and potentially biologically infectious, which pose a potential risk to human and/or environmental health. The hazardous materials will be generated mainly by the project's construction, mining, processing and include of hydrocarbons (i.e. fuels, waste oils, and lubricants), processing reagent, chemical and oil containers, batteries, medical waste, and paint.

The Wassa explosives magazine, managed by AEL, is located in the backfilled Mid-East 1 open pit. Blasting for both underground and open pit operations is conducted by AEL under contract and overseen by GSWL to ensure compliance with Explosives Regulation LI 2177. In addition, hazardous materials such as diesel and mineral processing chemicals will be stored on the project site. The handling, storage and transportation of hazardous materials shall prevent leakage, overflow or other accidental discharge into soil, surface water and groundwater. Solid waste generated is

predominantly managed onsite using a 10 m^3 semi-automated incinerator, a landfill site, a land farm and a scrapyard. Empty cyanide boxes/ plastics are dismantled and treated offsite. All waste oil generated by the operations is removed from site for recycling and disposal by a sub-contractor. During the site visit, SRK observed that the processing reagents are stored on a cement surface and secured with locked fences. SRK suggests taking measures to mitigate the risk of pollution caused by leakage, such as second containment facility, double-layer or thickened pipelines at key locations, shut-off valves to reduce spillage and avoid flowing into key areas. GSWL is a member of ICMC. Eagle Environmental Inc. conducted the most recent certification audit in April 2023. SRK recommends that the cyanide purchase, transportation, handling/storage, use, equipment decommissioning, operation safety, emergency response, training, etc. should comply with the practical principles and standards of ICMC.

16.4.6 Occupational Health and Safety ("OHS")

A well-developed and comprehensive safety management system comprises site inductions, site policies, safe work procedures, training, risk/hazard management (including signage), use of personal protective equipment ("PPE"), emergency response process, incident/accident reporting, an onsite first aid/ medical centre, designated safety responsibilities for site personnel and regular safety meetings, and a work permit/ tagging system, etc. SRK reviewed the occupational health and safety plan in EMPs, Policy on Health, Safety and Wellbeing, Emergency Response Plan, and Health and Safety Management System, and concluded that the development of these plans complies with relevant Ghanaian requirements.

During SRK's site visit, it was observed that safety signs were in place and safety provisions and rules were also displayed within the work areas, moving machinery parts were appropriately protected and covered, guard railings were installed on all gantries, and proper PPE was provided and being used by the workers, such as hardhats, reflective safety vest, dust masks, earplugs, and steel-toed shoes.

The company has provided SRK with a historical OHS records for the project. No fatal accidents have occurred in the past three years. SRK recommends the company conduct safety record and develop incident analysis reports for the possible injuries in future. The proposed reports analysed the cause of injuries and identified measures to prevent a recurrence, which are in line with international recognised OHS accident monitoring practice.

16.4.7 Environmental Protection and Management Plan ("EPMP")

The purpose of an operational Environmental Protection and Management Plan ("EPMP") is to direct and coordinate the management of the project's environmental risks. The EPMP documents the establishment, resourcing, and implementation of the project's environmental management programs. The site environmental performance should be monitored and feedback from this monitoring could then be utilized to revise and streamline the implementation of the EPMP.

SRK notes that EMPs for surface and underground operations at Wassa Mine were developed for 2022-2024, and an Environmental Certificate was issued based on these EMPs. The EMPs include the policy, environmental impact and management, occupational health and safety plan, program for meeting environmental requirements, reclamation and decommissioning plan, and environmental

action plan with a monitoring program. In 2023, the monitoring of groundwater quality, surface water quality, air quality, noise and vibration, soil quality, and ARD testing, among other parameters, was carried out for the Wassa project.

16.4.8 Mine Closure Plan and Rehabilitation

Closure management is a key component of the overall business activities of GSWL. Closure management is integrated in all phases of mine life, from concept, exploration, and project development through to operations, closure, and post-closure activities. Closure aspects are integrated into project-level EIS and environmental permitting processes. Reclamation security agreements (RSAs) are negotiated with the EPA to establish mine closure completion requirements and to establish long-term closure costs. Closure costs are estimated using conventional reclamation sequences, expected agreed-upon post-mining land uses, and prevailing operating and contractor rates that incorporate in-country inflation costs. Based on the cost estimates, the company posts security with the EPA to help ensure that all closure costs are accounted for. The security is returned to the company once the site has been reclaimed to agreed-upon levels and there are no ongoing monitoring and maintenance requirements.

SRK reviewed a Decommissioning Plan and Associated Asset Retirement Obligations by Golder Associates, dated June 2015. The total rehabilitation and closure cost was estimated at approximately USD 27 million, covering the infrastructure, mining areas, general surface reclamation, water management, post closure activities for Wassa, Benso and Hwini-Butre concessions. However, this estimate did not include TSF 2 and the expansion project. Over the years, GSWL has rehabilitated an area of 417.28 hectares, while the total disturbed area on the mining lease was 989.88 hectares as of March 31 2024. The Environmental Permit and EIS require a reclamation bond to be posted within one year of commencing operations. The initial reclamation bond for Wassa was posted in November 2004 and has been updated periodically as new projects or changes are approved. SRK viewed a copy of the bank guarantee of USD 144,441,629 for the Wassa rehabilitation and reclamation dated 14 June 2023. Rehabilitation and closure of the existing operations, including the processing plant, TSFs, open pit excavations, waste dumps, and transport routes, are covered under the EMP, Reclamation Security Agreement, and the associated bank guarantee (bond). Two years before mine closure, the final rehabilitation and closure plan will be prepared and submitted to the EPA.

16.4.9 Social Aspects

The Wassa Mine is in the Wassa East District of the Western Region of Ghana, and is 62 km north of the district capital Daboase, 35 km northeast of Tarkwa and 40 km east of Bogoso. The District was separated from Wassa Fiase Mpohor District in 1988 and occupies an area of 1,880 km^2 (464,553 ha) of which 344 km^2 and 85,000 ha are used as cultivable land. The population of the District according to the 2021 population and housing census stands at 99,641 with 51,200 males and 48,441 females (GSS 2021). The project vicinity is predominantly rural and there are no large urban settlements within a 50 km radius by road. The villages of Akyempim, Akyempim New Site, and Kubekro are the closest communities to the Wassa mine. Historic gold workings are also known to occur in the lease area but are on a relatively small scale.

Based on the 2023 NI 43-101 Report, GSWL applies the requirements of the International Finance Corporation, Performance Standard 5 for land acquisition and involuntary resettlement. Where physical, social and/ or economic displacement is anticipated, if compensation is required for future operations this is done in accordance with applicable laws, and GSWL Farm Compensation and Land Acquisition procedures. Previous application of these processes has shown that resettlement can be achieved with positive outcomes, evidenced most recently with the resettlement of the Togbekrom community to Ateiku in 2013. Stakeholder meetings and consultations are periodically held with leadership of Awunakrom, Pretea Ridge and Togbekrom resettlement communities. The agenda basically focuses on post resettlement issues, socio-economic programmes and general concerns.

The EIS included a stakeholder consultation programme, which identified 10 key stakeholders, including government regulatory agencies, government agencies, traditional leadership and communities. GSWL cultivates strong relationships, foster peaceful coexistence, and highlight the value-adding potential of key stakeholders. This is achieved through a well-organized three-tier stakeholder engagement plan, allowing active participation in decision-making on community concerns and needs.

Most predominant socio-economic concern of stakeholders who live within local communities around the mine site is employment, where working at the mine is viewed as a preferred occupation. GSWL over the years have provided employment through direct employment and through Corporate Social Responsibility (CSR) projects such as GSOPP and Golden Star Skills Training and Employability Program (GSSTEP). GSWL implemented a variety of targeted initiatives to support community skills training, development, and employability.

In 2023, the company successfully implemented its CSR as planned and the strategies adopted included but not limited to the following:

- Continual adherence and improvement in Stakeholder Engagement planning and consultation procedures as well as managing the communities growing and diverse expectations;
- Strict adherence to the implementation and monitoring of the provisions in the social responsibility memorandum of understanding ("MoU");
- Foster harmonious relationships and coexistence by implementing effective communication, timely intervention, feedback on community complaints, and establishing practical mechanisms for conflict resolution and grievance management.
- Promote effective collaboration with development partners, including local authorities and organizations, in the planning and decision-making processes for the development of host communities.
- Embrace a pragmatic and feasible approach in overseeing, monitoring, controlling, and executing community projects and programs.
- Ensure continuous improvement, assessment, and monitoring of employment systems, resources, and development projects, ensuring equitable and fair distribution among beneficiary communities in accordance with the social responsibility MoU provisions.

In 2023, the company made meaningful socio-economic investments in the following thematic areas:

- US$480,105.52 for investment projects has been paid into the Golden Star Development Foundation (Wassa),
- US$390,050.05 from GSWL direct support to programmes such as road maintenance, alternative livelihood projects, infrastructure projects, water and sanitation, etc.
- Ghanaian Cedis ("GHS") 431,300.00 was donated to support various stakeholder activities.
- US$1,333.796.06 invested in the GSOPP (GSWL host communities).
- GHS 2,127,909.44 of partnership funding was attracted through program partnerships with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Breast Cancer Awareness Program collaborators.

In 2023 the direct GSWL related corporate social responsibility funding amounted to an investment of approximately US$463,198.00 in their host communities.

GSWL maintains a grievance mechanism enabling catchment communities to document concerns and grievances for investigation and/ or action. The mechanism is well publicized by GSWL and used actively by the community and other stakeholders. Details of registered grievances and resolutions are recorded and reported internally and to the regulators. SRK viewed a complaint register for 2023, and a total of 15 community complaints were recorded. Complaints range from flooding and incidents caused by blasting activities to environmental concerns and community and labour disputes. Eleven complaints have been resolved, with follow-up actions, and the rest were still under investigation.

In Ghana, small-scale artisanal mining is termed "galamsey". It is mostly unauthorized or illegal and is often associated with environmental degradation, safety hazards and general community and social concerns. The mine also encounters a challenge with galamsey, particularly in the Benso operational area. The Mine was attacked by galamsey miners from Subriso community on 16 March 2023, and this led to the destruction of company assets such as Tipper trucks, light vehicles, office buildings, and office equipment which led to a temporary suspension of operations. GSWL intensified its security monitoring activities to drive away galamsey miners that operated close to its mining areas. Several stakeholder meetings were conducted with opinion leaders and youths from both Wassa and HBB communities, especially those involved in galamsey, emphasizing the importance of refraining from such actions to preserve rehabilitated sites and the environment. Upon discussion with on-site personnel during the site visit, GSWL is of the opinion that galamsey around Wassa Mine has little potential to impact the current or future operations. Generally, the removal of unauthorized persons from the project area has posed no difficulty. SRK recommends implementing stronger security measures including surveillance and well-trained personnel and providing alternative livelihood programs such as vocational training and microfinance support to reduce dependency on illegal mining. Additionally, collaboration with local authorities for law enforcement and regulatory compliance is crucial. Strengthening CSR initiatives and involving communities in environmental rehabilitation projects can further foster cooperation and sustainable development.

17 Capital and Operating Costs

This section summarises the Capex and Opex.

The Wassa mine has been in operation since 2017, consisting of one open pit and one underground mine. The associated Capex for deeper development and sustainability are estimated by the mine. The Wassa mine has relative stable operation, allowing the forecasting of Opex based on historical records. All the Capex and Opex are provided in USD by the mine management.

17.1 Capital Expenditure

17.1.1 Summary

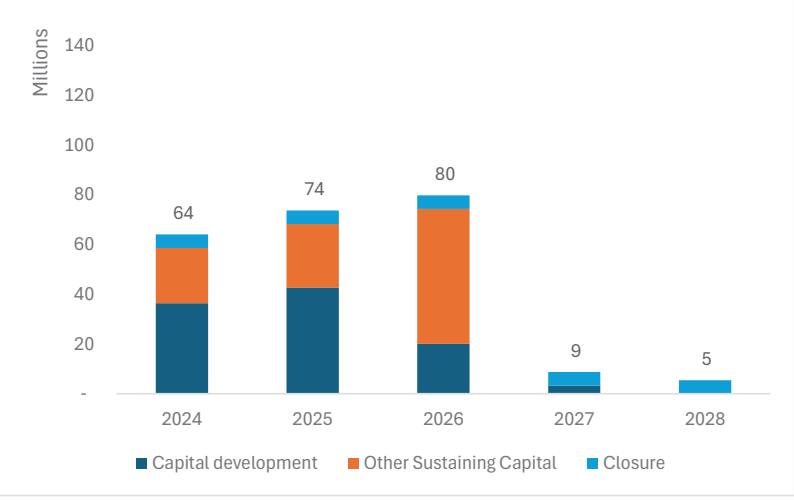
The Capex for Wassa over the LoM includes capitalised mine development, sustaining capex, and mine closure and reclamation. A summary of the Capex is presented in Table 17-1, with the Capex investment plan over the LoM detailed in Figure 17-1. The sunk and forecast capital expenditure over the LoM is shown in Table 17-2.

Table 17-1: Summary of Capex for Wassa Mine

Capex	Unit	LOM Total
Capital development	Million USD	103
Other Sustaining Capex	Million USD	102
Closure	Million USD	27
Total Capex	**Million USD**	**232**

Sources: GSR, summarized by SRK

Figure 17-1: Capex Investment Plan over LOM



Sources: SRK

Table 17-2: Consolidated Capital Expenditure (Sunk and Forecast) over LOM

Capex	Unit	LoM	2021	2022	2023	2024	2025	2026	2027	2028
Capital development	USD Million	102.5				36.5	42.7	20.0	3.3	-
Other capital expenses	USD Million	102.1				22.2	25.6	54.3	-	-
Closure	USD Million	27.2				5.4	5.4	5.4	5.4	5.4
Sunk Capex	USD Million	222.7	83.7	69.0	70.1					
Total Capex	USD Million	454.5	83.7	69.0	70.1	64.1	73.7	79.8	8.7	5.4

17.1.2 Capitalisation

Capitalisation involves treating expenditures on equipment and mine development for servicing the mine, for more than one year, as long-term assets, which is then depreciated or amortized over time rather than expensed immediately, Table 17-3 shows the capitalisation for the last three year.

Table 17-3: Capitalisation over the LoM

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Capitalisation	'000 USD	18,844	25,715	27,566

Sources: GSR, summarized by SRK

17.1.3 Sustaining Capex

The sustaining Capex for Wassa is categorized into two main areas: development and other sustaining capital expenditures, which include essential investments in mining, metallurgy, maintenance, and various support departments.

Development

For mine development that services the mine for more than one year, the assumed unit cost of development is US$3,620.03/ m. The development meter over the LoM is shown in Table 17-4.

Table 17-4: Capital Development Meters over the LoM

Development Meters	Unit	Total	2024	2025	2026	2027
Lateral capital development	m	26,013	8,994	11,067	5,123	828
Vertical capital development	m	2,307	1,079	733	414	82

Sources: GSR, summarized by SRK

Other Sustaining Capex

Other sustaining capex is summarised in Table 17-5. The sustaining Capex for Wassa Mine, excluding development, totals US$102 million. Key expenditures include US$82 million for mining, US$5.7 million for the Metallurgy Department, and US$3.2 million for Mine Maintenance. Additional costs are allocated to Human Resources, Environment & CSR, Health & Safety, Finance & IT, carryover projects, and exploration activities.

Table 17-5: Other Sustaining Capex over the LoM

Item	Unit	Total	2024	2025	2026
Mining (excl. dev)	'000 USD	82,066	16,742	16,967	48,358
Metallurgy Department Total	'000 USD	5,712	1,704	1,199	2,808
Mine Maintenance Department	'000 USD	3,180	548	595	2,037
Human Resources & Admin	'000 USD	1,296	134	1,162	-
Environment & CSR	'000 USD	202	-	202	-
Health & Safety	'000 USD	551	171	70	310
Finance, IT Supply & Projects	'000 USD	1,845	740	310	796
2023 Carry Over Projects	'000 USD	2,986	2,137	848	-
Exploration	'000 USD	4,256	38	4,218	-
Other Capex Total	'000 USD	102,092	22,213	25,571	54,308

Sources: GSR, summarized by SRK

17.1.4 Closure

Closure costs refer to the expenses incurred for safely shutting down and rehabilitating a mine site at the end of LOM. SRK reviewed a Decommissioning Plan by Golder Associates, dated June 2015. The total rehabilitation and closure cost was estimated at approximately USD 27 million, covering infrastructure, mining areas, general surface reclamation, water management, and post-closure activities for the Wassa, Benso, and Hwini Butre area.

Although this is not the final figure and is not recommended for use, it is the only available estimate currently. SRK will allocate the USD 27 million evenly over the LOM in the technical economic analysis.

17.2 Operating Cost

17.2.1 Summary

The operating costs are categorized into open pit mining, underground mining, processing, G&A. Table 17-6 shows the total cost and unit cost of each category.

The overall cost trends from 2022 to the 2024 Q1 actual and Q2 forecast indicate a dynamic shift in unit costs across various mining operations. The Total Cash Unit Cost has decreased from US$67.6 per tonne in 2022 to US$56.2 per tonne in the 2024 Q1 actual and Q2 forecast, reflecting a gradual reduction in overall expenses.

Table 17-6: Summary of Opex Historical & Forecasted for Wassa Mine

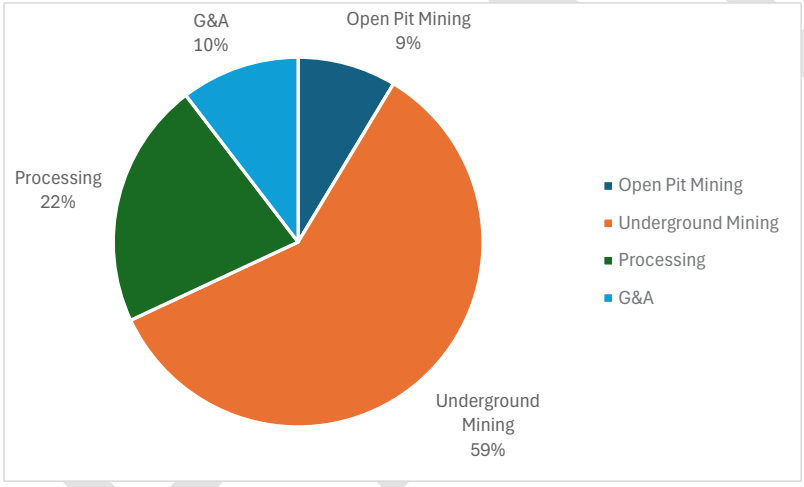
Item	Unit	2022	2023	2024 Q1 Actual	2024 Q1 Actual + Q2 Forecast	Weighted Average as Forecast
Open Pit Mining	USD/t TMM	4.7	6.5	6.8	7.4	6.2
Underground Mining	USD/t ROM	41.8	45.4	38.5	40.0	42.6
Processing	USD/t Feed	19.1	13.6	14.0	13.4	15.5

Item	Unit	2022	2023	2024 Q1 Actual	2024 Q1 Actual + Q2 Forecast	Weighted Average as Forecast
G&A	USD/t Feed	9.6	6.7	6.0	5.7	7.5
Total Cash Unit Cost	USD/t Feed	67.6	58.2	55.3	56.2	61.0
OP Mine TMM	kt	1,392	3,024	570	1,065	
UG Mine ROM	kt	1,816	1,701	560	1,148	
Plant Feed	kt	2,117	2,551	719	1,449	

Sources: GSR, summarized by SRK

Figure 17-2 shows that Underground Mining accounts for the largest share of total costs at 59%, followed by Processing at 22%. G&A expenses and Open Pit Mining make up 10% and 9% of the costs, respectively.

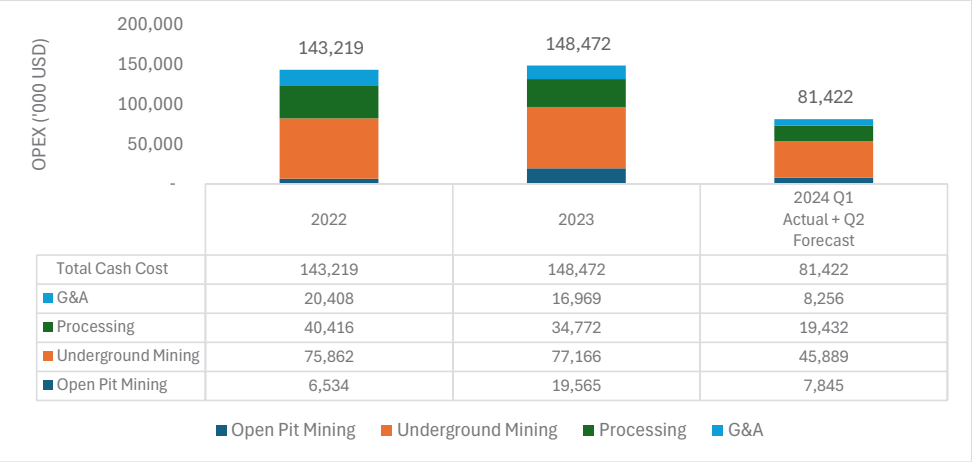
Figure 17-2: Pie Chat of Percentage for Wassa Mine Opex



Sources: GSR, summarized by SRK

Figure 17-3 illustrates the breakdown of Total Cash Costs by category for the years 2022, 2023, and the 2024 Q1 actual and Q2 forecast. Total Cash Costs increased from US$143.2 million in 2022 to US$148.5 million in 2023, before decreasing to US$81.4 million in 2024 Q1 actual and Q2 forecast, reflecting shifts in operational expenditures across these categories. The main reason for the declining opex is the increased allocation of capitalized opex and the rise in diamond drilling, which is logical due to the deeper development and in-fill drilling plan.

Figure 17-3: Operating Costs for historical three-year (in '000USD)



Sources: GSR, summarized by SRK

17.2.2 Open Pit Mining

The open-pit mining costs from 2022 to the first half of 2024, as illustrated in Table 17-7. Total costs increased from US$6.5 million in 2022 to US$19.6 million in 2023, before decreasing to US$7.8 million in the 2024 Q1 actual and Q2 forecast.

The unit cost per tonne moved was US$4.69 in 2022, US$6.47 in 2023, and US$7.37 in the 2024 Q1 actual and Q2 forecast.

Table 17-7: Breakdown of Open Pit Mining Cost

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Ancillary Equipment (Maint.)	'000 USD	83	-21	336
Drilling (Maint.)	'000 USD	-	-	-
Drilling (Ops.)	'000 USD	2,335	1,267	369
Geology (Ops.)	'000 USD	135	305	147
Hauling (Maint.)	'000 USD	77	-171	-48
Hauling (Ops.)	'000 USD	1,059	3,801	3
Loading (Maint.)	'000 USD	120	-253	-62
Loading (Ops)	'000 USD	810	11,317	5,101
Overheads (Maint.)	'000 USD	79	34	196
Overheads (Ops.)	'000 USD	1,688	2,946	1,651
Technical Services (Ops.)	'000 USD	147	313	152
Water Management (Ops.)	'000 USD	-	27	-
Open Pit Mining Cost	'000 USD	6,534	19,565	7,845
Ore Tonnes Mined	kt	350	693	301

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Waste Tonnes Mined	kt	1,042	2,331	764
Total Material Movement	kt	1,392	3,024	1,065
Unit Cost	US$/t	4.69	6.47	7.37

Sources: GSR, summarized by SRK

17.2.3 Underground Mining

The underground mining costs from 2022 to the first half of 2024, as shown in Table 17-8, show a steady level of expenditures with total costs of US$75.9 million in 2022, US$77.2 million in 2023, and US$45.9 million in the 2024 Q1 actual and Q2 forecast.

The unit cost per tonne was US$41.76 in 2022, US$45.38 in 2023, and US$39.96 in the 2024 Q1 actual and Q2 forecast. The main reason for the declining opex is the increased allocation of capitalized opex and the rise in diamond drilling, which is logical due to the deeper development and in-fill drilling plan.

For future cost estimation (Opex); the development cost will be calculated based on the meters of mined development, while the backfill cost will be calculated based on cubic meters (m^3) or tons, depending on the scheduling.

Table 17-8: Breakdown of Underground Mining Cost

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Ancillary Equipment (Maint.)	'000 USD	4,291	3,244	2,140
Backfill (Maint.)	'000 USD	516	417	183
Backfill (Ops.)	'000 USD	7,031	9,211	1,048
Blasting (Ops.)	'000 USD	6,023	7,337	3,663
Capitalised Opex Allocation	'000 USD	-18,844	-25,715	-27,566
Contract Development	'000 USD	-	-	8,469
Contract Production	'000 USD	-	-	10,124
Development Blasting (Maint.)	'000 USD	64	49	57
Development Drilling (Maint.)	'000 USD	5,057	5,099	3,377
Development Drilling (Ops.)	'000 USD	4,719	4,239	1,910
Development Overhead (Maint.)	'000 USD	461	366	196
Development Overhead (Ops.)	'000 USD	3,921	3,636	1,812
Diamond Drilling	'000 USD	3,495	9,790	6,801
Geology (Ops.)	'000 USD	2,470	3,040	1,982
Ground Support (Ops.)	'000 USD	5,507	5,011	1,941
Hauling (Maint.)	'000 USD	3,924	4,800	2,851
Hauling (Ops.)	'000 USD	7,196	5,384	3,333
Light Vehicles (Maint.)	'000 USD	963	987	504
Loading (Maint.)	'000 USD	6,700	6,555	4,319

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Loading (Ops.)	'000 USD	1,391	1,035	919
Mine Overheads (Ops.)	'000 USD	10,636	11,169	5,586
Overheads (Maint.)	'000 USD	6,380	6,468	3,416
Overheads (Ops.)	'000 USD	1,682	2,044	1,167
Power	'000 USD	3,350	3,998	2,457
Production Blasting (Maint.)	'000 USD	-	-	-
Production Drilling (Maint.)	'000 USD	1,863	2,143	1,417
Production Drilling (Ops.)	'000 USD	1,343	1,964	834
Production Overhead (Ops.)	'000 USD	1,965	1,283	719
Technical Services (Ops.)	'000 USD	2,603	2,733	1,597
Ventilation	'000 USD	588	670	446
Water Management (Ops.)	'000 USD	566	206	188
Grand Total	'000 USD	75,862	77,166	45,889
Ore Tonnes Mined	kt	1,816	1,701	1,148
Waste Tonnes Mined	kt	548	850	683
Total Material Movement	kt	2,365	2,551	1,832
Unit Cost	US$/t	41.76	45.38	39.96

Sources: GSR, summarized by SRK

Development

The assumed unit cost of development is US$3,620.03/ m. The development meter over the LoM is shown in Table 17-9.

Table 17-9: Operating Development Meters over the LoM

Development Meters	Unit	Total	2024	2025	2026	2027
Lateral operating development	18,541	7,394	5,372	3,945	1,635	194

Sources: GSR, summarized by SRK

Backfill

There is no detailed breakdown of backfill costs available, so SRK has used historical backfill costs to estimate future expenses. There are two types of backfill: rockfill and pastefill. For the 2024 Q1 actual and Q2 forecast, the estimated backfill cost is approximately US$1.07/t, with SRK aware that only rockfill was used, making the cost for rockfill US$1.07/t. In 2023, the backfill cost was US$5.66/t. Since there is no specified ratio between rockfill and pastefill, SRK assumes this to be the pastefill cost, which is considered reasonable based on industry benchmarks.

17.2.4 Processing

The processing costs from 2022 to 2024, as illustrated in Table 17-10. The total processing cost was US$40.4 million in 2022, US$34.8 million in 2023, and US$19.4 million in the 2024 Q1 actual and Q2 forecast.

The unit cost per tonne milled was US$19.09 in 2022, US$13.63 in 2023, and US$13.41 in the 2024 Q1 actual and Q2 forecast.

Table 17-10: Breakdown of Processing Cost

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Carbon In Leach (Maint.)	'000 USD	798	155	224
Carbon In Leach (Ops.)	'000 USD	6,070	5,352	3,240
Crushing (Maint.)	'000 USD	2,827	1,726	1,408
Crushing (Ops.)	'000 USD	3,463	3,309	1,516
Gold Recovery (Maint.)	'000 USD	28	16	8
Gold Recovery (Ops.)	'000 USD	2,465	2,158	1,216
Gravity and Acacia(Maint.)	'000 USD	116	55	99
Gravity and Acacia (Ops.)	'000 USD	209	156	60
Laboratory	'000 USD	1,359	1,321	635
Milling and Classification (Maint.)	'000 USD	1,213	889	592
Milling and Classification (Ops.)	'000 USD	8,397	8,356	4,556
Overheads (Maint.)	'000 USD	5,765	4,981	2,565
Overheads (Ops.)	'000 USD	6,118	5,481	2,776
Self Gen Power (Maint.)	'000 USD	146	77	83
Tailings Storage Facility (Maint.)	'000 USD	112	92	36
Tailings Storage Facility (Ops.)	'000 USD	894	396	172
Thickeners (Maint.)	'000 USD	107	17	101
Thickeners (Ops.)	'000 USD	157	196	99
Water treatment Facility (Maint.)	'000 USD	173	38	48
Processing cost	'000 USD	40,416	34,772	19,432
Ore tonnes milled	kt	2,117	2,551	1,449
Unit Cost	US$/t	19.09	13.63	13.41

Sources: GSR, summarized by SRK

17.2.5 G&A

The G&A costs from 2022 to the 2024 Q1 actual and Q2 forecast, as illustrated in Table 17-11, show the allocation of expenses across various administrative functions. The total G&A cost was US$20.4 million in 2022, US$16.7 million in 2023, and US$8.3 million in the 2024 Q1 actual and Q2 forecast.

The unit cost per tonne milled decreased from US$9.64 in 2022 to US$6.65 in 2023, and further to US$5.70 in the 2024 Q1 actual and Q2 forecast.

Table 17-11: Breakdown of G&A Cost

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Business Improvement	'000 USD	258	74	-
Camp and Housing	'000 USD	1,223	949	453

Item	Unit	2022	2023	2024 Q1 Actual + Q2 Forecast
Capital projects	'000 USD	697	636	9
Civil Work	'000 USD	666	523	215
Community relations - General	'000 USD	856	800	325
Environmental - Compliance	'000 USD	711	637	207
Environmental - General	'000 USD	1,645	957	536
Finance - General	'000 USD	3,467	2,891	1,760
GM Office	'000 USD	916	594	325
Health & Safety - Clinic	'000 USD	492	406	173
Health & Safety - ERT	'000 USD	0	-	-
Health & Safety - General	'000 USD	1,344	1,202	671
HR - General	'000 USD	1,533	1,234	670
Industrial Relations	'000 USD	335	227	137
Information technology - General	'000 USD	2,189	1,984	909
Land management	'000 USD	10	6	4
Light Vehicles	'000 USD	892	751	362
Maintenance - G&A	'000 USD	134	73	43
Procurement & Contract Management	'000 USD	771	767	385
Rehabilitation	'000 USD	-3	-	0
Rotational/Shift Transportation	'000 USD	445	513	220
Security - General	'000 USD	1,164	1,215	551
Supply Chain - Warehouse management	'000 USD	628	515	289
Water Supply	'000 USD	35	16	10
G&A Cost	'000 USD	20,408	16,969	8,256
Ore tonnes milled	kt	2,117	2,551	1,449
Unit Cost	US$/t	9.64	6.65	5.70

Sources: GSR, summarized by SRK

18 Economic Analysis

The economic analysis presented in this section is based purely on the results of the technical review provided above and some key assumptions and is provided for technical evaluation and Ore Reserve estimation purposes only.

The economic analysis was conducted using conventional Discounted Cash Flow ("DCF") techniques. The Net Present Value ("NPV") was determined from the project's cash flow using a 10% discount rate. It should be noted that SRK's DCF modelling and NPV calculation are carried out with the purpose of testing the "economic viability" of the Project which is required to a reasonable Ore Reserve reporting. Additionally, a sensitivity analysis was performed to examine the effects of changes in Capex, Opex, and gold price (revenue).

18.1 Principal Assumptions

18.1.1 General

The cash flow estimate includes only the revenue, costs, taxes, and other factors directly associated with the Project. The assumptions are as follows:

- The currency used for the Project is US dollars.
- Annual gross revenue is calculated by applying the estimated gold price and payables to the annual recovered metal for each operating year.
- The "nominal" values are applied. SRK does not consider future inflation of currency or cost fluctuations; the cost remains constant over the LoM without any adjustments are factored in.
- Financing is assumed to be on a 100% equity basis; no debt or related financing costs have been included in the technical economic analysis.
- Neither corporate obligations, financing costs, or corporate-level taxes are not considered.
- Sustaining capital for future exploration, which is aimed at discovering more Mineral Resources that is outside the Ore Reserves estimates, is not considered during this analysis, as the current project economic analysis has not employed any additional potential tonnage or grade.
- No salvage value has been included in the technical economic analysis.
- The reference date or effective date is 31 March 2024.

18.1.2 LOM Physical

The mine production and key technical inputs parameters are described in the previous section.

The summary of the key physical assumptions is presented in Table 18-1.

Table 18-1: LOM Physical Inputs for Economic Analysis

Item	Unit	LOM Total or Average
Open Pit		
Open Pit Ore Reserves	t	785,551
Open Pit Au Grade	g/t	0.96
Open Pit Capacity (average over LOM)	t	392,776
Underground		
Underground Ore Reserves	t	9,459,590
Underground Au Grade	g/t	2.20
Capacity (average over LOM)	t	1,891,918
Ore Reserves	t	10,245,142
Gold Grade	g/t	2.11
Life of Mine	yr	5
Recovery Rate	%	96%

Source: GSR, organized by SRK

18.1.3 Pricing Assumptions

Table 18-2 shows the price trend and long-term price for Gold from Deutsche Bank. A fixed gold price of US$2,050/oz is used in the technical economic analysis for the Wassa Mine.

Table 18-2: Gold Price Forecasts

Year	2021	2022	2023	2024	2025	2026	Long-term Price
Gold Price	1,800	1,798	1,940	2,025	2,100	2,141	2,050

Source: Deutsche Bank

18.1.4 Payability and Selling Costs

The gold payability for the Wassa Mine is estimated to be 99.1%. Selling cost including refining cost, transport cost and shipment fee are listed as below:

- Refining Cost: US$ 0.15/oz gold product
- Transport Cost: US$ 0.25/oz gold product
- Shipment Fee: US$ 2.86/oz gold product (above 200 kg)

18.1.5 Tax and Royalties

The income tax rate in Ghana is 35%. Royalties include both government and gold royalties. The government royalty is set at US$93 per ounce, while the gold royalty rate is 8.3%.

18.1.6 Depreciation and Amortization

The capital and sustaining expenditures, including development costs, have been depreciated on a unit production basis over the LOM. The assumed depreciation follows the straight-line method over a period of 5 years.

18.1.7 Working Capital

Working capital is the capital needed to fund operations before revenue is received from the finished product. It was calculated as 30% of the operating cost for the initial year. Over the project's life, the working capital nets to zero.

18.2 DCF Projection

The key economic results from the technical economic model is shown in Table 18-3.

Table 18-3: LOM Profit, Loss & Cash Flow Forecasting

Item	Unit	LOM Total	Annually Average over LOM
Revenue (incl. VAT)	Million USD	1,353	271
Opex	Million USD	(698)	(140)
Closure	Million USD	(27)	(5)
Royalties, Charges & VAT Payable	Million USD	(176)	(35)
EBITDA	**Million USD**	**452**	**90**
Depreciation	Million USD	(159)	(32)
EBIT	Million USD	293	59
Income Tax	Million USD	(110)	(22)
Net Profit	**Million USD**	**182**	**36**
Add back Depreciation	Million USD	159	32
Less Sustaining Capex	Million USD	(205)	(41)
Free Cash Flow	**Million USD**	**137**	**27**

Source: SRK

The forecasts for the Project shows a positive economic prospect. At a discount rate of 10%, the NPV of the Project is USD 94.38 million. The sensitivity of NPV against discount rate is presented in Table 18-4.

Table 18-4: Wassa Mine NPV versus Discount Rate

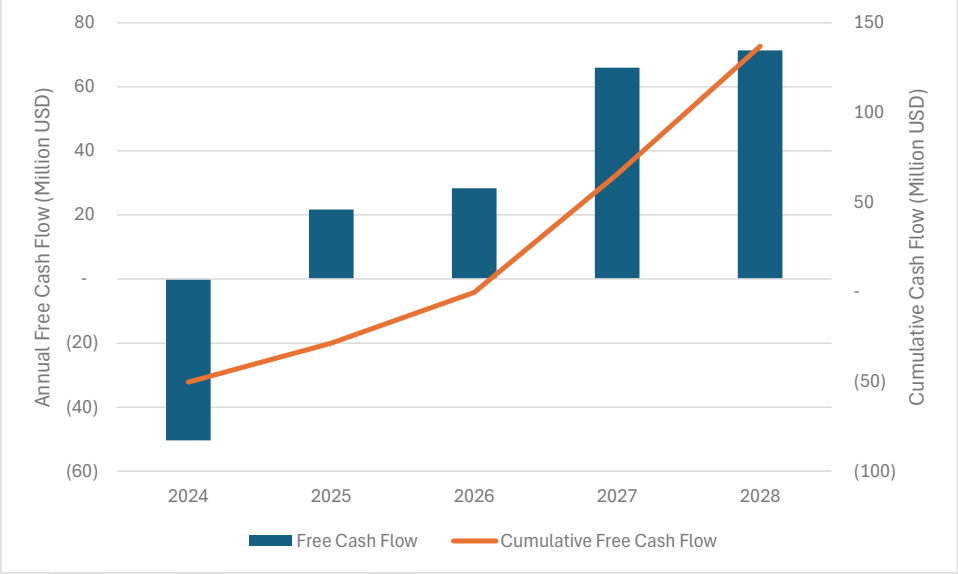
Discount Rate (%)	NPV (million USD)
5%	113.60
6%	109.46
7%	105.47
8%	101.64
9%	97.94
10%	**94.38**

Discount Rate (%)	NPV (million USD)
11%	90.95
12%	87.64
13%	84.44
14%	81.36
15%	78.39

Source: SRK

The annual cash flows are presented graphically in Figure 18-1 and in tabular form in Table 18-5.

Figure 18-1: Cash Flow Profile



Source: SRK

Table 18-5: LOM Production and Cash Flow Forecast

Wassa	Unit	LOM	2024	2025	2026	2027	2028
Physicals							
Processing							
Recovery	%		96%	96%	96%	96%	96%
Gold Produced	koz	666	152	193	178	112	31
Gold Produced	kg	20,713	4,739	6,000	5,533	3,474	967
Au Price	US$/oz	2050	2050	2050	2050	2050	2050
Revenue							
Payable	%		0.991	0.991	0.991	0.991	0.991
Payable	koz	660	151	191	176	111	31
Revenue	US$ '000	1,352,857	309,504	391,909	361,421	226,879	63,144
Selling cost							
Refining cost	US$ '000	99	23	29	26	17	5
Transport cost	US$ '000	165	38	48	44	28	8
Shipment fee	US$ '000	1,889	432	547	505	317	88
Selling cost	US$ '000	2,153	492	624	575	361	100
Royalties							
Gov. royalty rate	US$/oz		93	93	93	93	93
Gov. royalty cost	US$ '000	61,374	14,041	17,779	16,396	10,293	2,865
Royal Gold Royalty rate	%		8%	8%	8%	8%	8%
Royal Gold Royalty cost	US$ '000	112,287	25,689	32,528	29,998	18,831	5,241
Royalties	US$ '000	173,661	39,730	50,308	46,394	29,124	8,106
Capex							
Capital development	US$ '000	102,520	36,464	42,717	20,044	3,295	-
Other capital expenditures	US$ '000	102,092	22,213	25,571	54,308	-	-
Contingency	US$ '000	-	-	-	-	-	-
Capex	US$ '000	204,611	58,676	68,288	74,352	3,295	-
Closure	US$ '000	27,174	5,435	5,435	5,435	5,435	5,435
Depreciation	US$ '000	159,236	11,735	25,393	40,263	40,922	40,922
Working Capital	US$ '000		52,833	-	-	-	(52,833)
Opex							
UG Mining							
LHOS	US$ '000	333,757	73,559	97,055	88,802	56,954	17,388
Development	US$ '000	67,118	26,766	19,448	14,282	5,920	701
Backfill - RF	US$ '000	1,927	232	635	385	366	309
Backfill - Cement	US$ '000	39,678	8,903	10,752	11,597	7,134	1,292
UG Mining Total	US$ '000	442,480	109,460	127,890	115,066	70,374	19,690
OP Mining	US$ '000	20,652	11,335	9,316	-	-	-
Processing	US$ '000	158,481	37,317	49,638	38,933	24,970	7,623
G&A	US$ '000	76,431	17,997	23,939	18,777	12,043	3,677
Opex	US$ '000	698,044	176,109	210,783	172,776	107,386	30,990
Taxation							
Revenue	US$ '000	1,352,857	309,504	391,909	361,421	226,879	63,144
Selling cost	US$ '000	2,153	492	624	575	361	100
Opex	US$ '000	698,044	176,109	210,783	172,776	107,386	30,990
Closure	US$ '000	27,174	5,435	5,435	5,435	5,435	5,435
Royalties	US$ '000	173,661	39,730	50,308	46,394	29,124	8,106
Depreciation	US$ '000	159,236	11,735	25,393	40,263	40,922	40,922
Taxation	US$ '000	110,249	26,601	34,778	33,592	15,278	-
Income Statement							
Revenue	US$ '000	1,352,857	309,504	391,909	361,421	226,879	63,144
Selling Cost	US$ '000	2,153	492	624	575	361	100
Opex	US$ '000	698,044	176,109	210,783	172,776	107,386	30,990
Closure	US$ '000	27,174	5,435	5,435	5,435	5,435	5,435
Royalties	US$ '000	173,661	39,730	50,308	46,394	29,124	8,106
EBITDA	US$ '000	451,825	87,738	124,760	136,241	84,573	18,514
Depreciation	US$ '000	159,236	11,735	25,393	40,263	40,922	40,922
EBIT	US$ '000	292,590	76,002	99,367	95,978	43,651	(22,409)
Tax	US$ '000	110,249	26,601	34,778	33,592	15,278	-
Net Income	US$ '000	182,340	49,401	64,588	62,386	28,373	(22,409)
Cash Flow							
Cash IN	US$ '000		309,504	391,909	361,421	226,879	63,144
Cash OUT	US$ '000		359,876	370,216	333,124	160,879	(8,202)
Free Cash Flow	US$ '000	136,965	(50,372)	21,694	28,297	66,000	71,346
Cumulative Free Cash Flow	US$ '000		(50,372)	(28,679)	(382)	65,618	136,965

Source: SRK

18.3 Sensitivity Analysis

SRK conducted a single-factor sensitivity analysis for the Project to determine which factors most significantly impact its economics when considered independently. The analysis focused on gold price, Capex, and Opex, each tested within a ±30% range.

The results showed that the Project is most sensitive to changes in gold price. Results of the sensitivity tests are presented in Table 18-6 and Figure 18-2.

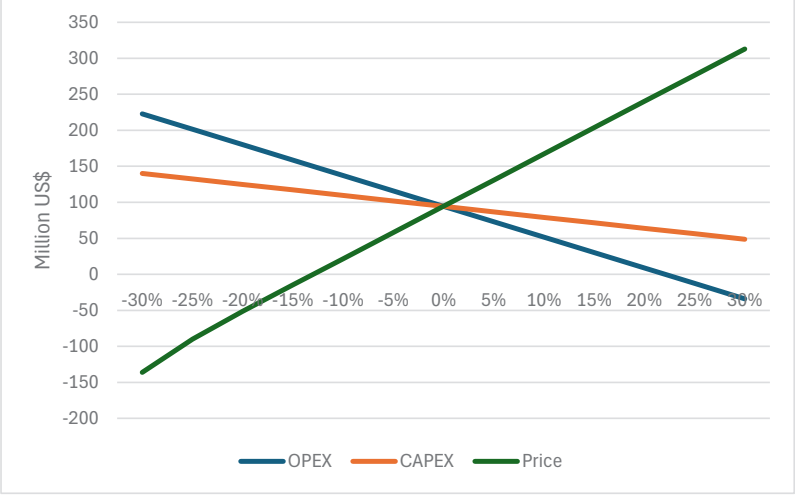
The break-even gold prices occur when the gold price drops by approximately 12.95%, resulting in an NPV of 0 at a 10% discount rate.

Table 18-6: Sensitivity Analysis Result

Variance	Opex	Capex	Price
	NPV @ 10% Annual Discount Rate (US$M)		
-30%	223	140	-136
-25%	201	132	-90
-20%	180	125	-51
-15%	159	117	-15
-10%	137	110	22
-5%	116	102	58
0%	94	94	94
5%	73	87	131
10%	52	79	167
15%	30	72	204
20%	9	64	240
25%	-13	56	277
30%	-34	49	313

Source: SRK

Figure 18-2: Sensitivity Spider Chart



Source: SRK

18.4 Wassa Ore Reserves and Upside Plan

The Wassa Mine has provided the Ore Reserves and upside plan, based on the Wassa Design. During discussions with the Wassa Mine, SRK understood that the Updated Wassa Design includes Residual material in the upper area and Material in the lower area. However, due to the time constraints in preparing and reviewing the Updated Wassa Design, SRK considers this an opportunity for potential economic material but does not classify it as an Ore Reserve, as detailed in Chapter 12.2.9. This section is intended to demonstrate the economic viability of the Ore Reserves and upside plan (Updated Wassa Design).

A summary of the Capex is presented in Table 18-7, with the Capex investment plan over the LoM detailed below.

Table 18-7: Summary of Capex for Wassa Mine (Ore Reserves and Upside Plan)

Capex	Unit	LOM Total
Capital development	Million USD	114
Other Sustaining Capex	Million USD	102
Closure	Million USD	27
Total Capex	**Million USD**	**243**

Sources: GSR, summarized by SRK

The operating costs are categorized into open pit mining, underground mining, hauling, processing, and G&A. Table 18-8 presents the unit cost for each category.

An additional cost for hauling material from the lower area has been included in the Ore Reserves and upside plan. This additional haulage cost is calculated at US$0.975/t, based on an average additional haulage distance of 650 m and a contractor-estimated haulage cost of US$1.5/t-km.

Table 18-8: Summary of Opex for Wassa Mine (Ore Reserves and Upside Plan)

Item	Unit	Weighted Average as Forecast
Open Pit Mining	USD/t TMM	6.2
Underground Mining	USD/t ROM	42.6
Hauling (Lower Area)	USD/t ROM in Lower Area	0.98
Processing	USD/t Feed	15.5
G&A	USD/t Feed	7.5

Sources: GSR, summarized by SRK

The principal assumptions outlined in Chapter 18.1, along with the above Capex and Opex, resulting in a positive NPV, indicating that the Ore Reserves and upside plan is economically minable with both scenarios.

At a discount rate of 10%, the NPV of the Project is USD 107 million.

The sensitivity of NPV against discount rate is presented in Table 18-9.

Table 18-9: Wassa Mine NPV versus Discount Rate

Discount Rate (%)	NPV (Million USD)
5%	129
6%	124
7%	119
8%	115
9%	111
10%	**107**
11%	103
12%	99
13%	96
14%	92
15%	89

Source: SRK

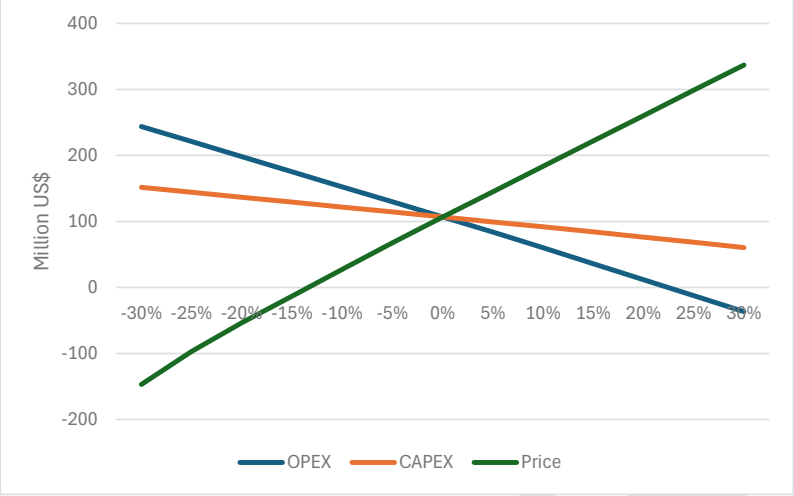
SRK conducted a single-factor sensitivity analysis for the Project to determine which factors most significantly impact its economics when considered independently. The analysis focused on gold price, Capex, and Opex, each tested within a ±30% range. The result showed that the Project is most sensitive to changes in gold price. Results of the sensitivity tests are presented in Table 18-10 and Figure 18-3. The break-even gold prices occur when the gold price drops by approximately 13.39%, resulting in an NPV of USD 0 at a 10% discount rate.

Table 18-10: Sensitivity Analysis Result (Ore Reserves and Upside Plan)

Variance	Opex	Capex	Price
	NPV @ 10% Annual Discount Rate (US$M)		
-30%	244	152	-147
-25%	221	144	-97
-20%	198	137	-54
-15%	175	129	-13
-10%	152	122	27
-5%	130	114	68
0%	107	107	107
5%	84	99	145
10%	60	92	184
15%	36	84	222
20%	12	76	260
25%	-12	68	299
30%	-37	60	337

Source: SRK

Figure 18-3: Sensitivity Spider Chart (Ore Reserves and Upside Plan)



Source: SRK

19 Risk Analysis

Mining is a relatively high-risk industry. In general, the risk may be expected to decrease from exploration, development, through to production stage. The Wassa Gold Project is a production project. Risks exist in different areas. SRK considered various technical aspects which may affect sustainable operation and future cash flow of the Project, and conducted a qualitative risk analysis which has been summarised in Table 19-1. In this risk analysis, various risk sources/ issues have been assessed for Likelihood and Consequence, and then a Risk Rating has been assigned. The qualitative risk analysis uses the following definitions for likelihood and consequence.

The Likelihood of a risk is considered within a certain time frame, e.g. 5 years, as:

- **Likely:** will probably occur;
- **Possible:** may occur; and
- **Unlikely:** unlikely to occur.

The Consequence of a risk is classified into:

- **Major Consequence:** the factor poses an immediate danger to the Project, if uncorrected, will have a material effect on the Project cash flow and performance and could lead a project failure;
- **Moderate Consequence:** the factor, if uncorrected, will have a significant effect on the Project cash flow and performance; and
- **Minor Consequence:** the factor, if uncorrected, will have little or no effect on the Project cash flow and performance.

The overall risk assessment combines the Likelihood and Consequence of a risk and be classified as **Low** (unlikely and possible minor risks and unlikely moderate risk)**, Medium** (likely minor, possible moderate and unlikely major risks), and **High** (likely moderate and major and possible major risks).

Below is the qualitative risk analysis summary table of the Wassa Gold Project.

Table 19-1: Project Risk Assessment of the Wassa Gold Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Overestimate of the Mineral Resource Grade	Possible	Moderate	Medium
Unknown Significant Geological Structure	Unlikely	Moderate	Low
Unexpected Groundwater Ingress	Possible	Moderate	Medium
Mining			
Subsidence and Ground Stability	Unlikely	Moderate	Low
Hydrogeological Modeling Uncertainties	Possible	Minor	Low
Significant Production Shortfalls	Unlikely	Major	Medium
Lack of Significant Ore Reserves	Unlikely	Major	Medium
Ore Processing			
Significantly Lower Recovery	Unlikely	Moderate	Low
Higher Processing Cost	Possible	Moderate	Medium

Risk Source/Issue	Likelihood	Consequence	Overall
Poor Plant Reliability	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delays	Unlikely	Moderate	Low
Capex and Opex Increases	Possible	Moderate	Medium
Higher Mine Closure Liability	Possible	Moderate	Medium
Environmental, Social and Governance			
Water Management	Possible	Moderate	Medium
Waste Rock and TSF Management	Possible	Moderate	Medium
Hazardous Materials Management	Unlikely	Moderate	Low
Social Licensee to Operate	Possible	Moderate	Medium
Infrastructure			
Poor TSF Management	Unlikely	Moderate	Low
Shortfall of Water Supply	Possible	Moderate	Medium
Shortfall of Power Supply	Possible	Moderate	Medium
Poor Condition of the Site Road	Possible	Minor	Low

The Wassa Project is an operating project with constant open pit and open pit production. The geology, mining methods and metallurgical flowsheet have been partly verified and proved by historical operation. Overall ratings of technical risks of the Project are low and some medium risks exist in different aspects. The risks and recommended management measures are discussed below.

- The geological risks relate to the uncertainty of underground hydrogeology associated with local geological structures. SRK recommends to maintaining and enhancing the geological exploration, such as mapping the underground tunnels, especially for faults and fractures, and monitoring the underground water discharges.
- The geological risks also related to the grade estimation of underground Mineral Resources. SRK noted there are abundant Inferred Mineral Resources for the underground mine and further exploration potential, and the current Inferred Mineral Resources in deeper zones have been estimated on primarily drill core interceptions with sparse distance so there is possibility of underestimate or overestimate. SRK recommends continuous exploration to be carried out for the upgrade the underground Mineral Resources.
- The risk in relation to mining could be possible poor planning, as it is an underground mine with a relatively high production rate. Consequently, possible risk will result to production shortfall or Ore Reserve overstatement. SRK recommends carrying out in-depth engineering studies associate to LoM planning and the use of professional mine planning software. Professional services may be sourced and retained, if needed.
- The risk in relation to ore processing and metallurgy could be the possibility of high operating cost, as the current production is transitioning from underground production solely. Proper management in grade control and planning will help reduce operating costs.
- The measures and practices to manage environmental risks relating to surface water and groundwater may include separate drainage systems for production wastewater, domestic sewage, and stormwater systems; storage of hazardous materials in a dedicated area could be planned to control the risk of hazardous materials pollution. The environmental risk of land disturbances could be controlled by limiting the waste rock storage and other disturbances; scrap iron and other industrial waste collection and recycling activity may control the risks resulting from waste generation. SRK notes a conceptual closure plan should be updated with ceasing

open pit production and further underground operation. TSF management associates to social responsibility, and should be taken into account.

The risks in relation to capital and operating costs include underestimates of project costs. Proper management and detailed mine scheduling may help the underground development of the Project in a proposed schedule. SRK recommends updating or adjusting the project's costs estimation from time to time according to production data in the future.It is SRK's opinion that the risks identified above are generally under control and not likely to develop into higher level of risks, as noted the Company and Wassa Project team has tracked record in production and risk management.

20 Conclusions and Recommendations

20.1 Conclusions

20.1.1 Geology and Exploration

- The Wassa deposit can be classified as an Eoeburnean folded vein system and is the only such deposit recognised to date within the Ashanti belt.
- The core drilling, geological logging etc. are implemented to a standard ensuring that the gathered data and information adequately underpin the objectives of subsequent geological modelling and Mineral Resources estimations.
- The procedures for sampling, preparation, analysis, and QA/QC are following the industry standards. SRK considers that they are acceptable for Mineral Resources estimations.

20.1.2 Mineral Resources Estimation

The Mineral Resources have been prepared in accordance with the JORC Code guidelines. Mining is assumed by open pit methods at DMH, I Zone and Chichiwelli, and underground methods at Wassa (242 and B Shoot) and Hwini Butre (FB/ADK).

The Mineral Resources have a RPEEE, with estimates constrained as follows:

- Open Pit: constrained by open pit shell and cut-off grade.
- Underground (FB/ADK): constrained by cut-off grade.
- Underground (242 and B Shoot): constrained by the MSO.

As of 31 March 2024, the Mineral Resources are estimated as:

- Measured and Indicated Mineral Resource: 17.70 Mt at 3.03 g/t, containing 1,724 Koz gold metal.
- Inferred Mineral Resources: 61.20 Mt at 3.37 g/t, containing 6,624 Koz gold metal.

20.1.3 Metallurgical Testing and Recovery Method

- Metallurgical tests were carried out before and after the construction of the processing plant in 2004. Both oxide and fresh ores have negligible preg-robbing effect and are amenable to CIL process. The gold recovery of Gravity-CIL process is as high as 90% to 95%.
- The capacity of the processing plant is 2.7 Mtpa. A traditional Crushing-Milling-CIL process with assistance of Gravity-Acacia operation in milling circuit is applied. The plant is well managed and achieved good historical performance. The gold recovery is 95.3% to 97.1% with gold production (in gold doré bars) of 4.84 to 5.31 tons per year.

20.1.4 Infrastructure

- The rehabilitation of TSF 1 is complete and is operated by the GSOPP for palm oil trees. The construction and management of TSF 2 is conducted properly. The planed extension of TSF 2 can meet the required capacity for tailings storage.
- The current two electricity resources (Ghanian grid power and mine generated) are sufficient for operations and domestic needs. If the solar system is implemented, it could significantly reduce power costs for offices and domestic use.
- The water balance is carefully managed. The facilities of backwater, surface water and underground water can fully support the operations of mining and processing.

20.2 Recommendations

SRK has made a number of recommendations during the review and/or site visits which have been discussed among SRK consultants and client staff. Key recommendations include:

- The large Inferred Mineral Resources needs a suitable drilling program to upgrade to at least Indicated Mineral Resource category.
- Improve the quality of grade control model and incorporate it into the Mineral Resource/ Ore Reserve model.
- Exploration potential and opportunities to be further analyzed.
- Improve underground studies to assure the Ore Reserves stated.
- Further test works on the deep underground veins may be needed to assure the processing procedures and laboratory protocols being used are appropriate and suitable..
- It is a feasible plan for using renewable energy such as solar to replace the electricity used in offices and residential facilities in the mine camp.

21 References

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Closure

This report, Independent Competent Person's Report for Wassa Gold Mine, Akyempim, Western Region, Ghana, was prepared by

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All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

and reviewed by

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Responsible for Peer Review

Appendix A Table 1 (JORC)

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Diamond Drill ("DD") samples were collected with maximum 1.2 m and minimum 0.3 lengths, usually 1m lengths. • Reverse Circulation drilling ("RC") samples were collected every 1 m. Where DD holes have been pre-collared using RC, the individual 1 m RC samples were combined to produce 3 m composites • Half core taken for DD samples. • Sub-sampling of RC samples was carried out using a Jones Riffle splitter. • Sample preparation on site is restricted to core logging and cutting, or RC and Rotary Air Blast ("RAB") sample splitting. • Industry standards have been undertaken for both DD and RC samples. • Wassa site laboratory was used as the primary laboratory for 3 m composites and grade control RC samples from July 2007 onwards. • Transworld Laboratories was the primary laboratory until July 2007. • SGS (Tarkwa) was used for core samples from July 2007 to August 2017. • Core samples have been sent to Intertek (Tarkwa) since 2017. • GSR changed the assay procedure from the 50 g fire assay method to 1 kg bulk leach extractable gold ("BLEG") assay because a component of coarse gold was present in the samples. • Atomic absorption spectroscopy (AAS) for gold grade determination.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• Drilling is carried out by a combination of DD, RC) and RAB techniques. • Most of the drilling has been conducted by GSR, although there are some holes completed by previous concession owners by SGL (Wassa) or SJR (Hwini Butre and Benso). • RC and DD drilling was conducted with a GSR geologist on site to align the drill rig and check the drill head dip and azimuth. • Downhole surveying was conducted using a single shot camera, for RC and DD holes at the bottom of holes exceeding 30 m depths and then taken progressively every 30 m up hole. • For Wassa, the deeper holes, often exceeding 1,000 m, are drilled from surface using HQ (63.5mm) sized core and this initial hole (referred to as the "mother" hole) is drilled to the depth where the first directional hole would be started. The directional hole (or "daughter" hole) is drilled

Criteria	Explanation	Commentary
		using a smaller core size, NQ (47.6 mm) and is deviated from the mother hole initially using a casing wedge which is oriented in the direction of the mineralised target. • All drillhole collars were surveyed using a Nikon Total Station (DTM-332) or Sokkia Total Station by a Golden Star (Wassa) surveyor. • Wassa UG holes were drilled using HQ, NQ or NQ2 (50.6 mm) core size. Downhole surveying was conducted using a Reflex multi-shot downhole surveying tool. Drill hole collar locations were captured by the underground mine surveying team.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Sample recovery is good across all deposits drilled to date. • There was no relationship between sample recovery and grade.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant intersections logged.	• All borehole cores were logged by geologists.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Half core taken for DD samples. • Sub-sampling of RC samples was carried out using a Jones Riffle splitter. • GSR has a standard approach to drilling and sampling on all mining leases and prospecting licenses. • Sampling is typically carried out along the entire mineralised drilled length. • Sample preparation is to industry standard involving drying, crushing and pulverizing of the entire sample • Sample sizes are considered appropriate. • Sample weights were sufficient for the mineralised materials.

Criteria	Explanation	Commentary
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• Sample assays have been performed at the Wassa Site Laboratory (WSL), SGS Tarkwa or Intertek Minerals Ltd (formerly named Transworld Ltd). • The sample preparation and analytical processes at the WSL, Intertek, and SGS differ slightly. • AAS for gold grade determination. • GSR changed the assay procedure from the 50 g fire assay method to 1 kg BLEG assay because a component of coarse gold was present in the samples. • GSR QA/QC program includes inserting blanks, Certified Reference Materials (CRMs), and pulp or coarse reject duplicates into sample batches, before sample submission to the lab.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• Analytical data is also routinely checked for consistency by GSR. • SRK has obtained and reviewed the QA/QC results produced by GSR. • SRK is of opinion that the QA/QC samples' performance are of industrial standard, which provides sufficient confidence for the mineral resource estimation.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All drillhole collars were surveyed using a Nikon Total Station (DTM-332) or Sokkia Total Station by a Golden Star (Wassa) surveyor. • Wassa UG drill hole collar locations were captured by the underground mine surveying team.
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• For Wassa, the final drilling density for classification as Measured Mineral Resource is designed to be 15 m along strike and 13 m down dip, or tighter. • For the 242 I Zone, DMH, blocks in the areas with drill hole spacing not more than 15m were classified as Measured Mineral Resources. • Composites were applied.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• Drill orientation varies by location within the deposit. • Drilling orientation is not considered to have introduced any sampling bias. • No orientation-based sampling bias has been identified.
Sample security	• The measures taken to ensure sample security.	• Samples are trucked by road to the laboratories in Tarkwa. • As the samples are loaded, they are checked, and the sample numbers are

Criteria	Explanation	Commentary
		validated. The sample dispatch forms are signed off by the driver and a company representative. The sample dispatch dates are recorded in the sample database as well as the date when results are received.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• As part of the Mineral Resource estimation, SRK conducted a review of sampling methods and data and determined that the database was of adequate quality to support the Mineral Resource estimation.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• GSR possesses three mining licenses, Wassa, Hwini-Butre and Benso. • GSR possesses four prospecting licenses, Benso, Manso 1, Dwaben and Manso 2. • Wassa mining license was current granted on 26 January 2022, and will be expire on of 25 January 2047, with an area of 63 km^2. • Hwini-Butre and Benso mining license were current granted on 25 August 2020, with areas of 43 km^2 and 19.45 km^2 respectively. • Manso 1 and Manso 2 prospecting licenses were current granted on 3 April 2022, with areas of 101.57 km^2 and 23.41 km^2 respectively. • Benso and Dwaben licenses are renewing and waiting for the approval of Minister of Lands and Natural Resources, Ghana.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	**Wassa** • The Wassa area has experienced local small-scale and colonial mining activity since the beginning of the 20th century with numerous small pits and adits evident. • From 1988, the property was operated as a small-scale mining operation with a gravity gold recovery circuit by WMRL, a Ghanaian company. • Exploration drilling commenced in February 1994 and by March 1997 58,709 m of drilling had been completed. • First ore was mined from the open pit in October 1998. **Hwini Butre, Benso and Chichiwelli** • Early European reports indicate the Dabokrom area, around Hwini Butre, may have been a major source for gold sold to Portuguese explorers when they first arrived in Ghana in the late 1400's. • The Dabokrom concession was acquired by BD Goldfields (BDG) during the 1980's who invited Danish company Lutz Resources Limited to carry out preliminary exploration on the property. • SJR began exploring the concession in February 1995 which represented the first sustained exploration program on the concession.

Criteria	Explanation	Commentary
		• Reconnaissance work at Chichiwelli, Subriso, Denerawah and Amantin was conducted by BHP Billiton from 1989-92, on what is now the Benso concession. • Canadian company Fairstar Exploration Limited took over the Benso concession in 1995 and carried out extensive work, particularly at Subriso and Amantin. • From early 2002 to about mid-2004, SJR focused mainly on the Subriso area where substantial mineralisation was outlined at two prospects, Subriso East and West.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Wassa deposit is located on the eastern flank of the northeast trending Ashanti Belt, a Paleoproterozoic greenstone belt which was formed and deformed, along with the dividing Birimian and Tarkwaian sedimentary basins during the Eoeburnean and Eburnean orogeny. The Wassa mineralisation consists of greenstone-hosted, low sulphide hydrothermal deposits where gold mineralisation occurs within folded quartz-carbonate veins. The Wassa deposit can therefore be classified as an Eoeburnean folded vein system and is the only such deposit recognised to date within the Ashanti belt. • The Hwini Butre deposits can be characterized as mafic intrusive hosted, orogenic shear zones. The deposits are hosted within diorite and granodiorite intrusive rocks of the Mpohor complex. The Father Brown deposit is characterized by well-developed fault-filled quartz veins. • The Benso deposits can also be characterized as mafic intrusive hosted, orogenic shear zones deposits, which are hosted by Birimian metavolcanics into which coarse plagioclase porphyry units have intruded and are generally conformable with the volcaniclastic units. • The Chichiwelli deposits can also be characterized as mafic intrusive hosted, orogenic shear zones, the deposits are hosted within diorite and granodiorite intrusive rocks. The mineralisation zones at Chichiwelli are similar to those observed at Benso, with the mineralised hosting structures generally dipping to the east.

Criteria	Explanation	Commentary
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • Hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• Surveys are conducted on drill hole collars (by total station) and downhole (by either multi-shot downhole camera, or gyro instrument for deeper holes). • For B Shoot, the Mineral Resource database includes 3,755 DD holes and 485 RC holes. • For 242, the Mineral Resource database includes 190 DD holes and 4,411 (GC)RC holes. • For I Zone, the Mineral Resource database includes 21 DD holes and 233 (GC)RC holes. • For FB/ADK, the Mineral Resource database includes 435 DD holes and 3,301 (GC)RC holes. • For Chichiwelli, the Mineral Resource database includes 23 DD holes and 483 RC holes. • All information of boreholes were collected, including collar, elevation, survey, depth, weathering data, specific gravity/ density, lithology etc.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Exploration data is reported as the average sample grade. Top cutting was used report the exploration results • No such aggregate intercepts short lengths of high-grade results or longer lengths of low-grade results is presented. • No metal equivalent values have been used.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• Mineralisation intercept lengths were reported. • Drill dip varies by location within the deposit.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Appropriate maps and typical sections were reported in this report.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high	• Reporting was fully representative of the data collected at this stage.

Criteria	Explanation	Commentary
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• No additional information was provided.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further drilling program is recommended due to Wassa's large portion of Inferred Mineral Resources.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Digitalized Mineral Resource databases were provided to SRK, and SRK conducted crossing-checking against logging data and typical interpretation. All relevant data was imported to Leapfrog™, and validation routines were run to confirm validity of all data. • Checks for holes without samples. • Checks for duplicate samples. • Checks and adjusts the missing or wrong intervals.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Four site visits were carried out by SRK with assistance from Golden Star personnel during preparation of the Report. • 7 to 10 December 2022, by geologist, geotechnical engineer, processing engineer and environment scientist. • 10 to 14 January 2023, by mining engineer and underground geotechnical engineer. • 11 to 16 February 2024, by geologist. • 27 to 29 May 2024, by geologist, mining engineer, processing engineer and environmental consultant.
Geological interpretation	• Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• The mineralisation boundaries were determined by lithological and sampling data. • For B Shoot, the mineralised wireframes were modelled by GSR using Leapfrog™ within two type envelops, with cut-off grade of 0.4 g/t and 1.2 g/t respectively. • For 242 and DMH, the mineralised wireframes were modelled by GSR using Leapfrog™ within two type envelops, with cut-off grade of 0.4 g/t and 1.0 g/t respectively. • For I Zone, the mineralised domains were generated at a cut-off of 0.5 g/t. • For FB/ADK, the solids were created by GSR and Resource Modelling Solutions (RMS). • For Chichiwelli, the mineralised solids were conducted by GSR with the 2D polylines using a cut-off grade of 0.5 g/t.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Wassa mineralisation is subdivided into several domains; namely F Shoot, B Shoot, 242, Southeast, Starter, 419, Mid East and Dead Man's Hill. Each of these represents discontinuous segments of the main mineralised system which extends for approximately 3.5 km along strike from surface and is still open at depth. • The mineralisation generally consists of broadly tabular zones containing dismembered and folded ribbon-like bodies of narrow quartz vein material, zones are typically 10 m to 50 m wide within a 900 m

Criteria	Explanation	Commentary
		mineralised corridor.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• For B Shoot, 242, DMH, Chichiwelli and I Zone, Au was estimated using Ordinary Kriging ("OK"). The solid models for Father Brown ("FBZ") and Adoikrom ("ADK") were created by GSR and Resource Modelling Solutions ("RMS"). They were modelled using a vein modelling technique, with estimating both vein thickness and grade. • This is the first Mineral Resource estimation in accordance with JORC Code. • For B Shoot and 242, the block model was constructed using a block size of to 5 m × 10 m × 5 m (East × North × Elevation), with a sub block size of 1.25 m × 2.5 m × 2.5 m. For DMH, the block model was constructed using a block size of to 5 m × 5 m × 3 m (East × North × Elevation), with a sub block size of 1.25 m × 1.25 m × 1.5 m. For I Zone, the block model was constructed using a block size of to 10 m × 20 m × 6 m (East × North × Elevation), with a sub block size of 1.25 m × 2.5 m × 1.5 m. For FBA/ADK, the block model was constructed using a block size of to 1 m × 2 m × 2 m (East × North × Elevation). For Chichiwelli, the block model was constructed using a block size of to 12.5 m × 25 m × 8 m (East × North × Elevation. • All samples were composited to 1-meter. • The cumulative frequency and distribution characteristics of the sample histogram were used to do the top capping. • SRK has validated both block models by swath plot and visual inspection, indicating that the models were validated.
Moisture	• Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The tonnages are estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The underground Mineral Resources were reported within the Mineable Stope Optimiser ("MSO"), based on a US$2,050/ ounce (oz) gold price and mining, processing and general administrative costs that were adjusted from actual costs at the Wassa B Shoot and 242 underground operations. • Open pit Mineral Resources were reported within the optimised/ designed open pit shell. • Underground Mineral Resources are reported at a cut-off grade of 1.38 g/t for B Shoot and 242 and 1.40 g/t for FB/ ADK. • Open pit Mineral Resources are reported at a cut-off grade of 0.438 g/t for DMH, 0.749 g/t

Criteria	Explanation	Commentary
		for I Zone and 0.55 g/t for Chichiwelli.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• B Shoot and 242 are two active underground mining operations. DMH is an active open pit operation. • The mining method for FBZ/ ADK is underground mining, for I Zone and Chichiwelli is open pit mining. • Underground Mineral Resources are reported within MSO and open pit Mineral Resources are reported within the optimised/ designed open pit shells. • The assists in demonstrating that the Mineral Resource meets the requirement of having reasonable prospects for eventual economic extraction criteria.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• Wassa Gold Mine is a production project, both metallurgical testing and historical production performance data are available, providing reliable data to Metallurgical Factors. • The oxide and primary ore of Wassa deposit are amenable to cyanide leaching ("CIL"). The CIL with Gravity Separation is a suitable process for gold extraction. Gold recovery of 90% to 95% can be achieved.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• The EIS reports have been completed and approved for the Wassa Gold Project, covering the current mining areas, the processing plant, the tailings storage facilities, and the expansion project.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	• For B Shoot and 242 underground, the bulk density in the model was set to 2.8 (fresh rock). • For DMH and I Zone, the density values for the tonnage estimation were coded to 1.8 g/cm^3 for oxide, 2.25 g/cm^3 for transition and 2.7 g/cm^3 for fresh by GSR. • For FBZ/ADK, the density used for estimation was provided by GSR with the value of 2.7 g/cm^3. • For Chichiwelli, the density values used for

Criteria	Explanation	Commentary
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	the estimation were provided by GSR with the values of 1.8 g/cm^3 for oxide and 2.68 g/cm^3 for fresh.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• **B Shoot** Measured Mineral Resources were defined in areas the drill intercepts were no greater than 15 m. Indicated Mineral Resources were defined in areas the drill intercepts were no greater than 50 m. The rest within each domain with little known information is classified as Inferred Mineral Resources. • **242** The blocks in the areas with drill hole spacing not more than 15m were classified as Measured Mineral Resources, those with drill hole spacing not greater than 30m were classified as Indicated Mineral Resources and those with drill hole spacing not greater than 45m were classified as Inferred Mineral Resources. • **DMH** Blocks in the areas with drill hole spacing not more than 15m were classified as Measured Mineral Resources, those with drill hole spacing not greater than 30m were classified as Indicated Mineral Resources and the rest within mineralised domains were classified as Inferred Mineral Resources. • **I Zone** Measured Mineral Resource was defined by the area with an average sample distance of 15 m. Indicated Mineral Resource was defined by the area with a sample distance of 30 m. And the rest within the mineralise domain was defined as Inferred Mineral Resources. • **FBA/ADK** Indicated Mineral Resources were classified in the areas where drilling is sufficient to demonstrate geological and grade continuity to a reasonable level. Inferred Mineral Resources were classified by two 3D solids that included the wider spaced drilling at depth (100 to 200m spacing), • **Chichiwelli** Wireframes were digitized for East Domain and West Domain, with the areas inside the modelled solids considered to be Indicated Mineral Resources, and outside, Inferred Mineral Resources.

Criteria	Explanation	Commentary
Audits or reviews.	• The results of any audits or reviews of Mineral Resource estimates.	• The input data, including geological mapping and drillhole data are comprehensive in their coverage of the mineralisation. • The Mineral Resource estimate appropriately reflects the view of the Competent Person. • The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code. • The statement relates to global volumetric estimates.

Section 4: Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The open pit Ore Reserves are based on a block model and Mineral Resource estimate discussed in section three. • The underground Ore Reserves are based on a block model and Mineral Resource estimate discussed in section three. • The stockpile Ore Reserve is the ore that have spilled from conveyor belts and accumulated over time and are subsequently returned to the ROM Pad. • Inferred Mineral Resources have been excluded from this estimate. • The reported Ore Reserves are included in the tonnage of Measured and Indicated categories of Mineral Resources and diluted material.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Four site visits were carried out by SRK with assistance from GSR personnel during preparation of the Report. • 7 to 10 December, 2022, by geologist, geotechnical engineer, processing engineer and environment scientist. • 10 to 14, January 2023, by mining engineer and underground geotechnical engineer. • 11 to 16 February, 2024, by geologist. • 27 to 29, May 2024, by geologist, mining engineer, processing engineer and environmental consultant. • Ali Rudaki, a Principal Mining Engineer from SRK Consulting South Africa, conducted a site visit from 10 to 13 January 2023. • TzuHsuan (Shan) Chuang, a Senior Mining Engineer from SRK Consulting China, conducted a site visit from 27 to 29 May 2024.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• The Wassa Mine is an operational mine with open pit and underground mining. Open pit mining commenced in 2007 and underground mining commenced in2016. • SRK Consulting (UK) Ltd. (2015) and Golden Star Resources Ltd (2021) provided the basis for the Ore Reserves estimate, referencing the NI 43-101 Technical Report on the Wassa Open Pit Mine and Underground Project in Ghana (2015), and the NI 43-101 Technical Report on the Wassa Gold Mine (2021). • The feasibility study, along with the operational data and production plan, constitutes the foundational basis for the conversion of Ore Reserves.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Open Pit Mines: Revenue Parameters: o Gold price: 2,050 USD/oz o Process plant recovery: 95.5% o Government and royalty: 13.5% of revenue

Criteria	Explanation	Commentary
		Costs Parameters: o Base Mining cost (Ox/ Fr): 3.1/ 4.2 USD/t o Haul to Plant: 0.3 USD/t o Process Cost: 15.09 USD/t o Dilution: 10% o Gold Cut-off Grade: 0.5 g/t • Underground Mines: Revenue Parameters: o Gold Price: 2,050 USD/oz o Process Plant Gold Recovery: 95.5% o Mining royalty of 5% and gold royalty of 8.3%; Cost Parameters: o Mine Production: 42.47 USD/t o Sustaining Capital: 8.08 USD/t o Processing: 14.93 USD/t o Site G&A: 7.23 USD/t Gold Cut-Off Grade: 1.34 g/t • The Ore Reserves were reported based on the above respective cut-off grade estimation.
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	• Underground: o Mineable Stope Optimiser (MSO) o Vertical Method: YZ plane o Minimum Mining Width: 5 meters o Maximum Mining Width: 60 meters o Stope Pillar: 10 meters o Cut-off Grade: 1.34 g/t Au o Wall Minimum Dip: 80° o Wall Maximum Dip: 100° o Variable Overbreak or Slough (VOS): o Bottom: 0.2 o Midpoint: 0.4 o Top: 0.8 o Section (Length) Intervals: 20 meters o Level (Height) Intervals: 25 meters o Sections (U): Variable based on mining method and mining lode o Dilution/ Recovery: o Development (gold >= Development cut-off grade): 0% dilution, 100% recovery o Development (gold < Development cut-off grade): 14% dilution, 100% recovery o Stope: 10% dilution, 95% recovery • Open Pit: o Ore Reserves are based on open pit shape designs, with appropriate modifications made to the original Whittle Shell outlines (Lercsh Grossman open pit optimisations) to ensure they meet practical mining parameters. o No additional mining dilution or recovery factors were applied, as the regularized model already accounts for both dilution and mining recovery. o The open pit design includes a 20-meter-wide ramp with a 10% gradient, which is wide enough for two-way hauling using 60-ton capacity off-highway haul trucks.

Criteria	Explanation	Commentary
		○ The open pit design incorporates slopes and benches based on historical geotechnical data for the open pits in the area, featuring an overall slope angle of 40° in the weathered zone and 52° in fresh rock. The bench height is set at 12 meters, with a 72° bench face angle, while drilling and blasting will be conducted over bench heights of 6 meters. • Two mining methods were applied depending on the material. Oxide or weathered material was typically excavated using the free-dig method. For fresh material, conventional mining techniques were used, drill, blast, load and haul, involving hydraulic excavators and blasting to flitches with a height of 3.0 meters. The broken rock was then loaded onto 60-ton capacity off-highway haul trucks and transported to a central stockpile or waste dump.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• Wassa Gold Mine is a production project, both metallurgical testing and historical production performance data are available, providing reliable data to Metallurgical Factors. • The oxide and primary ore of Wassa deposit are amenable to cyanide leaching. The CIL supplemented with Gravity Separation is a suitable process for gold extraction. Gold recovery of 90% to 95% can be achieved in laboratory tests. • The processing plant adopt CIL with Gravity Separation process to extract gold, and the actual gold recovery is higher as 95% to 97% in recent years production. Yearly gold production (in gold Doré bars) is around five tons. • The processing flowsheet to treat ores from both open pit and underground operations has been proved to be mature. Recovery methods in the processing plant and forward recovery assumptions and are supported by test work and plant history production.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• Waste rocks from the project are transported to the 419 dump, part of which was recycled as aggregates for construction and road works. The EIS report states that the waste rocks are not acid generating (NAG) based on the geochemical characterization. Tailings are pumped to the TSF for storage, and return water from the TSF is pumped back to the processing plant for reuse. Routine analyses of cyanide were undertaken, and all cyanide concentrations were less than reporting limits (mRL) of 0.005 mg/L. GSWL is a member of International Cyanide Management Code (ICMC).

Criteria	Explanation	Commentary
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• The Wassa mine is a well-established project with 20-year production history and adequate infrastructure. The power and water supply can support the mining and processing capacity of 2.7Mtpa ore.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• Capital expenditures: ○ Capitalised development: 102 million USD (3,620.03 USD/m for underground development). ○ Other capital expenditure: 102 million USD (includes mine maintenance, environment, in-fill drilling, etc.) ○ Initial working capital is assumed to be 30% of the operating costs in 2024, fully recovered by 2028. ○ Mine closure expenditure is estimated at 27 million USD and allocate evenly over the LOM. • Operating Costs: ○ G&A costs: 7.5 USD/milled ton. ○ Open pit mining costs: 6.2 USD/mined total material movement. ○ Underground mining costs: 35.3 USD/mined ore ton (excluding backfill and development costs). ○ Backfill costs: rock fill: 1.1 USD/mined ton, paste backfill: 15.9 USD/m³. ○ UG Development cost: 3,620.03 USD/m. ○ Processing costs: 15.5 USD/milled ton. ○ Government Royalties: ○ Government royalty: 93.0 USD/oz, applied to payable gold ounces. ○ Gold royalty: 8.3%, applied to gross revenue.
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• 2,050 USD/oz for the life of mine. • A 99.1% payable rate is applied to the metal price based on Wassa's cost analysis. • Sales Costs Applied to Gold Product includes Refining cost: 0.15 USD/oz; Transport cost: 0.25 USD/oz, and Shipment cost: 2.86 USD/oz.
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• The market of the commodity of gold is well established and analysed. • The gold industry is a mature commodity market comparing to other commodities in mining. • The gold price forecast used in this Report is referred to institutional analysis and referenced by the past actual gold prices. • A long term price of gold at US$ 2,050 per ounce has been applied for Ore Reserve study and project economics analysis.

Criteria	Explanation	Commentary
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• The discount rate used for NPV calculation ranges from 5.0% to 15.0%, with increments of 1.0%. All results indicate an economic outcome. • The "nominal" values are applied. The cost remains constant over the life of mine without any adjustments are factored in. • The operating costs, capital expenditure, and gold prices were selected for sensitivity analysis. These factors were analysed within a ±30% range for their impact on NPV, using a 10% discount rate. • The NPV is most sensitive to changes in the gold price, followed by operating costs.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• The public consultation of the EIS report shows that stakeholders have generally expressed their support for the project and willingness to engage with the company to enhance benefits. GSWL actively engages in a range of cooperate social responsibility strategies to cultivate strong relationships and highlight the value-adding potential of key stakeholders.
Other	• To the extent relevant, the impact of the following on the Project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the Project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• The current Ore Reserve estimates and statement are based on PFS level studies, along with the operational data and production plan, constitutes the foundational basis for the conversion of Ore Reserves, which is considered appropriate by SRK. • SRK is not aware of any material risk in social or legal aspects that will impact on the Ore Reserve statement.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• For the open pit and underground mining, Measured Mineral Resources in the mine designs are classified as Proved Ore Reserves. Indicated Mineral Resources in the mine designs are classified as Probable Ore Reserves. • For ore stockpiles, the materials are considered as Probable Ore Reserve based on reviewing the data provided by Wassa Mine. • The classification of Ore Reserves appropriately reflects the Competent Person's view of the deposits. • There is no Measured Mineral Resources, classified as Probable Ore Reserves.

Criteria	Explanation	Commentary
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• The Ore Reserves estimates have been peer reviewed internally and is in line with current industry standards.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The Ore Reserves estimates are based on data (studies and assessment) provided by Wassa Mine and ongoing operations. The Ore Reserves estimates are at a PFS level. • All modifying factors have been applied for Ore Reserves estimates on a global estimate. • Considering the Wassa project is an operating mine with track record, SRK is of opinion that Ore Reserve estimates based on short-term LoM plan based on Measured and Indicated Mineral Resources are of low risk.

Appendix B Wassa Life of Mine

Wassa Life of Mine

Mine production & development	Unit	Total	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
OPEN PIT													
OPEN PIT - Ore Tonnes	t	785,551	327,491	458,061									
OPEN PIT - Au Grade	g/t	0.96	1.04	0.90									
OPEN PIT - Au Metal	oz	24,172	10,974	13,198									
OPEN PIT - Waste Tonnes	t	2,548,826	1,502,686	1,046,140									
OPEN PIT - Total Material Movement	t	3,334,377	1,830,177	1,504,200									
UNDERGROUND													
Development	t	4,510,428	242,598	206,845	286,393	216,341	230,565	203,469	231,336	241,750	215,641	265,426	286,371
LHOS	t	69,433,876	1,829,857	2,512,165	2,742,771	2,813,985	2,802,819	2,834,457	2,794,528	2,777,241	2,814,837	2,782,622	2,752,079
UNDERGROUND - ROM Material Tonnes	t	73,944,303	2,072,455	2,719,011	3,029,164	3,030,327	3,033,384	3,037,926	3,025,864	3,018,992	3,030,478	3,048,047	3,038,449
UNDERGROUND - Au Grade	g/t	2.76	2.20	2.17	2.09	2.42	2.22	2.24	2.23	2.42	2.57	2.48	2.63
UNDERGROUND - Au Metal	oz	6,567,701	146,748	189,932	204,016	235,561	216,120	219,145	216,691	234,618	250,308	243,456	256,934
UNDERGROUND - Waste Tonnes	t	12,255,582	1,008,630	1,477,583	1,048,331	861,371	621,853	569,793	650,035	776,303	821,817	672,063	598,076
UNDERGROUND - Total Material Movement	t	86,199,886	3,081,084	4,196,593	4,077,494	3,891,698	3,655,237	3,607,720	3,675,900	3,795,295	3,852,295	3,720,110	3,636,526
Total													
ROM Material Tonnes	t	74,729,855	2,399,945	3,177,071	3,029,164	3,030,327	3,033,384	3,037,926	3,025,864	3,018,992	3,030,478	3,048,047	3,038,449
Au Grade	g/t	2.74	2.04	1.99	2.09	2.42	2.22	2.24	2.23	2.42	2.57	2.48	2.63
Au Metal	oz	6,591,873	157,722	203,130	204,016	235,561	216,120	219,145	216,691	234,618	250,307	243,455	256,933
Waste Tonnes	t	14,804,408	2,511,316	2,523,722	1,048,331	861,371	621,853	569,793	650,035	776,303	821,817	672,063	598,076
Total Material Movement	t	89,534,263	4,911,261	5,700,793	4,077,494	3,891,698	3,655,237	3,607,720	3,675,900	3,795,295	3,852,295	3,720,110	3,636,526
Development Meters													
Lateral operating development	m	117,715	9,203	14,953	10,350	9,066	6,119	5,723	6,511	7,816	8,408	6,605	6,108
Lateral capital development	m	132,469	7,174	6,049	7,251	5,664	6,270	5,677	6,245	6,401	6,084	7,224	6,879
Vertical capital development	m	10,664	1,072	1,042	772	855	529	507	508	510	650	692	694
Backfill													
Pastefill	m3	25,525,571	561,533	673,620	816,447	895,242	970,737	1,040,708	981,693	993,109	1,038,005	1,063,041	1,055,857
Rockfill	t	2,253,536	216,813	558,963	405,929	371,617	259,817	67,209	218,762	154,427	-	-	-
Processing													
Assumed Recovery	%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%
Assumed Gold Produced	oz	6,321,602	151,256	194,802	195,651	225,903	207,259	210,160	207,807	224,999	240,045	233,474	246,399

Mine production & development	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
OPEN PIT															
OPEN PIT - Ore Tonnes															
OPEN PIT - Au Grade															
OPEN PIT - Au Metal															
OPEN PIT - Waste Tonnes															
OPEN PIT - Total Material Movement															
UNDERGROUND															
Development	237,955	207,509	215,232	209,413	198,921	181,929	158,261	181,573	142,287	78,291	49,522	16,332	3,631	2,835	-
LHOS	2,811,972	2,821,005	2,846,855	2,817,313	2,843,540	2,840,129	2,860,743	2,850,534	2,898,639	2,955,849	2,985,906	3,004,789	3,061,588	2,324,988	52,664
UNDERGROUND - ROM Material Tonnes	3,049,927	3,028,514	3,062,087	3,026,726	3,042,461	3,022,059	3,019,004	3,032,106	3,040,926	3,034,140	3,035,428	3,021,121	3,065,220	2,327,824	52,664
UNDERGROUND - Au Grade	2.57	2.81	3.02	3.03	3.16	3.29	3.69	3.72	3.10	2.90	3.05	3.40	2.95	2.42	1.49
UNDERGROUND - Au Metal	251,718	273,953	297,403	295,061	308,679	319,982	358,051	362,282	303,152	282,462	297,251	330,178	290,451	181,030	2,520
UNDERGROUND - Waste Tonnes	236,976	280,867	267,441	274,777	286,664	317,378	341,626	281,011	261,316	231,560	218,282	66,132	39,656	39,763	6,277
UNDERGROUND - Total Material Movement	3,286,904	3,309,382	3,329,528	3,301,503	3,329,125	3,339,436	3,360,630	3,313,118	3,302,242	3,265,700	3,253,710	3,087,253	3,104,876	2,367,587	58,941
Total															
ROM Material Tonnes	3,049,927	3,028,514	3,062,087	3,026,726	3,042,461	3,022,059	3,019,004	3,032,106	3,040,926	3,034,140	3,035,428	3,021,121	3,065,220	2,327,824	52,664
Au Grade	2.57	2.81	3.02	3.03	3.16	3.29	3.69	3.72	3.10	2.90	3.05	3.40	2.95	2.42	1.49
Au Metal	251,718	273,953	297,403	295,060	308,679	319,981	358,051	362,282	303,152	282,462	297,251	330,178	290,451	181,030	2,520
Waste Tonnes	236,976	280,867	267,441	274,777	286,664	317,378	341,626	281,011	261,316	231,560	218,282	66,132	39,656	39,763	6,277
Total Material Movement	3,286,904	3,309,382	3,329,528	3,301,503	3,329,125	3,339,436	3,360,630	3,313,118	3,302,242	3,265,700	3,253,710	3,087,253	3,104,876	2,367,587	58,941
Development Meters															
Lateral operating development	2,064	2,560	2,473	2,375	2,531	2,782	3,169	2,523	1,964	2,108	2,017	288	-	-	-
Lateral capital development	5,938	5,517	5,541	5,727	5,492	5,400	4,982	5,145	4,933	3,465	3,010	2,402	2,232	1,664	105
Vertical capital development	211	320	230	322	253	343	364	169	187	187	187	62	-	-	-
Backfill															
Pastefill	1,102,068	1,079,028	1,085,760	1,087,632	1,105,404	1,074,526	1,124,439	1,105,361	1,110,471	1,109,228	1,145,957	1,163,384	1,167,555	935,875	38,890
Rockfill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing															
Assumed Recovery	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%	95.9%
Assumed Gold Produced	241,397	262,721	285,209	282,963	296,023	306,862	343,370	347,428	290,723	270,881	285,063	316,641	278,543	173,607	2,417

Appendix C Compliance with Chapter 18

Chapter 18				Sections in SRK's Report
18.01	**DEFINITIONS AND INTERPRETATION**			**Not applicable.** [1]
18.02-18.04	**CONDITIONS FOR [REDACTED] OF NEW APPLICANT MINERAL COMPANIES**			
18.02	In addition to satisfying the requirements of Chapter 8, a Mineral Company which has applied for [**REDACTED**] must also satisfy the requirements of this Chapter.			
18.03	A Mineral Company must:—			
	(1)	establish to the Exchange's satisfaction that it has the right to participate actively in the exploration for and/or extraction of Natural Resources, either:—		3.1
		(a)	through control over a majority (by value) of the assets in which it has invested together with adequate rights over the exploration for and/or extraction of Natural Resources; or	
			Note: 'control over a majority' means an interest greater than 50%.	
		(b)	through adequate rights (arising under arrangements acceptable to the Exchange), which give it sufficient influence in decisions over the exploration for and/or extraction of the Natural Resources;	
	(2)	establish to the Exchange's satisfaction that it has at least a portfolio of:—		10.11
		(a)	Indicated Resources; or	
		(b)	Contingent Resources, identifiable under a Reporting Standard and substantiated in a Competent Person's Report. This portfolio must be meaningful and of sufficient substance to justify a [REDACTED];	
	(3)	if it has commenced production, provide an estimate of cash operating costs including the costs associated with:—		17.2. [2]
		(a)	workforce employment;	
		(b)	consumables;	
		(c)	fuel, electricity, water and other services;	
		(d)	on and off-site administration;	
		(e)	environmental protection and monitoring;	
		(f)	transportation of workforce;	
		(g)	product marketing and transport;	
		(h)	non-income taxes, royalties and other governmental charges; and	
		(i)	contingency allowances;	
		Note: A Mineral Company must: • *set out the components of cash operating costs separately by category;* • *explain the reason for any departure from the list of items to be included under cash operating costs; and* • *discuss any material cost items that should be highlighted to* [**REDACTED**].		
	(4)	demonstrate to the Exchange's satisfaction that it has available working capital for 125% of the group's present requirements, that is for at least the next 12 months, which must include:—		17.1 [3]
		(a)	general, administrative and operating costs;	
		(b)	property holding costs; and	
		(c)	the cost of any proposed exploration and/or development; and	
		Note:	*Capital expenditures do not need to be included in working capital requirements. Where they are financed out of borrowings, relevant interest and loan repayments must be included.*	
	(5)	ensure that its working capital statement in the [**REDACTED**] document under Listing Rule 8.21A states it has available sufficient working capital for 125% of the group's present requirements, that is for at least 12 months from the date of its [**REDACTED**] document.		17.1 [3]
18.04	If a Mineral Company is unable to satisfy either the profit test in rule 8.05(1), the market capitalisation/revenue/cash flow test in rule 8.05(2), or the market capitalisation/revenue test in rule 8.05(3), it may still apply to be [**REDACTED**] if it can establish to the Exchange's satisfaction that its directors and senior managers, taken together, have sufficient experience relevant to the exploration and/or extraction activity that the Mineral Company is pursuing. Individuals relied on must have a minimum of five years relevant industry experience. Details of the relevant experience must be disclosed in the [**REDACTED**] document of the new applicant.			Not applicable. [4]
	Note: *A Mineral Company relying on this rule must demonstrate that its primary activity is the exploration for and/or extraction of Natural Resources.*			

Chapter 18				Sections in SRK's Report
18.05-18.08	**CONTENTS OF [REDACTED] DOCUMENTS FOR NEW APPLICANTS**			
18.05	In addition to the information set out in Appendix 1A, a Mineral Company must include in its [**REDACTED**] document:—			
	(1)	a Competent Person's Report;		1.1
	(2)	a statement that no material changes have occurred since the effective date of the Competent Person's Report. Where there are material changes, these must be prominently disclosed;		1.7
	(3)	the nature and extent of its prospecting, exploration, exploitation, land use and mining rights and a description of the properties to which those rights attach, including the duration and other principal terms and conditions of the concessions and any necessary licences and consents. Details of material rights to be obtained must also be disclosed;		3; 16.3
	(4)	a statement of any legal claims or proceedings that may have an influence on its rights to explore or mine;		2
	(5)	disclosure of specific risks and general risks. Companies should have regard to Guidance Note 7 on suggested risk analysis; and		19
	(6)	if relevant and material to the Mineral Company's business operations, information on the following:—		
		(a)	project risks arising from environmental, social, and health and safety issues;	19
		(b)	any non-governmental organisation impact on sustainability of mineral and/or exploration projects;	16.4.9
		(c)	compliance with host country laws, regulations and permits, and payments made to host country governments in respect of tax, royalties and other significant payments on a country by country basis;	16.3
		(d)	sufficient funding plans for remediation, rehabilitation and, closure and removal of facilities in a sustainable manner;	16.4.8, 17.1[5]
		(e)	environmental liabilities of its projects or properties;	16.4
		(f)	its historical experience of dealing with host country laws and practices, including management of differences between national and local practice;	16.4.9
		(g)	its historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements; and	16.4.9
		(h)	any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims.	16.4.9
18.06-18.08	***Additional disclosure requirements that apply to certain new applicant Mineral Companies***			
18.06	If a Mineral Company has begun production, it must disclose an estimate of the operating cash cost per appropriate unit for the minerals and/or Petroleum produced.			17.2
18.07	If a Mineral Company has not yet begun production, it must disclose its plans to proceed to production with indicative dates and costs. These plans must be supported by at least a Scoping Study, substantiated by the opinion of a Competent Person. If exploration rights or rights to extract Resources and/or Reserves have not yet been obtained, relevant risks to obtaining these rights must be prominently disclosed.			Not applicable. [6]
18.08	If a Mineral Company is involved in the exploration for or extraction of Resources, it must prominently disclose to [**REDACTED**] that its Resources may not ultimately be extracted at a profit.			10
18.09-18.13	**RELEVANT NOTIFIABLE TRANSACTIONS INVOLVING THE ACQUISITION OR DISPOSAL OF MINERAL OR PETROLEUM ASSETS**			**Not applicable. [1]**
18.09	A Mineral Company proposing to acquire or dispose of assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must:—			
	(1)	comply with Chapter 14 and Chapter 14A, if relevant;		
	(2)	produce a Competent Person's Report, which must form part of the relevant circular, on the Resources and/or Reserves being acquired or disposed of as part of the Relevant Notifiable Transaction;		
		Note: The Exchange may dispense with the requirement for a Competent Person's Report on disposals where shareholders have sufficient information on the assets being disposed of.		
	(3)	in the case of a major (or above) acquisition, produce a Valuation Report, which must form part of the relevant circular, on the Mineral or Petroleum Assets being acquired		

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		as part of the Relevant Notifiable Transaction; and	
	(4)	comply with the requirements of rules 18.05(2) to 18.05(6) in respect of the assets being acquired.	
	Note: Material liabilities that remain with the issuer on a disposal must also be discussed.		
18.10-18.11	***Requirements that apply to listed issuers***		
18.10	A listed issuer proposing to acquire assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must comply with rule 18.09.		
18.11	On completion of a Relevant Notifiable Transaction involving the acquisition of Mineral or Petroleum Assets, unless the Exchange decides otherwise, a listed issuer will be treated as a Mineral Company.		
18.12-18.13	***Requirements that apply to Mineral Companies and listed issuers***		
18.12	The Exchange may dispense with the requirement to produce a new Competent Person's Report or a Valuation Report under rules 18.05(1), 18.09(2) or 18.09(3), if the issuer has available a previously published Competent Person's Report or Valuation Report (or equivalent) which complies with rules 18.18 to 18.34 (where applicable), provided the report is no more than six months old. The issuer must provide this document and a no material change statement in the [**REDACTED**] document or circular for the Relevant Notifiable Transaction.		
18.13	An issuer must obtain the prior written consent of a Competent Person(s) or Competent Evaluator for their material to be included in the form and context in which it appears in a [**REDACTED**] document or circular for the Relevant Notifiable Transaction, whether or not such person or firm is retained by the [**REDACTED**] applicant or the issuer.		
18.14-18.17	**CONTINUING OBLIGATIONS**		**Not applicable. [7]**
18.14	***Disclosure in reports***		
18.14	A Mineral Company must include in its interim (half-yearly) and annual reports details of its exploration, development and mining production activities and a summary of expenditure incurred on these activities during the period under review. If there has been no exploration, development or production activity, that fact must be stated.		
18.15-18.17	***Publication of Resources and Reserves***		
18.15	A listed issuer that publicly discloses details of Resources and/or Reserves must give an update of those Resources and/or Reserves once a year in its annual report, in accordance with the reporting standard under which they were previously disclosed or a Reporting Standard.		
18.16	A Mineral Company must include an update of its Resources and/or Reserves in its annual report in accordance with the Reporting Standard under which they were previously disclosed.		
18.17	Annual updates of Resources and/or Reserves must comply with rule 18.18.		
	Note: Annual updates are not required to be supported by a Competent Person's Report and may take the form of a no material change statement.		
18.18-18.27	**STATEMENTS ON RESOURCES AND/OR RESERVES**		
18.18	***Presentation of data***		
18.18	Any data presented on Resources and/or Reserves by a Mineral Company in a [**REDACTED**] document, Competent Person's Report, Valuation Report or annual report, must be presented in tables in a manner readily understandable to a non-technical person. All assumptions must be clearly disclosed and statements should include an estimate of volume, tonnage and grades.		10.11 11.3
18.19	***Basis of evidence***		
18.19	All statements referring to Resources and/or Reserves:—		Not applicable. [1]
	(1)	in any new applicant [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction, must be substantiated in a Competent Person's Report which must form part of the document; and	
	(2)	in all other cases, must at least be substantiated by the issuer's internal experts.	
18.20	***Petroleum Competent Persons' Reports***		**Not applicable. [8]**
18.20	A Competent Person's Report for Mineral Companies involved in the exploration for and/or extraction of Petroleum Resources and Reserves must include the information set out in Appendix 25.		

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18.21-18.22	***Competent Person***		
18.21	A Competent Person must:—		
	(1)	have a minimum of five years experience relevant to the style of mineralization and type of deposit under consideration or to the type of Petroleum exploration, reserve estimate (as appropriate), and to the activity which the Mineral Company is undertaking;	1.4
	(2)	be professionally qualified, and be a member in good standing of a relevant Recognised Professional Organisation, in a jurisdiction where, in the Exchange's opinion, the statutory securities regulator has satisfactory arrangements (either by way of the IOSCO Multilateral MOU or other bi-lateral agreement acceptable to the Exchange) with the Commission for mutual assistance and exchange of information for enforcing and securing compliance with the laws and regulations of that jurisdiction and Hong Kong; and	1.4
	(3)	take overall responsibility for the Competent Person's Report.	1.4
18.22	A Competent Person must be independent of the issuer, its directors, senior management and advisers. Specifically the Competent Person retained must:—		1.7
	(1)	have no economic or beneficial interest (present or contingent) in any of the assets being reported on;	
	(2)	not be remunerated with a fee dependent on the findings of the Competent Person's Report;	
	(3)	in the case of an individual, not be an officer, employee or proposed officer of the issuer or any group, holding or associated company of the issuer; and	
	(4)	in the case of a firm, not be a group, holding or associated company of the issuer. Any of the firm's partners or officers must not be officers or proposed officers of any group, holding or associated company of the issuer.	
18.23	***Additional requirements of Competent Evaluators***		**Not applicable.** [9]
18.23	In addition to the requirements set out in rules 18.21(2) and 18.22, a Competent Evaluator must:—		
	(1)	have at least ten years relevant and recent general mining or Petroleum experience (as appropriate);	
	(2)	have at least five years relevant and recent experience in the assessment and/or valuation of Mineral or Petroleum Assets or securities (as appropriate); and	
	(3)	hold all necessary licences.	
	Note:	*A Competent Person's Report or Valuation Report may be performed by the same Competent Person provided he or she is also a Competent Evaluator.*	
18.24	***Scope of Competent Persons' Reports and Valuation Reports***		
18.24	A Competent Person's Report or Valuation Report must comply with a Reporting Standard as modified by this Chapter, and must:—		
	(1)	be addressed to the Mineral Company or listed issuer;	1.1
	(2)	have an effective date (being the date when the contents of the Competent Person's Report or Valuation Report are valid) less than six months before the date of publishing the [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction required under the Listing Rules; and	1.7
	(3)	set out what Reporting Standard has been used in preparing the Competent Person's Report or Valuation Report, and explain any departure from the relevant Reporting Standard.	1.2
18.25-18.26	***Disclaimers and Indemnities***		
18.25	A Competent Person's Report or Valuation Report may contain disclaimers of sections or topics outside their scope of expertise in which the Competent Person or Competent Evaluator relied upon other experts' opinions, but must not contain any disclaimers of the report in its entirety.		1.7
18.26	The Competent Person or Competent Evaluator must prominently disclose in the Competent Person's Report or Valuation Report the nature and details of all indemnities provided by the issuer. Indemnities for reliance placed on information provided by issuers and third party experts (for information outside the Competent Person's or Competent Evaluator's expertise) are generally acceptable. Indemnities for fraud and gross negligence are generally unacceptable.		1.7; 2

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18.27	***Obligations of sponsor***			**Not applicable.[1]**
18.27	Any sponsor appointed to or by a new applicant Mineral Company under Chapter 3A must ensure that any Competent Person or Competent Evaluator meets the requirements of this Chapter.			
18.28-18.34	**REPORTING STANDARD**			
18.28-18.30	***Mineral reporting standard***			
18.28	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting mineral Resources and Reserves must also satisfy rules 18.29 and 18.30.			
18.29	A Mineral Company must disclose information on mineral Resources, Reserves and/or exploration results either:—			1.2
	(1)	under:		
		(a)	the JORC Code;	
		(b)	NI 43-101; or	
		(c)	the SAMREC Code,	
		as modified by this Chapter; or		
	(2)	under other codes acceptable to the Exchange as communicated to the market from time to time, provided the Exchange is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.		
	Note: *The Exchange may allow presentation of Reserves under other reporting standards provided reconciliation to a Reporting Standard is provided. A Reporting Standard applied to specific assets must be used consistently.*			
18.30	A Mineral Company must ensure that:—			
	(1)	any estimates of mineral Reserves disclosed are supported, at a minimum, by a Prefeasibility Study;		11.1.1; 11.2.1
	(2)	estimates of mineral Reserves and mineral Resources are disclosed separately;		10; 11
	(3)	Indicated Resources and Measured Resources are only included in economic analyses if the basis on which they are considered to be economically extractable is explained and they are appropriately discounted for the probabilities of their conversion to mineral Reserves. All assumptions must be clearly disclosed. Valuations for Inferred Resources are not permitted;		11, 12.1.3, 12.2.7 18.1
	(4)	for commodity prices used in Pre-feasibility Studies, Feasibility Studies and valuations of Indicated Resources, Measured Resources and Reserves:—		18.1.3
		(a)	the methods to determine those commodity prices, all material assumptions and the basis on which those prices represent reasonable views of future prices are explained clearly; and	18.1.3
		(b)	if a contract for future prices of mineral Reserves exists, the contract price is used; and	15
	(5)	for forecast valuations of Reserves and profit forecasts, sensitivity analyses to higher and lower prices are supplied. All assumptions must be clearly disclosed.		Not applicable. [9]
18.31-18.33	***Petroleum reporting standard***			**Not applicable. [8]**
18.31	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting Petroleum Resources and Reserves must also satisfy rules 18.32 and 18.33.			
18.32	A Mineral Company must disclose information on Petroleum Resources and Reserves either:—			
	(1)	under PRMS as modified by this Chapter; or		
	(2)	under other codes acceptable to the Exchange if it is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.		
	Note: *A Reporting Standard applied to specific assets must be used consistently.*			
18.33	A Mineral Company must ensure that:—			
	(1)	where estimates of Reserves are disclosed, the method and reason for choice of estimation are disclosed (i.e. deterministic or probabilistic methods, as defined in PRMS). Where the probabilistic method is used, the underlying confidence levels applied must be stated;		

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	(2)	if the NPVs attributable to Proved Reserves and Proved plus Probable Reserves are disclosed, they are presented on a post-tax basis at varying discount rates (including a reflection of the weighted average cost of capital or minimum acceptable rate of return that applies to the entity at the time of evaluation) or a fixed discount rate of 10%;	
	(3)	Proved Reserves and Proved plus Probable Reserves are analysed separately and principal assumptions (including prices, costs, exchange rates and effective date) and the basis of the methodology are clearly stated;	
	(4)	if the NPVs attributable to Reserves are disclosed, they are presented using a forecast price as a base case or using a constant price as a base case. The bases for the forecast case must be disclosed. The constant price is defined as the unweighted arithmetic average of the closing price on the first day of each month within the 12 months before the end of the reporting period, unless prices are defined by contractual arrangements. The basis on which the forecast price is considered reasonable must be disclosed and Mineral Companies must comply with rule 18.30;	
		Note: In the forecast case under PRMS, the economic evaluation underlying the investment decision is based on the entity's reasonable forecast of future conditions, including costs and prices, which will exist during the life of the project.	
	(5)	if estimated volumes of Contingent Resources or Prospective Resources are disclosed, relevant risk factors are clearly stated;	
		Note: Under PRMS, wherever the volume of a Contingent Resource is stated, risk is expressed as the chance that the accumulation will be commercially developed and graduate to the reserves class. Wherever the volume of a Prospective Resource is stated, risk is expressed as the chance that a potential accumulation will result in a significant discovery of Petroleum.	
	(6)	economic values are not attached to Possible Reserves, Contingent Resources or Prospective Resources; and	
	(7)	where an estimate of future net revenue is disclosed, whether calculated without discount or using a discount rate, it is prominently disclosed that the estimated values disclosed do not represent fair market value.	
18.34	***Mineral or Petroleum Asset Valuation Reports***		**Not applicable.** [8, 9]
18.34	A Mineral Company must ensure that:—		
	(1)	any valuation of its Mineral or Petroleum Assets is prepared under the VALMIN Code, SAMVAL Code, CIMVAL or such other code approved by the Exchange from time to time;	
	(2)	the Competent Evaluator states clearly the basis of valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate, having regard to the nature of the valuation and the development status of the Mineral or Petroleum Asset;	
	(3)	if more than one valuation method is used and different valuations result, the Competent Evaluator comments on how the valuations compare and on the reason for selecting the value adopted; and	
	(4)	in preparing any valuation a Competent Evaluator meets the requirements set out in rule 18.23.	

Note:

[1] It's not the work scope of SRK.

[2] Operating cost is breakdown according to cost centre, instead of cost element.

[3] Without considering current assets and current liabilities, SRK made the assumption that the working capital has been incorporated into the sustaining capital.

[4] The simple economic analysis shown in "18 Economic Analysis" provides an indication that the Wassa Mine is economically viable.

[5] It is reasonable to expect that the operation of the Project will be extended with further exploration and feasibility studies, the mine closure fees, and the residual value of the project will not be considered in the economic projection.

[6] Wassa Mine is a producing project.

[7] Upon [**REDACTED**], Chifeng Gold/GSWL will comply with the relevant requirements under the Listing Rules.

[8] Mineral Resources and Ore Reserves of GSWL are Au minerals.

[9] The report prepared by SRK is not an Evaluation Report.

Appendix D Chapter 2.6 of the Guide for New Listing Applicants

Chapter 2.6		Section in SRK's Report
(i)	The cut-off grade (which should be an industry standard commonly used), minimum mining width, economic parameters (e.g. waste to ore ratio, stope productivity), specific gravity derivation, prevailing commodity price assumptions;	Section 10.11
(ii)	If the Competent Person has a different view on certain assumptions (e.g. processing recovery rate) made by the applicant, both views should be disclosed in the [**REDACTED**] document, with differences highlighted and underlying reasons for the different views, and the impact on the applicant if the more conservative view is adopted;	Not applicable.
(iii)	Detailed analysis for harmful elements identified at mines (e.g. mercury or arsenic at lead and zinc mines) to give a better picture of whether there are material concentrations of these elements within particular lodes, and the impact on the saleability of the minerals;	Not applicable.
(iv)	Clear and meaningful drawings and diagrams, shown to scale, of the location of the applicant's principal Mineral or Petroleum Assets;	Section 3
(v)	The procedures, amount of testing, assessment and time required to ascertain the amount of Reserves, and the existing Reserves of the mine over its entire mine life, expected average Resource and Reserve grades of ore that can be extracted in future years (preferably covering the whole economic life of the mine), depletion charges and hedging activities;	Section 11 and Section 12
(vi)	Whether the historical or expected improved recovery rate is used for estimating the net present value ("NPV"), and the basis on which the discount rates are considered appropriate;	Section 18.2
(vii)	If the Competent Person did not conduct a site visit, the applicant should disclose in the "Business" section of the [**REDACTED**] document the basis on which the Reserves/Resources, cost forecasts and other data relating to the mines/ oilfields as disclosed in the CPR are arrived at, how the lack of a site visit would affect the reliability of the information, and an appropriate risk factor 3; and	Section 1.5
(viii)	All material risks mentioned in the CPR should be disclosed in the "Risk Factors" section of the [**REDACTED**] document.	Section 19

Final

Independent Competent Person's Report for Sepon Rare Earth Element Project and Mengkham Rare Earth Element Project in Lao People's Democratic Republic

Project Spring Rain,The Lao People's Democratic Republic
Chifeng Jilong Gold Mining Co., Ltd.

SRK Consulting China Ltd. ▪ SCN849D ▪ 27 August 2024

srk consulting

Final

Independent Competent Person's Report for Sepon Rare Earth Element Project and Mengkham Rare Earth Element Project in Lao People's Democratic Republic

The Lao People's Democratic Republic

Prepared for:
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Cover Image(s):
No. 1 Wet Smelter Plant of Mengkham REE Project

SRK Consulting China Ltd. ▪ SCN849D ▪ 27 August 2024

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Acknowledgments

The opinions expressed in this Report have been based on the information supplied to SRK Consulting China Ltd. (SRK) by Chifeng Gold Jilong Mining Co., Ltd.(the "Client"). The opinions in this Report are provided in response to a specific request from the Client to do so. SRK has exercised all due care in reviewing the supplied information. Whilst SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK has no prior knowledge nor has the opportunity to evaluate.

Contents

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Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

%	Percent
'	Minute
°	Degrees
ASL	above sea level
C	Carboniferous System; Chemical symbol for element carbon
℃	Degree(s) Centigrade Celsius, a unit of temperature
Ce	Chemical symbol for the rare earth element cerium
cm	centimeter
CPR	Competent Person's Report
CREO	critical rare earth oxides, the sum of Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3
CRMs	Certified reference materials.
DTM	Digital Terrain Models
Dy	Chemical symbol for the rare earth element dysprosium
E	East
EDTA	Ethylene Diamine Tetraacetic Acid
Er	Chemical symbol for the rare earth element erbium
Eu	Chemical symbol for the rare earth element europium
g/t	gram per tonne
Gd	Chemical symbol for the rare earth element gadolinium
GPS	Global Positioning System
Ho	Chemical symbol for the rare earth element holmium
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, edition 2012
IAC	Ion Adsorption Clay
IDW	Inverse Distance Weighting
Indicated Mineral Resource	that part of a resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	that part of a resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
kg	kilogram
km	kilometer
km^2	squre kilometer
kt	kiloton
KV	Kilovolts, equivalent to 1,000 volts
La	Chemical symbol for the rare earth element lanthanum
LXML	Lane Xang Minerals Limited Company

%	Percent
Lu	Chemical symbol for the rare earth element lutetium
m	meter
MREO	magnet rare earth oxides, the sum of Pr_6O_{11}+Nd_2O_3+Tb_4O_7+Dy_2O_3
Mt	million tonnes
N	North
Nd	Chemical symbol for the rare earth element neodymium
P	Permian System
Pr	Chemical symbol for the rare earth element praseodymium
QA/QC	quality assurance and quality control
REE	Rare Earth Elements, consists of a set of seventeen chemical elements in the periodic table, specifically the fifteen lanthanides (from element number 57 to 71), as well as scandium and yttrium.
RPEEE	Reasonable Perspective of Eventual Economic Extraction
Sm	Chemical symbol for the rare earth element samarium
SREO	Soluble rare earth oxides, only including rare earth elements in the form of ionic adsorption of the deposit.
t/m^3	Tonne per cubic metre
T2	Middle Triassic Series
T3	Upper Triassic Series
Tb	Chemical symbol for the rare earth element terbium
Tm	Chemical symbol for the rare earth element thulium
TREO	The total rare earth oxides equivalent, the sum of La_2O_3, CeO_2, Pr_6O_{11}, Nd_2O_3, Sm_2O_3, Eu_2O_3, Gd_2O_3, Tb_4O_7, Dy_2O_3, Ho_2O_3, Er_2O_3, Tm_2O_3, Yb_2O_3, Lu_2O_3, Y_2O_3, including rare earth elements present in the crystal lattice as well as those in the form of ionic adsorption of the deposit.
UTM	Universal Transvers Mercator Projection
Xiamen Tungsten	Xiamen TUNGSTEN CO.,LTD
Y	Chemical symbol for the rare earth element yttrium
Yb	Chemical symbol for the rare earth element ytterbium
Z	Elevation

Executive Summary

SRK Consulting China Ltd.("**SRK**") was requested by Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**" or the "**Client**") to prepare a Competent Person's Report ("**CPR**" or the "**Report**") for its Sepon Rare Earth Element ("**REE**") Project and Mengkham Rare Earth Element Project (the "the **Projects**") located in Savannakhet Province and Xieng Khouang Province, Lao People's Democratic Republic ("**Laos**") in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("**JORC Code (2012)**") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**HKEx**"). The projects include exploration licenses, mining licenses, currently in-situ leaching mine, and associated ore processing and metallurgic plants in construction and trial production. The Sepon REE project is currently operated by Lane Xang Minerals Limited Comany("**LXML**"), which is a subsidiary of Chifeng Gold. The Mengkham REE project is 86% owned by China Investment Mining (Laos) Sole Co., Ltd. ("**China Investment Mining (Laos)**" via its 100% owned subsidiaries, China Investment Rare Earth Mining Co., Ltd., and China Investment Rare Earth Mining XiangKhouang Co., Ltd. Chixia Laos Holding Limited ("**Chixia Laos**"), a subsidiary of Chifeng Gold, is in the process of acquiring 90% of shares of China Investment Mining (Laos).

This report consists of an independent review of the geology, exploration, Mineral Resources, Ore Reserves, mining, mineral processing and smelter-refinery, capital investment, operating cost, and environmental and social aspects of the Projects.

Outline of Work Programs

The scope of work, as defined in letters of engagement reached in November 2022, and May 2024 between Chifeng Gold and SRK, includes reviewing and estimating of the mineral resource of the REE mineralisation delineated within the Sepon Project's tenements and the Mengkham REE project, and reviewing a preliminary feasibility study on the Mengkham REE project, and preparation of a CPR on the projects in accordance with JORC (2012) and the listing requirements of the HKEx.

SRK has conducted the work programs on the projects in phases:

Phase 1: SRK conducted a desktop review on documents provided by the client before conducting site visits to the project site;

Phase 2: SRK conducted site visits to both projects. During the period from 9 December 2022 to 14 December 2022, SRK's personnel conducted site visits to the Sepon Project, to gather data and interview related personnel who conducted exploration and feasibility study on the project. During the period from 13 to 16 May 2024, SRK further conducted a site visit to the Sepon REE Project. During the period from 9 to 11 May 2024, SRK conducted site visits to the Mengkham REE project, inspected and observed the status of the project, held meetings with the managements and technical personnel, sighted geology, exploration, mineralization, trial mining operation, ore processing and metallurgic operation, also conducted its own data verification programs, and carried out review in environmental and social aspects.

Phase 3: SRK team reviewed the information provided by Chifeng Gold, and estimated Mineral Resources and reviewed the preliminary feasibility study on the Mengkham REE project, conducted a preliminary economic assessment on the project, and compiled a technical report about the

projects and reported the Exploration Results, Mineral Resources and Ore Reserves according to the JORC Code 2012, and submitted it to the client for comments in August 2024.

SRK will further revise the report based on feedbacks from the client and related third parties, and will finalize it in the due course.

Results

Overall

Chifeng Gold owns the Sepon REE Project through its subsidiaries and is acquiring Mengkham REE Project. The REE deposits in both projects are ion-adsorption type with the REEs enriched in the weathered zones over granite rock bodies.

The Sepon REE Project is an exploration and resource project within the exploration permit of LXML. Exploration programs, including trenching, drilling to take samples, and assaying results of the samples and other related database, can support a mineral resource estimate. SRK has reviewed the database obtained and re-estimated the Mineral Resources of the project. As of 31 March 2024, the Sepon REE Project possesses 26.78 million tonnes ("**Mt**") of Indicated Mineral Resources with an average grade of 383.75 grams per tonne ("**g/t**") total rare earth oxide equivalent ("**TREO**"), and 63.79 Mt of Inferred Mineral Resources averaging 339.22 g/t TREO, at a cut-off grade of 170g/t TREO.

The Mengkham REE Project is a development-pilot production project. Previous exploration programs defined the REE mineralized bodies, and the database obtained may support a mineral resource estimate. As of 31 March 2024, SRK estimated that the project has a resource basis of 139.05 Mt Inferred Mineral Resources with an average grade of 241.79 g/t soluble rare earth oxide ("**SREO**"), at a cut-off grade of 100 g/t SREO.

SRK reviewed a feasibility study ("**FS**") done internally by Chixia Laos for developing the Mengkham REE Project, and considers that it may match the study level of a preliminary feasibility study ("**PFS**"). The PFS proposed that the in-situ leaching mining method would be adopted to develop the project, with wet smelter facilities to further process the leaching solutions to finally produce REE oxide for sales to the buyers in China. The proposed production capacity is 3,675 tonnes ("**t**") per annum.

Chixia Laos obtained a trial production license over 8 square kilometres ("km^2") of the deposit, and constructed the mining and recovering facilities for the pilot production, which started in May 2024.

SRK opines that the current resource basis can support a preliminary economic assessment on the project. SRK reviewed the PFS and held discussions with related technical personnel of the project, using the parameters proposed in the PFS with some modification, and projected that the project is economically viable.

SRK recommends that a supplemental exploration program should be conducted to enhance the resource category, and then a feasibility study should be conducted based on the updated resources and parameters obtained during the trial production.

Operational Licences and Permits

LXML owns an exploration permit which covering the Sepon REE Project.

SRK sighted a trail mining license for the Mengkham mine site, and land use agreements with the locals. Other licenses and permits including water use permit or site discharge permit are under the application.

Geology and Mineralization

Rare earth elements ("REE") typically refer to the 15 lanthanide elements on the periodic table from lanthanum (La) to lutetium (Lu) and the transition metals scandium (Sc) and yttrium (Y) due to the similarity of the chemical property. From industrial development perspective, scandium is typically excluded from REE mineral development operations as it's normally not the paragenetic mineral with the lanthanide rare earth elements. The promethium (Pm) is also not included in the mineral development due to its radioactive property.

Ion-adsorption rare earth deposit is formed through weathering and leaching of minerals bearing rare earth elements from primary rocks, typically in tropical climates. Rare earth elements leached from granitic or alkaline igneous rocks were adsorbed onto clay minerals in soil, sometimes forming economically viable deposits.

Sepon

The content of total rare earth oxides ("TREO") gradually decreases from top to bottom, the upper part can be enriched into a rare earth ore body, and the end hole position of a small part of the drill hole has a higher grade, and it may not be able to penetrate the weathering layer. The elevation of the ore body is between 240 and 410 meters ASL, the lowest erosion base level in this area is 210 meters, and the ore body is above the lowest erosion base level. The depth of the ore body is generally 0-5 meters. The TREO grade ranges from 310 to 830 g/t, averaging 440 g/t.

Mengkham

The geological layers were summarised as the completely weathered layer, semi-weathered layer and the fresh layer, with the completely weathered layer being the main ore-bearing layer. The top of the mineralised zone is defined by a thin surficial soil zone that averages 2 m in thickness. The base of the mineralised zone extends to an average vertical depth of 9.0 m. And the SREO grade range from 9.5 to 2,857 g/t, averaging 243.5 g/t.

Exploration Status

The procedures for sample collection, preparation, and analysis are following the REE industry standards. SRK considers that the procedure, as well as the data and information obtained, are acceptable for resource estimation purposes.

Sepon

For Sepon project, LXML Exploration Department conducted an exploration program from November 2021 to July 2022. A total of 607 boreholes (4,441 metres) were drilled during the exploration on a 200-metre x 100-metre or 100-metre x 100-metre pattern.

Sampling was conducted as well, and the whole drilling core was taken as sample at 1m interval by using the method of diagonal quarters to reduce the sample, with one half as the sample for assaying, and the other half as the spare sample for storage. The samples were all properly numbered, recorded before sent out to the labs.

All basic assaying samples (TREO) were prepared and assayed in the ALS lab in Australia. The assaying method is ME-MS81. Quality Control and Assurance ("QA/QC") procedures were undertaken on an on-going basis to certify that the assay results from the drilling programme would be confidently relied upon. These procedures included the insertion of QA/QC samples comprising standards or Certified Reference Materials (CRMs), i.e., material containing known quantities of the element being assayed for; blanks i.e., material that has been prepared known to contain trace material; and duplicates.

In the general exploration report, 10 specific gravity samples were also taken from drilling cores and were measured in the lab of the mine. In SRK's opinion, it was unable to collect density sample from GN Auger hole cores. A dry bulk density of 1.5 t/m^3 was used in resource estimation for Sepon project.

Mengkham

For Mengkham REE Project, Longyan Dadi Mining Development Service Co., Ltd conducted an exploration program from January 2022 to December 2023. A total of 13,656 boreholes (198,957 metres) were drilled during the exploration, which were spaced 30-100 m apart.

Before sample collection, a quick test procedure was conducted on-site to identify REE mineralized intervals. This test dissolved REE ions in clay using ammonium sulphate and oxalic acid to obtain a precipitate. The samples were collected and prepared according to the Chinese Rare Earth Mineral Geological Exploration Standard (DZ/T0204-2022). All samples were analysed (SREO) in the mine lab onsite with the method of Ethylene Diamine Tetraacetic Acid ("EDTA") volumetric.

A total of 6,017 samples (about 6% of the samples used in Mineral Resource estimation) were collected as internal lab check samples with a pass rate of 82%. And a total of 3,500 samples (about 4% of the samples used in Mineral Resource estimation) were collected as internal lab check samples with a pass rate of 92%.

SRK conducted a data verification program and collected 169 core duplicate samples from 13 boreholes in Mengkham REE project. The results showed that bias was observed between original assay and verification results. SRK has checked with both onsite laboratory and SGS staff, found that the sample preparation and assaying method were different. SRK has downgraded Indicated Mineral Resources to Inferred Mineral Resource.

A total of ten bulk density samples were implemented across the project areas with the natural bulk density (wet basis) ranging from 1.7 to 1.81 t/m^3, averaging 1.75 t/m^3, dry bulk density ranging between 1.35 and 1.55 t/m^3, averaging 1.47 t/m^3.

Mineral Resource Estimates

The resource estimation methodology involved consolidating and verifying borehole and topographic data. Wireframe models delineated mineralization boundaries based on assay data and lithology. Resource domains were defined, and sample results were composited and capped for statistical

analysis. Block models were interpolated, and resources classified and validated to determine economic prospects and cut-off grades.

Based on the Reasonable Perspective of Eventual Economic Extraction ("RPEEE") assessment and considering the characteristics of the leaching mining method, SRK used a cut-off grade of 170 g/t TREO for Sepon project to report Mineral Resources and a cut-off grade of 100 g/t SREO for Mengkham project , based on a price of 239,000 CNY/t REO.

As of 31 March 2024, by applying a cut-off grade of 170 g/t TREO, the Mineral Resources SRK estimated and reported are as follows:

- 26.78 Mt of Indicated Mineral Resource with an average grade of 383.75 g/t TREO, equivalent to 10.28 kt of total rare earth oxides within the Project area.
- 63.79 Mt Inferred Mineral Resource with an average grade of 339.22 g/t TREO, equivalent to 21.64 kt of total rare earth oxides within the Project area.

Table ES- 1: Mineral Resource Statement[1] of Sepon REE Project, as of 31 March 2024

Category	Tonnage (Mt)	TREO (g/t)	TREO (kt)	PrNd Oxides (%)	MREO(%)	CREO(%)
Indicated	26.78	383.75	10.28	19.14	21.97	33.87
Inferred	63.79	339.22	21.64	18.78	21.45	32.59

Notes:

[1] Mineral Resources are not Ore Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Dr Anson Xu who are full time employees of SRK Consulting China. Mr Huaixiang Li is a Member of AIG and Dr Anson Xu is a Fellow of AusIMM. Dr Xu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined by JORC Code (2012). Mr Li and Dr Xu consent to the reporting of this information in the form and context in which it appears.

[3] Mineral Resources are reported at a cut-off grade of 170 g/t TREO. Cut-off grades are based on a price of 239,000 CNY/t REO.

[4] MREO: Pr_6O_{11}+Nd_2O_3+Tb_4O_7+Dy_2O_3.

[5] CREO: Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3, determined by US Department of Energy 2023.

[6] TREO: Total Rare Earth Oxides include Y_2O_3+ La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3.

As of 31 March 2024, by applying a cut-off grade of 100 g/t SREO, the Mineral Resources of Mengkham project are as follows:

- 139.05 Mt Inferred Mineral Resource with an average grade of 241.79 g/t SREO, equivalent to 33.62 kt of soluble rare earth oxides within the Project area.

Table ES- 2: Mineral Resource Statement[1] of Mangkham REE Project, as of 31 March 2024

License	Category	Dry BD (t/m^3)	Tonnage (Mt)	SREO (g/t)	SREO (kt)
Trial Mining	Inferred	1.47	55.59	267.75	14.88
Exploration	Inferred	1.47	83.47	224.51	18.74
Total	**Inferred**	1.47	139.05	241.79	33.62

Notes:

[1] Mineral Resources are not Ore Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Dr Anson Xu who are full time employees of SRK Consulting China. Mr Huaixiang Li is a Member of AIG and Dr Anson Xu is a Fellow of AusIMM. Dr Xu have sufficient experience which is relevant to the style of mineralisation and the type of

deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined by JORC Code (2012). Mr Li and Dr Xu consent to the reporting of this information in the form and context in which it appears.

[3] Mineral Resources are reported at a cut-off grade of 100 g/t SREO. Cut-off grades are based on a price of 239,000 CNY/t REO.

Ore Reserve Estimates

For Sepon REE Project, the current study indicates that the project would not be financially feasible. Following discussions with LXML, it has been decided that only Mineral Resources will be reported in the report.

According to the JORC 2012, only Measured Resources and Indicated Resources can be considered when estimating Ore Reserves. In this case of Mengkham Ion Rare Earth Project, based on SRK's resource review and re-estimate, all of the Mineral Resources of the Mengkham REE Project are categorized as Inferred Mineral Resources. The mineral resource basis may only support a preliminary economic assessment to analyse the project's potential economics. Therefore, there is no Orel Reserve for the Mengkham REE Project.

For Mengkham REE Project only

In-situ Leaching Mining

CHIXIA Laos commenced to operate a pilot production in March 2024. The pilot production facilities were constructed basically according to the design proposed in a preliminary feasibility study ("**PFS**") to develop the project. SRK reviewed the PFS and visited the pilot production facilities. CHIXIA Laos used in-situ leaching mining to extract REEs from the deposits, The process of the in-situ leaching mining involves mainly two parts: leaching solution injection and pregnant leach solution ("PLS") collection.

The injection system introduces a leaching solution into the ore body to dissolve the REEs through injection holes. The leaching solution enters the ore body via holes and absorbs the REEs.

The collection system consists of a series of tunnels and/or collection holes under the ore body to gather the PLS, which is then pumped to the plant for further processing via pipes.

The key technical parameters listed in Table ES- 3 below are summarized based on the PFS with SRK's modification.

Table ES- 3: In-situ Leaching Mining Design Parameters, as of 31 March 2024

Design Parameter	Unit	PFS's Inputs	SRK's Inputs
Overall			
In-situ Leaching Mining Recovery	%	90.0	90.0
Processing Recovery	%	85.5	85.5
Overall Recovery	%	77.0	77.0
Wet Plant – REO	tpa	3675 & 2800	3675 & 2800
PLS Capacity	million m^3 pa	16.3 &11.6	16.3 &11.6
In-situ Leaching Mining			
Average Orebody Depth	m	8.7	7.9
Injection Holes	m	4.0	4.0
Injection holes Cover Area	m^2	5.0	5.0
Collection Tunnel Cover Area	m^2	3.5	3.5

Source: CHIXIA

Mining Schedule

A mining schedule has been planned in terms of the proposed processing capacity as shown in Table ES- 4.

Table ES- 4: Mining Schedule of the CHIXIA Project

Section	Unit	Total	2024	2025	2026	2027	2028	2029	2030	2031
Tonnage	kt	138,040	4,620	19,700	18,040	19,590	19,650	25,020	19,150	12,270
Grade (SREO)	g/t	239.42	221.94	266.10	236.15	237.71	218.51	220.33	263.75	245.12

Source: SRK

Metallurgical Testing and Recovery Methods

The Mengkham ore belongs to the ion-adsorbed type rare earth ore, with average soluble rare earth oxide ("SREO") content of 0.025%. The minerals are mainly quartz, feldspar, biotite, ilmenite, magnetite, followed by zircon, apatite, xenotime, fluorite, sphene minerals and so on.

A simple laboratory column leaching test had been conducted on the samples from #2 ore body. The results showed that the permeability coefficient is $0.89x10^{-3} \sim 1.11x10^{-3}$cm/s and the pregnant leaching solution ("PLS") concentration can reach 2.0 g/L with the SREO leaching rate of about 94%.

The PLS undergoes four steps of processing to yield primary product of rare earth carbonate ("REC"), which will be sent to the calcination workshop to produce mixed rare earth oxide ("REO"). The residue generated from the processing will be dissolved by acid to recycle REO, which would improve the REO processing recovery and the economic benefits.

The full production capacity of the first hydrometallurgical plant is 3,675 tpa REO, and SRK deems that it is appropriate. The designed total recovery was 77%, with the ISL rate of 90% and the hydrometallurgical recovery rate of 85.5%.

After the review of all design data and site visit for the Project, SRK comes to the following conclusions and recommendations:

- Representative ore samples from each ore body should be taken to carry out test studies before production, and add the following experimental contents:
    i. SREO content analysis of ore samples, and
    ii. PLS purification and precipitation tests to determine the purification and precipitation conditions and reagents consumption.
- Three hydrometallurgical plants and one calcination plant are planned to be built during the life of mine. The Project had completed most of the construction of the Pilot Plant until May 2024, except for the filter press workshop and calcination workshop. Additionally, North Plant with production capacity of 3,675 tpa REO and South Plant of 2,800 tpa REO are scheduled to be constructed in 2026 and 2028, respectively.

Environmental and Social Aspects

Currently what are identified as part of the project assessment and this SRK review would include:

- Environmental approval to be obtained;
- Water pollution; and
- Mine closure fund to be established.

It is SRK's opinion that the above environmental risks are categorised as medium risks (i.e., requiring risk management measures) and they are generally manageable.

Capital Expenditures and Operating Expenses

The estimated Capex primarily encompasses the main production facilities of three hydrometallurgical plants, public auxiliary facilities and other engineering construction expenses (mainly associated with the mining rights or licence cost).

The total estimated Capex over the LOM is CNY 269.81 million, which includes the initial investment of CNY 239.81 million and the continuing investment of CNY 30 million. Table ES- 5 summarized the Capex breakdown for the Project.

Table ES- 5: The Capex Breakdown for the Mengkham REE Project (Unit: CNY million)

Item	Initial Investment	Continuing Investment	Total
Hydrometallurgy Plant Construction	18.48	17.00	35.48
Public Auxiliary Facilities	24.93	13.00	37.93
Engineering Construction Other Expenses	196.40	-	196.40
Subtotal Investment	239.81	30.00	269.81

The project's Opex primarily includes production cost, reclamation cost, G&A (general and administrative) cost and sales cost. Production cost mainly encompasses injection and collection cost, raw material cost, pipes and accessories cost, power cost, safety and environmental cost, staff salary cost and other cost.

Table ES- 6 summarized the forecasted Opex for the Project, with a total Opex of CNY 2,682 million and a unit cost of approximately CNY 19.43 per tonne of Raw ore or CNY 105,480 per tonne of pure REO. All costs are current as of 31 March 2024, with no escalation factored in.

Table ES- 6: Forecasted Opex of the Mengkham REE Project

Item	LOM Total Cost (CNY M)	Unit Cost (CNY/t RoM)	Unit Cost (CNY/t REO)
Production Cost	2,591	18.77	101,902
Injection and collection cost	741	5.37	29,155
Raw material	1,063	7.70	41,794
Pipes and accessories	216	1.57	8,500
Power cost	154	1.11	6,042
Safety and environmental cost	31	0.22	1,200
Staff salary	161	1.17	6,339
Other cost	226	1.63	8,872
Reclamation cost	15	0.11	601
General and Administration (G&A)	38	0.27	1,477
Sales Cost	38	0.28	1,500
Total	2,682	19.43	105,480

Preliminary Economic Analysis

The Discounted Cash Flow ("DCF") method was used for the economic analysis, as the project is under the construction and pre-operation stage with a completed PFS. It is important to note that the purpose of this analysis is solely to demonstrate the economic viability of the project. The derived NPVs do not indicate the fair market values or the profitability of the projects. The estimated cash flows and NPVs were presented on an after-tax basis, and financing costs were not considered.

CNY 296.32 million of the net present value ("NPV") at 10% discount rate was estimated by SRK through DCF model. The NPVs based on different discount rate were also estimated, presented in Table ES- 7, which has demonstrated the economic viability of the Project.

Table ES- 7: Estimated NPV at Different Discount Rate

Discount Rate	8%	9%	10%	11%	12%
NPV (CNY M)	348.70	321.63	296.32	272.64	250.47

Sensitivity analysis was conducted on Capex, Opex and price. The result indicates the NPV is most sensitive to price, followed by Opex and Capex.

Risk Assessment

The results of the risk assessment rating are presented in Table ES- 8 below. The rating of the risks is presented before implementation of control recommendations.

Table ES- 8: Project Risk Assessment of the Mengkham REE Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Lack of Significant Ore Reserves	Possible	Major	High
Unexpected Groundwater Ingress	Unlikely	Minor	Low
Mining			
Subsidence and Ground Stability	Possible	Moderate	Medium
Hydrogeological Modeling Uncertainties	Unlikely	Moderate	Low
Significant Production Shortfalls	Unlikely	Major	Medium
Significant Geological Structure	Possible	Minor	Low
Ore Processing			
Lower Recovery	Unlikely	Moderate	Low
High Production Cost	Possible	Minor	Low
Poor Plant Reliability	Unlikely	Minor	Low
Capital and Operating Costs			
Project Timing Delays	Possible	Minor	Low
Capital Cost and Operating Cost Increases	Likely	Moderate	High
High mine closure cost	Possible	Moderate	Medium
Environmental, Social and Permitting			
Environmental approval to be delayed	Possible	Moderate	Medium
Water eutrophication	Possible	Moderate	Medium
Fund not available and without proper mine closure	Possible	Moderate	Medium

Some medium to high risks have been identified for the Project. Two high risks are "Lack of significant Ore Reserves" and "Capital Cost and Operating Cost Increases". To manage the risks,

SRK recommends the Company should further conduct supplemental exploration programs following guidelines of the best practice to improve the mineral resource basis, and then conduct a feasibility study.

Recommendations

Geology and Mineral Resources

The core drilling and geological logging were carried out to a standard that ensures the data and information collected sufficiently support the goals of subsequent geological modelling and resource estimation.

SRK considers that the depth capacity of manual auger drilling may not be enough to penetrate potentially semi-weathered hard layers or boulders. This limitation could potentially result in incomplete intersections of the ore-bearing horizon during drilling.

Sepon

Looking ahead, the Sepon REE mine is considering in-situ leaching to be their main extraction technique. However, the available data, which only includes 8 ionic analyses, falls short in providing an accurate estimate of the mine's potential and productivity. The scant data does not paint a holistic picture of what the mine can offer. For this reason, SRK suggests a re-analysis of the ionic REE grade. Through this, a clearer view of the mine's potential can be ensured, which is crucial in devising and executing efficient mining plans.

Mengkham

SRK considers that the rapid test method, which entails visually observing rare earth precipitates before conducting core sampling for laboratory analysis, is qualitative in nature. This approach serves merely as an initial indication to assess the mineralization within the sampled core interval. Due to its inherent subjectivity, this method may result in overlooking certain shallow-occurring intervals containing REE sufficient for subsequent laboratory testing, potentially leading to an underestimation of orebody thickness.

The 1:5000 topographic aerial survey only covered an area of 2.3 km^2. SRK suggests the mine to conduct a detailed topographic survey covering the whole project area.

The mine's current approach is to analyse all basic samples in the lab onsite. While this might be convenient and efficient, it may not provide the most accurate results. Large bias was observed between original assay and SRK verification results. It is recommended that all the samples should be sent to a qualified laboratory for assaying again.

There are merely 30 samples that possess REE compositions. This limited number prompts SRK to recommend that the mine increase its efforts in conducting more composition analyses. This is to ensure a more reliable and expansive dataset for evaluation purposes.

SRK also recommends carrying out more research on structure or fault system. This is because faults may have a substantial influence on the in-situ leaching mining method.

Prefeasibility Study

SRK would recommends the Company to conduct a prefeasibility study on the Mengkham REE Project once the supplemental exploration programs and resource update have been completed to optimize the development scheme of the project.

1 Introduction and Terms of Reference

SRK Consulting China Ltd. ("**SRK**") was requested by Chifeng Jilong Gold Mining Co., Ltd. ("**Chifeng Gold**" or the "**Client**") to prepare a Competent Person's Report ("**CPR**" or the "**Report**") for its Sepon REE Project and Mengkham REE Project (**the** "**Projects**") located in Savannakhet Province, and Xiengkhouang Province, Lao People's Republic ("**Laos**"), respectively, in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves, 2012 edition ("**JORC Code (2012)**") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**HKEx**").

The projects include exploration licenses, mining licenses, currently in-situ leaching mine, and associated ore processing and metallurgic plants under construction and trial production. The Sepon REE project is currently operated by Lane Xang Minerals Limited ("**LXML**"), which is a subsidiary of Chifeng Gold, and the Mengkham REE project is 86% owned by China Investment Mining (Laos) Sole Co., Ltd. ("**China Investment Mining (Laos)**") via its 100% owned subsidiaries, China Investment Rare Earth Mining Co., Ltd., and China Investment Rare Earth Mining XiangKhouang Co., Ltd. Chixia Laos Holding Limited, a Chifeng Gold subsidiary is in the process of acquiring 90% shares of China Investment Mining (Laos).

This report consists of an independent review of the geology, exploration, mineral resources, Ore Reserves, mining, mineral processing and smelter-refinery, capital investment, operating cost, and environmental and social aspects of the Projects. The mineral resource statement reported herein was prepared in conformity with JORC (2012).

1.1 Scope of Work

The scope of work, as defined in letters of engagement executed in November 2022 and in May 2024 between Chifeng Gold and SRK, includes the reviewing/updating of mineral resource models for the REE mineralization, delineated on the Projects, and reviewing of a prefeasibility study done on the Mengkham REE project and preparation of a CPR in compliance with JORC (2012) and the listing requirements of the HKEx. This work involved the assessment of the following aspects of the Projects.

- Regional, local and mine geology
- Exploration history, quality and independent data verification
- Geological modelling, mineral resource estimation and validation
- Mining assessment
- Processing and mineral recovery, smelter and refinery
- Environmental and social
- Operating and capital costs; and economic analysis
- Preparation of a Mineral Resource Statement and an Ore Reserve Statement, if any
- Recommendations for additional work

1.2 Work Program

The scope of work, as defined in letters of engagement reached in November 2022, and May 2024 between Chifeng Gold and SRK, includes the reviewing and estimating of the mineral resource of the REE mineralisation delineated within the Sepon Project' tenements and the Mengkham REE project, and reviewing of a preliminary feasibility study on the Mengkham REE project, and the preparation of a CPR on the projects in accordance with JORC (2012) and the [**REDACTED**] requirements of the HKEx.

SRK conducted the work programs on the projects in phases:

Phase 1: SRK conducted a desktop review on the documents provided by the client, before conducting the site visits the project site;

Phase 2: SRK conducted site visits to both projects. During the period from 9 to 14 December 2022, SRK's personnel conducted site visits to the Sepon Project, to gather data and interview related personnel who conducted exploration and feasibility study on the project. During the period from 13 to 16 May 2024, SRK further conducted a site visit to the Sepon REE Project. During the period from 9 to 11 May 2024, SRK conducted site visits to the Mengkham REE project, inspected and observed the status of the project, held meetings with the managements and technical personnel, sighted geology, exploration, mineralization, trial mining operation, ore processing and metallurgic operation, as well as conducted its own data verification programs, ans assessed environmental and social aspects.

Phase 3: SRK team reviewed the information provided by Chifeng Gold, and estimated mineral resources and reviewed the preliminary feasibility study on the Mengkham REE project, conducted a preliminary economic assessment on the project, and compiled a technical report about the projects, and submitted it to the client for comments in June 2024.

SRK will further revise the report based on the feedbacks from the client and related third parties, and will finalize it in the due course.

1.3 Basis of Technical Report

This report is based on information collected by SRK during site visits carried out in December 2022 and May 2024 and on additional information provided by the Company throughout the course of SRK's investigations. SRK has no reason to doubt the reliability of the information provided by the company. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with personnel of the Sepon and Mengkham REE Projects
- Inspection of the Sepon and Mengkham REE Projects area, including outcrop and drill core
- Review of exploration data collected by the Company
- Additional information from public domain sources

This report has been prepared to accommodate the requirements of HKEx, and the Mineral Resources and Ore Reserves are reported according to the JORC (2012), which is binding upon all Australasian Institute of Mining and Metallurgy ("**AusIMM**") members.

1.4 Qualifications of SRK and SRK Team

SRK Consulting comprises over 1,800 professionals, offering expertise in a wide range of resource engineering disciplines. SRK's independence is ensured by the fact that it holds no equity in any projects and that its ownership rests solely with its staff. This fact permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Ore Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. SRK has also worked with a large number of major international mining companies and their projects, has provided mining industry consultancy service inputs.

The short bios of key SRK personnel are shown below:

Anshun Xu (Anson Xu), ***Ph.D., FAusIMM,*** is a Corporate Consultant (Geology) who specializes in the exploration of mineral deposits. He has more than 30 years' experience in exploration and development of various types of mineral deposits including Cu-Ni sulphide deposits related to ultra-basic rocks, tungsten and tin deposits, diamond deposits, and REE deposits. He recently completed several due diligence jobs for clients from both China and overseas including technical review projects such as Canadian NI43-101 reports and HKEx IPO technical reports. Dr. Xu was the Projects Manager of this project and the Competent Person ("CP") who takes overall responsibility for this report.

Huaixiang (Hubert) Li, ***MEng, MAIG,*** is a senior consultant (geology) with SRK China. He graduated from the China University of Geosciences (Beijing) and has worked in a geological exploration company for more than 6 years and gained lots of experiences and expertise in geological and mineral resources exploration. As a consulting geologist, he has participated a number of metal mineral projects, including exploration design review, data verification, due diligence reviews and mineral resource estimation. He is familiar with the principles and methods for metal ore deposits prospecting and exploration including lithium, gold, silver, PGE, REE, copper, lead, zinc, molybdenum, bauxite, etc. He is proficient in geological modelling, resources estimation, data processing and GIS/RS application. Mr. Li is responsible for the geology, exploration and mineral resources, and is the Competent person of the mineral resources.

Yonggang Wu, (Mining and Reserves)，*M.Eng*., is a Principle Consultant (Mining). He joined SRK after graduation from Jiangxi University of Science and Technology in 2007. He has acquired specialized knowledge in mining engineering, MineSight software and has been involved in various projects to date. He has worked on a wide range of commodities including Au, Ag, Pb, Zn, Mn, Cu, Fe, W, Sn, fluorite, potassium salts, alum, phosphorus, serpentine, and many more. He has accumulated extensive experience in Mineral Resource/ Ore Reserve estimation, pit limit optimization and design, underground mining design, long-term production planning, mining assessment, public facilities and infrastructures assessment and due diligence studies. Yonggang has expertise in geological and mining modelling and is proficient in using MineSight, Surpac, AutoCAD, and other specialized software packages. He has been involved in dozens of independent technical reports, due diligence reports and annual reports to provide investors, decision makers and shareholders with unbiased technical opinions. Mr. Wu supervises Mr. Lu for the mining assessment, and acts as the CP of ore reserves.

Erwei Lu, ***M.Eng.;*** Consultant (Mining) at SRK China, he obtained his bachelor's degree and

master's degree in mining engineering from Central South University. He has over five years of practice of underground operation, and about one year's mineral project evaluation experience. He worked as an on-site mining engineer in Zambia for China Nonferrous Metal Mining (Group) Co., Ltd. after graduation in 2017. He also worked for an autonomous driving application and mineral project investment companies since 2022. He is familiar with large scale underground mobile equipment operation and training, long-hole blasting, mine design and scheduling, and production management, as well as autonomous driving application in open pit mine, and project evaluation. Mr. Lu conducted mining assessment under the supervision of Mr. Yonggang Wu.

Lanliang Niu, B.Eng., *MAusIMM*, is a Principal Consultant (Mineral Processing), who graduated in 1987 from Beijing University of Science and Technology majoring in ore processing. He has worked on the industrial testing of gold leaching with low grade ores, managed or participated in processing and metallurgical testing for more than 10 precious and non-ferrous metals projects. With SRK, he has been responsible for the ore processing and metallurgical scope of work and involved in many key projects. Mr. Niu was responsible for the metallurgical and processing review. Mr. Niu peer reviewed Ms. Xiangfeng Yang's work.

Xiangfeng Yang, MEng*; MAusIMM, Chinese Certified Mine Constructor, Chinese Certified Mineral Right Value, Certified Cost Engineer,* is a Senior Consultant (Mineral Processing) with SRK Consulting China Ltd. She has over 12 years' experience in processing Feasibility Study, processing design and technical consultancy service, especially in industrial minerals including gold, silver, lead, zinc, copper as well as phosphate. She obtained bachelor's degree and master's degree in mineral processing engineering from Jiangxi University of Science and Technology and Wuhan University of Science and Technology, during which she systematically studied the processing flowsheet and plant design on nonferrous metals ore and non-metallic ores. Before joining SRK, she engaged in ore Feasibility Study, preliminary design, construction drawing design and equipment procurement evaluation in Bluestar Lehigh Engineering Institute Co., Ltd and Nanchang Mineral Systems Co. Ltd. She has published several journal papers and utility models, conducted and participated in the plant design of many medium and large phosphate ore, potash salt, sulfide ore, iron ore and other projects. Ms. Yang reviewed the processing and metallurgic aspects, as well as the economic analysis.

Andy Li, PhD, *MAusIMM*, is a Principal Environmental Consultant with SRK Consulting China Ltd. Having graduated with a doctoral degree in Environmental Engineering from the Florida State University, he has over 12 years' experience in the environmental engineering field and has worked in various environmental projects in the USA, China, Mongolia, and a number of South Asian countries. He has particular expertise in environmental due diligence reviews, environmental compliance, and impact assessments for mining, mineral processing, refining, and smelting; in contaminated-site assessments and remedial design; in wetland and landfill rehabilitation; and in environmental-risk assessment. He also has extensive experience in water/wastewater treatment design, water distribution systems, and storm water management system design. Dr. Li was responsible for the environmental, permit, social and community review.

Yonglian Sun, *B.Eng. PhD, FAusIMM, FIEAust, CPEng*., is a Corporate Consultant and a Practice Leader of SRK China. Dr Sun has over 30 years experience in geotechnical engineering and mining engineering in five countries across four continents. He also has extensive international experience in mining project evaluation for project financing and overseas stock market listings. Over the last decade, Dr Sun has led and coordinated dozens of due diligence projects for many mining companies

and most of them have been successfully financed or listed on the HKEx. Dr Sun provided internal peer review to ensure the quality of the report meets the required standard.

1.5 Site Visit

SRK conducted site visits to both projects. During the period from 9 to 14 December 2022, SRK's personnel conducted site visits to the Sepon Project, gathered data and interviewed related personnel who conducted exploration and feasibility study on the project. During the period from 13 to 16 May 2024, SRK further conducted a site visit to the Sepon REE Project. During the period from 9 to 11 May 2024, SRK conducted site visits to the Mengkham REE project, inspected and observed the status of the project, held meetings with the managements and technical personnel, sighted geology, exploration, mineralization, trial mining operation, ore processing and metallurgic operation, as well as conducted its own data verification programs, and assessed environmental and social aspects.

SRK was given a full access to relevant data and conducted interviews with Sepon/Mengkham REE Project personnel to obtain information on the past exploration work, to understand procedures used to collect, record, store and analyse historical and current exploration data, as well as operating issues and data.

1.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Sepon and Mengkham personnel for this assignment. Their collaboration was greatly appreciated and was instrumental to the success of this project.

1.7 Declaration

SRK's opinion contained herein and effective as of **March 31, 2024**, is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of Chifeng Gold, and neither SRK nor any affiliate has acted as advisor to Chifeng Gold, its subsidiaries or its affiliates in connection with the projects. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

2 Reliance on Other Experts

SRK trusts the information from Chifeng Gold regarding mine ownership, legal and financial liability. SRK did not carry out independent validation of the information regarding licences and permits of the Projects summarised in "Chapter 3 Licences and Permits" of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but have relied on the Client. SRK was informed by Chifeng Gold that there are no known litigations potentially affecting the Projects.

Chifeng Gold provided the digital database used for geological modelling. SRK verified this database and removed repeated samples. It is SRK's opinion that the database used for resource estimation has been validated and was collected and built in a professional manner.

The topography used in estimating the Mineral Resource statement in this report relies on the topographic survey map from the geological report prepared by local geological brigade. SRK trusts the results of this survey.

3 Operational Licenses and Permits

This section summarises related operational licences and permits. SRK relied on the information provided by the Company, and SRK understands that a legal due diligence review of this Project has been undertaken by the Company's legal advisors.

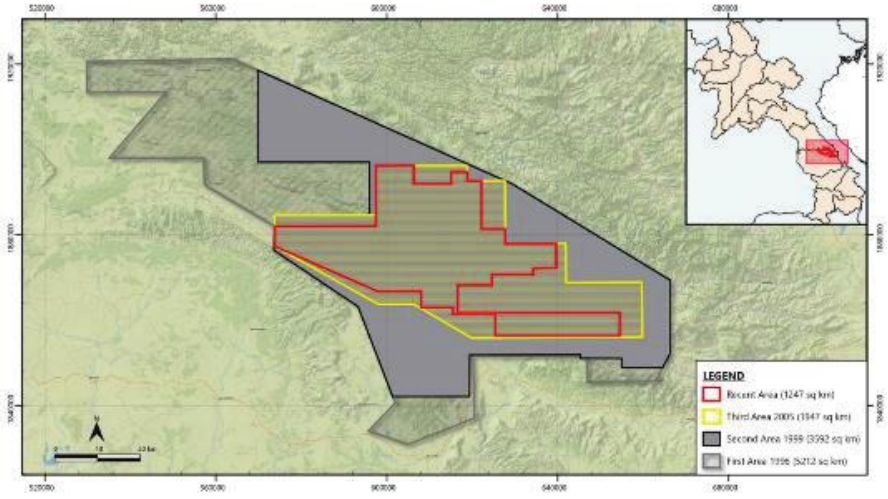
3.1 Sepon REE Project

Currently, LXML possesses an exploration permit with a total area of 1,010.40 km^2, which is valid till June 2026. The exploration permit consists of 32 inflection points which have been provided in Table 3-1 below. The Sepon REE Project area is located in the southeastern corner of the permit.

Table 3-1: Inflection Points of Sepon Exploration Permit

	Coordinates（Indian60/UTM zone48N)							
No.	**Easting**	**Northing**	**No.**	**Easting**	**Northing**	**No.**	**Easting**	**Northing**
1	573862	1882069	12	627729	1881372	23	654528	1856386
2	597530	1882125	13	627740	1877917	24	625446	1856403
3	597493	1896201	14	639684	1877944	25	625435	1861368
4	606341	1896245	15	639712	1872165	26	615504	1861365
5	606312	1891995	16	634320	1872099	27	615536	1862969
6	615094	1891995	17	634273	1870635	28	608051	1862967
7	615077	1894679	18	624641	1870635	29	608036	1866712
8	618788	1894699	19	624691	1868192	30	597977	1866708
9	618801	1892615	20	616589	1868192	31	573861	1877302
10	622176	1892641	21	616585	1861836	32	573862	1882069
11	622176	1881382	22	654556	1861825			

Figure 3-1: The Exploration Permit area of Sepon Project



(Source: LXML, 2022)

3.2 Mengkham REE Project

3.2.1 Trial Mining License

Table 3-2 which is renewable, and the scanned copy of the original trial mining license is attached in Appendix A. Please note that the Company is in the process of renewing this license.

Table 3-2: Trial Mining License

Name of Mine	Mengkham Rare Earth Mine
Ming License No.	MPL0156
Issued to	China Investment Xieng Khouang Rare Earth Minerals Limited
Issued by	Ministry of Mine and Energy
Area (km^2)	8.0
Issuing Date	28 December 2022
Expiry Date	December 2025

3.2.2 Exploration Permit

Table 3-3 summarizes the key information of the exploration permit.

Table 3-3: Exploration Permit

Name of Mine	Mengkham Rare Earth Mine
Ming License No.	2122 No.3
Issued to	China Investment Xieng Khouang Rare Earth Minerals Limited
Issued by	Ministry of Mine and Energy
Area (km^2)	42.0
Issuing Date	28 December 2022
Expiry Date	December 2024

3.2.3 Other Key Operational Licenses and Permits

The Company has obtained land use agreements with the locals for the site operation, and SRK was provided with sample agreements for review. They include information regarding land area, items for compensation, etc. Other license and permits for water use permit or discharge permit are under application process.

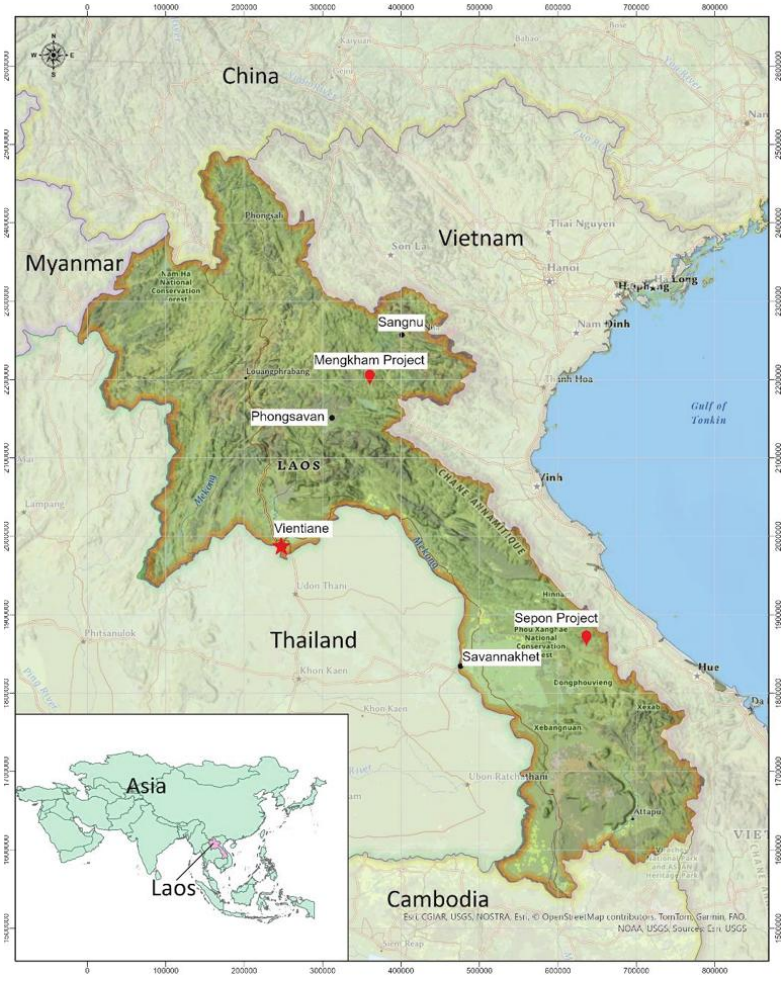
4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The Sepon project is in Sepon County, Savannakhet Province, Lao PDR. The property is situated in the southern part of the Sepon gold and copper Mine.

The Mengkham REE Project is located in Mengkham County, XiengKhouang Province, Lao People's Democratic Republic. The property is situated between latitudes 19°48' and 19°51' north, and between longitudes 103°39' and 103°41' east.

The locations of the two projects are shown in Figure 4-1.

Figure 4-1: Locations of The Sepon and Mengkham REE Projects



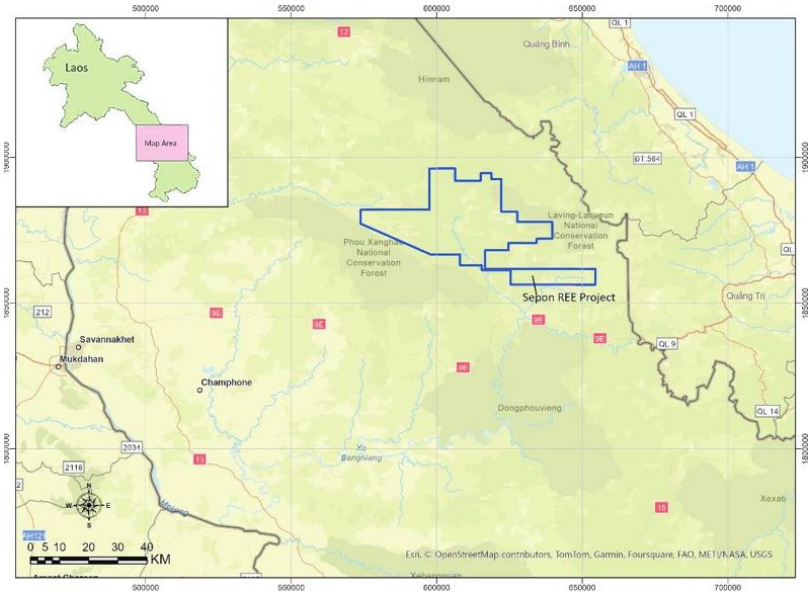
Source:SRK

4.1 Sepon Rare Earth Element Deposit

4.1.1 Accessibility

The Sepon REE project is in Savannakhet province, south-central Laos (Figure 4-2). Access to the project area from Vientiane, the capital of Laos may take about 1.5 hours flight or about 8 hour drive for a distance about 560 km. There are daily charter flights available between Vientiane and Sepon mine in weekdays. There are also daily flights between Vientiane and Chinese, Vietnam and Thailand cities. Alternate access to the project is about 1 hour flight between Vientiane and Savannakhet and then about 4-hours bus ride between Savannakhet to Sepon.

Figure 4-2: Location of Sepon REE Project



Sources: SRK

4.1.2 Local Resources and Infrastructure

In the Sepon Project region, the vegetations are abundant with eucalyptus forest and bushes.

Villages are widely distributed in the area, and villagers generally work in agriculture and forestry productions. Rice is the main crop and Manihot is also important crop. Industry is not well developed. Labours are abundant, while technical personnel are absent.

Power line of 220 KV goes through the area and supplies the electricity. Telephones and mobile communication are available.

4.1.3 Climate and Physiography

The climate in the project area belongs to tropic climate with northeast monsoon and southwest monsoon. The raining season relates to the southwest monsoon with the characteristics of heavy rains, high temperatures and high moistures, and lasts from mid-April to mid-October. The dry season lasts from mid-October to mid-April in the following year with the characteristics of less rains and relatively lower temperatures and moistures, while the driest season is from mid-November to mid-February of thfollowing year.

4.1.4 Physiography

The Sepon project area has a geomorphology of low-mid mountains. The elevations generally range from 240 to 420m above sea level ("ASL"). The highest point in the mountainous area in the north is 755.0m ASL. In the mine area, the relative elevation differences are about 50 to 100m.

The mountain ranges generally strike near eastly to westerly. Water runs from the slope of each side to small streams. During dry the season, most of the small streams are dried out, while the small rivers which the small streams flow into have the running water all year round. The small rivers flow into Sebanghiang River in the foot of the south slope, and the Sebanghiang River flows into Mekong River.

4.2 Mengkham REE Project

4.2.1 Accessibility

The project is situated in Longmou Village and Soumont Village, Mengkham County, in the northern part of Xiengkhouang Province (Figure 4-3). There are daily commercial flights available between Vientiane, the capital of Loas, and Phongsavan, the capital of Xiengkhouang Province. Provincial highway, 1C, runs through the mining area, linking Phongsavan and Sangnu, the capital of Houaphan Province. Traveling from Mengkham County town to the project area along highway 1C is approximately 45 kilometers, all of which are winding mountain roads with asphalt surfaces. These roads can be dangerous due to many curved turns. The project is roughly 100 kilometers away from Phongsavan and around 140 kilometres from Sangnu, making transportation generally straightforward. Certain parts of the mining area have been surfaced with sand and stone, allowing for vehicular access in both rainy and dry seasons.

Figure 4-3: Location of Mengkham REE Project

Sources: SRK

4.2.2 Local Resources and Infrastructure

Xiengkhouang province is located in the northeast of Laos, bordering Vietnam to the east. The capital is Phongsavan and the province is divided into eight districts. As of 2020, it has a population of 267,179 and covers an area of 15,800km^2.

XiengKhouang province is a multi-ethnic region primarily inhabited by Lao Long (Dai), Lao Song (Miao), and Lao Listen (Yao). It has a pleasant climate and fertile land, making it suitable for growing semi-plateau plants, cultivating vegetables, and breeding cattle and other livestock. The province is rich in minerals like iron, antimony, zinc, silver, copper, alluvial gold, and coal.

Traditional industries include silk weaving, bamboo weaving, ironwork, pottery, and food processing. The region is also home to sewing factories, ice factories, beverage factories, sawmills, waterworks, and automobile repairing shops. Rice paddies dot the river valleys and parts of the shallow hills. The Shigang Plain, a famous tourist attraction in Laos, is also located there.

The mine is located near two villages, Longmou and Soumont, which collectively house about 394 households or 2907 people, including 1512 men and 1395 women. The residents primarily engage in farming, hunting, and storekeeping, though the economic condition of the area is relatively poor.

Locals mainly use diesel and gasoline for fuel, which are conveniently supplied in townships, counties, and urban areas. Construction materials such as cement, sand, stone, and steel bars are available in urban areas.

Mobile communication companies, LAO TELECOM and UNITEL, provide domestic and international telephone services within the mining rights area.

The mining area has sufficient power supply with a township power grid. However, due to high power consumption, a new substation is required to supply electricity in the mining area.

4.2.3 Climate

The climate in the area belongs to the Southeast Asian tropical rainforest climate zone, characterized by changeability, long sunshine hours, strong ultraviolet radiation, large diurnal temperature differences, and year-round hot and humid weather. Influenced by the monsoon climate, the year is divided into dry and rainy seasons. The rainy season is from June to October, with occasional thunderstorms and heavy rains, abundant rainfalls, which cause roads muddy, air humid, travel difficult, so it is unsuitable for outdoor geological work. The dry season is from November to the following May. The weather is clear and less rainy, and the temperature is relatively mild, making it the golden season for outdoor geological work. However, in April, it is often continuously hot, which is the highest temperature period of the year. Temperatures hover between 36℃ and 43℃. Outdoor activities should be avoided as much as possible to prevent heatstroke. The province of Xiengkhouang belongs to the Laotian plateau, where the temperature varies greatly between day and night in the dry season. From November to February of the following year, the lowest temperature is 5-6℃.

The mining area is relatively high in terrain, with undeveloped surface water bodies. The only recharge source of groundwater is atmospheric precipitation. In addition to running off along the slope into nearby streams, atmospheric precipitation is partly consumed by evaporation and plant transpiration. The remaining part infiltrates down through the loose layer of the Quaternary and the fissures of the weathered crust of the bedrock to form underground seepage, with the recharge degree mainly controlled by the terrain. In areas with steeper terrain, atmospheric precipitation easily forms surface runoff into nearby streams. In areas with relatively gentle terrain, the main method is infiltration, partly recharging deep groundwater. The direction of groundwater seepage in the mining area flows from relatively high to relatively low terrain.

The mining area is located in the mountains and is the watershed area of the hydrogeological units in the region. There are no large-scale surface water bodies, but many mountain streams have developed, branching out like tree branches. There are two types of water source replenishment methods: one is precipitation replenishment, and the other is groundwater seeping out along the bank of the ditch. There are no centralized water outlets. The stream flow gradually increases from upstream (the source is located in the mining area) to downstream. The surface water is clear and transparent, slightly turbid in the rainy season, and the content of mud and sand increases. All areas within the mining area are above the local erosion base level, and there is no impact of surface water on future mining.

4.2.4 Physiography

One-fifth of Xiengkhouang province is plains, while the remaining four-fifths consist of mountains and plateaus. The average elevation in the northern part exceeds 1,500 meters above sea level. The highest peak, Bia Mountain, located in Xiengkhouang province, stands at 2,820 meters. Other peaks in the province rise over 2,000 meters.

The northwestern region of the province is rugged, remote, and isolated, with rivers that swell in the rainy season. The Truong Son Mountain range in the eastern part of the province descends gradually from north to south, with an average elevation of 1,200 meters in the south. The Truong Son range acts as the natural boundary between Laos and Vietnam. Areas near the Truong Son range are characterized by highlands and mountains.

5 History

5.1 Sepon Rare Earth Element Deposit

The REE project of Sepon is located in the southeast of the mining area, with an area of 209km^2, and is about 20-50km straight line distance from the main mining area. The exploration history is summarized as follows:

From 1995 to 1996, CRAE Company conducted prospective work in this area.

From 1997 to 1998, CRAE Company carried out mapping, water system sediment measurement, block sample analysis, etc. in this area. The highest grade of Au ore found in the grabbed sample is 4.7 g/t.

In 2008, OZ Company carried out mapping work in the western part of this block and delineated the distribution range of granite.

In 2009, OZ Company carried out geological mapping and soil sampling work in the eastern part of the project and delineated the distribution range of granite. During the mapping, silicified conglomerates were found on the surface, the highest Au grade was 2.18 g/t, and sulfide veinlets could be seen in the Highway group sandstone.

In 2021, the exploration department of LXML restarted geological exploration work in the area, carried out geological mapping and physical and chemical measurement work, and found that granite was widely distributed in the area during the mapping and soil measurement, and the granite-covered area had a significant rare earth anomaly, with the characteristics of ion-adsorption type rare earth deposits in the weathering crust.

5.2 Mengkham Rare Earth Project

Since 1987, Laos has been carrying out 1:200,000 geological mapping. The 1:200,000 geological map with the code E-48-Ⅱ (KHANGKHAI AREA) includes the mining area.

In 1988, the Soviet Union and Vietnam published six geological maps for Vietnam, Laos, and Cambodia. In 1990, the United Nations published a 1:500,000 geological map of Laos, a Laos mineral resources distribution map, and explanatory notes. These were edited by the United Nations Economic and Social Commission for Asia and the Pacific ("ESCAP").

In 1991, Peter J. Cook of the British Geological Survey and Dr. Bosay Kham of the Lao Geology and Minerals Bureau published a Lao People's Democratic Republic mineral distribution map (1:1,000,000).

From September 1990 to March 1991, a five-person team from the British Geological Survey created two new English computer databases for geological books and mineral resources of the Vientiane Geology and Minerals Bureau. The creation was supported by the West Asia Development Bank. The team also prepared a new coloured geological and mineral map (1:1,000,000).

With the progress of China's "One Belt, One Road" initiative and funding from the China Geological Survey, Laos completed a 1:1 million geochemical filling map. This filled the gap in the national scale geochemical filling map of Laos. The project collected 1905 geochemical samples in the territory (net

degree 10km×10km). The content of 71 elements was analysed using various testing methods, and geochemical maps and geochemical anomaly maps were compiled.

In 2022, China Investment Mining (Laos) Co., Ltd. organized detailed exploration work. It resulted in a cumulative total of 13,656 drilling holes and approximately 200,000 meters.

From 2022 to 2023, detailed exploration work was carried out in the mining area. The resources of ionic rare earth oxides within the mineral rights range were estimated based on the detailed exploration data.

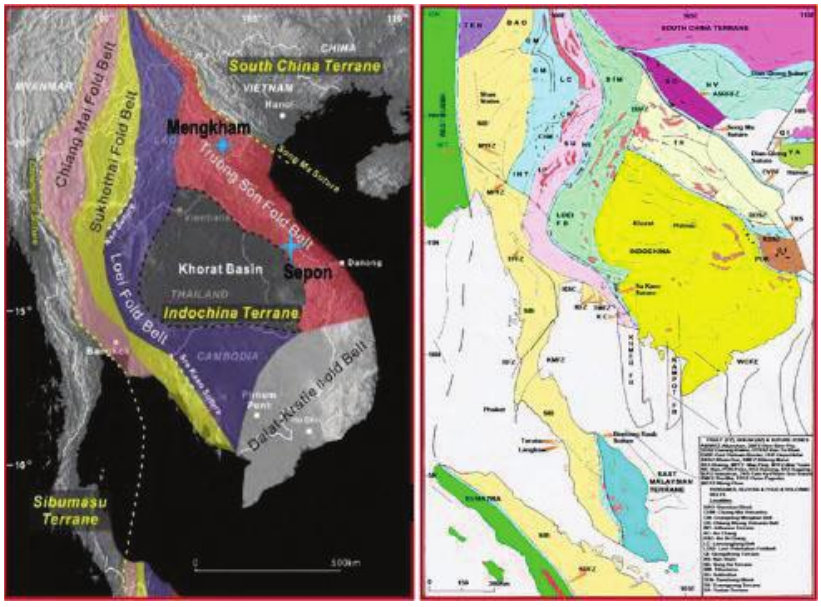
6 Geological Setting and Mineralization

6.1 Regional Geology

Tectonically, Sepon and Mengkham REE project lie within the Truongson Fold Belt (or Annamite Cordillera) and the Kontum Massif. The Truongson Fold Belt is a NW elongated belt between South China Terrane and Indochina Terrane (Figure 6-1).

The Troungson Fold Belt is consisted of Early to Middle Palaeozoic sediments and lesser volcanic rocks, interspersed with lesser tectonic slices of metamorphic terranes, bound to the north by the Song Ma-Song Da suture zone and to the south by the NW trending Truongson Fault. The Kontum Massif comprises an Upper Proterozoic basement of ortho- and para-gneiss, crystalline schist and migmatite which abuts the Truongson Fold Belt to the south.

Figure 6-1: Regional Geology Setting



The main strata in the region include the Proterozoic low to mid-high grade metamorphic rocks, such as schist, marble and gneiss; Palaeozoic marine volcanic and sedimentary rocks with some continental volcanic and sedimentary rocks, such as limestone, sandstone, siltstone, shale, mudstone and marlstone; Mesozoic continental sedimentary rocks, such as red sandstone and clay; and Cenozoic loose sand and gravel. In the Sepon district, the Truongson Fold Belt is represented by a series of E-W trending basins which are truncated by the NW-striking Truongson Fault (Figure 6-1). Affected by the Fault, NW and nearly S-N striking faults were developed, with some secondary faults striking NE and nearly E-W.

Granitic intrusions have been mapped in the district as well as rhyodacite and andesite dykes and stocks, interpreted to be part of the Late Palaeozoic Variscan Orogeny. At least three phases of around 300 Ma rhyodacite porphyry intrusion are recognised, including a late, quartz-stockwork

veined phase, which is interpreted to be genetically associated with all known Cu and Au mineralisation in the field. Minor remnants of Jurassic to Cretaceous Khorat Basin continental sedimentary rocks unconformably overlie the Palaeozoic marine sedimentary sequences to the east and north, while west of the Kontum Massif and south of the Truongson Fault, Khorat sedimentary rocks are dominant. Cenozoic volcanic rocks unconformably overlie the Palaeozoic rocks to the north-east.

There are abundant mineral resources in the region, including gold, copper, lead-zinc and limestone resources, as well as coal, iron, REE and bauxite resources.

6.2 Property Geology

6.2.1 Sepon Rare Earth Element Deposit Property Geology

The exposed strata in Sepon area mainly include Archean gneiss, Ordovician Highway Group, Silurian Vang Ngang Group, Devonian calcareous shale and limestone, and Quaternary (Figure 6-2), with the lithological characteristics described as follows:

Archean gneiss: This includes biotite gneiss, two mica gneiss, white mica plagioclase gneiss, biotite quartzite, and schist. It is mainly distributed in the southern part of the work area.

Ordovician Highway Group: The Highway Group mainly consists of clastic rock marine sedimentary sequences. The lower segment of the Highway Group is mainly composed of thickly bedded feldspar sandstone, irregularly interbedded with a small amount of siltstone, mudstone, and shale. Lenticular, thinly bedded to bedded calcareous sandstone and limestone layers appear at the top of this segment. The composition of the upper segment of the Highway Group is similar to the lower segment, characterized by medium to thick beds (0.1 ~ 1m, averaging 0.4 m thick) blocky quartz-feldspar-mica sandstone interbedded with thin to bedded siltstone, banded siltstone, and mudstone-shale. It mainly distributed in the northern part of the work area.

Silurian Vang Ngang Group: The Vang Ngang Group is characterized by very good bedding, thin layers (2 cm-15 cm) and rhythmically bedded red and green siltstone, which is often silicified into flint. Unlike the underlying Highway Group, the sediments of the Vang Ngang Group are non-mica-bearing. The siliceous rock is underlain by a limestone unit, which is typically light gray, fossil-free, massive, and almost devoid of internal structure except for sutures. The top of the Vang Ngang Group is marked by graptolite shale, which is a thin-bedded black carbonaceous shale unit containing common graptolite fossils. The Vang Ngang Group is exposed in a small area in the central-northern part of the work area.

Devonian calcareous shale and limestone: A small area of nodular or angular calcareous shale and limestone bedrock is exposed in the middle eastern part of the work area. It is currently believed that the Jasporid metamorphic rock found in the mining area, which is gold-mineralized, may be related to this.

Quaternary: These mainly consist of Quaternary colluvial and alluvial sediments. The colluvial deposits are widely distributed in the broad gentle slopes and footslope areas within the region, mainly composed of residual, slope, alluvial sand, clay and other rock fragments, with a large thickness variation, generally greater than 2m; the alluvial deposits are mainly distributed along rivers

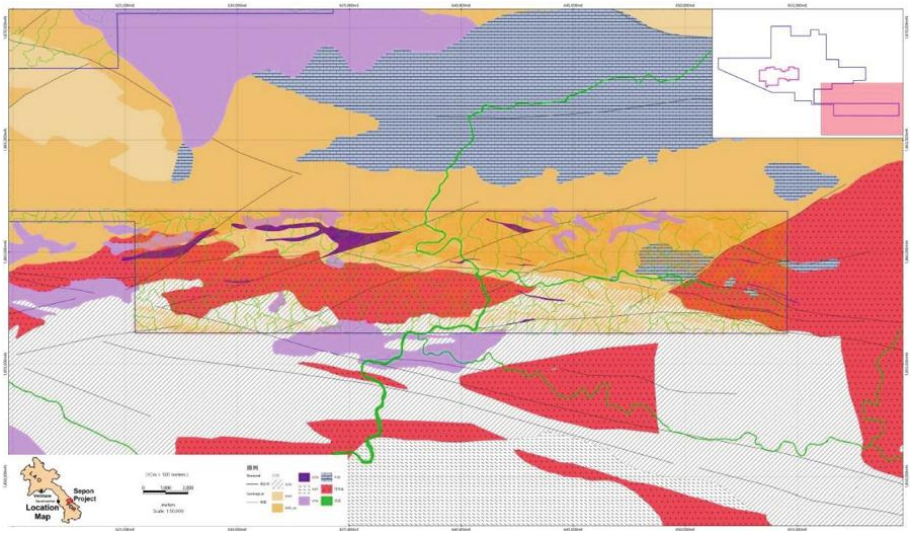
and channels, mainly composed of gravel, sand, and clay, with a large thickness variation, generally greater than 5m.

Folds and fault structures are well developed in this area. According to the direction, the fault structures can be divided into two groups: northeast and northwest. They are large in scale. The northeast faults developed earlier and are of a compressive-torsional nature. They are offset by northwest tension-torsional faults, with displacements ranging from tens to hundreds of meters.

There is intense magmatic activity in the area, mainly composed of granites of Indosinian period. These granites are contemporaneous with the Que Son mixtures in Vietnam. The Permian-Triassic intrusions consist of granites and granodiorites, representing the main stage of the Indosinian orogeny/rise. Magmatic rocks are followed by a small number of andesite veins developed near east-west. The granodiorite and granite bodies are generally distributed in an east-west band, with the mining area mainly divided into two east-west areas, covering an area of about 50 square kilometres.

The ion-adsorption type rare earth ores in this area are housed in the weathering crusts of granodiorite and granite. Granite is directly exposed to the surface, and under surface weathering, the original rock decomposes, and rare earth elements selectively migrate, forming a weathered crust rich in ionic rare earths. The main conditions controlling the development and preservation degree of the weathering crust are climate and topographic conditions.

Figure 6-2: Local Geological Map of the Sepon Project



Sources: LXML.

6.2.2 Mengkham Rare Earth Project

The strata exposed in the area primarily consist of the Carboniferous, Permian, Triassic, and Quaternary. The area features pronounced faults and folds, vertical and horizontal zoning, cleavage and fault zones, and frequent volcanic activity. As a region favourable for non-ferrous and precious metal mineralization, this area demonstrates significant mineral potential.

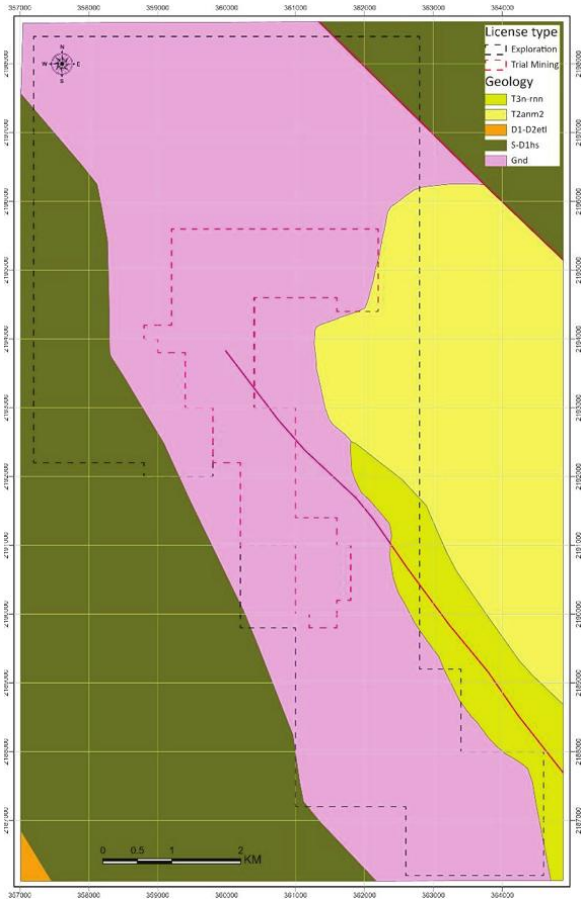
The exposed strata in the area are the Carboniferous-Permian Nonghei Group (C-Pnh), the Upper Triassic Namu Group (T3n-rnn), and the Middle Triassic (T2anm2), detailed in Figure 6-3, mainly as follows:

Carboniferous-Permian Nonghei Group (C-Pnh): Grey and black recrystallized limestone, white quartzite.

Upper Triassic Namu Group (T3n-rnn): Coarse conglomerate, quartz sandstone and lenticular peat.

Middle Triassic (T2anm2): Siltstone, mica-bearing sandstone, sheet limestone.

Figure 6-3: Local Geological Map of the Mengkham REE Project



Sources: Modified after China Investment Mengkham Rare Earth Minerals Limited.

The North Changshan metallogenic belt where the mine is located is one of the oldest blocks in Indo-China Peninsula. Influenced by the evolution of the Tethys Ocean basin, the main tectonic direction is NW, and secondary EW trending fault structures are developed. The working area is located at the junction of the "T" structure. The Himalayan Indochina plate rotates clockwise to form the right-lateral strike-slip structure which has a profound influence on it.

The magmatic rocks of Mengkham REE Project are mainly Triassic granite and biotite granite, which are also the main ore-bearing horizon of rare earth ore.

Granite: the colour is grey-white, and the main composition is quartz (about 55%) and plagioclase (about 40%). The rock surface is strongly weathered, sand like, sericite, kaolin, rare earth mineralization is weak.

Biotite granite: the colour is clay yellow to grey white, the main composition is Quartz (about 50%), plagioclase (about 35%), biotite (about 15%). The rock surface is strongly weathered and sandy. The local characteristics of the rock are potassium mineralization, sericite mineralization, kaolin mineralization and rare earth mineralization.

6.3 Mineralization

6.3.1 Sepon Rare Earth Element Deposit Property Geology

This deposit is a granite weathering crust ion-adsorption type rare earth deposit. The ore bodies are all in the middle and lower parts of the weathering crust, and the ore from the surface can be seen in a few boreholes. The weathering crust is vertically stratified from top to bottom as completely weathered layer and semi-weathered zone.

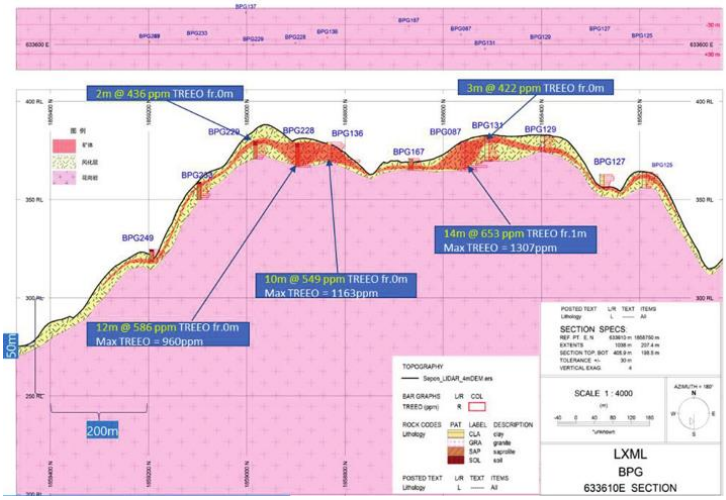
Completely weathered layer: brown-yellow, light yellow, light red, and gray-white. The main components are clay and a small amount of quartz. The structure is loose and porous, and the original rock structure is no longer visible. The content of rare earth oxides (TREO) is relatively high, generally between 0.030 and 0.167%. The thickness is generally 3 to 10 meters, mostly 5 to 8 meters. The fully weathered layer is the main location of the rare earth ore body.

Semi-weathered layer: brown-yellow, light yellow, and light red. The main components are clay, a small amount of feldspar weathering residues, and quartz. The original rock structure is still preserved, and the feldspar has a complete shape and is relatively hard. The thickness varies greatly, generally 1 to 3 meters, and the thickest can reach 5 meters. The content of rare earth oxides (TREO) gradually decreases from top to bottom, the upper part can be enriched into a rare earth ore body, and the end hole position of a small part of the drill hole has a higher grade, and it may not be able to penetrate the weathering layer.

The elevation of the ore body is 240 to 410 meters, the lowest erosion base level in this area is 210 meters, and the ore body is above the lowest erosion base level.

The depth of the ore body is generally 0-5 meters. The TREO grade ranges from 310 to 830 g/t, averaging 440 g/t.

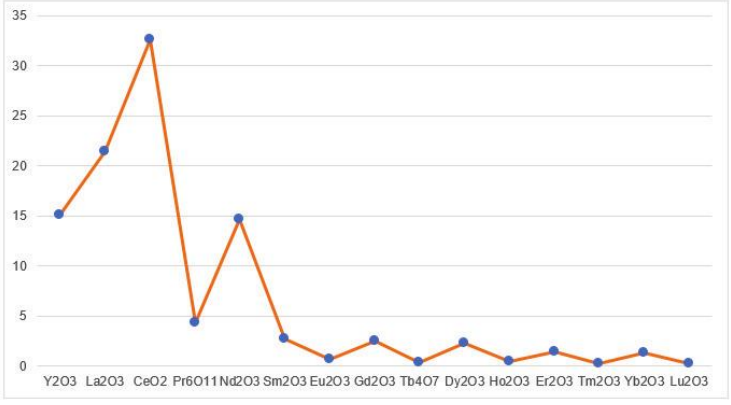
Figure 6-4: Section Map of Sepon Project (633610E)



Sources: LXML.

The typical TREO composition chart is presented in Figure 6-5. The approximate range of TREO composition is as follows: praseodymium-neodymium (PrNd) oxides 18.9%, magnet rare earth oxides ("MREO") 21.62%, and critical rare earth oxides (CREO) account for 33% of the total TREO content (Table 6-1).

Figure 6-5: TREO Composition of Sepon Project



Sources: SRK.

Table 6-1: Typical Content and Composition of the TREO for Sepon Project

Item	Content (g/t)	%/TREO
TREO	352	100
Y_2O_3	53	15.05

Item	Content (g/t)	%/TREO
La_2O_3	75	21.37
CeO_2	115	32.57
Pr_6O_{11}	15	4.29
Nd_2O_3	51	14.61
Sm_2O_3	10	2.72
Eu_2O_3	2	0.62
Gd_2O_3	9	2.47
Tb_4O_7	1	0.39
Dy_2O_3	8	2.33
Ho_2O_3	2	0.48
Er_2O_3	5	1.39
Tm_2O_3	1	0.20
Yb_2O_3	5	1.31
Lu_2O_3	1	0.20

Notes:

[1] MREO: Pr_6O_{11}+Nd_2O_3+Tb_4O_7+Dy_2O_3.

[2] CREO: Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3, determined by US Department of Energy 2023.

[3] TREO: Total Rare Earth Oxides include Y_2O_3+ La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3.

6.3.2 Mengkham REE Project

The rare earth minerals in Mengkham area consist of a medium-fine biotite granite regolith. Notably, there are significant differences among the rock regolith. As a result, the ore composition and type are directly linked to the regolith characteristics and its rock types. The weathering crust can be divided into three layers: topsoil, completely weathered zone, and semi-weathered zone. These layers transition gradually, with the ore primarily composed of full regolith and a portion of the topsoil.

Topsoil: This layer mainly consists of biotite granite residuum. Its thickness varies, usually thinner at the mountain top and thicker at the slope and foot of the mountain. It often mixes with more Quaternary slope deposits. Its upper part often includes tens of centimeters of humus. The layer, typically about 1-2 meters thick, is mainly gray-brown to black-brown, composed of quartz sand, weathered fragments of biotite granite, clay, and a small amount of biotite and feldspar. Its texture is loose. Generally, this layer doesn't contain rare earth, or it has weak rare earth mineralization.

Completely weathered zone: This rare earth bearing mineral layer is the main part of the ore body. It is often flesh-red, light red, and gray white. It largely consists of kaolin, the weathering product of feldspar, mica, and other minerals. A few minerals retain the structure of feldspar and can be easily broken by hand. Rare residual detrital minerals such as quartz, feldspar, and mica make up 1-3%. Other weathered residual accessory minerals like ilmenite, monazite, phosphoyttriite, and zircon constitute less than 1%. Minerals such as sphenite, epidote, and apatite are rare or very rare. The thickness generally ranges from 2.0-15 meters, with an average thickness of 7 meters.

Semi-weathered zone: This layer is gray-white, with a granite structure, composed mainly of quartz, feldspar, and biotite. It serves as the bottom of the rare earth layer. The weathering degree of rocks in this layer is weak, with feldspar weathering decreasing and kaolinization common at the edge of feldspar grains, about 30%. Feldspar crystals are relatively complete and generally not easy to crush. This layer typically doesn't contain rare earth ore, or it has weak rare earth mineralization.

The ore body is formed by the weathering of medium-fine grained biotite granite, which is the main ore-forming rock and a product of later alteration, in which the altered residues of medium-coarse grained biotite granite can be seen, indicating that the ore-forming parent rock in this area has

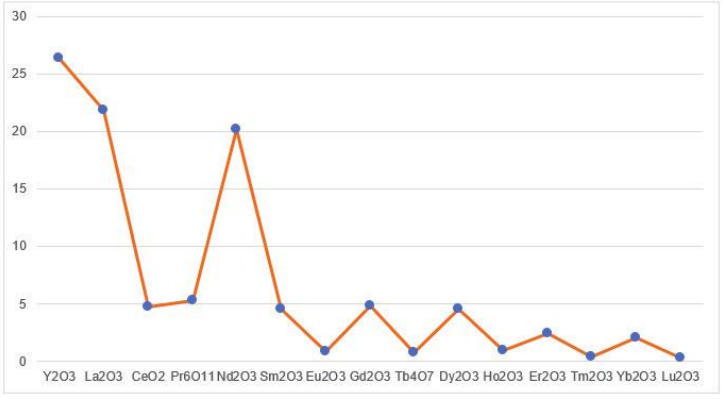
undergone at least two periods of magmatic alteration. The structure within the mining area is simple, and the rock body (ore body) is held between faults extending from northwest to southeast, where no folding structures are seen.

The favorable climate and geographical environment have led to the extensive development and complete preservation of the weathering crust in the mining area; through geological surveys and drilling operations in the mining area, it was found that the rare earth mineralization is influenced by factors such as lithology, uneven weathering, and topography, and the rock weathering intensity varies in both vertical and horizontal directions, causing the rare earth ore (mineralization) to undulate along the terrain. Ores rich in clay minerals have better grades. In terms of individual micro-geomorphological units, the grades are high at the tops and sides of the mountains, and gradually decrease to non-ore bodies towards the valleys and foot of the mountains. The ore (mineralization) body is pseudo-layered, locally lens-shaped, and the continuity of mineralization is general. A complete weathering crust is preserved from the surface soil layer, fully weathered layer, and semi-weathered layer, with the fully weathered layer being the main ore-bearing layer. The thickness of the regolith is between 10 and 32 metres from surface.

At Mengkham the top of the mineralised zone is defined by a thin surficial soil zone that averages 2 m in thickness. The base of the mineralised zone extends to an average vertical depth of 9.0 m. And the SREO grade range from 9.5 to 2857 g/t, averaging 243.5 g/t.

Based on 30 holes composite assays, the typical SREO composition chart is presented in Figure 6-6. The approximate range of SREO composition is as follows: praseodymium-neodymium (PrNd) oxides 25.5%, magnet rare earth oxides ("MREO") 30.84%, and critical rare earth oxides ("CREO") account for 52.77% of the total SREO content (Table 6-2).

Figure 6-6: SREO Composition of Mengkham REE Project



Sources: SRK.

Table 6-2: Typical Content and Composition of the SREO for Mengkham REE Project

Item	Content (g/t)	%/SREO
SREO	400	100
Y_2O_3	106	26.39
La_2O_3	87	21.84
CeO_2	19	4.70
Pr_6O_{11}	21	5.33

Item	Content (g/t)	%/SREO
Nd_2O_3	81	20.16
Sm_2O_3	18	4.53
Eu_2O_3	3	0.87
Gd_2O_3	19	4.82
Tb_4O_7	3	0.76
Dy_2O_3	18	4.58
Ho_2O_3	4	0.90
Er_2O_3	10	2.44
Tm_2O_3	1	0.35
Yb_2O_3	8	2.01
Lu_2O_3	1	0.25

Notes:

[1] MREO: Pr_6O_{11}+Nd_2O_3+Tb_4O_7+Dy_2O_3.

[2] CREO: Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3, determined by US Department of Energy 2023.

[3] SREO: Total Soluble Rare Earth Oxides include Y_2O_3+La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3.

6.4 Deposit Types

Both Sepon REE Project and Mengkham REE Project are ion absorption type of REE deposits, which was developed over granite bodies by weathering the rock bodies and transferring and enriching the REEs bearing in the minerals into clay minerals of the weathered zones by absorption.

The REE-bearing regolith profile provides a vertical cross-section of the soil layers created by weathering and other breakdown processes. The soil profile is generally recognized to have three fundamental layers: Horizons A, B, and C.

Horizon A, the uppermost layer, is typically composed of organic matter, humus, and mineral particles. Its thickness can vary based on factors such as vegetation cover and rainfall. This layer can be further subdivided into smaller sub-layers, including Ah (humus-rich) and Ae (eluvial horizon with leached minerals). Due to leaching and organic complexation (and occasionally chemical reduction), Horizon A usually has low REE concentrations. These processes move REE ions deeper into the soil profile.

Horizon B, the subsurface layer, is enriched with minerals leached from the overlying Horizon A. It serves as the key zone for IAC REE accumulation due to:

- Adsorption onto clay minerals like kaolinite and halloysite, prevalent in Horizon B.
- Chemical conditions conducive to REE precipitation with specific minerals.

Horizon B, a layer essential for rare earth exploration and potential resource extraction, can be further classified based on features such as color and clay content. Factors like rock type, climate, and weathering intensity affect the thickness and rare earth elements (REE) concentration within Horizon B. Often referred to as the main REE-bearing layer within the project area, Horizon B typically occurs approximately 2 to 10 metres below the topsoil and averages about eight metres in thickness.

Horizon C, the layer beneath Horizon B, represents the unweathered or partially weathered parent rock. It contains the original source of REE within the weathered regolith deposits.

The projects area are located in a tropical region with a warm and humid climate. The granite rock in the area undergoes intense weathering due to favourable topographic conditions where erosion is

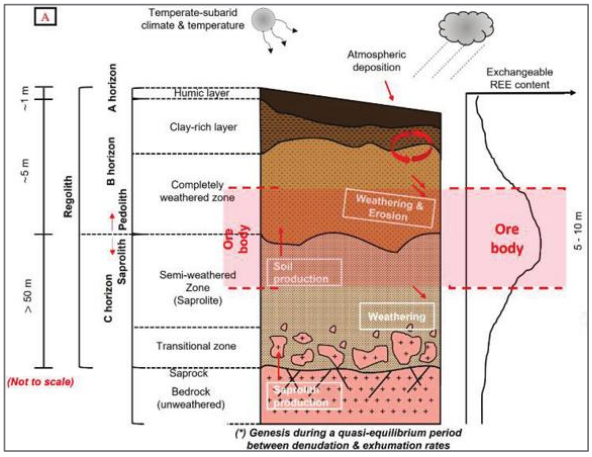
less significant than weathering. This has led to the widespread formation of weathered layers, which range from less than 1 metre to over 50 metres thick in some parts of the project area.

The distribution of the weathered layer is typically irregular due to erosion from the river drainage system. Depending on the extent of the weathered layer covering the mountainous terrain, it can be classified into two types from the in-situ leaching perspective: full coverage and exposed base types.

Full-coverage type: This type refers to the complete coverage of the entire mountain by the weathered layer, where no bedrock is visible at the mountain base or in the gullies. Predominantly observed in the low hills characterized by gentle, rolling topography, this type maintains each section of the weathered layers well. Erosion along the mountain base leads to a thinner weathered layer compared to the hillside and mountain top.

Base-exposure type: This type includes the weathered layer covering most of the mountain base, as well as the entire hillside and mountain top. In some parts of the mountain base, the bedrock is exposed due to strong erosional processes. This type is mainly found in the low hills with a medium rolling style.

Figure 6-7: Typical IAC-REEs Bearing Profile



Source: N Bustos, C Marquardt, A Belmar, P Cordeiro; Regolith-hosted rare earth exploration in the Chilean Coastal Range of the Central Andes

The Mengkham and Seop REE projects are primarily characterized by low hills and gentle, undulating terrain. Influenced by a tropical climate, these areas have a relatively thick regolith cover. According to the classification, the regolith layer developed within most of the project area can be categorized as the full-coverage type of IAC deposit.

7 Exploration, Sampling and Assaying

SRK has not participated in the explorations conducted for both Mengkham and Speon projects. The information regarding the exploration is derived from the data provided by the client and through discussions with geologists engaged in the fieldwork.

7.1 Exploration Programs

7.1.1 Sepon Rare Earth Element Deposit

During the geological mapping program in 2021, the anomalies of REE have been discovered in the weathered crust of granite bodies in the Sepon project area. In November 2021, LXML drilled three test shallow holes in the granite rock body in the south part of the Sepon project area and identified cation REE enrichment in the weathered zone. Further work defined three preliminary targets to look for REE mineralized bodies in the granite rock bodies.

In the period from December 2021 to January 2022, first drilling program was conducted with totalling 53 holes. The program defined two advanced targets (Block01 and Block02) in the No.1 preliminary target. In February 2022, a drilling program with 100 m by 100m grid was conducted in the two advanced targets, and then in-fill drilling was also conducted. From May 2021, step out drilling program with a grid of 200m by 100m was conducted in the area surrounding the advanced targets. By July 2021, totally 607 holes with a meterage of 4,441m were completed in an area of about 9.1km^2. Totally 4,443 samples were taken for assaying.

Table 7-1 summarizes the work completed in the exploration of REE deposits.

Table 7-1: Programs Completed in Sepon Project

Working item	Unit	Quantity	Remark
1/10000Geological mapping	km^2	10	
Drilling	M	4440.8	
Assaying	Sample	4443	
QAQC samples	Sample	445	
Cation phase analysis	Sample	8	
Specific gravity measures	Sample	10	
Hydrogeological survey	km^2	10	
Geotechnical survey	km^2	10	
Environmental survey	km^2	10	

The locations of collars of drilling holes were surveyed by using 63csx GSP hand-held meter, compass and topographic map. The relative error of such survey is 3-5m, which matches the Chinese requirements of a general exploration program.

Shallow holes conducted in the exploration program were usually drilled 8-11 m deep with almost 100% recovery and good quality.

7.1.2 Mengkham Rare Earth Element Project

From January 2022 to June 2023, China Investment Mining (Laos) Co., Ltd. carried out a detailed exploration for Mengkham REE Project.

Table 7-2 summarizes the work completed in the exploration.

Table 7-2: Programs Completed in Mengkham REE Project

Working item	Unit	Quantity	Remark
1/5000 Geological mapping	km^2	50	
Drilling	m	198,956.9	
Assaying	Sample	105,279	
QAQC samples	Sample	9,517	
Bulk density measures	Sample	10	
1/10000 Hydrogeological survey	km^2	50	
1/5000 Topo aero survey	km^2	2.3	

The 1:5000 topographic aerial survey was organized and implemented by Longyan Minde Surveying and Mapping Co., Ltd., which has a Class A qualification in topographic surveying. The indoor work was assisted by China Investment Mining company, and the field work started in December 2022, with the results and data finished in early July 2023.

The locations of drilling holes were surveyed by using hand-held GPS.

Geological survey of 1:5000 was carried out in the rare earth exploration area, basically finding out the scale, shape, occurrence and ore-forming relationship of different periods and different lithology intrusive rocks; basically finding out the distribution of the Quaternary and the river system in the area; basically finding out the types of landforms, micro-geomorphological features and types and distribution of weathering crust in the work area, providing a reliable basis for the deployment of manual impact sampling drilling and resource estimation.

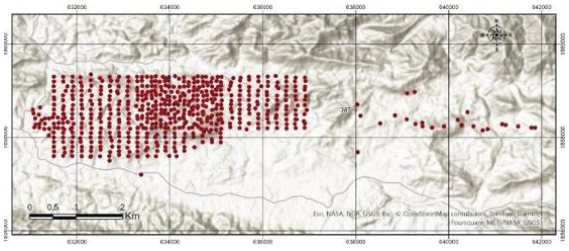
7.1.3 SRK Comments

For the Mengkham REE project, the 1:5000 topographic aerial survey only covered an area of 2.3 km^2. SRK suggests the mine to conduct a detailed topographic survey covering the entire project area.

7.2 Drilling Programs

For Sepon project, LXML Exploration Department conducted an exploration program from November 2021 to July 2022. A total of 607 boreholes (4,441 metres) were drilled during the exploration on a 200-metre x 100-metre or 100-metre x 100-metre pattern, as shown in Figure 7-1.

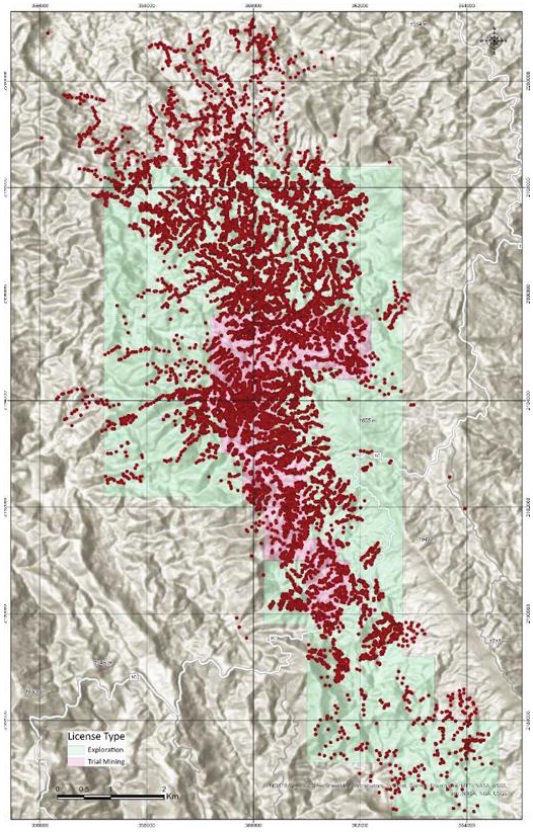
Figure 7-1: Borehole Distribution of Sepon Project



Source: SRK

For Mengkham REE Project, Longyan Dadi Mining Development Service Co., Ltd conducted an exploration program from January 2022 to December 2023. A total of 13,656 boreholes (198,957 metres) were drilled during the exploration with a spacing of 30-100 m, as shown in Figure 7-2.

Figure 7-2: Borehole Distribution of the Mengkham REE Project



Source: SRK

The design of the drilling grid follows the exploration principle of ion-adsorption rare earth deposit outlined in Chinese standard *DZ/T 0204-2002: Geological Exploration Specifications of Rare Earth deposit*.

The manual GN auger was employed to delineate and identify economically viable zones in the regolith. This auger is extensively used for exploring IAC rare earth deposits in China. Under optimal operating conditions, it can reach a maximum drilling depth of 45 meters in the fully weathered regolith horizon. This method provides a swift and cost-effective drilling solution compared to other techniques.

The specifications of the GN auger include a 95 cm diameter x 0.5 m long auger bucket equipped with 2 m drill rods. According to the drilling records, the auger drilling achieved over 100% core recovery during the programs.

During the drilling, the retrieved core soil from each run was separately placed on plastic film, labelled, recorded, and prepared for sampling.

After completion of a borehole, a wooden stick marked with the borehole ID (Figure 7-3), start and end date, and end-hole-depth is placed at the drilling site to assist the surveyor in conducting the collar survey.

Figure 7-3: The GN Auger Utilization and Hole Sealing

The core drilling and geological logging were carried out to a standard that ensures the data and information collected sufficiently support the goals of subsequent geological modelling and resource estimation.

SRK considers that the depth capacity of manual auger drilling may not be enough to penetrate potentially semi-weathered hard layers or boulders. This limitation could potentially result in incomplete intersections of the ore-bearing horizon during drilling.

7.3 Sample Preparation, Analyses, and Security

7.3.1 Sepon Rare Earth Element Deposit

Sample Collection

During the general exploration program, three types of samples were taken, i.e. basic assaying samples, QAQC samples and specific samples.

Sampling was conducted as, whole drilling core was taken as sample at 1m interval by using the method of diagonal quarters to reduce the sample, with one half as the sample for assaying, and the other half as the spare sample for storage.

The samples were all properly numbered, recorded before sent to labs.

Sample Preparation and Analyses

All basic assaying samples were prepared and assayed in the ALS lab in Australia. The assaying method is ME-MS81, which uses lithium borate to fuse, and then use acid to dissolve, and finally use ICP-MS for assaying. The method can achieve a precision of 0.1ppm.

Eight samples were sent to the testing centre of Guilin non-ferrous metallic mineral resources Institute, China, for analysing REE compositions. The analytical results show that the deposit possesses mid-heavy REE, which is scarce.

Quality Assurance and Quality Control Program

Quality Control and Assurance (QA/QC) procedures were undertaken on an on-going basis to certify that the assay results from the drilling programme would be confidently relied upon. These procedures included the insertion of QA/QC samples comprising standards or Certified Reference Materials (CRMs), i.e., material containing known quantities of the element being assayed for; blanks i.e., material that has been prepared known to contain trace material; and duplicates.

Bulk Density Test

In the general exploration report, 10 specific gravity samples were also taken from drilling cores and were measured in the lab of the mine.

In SRK's opinion, it was unable to collected density sample from GN Auger hole cores. A dry bulk density of 1.5 t/m^3 was used in resource estimation for Sepon project.

SRK Comments

The procedures for sample collection, preparation, and analysis are following the REE industry standards. SRK considers that the procedure, as well as the data and information obtained, are acceptable for resource estimation purposes.

Going forward, the Sepon REE mine is considering in-situ leaching to be their main extraction technique. However, the available data, which only includes 8 ionic analyses, falls short in providing an accurate estimate of the mine's potential and productivity. The scant data does not paint a holistic picture of what the mine can offer. For this reason, SRK suggests a re-analysis of the ionic REE grade. Through this, we can have a clearer view of the mine's potential, which is crucial in devising and executing efficient mining plans.

7.3.2 Mengkham REE Project

Sample Collection

Prior to conducting sample collection, an on-site quick test procedure was conducted to qualitatively identify rare earth elements ("REE") mineralized intervals. Once the quick test confirmed the presence of mineralization in the retrieved core interval, the corresponding interval was collected for further laboratory analysis.

The quick test employs ammonium sulphate to dissolve the REE ions in the clay and using oxalic acid to obtain the precipitate. The quick test utilizes ammonium sulphate to dissolve any potentially present REE ions in the clay. The solution is then filtered through filter paper, and oxalic acid is added to the filtrate in a test tube to see whether white precipitate is observed. If the solution remains clear, it is deemed non-mineralized, and no sampling is conducted. Conversely, if a precipitate is observed, the interval is sampled for further analysis.

The quick test employs ammonium sulphate to dissolve the rare earth elements ("REE") ions potentially present in the clay. The process involves the following steps:

- Ammonium sulphate is used to dissolve any potentially present REE ions in the clay sample.
- The resulting solution is filtered through filter paper.
- Oxalic acid is added to the filtrate in a test tube, and.
- Check whether white precipitate is observed.

If the solution remains clear after the addition of oxalic acid, indicating the absence or trace amounts of REE ions, the interval is deemed non-mineralized, and no sampling is conducted. Conversely, if a white precipitate is observed, indicating the presence of REE ions, the interval is sampled for further laboratory analysis. Once the white precipitate is observed, all samples downwards from that depth are collected for laboratory analysis.

Figure 7-4: The Quick REE Mineralization Distinguish on Mengkham Drilling Site

The samples are collected from the core of the GN Auger holes, and continuous samples are taken according to different weathering layers. According to the Chinese Rare Earth Mineral Geological Exploration Standard (DZ/T0204-2022), the sample length is generally 1m, and cross-layer sampling

is prohibited. If the different weathering layers are less than 1m, they are sampled separately. On the site, the rock core within the same sample is first mixed evenly on a non-polluting sample cloth, and then the diagonal method is used for subdivision, repeated several times until the sample standard is met, and finally bagged and numbered and sent to the laboratory in time. The sample position, number, and sample length are clearly recorded on the spot in time. Each sample has an original weight of more than 1~1.5kg.

Sample Preparation and Analyses

All samples were prepared and analysed in the Mangkham mine laboratory.

The samples were split according to the formulation $Q = Kd^2$, while K ranged from 0.2 to 0.5.

The original sample was not washed in any way to prevent the loss of useful, beneficial, and harmful components. Before preparation, the sample was dried and weighed. The balance should be calibrated. The preparation utensils and equipment used before and after sample preparation should be kept clean. It was strictly forbidden to mix in other substances. Effective measures should be taken to ensure the quality of sample preparation. During the whole preparation process, the total loss rate of the sample should not exceed 5%, and the error of each splitting should not exceed 3% of the original mass.

Figure 7-5: The Drying Oven on Mengkham Mine Site

The analyse method was EDTA (Ethylene Diamine Tetraacetic Acid) volumetric method as follows:

- Take 19.95-20.05g of the dry sample and put it into a long funnel, then place it on a triangular flask, rinse it with 100ml-120ml of ammonium sulfate for more than three times, and wait until there is no more liquid leaking from the bottom of the funnel, then take the volume of the leachate and record it.
- Take 20ml of extract, add acetone, sulfonyl salicylate, dimethyl phenol orange, methyl tetramine, titrate with calibrated EDTA until the solution changes from purple-red to bright yellow as the endpoint, record the amount of EDTA used.
- Conduct two independent measurements and take their average value.

Figure 7-6: The Mine Laboratory

The external laboratory check samples were analysed in Longyan Rare Rarth Development Co., Ltd and the composition of REE oxide samples were analysed in China Rare Rarth Laboratory.

Quality Assurance and Quality Control Program

A total of 6,017 samples (about 6% of the samples used in Mineral Resource estimation) were collected as internal lab check samples with a pass rate of 82%. And a total of 3,500 samples (about 4% of the samples used in Mineral Resource estimation) were collected as internal lab check samples with a pass rate of 92%.

Bulk Density Test

A total of ten bulk density samples were implemented across the project areas with the natural bulk density (wet basis) ranging from 1.7 to 1.81 t/m^3, averaging 1.75 t/m^3, dry bulk density ranging between 1.35 and 1.55 t/m^3, averaging 1.47 t/m^3.

The average dry bule density of 1.47 t/m^3 is determined to be used in resource estimation for the entire project area.

SRK Comments

SRK considers that the onsite laboratory was poorly equipped, and no CRMs or blank samples were used for quality control. It is recommended that all the samples should be sent to a qualified laboratory for assaying again.

There are merely 30 samples that possess REE compositions. This limited number prompts SRK to recommend that the mine should increase its efforts in conducting more composition analyses. This is to ensure a more reliable and expansive dataset for evaluation purposes.

The mine's current approach is to analyse all basic samples in the lab onsite. While this might be convenient and efficient, it may not provide the most accurate results. Therefore, to enhance the

validity of the results, SRK recommend collecting a substantial portion, specifically 30%, of the samples for further validation at an external lab. This will provide a more robust cross-checking mechanism and thus, ensuring a higher level of accuracy in the analysis results.

SRK also considers that the rapid test method, which entails visually observing rare earth precipitates before conducting core sampling for laboratory analysis, is qualitative in nature. This approach serves merely as an initial indication to assess the mineralization within the sampled core interval. Due to its inherent subjectivity, this method may result in overlooking certain shallow-occurring intervals containing REE sufficient for subsequent laboratory testing, potentially leading to an underestimation of REE mineralization thickness.

8 Data Verification

8.1 Sepon Rare Earth Element Deposit

8.1.1 Verifications by the Client

SRK has checked samples results provided by the Client, including 11 CRMs, 393 blank samples and 29 field duplicate samples.

Table 8-1: QAQC Sample Summary for Sepon Project

Zone	Category	QC samples	Total N of samples	%Coverage
Sepon	CRMs	11	4443	0.25%
	Coarse Blanks	327		7.36%
	Pulp Blanks	66		1.49%
	Field Duplicates	29		0.65%

CRMs

Sepon supplied only one CRM, namely Ox-P1L, as detailed in Table 8-2.

Table 8-2: CRM Summary for Sepon Project

Count	Minimum	Maximum	Range	Mean	SD
11	109.02	116.38	7.36	111.65	2.51

Blanks

Coarse and pulp blanks were used. As shown in Figure 8-1 and Figure 8-2, all samples are less than 170 TREO g/t, the cut-off grade of Mineral Resource.

Figure 8-1: Coarse Blanks for Sepon Project

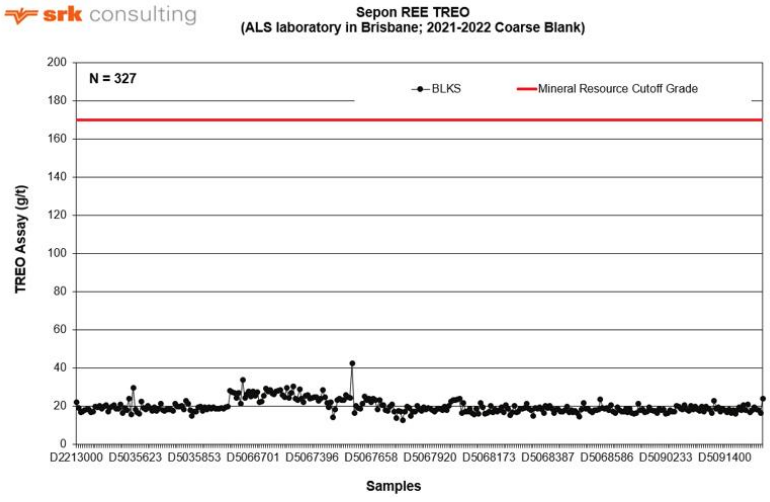
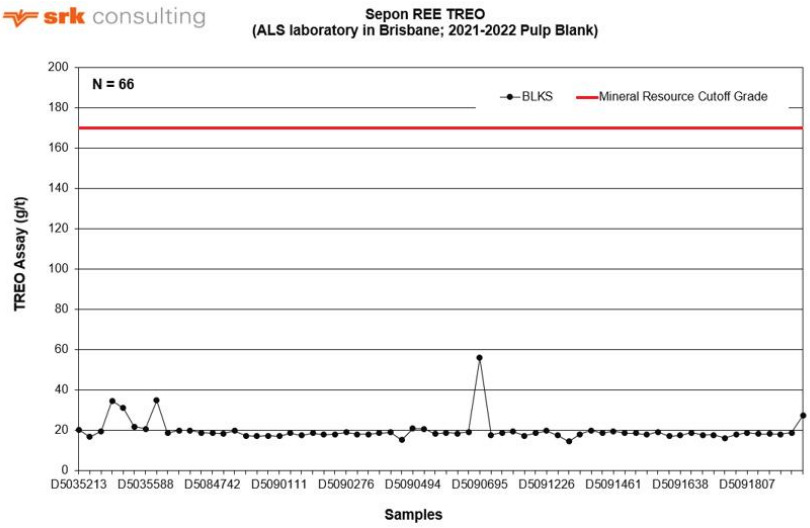


Figure 8-2: Pulp Blanks for Sepon Project



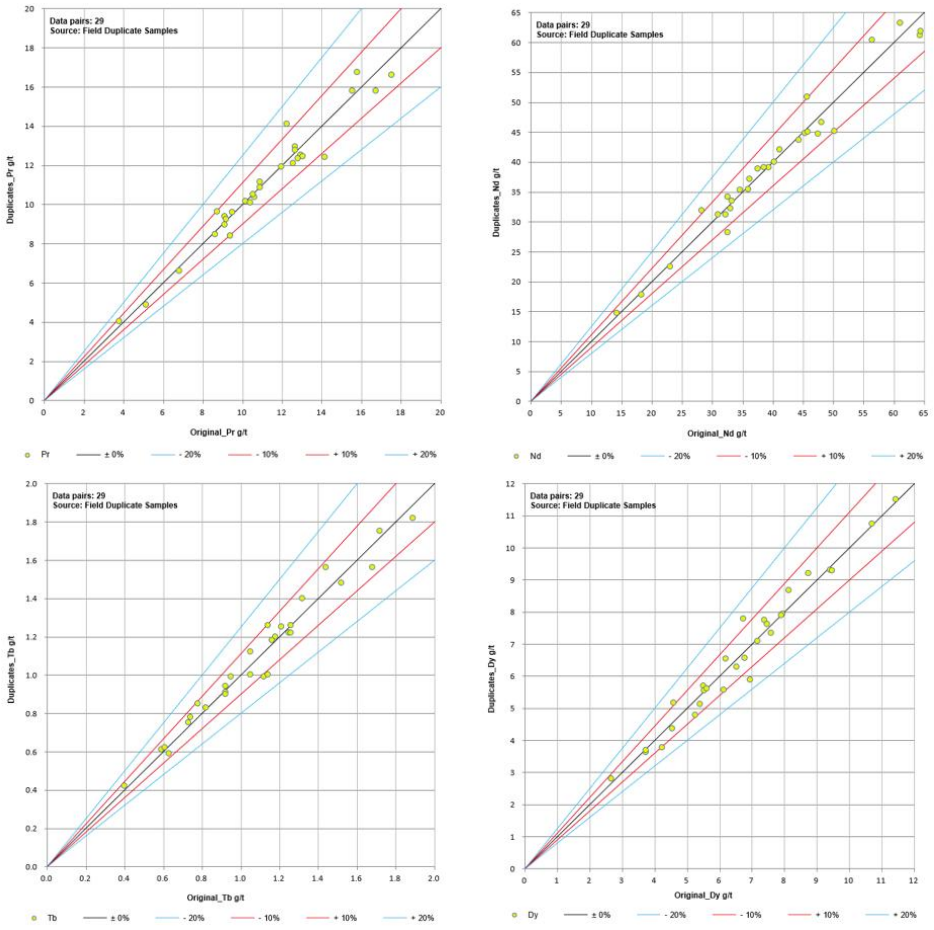
Filed Duplicates

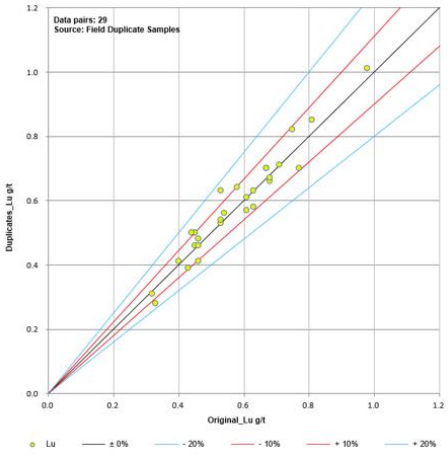
All duplicate pairs are within 20% limits, as shown in Table 8-3 and Figure 8-3.

Table 8-3: Field Duplicates Summary for Sepon Project

Element	Data Pairs Count	Relative Difference					
		<10%		10% - 20%		> 20%	
Pr	29	26	90%	3	10%	-	0%
Nd	29	25	86%	4	14%	-	0%
Tb	29	26	90%	3	10%	-	0%
Dy	29	25	86%	4	14%	-	0%
Lu	29	23	79%	6	21%	-	0%

Figure 8-3: Field Duplicates for Sepon Project





8.1.2 SRK Comments

SRK is of opinion that the exploration data has been validated and is appropriate for a mineral resource estimate.

8.2 Mengkham REE Project

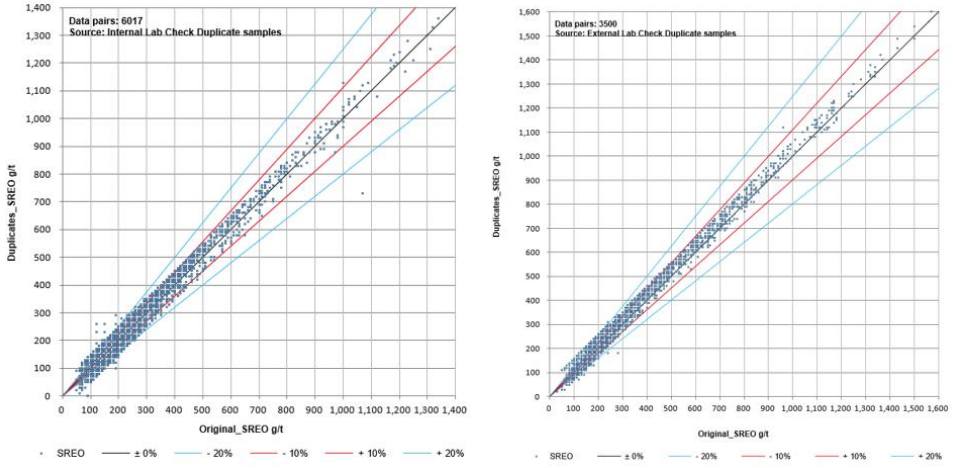
8.2.1 Verifications by the Client

SRK was provided with 6,017 pairs of samples for internal lab check and 3,500 pair of samples for external lab check. As shown in Table 8-4 and Figure 8-4, the above 20% relative differences are 18% for internal and 8% for external. The exploration data was appropriate for the mineral resource estimate.

Table 8-4: QAQC Sample Summary for Mengkham REE Project

Category	Element	Data Pairs Count	Percentage of Assays	Relative Difference					
				<10%		10% - 20%		> 20%	
Internal	SREO	6,017	6%	2,723	45%	2,196	36%	1,098	18%
External	SREO	3,500	4%	2,191	63%	1,028	29%	281	8%

Figure 8-4: Duplicates of Mengkham REE Project



8.2.2 Verifications by SRK

During the period from 13 to 16 May 2024, SRK conducted a site visit to the Mengkham REE project and collected 169 core duplicate samples from 13 boreholes, detailed in Table 8-5. The samples were sent to SGS Mineral Laboratory located in Tianjin, China for verification assay.

Table 8-5: Summary of SRK Verification Borehole Samples

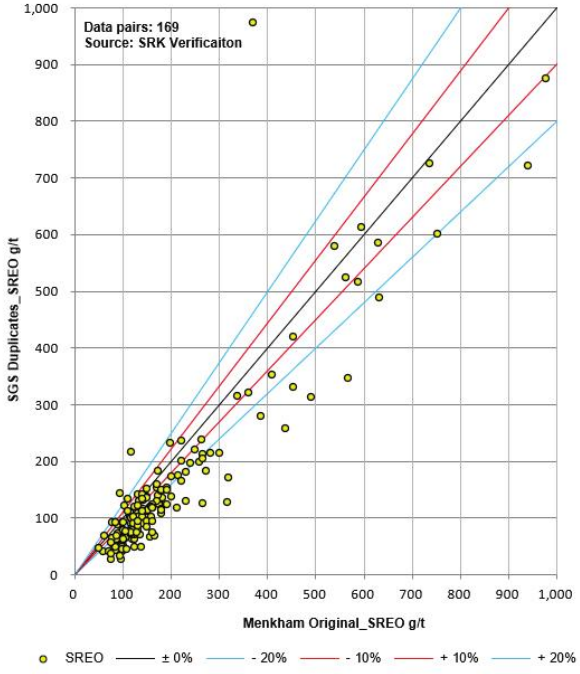
Hole	Easting	Northing	Depth	Duplicate Samples
KT8-35	360932	2193253	10	10
KT8-27-2	360971	2193207	14	14
YZ33	360933	2195189	25	25
YZ02-1	361589	2189949	25	25
KT7-121	360673	2192876	12	12
KT6-103-1	360049	2193819	10	10
KT3-16	359369	2193759	13	13
KT6-82	359948	2194108	9	9
KT7-7	360038	2192800	13	13
ZKF16-179	360945	2196321	14	12
ZK17-115	360391	2193631	18	10
ZKF18-104	360308	2196387	14	7
ZKF29-140	361003	2194583	11	9

The results were shown in Table 8-6 and Figure 8-5, large bias was observed between original assay and verification results. About 32% results for SREO are within ±20%. About 68% results are out of ±20%. SRK has checked with both onsite laboratory and SGS staff, found that the sample preparation and assaying method were different. The samples were crushed to 75 μm (200 mesh) in SGS and the assaying method was ICP-MS. And in onsite laboratory, the samples were crushed to 1 mm and the assaying method was EDTA. SRK has downgraded Indicated Mineral Resources to Inferred Mineral Resource.

Table 8-6: SRK Verification Samples Summary for Mengkham Project

Element	Data Pairs Count	Relative Difference <10%		10% - 20%		> 20%	
SREO	169	30	18%	24	14%	115	68%

Figure 8-5: SRK Verification Duplicates of Mengkham REE Project



8.2.3 SRK Comments

Large bias was observed between original assay and SRK verification results. It is recommended that all the samples should be sent to a qualified laboratory for re-assaying.

9 Mineral Processing and Metallurgical Testing

This section is only prepared for the Mengkham REE project.

9.1 Ore Properties

The Mengkham ore belongs to the ion-adsorbed type rare earth ore, and the rare earth elements ("REE") are adsorbed in the clay minerals in the granite weathering crust, with average SREO content of 0.025%.

The minerals are mainly quartz, feldspar, biotite, ilmenite, magnetite, followed by zircon, apatite, xenotime, fluorite, sphene minerals and so on. The main impurities are Al_2O_3 with an average content of 57.47%, CaO with an average content of 26.38% and SiO_2 with an average content of 5.80%.

9.2 Metallurgical Test

The Client conducted a simple laboratory column leaching test on a composite sample collected from #2 ore body in March 2024. The SREO content of the test sample was 0.0245%. The test uses ammonium sulphate as RE leaching reagent, mainly includes ammonium sulphate dosage test, pH value condition test and permeability test. The photos of test process are shown in Figure 9-1 and the test results are as follows:

- The permeability coefficient of the RE samples is $0.89x10^{-3}$～$1.11x10^{-3}$cm /s.
- With the consumption of ammonium sulphate of over 12 t/t REO and the pH value of 4.5, the peak REO concentration of the pregnant leaching solution ("PLS") can reach over 2.0 g/L, and the SREO leaching rate can reach 94% along with the leaching time of 120 hours.

The results indicate the ore is easy to leach, and the In-situ Leaching method is probably applicable. SRK noted that the test report is relatively simple and can only be used as a basic reference for in-situ leaching of #2 ore body. Due to the differences in ROM properties and grades of different ore bodies, SRK recommends that ore samples should be taken from each ore body representatively to carry out test studies before production, and the following experimental contents should be added:

- SREO content analysis of RE ore samples, and
- PLS purification and precipitation tests to determine the purification and precipitation conditions and reagents consumption.

Figure 9-1: Laboratory Leaching Test

10 Mineral Resource Estimates

10.1 Sepon Rare Earth Element Deposit

10.1.1 Introduction

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Sepon REE project in accordance with the JORC Code 2012.

The mineral resource model prepared by SRK considers the core boreholes drilled by the client during the period of November 2021 to July 2022. The effective date of the Mineral Resource Statement is 31 March 2024.

This section describes the methodology, procedure and key assumptions applied in Resource estimation. In the opinion of SRK, the resource estimation reported herein is a reasonable representation of the global rare earths resource found in the Sepon IAC REE Project at the current level of sampling. The mineral resources are reported in accordance with the JORC Code 2012. Mineral resources are not Ore Reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into Ore Reserve.

The database used to estimate the Project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for rare earths mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

The Leapfrog Geo and Edge (Version 2023.2) software was used to create both geological model and block model for the Project. The software is considered as a proper modelling tool for this regolith type of deposit.

10.1.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification
- Construction of wireframe models for the boundaries of the REE mineralization
- Definition of resource domains
- Data conditioning (compositing and capping) for analysis
- Block modelling and grade interpolation
- Resource classification and validation
- Assessment of "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades
- Preparation of the Mineral Resource Statement

10.1.3 Resource Database

The datasets and information used in the models were provided by the client, including geological exploration reports and associated maps and tables, topographic data, geological maps, borehole databases, etc. The coordinate system applied for the entire project is the UTM projection (Zone 48N) using the Indian 1960 Datum.

Prior to conducting Mineral Resource modelling, SRK performed a data validation procedure to assess the reliability of the received datasets.

Digital terrain models ("DTM") were created from AutoCAD contour maps provided by the client. These contour maps were derived from the site survey activity. SRK considers that the created DTMs are acceptable to be used in the mineral resource estimation.

The summary statistics of the holes (Table 10-1) used in Mineral Resource estimation is listed in Table 10-5.

Table 10-1: Drillhole Statistics used for the Resource Estimation

Drillhole Type	Drillholes	Length（m）	Samples	Year
GN Auger	591	4,296	4,298	2021-2022

10.1.4 Solid Body Modelling

Solid models were created in Leapfrog Geo software based on the following considerations, principles, and steps.

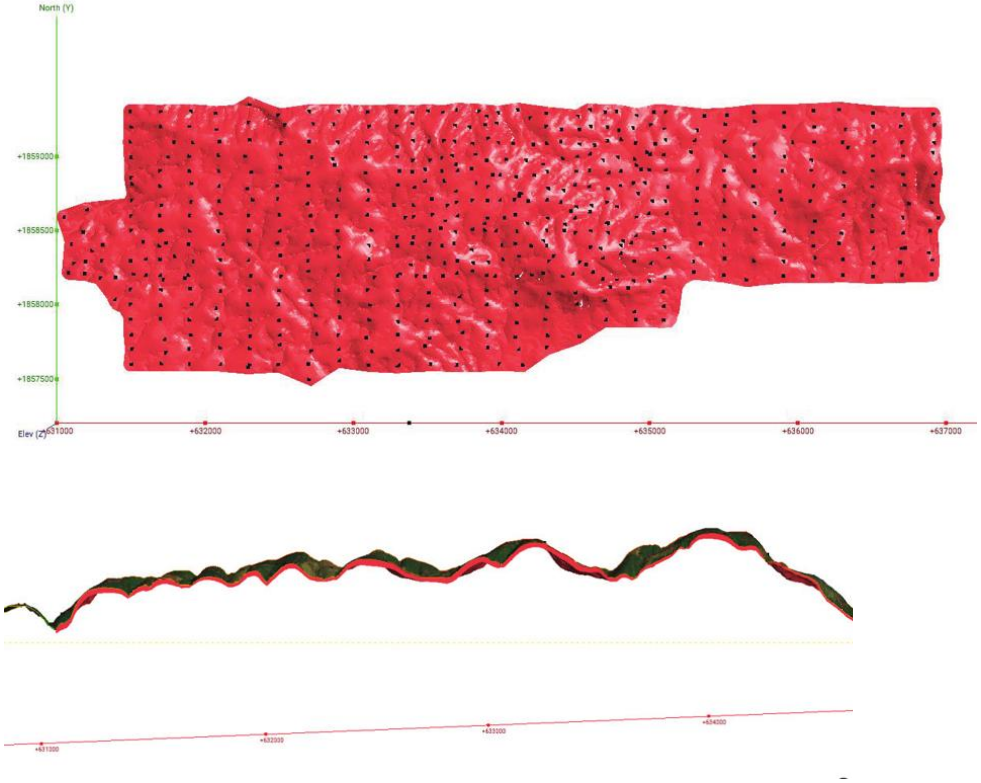
The deposit type in the Sepon project is an ion-adsorption type hosted in weathered regolith. The development level of the weathered regolith layer largely shaped the distribution and geometry of the REE mineralization. The ore-bearing layers are mainly present in the middle part of the fully weathered regolith profile and the upper part of the semi-weathered layer.

The REE mineralized bodies generally exhibit a stratiform appearance, with their morphology controlled by the occurrence of the weathered regolith. In relatively flat mountaintop areas, the bodies tend to be thicker and have a more pronounced sheet-like shape. Whereas in steep hillside and valley areas, the bodies tend to have a thinner and more complex shape due to erosion and transportation effects.

In Leapfrog software, SRK created a geological model based on the drillhole assay data and employed an implicit modeling approach.

The distribution maps of mineralized bodies were illustrated in Figure 10-1.

Figure 10-1: Plan View (Up) and Section View (Down) of Sepon Mineralized Bodies



Source:SRK

10.1.5 Bulk Density Test

In the general exploration report, 10 specific gravity samples were also taken from drilling cores and were measured in the lab of the mine.

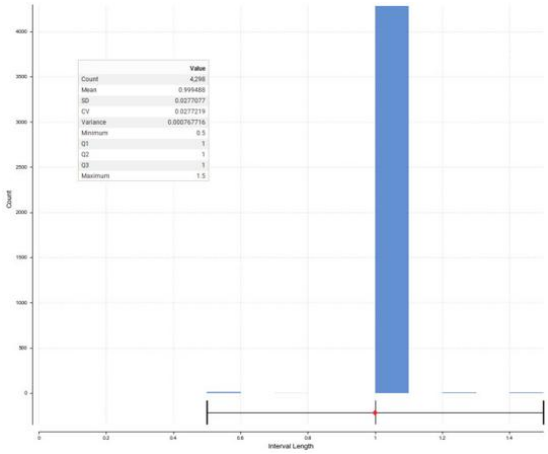
In SRK's opinion, it was unable to collected density sample from GN Auger hole cores. A dry bulk density of 1.5 t/m^3 was used in resource estimation for Sepon project.

10.1.6 Compositing

Prior to conducting the statistical analysis, the samples were combined so the length of each sample was basically equivalent. The distribution of sample length is provided in Figure 10-2. The database indicates that most of the sample intervals are 1 m.

All data from the database containing the flagged raw sample intervals were composited to 1.0 m downhole lengths, with a minimum length of 0.5 m required to create a composite. SRK applied 1.0 m composite for all subsequent analyses and grade interpolations.

Figure 10-2: Histogram of Sample Length



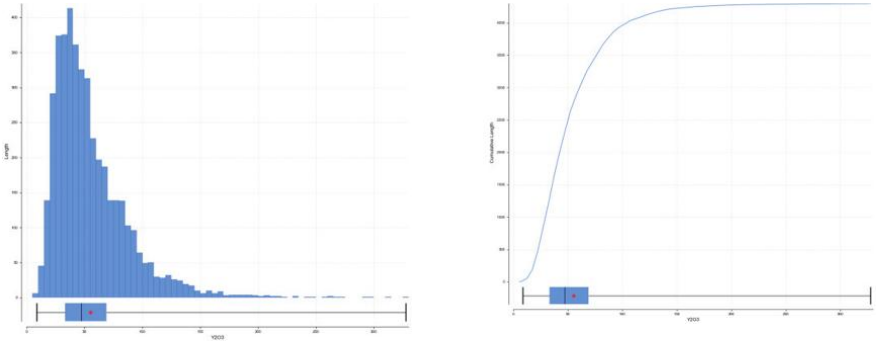
Source:SRK

The sampling methods in the Sepon Project are essentially consistent, and the approach to handling composite samples is also the same.

10.1.7 Evaluation of Outliers

To identify the appropriate top cuts for every mineralised orebody, the cumulative frequency and distribution characteristics of the sample histogram, as shown in from Figure 10-3 to Figure 10-16 were used, in addition, the coefficient of variation statistic and 3D visualisations were also considered. The cutoff grades for each rare earth oxides used in estimation listed in Table 10-2.

Figure 10-3: Y2O3 Histogram and Cumulative Histogram of the Mineralized Domain



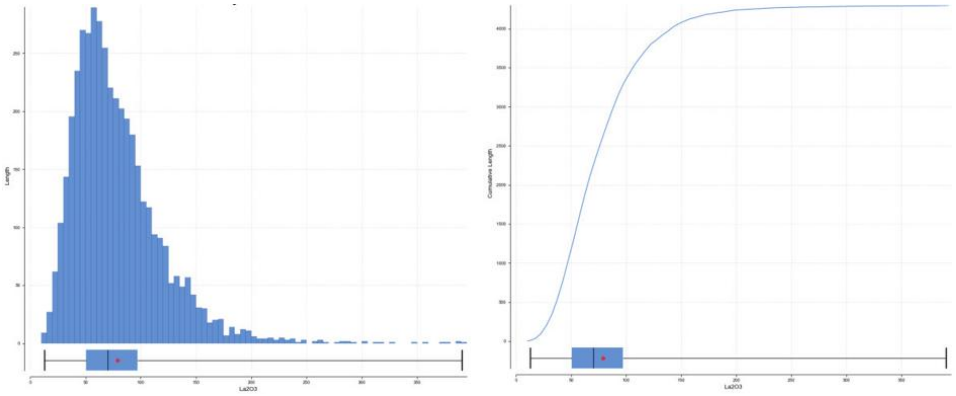
Source:SRK

Note:

[1] The mean is indicated by the red diamond.

[2] The median is indicated by the line that crosses the inside of the box.

Figure 10-4: La_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



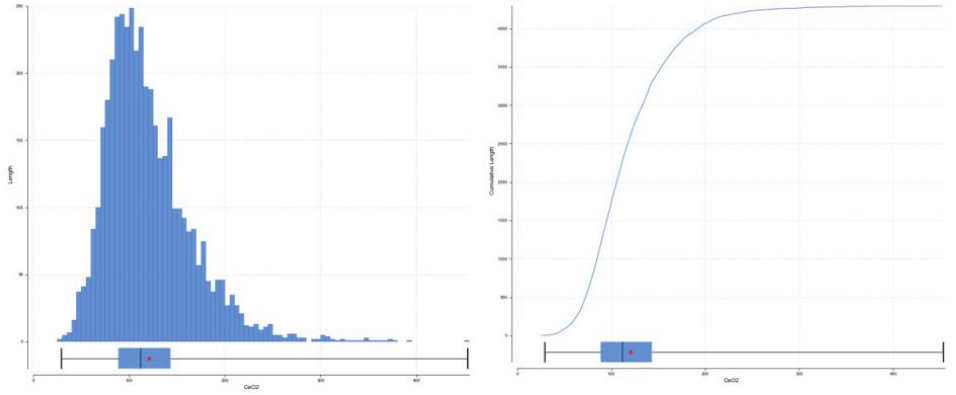
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-5: CeO_2 Histogram and Cumulative Histogram of the Mineralized Domain



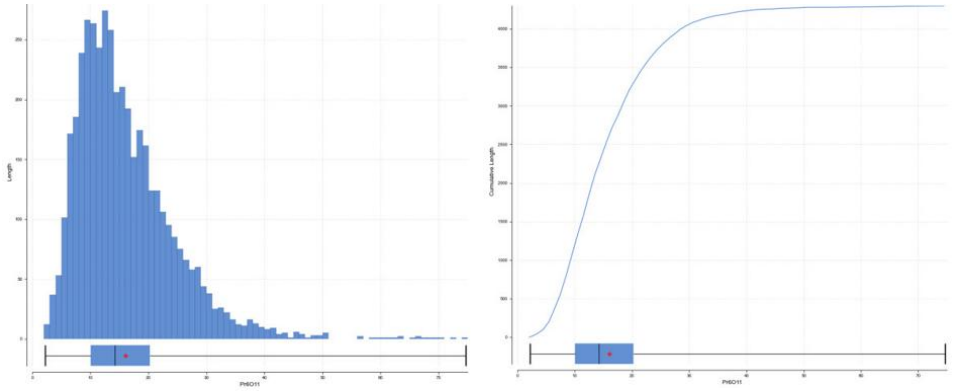
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-6: Pr_6O_{11} Histogram and Cumulative Histogram of the Mineralized Domain



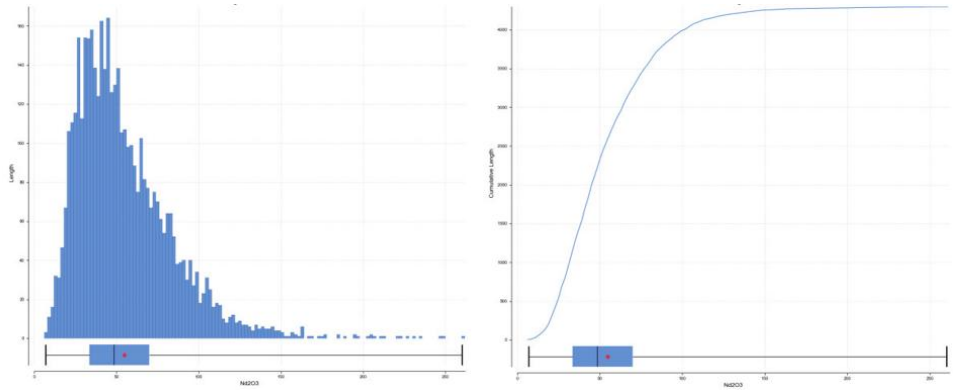
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-7: Nd_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



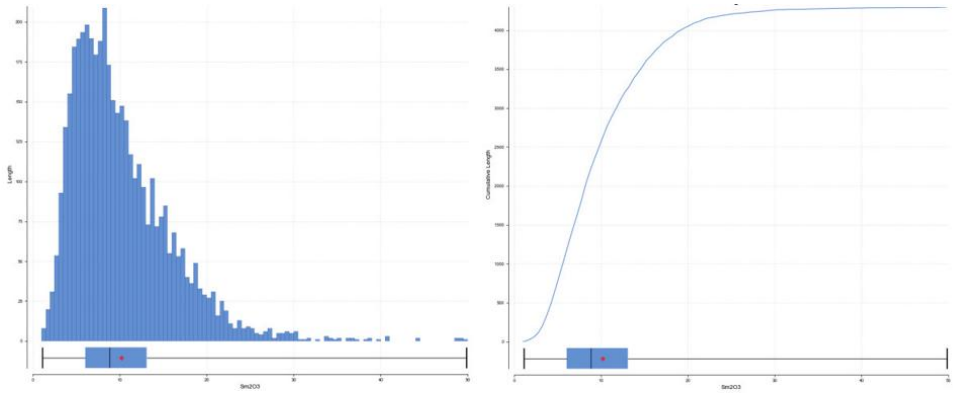
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-8: Sm_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



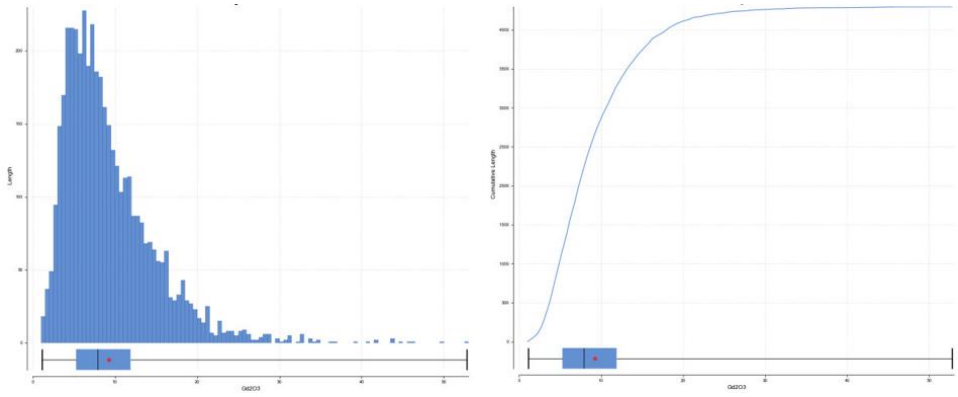
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-9: Gd_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



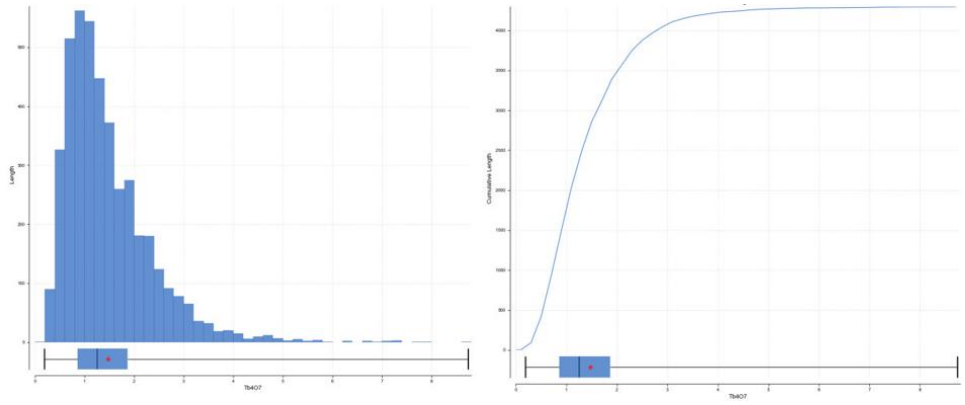
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-10: Tb_4O_7 Histogram and Cumulative Histogram of the Mineralized Domain



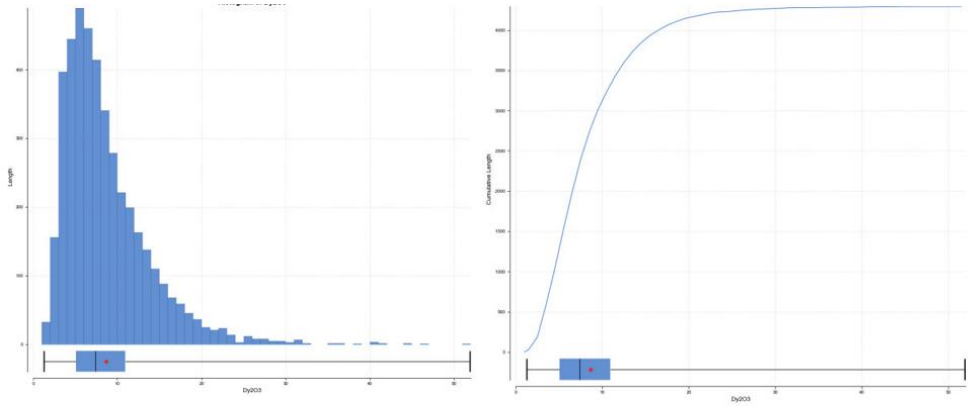
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-11: Dy_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



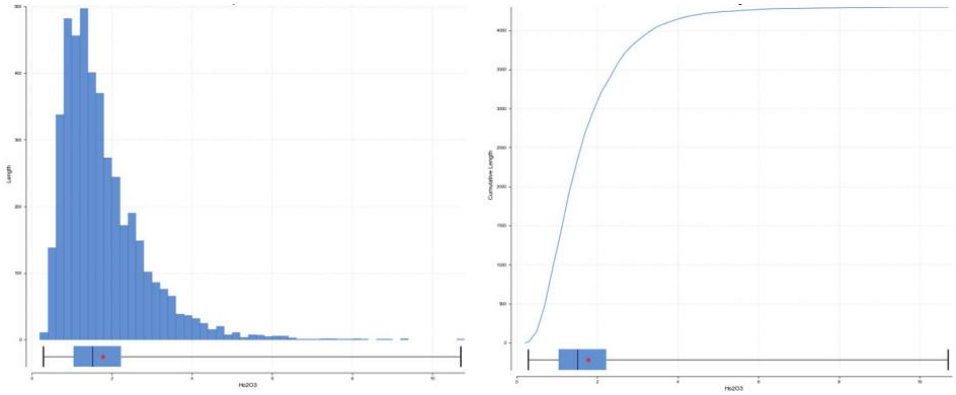
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-12: Ho_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



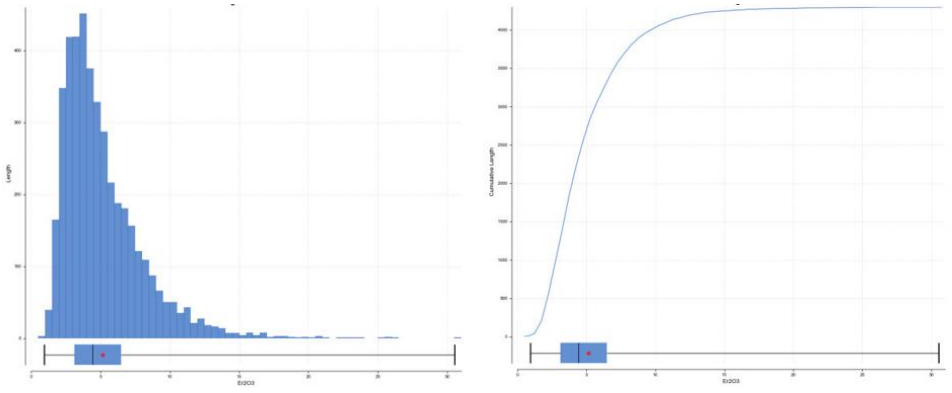
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-13: Er_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



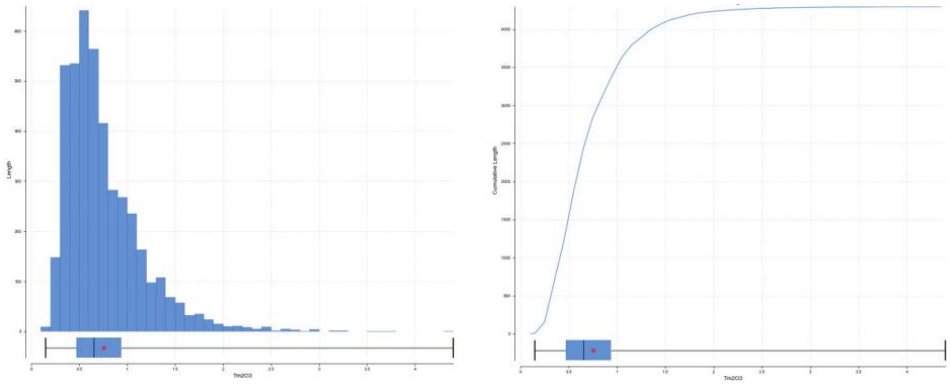
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-14: Tm_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



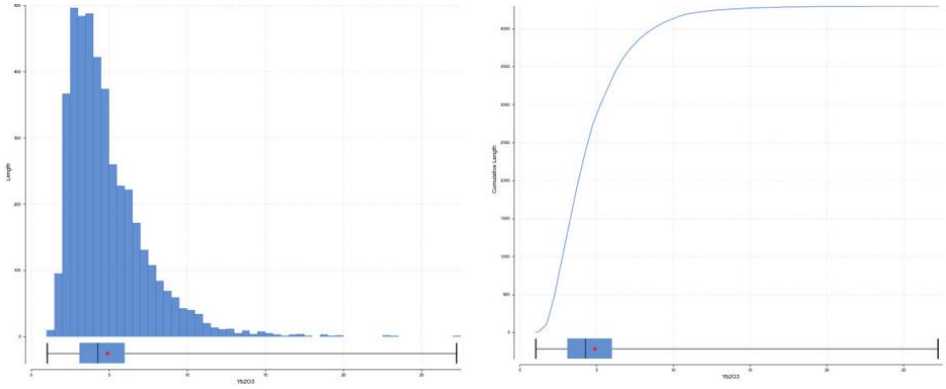
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-15: Yb_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



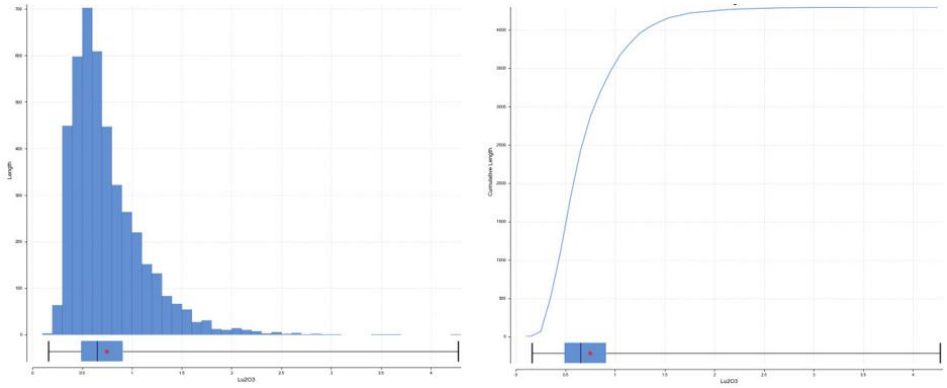
Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Figure 10-16: Lu_2O_3 Histogram and Cumulative Histogram of the Mineralized Domain



Source:SRK

Note:

[1] The mean is indicated by the red diamond.

[2] The median is indicated by the line that crosses the inside of the box.

Table 10-2: Outlier Value for Sepon Project

TREO	Assay Cap (g/t)	Capped Samples	Capped Ratio (%)	Mean (%)	
				Before Capping	After Capping
Y_2O_3	175	42	0.98	55.39	54.96
La_2O_3	250	24	0.56	78.99	78.65
CeO_2	300	30	0.70	120.51	120.25
Pr_6O_{11}	45	40	0.93	16.05	15.95
Nd_2O_3	160	33	0.77	54.82	54.55
Sm_2O_3	32	28	0.65	10.21	10.16
Eu_2O_3	10	19	0.44	2.44	2.43
Gd_2O_3	28	50	1.17	9.26	9.19
Tb_4O_7	5	28	0.65	1.47	1.47
Dy_2O_3	30	27	0.63	8.68	8.64
Ho_2O_3	6	32	0.75	1.77	1.77
Er_2O_3	18	22	0.51	5.17	5.15
Tm_2O_3	2	66	1.54	0.75	0.75
Yb_2O_3	15	27	0.63	4.87	4.85
Lu_2O_3	2.5	15	0.35	0.75	0.75

10.1.8 Block Model and Grade Estimation

SRK generated non-rotational model via Leapfrog software for grade and tonnage estimation. A suitable block interval and unit size was adopted to build a block model which was able to contain the mineralized zones. The bock size was set to 10 m × 10 m × 2 m (East × North × Elevation). A summary of the block model specifications is presented in Table 10-3.

Table 10-3: Block Model Parameters

	Base Point	Boundary	Block Size	Sub Block Size	Rotation
E	630,487.98	7,020	10	10	0
N	1,857,207.27	2,630	10	10	0
Z	560.00	544	2	2	0

The estimation method for SREO was Inverse Distance Weighting ("IDW2"). The model underwent three searches. The specific search parameters are detailed in Table 10-4.

Table 10-4: Search Ellipsoid Parameters

Element	Runs	Search Distanc(m)	Minimum Samples	Maximum Samples	Maximum samples in a single drillhole
15 Rare Earth Oxide	1	110	6	24	2
	2	220	6	24	2
	3	220	2	24	2

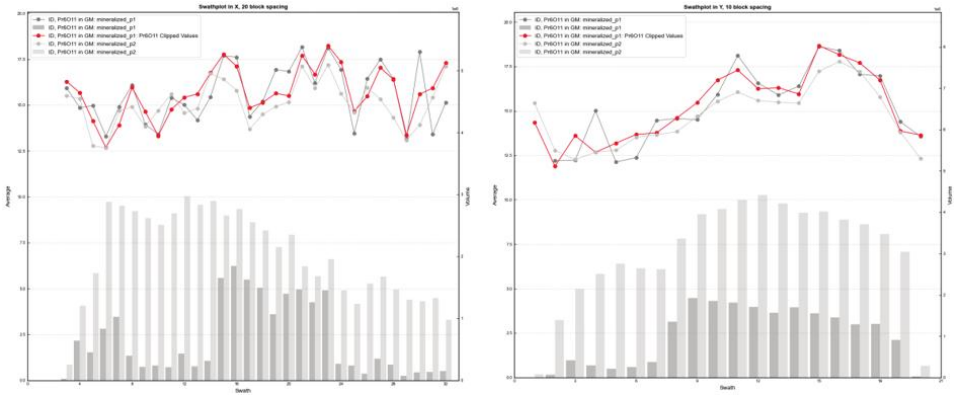
10.1.9 Model Validation and Sensitivity

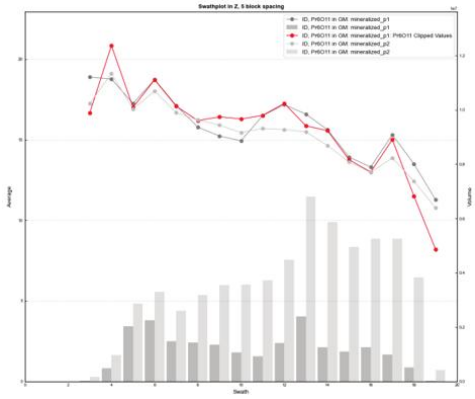
Swath plots are an important validation tool for providing comparisons between sample points and estimated values to identify any bias towards under-estimation or over-estimation or any smoothing in the results. The effect of different estimation methods and parameters can also be compared.

The swath plot is a one-dimensional graph in a specific direction of interest. A swath is a sectional slice through the block model with a specified thickness. The swath plot shows the average grade for the blocks in the swath, along with the averaged sample values in the swath.

Swath plots have been generated in three orthogonal (north, east, and vertical) directions at a certain distance for Pr_6O_{11} and Nd_2O_3 grade by SRK, as shown in Figure 10-17 and Figure 10-18. The block models and the composites correspond well in all orthogonal directions. This comparison shows close consistency between the blocks and composites in terms of overall distribution as a function of X, Y, and Z coordinates.

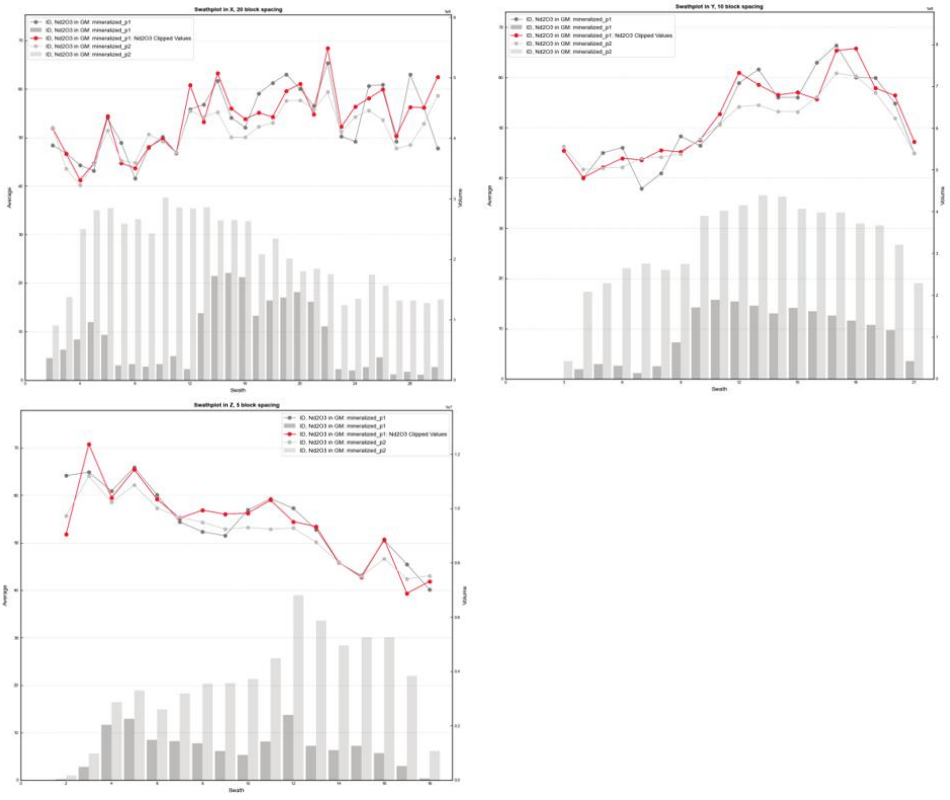
Figure 10-17: Pr_6O_{11} Grade Swath Plot for Sepon Project





Source:SRK

Figure 10-18: Nd_2O_3 Grade Swath Plot for Sepon Project



Source:SRK

10.1.10 Mineral Resource Classification

Block model quantities and grade estimates for the Sepon project were classified according to the JORC Code 2012.

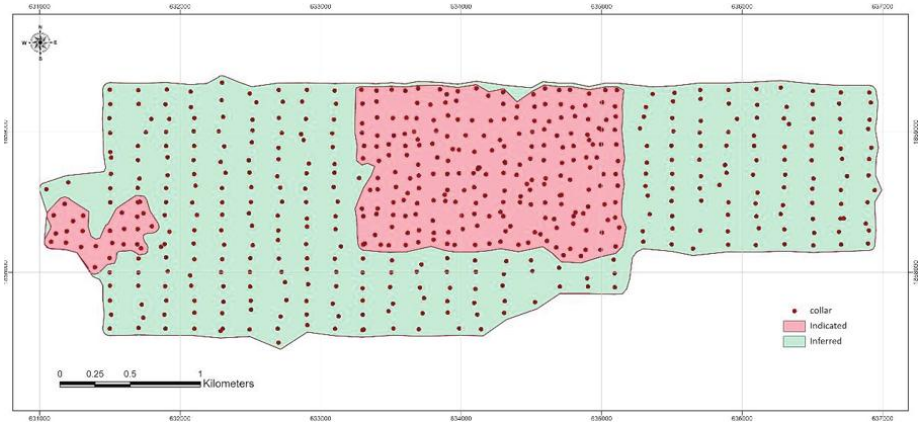
Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by GN Auger holes drilling on spaced at 100-200 metres. As such the Mineral Resource is classified based on the following principles:

- Indicated Mineral Resource: the areas less than 100 m spacing of the drillholes.
- Inferred Mineral Resource: the areas greater than 100 m and less than 200 m spacing of the drillholes.

Typical Mineral Resource classification maps are presented in Figure 10-19.

Figure 10-19: Sepon Project Mineral Resource Classification



Source:SRK

10.1.11 Mineral Resource Statement

The JORC Code 2012 defines a mineral resource as:

"a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological

evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries.

In contrast to conventional mining method, the in-situ leaching operation and wet plant cannot be treated as separate business units as the output PLS produced from the leaching process is directly fed into a wet plant for processing and the processed solution from the PLS is then recycled for leaching utilization. Therefore, this RPEEE assessment considers the technical and cost factors associated with both the leaching process and the wet plant.

SRK considers that the blocks with the TREO grade greater than 170 g/t show "reasonable prospects for economic extraction" and can be reported as a Mineral Resource.

As of 31 March 2024, by applying a cut-off grade of 170 g/t TREO, The Mineral Resources which SRK estimated and reported are as follows:

- 26.78 Mt of Indicated Mineral Resource with an average grade of 383.75 g/t TREO, equivalent to 10.28 kt of total rare earth oxides within the Project area.
- 63.79 Mt Inferred Mineral Resource with an average grade of 339.22 g/t TREO, equivalent to 21.64 kt of total rare earth oxides within the Project area.

Table 10-5: Mineral Resource Statement[1] of Sepon REE Project, as of 31 March 2024

Category	Mass (Mt)	TREO (g/t)	TREO (kt)	PrNd Oxides (%)	MREO(%)	CREO(%)
Indicated	26.78	383.75	10.28	19.14	21.97	33.87
Inferred	63.79	339.22	21.64	18.78	21.45	32.59

Notes:

[1] Mineral Resources are not Ore Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Dr Anson Xu who are full time employees of SRK Consulting China Ltd. Mr Huaixiang Li is a Member of AIG and Dr Anson Xu is a Fellow of AusIMM. Dr Xu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in JORC (2012). Mr Li and Dr Xu consent to the reporting of this information in the form and context in which it appears.

[3] Mineral Resources are reported at a cut-off grade of 170 g/t TREO. Cut-off grades are based on a price of 239,000 CNY/t REO.

[4] MREO: Pr_6O_{11}+Nd_2O_3+Tb_4O_7+Dy_2O_3.

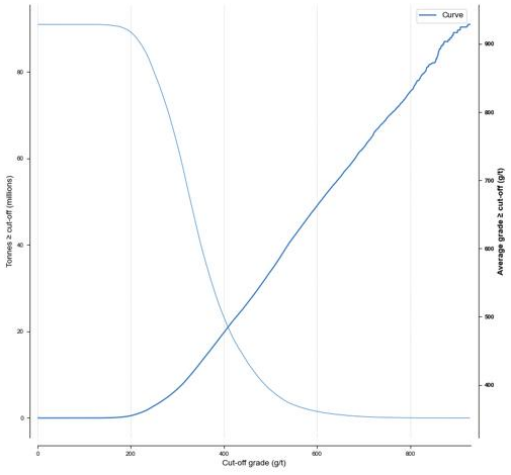
[5] CREO: Nd_2O_3 + Eu_2O_3 + Tb_4O_7 + Dy_2O_3 + Y_2O_3, determined by US Department of Energy 2023.

[6] TREO: Total Rare Earth Oxides include Y_2O_3+ La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3.

10.1.12 Grade Sensitivity Analysis

The Mineral Resources of the Sepon project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Figure 10-20 at various cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.

Figure 10-20: Sepon Project Grade Tonnage Curve



Source:SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

10.2 Mengkham REE Project

10.2.1 Introduction

The Mineral Resource Statement presented herein represents the first mineral resource evaluation prepared for the Mengkham REE project in accordance with the JORC Code 2012.

The mineral resource model prepared by SRK considers the core boreholes drilled by the client during the period of January 2022 to December 2023. The effective date of the Mineral Resource Statement is 31 March 2024.

This section describes the methodology, procedure and key assumptions applied in Resource estimation. In the opinion of SRK, the resource estimation reported herein is a reasonable representation of the global rare earths resource found in the Mengkham IAC REE Project at the current level of sampling. The mineral resources have been estimated in accordance with the JORC Code 2012. Mineral resources are not Ore Reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into Ore Reserve.

The database used to estimate the Project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for rare earths mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

The Leapfrog Geo and Edge (Version 2023.2) software was used to create both geological model and block model for the Project. The software is considered as a proper modelling tool for this regolith type of deposit.

10.2.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification
- Construction of wireframe models for the boundaries of the REE mineralization
- Definition of resource domains
- Data conditioning (compositing and capping) for analysis
- Block modelling and grade interpolation
- Resource classification and validation
- Assessment of "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades
- Preparation of the Mineral Resource Statement

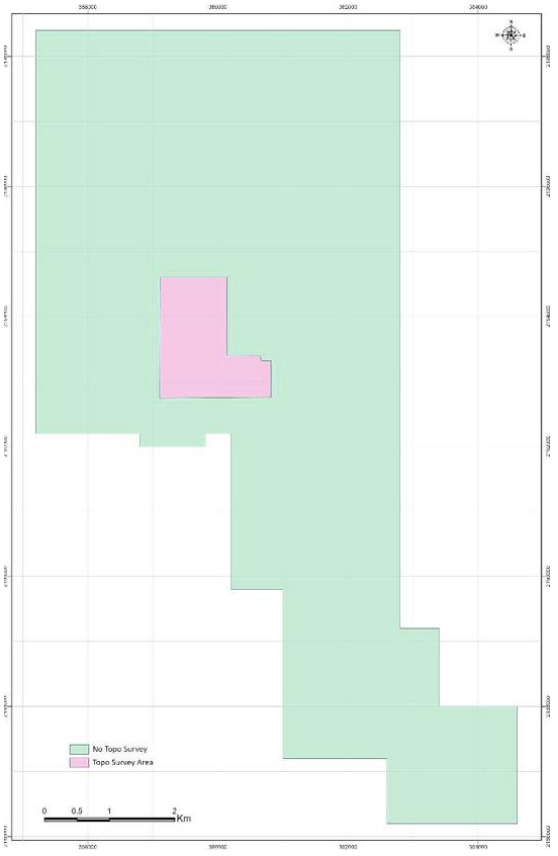
10.2.3 Resource Database

The datasets and information used in the models were provided by the client, including geological exploration reports and associated maps and tables, topographic data (only covering an area of 2.3 km^2), geological maps, borehole databases, etc. The coordinate system applied for the entire project is the UTM projection (Zone 48N) using the Indian 1960 Datum.

Prior to conducting Mineral Resource modelling, SRK performed a data validation procedure to assess the reliability of the received datasets. 736 holes with 15,067 assays were excluded due to the reasons of wrong coordinates, duplicate assay at the same interval or extremely high SREO grade (from 0.4% to 2.68%).

Digital terrain models ("DTM") of an area of 2.3 km^2 were created from AutoCAD contour maps provided by the client, as shown in Figure 10-21. These contour maps were derived from the site survey activity. SRK considers that the created DTMs are acceptable to use in the mineral resource estimation. The rest area of the project's DTM was created using the Copernicus data downloaded by SRK.

Figure 10-21: Topo Survey Area of Mengkham REE Projects



Source:SRK

The summary statistics of the holes (Figure 7-2) used in Mineral Resource estimation is listed in Table 10-6.

Table 10-6: Drillhole Statistics used for the Resource Estimation

Drillhole Type	Drillholes	Length（m）	Samples	Year
GN Auger	13,251	192,008	92,935	2022-2023

10.2.4 Solid Body Modelling

Solid models were created in Leapfrog Geo software based on the following considerations, principles, and steps.

The deposit type in the Mengkham REE Project is an ion-adsorption type hosted in weathered regolith. The development level of the weathered regolith layer largely shaped the distribution and geometry of the REE mineralization. The ore-bearing layers are mainly present in the middle part of the fully weathered regolith profile and the upper part of the semi-weathered layer.

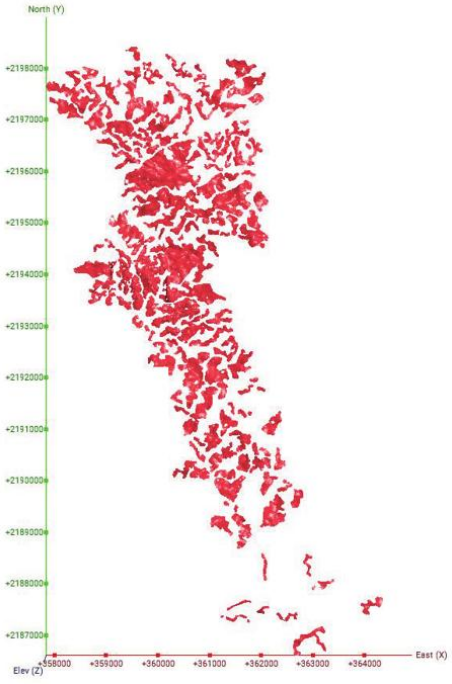
The REE mineralized bodies generally exhibit a stratiform appearance, with their morphology controlled by the occurrence of the weathered regolith. In relatively flat mountaintop areas, the bodies tend to be thicker and have a more pronounced sheet-like shape. Whereas in steep hillside and valley areas, the bodies tend to have a thinner and more complex shape due to erosion and transportation effects.

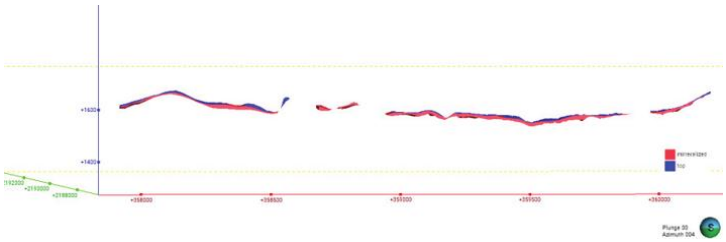
Based on the above considerations, a terrain analysis was conducted to identify steep areas (typically slopes greater than 40 degrees) and valley areas with creeks or rivers. Through cross-checking with drillhole assay data, areas were identified as unlikely to retain weathered regolith or host mineralization of insufficient thickness to be economically viable. Subsequently, these areas were excluded from the delineation of mineralized boundaries.

Due to the REE quick test before sampling, SRK considers all the intervals with REE grades as the mineralized zone and above the mineralized zone is the topsoil zone. In Leapfrog software, SRK created a geological model based on the drillhole assay data and employed an implicit modeling approach. Additionally, constraints on the mineralized zones are applied using data related to valleys and water systems.

The distribution maps of mineralized orebodies were illustrated from Figure 10-22.

Figure 10-22: Plan View (Up) and Section View (Down) of Mengkham Mineralized Bodies





Source:SRK

10.2.5 Bulk Density Test

A total of ten bulk density samples were implemented across the project areas with the natural bulk density (wet basis) ranging from 1.7 to 1.81 t/m^3, averaging 1.75 t/m^3, dry bulk density ranging between 1.35 and 1.55 t/m^3, averaging 1.47 t/m^3.

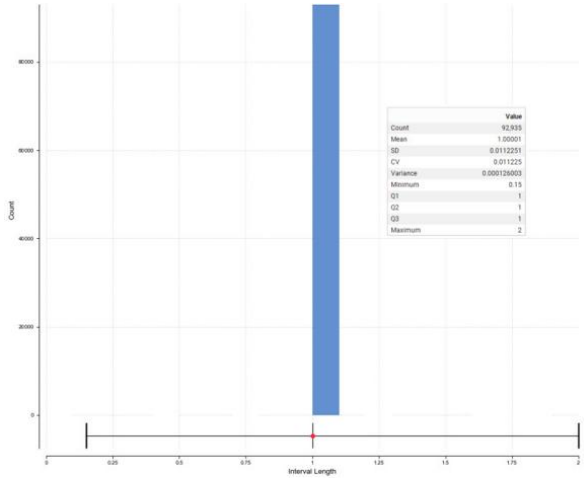
The average dry bule density of 1.47 t/m^3 is determined to use in resource estimation for the entire project area.

10.2.6 Compositing

Prior to conducting the statistical analysis, the samples were combined so the length of each sample was basically equivalent. The distribution of sample length is provided in Figure 10-23. The database indicates that most of the sample intervals are 1 m.

All data from the database containing the flagged raw sample intervals were composited to 1.0 m downhole lengths, with a minimum length of 0.5 m required to create a composite. SRK applied 1.0 m composite for all subsequent analyses and grade interpolations.

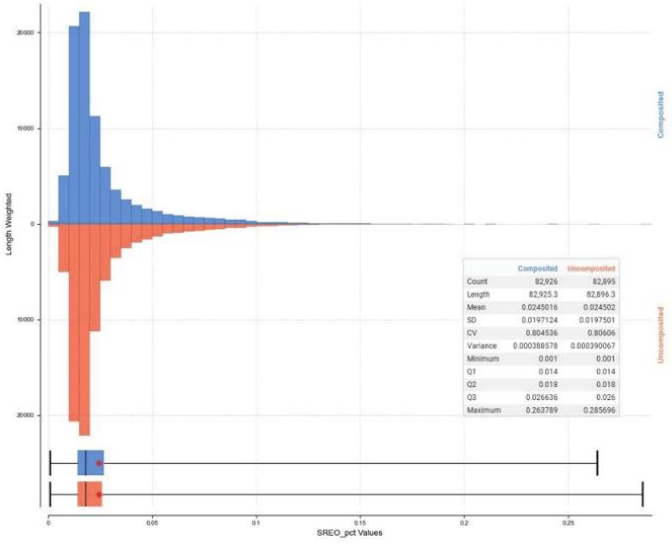
Figure 10-23: Histogram of Sample Length



Source:SRK

The sampling methods in the Mengkham REE Project are essentially consistent, and the approach to handling composite samples is also the same, as shown in Figure 10-24.

Figure 10-24: SREO Grade Before and After Compositing



Source:SRK

10.2.7 Evaluation of Outliers

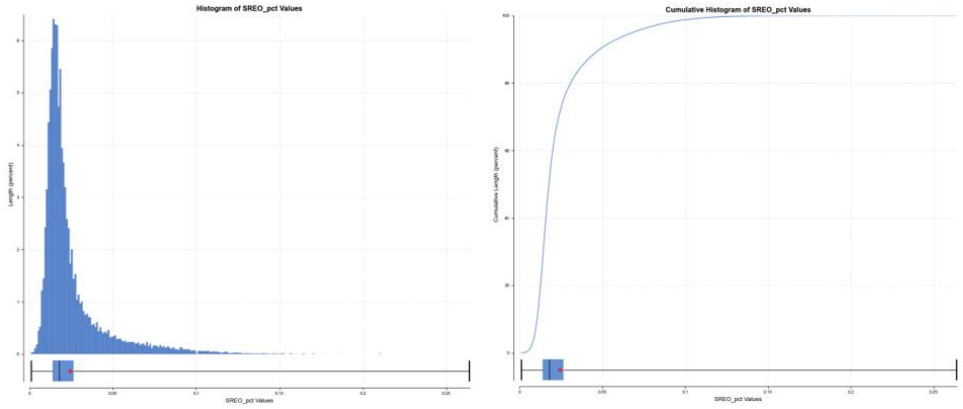
Due to the specific nature of the drilling method, over 99% of the sample lengths are 1.0 meter. Therefore, the original data statistics and composite data statistics for samples within the orebodies show almost identical results, listed in Table 10-7.

Table 10-7: Raw and Composite Sample Statistics within Mineralized Domain

Items	Raw	Composite
Count	82,895	82,926
Mean	0.0245	0.0245
Length	82,896.3	82,925.3
Std	0.02	0.02
CV	0.81	0.80
Variance	0.0004	0.0004
Minimum Value	0.001	0.001
Q1	0.014	0.014
Q2	0.018	0.018
Q3	0.026	0.027
Maximum Value	0.286	0.264

To identify the appropriate top cuts for the mineralised body, the cumulative frequency and distribution characteristics of the sample histogram, as shown in Figure 10-25 were used, in addition, the coefficient of variation statistic and 3D visualisations were also considered. After reaching a SREO grade of 0.105%, the continuity of samples becomes sparse. The cutoff grades used in estimation listed in Table 10-8.

Figure 10-25: Histogram and Cumulative Histogram of the Mineralized Domain



Source:SRK

Note:

1 The mean is indicated by the red diamond.

2 The median is indicated by the line that crosses the inside of the box.

Table 10-8: Outlier Value for Mengkham REE Project

Assay Cap SREO (%)	Capped Samples	Capped Ratio (%)	SREO Mean (%)	
			Before Capping	After Capping
0.105	794	0.96	0.0245	0.0243

10.2.8 Block Model and Grade Estimation

SRK generated non-rotational model via Leapfrog software for grade and tonnage estimation. A suitable block interval and unit size was adopted to build a block model which was able to contain the mineralized zones. The bock size was set to 10 m × 10 m × 4 m (East × North × Elevation). A summary of the block model specifications is presented in Table 10-9.

Table 10-9: Block Model Parameters

	Base Point	Boundary	Block Size	Sub Block Size	Rotation
E	357,495.35	7,060	10	5	0
N	2,186,283.81	12,290	10	5	0
Z	1,800.00	612	4	2	0

The estimation method for SREO was Inverse Distance Weighting (IDW2). The model underwent three searches. The specific search parameters are detailed in Table 10-10.

Table 10-10: Search Ellipsoid Parameters

Element	Runs	Search Distance (m)	Minimum Samples	Maximum Samples	Maximum samples in a single drillhole
SREO	1	60	6	24	2
	2	120	6	24	2
	3	120	2	24	2

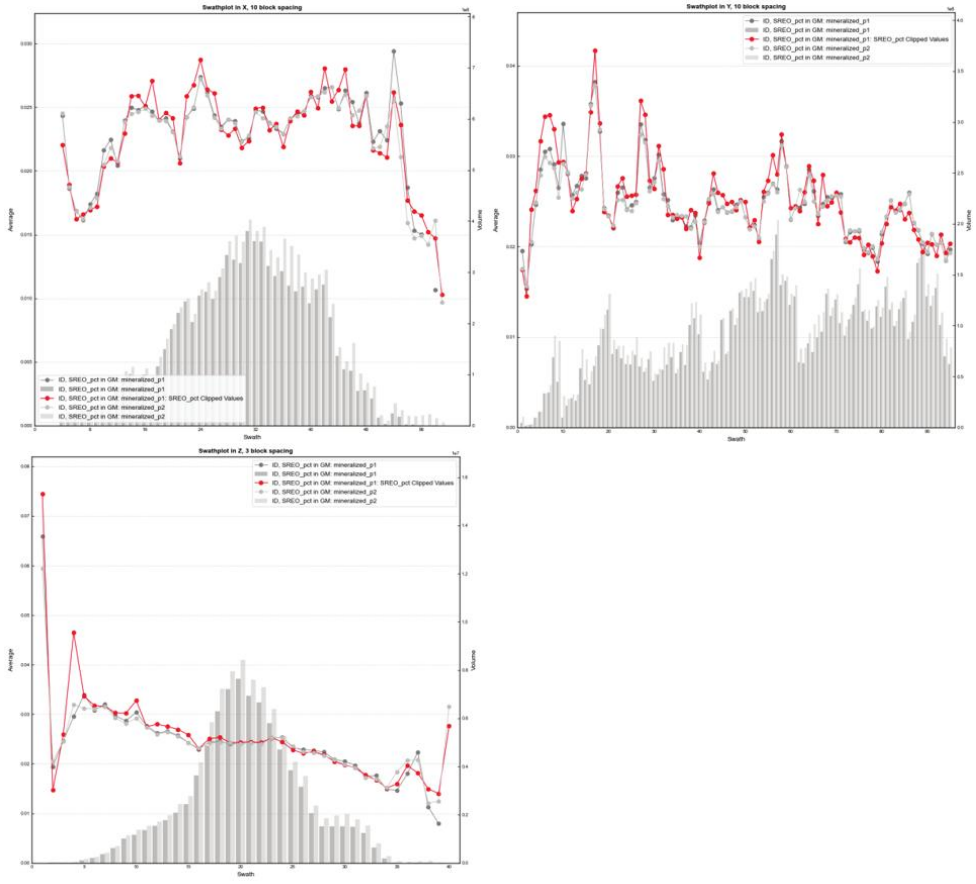
10.2.9 Model Validation and Sensitivity

Swath plots are an important validation tool for providing comparisons between sample points and estimated values to identify any bias towards under-estimation or over-estimation or any smoothing in the results. The effect of different estimation methods and parameters can also be compared.

The swath plot is a one-dimensional graph in a specific direction of interest. A swath is a sectional slice through the block model with a specified thickness. The swath plot shows the average grade for the blocks in the swath, along with the averaged sample values in the swath.

Swath plots have been generated in three orthogonal (north, east, and vertical) directions at a certain distance for SREO grade by SRK, as shown in Figure 10-26. The block models and the composites correspond well in all orthogonal directions. This comparison shows close consistency between the blocks and composites in terms of overall distribution as a function of X, Y, and Z coordinates.

Figure 10-26: SREO Grade Swath Plot for Mengkham REE Project



Source:SRK

10.2.10 Mineral Resource Classification

Block model quantities and grade estimates for the Mengkham REE Project were classified according to the JORC Code 2012.

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

SRK is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by GN Auger holes drilling on spaced at 30-100 metres. As such the Mineral Resource is classified based on the following principles:

- Indicated Mineral Resource: the areas less than 100 m spacing of the drillholes.
- Inferred Mineral Resource: the areas greater than 100 m and less than 200 m spacing of the drillholes.

Considering the specific IAC deposit type, SRK only categorised Indicated Mineral Resources in the area have been topo surveyed as described in resource database section. All the blocks within the area using Copernicus DTM were classified as Inferred Mineral Resources.

Due to the large bias between Menghkam original assay and SRK verification results, Indicated Mineral Resources were downgraded to Inferred Mineral Resources by SRK.

10.2.11 Mineral Resource Statement

The JORC Code 2012 defines a mineral resource as:

"a concentration or occurrence of material of solid material of economic interest in or on the Earth's crust in such form, grade (or quality) and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories."

The "reasonable prospects for eventual economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recoveries.

In contrast to conventional mining method, the in-situ leaching operation and wet plant cannot be treated as separate business units as the output PLS produced from the leaching process is directly fed into a wet plant for processing and the processed solution from the PLS is then recycled for leaching utilization. Therefore, this RPEEE assessment considers the technical and cost factors associated with both the leaching process and the wet plant.

The block model quantities and grade estimates were also reviewed to determine the portions of the Mengkham deposit having "reasonable prospects for economic extraction, based on parameters summarized in Table 10-11. The product price was sourced from the guide REO price of Xiamen Tungsten 2024. Detailed in Figure 18-1, the REO price was between 220,000 CNY/t and 341,000 CNY/t from 2019 to 2023, averaging 263,000 CNY/t.

Table 10-11: Simplified Cost Model used for RPEEE Assessment

Item	Unit	Value	Remarks
Unit Cost			
Production Cost	CNY/t RoM	15.7	SRK collected and analyzed
Injection and Collection Cost	CNY/t RoM	2.3	SRK collected and analyzed
Raw Material	CNY/t RoM	7.7	SRK collected and analyzed
Pipes and Accessories	CNY/t RoM	1.6	SRK collected and analyzed
Power Cost	CNY/t RoM	1.1	SRK collected and analyzed
Safety and Environmental Cost	CNY/t RoM	0.2	SRK collected and analyzed
Staff Salary	CNY/t RoM	1.2	SRK collected and analyzed
Other Cost	CNY/t RoM	1.6	SRK collected and analyzed
Reclamation Cost	CNY/t RoM	0.6	SRK collected and analyzed
G&A	CNY/t RoM	0.3	SRK collected and analyzed
Sales Cost	CNY/t RoM	0.3	SRK collected and analyzed
Total Unit Cost	CNY/t RoM	16.9	SRK collected and analyzed
Recovery Rate			
Leaching Rate	%	90.0	Mengkham REE PFS Report
Processing Recovery Rate	%	85.5	Mengkham REE PFS Report
Overall REE Recovery	%	77.0	Mengkham REE PFS Report
Revenue			
Product Price	CNY/t REO	239,000.0	Mengkham REE PFS Report

Based on the RPEEE assessment and considering the characteristics of the leaching mining method, SRK selected a cut-off grade of 100 g/t SREO to report Mineral Resources. The reader is cautioned that the results of the estimate are used solely for the purpose of testing the "reasonable prospects for eventual economic extraction" by in-situ leaching mining and do not represent an attempt to estimate Ore Reserves. The results are to be used as a guide for assisting in the preparation of a Mineral Resource Statement and for selecting an appropriate resource-reporting cut-off grade.

As of 31 March 2024, by applying a cut-off grade of 100 g/t SREO, The Mineral Resources which SRK estimated and reported are as follows:

- 139.05 Mt Inferred Mineral Resource with an average grade of 241.79 g/t SREO, equivalent to 33.62 kt of soluble rare earth oxides within the Project area.

Table 10-12: Mineral Resource Statement[1] of Mangkham REE Project, as of 31 March 2024

License	Category	Dry BD (t/m^3)	Mass (Mt)	SREO (g/t)	SREO (kt)
Trial Mining	Inferred	1.47	55.59	267.75	14.88
Exploration	Inferred	1.47	83.47	224.51	18.74
Total	**Inferred**	1.47	139.05	241.79	33.62

Notes:

[1] Mineral Resources are not Ore Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All composites have been capped where appropriate.

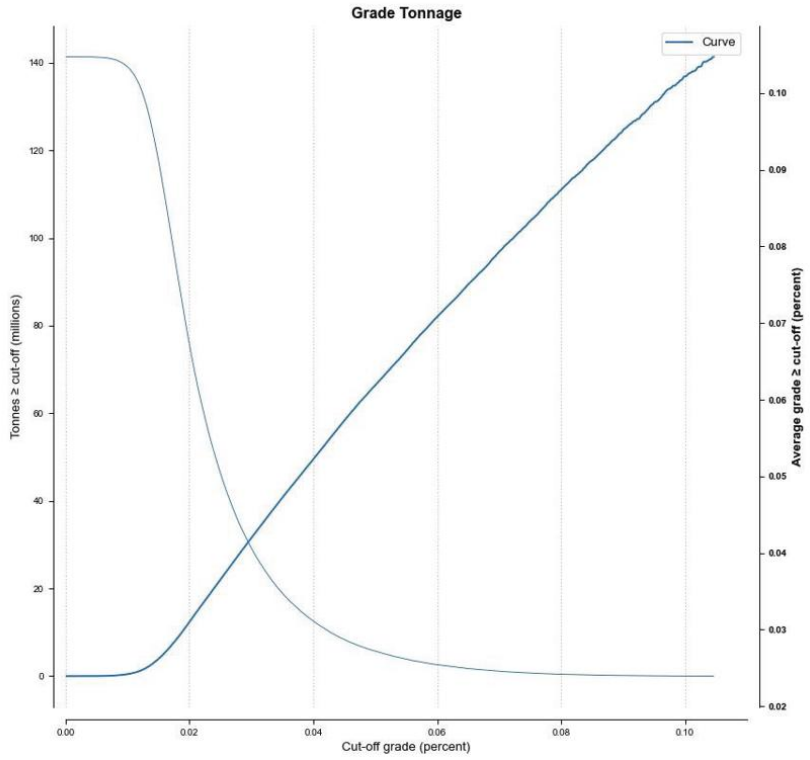
[2] The information in this report which relates to Mineral Resource is based on information compiled by Mr Huaixiang Li and Dr Anson Xu who are full time employees of SRK Consulting China. Mr Huaixiang Li is a Member of AIG and Dr Anson Xu is a Fellow of AusIMM. Dr Xu have sufficient experience which is relevant to the style of mineralisation and the type of deposits under consideration and to the activity which they are undertaking to qualify as the Competent Persons as defined in JORC (2012). Mr Li and Dr Xu consent to the reporting of this information in the form and context in which it appears.

[3] Mineral Resources are reported at a cut-off grade of 100 g/t SREO. Cut-off grades are based on a price of 239,000 CNY/t REO.

10.2.12 Grade Sensitivity Analysis

The mineral resources of the Menkham project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Figure 10-27 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.

Figure 10-27: Mengkham REE Project Grade Tonnage Curve



Source:SRK

Notes:

[1] The reader is cautioned that the figures should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

10.3 SRK Comments

Mineral Resources have been estimated through creating resource models. The data and information used for this resource model generation are acquired from the exploration and were reviewed by SRK to ensure the data reliability.

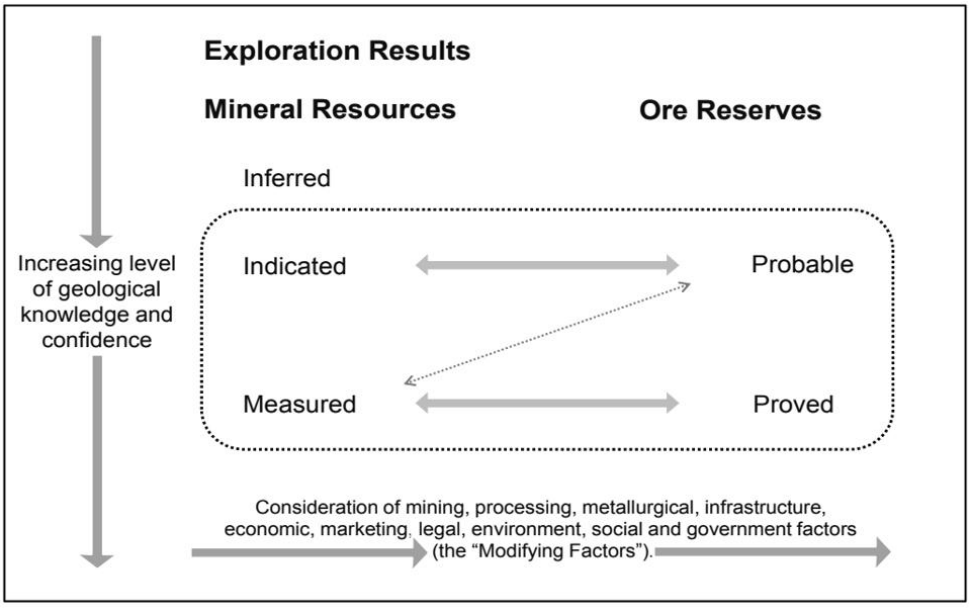
Due to the drilling and sampling methods employed in the exploration, there is a possibility of misidentification of certain sections potentially bearing REE. Consequently, this could lead to under-delineation of the mineralized domains during resource modelling, potentially resulting in a conservative resource estimate.

11 Ore Reserve Estimates

11.1 Introduction

JORC Code 2012 provides for a direct relationship between Indicated Mineral Resources and Probable Ore Reserves and between Measured Mineral Resources and Proved Ore Reserves. As shown in Figure 11-1 below.

Figure 11-1: Relationship Between Mineral Resources and Ore Reserve



Sources: JORC Code 2012

The following statement has been extracted from the JORC Code 2012 for reference:

"An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified."

"The reference point at which Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported."

For Sepon REE Project, the current study indicates that the project would not be financially feasible. Following discussions with LXML, it has been decided that only Mineral Resources will be reported in the report .

For Mengkham REE Project, there are technical situations as of 31 March 2024 as followings:

According to the eligible JORC Code 2012 for Mineral Resources, considering the resource within both mining license and exploration license, when utilizing a SREO cut-off grade of 0.01%, the following resources have been identified:

- Inferred Mineral Resource: 139.05 million tonnes at a grade of 241.79 g/t SREO.

The technical study is entitled "Mengkham Ion Adsorption Rare Earth Project Feasibility Study" ("PFS") and was prepared by CHIXIA Laos Holdings Limited ("CHIXIA") on February 23, 2024.

According to JORC Code 2012, only Measured Mineral Resource and Indicated Mineral Resource can be considered when estimating Ore Reserves. In this instance, the Mengkham REE Project contains solely Inferred Mineral Resource. After discussions with CHIXIA, it has been decided that only a preliminary economic analysis based on PFS would be conducted to analyse the project's economic feasibility and report project's modified Mineral Resources, and none of the Mineral Resources would be converted to Ore Reserves.

Additionally, SRK has recommended to CHIXIA that necessary works and studies be conducted to increase geological confidence as well as technical and economic confidence.

11.2 Pilot Production of Mengkham REE Project

In the pilot production area, some of the topography has been cleared, and the PLS collection Tunnel has been developed to approximately 7,000 meters, according to PFS. During the site visit in May 2024, it was observed that the injection process had already commenced. However, the collection of the PLS had not yet been completed, and there was no final product as of 31 March 2024. Figure 11-2 below shows the in-situ injection system at the mountaintop.

Figure 11-2: In-Situ Injection System at The Mountaintop

Source: SRK

11.2.1 In-situ Leaching Mine Design

As described in the PFS, the mine is going to adopt the "in-situ leaching" process. The PFS has explained the procedures of the mining method, which will be discussed in more detail in Section 12.

SRK constructed a preliminary mining model based on the PFS's description and industrial standards. For more explanations, refer to Section 11.

11.2.2 Modified Mineral Resources

As mentioned at the beginning of Section 11, Ore Reserves were not estimated. Based on reviewing PFS, the modified Mineral Resources is shown in Table 11-1 below.

Table 11-1: Modified Mineral Resources of the CHIXIA Project, as of 31 March 2024

	Tonnage (Mt)	SREO (g/t)
Total	138.04	239.42

Source: SRK.

12 In-situ Leaching Mining

CHIXIA commenced to operate a pilot production in March 2024. In April 2024, CHIXIA requested SRK to conduct an independent review of the project. The PFS was prepared by CHIXIA. The key technical parameters listed in Table 12-1 below are summarized based on the PFS with SRK's modification.

Table 12-1: In-situ Leaching Mining Design Parameters, as of 31 March 2024

Design Parameter	Unit	PFS's Inputs	SRK's Inputs
Overall			
In-situ Leaching Mining Recovery	%	90.0	90.0
Processing Recovery	%	85.5	85.5
Overall Recovery	%	77.0	77.0
Wet Plant - REO	tpa	3675&2800	3675&2800
PLS Capacity	million m^3 pa	16.3 &11.6	16.3 &11.6
In-situ Leaching Mining			
Average Orebody Depth	m	8.7	7.9
Injection Holes	m	4.0	4.0
Injection holes Cover Area	m2	5.0	5.0
Collection Tunnel Cover Area	m2	3.5	3.5

Source: CHIXIA

SRK's preliminary economic analysis was conducted based on the PFS, as well as information collected from site visits and discussions with CHIXIA's technical team.

12.1 Introduction

The extraction of REEs involves several mining methods, each suited to different types of deposits.

- Open-pit mining is used for shallow deposits and involves removing overburden, drilling, blasting, and transporting the ore, but it has significant environmental impacts.
- Underground mining is suitable for deeper deposits and involves creating shafts and tunnels, but it is costlier and riskier.
- In-situ leaching, used for specific geological conditions, involves injecting a leaching solution into the ore body to dissolve REEs, which are then pumped to the surface or collected from the tunnels and subsequently pumped to the processing plant; it has minimal surface disturbance but potential groundwater contamination risks.
- Placer mining, used for alluvial deposits, involves excavating, screening, and concentrating REE minerals, with lower environmental impact but limited to specific deposits.

The choice of method depends on deposit depth, type, economic factors, and environmental considerations.

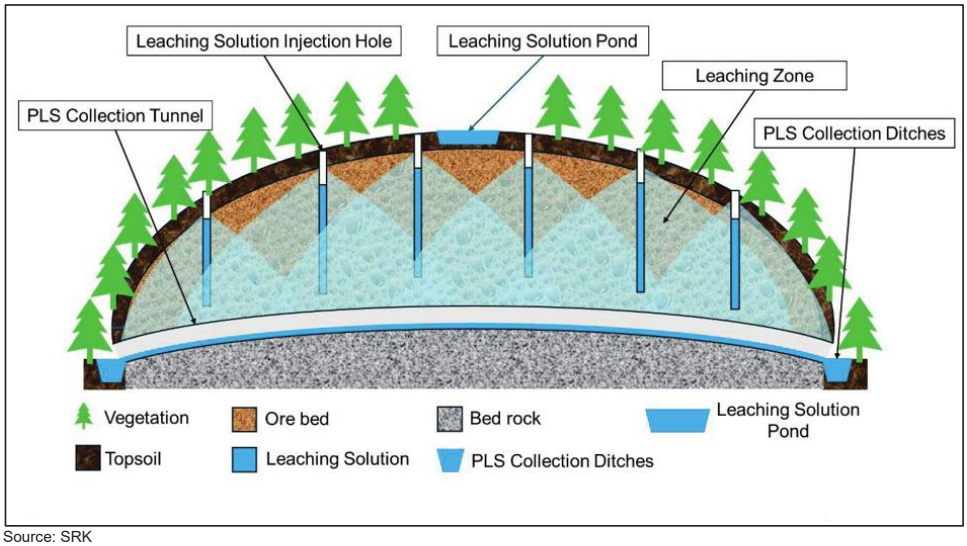
The in-situ leaching process can be divided into two stages:

- Leaching solution injection
- Collection of the PLS

The choice of leaching solution is crucial and typically consists of a weak acid or salt solution designed to selectively bind with the adsorbed REEs while minimizing harmful environmental impacts. Common choices include ammonium sulfate, sodium chloride, or organic acids.

The leaching solution used in the CHIXIA project primarily comprises ammonium sulfate, which is widely used in similar in-situ leach mines in China. Figure 12-1 below shows the schematic view of in-situ leaching mining.

Figure 12-1: Schematic Cross-section View of In-situ Leaching Mining



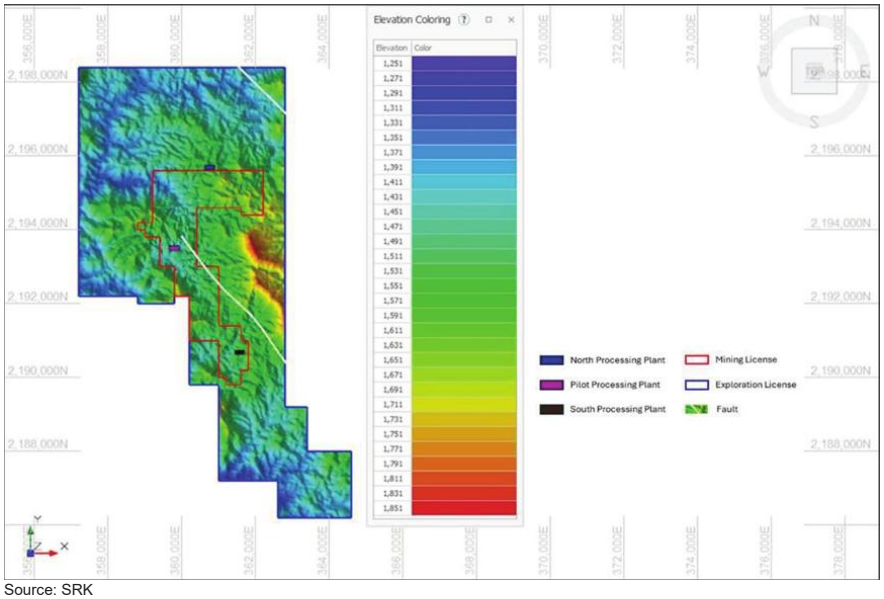
Source: SRK

12.2 Leaching Conditions

12.2.1 Topographic Condition

As illustrated in Figure 12-2, the elevation of the rare earth exploration area generally ranges from 1,251 to 1,851 meters ASL, with the highest elevation in the eastern exploration area reaching 1,851 meters ASL. The relative elevation difference within the area varies between 15 and 173 meters.

Figure 12-2: General Topographic Elevations within Exploration License



Source: SRK

[1] It should be noted that the locations of the three processing plants depicted in the figure only demonstrate the approximate layout and do not indicate the actual coordinates.

The topographic conditions are conducive to the strategic placement of leaching solution ponds and injection holes. These conditions facilitate an acceptable duration for the migration of PLS and provide a suitable hydraulic head for the delivery of PLS.

12.2.2 Occurrence and Lithology of the Orebody

The PFS did not provide adequate information about the lithology of the orebody; it only explains the geological characteristics and weathering profile, which are as follows:

The deposit is formed by the weathering of medium-fine grained biotite granite, the main ore-forming parent rock. The mining area's structure is simple, with the deposit located between NW-SE faults and lacking fold structures.

Favourable climate and geography have preserved the weathered crust well. Geological surveys and drilling show that the weathering strength of rare earth minerals varies due to lithology, uneven weathering, and topography, resulting in a wavy distribution of mineralization. Generally, clay-rich ores have better grades, with higher grades at the mountain top and waist, decreasing towards the col and foot of the mountain.

The mineralized body is stratified and locally lenticular, with general continuity. The intact regolith develops from topsoil, full regolith, and semi-regolith, with the full regolith being the main ore-bearing layer.

- Topsoil Layer: Mainly composed of biotite granite residuum, its thickness varies, being thinner or absent at the mountain top and thicker at the slope and foot. It often contains

humus and quaternary slope deposits, with a thickness of about 1-2 meters. This layer generally does not contain rare earth minerals.

- Full Regolith: The primary rare earth-bearing layer, often flesh-red, light red, or grayish-white, mainly composed of kaolin. It contains residual minerals like quartz, feldspar, and mica (1-3%), and accessory minerals such as ilmenite, monazite, and zircon (<1%). The thickness ranges from 2.0 to 15 meters, with an average of 7 meters.
- Semi-Regolith: Grayish-white with a granite structure, composed mainly of quartz, feldspar, and biotite. This layer is the bottom of the rare earth layer, with weak weathering and kaolinization around feldspar grains. It generally does not contain rare earth minerals.

Given the thickness of the topsoil layer within the project area, conventional open-pit mining methods could potentially cause significant surface disturbance. Furthermore, the regolith derived from the weathered granite possesses a certain degree of hydraulic conductivity. Therefore, this rare earth deposit is amenable to the application of in-situ leaching techniques for the extraction of REEs.

12.2.3 Geotechnical and Hydrogeological Conditions

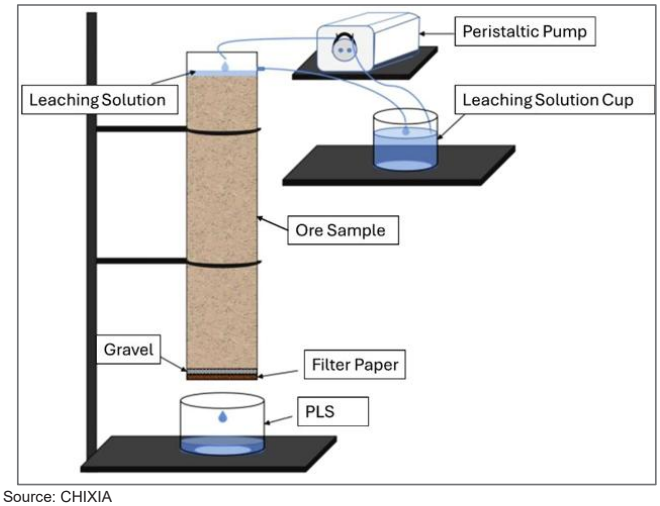
Geotechnical condition

No geotechnical testing has been conducted on the regolith within the project area.

Hydrological and Hydrogeological Condition

In April 2024, CHIXIA conducted two experiments and summarized the results in the "Experimental Research Report on the Specific Consumption of Leaching Agent and Injection Intensity for Ore Body #2 of the Mengkham Rare Earth Project." Figure 12-3 shows the schematic diagram of the experiment.

Figure 12-3: Schematic Diagram of Leaching Injection Intensity Experiment

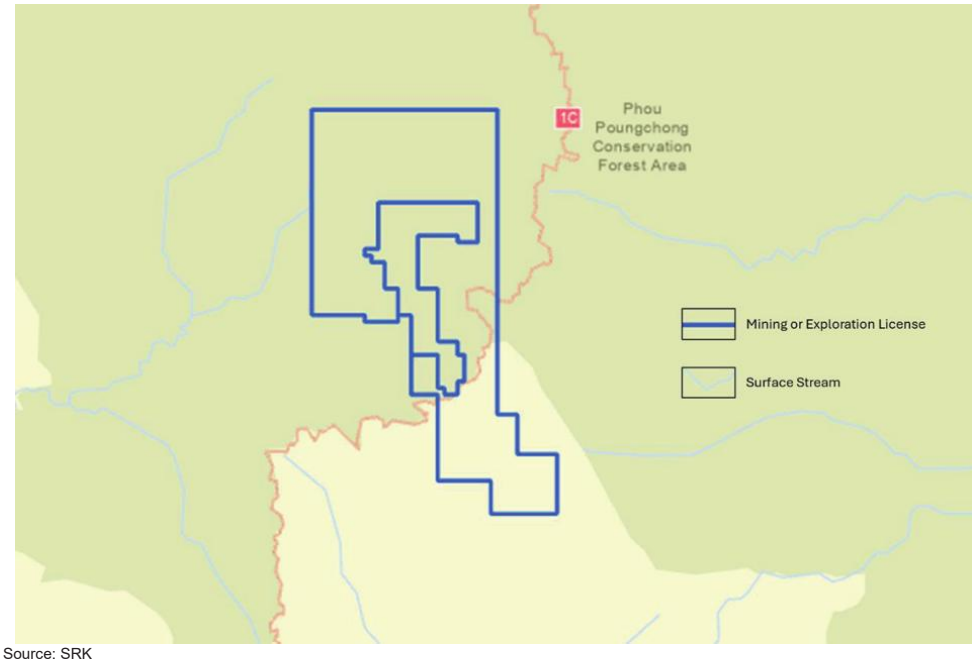


Source: CHIXIA

According to the report, the hydraulic conductivity of Ore Body #2 is 3.2-4.0 cm/h.

CHIXIA has not submitted any other hydrological and hydrogeological condition investigations or studies as of 31 March 2024. During the site visit, SRK was informed by CHIXIA that groundwater is not abundant in the project area. SRK checked the local surface water condition as it shows in Figure 12-4 below.

Figure 12-4: Local Surface Water Condition



Source: SRK

12.3 Leaching System

An independent in-situ leaching system primarily consists of an injection system and a collection system.

- The injection system is situated at the mountaintop and gentle slopes and is divided into three components.
- The collection system is located at the foot of the mountain and may vary slightly depending on the design approach for solution collection.

12.3.1 The Injection System

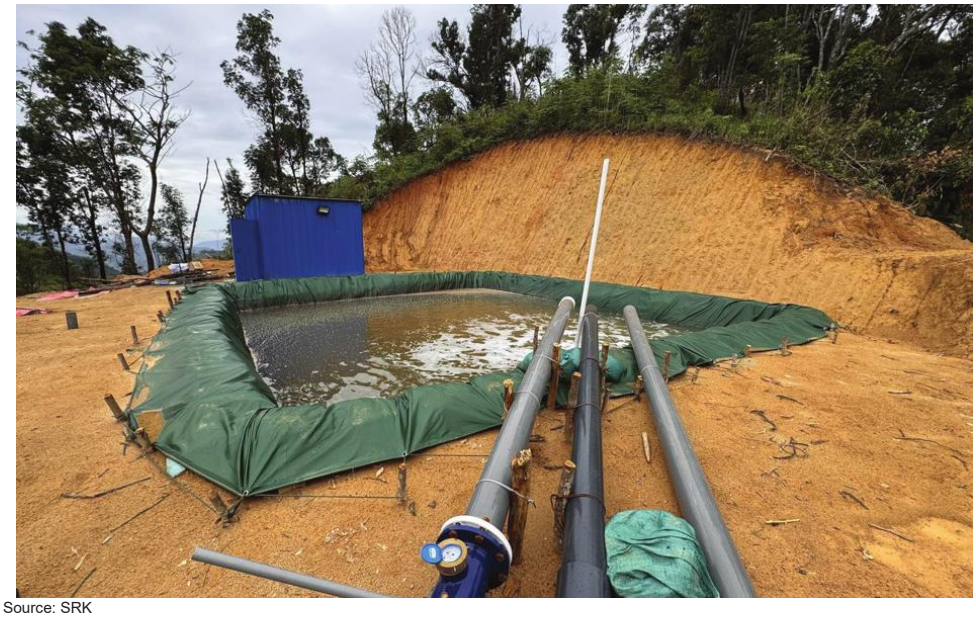
The injection system is designed to introduce a leaching solution into the ore body to dissolve the REEs for extraction. The process involves preparing the ore body, injecting the leaching solution, and closely monitoring the operation. The injection system offers several advantages, including efficiency, reduced environmental impact, and cost-effectiveness. However, it requires precise control and careful management to ensure complete recovery and avoid environmental contamination.

The main three components are: leaching solution pond, injection holes and injection pipeline system.

Leaching Solution Pond

The leaching solution pond is designed for storing the leaching solution before injection and is typically constructed at the mountaintop. The leaching solution is prepared in the wet plant and pumped to the leaching solution pond using stainless steel pumps. From the pond, the leaching solution flows through a pipeline system to the various injection holes. Figure 12-5 shows the leaching solution pond during the site visit on 11 May 2024.

Figure 12-5: Leaching Solution Pond



Source: SRK

Injection Hole

Injection holes are arranged on the surface of each ore block at intervals of 2 to 3 meters by 2 to 3 meters. The specifications for these holes are as follows: diameter of 0.1 to 0.15 meters, with the depth determined based on the burial depth of the ore bed, generally extending 0.5 to 2 meters into the ore bed roof. Each injection hole is equipped with an injection pipeline and a gate valve to control the injection volume. Ammonium sulfate solution is introduced into the ore bed through the injection holes to recover REEs. Figure 12-6 shows the auger and injection hole during the site visit on 11 May 2024.

Figure 12-6: Auger and Injection Hole

Source: SRK

Injection Pipeline Network

In an in-situ leaching operation for REEs, the injection pipeline network would transport an ammonium sulfate solution from leaching solution level pond to multiple injection. Control valves and monitoring systems would ensure that the solution is delivered at the correct flow rate and pressure, allowing for efficient dissolution and recovery of the REEs. Figure 11-2 shows the injection pipeline network during the site visit on 11 May 2024.

12.3.2 PLS Collection System

The PLS collection system is a critical component of the in-situ leaching process, designed to efficiently collect the leachate containing dissolved REEs. The system comprises four main components:

PLS Collection Tunnel

A primary horizontal tunnel, known as the PLS collection tunnel, is excavated in the semi-weathered rock beneath the ore bed, following the contour lines of the ore bed's floor. This tunnel is strategically placed to avoid barren zones and ensure maximum efficiency in capturing the leachate.

According to PFS, the typical dimensions of the PLS collection tunnel have a top width of 0.3 to 0.4 meters, a bottom width of 0.6 to 0.8 meters, and a height of 1.6 to 1.8 meters. The length of the tunnel varies based on the ore bed's extension, generally ranging from 60 to 200 meters. Sub-tunnels are arranged at intervals of 8 to 20 meters on both sides of the main collection tunnel. These sub-

tunnels form a grid-like collection system, optimizing the capture of the leachate. All tunnel floors are treated to prevent leakage and are sloped at 3 to 5% towards the tunnel entrance with a collection pool. If the ore bed's floor has a significant dip angle, additional fan-shaped drill holes may be constructed in the roof of the sub-tunnels to shorten the leachate's infiltration distance and enhance collection efficiency.

The specifications of the PLS collection tunnel are shown in the beginning of Section 11.

Figure 12-7: Main PLS Collection Tunnel in Construction

Source: SRK

PLS Collection Hole

As described in the PLS collection tunnel section, fan-shaped drill holes may be constructed to enhance collection efficiency. Since the PFS does not specify the parameters, standardized parameters were adopted in preparing this report. These parameters include five holes on both wall side of the tunnel, spaced 1 meter apart, with each hole having a depth of 12 meters, refer to the beginning of Section 11.

Main Collection Pipelines and Ditches

A system of pipelines and ditches transports the PLS from the collection tunnels to the PLS hub pond. The pipelines ensure a controlled and efficient flow of the PLS, while the ditches provide additional pathways for the leachate, minimizing the risk of overflow and ensuring consistent delivery.

PLS Hub Pond

The hub pond is designed to accommodate large volumes of PLS, providing a buffer that ensures a steady supply to the processing plant and allowing for any necessary adjustments in the leaching process.

Figure 12-8: PLS Hub Ponds

Source: SRK

12.3.3 Recycled Solution System

After processing the PLS in the wet plant, the filtrate and supernatant flow into the ammonium sulfate preparation ponds. Ammonium sulfate and sulfuric acid are added, and the solution is then pumped by stainless steel pumps to the leaching solution pond at the mine for continued leaching. This injection treatment continues until the rare earth content in the collected PLS declines to a level that is no longer economically recoverable. The PFS does not specify the grade indicator for the suspension of exploitation.

12.4 Leaching Unit Identification

The in-situ leaching unit determination normally involves following considerations:

Terrain: The stability of the surface terrain is important to ensure safe operations and to prevent subsidence or collapse during and after the leaching process.

SREO Content: The grade of the SREO, should be high enough to make the leaching process economically viable.

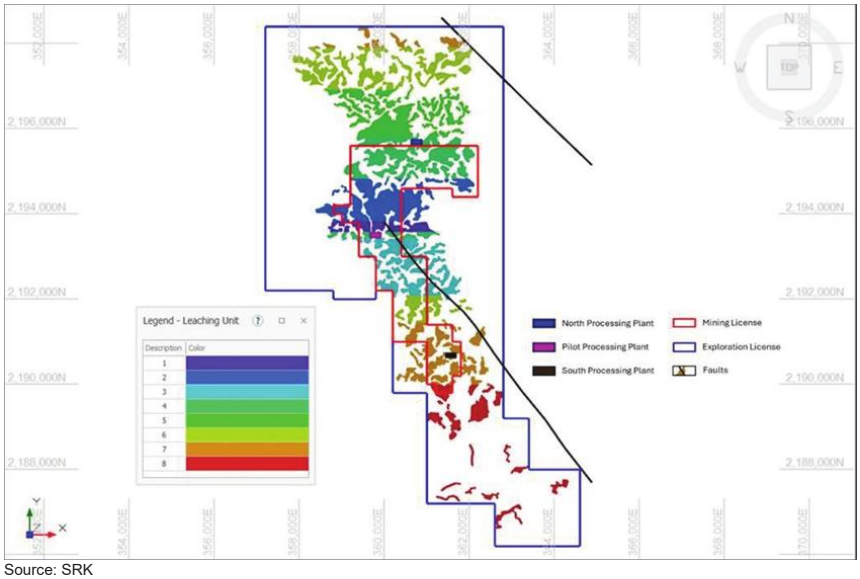
Water Table: areas below the groundwater table have relatively poor ion-adsorption rare earth grades. Therefore, suitable mining areas are selected above the groundwater table.

According to PFS, it does not specify the leaching unit based on the factors mentioned above. In preparing this report, SRK has considered the SREO content, wet plant capacity and strategic exploitation plan only based on the data collected.

It should be noted that there are two significant faults in the southeast and northeast part of the project as it shows in Figure 12-9. When conducting in-situ leaching in areas with faults, the mining recovery can be lower than expected. If fault areas are defined by offsetting 50 meters on both sides of the faults, and the Mineral Resources within these fault areas are reported, it is estimated that approximately 1-2% of the Mineral Resources are affected by the faults. During this preliminary analysis, it is assumed that the mineral resources in the fault areas are unrecoverable.

Below, Figure 12-9 shows the leaching unit identified for the project.

Figure 12-9: In-situ Leaching Unit Identification



Source: SRK

Notes:

[1] It should be noted that the locations of the three processing plants in the figure only demonstrate the approximate layout and do not indicate the actual coordinates.

12.5 Construction and Production Plan

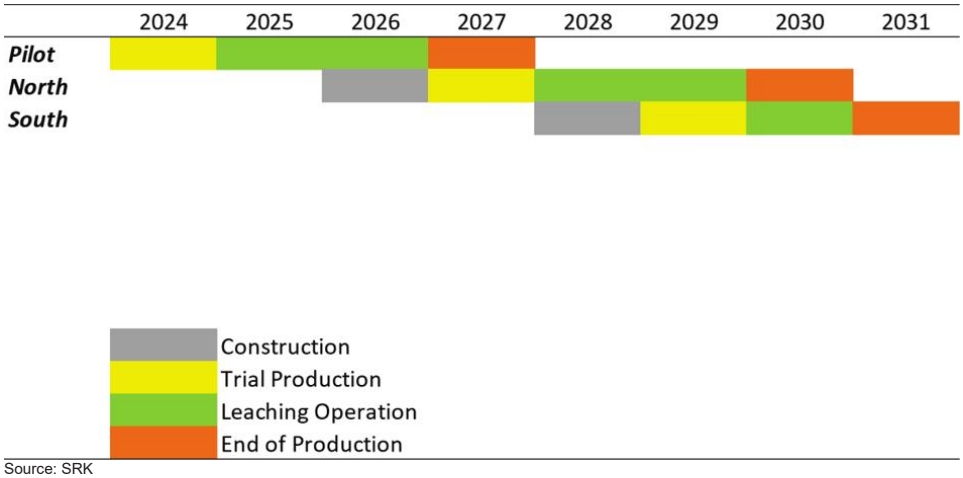
12.5.1 Production Schedule

In Section 13, according to PFS, SRK has summarized the strategic plan for the construction of the wet plant. The plant was still under construction as of 31 March 2024, named the Pilot Plant, has a full production capacity of 3,675 tpa REO. Additionally, there are two more plants planned: one with a production capacity of 3,675 tpa REO, named the North Plant, and another with a production capacity of 2,800 tpa REO, named the South Plant. These are scheduled to be put into operation in 2026 and 2028, respectively.

Based on the calculations in PFS, the total annual PLS throughput is 16.34 million cubic meters for the 3,675 tpa REO plants and 11.55 million cubic meters for the 2,800 tpa REO plant.

The construction and operation plan are shown in Figure 12-10.

Figure 12-10: Construction and Production Chart



Source: SRK

The in-situ leaching schedule aligns with the annual PLS throughput capacity of the wet plants.

A mining schedule has been planned in terms of the proposed processing capacity as it shows in Table 12-2.

Table 12-2: Mining Schedule of the CHIXIA Project

Section	Unit	Total	2024	2025	2026	2027	2028	2029	2030	2031
Tonnage	kt	138,040	4,620	19,700	18,040	19,590	19,650	25,020	19,150	12,270
Grade (SREO)	g/t	239.42	221.94	266.10	236.15	237.71	218.51	220.33	263.75	245.12

Source: SRK

12.6 Conclusions and Recommendations

After reviewing PFS, SRK has conducted preliminary analysis based on PFS and industry best practices. In-situ leaching mining is widely used and should not pose major risks. However, SRK has the following recommendations:

- Increase geological confidence: Enhance the understanding of the geological conditions to ensure accurate resource estimation and effective leaching operations.
- Collect production data: Gather production data to provide a better understanding of the in-situ leaching recovery rates and to optimize the leaching process.
- Conduct geotechnical and hydrogeological investigations as well as studies: Guide the design parameters for in-situ leaching, ensuring safe and efficient operations.

13 Recovery Methods

This section is only for the Mengkham REE project.

13.1 Overview

The ore of the Mengkham RE deposits is an ion-adsorption type rare earth, with an average SREO grade of 0.025%. A preliminary feasibility study for the Project development had been carried out by CHIXIA Laos Holdings Limited ("CHIXIA") in 2023, with a designed production capacity of 3,675 tpa REO.

The PFS adopts the "in-situ leaching ("ISL")" process to extract the RE from the ore bodies. The rare earth pregnant leaching solution ("PLS") from ISL is then processed in hydrometallurgical plant to produce final product - mixed REO. The hydrometallurgical process includes purification (impurities removal), RE precipitation, REC filtration and calcination operations. The designed total recovery was 77%, with the ISL rate of 90% and the hydrometallurgical recovery rate of 85.5%.

Three hydrometallurgical plants and one calcination plant are planned to be built during the life of mine. The Project had completed most of the construction of the Pilot Plant until May 2024, except for the filter press workshop and calcination workshop. Additionally, North Plant with production capacity of 3,675 tpa REO and South Plant of 2,800 tpa REO are scheduled to be constructed in 2026 and 2028, respectively.

SRK's assessment on the hydrometallurgical processing is based on the Feasibility Study, as well as information collected from site visits and discussions with the technical team of the client.

13.2 Hydrometallurgical Process

The PLS from ISL operation undergoes four steps of processing which consists of purification, precipitation, crystallization and filtration. The primary product is rare earth carbonate ("REC"), which will be sent to the calcination workshop to produce mixed REO. The processing flowsheet is shown in Figure 13-1, and specified as follows:

PLS Purification

The PLS collected from the ISL area is gathered and subsequently pumped into the PLS purification ponds at the hydrometallurgical plant. The PLS contains some impurities which can influence the quality of the product, so that need to be removed. Ammonium bicarbonate solution is introduced into the ponds, and the blend is consistently stirred by compressed air. The pH value of the PLS in the pond is maintained within a range of 5.0 to 5.2, and the impurity ions will precipitate by forming insoluble compounds.

The residue that precipitate from the PLS purification operation is primarily composed of Al $(OH)_3$, $Fe(OH)_3$, SiO_2, clay, etc., and containing a small amount of REO. It is then dissolved by acid to recycle REO, which would improve the REO processing recovery.

Precipitation and Crystallization

After impurity removal, the purified PLS enters the precipitation ponds. Saturated ammonium bicarbonate solution is introduced into the ponds, and a consistent and uniform stirring is maintained

using compressed air. The amount of the ammonium bicarbonate solution is carefully controlled until reaching to a suitable pH value leading to the precipitation of the REC, which is then flowed into the crystallization pond for still settlement, allowing the REC crystals to grow up. It is then pumped into the filter press for dehydration. The supernatant can be recycled for ISL injection. The corresponding reaction equation is as follows:

$2RE^{3+} + 6HCO_3^- \rightarrow RE_2(CO_3)_3 \downarrow + 3CO_2 \uparrow + 3H_2O$

REC Dehydration and Calcination

The REC crystals are pumped into the filter press for dehydration. The resulting filter cake, which is the wet REC product, is then conveyed to the calcination workshop to produce mixed REO. The filtrate is collected and pumped into the leaching solution preparation ponds.

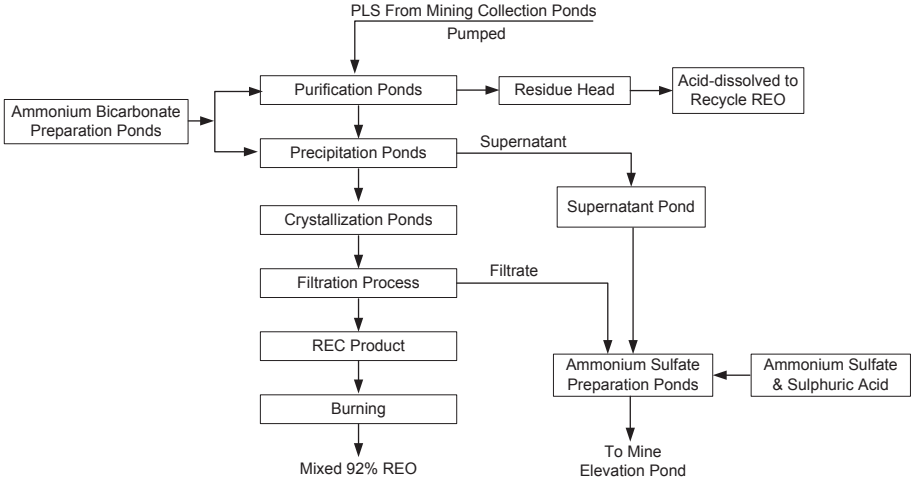
Preparation of Leaching Solution

The ISL solution preparation pond contains a mixture of supernatant and filtrate, and the solution is of alkaline as significant quantity of ammonium bicarbonate contained. As such the sulfuric acid is added to convert the excess ammonium bicarbonate to ammonium sulphate and maintain a pH value of about 5 for the solution. The reaction equation is as follows:

$2NH_4HCO_3 + H_2SO_4 = (NH_4)_2SO_4 + 2CO_2\uparrow + 2H_2O$

After converting, the solution is tested to determine the concentration of ammonium ions. Ammonium sulphate is subsequently added to formulate the leaching solution. This prepared solution is then pumped into the mine elevation pond and injected into the orebodies through the injection system.

Figure 13-1: Processing Flowsheet of Hydrometallurgical Plant



Source: PFS report of Mengkham RE mine project in Mengkham County, Xieng Khouang Province, Laos, CHIXIA ,2023 and is prpeared by SRK.

13.3 Production Capacity and Technical Parameters

The production capacity of the mine depends on the scope area of the liquid injection holes and the collection tunnels. Compared with the actual production capacity of other similar mines, the full production capacity of the first hydrometallurgical plant is 3,675 tpa REO, and SRK deems that it is appropriate. Further considering the leaching unit classification and the distribution of different ore bodies, it is planned to construct additional two hydrometallurgical plants, one with production capacity of 3,675 tpa REO and the other one of 2,800 tpa REO, which are scheduled to put into operation in 2026 and 2028, respectively.

The hydrometallurgical plant adopts continuous working system, which is 330 working days per year, with 2 shifts per day, and 12 hours per shift.

According to the FS report and discussion with the technical team of the client, SRK summarizes the technical parameters of the hydrometallurgical plant, which are shown in Table 13-1.

Table 13-1: Main Technical Parameters of the Hydrometallurgical Plant

Design Parameter	Unit	Value
Annual Operational Days	dpa	330
Overall Availability	%	90.41
Daily Operating Hours	hpd	24
PLS Flow Volume	m^3/d	44,545
PLS Flow Volume	1,000 m^3/a	14,700
Average PLS Grade – REO	g/l	0.25
Processing Recovery	%	85.5
Overall Recovery	%	77
pH Value of Purification	n/a	5.0~5.2
pH Value of REE Precipitation	n/a	8.0~8.5
Production - REO	tpa	3,675

Source: PFS report of Mengkham RE mine project in Mengkham County, Xieng Khouang Province, Laos, CHIXIA ,2023 and is collected by SRK.

13.4 Main Equipments & Facilities & Plant Layout

The existing hydrometallurgical plant equipments mainly consist of pumps, filter press and compressor machines, which are shown in Table 13-2 . The facilities mainly include reagent warehouse, ammonium bicarbonate solution preparing ponds, purification ponds, REC precipitation ponds, REC crystallization ponds, residue turnover ponds, leaching solution preparation ponds, filter press workshop, calcination workshop, product warehouse, sulfuric acid tank, power station, laboratory, maintenance workshop, etc, which are listed in Table 13-3. All the ponds above are impermeable with geotextiles.

Table 13-2: Main Equipments of the Existing Hydrometallurgical Plant

No.	Equipment Name	Specifications and Models	Unit	Quantity	Remark
1	Acid-resisting Centrifugal Pump	DF85-45*6	Set	20	Pump the ammonium sulfate solution

2	Acid-resisting Centrifugal Pump	DF85-45*7	Set	20	Pump the ammonium sulfate solution
3	Acid-resisting Centrifugal Pump	280DF-43*3	Set	18	Pump the PLS
4	Acid-resisting Submerged Pump	QY25-50-7.5F	Set	15	Pump the ammonium biacarbonate solution
5	Acid-resisting Submerged Pump	QY80-18-7.5F	Set	15	Pump the ammonium biacarbonate solution
6	Air Compressor	PMVF90-II	Set	9	Purification/Precipitation Stirring
7	Air Compressor	PMVF75-II	Set	3	Stirring
8	Air Compressor	PMVF55-II	Set	8	Preparation ammonium sulfate solution stirring
9	Diesel Generator	WPG2500*73	Set	1	
10	Diesel Generator	WPG3025*73	Set	1	
11	Diesel Generator	WPG2062*73	Set	1	
12	Diesel Generator	WPG1250*73	Set	1	
13	Diesel Generator	WPG206*8	Set	1	
14	Press Filter	XMZGF300/1500-U	Set	3	Filtration workshop
15	Rotary Kiln		Set	2	Calcinationworkshop

Source: Client provided and SRK collected.

Table 13-3: Main Facilities of the Hydrometallurgical Plant

No.	Facility/Equipment	Quantity
1	Ammonium sulfate preparation pond	9
2	Ammonium bicarbonate preparation pond	6
3	Ammonium bicarbonate high-level pond	2
4	Purification pond	22
5	Purification buffering pond	4
6	Precipitation pond	26
7	Slag head pond	3
8	Crystallization pond	4
9	Ammonium bicarbonate warehouse	1
10	Ammonium sulfate warehouse	1
11	Sulfuric acid tank warehouse	2

Source: Client provided and SRK collected.

According to the distribution of ore body and terrain conditions, hydrometallurgical plant is arranged in the middle flat area of the mine. Considering the requirements of the process order, the plant is structured in a stepped manner along the hillside, which can make the mother liquor flow by itself and reduce the power consumption.

Till May 2024, the Project had completed most of the construction of the first hydrometallurgical plant, except for the filter press workshop and calcination workshop. The general view of the plant is shown in Figure 13-2.

Figure 13-2: General View of the Hydrometallurgical Plant

Source: SRK site visit

13.5 Conclusions and Recommendations

The PLS undergoes four steps of processing to yield primary product of rare earth carbonate ("REC"), which will be sent to the calcination workshop to produce mixed rare earth oxide ("REO"). The residue will be dissolved by acid to recycle REO, which would improve the REO processing recovery and the economic benefits.

The full production capacity of the existing hydrometallurgical plant is 3,675 tpa REO. The designed total recovery was 77%, with the ISL rate of 90% and the hydrometallurgical recovery rate of 85.5%. SRK deems that it is appropriate.

Three hydrometallurgical plants and one calcination plant are planned to be built during the life of mine. The Project had completed most of the construction of the Pilot Plant till May 2024, except for the filter press workshop and calcination workshop. Additionally, North Plant with production capacity of 3,675 tpa REO and South Plant of 2,800 tpa REO are scheduled to be constructed in 2026 and 2028, respectively.

14 Project Infrastructure

This section only reports the project infrastructure of Mengkham REE project.

14.1 Industrial Sites

The industrial sites of the Mengkham REE Project, based on the PFS and the observation during the site visit, mainly include the mining site, PLS processing plants and officing and living facilities etc.

The mining sites are the mineralized bodies designed for in-situ leaching mining. Current pilot production has developed the mining facilities in the first mining section.

The sites for PLS processing plants will be determined by considering various factors in order to efficiently develop and utilize the mineral resources with optimal operating costs and minimizing the environmental risks. The first PLS processing has been constructed and put in the pilot production.

Waste dumping sites will be the valleys near the mineralized blocks to be mined.

The officing and living sites should be chosen by considering safety factors. For the pilot production, some facilities, such as office, conference rooms, dining rooms, storages and lab etc. have been constructed.

Table 14-1 lists the land area needed for the industrial sites proposed in the PFS.

Table 14-1: Proposed Land Area needed for the industrial sites proposed in the PFS

Item	Unit	Area
Mining sites	m^2	3,152,029.00
PLS Processing plants	m^2	78,237.65
Waste dumping sites	m^2	206,698.87
Officing and living site	m^2	5000
Water pumping station	m^2	100

14.2 Internal and External Transportation

Since the in-situ leaching method is adopted to mine and extract the REE in the mineralized bodies. The transportation of various liquid between mining sites to the PLS processing plants will use pipes. The dirt and/or gravel paved roads will connect various sites within the project area.

The project is near the provincial highway C1, and the highway will be used for the transportation of supportive materials from outside, and the final products of the project will be trucked to outside.

14.3 Water Supply and Drainage

According to the PFS, in order to produce 3,674tpa REO, the water consumption is 7,425m^3/day for production. Other water consumption includes for living and fire fight.

Water sources in the project area are not abundant. There are two streams near the plant, while their volume is small. The PFS has proposed to constructing water storage facilities where the two streams join.

Surrounding the PLS processing plants, ditches will be dug for water drainage of rainfalls. Civil waste water will be discharged into valleys after treatment. The water in the production will be recycled, without any discharge.

14.4 Power Supply

The mine has been connected to the high-voltage feeder of 115KV, and constructed a transformer substation to transform the electricity to 10KV. Through overhead lines, the power line connects to substations of various sites, such as mining sites, plants, as well as living facilities.

14.5 Other Supportive Facilities

Other Supportive Facilities include communication systems, supportive constructions and machinery maintenance and repairing.

15 Market Studies and Contracts

There are abundant uses of REEs in various aspects, such as metallurgy, petroleum, chemical industry, glass and ceramics, textile, medicine, agriculture and environmental protection etc. With the development of science and technology, people will recognize new properties of REEs, and REEs have been becoming important materials for modern industry.

In recent years, the production of REE production in China constantly increased, and the market is bright for the REEs.

There is no information at the moment on the contracts of product sales of the project.

16 Environmental, Social and Community Impact for Mengkham REE Project

16.1 Environmental and Social Review Objectives

The objective of this environmental and social review is to identify and/or verify the existing and potential environmental and social liabilities and risks, and assess any associated proposed remediation measures for the development and operation of the Mengkham REE Project. During SRK's site visit in May 2024, the project was in a trial operation stage.

16.2 Environmental and Social Review

The process for the environmental and social preliminary review for the Project comprised a review of provided project environmental and social management documentation combined with site visit observation against relevant criteria within:

- Laos national environmental regulatory requirements; and
- World Bank/International Finance Corporation ("IFC") environmental and social standards and guidelines and internationally recognised environmental management practices.

SRK notes that an Environmental and Social Impact Assessment ("ESIA") report has not been prepared at this stage, and the Company is in the process to prepare such a document to be submitted for approval by the environmental authorities. SRK reviewed the environmental section from the provided feasibility study report dated 2024 prepared by Chixia Laos Holdings Ltd against recognized international industry environmental management standards, guidelines and practices. SRK provides comments in respect to the Project's environmental management measures by the following.

The environmental impact of mining encompasses erosion, sedimentation, biodiversity loss, and the contamination of soil, groundwater, and surface water by chemicals from the mining industry. During mining operations, the key pollutants anticipated to enter the river and affect the ecological system are ammoniacal nitrogen and sulphate from the in-situ leaching process. The potential for chemicals to leak into groundwater, especially through bedrock cracks, poses threats not only to the environment but also to public health and socio-ecological stability.

Since the injection solution contains ammonia nitrogen, there is a high risk of eutrophication and water pollution. To address these concerns, a series of mitigation strategies are proposed. These include conducting clear water injections to detect potential cracks prior to injecting leaching solutions, installing PVC linings in solution collection tunnels to prevent seepage, transforming existing wells into groundwater monitoring sites while sourcing new water supplies, initiating a comprehensive groundwater monitoring program, and implementing engineering solutions such as anti-seepage layers and containment bunds.

The project might cause ecological disturbances, primarily due to the destruction of plant and crop habitats during its development, mining, and operational phases. Additionally, the employment of chemicals such as ammonium sulphate and ammonium bicarbonate in mining processes poses a risk to local vegetation, including rubber trees, by altering the soil composition.

The impact from noise and air quality might arise from site clearing and construction activities. To mitigate these impacts, several measures are proposed: dampening or covering access roads, stockpiles, and vehicles transporting loose construction materials; establishing a periodic maintenance schedule for all motorized machinery and equipment, focusing on the efficiency of mufflers/silencers to reduce noise emissions, and implementing a Monitoring Plan. During the site visit, SRK did not observe significant noise and fugitive dust emissions.

The recognised international industry practice for managing site closure and rehabilitation is to develop and implement an operational site closure and rehabilitation planning process and document this through an operational Closure and Rehabilitation Plan. This operational closure planning process generally includes the following components:

- Identify all site closure stakeholders (e.g., government, employees, community);
- Undertake stakeholder consultation to develop agreed site closure criteria and post operational land use;
- Maintain records of stakeholder consultation;
- Establish a site rehabilitation objective in line with the agreed post operational land use;
- Describe/define the site closure liabilities determined against agreed closure criteria;
- Establish site closure management strategies and cost estimates to address/reduce site closure liabilities;
- Establish a cost estimate and financial accrual process for site closure; and
- Describe the post site closure monitoring activities/program to demonstrate compliance with the rehabilitation objective/closure criteria.

At this stage, no comprehensive mine closure plan has been developed. Based on SRK's estimate, the total cost of mine closure for this 8.0 km^2 is approximately US$ 1.50 M. However, a mine closure bond has not been established.

The proposed project is situated in an area characterized by a mix of land uses, including agricultural land primarily planted with latex rubber trees. In addition to direct employment for local people, mining industry can lead to promote local people's living if natural resource extraction occurs responsibly and well managed to meet government and community requirements. A well-developed Corporate social responsibility ("CSR") and community development ("CD") can be the vehicle for achieving the above objectives. No non-compliance notices or other notices of a breach of environmental or social conditions for the Project from the Local or Provincial governments have been sighted as part of this review. As part of this review, SRK has not sighted any documentation in relation to any actual or potential impacts of non-governmental organisations on the sustainability of the mining and processing operations.

16.3 Evaluation of Environmental and Social Risks

The sources of environmental risk are project activities that may result in potential environmental impacts. These project activities have been previously described within this report. In summary, the most significant potential environmental and social risks for the development of the Project, currently identified as part of the project assessment and this SRK review, are:

- Environmental approval to be obtained;
- Water pollution; and
- Mine closure fund to be established

It is SRK's opinion that the above environmental risks are categorised as medium risks (i.e., requiring risk management measures) and they are generally manageable. Since various environmental protection measures are planned or conducted by the Company to solve these environmental issues, SRK considers that these environmental risks are controlled properly and not likely to develop into higher level of risks.

17 Capital Expenditures and Operating Expenses

17.1 Summary

A preliminary feasibility study ("**PFS**") for the Mengkham RE Project had been carried out by CHIXIA Laos Holdings Limited ("CHIXIA") in 2023, with the Pilot Plant production capacity of 3,675 tpa REO. Additionally, North Plant with production capacity of 3,675 tpa REO and South Plant of 2,800 tpa REO are scheduled to be constructed in 2026 and 2028, respectively.

The capital expenditures ("Capex") and operating expenses ("Opex") for the project are selected according to the PFS which assumes that all the Capex is own capital invested by the Client, no financial cost is considered.

Given the typical service life of each injection hole and collection tunnel being less than 1-2 years, SRK deems it appropriate to allocate the related costs into the Opex. This approach ensures a comprehensive consideration of all relevant expenditures over the project's Life-of-mine ("LOM").

The currencies used in the estimation are Chinese Yuan ("CNY") and United States Dollar ("USD") of March 2024, and the exchange rate is USD 1= CNY 7.20.

17.2 Capital Expenditures

The estimated Capex primarily consists of the main production facilities of three hydrometallurgical plants, public auxiliary facilities and engineering construction other expenses (mainly the mining rights or licence cost).

According to the data provided by CHIXIA, SRK analysed and summarized the Capex breakdown for the Project, which is shown in Table 17-1. Additionally, the details of the initial investment are listed in Table 17-2. The total estimated Capex over the LOM is CNY 269.81 million, which includes the initial investment of CNY 239.81 million and the continuing investment of CNY 30 million.

Table 17-1: The Capex Breakdown for the Mengkham RE Project (Unit: CNY million)

Item	Initial Investment	Continuing Investment	Total
Hydrometallurgy Plant Construction	18.48	17.00	35.48
Public Auxiliary Facilities	24.93	13.00	37.93
Engineering Construction Other Expenses	196.40	-	196.40
Subtotal Investment	239.81	30.00	269.81

Table 17-2: The Capex Breakdown of the Initial Investment (Unit: CNY million)

Item	Construction Engineering	Equipment Purchase	Other Expenses	Total Value
Hydrometallurgy Plant Construction	9.46	24.93	-	34.39
Processing Pools	6.43	-	-	6.43
Warehouse	0.17	-	-	0.17
Equipments	-	24.93	-	24.93
Auxiliary project	2.01	-	-	2.01
Filter press workshop	0.52	-	-	0.52
Calcination workshop	0.33	-	-	0.33
Public Auxiliary Facilities	9.02	-	-	9.02
Engineering Construction Other Expenses	-	-	196.40	196.40

Item	Construction Engineering	Equipment Purchase	Other Expenses	Total Value
Mining Rights/License/Acquisition cost	-	-	196.40	196.40
Total Investment	**18.48**	**24.93**	**196.40**	**239.81**

Source: FS report data and SRK analysed.

In addition to the Capex, the working capital cost will be invested into the project according to the production schedule which will be recovered during closure of the project. It is estimated by expanded index method which is 45% of Opex.

The Capex investment schedule and working capital needed are summarized in Table 17-3.

Table 17-3: Capex Investment and Working Capital Schedule (Unit: CNY million)

Item	2024	2025	2026	2027	2028	2029	2030	2031
Pilot Plant	239.81	-	-	-	-	-	-	-
North Plant	-	-	15.00	-	-	-	-	-
South Plant	-	-	-	-	15.00	-	-	-
Total	239.81	-	15.00	-	15.00	-	-	-
Working Capital	46.86	182.09	150.07	177.15	160.63	200.60	174.60	115.09
Working Capital Change	46.86	135.22	-32.02	27.08	-16.51	39.96	-25.99	-174.60

17.3 Operating Expenses

The project's Opex primarily include production cost, reclamation cost, G&A (general and administrative) cost and sales cost. Production cost mainly encompass injection and collection cost, raw material cost, pipes and accessories cost, power cost, safety and environmental cost, staff salary and other costs. In addition, reclamation cost should be taken into the Project with the closure of each wet plant and mine lot, which is estimated to CNY 1.3 per square meter of mining area.

Table 17-4 summarized the forecasted Opex for the Project, with a total Opex of CNY 2,682 million and unit cost of approximately CNY 19.43 per tonne of Raw ore or CNY 105,480 per tonne of pure REO. All costs are current as of 31 March 2024, with no escalation factored in.

Table 17-4: Forecasted Opex of the Mengkham RE Project

Item	LOM Total Cost (CNY M)	Unit Cost (CNY/t RoM)	Unit Cost (CNY/t REO)
Production Cost	2,591	18.77	101,902
Injection and collection cost	741	5.37	29,155
Raw material	1,063	7.70	41,794
Pipes and accessories	216	1.57	8,500
Power cost	154	1.11	6,042
Safety and environmental cost	31	0.22	1,200
Staff salary	161	1.17	6,339
Other cost	226	1.63	8,872
Reclamation Cost	15	0.11	601
General and Administration (G&A)	38	0.27	1,477
Sales Cost	38	0.28	1,500
Total	2,682	19.43	105,480

18 Preliminary Economic Analysis for Mengkham REE Project

Given that the project is currently at the construction and pre-operation stage with the FS completed, the Discounted Cash Flow ("DCF") modelling method under the income approach was considered an appropriate technique to conduct the preliminary economic analysis.

The Capex and Opex estimated in the FS allowed SRK to create a technical economic model and analyse the economic viabilities of the future mining operation. In addition to the FS, SRK's estimation also relied on information collected through site visits and experience in this field.

The economic analysis presented in this section contains forward-looking information related to the ore production estimate, commodity prices, exchange rates, proposed production plan, projected recovery rates, production cost, etc. The results of the economic analysis are subject to several known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented herein.

It is important to note that the purpose of this analysis is solely to demonstrate the economic viability of the projects. The derived NPVs do not indicate the fair market values or the profitability of the projects. The estimated cash flows and NPVs were presented on an after-tax basis, and financing costs were not considered.

The Net Present Value ("NPV") was estimated from the project's cash flow projections based on an 10% discount rate. Furthermore, a sensitivity analysis was conducted to assess the potential impacts of variations in project capital costs, operating costs, and commodity prices.

18.1 Principal Assumptions

The assumptions applied to the economic model is based on the following principles:

- Product prices were based on Xiamen Tungsten 2024 REO guidance price which is described in the FS report.
- The model utilizes a constant REO price during the life-of-mine and assumes that the final REO product will be sold within the same year of production.
- The financial model utilizes Chinese Yuan ("CNY") as the currency unit.
- Capex is depreciated and/or amortized using the straight-line method. Working capital will be fully recovered in the final year of the Project.
- Discount rate of 10% will be used in base case.

The principal assumptions and parameters applied in the DCF model are presented in Table 18-1.

Table 18-1: Principal Assumptions for the DCF Model of the Project

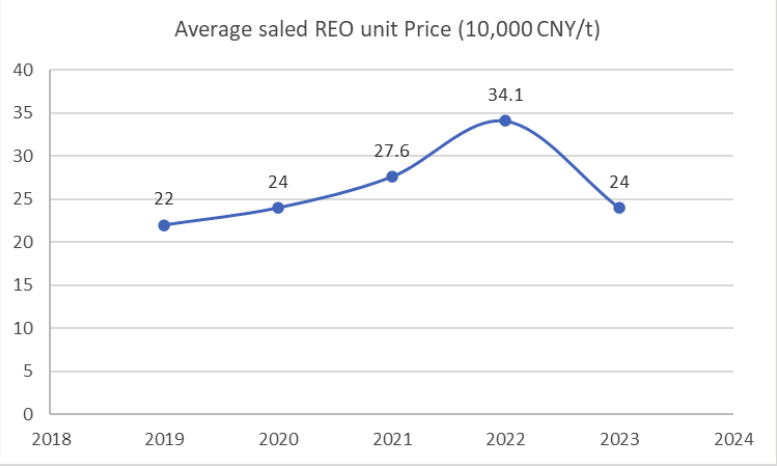
Item	Unit	Value
Total ore output	kt	138,036
SREO grade	%	0.0239
Total REO Product	t	25,431
Life-of-Mine	Year	8
Leaching rate	%	90

Processing recovery rate	%	85.5
Overall REE recovery	%	77
Initial investment	CNY M	239.81
Continue investment	CNY M	30
Unit Opex	CNY/t RoM	19.43
Unit Opex	CNY/t REO	105,480
Royalty	%	20%@Sales Revenue
Export Tax	%	10% @Sales Revenue
Discount rate	%	10
Corporate income tax	%	20%@Gross Profit

18.2 REO Price

The Project is an ion-type rare earth mine, and the ore belongs to middle yttrium rich europium ("MYRE") mixed REO. Figure 18-1 below shows the MYRE price trend from 2019 to 2023. It can be seen from the figure that the price has shown a trend of rising initially and then stating to fall in the year 2022, and the lowest price including tax is 220,000 CNY/t REO, and the highest price including tax is 341,000 CNY/t REO. The average annual price for 5 years is 263,400 CNY/t REO including tax.

Figure 18-1: Mixed REO Price Trend in History



Source: SMM

The price of mixed REO is determined by the allocation of each rare earth product and the price of each REO. At present, the Project is under the construction and early production stage, and without sales agreement or pricing formula yet. Therefore, SRK adopts Xiamen Tungsten guide REO price in 2024, which is of 239,000 CNY/t REO (including tax) for DCF model calculation according to the FS report. The value-added tax rate is 13%, thus the price excluding tax is 211,504 CNY/t REO.

18.3 Depreciation, Amortization and Taxes

According to the accounting standards of Laos, the depreciation life of equipment such as machinery, electronic equipment and transportation equipment is 5 years, and the salvage value is 0. Intangible assets and other assets are amortized according to the REO output.

The Taxes and Surcharges primarily consist of royalties and export tax. The Client has informed SRK that the royalty rate is 20%, while the export tax rate is 10% of the sales revenue. Additionally, SRK has applied a Corporate Income Tax ("CIT") of 20% on the gross profit, with royalties and export tax being deductible expenses before calculating taxes.

18.4 Net Present Value Result

The net present value ("NPV") CNY 296.32 million at 10% discount rate was estimated by SRK using DCF model with the assumptions as outlined in the above section. The NPVs based on different discount rate were also estimated, presented in Table 18-2, which has demonstrated the economic viability of the Project.

Table 18-2: Estimated NPVs at Different Discount Rate

Discount Rate	8%	9%	10%	11%	12%
NPV (CNY M)	348.70	321.63	296.32	272.64	250.47

18.5 Sensitivity Analysis

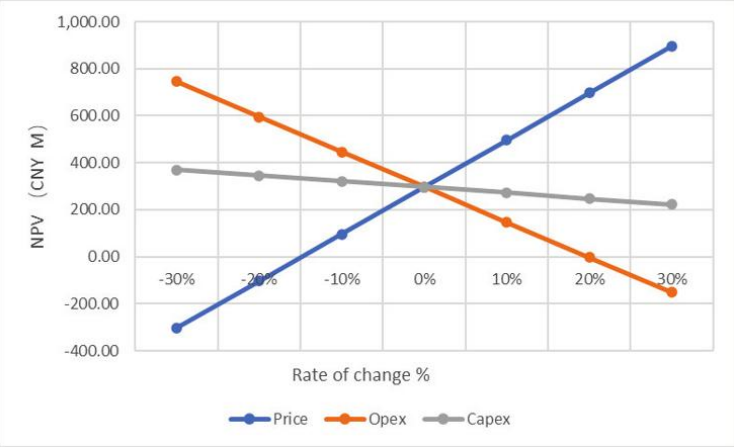
SRK applied the single factor method for conducting the sensitivity analysis. Many parameters can affect the Project's NPV. To simplify the calculations, the Opex, Capex, and REO product price were selected as the essential variable factors on cash flow. The effects of these essential factors on the NPV were analysed within a ±30% range. The corresponding results for the Project are presented in Table 18-3 and Figure 18-2, respectively.

Table 18-3: Sensitivity Coefficient of NPV (at 10% Discount Rate, in CNY M)

Factors	Changes								
	-30%	-20%	-10%	0%	10%	20%	30%	Average +1%	Average -1%
Price	-303.41	-103.50	96.41	296.32	496.23	696.14	896.05	6.75	-6.75
Opex	744.41	595.05	445.68	296.32	146.96	-2.41	-151.77	-5.04	5.04
Capex	369.62	345.19	320.75	296.32	271.88	247.45	223.01	-0.82	0.82

The table showcases the sensitivity of the NPV with changes in price, Opex, and Capex. Price fluctuations exhibit the most substantial impact, with a 30% increase boosting NPV to CNY 896.05 million, while Opex changes moderately influence NPV. Capex variations have the least effect on NPV.

Figure 18-2: Sensitivity Analysis on NPV



19 Risk Analysis

Mining is a relatively high-risk industry. In general, the risk may be expected to decrease from exploration, development, through to production stage. The Sepon REE Project is a resource project, and the Mengkham REE Project is a development-trial production project. In this risk analysis, SRK only focus on the Mengkham REE Project. Risks exist in different areas. SRK considered various technical aspects which may affect the feasibility and future cash flow of the Project, and conducted a qualitative risk analysis which has been summarised in Table 19-1. In this risk analysis, various risk sources/ issues have been assessed for Likelihood and Consequence, and then a Risk Rating has been assigned. The qualitative risk analysis uses the following definitions for likelihood and consequence:

In the risk assessment, various risk issues have been assessed for Likelihood, Consequence, and Overall Rating. SRK has used a matrix as follows:

The Likelihood of a risk is considered within a certain time frame, e.g. 5 years, as:

Likely: will probably occur;

Possible: may occur; and

Unlikely: unlikely to occur.

The Consequence of a risk is classified into:

Major Consequence: the factor poses an immediate danger to the Project, if uncorrected, will have a material effect on the Project cash flow and performance and could lead a project failure;

Moderate Consequence: the factor, if uncorrected, will have a significant effect on the Project cash flow and performance; and

Minor Consequence: the factor, if uncorrected, will have little or no effect on the Project cash flow and performance.

The overall risk assessment combines the Likelihood and Consequence of a risk and be classified as **Low** (unlikely and possible minor risks and unlikely moderate risk)**, Medium** (likely minor, possible moderate and unlikely major risks), and **High** (likely moderate and major and possible major risks).

Below is the qualitative risk analysis summary table of the Mengkham REE Project.

Table 19-1: Project Risk Assessment of the Mengkham REE Project

Risk Source/Issue	Likelihood	Consequence	Overall
Geology and Resource			
Lack of Significant Mineral Resources	Unlikely	Moderate	Low
Lack of Significant Ore Reserves	Possible	Major	High
Unexpected Groundwater Ingress	Unlikely	Minor	Low
Mining			
Subsidence and Ground Stability	Possible	Moderate	Medium
Hydrogeological Modeling Uncertainties	Unlikely	Moderate	Low
Significant Production Shortfalls	Unlikely	Major	Medium
Significant Geological Structure	Possible	Minor	Low
Ore Processing			
Lower Recovery	Unlikely	Moderate	Low
High Production Cost	Possible	Minor	Low
Poor Plant Reliability	Unlikely	Minor	Low
Capital and Operating Costs			
Project Timing Delays	Possible	Minor	Low
Capital Cost and Operating Cost Increases	Likely	Moderate	High
High mine closure cost	Possible	Moderate	Medium
Environmental, Social and Permitting			
Environmental approval to be delayed	Possible	Moderate	Medium
Water eutrophication	Possible	Moderate	Medium
Fund not available and without proper mine closure	Possible	Moderate	Medium

Some medium and high risks have been identified for the Project. Two high risks are "Lack of significant Ore Reserves" and "Capital Cost and Operating Cost Increases". To manage the risks, SRK recommends the Company should further conduct supplemental exploration programs following guidelines of the best practice to upgrade the mineral resource basis, and then conduct a feasibility study accordingly.

20 Interpretation and Conclusions

20.1 Sepon Rare Earth Element Deposit

20.1.1 Geology and Exploration

The Sepon Project is classified as an ion-adsorption type of rare earth deposit, wherein the majority of REE occurs in an ion-exchangeable form, adsorbed onto clay minerals.

The core drilling, geological logging, and topographic survey were implemented to a standard ensuring that the gathered data and information adequately underpin the objectives of subsequent geological modelling and resource estimation.

SRK opines that the depth capacity of manual auger drilling might be insufficient to penetrate potentially semi-weathered hard layers or boulders. This limitation could potentially lead to incomplete intersections of the bottom of ore-bearing horizon during drilling.

The procedures for sample collection, preparation, and analysis are following the REE industry standards. SRK considers that the procedure, as well as the data and information obtained, are acceptable for resource estimation purposes.

20.1.2 Mineral Resource Estimation

Mineral Resources have been estimated through creating resource models. The data and information used for this resource model generation are acquired from the exploration and were reviewed by SRK to ensure the data reliability.

Due to the drilling and sampling methods employed in the exploration, there is a possibility of misidentification of certain sections potentially bearing REE. Consequently, this could lead to under-delineation of the mineralized domains during resource modelling, potentially resulting in a conservative resource estimate.

20.2 Mengkham REE Project

20.2.1 Geology and Exploration

The Mengkham REE Project is classified as an ion-adsorption type of rare earth deposit, wherein the majority of REE occur in an ion-exchangeable form, adsorbed onto clay minerals.

Exploration activities have revealed that the ion-exchangeable rare earth elements ("REE") are primarily concentrated within the mid-section of the regolith horizon. At Mengkham the top of the mineralised zone is defined by a thin surficial soil zone that averages 2 m in thickness. The base of the mineralised zone extends to an average vertical depth of 9.0 m. And the SREO grade ranges from 9.5 to 2857 g/t, averaging 243.5 g/t.

The core drilling, geological logging, and topographic survey were implemented to a standard ensuring that the gathered data and information adequately underpin the objectives of subsequent geological modelling and resource estimation.

SRK opines that the depth capacity of manual auger drilling might be insufficient to penetrate potential semi-weathered hard layers or boulders. This limitation could potentially lead to incomplete intersections of the bottom of ore-bearing horizon during drilling.

The implementation of sample collection, preparation, and analysis in accordance with relevant Chinese standards is a common practice employed across China for IAC REE exploration projects. After reviewing the entire process and the duplicate sample test results, SRK considers that the procedure, as well as the data and information obtained, are acceptable for resource estimation purposes.

However, SRK considers that the rapid test method, which entails visually observing rare earth precipitates before conducting core sampling for laboratory analysis, is qualitative in nature. This approach serves merely as an initial indication to assess the mineralization within the sampled core interval. Due to its inherent subjectivity, this method may result in overlooking certain shallow-occurring intervals containing REE sufficient for subsequent laboratory testing, potentially leading to an underestimation of orebody thickness.

20.2.2 Mineral Resource Estimation

Due to the drilling and sampling methods employed in the exploration, there is a possibility of misidentification of certain sections potentially bearing REE. Consequently, this could lead to under-delineation of the mineralized domains during resource modelling, potentially resulting in a conservative resource estimate.

Large bias was observed between Mengkham original assay and SRK verification results. The Mineral Resource are not abiding JORC (2012).

20.2.3 Metallurgical Testing and Recovery Methods

The Mengkham ore belongs to the ion-adsorbed type rare earth ore, with average soluble rare earth oxide ("SREO") content of 0.025%. The minerals are mainly quartz, feldspar, biotite, ilmenite, magnetite, followed by zircon, apatite, xenotime, fluorite, sphene minerals and so on.

A simple laboratory column leaching test had been conducted on the samples from #2 ore body. The results showed that the permeability coefficient is $0.89x10^{-3} \sim 1.11x10^{-3}$cm/s and the pregnant leaching solution ("PLS") concentration can reach 2.0 g/L with the SREO leaching rate of about 94%.

The PLS undergoes four steps of processing to yield primary product of rare earth carbonate ("REC"), which will be sent to the calcination workshop to produce mixed rare earth oxide ("REO"). The residue generated from the processing will be dissolved by acid to recycle REO, which would improve the REO processing recovery and the economic benefits.

The full production capacity of the existing hydrometallurgical plant is 3,675 tpa REO. The designed total recovery was 77%, with the ISL rate of 90% and the hydrometallurgical recovery rate of 85.5%. SRK deems that it is appropriate.

21 Recommendations

21.1 Sepon REE Project

21.1.1 Mineral Resources Estimation

Looking ahead, the Sepon REE mine is considering in-situ leaching to be their main extraction technique. However, the available data, which only includes 8 ionic analyses, falls short in providing an accurate estimate of the mine's potential and productivity. The scant data does not paint a holistic picture of what the mine can offer. For this reason, SRK suggests a re-analysis of the ionic REE grade. Through this, SRK can have a clearer view of the mine's potential, which is crucial in devising and executing efficient mining plans.

21.2 Mengkham REE Project

21.2.1 Mineral Resources Estimation

For the Mengkham REE project, the 1:5000 topographic aerial survey only covers an area of 2.3 km^2. SRK suggests the mine to conduct a detailed topographic survey covering the entire project area.

The mine's current approach is to analyse all basic samples in the lab onsite. While this might be convenient and efficient, it may not provide the most accurate results. Large bias was observed between original assay and SRK's verification results. It is recommended that all the samples should be sent to a qualified laboratory for assaying again.

There are merely 30 samples that possess REE compositions. This limited number prompts SRK to recommend that the mine increase its efforts in conducting more composition analyses. This is to ensure a more reliable and expansive dataset for evaluation purposes.

SRK also recommends carrying out more research on structure or fault system. This is because faults may have a substantial influence on the in-situ leaching mining method.

21.2.2 Metallurgical Testing and Recovery Methods

The column test is relatively simple and can only be used as a basic reference for in-situ leaching of #2 ore body. Due to the differences in ROM properties and grades of different ore bodies, SRK recommends that each ore body should take representative ore samples to carry out test studies before production.

According to the production schedule, North Plant with production capacity of 3,675 tpa REO and South Plant of 2,800 tpa REO have been planned to be constructed in 2026 and 2028, respectively. SRK suggested that the site selection and design of the two plants should be carried out as soon as possible.

22 References

1. Longyan Dadi Mining Development Service Co., LTD, Detailed Exploration Report of Mengkham REE Mine in Mengkham Conty, Xiengkhouan Province, Laos PDR, January 2024.
2. Lane Xang Minerals Limited Company, General Exploration Report of Sepon South REE Deposit in Savannakhet Province, Laos PDR, August 2022.
3. PFS Report of Mengkham RE Mine Project in Mengkham County, Xieng Khouang Province, Laos, CHIXIA ,2023.

Closure

This report was prepared by

Anshun Xu (Corporate Consultant)

and reviewed by

Yonglian Sun, PHD, FAusIMM
Corporate Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

APPENDIX IIID COMPETENT PERSON'S REPORT FOR THE SEPON RARE EARTH MINE

Appendix A Trail Mining License

ສາທາລະນະລັດ ປະຊາທິປະໄຕ ປະຊາຊົນລາວ
ສັນຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະນະຖາວອນ

ກະຊວງພະລັງງານ ແລະ ບໍ່ແຮ່
ກົມຄຸ້ມຄອງບໍ່ແຮ່

ເລກທີ 17-23/ພບ.ກຄບ
ລະຫັດໃບອະນຸຍາດ MPL0156

ໃບອະນຸຍາດ
ດຳເນີນກິດຈະການໂຮງງານປຸງແຕ່ງແຮ່ທາດຫາຍາກ (ແບບທົດລອງ)

- ອີງຕາມ ກົດໝາຍວ່າດ້ວຍແຮ່ທາດ (ສະບັບປັບປຸງ) ສະບັບເລກທີ 31/ສພຊ, ລົງວັນທີ 3 ພະຈິກ 2017;
- ອີງຕາມ ໃບອະນຸຍາດລົງທຶນ ສະບັບເລກທີ 053-2023/ກຜທ.ລທ3, ລົງວັນທີ 06 ເມສາ 2023;
- ອີງຕາມ ຂໍ້ຕົກລົງ ຂອງລັດຖະມົນຕີກະຊວງພະລັງງານ ແລະ ບໍ່ແຮ່ ວ່າດ້ວຍການອຸດຄົ້ນ ແລະ ດຳເນີນກິດຈະການໂຮງງານປຸງແຕ່ງແຮ່ທາດຫາຍາກ ແບບທົດລອງ ສະບັບເລກທີ 938/ພບ, ລົງວັນທີ 17 ພຶດສະພາ 2023.

ກົມຄຸ້ມຄອງບໍ່ແຮ່ ອະນຸຍາດໃຫ້:

Mr CHEN YONGHAI ; ວັນ, ເດືອນ, ປີເກີດ: 04 ສິງຫາ 1968; ສັນຊາດ: ຈີນ; ໃນນາມ: ຜູ້ອຳນວຍການ ບໍລິສັດ; ສຳນັກງານຕັ້ງຢູ່: ບ້ານໂພນທອງ, ເມືອງໄຊເສດຖາ, ນະຄອນຫຼວງວຽງຈັນ; ເບີໂທລະສັບ: 020 91997678;

ຊື່ວິສາຫະກິດ: ບໍລິສັດ ຊາຍນາ ການລົງທຶນ ຂຸດຄົ້ນແຮ່ທາດຫາຍາກ ຈຳກັດ; ຊື່ໂຮງງານ: ໂຮງງານປຸງແຕ່ງແຮ່ທາດຫາຍາກ; ເນື້ອທີ່ເຂດໂຮງງານ 8 ເຮັກຕາ, ເຊິ່ງນອນໃນເຂດສຳປະທານເນື້ອທີ່ 800 ເຮັກຕາ ຢູ່ເຂດບ້ານໝອງໂອນ ແລະ ບ້ານສວນມອນ, ເມືອງຄຳ, ແຂວງຊຽງຂວາງ.

ເພື່ອດຳເນີນການປຸງແຕ່ງ: ແຮ່ທາດຫາຍາກ; ກຳມະວິທີໃນການປຸງແຕ່ງ:.....; ຄວາມອາດສາມາດຮັບ ແຮ່ປ້ອນ ຂອງໂຮງງານປຸງແຕ່ງ ສູງສຸດບໍ່ເກີນ: .....ໂຕນ/ປີ ຫຼື ສະເລ່ຍ:.....ໂຕນ/ປີ. ຜົນຜະລິດ ສູງສຸດ:.....ໂຕນ/ປີ ຫຼື ສະເລ່ຍ:.....ໂຕນ/ປີ; ປະເພດຜົນຜະລິດ:....., ຄຸນນະພາບ:.....% ຕາມບົດແຜນການປຸງແຕ່ງແຮ່ທາດຫາຍາກ ທີ່ຖືກຮັບຮອງໂດຍ ກົມຄຸ້ມຄອງບໍ່ແຮ່ ສະບັບຄັ້ງວັນທີ:.....

ມູນຄ່າການລົງທຶນທີ່ໃຊ້ເຂົ້າໃນການປຸງແຕ່ງ:.....USD (.....ໂດລາສະຫະລັດ).

ຂະໜາດຂອງໂຮງງານ: ....., ລະຫັດໂຮງງານ ເລກທີ: CNIREM-01-Rare Earth.

- ໄລຍະດຳເນີນກິດຈະການໂຮງງານປຸງແຕ່ງແຮ່ທາດ 3 (ສາມ) ປີ.

ໃບອະນຸຍາດສະບັບນີ້ມີຜົນສັກສິດນັບແຕ່ມື້ລົງລາຍເຊັນເປັນຕົ້ນໄປ ແລະ ນຳໃຊ້ໄດ້ຈົນເຖິງວັນທີ 27 ທັນວາ 2025.

ນະຄອນຫລວງວຽງຈັນ, ວັນທີ 14 JUN 2023

ຫົວໜ້າກົມ

ໝາຍເຫດ:
ຫ້າມປອມແປງ ຫຼື ດັດແກ້ຂໍ້ຄວາມໃດໆ ໃນໃບອະນຸຍາດສະບັບນີ້ ຜູ້ລະເມີດຕ້ອງໄດ້ຮັບໂທດຕາມກົດໝາຍ ຂອງ ສປປ ລາວ.

ຈັບທະລາ ແກ້ວຫາວົງ

ຂໍ້ແນະນຳ ແລະ ເງື່ອນໄຂໃນການນຳໃຊ້ໃບອະນຸຍາດ:

1. ຜູ້ໄດ້ຮັບໃບອະນຸຍາດສະບັບນີ້ ຕ້ອງດຳເນີນກິດຈະການຕາມທີ່ໄດ້ລະບຸໃນໃບອະນຸຍາດສະບັບນີ້ເທົ່ານັ້ນ ແລະ ປະຕິບັດລະບຽບກົດໝາຍທີ່ກ່ຽວຂ້ອງ ຂອງ ສປປ ລາວ;
2. ໃບອະນຸຍາດສະບັບນີ້ບໍ່ສາມາດນຳໃຊ້ເປັນຫລັກຊັບໄດ້;
3. ຖ້າຫາກມີການປ່ຽນແປງກຳລັງການຜະລິດ ແລະ ວິທີການປຸງແຕ່ງຕ້ອງໄດ້ຮັບອະນຸຍາດສາກ່ອນ;
4. ໃບອະນຸຍາດນີ້ຕ້ອງຕິດໄວ້ບ່ອນທີ່ເປີດເຜີຍໃນສະຖານທີ່ດຳເນີນທຸລະກິດ ຫຼື ສຳນັກງານ;
5. ໃບອະນຸຍາດນີ້ໄດ້ພິມອອກຈຳນວນ 3 ສະບັບເທົ່ານັ້ນ 1 ສະບັບ ມອບໃຫ້ບໍລິສັດ ຜູ້ຖືໃບອະນຸຍາດ ແລະ 2 ສະບັບ ເກັບຮັກສາໄວ້ທີ່ ກົມຄຸ້ມຄອງບໍ່ແຮ່;
6. ຜູ້ໄດ້ຮັບໃບອະນຸຍາດນີ້ ຕ້ອງໄດ້ເສຍຄ່າທຳນຽມ ໃບອະນຸຍາດ ຕາມລະບຽບການທີ່ປະກາດໃຊ້.

Appendix B Table 1 (JORC)

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• For Sepon project, LXML conducted an exploration program from November 2021 to July 2022. A total of 607 boreholes (4,441 metres) were drilled. For Mengkham project, Longyan Dadi Mining Development Service Co., Ltd conducted an exploration program from January 2022 to December 2023. A total of 13,656 boreholes (198,957 metres) were drilled. • 1-meter samples. • For Sepon project, holes were drilled on a 200-metre x 100-metre or 100-metre x 100-metre pattern. For Mengkham project, holes were drilled with a spacing of 30-100m. • The sampling procedures are following the Chinese REE industry standards
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• The manual GN auger was employed to delineate and identify economically viable zones in the regolith. This auger is extensively used for exploring IAC rare earth deposits in China. • The specifications of the GN auger include a 95 cm diameter x 0.5 m long auger bucket equipped with 2 m drill rods. • It is no need to do downhole survey according to Chinese GN auger technical procedures.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• According to the drilling records, the auger drilling achieved almost 100% core recovery. • There was no relationship between sample recovery and grade.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.)	• All borehole cores were logged by geologists. • According to the characteristics of the granite weathering crust, the record description, the round footage, the hole depth and the sample length are measured by qualified steel wire rulers and recorded.

Criteria	Explanation	Commentary
	photography. • The total length and percentage of the relevant intersections logged.	• Core logging is qualitative.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• All core taken. • Sampled wet. • After logging, sample location and length were marked and numbered by logging geologists. And then core samples were put into numbered bags. • Sample weights were sufficient for the mineralized materials.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• For Sepon project, samples were prepared and assayed in the ALS lab in Australia. For Mengkham project, samples were prepared and assayed in lab onsite. • For Sepon project, the assaying method is ME-MS81. For Mengkham project, the assaying method is EDTA (Ethylene Diamine Tetraacetic Acid) volumetric method. • For Sepon project, QAQC procedures included CRMs, blanks and duplicates. • For Mengkham project, internal and external lab check samples were used as control samples.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• For Sepon project, a total of 29 pairs field duplicates were used and all pairs were within 20% limits. For Mengkham project, a total of 6,017 samples were collected as internal lab check samples with a pass rate of 82%. And a total of 3,500 samples were collected as external lab check samples with a pass rate of 92%. • For Mengkham project, SRK collected 169 duplicates in May 2024, but a large bias was observed between original assay and verification results. Only about 19% of the results for SREO are within ±20%. About 78% results are out of ±20%.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• The locations of drilling holes were surveyed by using hand-held GPS. • The coordinate system applied for the entire project is the UTM projection (Zone 48N) using the Indian 1960 Datum.

Criteria	Explanation	Commentary
	• Specification of the grid system used. • Quality and adequacy of topographic control.	
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• For Sepon project, holes were drilled on a 200-metre x 100-metre or 100-metre x 100-metre pattern. For Mengkham project, holes were drilled with a spacing of 30-100m. • Current borehole spacing was sufficient to establish geological and grade continuity for Mineral Resources estimation classification. • Composites were applied.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• All boreholes were vertical.
Sample security	• The measures taken to ensure sample security.	• The samples were all properly numbered, recorded before being sent to labs.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• For Sepon project, LXML completed the audits during the exploration. • For Mengkham project, Longyan Dadi Mining company completed the audits during the exploration.

Section 2: Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	• LXML possesses an exploration permit with an area of 1,010.40 km^2, which is valid until June 2026. The Sepon REE project is in the southeast corner of the permit. • For Mengkham project, China Investment Xieng Khouang Rare Earth Minerals Limited possesses an trial mining license of 8.0 km^2 and a exploration permit of 42.0 km^2. The expiry date of the trial mining license is December 2025, and the exploration permit is December 2024.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• For Sepon project, LXML Exploration Department conducted an exploration program from November 2021 to July 2022. • For Mengkham project, Longyan Dadi Mining Development Service Co., Ltd conducted an exploration program from January 2022 to December 2023.
Geology	• Deposit type, geological setting and style of mineralisation.	• Both Sepon REE Project and Mengkham REE Project are ion absorption type of REE deposits, which was developed over granite bodies by weathering the rock bodies and transferring and enriching the REEs bearing in the minerals into clay minerals of the weathered zones by absorption. • The REE-bearing regolith profile provides a vertical cross-section of the soil layers created by weathering and other breakdown processes. • The projects area is in a tropical region with a warm and humid climate. The granite rock in the area undergoes intense weathering due to favourable topographic conditions where erosion is less significant than weathering. This has led to the widespread formation of weathered layers, which range from less than 1 metre to over 50 metres thick in some parts of the project area. • The distribution of the weathered layer is typically irregular due to erosion from the river drainage system. Depending on the extent of the weathered layer covering the mountainous terrain, it can be classified into two types from the in-situ leaching perspective: full coverage and exposed base types.

Criteria	Explanation	Commentary
		• The Mengkham and Seop REE projects are primarily characterized by low hills and gentle, undulating terrain. Influenced by a tropical climate, these areas have a relatively thick regolith cover. According to the classification, the regolith layer developed within most of the project area can be categorized as the full-coverage type of IAC deposit.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • Hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• For Sepon project, a total of 607 boreholes (4,441 metres) were drilled.For Mengkham project, a total of 13,656 boreholes (198,957 metres) were drilled. • For Sepon project, 591 holes were used in the Mineral Resources estimation and for Mengkham project, 13,251 holes were used in the Mineral Resource estimation. • All information of boreholes were collected, including collar, elevation, depth, lithology etc.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Exploration data is reported as the average sample grade. Top cutting was used report the exploration results. • No such preferential reporting of high-grade results is presented.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	• All boreholes were vertical. • The rare earth minerals consist of a medium-fine biotite granite regolith. Notably, there are significant differences among the rock regolith. As a result, the ore composition and type are directly linked to the regolith characteristics and its rock types.

Criteria	Explanation	Commentary
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Appropriate maps and typical sections were reported in this report.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Reporting was fully representative of the data collected at this stage.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• For Sepon project, in the general exploration report, 10 specific gravity samples were also taken from drilling cores and were measured in the lab of the mine. In SRK's opinion, it was unable to collect density sample from GN Auger hole cores. A dry bulk density of 1.5 t/m^3 was used in resource estimation for Sepon project. • For Mengkham project, a simple laboratory column leaching test had been conducted. • A total of ten bulk density samples were implemented across the project areas with the natural bulk density (wet basis) ranging from 1.7 to 1.81 t/m^3, averaging 1.75 t/m^3, dry bulk density ranging between 1.35 and 1.55 t/m^3, averaging 1.47 t/m^3.
Further work	• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Further drilling program is recommended.

Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• A digitalized resource database was provided to SRK, and SRK conducted crossing - checking against logging data and typical interpretation. All relevant data were imported to Leapfrog, and validation routines were run to confirm validity of all data.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• During the period from 13 to 16 May 2024, SRK conducted a site visit to the Sepon REE Project. • During the period from 9 to 11 May 2024, SRK conducted site visits to the Mengkham REE project.
Geological interpretation	• Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• SRK has a high confidence regarding the geological interpretation for both Sepon and Mengkham project. • Both Sepon and Mengkham project databases were composed of collar, survey, assay, lithological data. Detailed geological logging and surface mapping allowed extrapolation, with a distance no more than 50 m. • The geological boundaries were determined by lithological and sampling data. SRK has defined the REE mineralization zones, which were mainly controlled by the topography.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The deposit type is an ion-adsorption type hosted in weathered regolith. The development level of the weathered regolith layer largely shaped the distribution and geometry of the REE mineralization. The ore-bearing layers are mainly present in the middle part of the fully weathered regolith profile and the upper part of the semi-weathered layer. • The REE mineralized bodies generally exhibit a stratiform appearance, with their morphology controlled by the occurrence of the weathered regolith. In relatively flat mountaintop areas, the bodies tend to be thicker and have a more pronounced sheet-like shape. Whereas in steep hillside and valley areas, the bodies tend to have a thinner and more complex shape due to erosion and transportation effects. • For Sepon project, the elevation of the ore body is 240 to 410 meters, the lowest erosion base level in this area is 210 meters, and the ore body is above the lowest erosion base level. The depth of the ore body is generally 0-5 meters. • For Mengkham project, the top of the

Criteria	Explanation	Commentary
		mineralised zone is defined by a thin surficial soil zone that averages 2 m in thickness. The base of the mineralised zone extends to an average vertical depth of 9.0 m.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• For Sepon project, Y_2O_3, La_2O_3 , CeO_2 , Pr_6O_{11} , Nd_2O_3 , Sm_2O_3 , Eu_2O_3 , Gd_2O_3 , Tb_4O_7 , Dy_2O_3 , Ho_2O_3 , Er_2O_3 , Tm_2O_3 , Yb_2O_3 , Lu_2O_3 were estimated using IDW2 in Leapfrog. For Mengkham project, SREO was estimated using IDW2 in Leapfrog. • This is the first mineral resource estimation in accordance with JORC Code for both Sepon and Mengkham project. • The block model was constructed using a block size of to 10 m × 10 m × 2 m (East × North × Elevation) for Sepon project and for Mengkham project the size is to 10 m × 10 m × 4 m with a sub-block size of to 5 m × 5 m × 2 m. • All samples were composited to 1-meter. • The cumulative frequency and distribution characteristics of the sample histogram were used to do the top capping. • SRK has validated the both block models by swath plot and visual inspection, indicating that the models was validated.
Moisture	• Whether the tonnages estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• The tonnages are estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• For Sepon project, the Mineral Resources are reported at a cut-off grade of 170 g/t TREO. Cut-off grades are based on a price of 239,000 CNY/t REO. • For Mengkham project, the Mineral Resources are reported at a cut-off grade of 100 g/t SREO. Cut-off grades are based on a price of 239,000 CNY/t REO.

Criteria	Explanation	Commentary
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• For Sepon project, the feasibility study has not undertaken yet. • For Mengkham project, a preliminary feasibility study was carried out. The mining method is in-situ leaching. The process of the in-situ leaching mining involves mainly two parts: leaching solution injection and pregnant leach solution ("PLS") collection.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• A simple laboratory column leaching test had been conducted on the samples from 2# ore body. The results showed that the permeability coefficient is $0.89x10^{-3}\sim 1.11x10^{-3}$cm/s and the pregnant leaching solution ("PLS") concentration can reach 2.0 g/L with the SREO leaching rate of about 94%. • The FS designed total recovery was 77%, with the ISL rate of 90% and the hydrometallurgical recovery rate of 85.5%. SRK deems that it is appropriate. • The details are depicted in Section 12 and Section13.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The sources of environmental risk are project activities that may result in potential environmental impacts. These project activities have been previously described within this report. In summary, the most significant potential environmental and social risks for the development of the Project, currently identified as part of the project assessment and this SRK review, are: • Environmental approval to be obtained; • Water pollution; and • Mine closure fund to be established
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	• For Sepon project, in the general exploration report, 10 specific gravity samples were also taken from drilling cores and were measured in the lab of the mine. In SRK's opinion, it was unable to collected density sample from GN Auger hole cores. A dry bulk density of 1.5 t/m^3 was used in resource estimation. • For Mengkham project, a total of ten bulk density samples were implemented across

Criteria	Explanation	Commentary
	• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	the project areas with the natural bulk density (wet basis) ranging from 1.7 to 1.81 t/m3, averaging 1.75 t/m3, dry bulk density ranging between 1.35 and 1.55 t/m3, averaging 1.47 t/m3. The average dry bule density of 1.47 t/m3 is determined to use in resource estimation.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	• Indicated Mineral Resource were defined by the boreholes with the spacing less than 100 m. • Inferred Mineral Resource were defined by the boreholes with the spacing less than 200 m. • For Mengkham project, Indicated Mineral Resources were downgraded to Inferred Mineral Resources duo to the the large bias between Menghkam original assay and SRK verification results.
Audits or reviews.	• The results of any audits or reviews of Mineral Resource estimates.	• The input data, including geological mapping and drillhole data are comprehensive in their coverage of the mineralisation. • The Mineral Resource estimate appropriately reflects the view of the Competent Person. • The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code. • The statement relates to global volumetric estimates.

Appendix C Campliance with 18 Chapter

Chapter 18				Sections in SRK's Report
18.01	**DEFINITIONS AND INTERPRETATION**			**Not applicable.**
18.02-18.04	**CONDITIONS FOR [REDACTED] OF NEW APPLICANT MINERAL COMPANIES**			
18.02	In addition to satisfying the requirements of Chapter 8, a Mineral Company which has applied for [**REDACTED**] must also satisfy the requirements of this Chapter.			1.3
18.03	A Mineral Company must:—			
	(1)	establish to the Exchange's satisfaction that it has the right to participate actively in the exploration for and/or extraction of Natural Resources, either:—		3.1
		(a)	through control over a majority (by value) of the assets in which it has invested together with adequate rights over the exploration for and/or extraction of Natural Resources; or	
			Note: 'control over a majority' means an interest greater than 50%.	
		(b)	through adequate rights (arising under arrangements acceptable to the Exchange), which give it sufficient influence in decisions over the exploration for and/or extraction of the Natural Resources;	
	(2)	establish to the Exchange's satisfaction that it has at least a portfolio of:—		10.1.11;10.2.11
		(a)	Indicated Resources; or	
		(b)	Contingent Resources, identifiable under a Reporting Standard and substantiated in a Competent Person's Report. This portfolio must be meaningful and of sufficient substance to justify a [**REDACTED**];	
	(3)	if it has commenced production, provide an estimate of cash operating costs including the costs associated with:—		N/A
		(a)	workforce employment;	
		(b)	consumables;	
		(c)	fuel, electricity, water and other services;	
		(d)	on and off-site administration;	
		(e)	environmental protection and monitoring;	
		(f)	transportation of workforce;	
		(g)	product marketing and transport;	
		(h)	non-income taxes, royalties and other governmental charges; and	
		(i)	contingency allowances;	
		Note:	*A Mineral Company must:* • *set out the components of cash operating costs separately by category;* • *explain the reason for any departure from the list of items to be included under cash operating costs; and* • *discuss any material cost items that should be highlighted to* [**REDACTED**].	
	(4)	demonstrate to the Exchange's satisfaction that it has available working capital for 125% of the group's present requirements, that is for at least the next 12 months, which must include:—		17.2;17.3
		(a)	general, administrative and operating costs;	
		(b)	property holding costs; and	
		(c)	the cost of any proposed exploration and/or development; and	
		Note:	*Capital expenditures do not need to be included in working capital requirements. Where they are financed out of borrowings, relevant interest and loan repayments must be included.*	
	(5)	ensure that its working capital statement in the [**REDACTED**] document under Listing		17.2;17.3

Chapter 18				Sections in SRK's Report
			Rule 8.21A states it has available sufficient working capital for 125% of the group's present requirements, that is for at least 12 months from the date of its [**REDACTED**] document.	
18.04			If a Mineral Company is unable to satisfy either the profit test in rule 8.05(1), the market capitalisation/revenue/cash flow test in rule 8.05(2), or the market capitalisation/revenue test in rule 8.05(3), it may still apply to be [**REDACTED**] if it can establish to the Exchange's satisfaction that its directors and senior managers, taken together, have sufficient experience relevant to the exploration and/or extraction activity that the Mineral Company is pursuing. Individuals relied on must have a minimum of five years relevant industry experience. Details of the relevant experience must be disclosed in the [**REDACTED**] document of the new applicant.	Not applicable.
			Note: A Mineral Company relying on this rule must demonstrate that its primary activity is the exploration for and/or extraction of Natural Resources.	
18.05-18.08			**CONTENTS OF [REDACTED] DOCUMENTS FOR NEW APPLICANTS**	
18.05			In addition to the information set out in Appendix 1A, a Mineral Company must include in its [**REDACTED**] document:—	
	(1)		a Competent Person's Report;	1.1
	(2)		a statement that no material changes have occurred since the effective date of the Competent Person's Report. Where there are material changes, these must be prominently disclosed;	1.7
	(3)		the nature and extent of its prospecting, exploration, exploitation, land use and mining rights and a description of the properties to which those rights attach, including the duration and other principal terms and conditions of the concessions and any necessary licences and consents. Details of material rights to be obtained must also be disclosed;	3
	(4)		a statement of any legal claims or proceedings that may have an influence on its rights to explore or mine;	2
	(5)		disclosure of specific risks and general risks. Companies should have regard to Guidance Note 7 on suggested risk analysis; and	19
	(6)		if relevant and material to the Mineral Company's business operations, information on the following:—	16.3
		(a)	project risks arising from environmental, social, and health and safety issues;	
		(b)	any non-governmental organisation impact on sustainability of mineral and/or exploration projects;	
		(c)	compliance with host country laws, regulations and permits, and payments made to host country governments in respect of tax, royalties and other significant payments on a country by country basis;	
		(d)	sufficient funding plans for remediation, rehabilitation and, closure and removal of facilities in a sustainable manner;	
		(e)	environmental liabilities of its projects or properties;	
		(f)	its historical experience of dealing with host country laws and practices, including management of differences between national and local practice;	
		(g)	its historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements; and	
		(h)	any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims.	

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18.06-18.08	***Additional disclosure requirements that apply to certain new applicant Mineral Companies***		
18.06	If a Mineral Company has begun production, it must disclose an estimate of the operating cash cost per appropriate unit for the minerals and/or Petroleum produced.		17.2;17.3
18.07	If a Mineral Company has not yet begun production, it must disclose its plans to proceed to production with indicative dates and costs. These plans must be supported by at least a Scoping Study, substantiated by the opinion of a Competent Person. If exploration rights or rights to extract Resources and/or Reserves have not yet been obtained, relevant risks to obtaining these rights must be prominently disclosed.		Not applicable.
18.08	If a Mineral Company is involved in the exploration for or extraction of Resources, it must prominently disclose to [**REDACTED**] that its Resources may not ultimately be extracted at a profit.		10
18.09-18.13	**RELEVANT NOTIFIABLE TRANSACTIONS INVOLVING THE ACQUISITION OR DISPOSAL OF MINERAL OR PETROLEUM ASSETS**		**Not applicable.**
18.09	A Mineral Company proposing to acquire or dispose of assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must:—		
	(1)	comply with Chapter 14 and Chapter 14A, if relevant;	
	(2)	produce a Competent Person's Report, which must form part of the relevant circular, on the Resources and/or Reserves being acquired or disposed of as part of the Relevant Notifiable Transaction;	
		Note: The Exchange may dispense with the requirement for a Competent Person's Report on disposals where shareholders have sufficient information on the assets being disposed of.	
	(3)	in the case of a major (or above) acquisition, produce a Valuation Report, which must form part of the relevant circular, on the Mineral or Petroleum Assets being acquired as part of the Relevant Notifiable Transaction; and	
	(4)	comply with the requirements of rules 18.05(2) to 18.05(6) in respect of the assets being acquired.	
	Note: Material liabilities that remain with the issuer on a disposal must also be discussed.		
18.10-18.11	***Requirements that apply to listed issuers***		
18.10	A listed issuer proposing to acquire assets which are solely or mainly Mineral or Petroleum Assets as part of a Relevant Notifiable Transaction must comply with rule 18.09.		
18.11	On completion of a Relevant Notifiable Transaction involving the acquisition of Mineral or Petroleum Assets, unless the Exchange decides otherwise, a listed issuer will be treated as a Mineral Company.		
18.12-18.13	***Requirements that apply to Mineral Companies and listed issuers***		
18.12	The Exchange may dispense with the requirement to produce a new Competent Person's Report or a Valuation Report under rules 18.05(1), 18.09(2) or 18.09(3), if the issuer has available a previously published Competent Person's Report or Valuation Report (or equivalent) which complies with rules 18.18 to 18.34 (where applicable), provided the report is no more than six months old. The issuer must provide this document and a no material change statement in the [**REDACTED**] document or circular for the Relevant Notifiable Transaction.		
18.13	An issuer must obtain the prior written consent of a Competent Person(s) or Competent Evaluator for their material to be included in the form and context in which it appears in		

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	a [**REDACTED**] document or circular for the Relevant Notifiable Transaction, whether or not such person or firm is retained by the [**REDACTED**] applicant or the issuer.		
18.14-18.17	**CONTINUING OBLIGATIONS**		**Not applicable.**
18.14	***Disclosure in reports***		
18.14	A Mineral Company must include in its interim (half-yearly) and annual reports details of its exploration, development and mining production activities and a summary of expenditure incurred on these activities during the period under review. If there has been no exploration, development or production activity, that fact must be stated.		
18.15-18.17	***Publication of Resources and Reserves***		
18.15	A listed issuer that publicly discloses details of Resources and/or Reserves must give an update of those Resources and/or Reserves once a year in its annual report, in accordance with the reporting standard under which they were previously disclosed or a Reporting Standard.		
18.16	A Mineral Company must include an update of its Resources and/or Reserves in its annual report in accordance with the Reporting Standard under which they were previously disclosed.		
18.17	Annual updates of Resources and/or Reserves must comply with rule 18.18.		
	Note: Annual updates are not required to be supported by a Competent Person's Report and may take the form of a no material change statement.		
18.18-18.27	**STATEMENTS ON RESOURCES AND/OR RESERVES**		
18.18	***Presentation of data***		
18.18	Any data presented on Resources and/or Reserves by a Mineral Company in a [**REDACTED**] document, Competent Person's Report, Valuation Report or annual report, must be presented in tables in a manner readily understandable to a non-technical person. All assumptions must be clearly disclosed and statements should include an estimate of volume, tonnage and grades.		10.1.11; 10.2.11
18.19	***Basis of evidence***		
18.19	All statements referring to Resources and/or Reserves:—		Not applicable.
	(1)	in any new applicant [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction, must be substantiated in a Competent Person's Report which must form part of the document; and	
	(2)	in all other cases, must at least be substantiated by the issuer's internal experts.	
18.20	***Petroleum Competent Persons' Reports***		**Not applicable.**
18.20	A Competent Person's Report for Mineral Companies involved in the exploration for and/or extraction of Petroleum Resources and Reserves must include the information set out in Appendix 25.		
18.21-18.22	***Competent Person***		
18.21	A Competent Person must:—		
	(1)	have a minimum of five years experience relevant to the style of mineralization and type of deposit under consideration or to the type of Petroleum exploration, reserve estimate (as appropriate), and to the activity which the Mineral Company is undertaking;	1.4
	(2)	be professionally qualified, and be a member in good standing of a relevant Recognised Professional Organisation, in a jurisdiction where, in the Exchange's opinion, the statutory securities regulator has satisfactory arrangements (either by	1.4

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		way of the IOSCO Multilateral MOU or other bi-lateral agreement acceptable to the Exchange) with the Commission for mutual assistance and exchange of information for enforcing and securing compliance with the laws and regulations of that jurisdiction and Hong Kong; and	
	(3)	take overall responsibility for the Competent Person's Report.	1.7
18.22	A Competent Person must be independent of the issuer, its directors, senior management and advisers. Specifically the Competent Person retained must:—		1.7
	(1)	have no economic or beneficial interest (present or contingent) in any of the assets being reported on;	
	(2)	not be remunerated with a fee dependent on the findings of the Competent Person's Report;	
	(3)	in the case of an individual, not be an officer, employee or proposed officer of the issuer or any group, holding or associated company of the issuer; and	
	(4)	in the case of a firm, not be a group, holding or associated company of the issuer. Any of the firm's partners or officers must not be officers or proposed officers of any group, holding or associated company of the issuer.	
18.23	***Additional requirements of Competent Evaluators***		**Not applicable.**
18.23	In addition to the requirements set out in rules 18.21(2) and 18.22, a Competent Evaluator must:—		
	(1)	have at least ten years relevant and recent general mining or Petroleum experience (as appropriate);	
	(2)	have at least five years relevant and recent experience in the assessment and/or valuation of Mineral or Petroleum Assets or securities (as appropriate); and	
	(3)	hold all necessary licences.	
	Note: A Competent Person's Report or Valuation Report may be performed by the same Competent Person provided he or she is also a Competent Evaluator.		
18.24	***Scope of Competent Persons' Reports and Valuation Reports***		
18.24	A Competent Person's Report or Valuation Report must comply with a Reporting Standard as modified by this Chapter, and must:—		
	(1)	be addressed to the Mineral Company or listed issuer;	1.1
	(2)	have an effective date (being the date when the contents of the Competent Person's Report or Valuation Report are valid) less than six months before the date of publishing the [**REDACTED**] document or circular relating to a Relevant Notifiable Transaction required under the Listing Rules; and	1.7
	(3)	set out what Reporting Standard has been used in preparing the Competent Person's Report or Valuation Report, and explain any departure from the relevant Reporting Standard.	1.2
18.25-18.26	***Disclaimers and Indemnities***		
18.25	A Competent Person's Report or Valuation Report may contain disclaimers of sections or topics outside their scope of expertise in which the Competent Person or Competent Evaluator relied upon other experts' opinions, but must not contain any disclaimers of the report in its entirety.		1.7
18.26	The Competent Person or Competent Evaluator must prominently disclose in the Competent Person's Report or Valuation Report the nature and details of all indemnities provided by the issuer. Indemnities for reliance placed on information provided by issuers and third party experts (for information outside the Competent Person's or Competent		1.7, 2

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	Evaluator's expertise) are generally acceptable. Indemnities for fraud and gross negligence are generally unacceptable.				
18.27	***Obligations of sponsor***				**Not applicable**
18.27	Any sponsor appointed to or by a new applicant Mineral Company under Chapter 3A must ensure that any Competent Person or Competent Evaluator meets the requirements of this Chapter.				
18.28-18.34	**REPORTING STANDARD**				
18.28-18.30	***Mineral reporting standard***				
18.28	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting mineral Resources and Reserves must also satisfy rules 18.29 and 18.30.				
18.29	A Mineral Company must disclose information on mineral Resources, Reserves and/or exploration results either:—				1.2
	(1)	under:			
		(a)	the JORC Code;		
		(b)	NI 43-101; or		
		(c)	the SAMREC Code,		
		as modified by this Chapter; or			
	(2)	under other codes acceptable to the Exchange as communicated to the market from time to time, provided the Exchange is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.			
	Note: The Exchange may allow presentation of Reserves under other reporting standards provided reconciliation to a Reporting Standard is provided. A Reporting Standard applied to specific assets must be used consistently.				
18.30	A Mineral Company must ensure that:—				
	(1)	any estimates of mineral Reserves disclosed are supported, at a minimum, by a Prefeasibility Study;			**Not applicable**
	(2)	estimates of mineral Reserves and mineral Resources are disclosed separately;			10; 11
	(3)	Indicated Resources and Measured Resources are only included in economic analyses if the basis on which they are considered to be economically extractable is explained and they are appropriately discounted for the probabilities of their conversion to mineral Reserves. All assumptions must be clearly disclosed. Valuations for Inferred Resources are not permitted;			**Not applicable**
	(4)	for commodity prices used in Pre-feasibility Studies, Feasibility Studies and valuations of Indicated Resources, Measured Resources and Reserves:—			**Not applicable**
		(a)	the methods to determine those commodity prices, all material assumptions and the basis on which those prices represent reasonable views of future prices are explained clearly; and		
		(b)	if a contract for future prices of mineral Reserves exists, the contract price is used; and		
	(5)	for forecast valuations of Reserves and profit forecasts, sensitivity analyses to higher and lower prices are supplied. All assumptions must be clearly disclosed.			Not applicable
18.31-18.33	***Petroleum reporting standard***				**Not applicable.**
18.31	In addition to satisfying the requirements of Chapter 13 (as modified by this Chapter), a Mineral Company exploring for and/or extracting Petroleum Resources and Reserves must				

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	also satisfy rules 18.32 and 18.33.		
18.32	A Mineral Company must disclose information on Petroleum Resources and Reserves either:—		
	(1)	under PRMS as modified by this Chapter; or	
	(2)	under other codes acceptable to the Exchange if it is satisfied that they give a comparable standard of disclosure and sufficient assessment of the underlying assets.	
	Note: A Reporting Standard applied to specific assets must be used consistently.		
18.33	A Mineral Company must ensure that:—		
	(1)	where estimates of Reserves are disclosed, the method and reason for choice of estimation are disclosed (i.e. deterministic or probabilistic methods, as defined in PRMS). Where the probabilistic method is used, the underlying confidence levels applied must be stated;	
	(2)	if the NPVs attributable to Proved Reserves and Proved plus Probable Reserves are disclosed, they are presented on a post-tax basis at varying discount rates (including a reflection of the weighted average cost of capital or minimum acceptable rate of return that applies to the entity at the time of evaluation) or a fixed discount rate of 10%;	
	(3)	Proved Reserves and Proved plus Probable Reserves are analysed separately and principal assumptions (including prices, costs, exchange rates and effective date) and the basis of the methodology are clearly stated;	
	(4)	if the NPVs attributable to Reserves are disclosed, they are presented using a forecast price as a base case or using a constant price as a base case. The bases for the forecast case must be disclosed. The constant price is defined as the unweighted arithmetic average of the closing price on the first day of each month within the 12 months before the end of the reporting period, unless prices are defined by contractual arrangements. The basis on which the forecast price is considered reasonable must be disclosed and Mineral Companies must comply with rule 18.30;	
		Note: In the forecast case under PRMS, the economic evaluation underlying the investment decision is based on the entity's reasonable forecast of future conditions, including costs and prices, which will exist during the life of the project.	
	(5)	if estimated volumes of Contingent Resources or Prospective Resources are disclosed, relevant risk factors are clearly stated;	
		Note: Under PRMS, wherever the volume of a Contingent Resource is stated, risk is expressed as the chance that the accumulation will be commercially developed and graduate to the reserves class. Wherever the volume of a Prospective Resource is stated, risk is expressed as the chance that a potential accumulation will result in a significant discovery of Petroleum.	
	(6)	economic values are not attached to Possible Reserves, Contingent Resources or Prospective Resources; and	
	(7)	where an estimate of future net revenue is disclosed, whether calculated without discount or using a discount rate, it is prominently disclosed that the estimated values disclosed do not represent fair market value.	
18.34	***Mineral or Petroleum Asset Valuation Reports***		**Not applicable.**
18.34	A Mineral Company must ensure that:—		

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	(1)	any valuation of its Mineral or Petroleum Assets is prepared under the VALMIN Code, SAMVAL Code, CIMVAL or such other code approved by the Exchange from time to time;	
	(2)	the Competent Evaluator states clearly the basis of valuation, relevant assumptions and the reason why a particular method of valuation is considered most appropriate, having regard to the nature of the valuation and the development status of the Mineral or Petroleum Asset;	
	(3)	if more than one valuation method is used and different valuations result, the Competent Evaluator comments on how the valuations compare and on the reason for selecting the value adopted; and	
	(4)	in preparing any valuation a Competent Evaluator meets the requirements set out in rule 18.23.	

Appendix D Chapter 2.6 of the Guide for New Listing Applicants

	Chapter 2.6	Section in SRK's Report
(i)	The cut-off grade (which should be an industry standard commonly used), minimum mining width, economic parameters (e.g. waste to ore ratio, stope productivity), specific gravity derivation, prevailing commodity price assumptions;	Section 10.1.11 and Section 10.2.11
(ii)	If the Competent Person has a different view on certain assumptions (e.g. processing recovery rate) made by the applicant, both views should be disclosed in the [**REDACTED**] document, with differences highlighted and underlying reasons for the different views, and the impact on the applicant if the more conservative view is adopted;	Not applicable
(iii)	Detailed analysis for harmful elements identified at mines (e.g. mercury or arsenic at lead and zinc mines) to give a better picture of whether there are material concentrations of these elements within particular lodes, and the impact on the saleability of the minerals;	Not applicable.
(iv)	Clear and meaningful drawings and diagrams, shown to scale, of the location of the applicant's principal Mineral or Petroleum Assets;	Section 4
(v)	The procedures, amount of testing, assessment and time required to ascertain the amount of Reserves, and the existing Reserves of the mine over its entire mine life, expected average Resource and Reserve grades of ore that can be extracted in future years (preferably covering the whole economic life of the mine), depletion charges and hedging activities;	Not applicable
(vi)	Whether the historical or expected improved recovery rate is used for estimating the net present value ("NPV"), and the basis on which the discount rates are considered appropriate;	Section 18.4
(vii)	If the Competent Person did not conduct a site visit, the applicant should disclose in the "Business" section of the [**REDACTED**] document the basis on which the Reserves/Resources, cost forecasts and other data relating to the mines/ oilfields as disclosed in the CPR are arrived at, how the lack of a site visit would affect the reliability of the information, and an appropriate risk factor 3; and	Section 1.5
(viii)	All material risks mentioned in the CPR should be disclosed in the "Risk Factors" section of the [**REDACTED**] document.	Section 19

TAXATION FOR HOLDERS OF SECURITIES

Income tax and capital gains tax of holders of H Shares is subject to the laws and practices of the PRC and of jurisdictions in which holders of H Shares are residents or otherwise subject to tax. The following summary of certain relevant taxation provisions is based on current laws and practices, and has not taken into account the expected change or amendment to the relevant laws and policies and does not constitute any opinion or advice. The discussion does not deal with all possible tax consequences relating to an investment in the H shares, nor does it take into account the specific circumstances of any particular investor, some of which may be subject to special regulation. Accordingly, you should consult your own tax adviser regarding the tax consequences of an [**REDACTED**] in the H shares. The discussion is based upon laws and relevant interpretations in effect as of the Latest Practicable Date, all of which are subject to change and may have retrospective effect.

No issues on PRC or Hong Kong taxation other than income tax, capital gain tax and profits tax, business tax/VAT, stamp duty and estate duty were referred in the discussion. Prospective investors are urged to consult their financial advisors regarding the PRC, Hong Kong and other tax consequences of owning and disposing of the H Shares.

THE PRC TAXATION

Taxation on Dividends

Individual Investors

Pursuant to the Individual Income Tax Law of the PRC (《中華人民共和國個人所得税法》), which was most recently amended on August 31, 2018 and the Implementation Provisions of the Individual Income Tax Law of the PRC (《中華人民共和國個人所得税法實施條例》), which was most recently amended on December 18, 2018 (hereinafter collectively referred to as the "**IIT Law**"), dividends distributed by PRC enterprises are subject to individual income tax levied at a flat rate of 20%. For a foreign individual who is not a resident of the PRC, the receipt of dividends from an enterprise in the PRC is normally subject to individual income tax of 20% unless specifically exempted by the tax authority of the State Council or reduced by relevant tax treaty.

Pursuant to the Arrangement between Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (《內地和香港特別行政區關於對所得避免雙重徵税和防止偷漏税的安排》) (hereinafter referred to as the "**Arrangement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income (《對所得避免雙重徵税和防止偷漏税的安排》)**") signed by Mainland China and the Hong Kong Special Administrative Region on August 21, 2006, the PRC government may impose tax on dividends paid by a PRC company to a Hong Kong resident (including natural person and legal entity), but such tax shall not exceed 10% of the total amount of dividends payable. If a Hong Kong resident directly holds 25% or more of equity interest in a PRC company and the

Hong Kong resident is the beneficial owner of the dividends and meets other conditions, such tax shall not exceed 5% of the total amount of dividends payable by the PRC company. The Fifth Protocol to the Arrangement between Mainland China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income (《國家税務總局關於<內地和香港特別行政區關於對所得避免雙重徵税和防止偷漏税的安排>第五議定書》) (the "**Fifth Protocol**") issued by the SAT and became effective on December 6, 2019, provides that such provisions shall not apply to arrangements or transactions made for one of the primary purposes of obtaining such tax benefits.

Enterprise Investors

In accordance with the Enterprise Income Tax Law of the PRC (《中華人民共和國企業所得税法》) issued by NPC on March 16, 2007 and most recently amended on December 29, 2018 and the Implementation Provisions of the Enterprise Income Tax Law of the PRC (《中華人民共和國企業所得税法實施條例》) issued by the State Council on December 6, 2007, came into effect on January 1, 2008 and amended on April 23, 2019 (hereinafter collectively referred to as the "**EIT Law**"), a non-resident enterprise is generally subject to a 10% enterprise income tax on PRC-sourced income (including dividends received from a PRC resident enterprise), if it does not have an establishment or premise in the PRC or has an establishment or premise in the PRC but its PRC-sourced income has no real connection with such establishment or premise. The aforesaid income tax payable by non-resident enterprises are withheld at source, where the payer of the income is required to withhold the income tax from the amount to be paid to the non-resident enterprise. Such withholding tax may be reduced or exempted pursuant to an applicable treaty for the avoidance of double taxation.

The Circular of the State Administration of Tax on Issues Relating to the Withholding and Remitting of Enterprise Income Tax by PRC Resident Enterprises on Dividends Distributed to Overseas Non-Resident Enterprise Shareholders of H Shares (《國家税務總局關於中國居民企業向境外H股非居民企業股東派發股息代扣代繳企業所得税有關問題的通知》), which was issued and implemented by the SAT on November 6, 2008, further clarified that a PRC-resident enterprise must withhold corporate income tax at a rate of 10% on the dividends paid to non-PRC resident enterprise holders of H Shares which are derived out of profit generated since 2008. Non-PRC resident enterprise shareholders who need to enjoy tax treaty benefits, the relevant provisions of such tax treaty shall apply.

Pursuant to the Arrangement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, the PRC government may impose tax on dividends paid by a PRC company to a Hong Kong resident (including natural person and legal entity), but such tax shall not exceed 10% of the total amount of dividends payable. If a Hong Kong resident directly holds 25% or more of equity interest in a PRC company and the Hong Kong resident is the beneficial owner of the dividends and meets other conditions, such tax shall not exceed 5% of the total amount of dividends payable by the PRC company. The Fifth Protocol provides that such provisions shall not apply to arrangements or transactions made for one of the primary purposes of obtaining such tax benefits.

Although there may be other provisions under the Arrangement for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income, the treaty benefits under the criteria shall not be granted in the circumstance where relevant gains, after taking into account all relevant facts and conditions, are reasonably deemed to be one of the main purposes for the arrangement or transactions which will bring any direct or indirect benefits under this Arrangement, except when the grant of benefits under such circumstance is consistent with relevant objectives and goals under the Arrangement. The application of the dividend clause of tax agreements is also subject to the requirements of PRC tax laws and regulations, such as the Notice of the State Administration of Taxation on the Issues Concerning the Application of the Dividend Clauses of Tax Agreements (《國家税務總局關於執行税收協定股息條款有關問題的通知》).

Tax Treaties

Non-resident investors residing in jurisdictions which have entered into treaties or adjustments for the avoidance of double taxation with the PRC might be entitled to a reduction of the Chinese corporate income tax imposed on the dividends received from PRC companies. The PRC currently has entered into treaties or adjustments for the avoidance of double taxation with a number of countries and regions including Hong Kong Special Administrative Region, Macau Special Administrative Region, Australia, Canada, France, Germany, Japan, Malaysia, the Netherlands, Singapore, the United Kingdom and the United States. Non-PRC resident enterprises entitled to preferential tax rates in accordance with the relevant taxation treaties or arrangements are required to apply to the Chinese tax authorities for a refund of the corporate income tax in excess of the agreed tax rate, and the refund application is subject to approval by the Chinese tax authorities.

Taxation on Share Transfer

VAT and Local Additional Tax

Pursuant to the Notice on Fully Implementing the Pilot Reform for the Transition from Business Tax to Value-added Tax (《關於全面推開營業税改徵增值税試點的通知》) (the "**Circular 36**"), which was implemented on May 1, 2016 and partially repealed on July 1, 2017, January 1, 2018 and April 1, 2019, entities and individuals engaged in the services sale in the PRC are subject to VAT and "engaged in the services sale in the PRC" means that the seller or buyer of the taxable services is located in the PRC. Circular 36 also provides that transfer of financial products, including transfer of the ownership of marketable securities, shall be subject to VAT at 6% on the taxable revenue (which is the balance of sales price upon deduction of purchase price), for a general or a foreign VAT taxpayer. However, individuals who transfer financial products are exempt from VAT, which is also provided in the Notice of Ministry of Finance and State Administration of Taxation on Several Tax Exemption Policies for Business Tax on Sale and Purchase of Financial Commodities by Individuals (《財政部、國家税務總局關於個人金融商品買賣等營業税若干免税政策的通知》) effective on January 1, 2009. According to these regulations, if the holder is a non-resident individual, the PRC VAT is exempted from the sale or disposal of H shares; if the holder is a non-resident enterprise and

the H-share buyer is an individual or entity located outside the PRC, the holder is not necessarily required to pay the PRC VAT, but if the H-share buyer is an individual or entity located in China, the holder may be required to pay the PRC VAT.

However, in view of no clear regulations, it is still uncertain whether the non-Chinese resident enterprises are required to pay the PRC VAT for the disposal of H shares in practice.

At the same time, VAT payers are also required to pay urban maintenance and construction tax, education surtax and local education surcharge, which shall be usually subject to 12% of the actual VAT payable (if any).

Income tax

Individual Investors

According to the IIT Law, gains on the transfer of equity interests in the PRC resident enterprises are subject to individual income tax at a rate of 20%.

Pursuant to the Circular on Declaring that Individual Income Tax Continues to be Exempted over Income of Individuals from the Transfer of Shares (《關於個人轉讓股票所得繼續暫免徵收個人所得稅的通知》) issued by the SAT on March 30, 1998, from January 1, 1997, income of individuals from transfer of the shares of listed enterprises continues to be exempted from individual income tax. The SAT has not expressly stated whether it will continue to exempt tax on income of individuals from transfer of the shares of listed enterprises in the most recently amended IIT Law.

However, on December 31, 2009, the Ministry of Finance, SAT and CSRC jointly issued the Circular on Related Issues on Levying Individual Income Tax over the Income Received by Individuals from the Transfer of Listed Shares Subject to Sales Limitation (《關於個人轉讓上市公司限售股所得徵收個人所得稅有關問題的通知》), which came into effect on January 1, 2010, which states that individuals' income from the transfer of listed shares obtained from the public offering of listed companies and transfer market on the Shanghai Stock Exchange and the Shenzhen Stock Exchange shall continue to be exempted from individual income tax, except for the relevant shares which are subject to sales restriction (as defined in the Supplementary Notice on Related Issues on Levying Individual Income Tax over the Income Received by Individuals from the Transfer of Listed Shares Subject to Sales Limitation (《關於個人轉讓上市公司限售股所得徵收個人所得稅有關問題的補充通知》) jointly issued and implemented by such departments on November 10, 2010). As of the Latest Practicable Date, no aforesaid provisions have expressly provided that individual income tax shall be levied from non-PRC resident individuals on the transfer of shares in PRC resident enterprises listed on overseas stock exchanges.

Enterprise Investors

According to the EIT Law, a non-resident enterprise is generally subject to a 10% enterprise income tax on PRC-sourced income (including dividends received from a PRC resident enterprise), if it does not have an establishment or premise in the PRC or has an establishment or premise in the PRC but its PRC-sourced income has no real connection with such establishment or premise. The aforesaid income tax payable by non-resident enterprises are withheld at source, where the payer of the income is required to withhold the income tax from the amount to be paid to the non-resident enterprise. Such withholding tax may be reduced or exempted pursuant to an applicable treaty for the avoidance of double taxation.

The Circular of the State Administration of Tax on Issues Relating to the Withholding and Remitting of Enterprise Income Tax by PRC Resident Enterprises on Dividends Distributed to Overseas Non-Resident Enterprise Shareholders of H Shares (《國家税務總局關於中國居民企業向境外H股非居民企業股東派發股息代扣代繳企業所得税有關問題的通知》), which was issued and implemented by the SAT on November 6, 2008, further clarified that a PRC-resident enterprise must withhold corporate income tax at a rate of 10% on the dividends paid to non-PRC resident enterprise holders of H Shares which are derived out of profit generated since 2008. Non-PRC resident enterprise shareholders who need to enjoy tax treaty benefits, the relevant provisions of such tax treaty shall apply.

Stamp Duty

According to the Stamp Duty Law of the PRC (《中華人民共和國印花税法》), which was promulgated on June 10, 2021 and came into effect on July 1, 2022, PRC stamp duty only applies to specific taxable document executed or received within the PRC, having legally binding force in the PRC and protected under the PRC laws, thus the requirements of the stamp duty imposed on the transfer of shares of PRC listed companies shall not apply to the acquisition and disposal of H Shares by non-PRC investors outside of the PRC.

Estate Duty

As of the Latest Practicable Date, no estate duty has been levied in the PRC under the PRC laws.

Enterprise Income Tax

According to the EIT Law, enterprises and other income-generating organizations (hereinafter collectively referred to as "**an enterprise**" or "**enterprises**") within the territory of the PRC are the taxpayers of enterprise income tax and shall pay enterprise income tax in accordance with the provisions of the EIT Law. The Enterprise Income Tax rate is 25%.

According to the Administrative Measures for Determination of High and New Tech Enterprises (《高新技術企業認定管理辦法》), which was promulgated by the Ministry of Science and Technology, the Ministry of Finance and the State Administration of Taxation on

April 14, 2008, amended on January 29, 2016 and became effective on January 1, 2016, an enterprise recognized as a high and new technology enterprise may apply for a preferential enterprise income tax rate of 15% pursuant to the relevant requirements of the EIT Law.

VAT

Pursuant to the Interim Regulations on Value-added Tax of the PRC (《中華人民共和國增值税暫行條例》) issued on December 13, 1993 by the State Council, came into effect on January 1, 1994, and revised on November 10, 2008, February 6, 2016 and November 19, 2017, as well as the Implementation Rules for the Interim Regulations on Value-Added Tax of the PRC (《中華人民共和國增值税暫行條例實施細則》) issued on December 25, 1993 by the MOF, came into effect on the same day and revised on December 15, 2008 and October 28, 2011, any entities and individuals engaged in the sale of goods, supply of processing, repair and replacement services, and import of goods within the territory of the PRC are taxpayers of VAT and shall pay the VAT in accordance with the law. The rate of VAT for sale of goods is 17% unless otherwise specified, such as the rate of VAT for sale of transportation is 11%. With the VAT reforms in the PRC, the rate of VAT has been changed several times. The Notice of the Ministry of Finance and the State Administration of Taxation on the Adjustment to VAT Rates (《財政部、國家税務總局關於調整增值税税率的通知》) which was promulgated by the Ministry of Finance and the State Administration of Taxation on April 4, 2018 to adjust the tax rates of 17% and 11% applicable to any taxpayer's VAT taxable sale or import of goods to 16% and 10%, respectively, and this adjustment became effective on May 1, 2018. Subsequently, the Announcement of the Ministry of Finance and the State Administration of Taxation on Relevant Policies for Deepening the VAT Reform (《財政部、國家税務總局關於深化增值税改革有關政策的公告》) which was jointly promulgated by the MOF, the SAT and the General Administration of Customs on March 20, 2019 to make a further adjustment, which came into effect on April 1, 2019. The previous tax rate of 16% applicable to the VAT taxable sale behavior or import of goods shall be adjusted to 13%, and the previous tax rate of 10% applicable thereto shall be adjusted to 9%.

TAXATION IN HONG KONG

Tax on Dividends

Under the current practice of the Inland Revenue Department of Hong Kong, no tax is payable in Hong Kong in respect of dividends paid by us.

Capital Gains Tax and Profits Tax

No tax is imposed in Hong Kong in respect of capital gains from the sale of H Shares. However, trading gains from the sale of the H Shares by persons carrying on a trade, professional services or business in Hong Kong, where such gains are derived from or arise in Hong Kong from such trade, professional services or business, will be subject to Hong Kong profits tax, which is currently imposed at the maximum rate of 16.5% on corporations and at the maximum rate of 15% on unincorporated businesses. Certain categories of taxpayers (for

example, financial institutions, insurance companies and securities dealers) are likely to be regarded as deriving trading gains rather than capital gains unless these taxpayers can prove that the investment securities are held for long-term investment purposes. Trading gains from sales of H Shares effected on the Hong Kong Stock Exchange will be considered to be derived from or arise in Hong Kong. Liability for Hong Kong profits tax would thus arise in respect of trading gains from sales of H Shares effected on the Hong Kong Stock Exchange realized by persons carrying on a business of trading or dealing in securities in Hong Kong.

Stamp Duty

Hong Kong stamp duty, currently charged at the ad valorem rate of 0.1% on the higher of the consideration for or the market value of the H Shares, will be payable by the purchaser on every purchase and by the seller on every sale of Hong Kong securities, including H Shares (in other words, a total of 0.2% is currently payable on a typical sale and purchase transaction involving H Shares). In addition, a fixed stamp duty of HK$5.00 is currently payable on any instrument of transfer of H Shares. Where one of the parties is a resident outside Hong Kong and does not pay the ad valorem duty due by it, the duty not paid will be assessed on the instrument of transfer (if any) and will be payable by the transferee. If no stamp duty is paid on or before the due date, a penalty of up to ten times the duty payable may be imposed.

Estate Duty

The Revenue (Abolition of Estate Duty) Ordinance 2005 (《2005年收入(取消遺產税)條例》) came into effect on February 11, 2006 in Hong Kong, pursuant to which, no Hong Kong estate duty is payable and no estate duty clearance papers are needed for an application of a grant of representation in respect of holders of H Shares whose deaths occur on or after February 11, 2006.

FOREIGN EXCHANGE ADMINISTRATION IN THE PRC

The lawful currency of the PRC is Renminbi, which is currently subject to foreign exchange control and cannot be freely converted into foreign currency. The SAFE, with the authorization of the People's Bank of China, is empowered with the functions of administering all matters relating to foreign exchange, including the enforcement of foreign exchange control regulations.

The Administrative Regulations on Foreign Exchange of the PRC (《中華人民共和國外匯管理條例》) which was issued by the State Council on January 29, 1996, implemented on April 1, 1996 and latest amended on August 5, 2008, classifies all international payments and transfers into current items and capital items. Current items are subject to the reasonable examination of the veracity of transaction documents and the consistency of the transaction documents and the foreign exchange receipts and payments by financial institutions engaging in conversion and sale of foreign currencies and supervision and inspection by the foreign exchange administrative authorities. For capital items, overseas organizations and overseas individuals making direct investments in the PRC shall, upon approval by the relevant

authorities in charge, process registration formalities with the foreign exchange administrative authorities. Foreign exchange income received overseas can be repatriated or deposited overseas, and foreign exchange and foreign exchange settlement funds under the capital account are required to be used only for purposes as approved by the competent authorities and foreign exchange administrative authorities. In the event that international revenues and expenditure occur or may occur a material misbalance, or the national economy encounters or may encounter a severe crisis, the State may adopt necessary safeguard and control measures on international revenues and expenditure.

The Regulations for the Administration of Settlement, Sale and Payment of Foreign Exchange (《結匯、售匯及付匯管理規定》), which was promulgated by the People's Bank of China on June 20, 1996 and implemented on July 1, 1996, removes other restrictions on convertibility of foreign exchange under current items, while imposing existing restrictions on foreign exchange transactions under capital account items.

According to the Announcement on Improving the Reform of the Renminbi Exchange Rate Formation Mechanism (《關於完善人民幣匯率形成機制改革的公告》), which was issued by the People's Bank of China and implemented on July 21, 2005, the PRC has started to implement a managed floating exchange rate system in which the exchange rate would be determined based on market supply and demand and adjusted with reference to a basket of currencies since July 21, 2005. Therefore, the Renminbi exchange rate was no longer pegged to the U.S. dollar. The People's Bank of China would publish the closing price of the exchange rate of the Renminbi against trading currencies such as the U.S. dollar in the interbank foreign exchange market after the closing of the market on each working day, as the central parity of the currency against Renminbi transactions on the following working day.

According to the relevant laws and regulations in the PRC, PRC enterprises (including foreign investment enterprises) which need foreign exchange for current item transactions may, without the approval of the foreign exchange administrative authorities, effect payment through foreign exchange accounts opened at the designated foreign exchange bank, on the strength of valid transaction receipts and proof. Foreign investment enterprises which need foreign exchange for the distribution of profits to their shareholders and PRC enterprises (such as our Company) which, in accordance with regulations, are required to pay dividends to their shareholders in foreign exchange may, on the strength of resolutions of the board of directors or the shareholders' meeting on the distribution of profits, effect payment from foreign exchange accounts at the designated foreign exchange bank, or effect exchange and payment at the designated foreign exchange bank.

According to the Decisions on Matters including Canceling and Adjusting a Batch of Administrative Approval Items (《國務院關於取消和調整一批行政審批項目等事項的決定》) which was promulgated by the State Council on October 23, 2014, it decided to cancel the approval requirement of the SAFE and its branches for the remittance and settlement of the proceeds raised from the overseas listing of the foreign shares into RMB domestic accounts.

According to the Notice of the State Administration of Foreign Exchange on Issues Concerning the Foreign Exchange Administration of Overseas Listing (《國家外匯管理局關於境外上市外匯管理有關問題的通知》) issued by the SAFE and implemented on December 26, 2014, a domestic company shall, within 15 business days from the date of the end of its overseas listing issuance, register the overseas listing with the local branch office of state administration of foreign exchange at the place of its establishment; the proceeds from an overseas listing of a domestic company may be remitted to the domestic account or deposited in an overseas account, but the use of the proceeds shall be consistent with the content of the document and other disclosure documents.

According to the Notice of the State Administration of Foreign Exchange on Revolutionizing and Regulating Capital Account Settlement Management Policies (《國家外匯管理局關於改革和規範資本項目結匯管理政策的通知》) which was promulgated by the SAFE and implemented on June 9, 2016, foreign currency earnings in capital account that relevant policies of willingness exchange settlement have been clearly implemented on (including the recalling of raised capital by overseas listing) may undertake foreign exchange settlement in the banks according to actual business needs of the domestic institutions.

This Appendix sets out summaries of certain aspects of PRC laws and regulations, which are relevant to the Company's operations and business. Laws and regulations relating to taxation in the PRC are discussed separately in "Appendix III — Taxation and Foreign Exchange" to this document. The principal objective of this summary is to provide potential investors with an overview of the principal PRC legal and regulatory provisions applicable to the Company. This summary is not intended to include all the information which may be important to potential investors. For more details on laws and regulations which are relevant to our business, please refer to the section headed "Regulatory Overview" in this document.

THE PRC LEGAL SYSTEM

The PRC legal system is based on the *Constitution of the PRC* (《中華人民共和國憲法》) (the "**Constitution**") and is made up of written laws, administrative regulations, local regulations, separate regulations, autonomous regulations, rules and regulations of departments, rules and regulations of local governments and international treaties of which the PRC government is a signatory, and other regulatory documents. Court verdicts do not constitute binding precedents. However, they may be used as judicial reference and guidance.

Pursuant to the *Constitution* and the *Legislation Law of the PRC* (2023 revision) (《中華人民共和國立法法(2023年修訂)) (the "**Legislation Law**"), the NPC and the Standing Committee of the NPC (SCNPC) are empowered to exercise the legislative power of the State. The NPC has the power to formulate and amend basic laws governing civil and criminal matters, state organs and other matters. The SCNPC is empowered to formulate and amend laws other than those required to be enacted by the NPC and to supplement and amend any parts of laws enacted by the NPC during the adjournment of the NPC, provided that such supplements and amendments are not in conflict with the basic principles of such laws.

The State Council is the highest organ of the PRC administration and has the power to formulate administrative regulations based on the Constitution and laws.

The people's congresses of provinces, autonomous regions and municipalities and their respective standing committees may formulate local regulations based on the specific circumstances and actual requirements of their own respective administrative areas, provided that such local regulations do not contravene any provision of the Constitution, laws or administrative regulations.

The ministries and commissions of the State Council, PBOC, National Audit Office of the PRC as well as the other organs endowed with administrative functions directly under the State Council may, in accordance with the laws as well as the administrative regulations, decisions and orders of the State Council and within the limits of their power, formulate rules.

The people's congresses of cities divided into districts and their respective standing committees may formulate local regulations in terms of urban and rural development and management, environmental protection, and historical and cultural protection based on the specific circumstances and actual requirements of such cities, which will become enforceable after being reported to and approved by the standing committees of the people's congresses of the relevant provinces or autonomous regions but such local regulations shall conform with the Constitution, laws, administrative regulations, and the relevant local regulations of the relevant provinces or autonomous regions. People's congresses of national autonomous areas have the power to enact autonomous regulations and separate regulations in light of the political, economic and cultural characteristics of the nationality (nationalities) in the areas concerned.

The people's governments of the provinces, autonomous regions, and municipalities directly under the central government and the cities divided into districts or autonomous prefectures may enact rules, in accordance with laws, administrative regulations and the local regulations of their respective provinces, autonomous regions or municipalities. The Constitution has supreme legal authority and no laws, administrative regulations, local regulations, autonomous regulations or separate regulations may contravene the Constitution. The authority of laws is greater than that of administrative regulations, local regulations and rules. The authority of administrative regulations is greater than that of local regulations and rules. The authority of local regulations is greater than that of the rules of the local governments at or below the corresponding level. The authority of the rules enacted by the people's governments of the provinces or autonomous regions is greater than that of the rules enacted by the people's governments of the city divided into districts or autonomous prefecture within the administrative areas of the provinces and the autonomous regions.

The NPC has the power to alter or annul any inappropriate laws enacted by the SCNPC, and to annul any autonomous regulations or separate regulations which have been approved by the SCNPC but which contravene the Constitution or the Legislation Law. The SCNPC has the power to annul any administrative regulations that contravene the Constitution and laws, to annul any local regulations that contravene the Constitution, laws or administrative regulations, and to annul any autonomous regulations or local regulations which have been approved by the standing committees of the people's congresses of the relevant provinces, autonomous regions or municipalities directly under the central government, but which contravene the Constitution and the Legislation Law. The State Council has the power to alter or annul any inappropriate ministerial rules and rules of local governments. The people's congresses of provinces, autonomous regions or municipalities directly under the central government have the power to alter or annul any inappropriate local regulations enacted or approved by their respective standing committees. The people's governments of provinces and autonomous regions have the power to alter or annul any inappropriate rules enacted by the people's governments at a lower level.

According to the Constitution and the Legislation Law, the power to interpret laws is vested in the SCNPC. According to the *Decision of the Standing Committee of the NPC Regarding the Strengthening of Interpretation of Laws* (《全國人民代表大會常務委員會關於加強法律解釋工作的決議》) passed on June 10, 1981, the Supreme People's Court of the PRC (the "**Supreme People's Court**") has the power to give general interpretation on questions involving the specific application of laws and decrees in court trials. The State Council and its ministries and commissions are also vested with the power to give interpretation of the administrative regulations and department rules which they have promulgated. At the regional level, the power to give interpretations of the local laws and regulations as well as administrative rules is vested in the regional legislative and administrative organs which promulgate such laws, regulations and rules.

THE PRC JUDICIAL SYSTEM

Under the *Constitution* and the *PRC Law on the Organization of the People's Courts* (2018 revision) (《中華人民共和國法院組織法(2018年修訂)》), the PRC judicial system is made up of the Supreme People's Court, the local people's courts and special people's courts.

The local people's courts are comprised of the primary people's courts, the intermediate people's courts and the higher people's courts. The higher-level people's courts supervise the primary and intermediate people's courts. The people's procuratorates also have the right to exercise legal supervision over the civil proceedings of people's courts of the same level and lower levels. The Supreme People's Court is the highest judicial body in the PRC. It supervises the judicial administration of the people's courts at all levels.

The *PRC Civil Procedure Law* (2023 revision) (《中華人民共和國民事訴訟法(2023年修訂)》) (the "**Civil Procedure Law**"), which was adopted in 1991 and amended in 2007, 2012, 2017, 2021 and 2023, sets forth the criteria for instituting a civil action, the jurisdiction of the people's courts, the procedures to be followed for conducting a civil action and the procedures for enforcement of a civil judgment or order. All parties to a civil action conducted within the PRC must comply with the Civil Procedure Law. Generally, a civil case is initially heard by a local court of the municipality or province in which the defendant resides. The parties to a contract may, by express agreement, select a judicial court where civil actions may be brought, provided that the judicial court is either the plaintiff's or the defendant's domicile, the place of execution or implementation of the contract or the place of the object of the action, provided that such choice shall not violate the requirements of the level of jurisdiction and exclusive jurisdiction.

A foreign national or enterprise generally has the same litigation rights and obligations as a citizen or legal person of the PRC. If a foreign country's judicial system limits the litigation rights of PRC citizens and enterprises, the PRC courts may apply the same limitations to the citizens and enterprises of that foreign country within the PRC.

If any party to a civil action refuses to comply with a judgment or ruling made by a people's court or an award made by an arbitration panel in the PRC, the other party may apply to the people's court for the enforcement of the same. There are time limits of two years imposed on the right to apply for such enforcement. If a person fails to satisfy a judgment made by the court within the stipulated time, the court will, upon application by either party, enforce the judgment in accordance with the law.

A party seeking to enforce a judgment or ruling of a people's court against a party who is not personally or whose property is not within the PRC may apply to a foreign court with jurisdiction over the case for recognition and enforcement of the judgment or ruling. A foreign judgment or ruling may also be recognized and enforced by the people's court according to PRC enforcement procedures if the PRC has entered into or acceded to an international treaty with the relevant foreign country, which provides for such recognition and enforcement, or if the judgment or ruling satisfies the court's examination according to the principle of reciprocity, unless the people's court finds that the recognition or enforcement of such judgment or ruling will result in a violation of the basic legal principles of the PRC, its sovereignty or security or against social and public interest.

Pursuant to the *Arrangements for Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Cases between Courts of the Mainland and Hong Kong Special Administrative Region* (《最高人民法院關於內地與香港特別行政區法院相互認可和執行民商事案件判決的安排》), which came into effect on January 29, 2024, a party with an enforceable final court judgment rendered by any designated people's court of China or any designated Hong Kong court requiring payment of money in a civil and commercial case according to a written choice of court agreement, may apply for recognition and enforcement of the judgment in the relevant people's court of China or Hong Kong court.

THE *PRC COMPANY LAW*, *OVERSEAS LISTING TRIAL MEASURES* AND *GUIDANCE FOR ARTICLES OF ASSOCIATION*

A joint stock limited company incorporated in the PRC and seeking a listing on the Stock Exchange is mainly subject to the following laws and regulations in the PRC:

- The *Company Law of the PRC* (《中華人民共和國公司法》) (the "**Company Law**") which was promulgated by the Standing Committee of the NPC on December 29, 1993, came into effect on July 1, 1994, revised on December 25, 1999, August 28, 2004, October 27, 2005, December 28, 2013 and December 29, 2023 respectively and the latest revision of which was implemented on July 1, 2024.

- The Overseas Listing Trial Measures and five relevant guidelines which were promulgated by the CSRC on February 17, 2023 pursuant to the *PRC Securities Law* and are applicable to the direct and indirect overseas share offering or listing of domestic companies; and

- The *Guidelines for Articles of Association of Listed Companies* (《上市公司章程指引》) (the "**Guidance for Articles of Association**") which was most recently amended on December 15, 2023 by the CSRC. The Articles of Association are formulated based on the *Guidance for Articles of Association* on a reference basis, the summary of which is set out in the section entitled "Appendix V — Summary of the Articles of Association" to this document.

Set out below is a summary of the major provisions of the currently effective *Company Law*, the Overseas Listing Trial Measures and the *Guidance for Articles of Association* which are applicable to the Company.

General

A joint stock limited company refers to an enterprise legal person incorporated in accordance with the *Company Law* with its registered capital divided into shares of equal par value. The liability of its shareholders is limited to the amount of shares held by them and the company is liable to its creditors for an amount equal to the total value of its assets.

A joint stock limited company shall conduct its business in accordance with laws and administrative regulations. It may invest in other limited liability companies and joint stock limited companies and its liabilities with respect to such invested companies are limited to the amount invested. Unless otherwise provided by laws, the joint stock limited company may not be a contributor that undertakes joint and several liabilities for the debts of the invested companies.

Incorporation

A joint stock limited company may be incorporated by promotion or public subscription.

A joint stock limited company may be incorporated by a minimum of one but not more than 200 promoters, and at least half of the promoters must have residence within the PRC. Companies incorporated by promotion are companies of which the entire registered capital is subscribed for by the promoters. Shares in the company incorporated by promotion shall not be offered to others unless the registered capital has been fully paid up. If laws, administrative regulations and decisions of the State Council have separate provisions on paid-in registered capital and the minimum registered capital, the company should follow such provisions.

For companies incorporated by way of promotion, the promoters shall subscribe in writing for the shares required to be subscribed for by them and pay up their capital contributions under the articles of association. Procedures relating to the transfer of titles to non-monetary assets shall be duly completed if such assets are to be contributed as capital. Promoters who fail to pay up their capital contributions in accordance with the foregoing provisions shall assume default liabilities in accordance with the covenants set out in the promoters' agreements. After the promoters have confirmed the capital contribution under the

articles of association, a board of directors and a board of supervisors shall be elected and the board of directors shall apply for registration of incorporation by filing the articles of association with the company registration authority, and other documents as required by laws or administrative regulations.

Where companies are incorporated by public subscription, not less than 35% of their total number of shares must be subscribed for by the promoters, unless otherwise provided for by laws or administrative regulations. The promoters shall preside over and convene an inauguration meeting within thirty days from the date of the full payment of subscription capital. The inauguration meeting shall be formed by the promoters and subscribers. Where the shares issued are not fully subscribed for within the offer period stipulated in the share offering prospectus, or where the promoter fails to convene an inauguration meeting within thirty days of the subscription capital for the shares issued being fully paid up, the subscribers may demand that the promoters refund the subscription capital so paid together with the interest calculated at bank rates of a deposit for the same period. Within thirty days of the conclusion of the inauguration meeting, the board of directors shall apply to the registration authority for registration of the establishment of the company. A company is formally established and has the status of a legal person after the registration with the relevant administration for market regulation has been completed and a business license has been issued.

Registered Capital

The promoters may make a capital contribution in currencies, or non-monetary assets such as in kind, intellectual property rights or land use rights which can be appraised with monetary value and transferred lawfully, except for assets which are prohibited from being contributed as capital by laws or administrative regulations. If a capital contribution is made in non-monetary assets, a valuation of the assets contributed must be carried out pursuant to the provisions of laws or administrative regulations on valuation without any over-valuation or under-valuation.

The shares of a company are represented by stocks. A stock is a certificate issued by the company to certify the share held by a shareholder. The stock issued by the company shall be in the form of registered stock.

All issue of shares of a joint stock limited company shall be based on the principles of equality and fairness. The same class of shares must carry equal rights. Shares issued at the same time and within the same class must be issued on the same conditions and at the same price. It may issue shares at par value or at a premium, but it may not issue shares below the par value.

Under the Overseas Listing Trial Measures, if a domestic company offers shares overseas, it may raise funds and dividend distributions in foreign currency or Renminbi.

Under the *Company Law*, a company issuing registered share certificates shall maintain a shareholder registry which sets forth the following matters:

- the name and domicile of each shareholder;
- the type of shares and number of shares subscribed by each shareholder;
- the serial numbers of shares held by each shareholder; and
- the date on which each shareholder acquired the shares.

Increase of Registered Capital and Issue of Shares

In light of its operational and development needs and in accordance with laws and regulations, a company may increase its share capital under any of the following methods, subject to the resolutions be passed at a shareholders' general meeting: (i) a public offering of shares; (ii) a private placement of shares; (iii) offering of bonus shares to existing shareholders; (iv) the conversion of reserve funds into shares; and (v) any other methods provided in law and administrative regulations and approved by the CSRC.

Pursuant to the *Company Law*, a company may, according to its articles of association, issue the following classified shares, which have different rights from those of the ordinary shares: (i) shares with priority or inferior rights to profits or remaining property in distribution; (ii) shares with more or less voting rights per share than those of the ordinary shares; (iii) shares whose transfer is subject to the consent of the company and other restrictions; and (iv) other classified shares provided by the State Council. A company making a public offering of shares shall not issue any of the classified shares as prescribed on items (ii) and (iii), except those issued prior to the public offering. Where a company is issuing new shares, resolutions shall be passed at general meeting in accordance with the articles of association in respect of the class and amount of the new shares, the issue price of the new shares, the commencement and end dates for the issue of the new shares and when the new shares are proposed to be issued to existing shareholders, the class and amount of such new shares.

To offer shares overseas, the domestic company shall report the application documents for offering and listing to the CSRC for record-filing within three business days after submission of the application documents for offering and listing overseas.

Reduction of Registered Capital

A company may reduce its registered capital in accordance with the following procedures prescribed by the *Company Law*:

- the company shall prepare a balance sheet and an inventory of the assets;

- the reduction of registered capital shall be approved by a general meeting;

- the company shall inform its creditors of the reduction in registered capital within 10 days and publish an announcement of the reduction in the newspaper within 30 days after the resolution approving the reduction has been passed;

- creditors shall within 30 days after receiving the notice, or within 45 days of the public announcement if no notice has been received, require the company to pay its debts or provide corresponding guarantees covering the debts;

- the company shall apply to the relevant administration of registration for the registration of the reduction in registered capital.

Repurchase of Shares

According to the *Company Law*, a joint stock limited company may not purchase its shares other than for one of the following purposes: (i) to reduce its registered capital; (ii) to merge with another company that holds its shares; (iii) to grant its shares for carrying out an employee stock ownership plan or equity incentive plan; (iv) to purchase its shares from shareholders who vote against the resolution regarding the merger or division with other companies at a general meeting; (v) to apply shares for conversion of convertible corporate bonds issued by a listed company; and (vi) to maintain the company value and protect the shareholders' interests of a listed company as necessary.

Repurchase of its own shares on the grounds set out in (i) and (ii) above shall be subject to resolution passed by the general meeting; repurchase of its own shares on the grounds set out in (iii), (v) or (vi) above shall be subject to a resolution of the company's board of directors shall be made by a two-third majority of directors attending the meeting in accordance with the provisions of the company's articles of association or as authorized by the general meeting.

Following the repurchase of its own shares in accordance with (i) above, such shares shall be canceled within 10 days from the date of repurchase; the shares shall be transferred or canceled within six months if the repurchase of its own shares is in accordance with either (ii) or (iv) above; and the shares repurchased in accordance with (iii), (v) or (vi) above shall not exceed 10% of the company's total issued shares, and shall be transferred or canceled within three years.

A listed company shall perform its obligation of information disclosure according to the provisions of the *Securities Law* when repurchasing its own shares. In the event the repurchase of its own shares is in accordance with (iii), (v) or (vi) above, centralized public trading shall be adopted.

A company shall not accept its own shares as the subject matter of a mortgage.

Transfer of Shares

Shares held by shareholders may be transferred in accordance with the relevant laws and regulations. Pursuant to the *Company Law*, transfer of shares by shareholders shall be carried out at a legally established securities exchange or in other ways stipulated by the State Council. Registered shares may be transferred after the shareholders endorse the back of the share certificates or in any other manner specified by laws or administrative regulations. Following the transfer, the company shall enter the names and addresses of the transferees into its share register. No changes of registration in the share register described above shall be effected during a period of twenty days prior to convening a shareholders' general meeting or five days prior to the record date for the purpose of determining entitlements to dividend distributions, subject to any legal provisions on the registration of changes in the share register of listed companies.

According to the *Company law*, shares issued prior to the public issuance of shares shall not be transferred within one year from the date of the joint stock limited company's listing on a stock exchange. Directors, supervisors and the senior management shall declare to the company their shareholdings in the company and any changes of such shareholdings; they shall not transfer more than 25% of all the shares they hold in the company annually during their tenure; and they shall not transfer the shares they hold within one year from the date on which the company's shares are listed and commenced trading on a stock exchange, nor within six months after their resignation from their positions with the company.

Shareholders

According to the *Company Law*, the rights of holders of ordinary shares of a joint stock limited company include:

- the right to attend or appoint a proxy to attend general meetings and to vote thereat;
- the right to transfer shares in accordance with laws, administrative regulations and provisions of the articles of association;
- the right to inspect the company's articles of association, share register, counterfoil of company debentures, minutes of general meetings, resolutions of meetings of the board of directors, resolutions of meetings of the board of supervisors and financial and accounting reports and to make proposals or enquiries on the company's operations;
- the right to bring an action in the people's court to rescind resolutions passed by general meetings and board of directors where the articles of association is violated by the above resolutions;

- the right to receive dividends and other types of interest distributed in proportion to the number of shares held;

- in the event of the termination or liquidation of the company, the right to participate in the distribution of residual properties of the company in proportion to the number of shares held; and

- other rights granted by laws, administrative regulations, other regulatory documents and the company's articles of association.

The obligations of a shareholder include the obligation to abide by the Company's articles of association, to pay the subscription moneys in respect of the shares subscribed for and in accordance with the form of making capital contributions, to be liable for the company's debts and liabilities to the extent of the amount of his or her subscribed shares and any other shareholders' obligation specified in the company's articles of association.

Shareholder's General Meetings

The general meeting is the organ of authority of the company, which exercises its powers in accordance with the *Company Law*. According to the *Company Law*, the general meeting exercises the following principal powers:

- to elect or remove the directors and supervisors (other than the representative of the employees of the company) and to decide on matters relating to the remuneration of directors and supervisors;

- to examine and approve reports of the board of directors;

- to examine and approve reports of the board of supervisors;

- to examine and approve the company's proposals for profit distribution plans and loss recovery plans;

- to decide on any increase or reduction of the company's registered capital;

- to decide on the issue of bonds by the company;

- to decide on issues such as merger, division, dissolution and liquidation of the company and other matters;

- to amend the company's articles of association; and

- other powers as provided for in the articles of association.

Annual general meeting is required to be held once every year. Extraordinary general meeting is required to be held within two months after the occurrence of any of the following:

- the number of directors is less than the number stipulated by the law or less than two thirds of the number specified in the articles of association;
- the aggregate losses of the company which are not recovered reach one-third of the company's total paid-in registered capital;
- when shareholders individually or in aggregate holding 10% or more of the company's shares request the convening of an extraordinary general meeting;
- whenever the board of directors deems necessary;
- when the board of supervisors so requests; or
- other circumstances as provided for in the articles of associations.

According to the *Company Law*, general meetings shall be convened by the board of directors, and presided over by the chairman of the board of directors. In the event that the chairman is incapable of performing or does not perform his/her duties, the meeting shall be presided over by the vice chairman. In the event that the vice chairman is incapable of performing or not performing his/her duties, a director nominated by more than half of directors shall preside over the meeting.

Where the board of directors is incapable of performing or not performing its duties of convening the general meeting, the board of supervisors shall convene and preside over such meeting in a timely manner. In case the board of supervisors fails to convene and preside over such meeting, shareholders alone or in aggregate holding more than 10% of the company's shares for 90 days consecutively may unilaterally convene and preside over such meeting.

According the *Company Law*, notice of annual general meeting shall state the time and venue of and matters to be considered at the meeting and shall be given to all shareholders 20 days before the meeting. Notice of extraordinary general meetings shall be given to all shareholders 15 days prior to the meeting.

There is no specific provision in the *Company Law* regarding the number of shareholders constituting a quorum in a general meeting.

According to the *Company Law*, shareholders present at general meeting have one vote for each share they hold, save that shares held by the company are not entitled to any voting rights.

Pursuant to the provisions of the articles of association or a resolution of the general meeting, the accumulative voting system may be adopted for the election of directors and supervisors at the general meeting. Under the accumulative voting system, each share shall be entitled to vote equivalent to the number of directors or supervisors to be elected at the general meeting and shareholders may consolidate their voting rights when casting a vote.

Pursuant to the *Company Law*, resolutions of the general meeting shall be adopted by more than half of the voting rights held by the shareholders present at the meeting. However, resolutions of the general meeting regarding the following matters shall be adopted by more than two-thirds of the voting rights held by the shareholders present at the meeting: (i) amendments to the articles of association; (ii) the increase or decrease of registered capital; (iii) the merger, division, dissolution, liquidation or change in the form of the company; and (iv) other matters considered by the general meeting, by way of an ordinary resolution, to be of a nature which may have a material impact on the company and should be adopted by a special resolution.

According to the *Company Law*, meeting minutes shall be prepared in respect of decisions on matters discussed at the general meeting. The chairman of the meeting and directors attending the meeting shall sign to endorse such minutes. The minutes shall be kept together with the shareholders' attendance register and the proxy forms.

Board of Directors

According to the *Company Law*, a joint stock limited company shall have a board of directors which shall have at least three members. For a company that has three hundred or more employees, the board of directors shall include the staff representative unless the board of supervisors has been established and already included the staff representative supervisor. The term of a director shall be stipulated in the articles of association, provided that no term of office shall last for more than three years. A director may serve consecutive terms if re-elected. A director shall continue to perform his/her duties as a director in accordance with the laws, administrative regulations and articles of association until a duly re-elected director takes office, if re-election is not conducted in a timely manner upon the expiry of his/her term of office, or if the resignation of directors results in the number of directors being less than the quorum.

According to the *Company Law*, the board of directors mainly exercises the following powers:

- to convene the general meetings and report on its work to the general meetings;
- to implement the resolutions passed in general meetings;
- to decide on the company's business plans and investment proposals;

- to formulate the company's profit distribution proposals and loss recovery proposals;
- to formulate proposals for the increase or reduction of the company's registered capital and the issuance of corporate bonds;
- to prepare plans for the merger, division, dissolution and change in the form of the company;
- to decide on the setup of the company's internal management organs;
- to appoint or dismiss the company's manager and decide on his/her remuneration and, based on the manager's recommendation, to appoint or dismiss any deputy manager and financial officer of the company and to decide on their remunerations;
- to formulate the company's basic management system; and
- to exercise any other power under the articles of association.

Meetings of the Board of Directors

According to the *Company Law*, the board of directors of a joint stock limited company shall hold at least two meetings per year. The board of directors shall issue a notice of meeting to all directors and supervisors 10 days before the meeting. Shareholders representing more than 10% of the voting rights, more than one-third of the directors or the board of supervisors may propose to convene an extraordinary meeting of the board of directors. The chairman of the board of directors shall convene and preside over a meeting of the board of directors within 10 days from the receipt of the proposal. A meeting of the board of directors may only be held if half or more of the directors are present. Resolutions of the board of directors shall be approved by a majority of all directors. Resolutions approved by the board of directors shall be by one person, one vote. Directors shall attend meetings of the board of directors in person. If a director is unable to attend for any reason, he/she may appoint another director to attend the meeting on his/her behalf by a written power of attorney specifying the scope of authorization.

If a resolution of the board of directors violates any laws, administrative regulations or the articles of association, and as a result of which the company sustains serious losses, the directors participating in the resolution are liable to compensate the company. However, if it can be proved that a director expressly objected to the resolution when the resolution was voted on, and that such objection was recorded in the minutes of the meeting, such director shall be relieved from that liability.

Chairman of the Board of Directors

Pursuant to the *Company Law*, the board of directors shall appoint a chairman and may appoint a vice chairman. The chairman and the vice chairman shall be elected with approval of more than half of all the directors. The chairman shall convene and preside over board meetings and review the implementation of board resolutions. The vice chairman shall assist the chairman to perform his/her duties. Where the chairman is incapable of performing or is not performing his/her duties, the duties shall be performed by the vice chairman. Where the vice chairman is incapable of performing or is not performing his/her duties, a director elected by more than half of the directors shall perform his/her duties.

Qualifications of Directors

Under the *Company Law*, the following person may not serve as a director in a company:

- a person without capacity or restricted capacity to undertake any civil liabilities;

- a person who has been sentenced to any criminal penalty for corruption, bribery, embezzlement, misappropriation of property or destruction of the socialist economic order, or who has been deprived of his political rights due to his crimes and such sentence has expired for no more than five years, or who is granted probation, if no more than two years have passed since the expiration of the probation period;

- a person who has been a former director, factory manager or manager of a company or an enterprise that has entered into insolvent liquidation and who was personally liable for the insolvency of such company or enterprise, where no more than three years have elapsed since the date of the completion of the bankruptcy and liquidation of the company or enterprise;

- a person who has been a legal representative of a company or an enterprise that has had its business license revoked due to violations of the law or has been ordered to close down by law and the person was personally responsible, where less than three years have elapsed since the date of such revocation or the order to close down; or

- a person who is listed as a dishonest person subject to enforcement by the people's court due to failure to pay off a large amount of unliquidated mature debts.

Board of Supervisors

A joint stock limited company shall have a board of supervisors composed of not less than three members. The board of supervisors shall consist of representatives of the shareholders and an appropriate proportion of representatives of the company's staff, among which the proportion of representatives of the company's staff shall not be less than one-third, and the actual proportion shall be determined in the articles of association. Representatives of the company's staff at the board of supervisors shall be democratically elected by the company's staff at the staff representative assembly, general staff meeting or otherwise.

Directors and senior management shall not act concurrently as supervisors.

The board of supervisors shall appoint a chairman and may appoint a vice chairman. The chairman and the vice chairman of the board of supervisors shall be elected by more than half of the supervisors. The chairman of the board of supervisors shall convene and preside over board of supervisors meetings. Where the chairman of the board of supervisors is incapable of performing or is not performing his/her duties, the vice chairman of the board of supervisors shall convene and preside over supervisory board meetings. Where the vice chairman of the board of supervisors is incapable of performing or is not performing his/her duties, a supervisor nominated by more than half of the supervisors shall convene and preside over meetings of the board of supervisors.

Each term of office of a supervisor is three years and he/she may serve consecutive terms if re-elected. A supervisor shall continue to perform his/her duties as a supervisor in accordance with the laws, administrative regulations and the articles of association until a duly re-elected supervisor takes office, if re-election is not conducted in a timely manner upon the expiry of his/her term of office or if the resignation of supervisors results in the number of supervisors being less than the quorum. The board of supervisors meets at least once every six months. In accordance with the *Company Law*, resolutions by the board of supervisors shall be passed by a majority of all supervisors

The board of supervisors may exercise its powers:

- to review the company's financial position;
- to supervise the directors and senior management in their performance of their duties and to propose the removal of directors and senior management who have violated laws, regulations, the articles of association or shareholders' resolutions;
- when the acts of directors or senior management are detrimental to the company's interests, to require the director and senior management to correct these acts;

- to propose the convening of extraordinary shareholders' general meetings and to convene and preside over shareholders' general meetings when the board of directors fails to perform the duty of convening and presiding over shareholders' general meetings under the *PRC Company Law*;

- to submit proposals to the shareholders' general meetings;

- to bring actions against directors and senior management pursuant to the relevant provisions of the *PRC Company Law*; and

- to exercise any other authority stipulated in the articles of association.

Supervisors may be present at board meetings and make inquiries or proposals in respect of the resolutions of the board. The board of supervisors may investigate any irregularities identified in the operation of the company and, when necessary, may engage an accounting firm to assist its work at the cost of the company.

Manager and Senior Management

Pursuant to the *Company Law*, a company shall have a manager who shall be appointed or removed by the board of directors. The manager shall exercise his/her powers in accordance with the company's articles of association or the authorization of the board of directors.

Other provisions in the articles of association on the manager's powers shall also be complied with. The manager shall be present at meetings of the board of directors. However, the manager shall have no voting rights at meetings of the board of directors unless he/she concurrently serves as a director.

Pursuant to the *Company Law*, senior management refers to the manager, deputy manager, financial officer, secretary to the board of directors of a listed company and other personnel as stipulated in the articles of association.

Duties of Directors, Supervisors and Senior Management

Directors, supervisors and senior management are required under the *Company Law* to comply with the relevant laws, regulations and the articles of association, and shall be obliged to be faithful and diligent towards the company. Where the controlling shareholder or actual controller of the company who does not serve as a director but actually attends to the company's affairs, shall comply with the foregoing provisions.

Directors, supervisors and management personnel are prohibited from abusing their authority in accepting bribes or other unlawful income and from misappropriating the company's property.

Directors, supervisors and senior management are prohibited from:

- seizing the assets of the company or misappropriating company funds;
- depositing company funds into accounts under their own names or the names of other individuals;
- taking advantage of power to accept bribes or other illegal income;
- accepting commissions paid by a third party for transactions conducted with the company for their own benefit;
- unauthorized divulgence of confidential information of the company; and
- other acts in violation of their duty of loyalty to the company.

Where directors, supervisors and senior management directly or indirectly conclude any contract or engage in transactions with the company, they shall report to the board of directors or the shareholders' meeting and seek approval by resolutions of the board of directors or the shareholders' meeting in accordance with the articles of association. The requirement shall also apply to the conclusion of contracts or engagement in transactions by close relatives of the directors, supervisors and senior management or enterprises directly or indirectly controlled by close relatives of the directors, supervisors and senior management as well as persons who are otherwise related to the directors, supervisors and senior management.

Directors, supervisors and senior management shall not take advantage of duty to seek business opportunities for themselves or others that would have been directed to the company, unless such act such act has been reported to and approved by the board of directors or the shareholders' meeting in accordance with the articles of association or the company is unable to take the business opportunity in accordance with applicable laws, administrative regulations, and the articles of association.

Directors, supervisors and senior management shall not engage in the business similar to those of the company for themselves or others, unless such act has been reported to and approved by the board of directors or the shareholders' meeting in accordance with the articles of association.

Income generated by directors or senior management in violation of aforementioned shall be returned to the company.

A director, supervisor or senior management who contravenes any laws, regulations or the company's articles of association in the performance of his/her duties resulting in any loss to the company shall be liable to the company for compensation.

The *Guidance for Articles of Association* provides that a company's directors and senior management shall have duties of diligence towards the company, for example, the directors shall be prudent, serious and diligent in exercising the authority conferred by the company to ensure that the business activities of the company comply with state's laws, administrative regulations and various economic policy requirements and that the business activities do not go beyond the scope of business activities specified in the company's business license; the directors shall treat all shareholders equally; the shareholders shall keep abreast of the company's business management status; both the directors and the senior management shall sign written statements confirming periodic reports of the company and ensure that the information disclosed by the company is true, accurate and complete; both the directors and the senior management shall provide accurate information and materials to the board of supervisors and shall not interfere with the performance of duties by the board of supervisors or individual supervisors; both the directors and the senior management shall have other diligence duties prescribed by laws, administrative regulations, departmental rules and the company's articles of association.

Finance and Accounting

Pursuant to the *Company Law*, a company shall establish its own financial and accounting systems according to the laws, administrative regulations and the regulations of the competent financial departments of the State Council. At the end of each financial year, a company shall prepare a financial report which shall be audited by an accounting firm in accordance with the laws. The financial and accounting reports shall be prepared in accordance with the laws, administrative regulations and the regulations of the financial departments of the State Council.

Pursuant to the *Company Law*, the company shall send the financial accounting report to all shareholders in accordance with the period stipulated in the articles of association, and the company's financial accounting report shall be made available for inspection by shareholders at least 20 days before the annual general meeting. A company that makes public stock offerings shall publish its financial reports.

When distributing each year's profits after taxation, the company shall set aside 10% of its profits after taxation for the company's statutory common reserve fund until the fund has reached more than 50% of the company's registered capital. When the company's statutory common reserve fund is not sufficient to make up for the company's losses for the previous years, the current year's profits shall first be used to make good the losses before any allocation is set aside for the statutory common reserve fund. After the company has made allocations to the statutory common reserve fund from its profits after taxation, it may, upon passing a resolution at a shareholders' general meeting, make further allocations from its profits after taxation to the discretionary common reserve fund. After the company has made good its losses and made allocations to the abovementioned reserve fund, the remaining profits after taxation shall be distributed in proportion to the number of shares held by the shareholders, except for those which are not distributed in a proportionate manner as provided by the articles of association.

Profits distributed to shareholders in violation of the requirements described above must be returned to the company. The company shall not be entitled to any distribution of profits in respect of shares held by it.

The premium over the nominal value of the shares of the company on issue and other income as required by relevant government authorities to be treated as the capital reserve fund shall be accounted for as the capital reserve fund. The common reserve fund of a company shall be applied to make good the company's losses, expand its business operations or increase its capital. Where any losses need to be covered with reserve fund of the company, discretionary reserve fund and statutory common reserve fund shall first be used and if still insufficient, capital reserve fund can be used in accordance with applicable provisions. Upon the transfer of the statutory common reserve fund into increasing capital, the balance of the statutory common fund shall not be less than 25% of the registered capital of the company before such transfer.

The company shall have no accounting books other than the statutory books. The company's capital shall not be deposited in any account opened under the name of an individual.

Appointment and Retirement of Accounting Firm

In accordance with the *Company Law*, the appointment or dismissal of the accounting firm responsible for the company's auditing shall be determined at a shareholders' general meeting, by the board of directors, or by the board of supervisors, as stipulated in the articles of association. The accounting firm should be allowed to make representations when the shareholders' general meeting, the board of directors, or the board of supervisors votes on its dismissal. The company should provide true and complete accounting evidence, accounting books, financial and accounting reports and other accounting information to the engaged accounting firm without any refusal, withholding or falsification of information.

The *Guidance for Articles of Association* provides that a company shall engage an accounting firm which is qualified with the *PRC Securities Law* to provide services including the audit of financial statements, the verification of net assets and other relevant consultancy services. The engagement term is one year and may be extended. The audit fee for the accounting firm shall also be determined by shareholders at a general meeting.

Profit Distribution

According to the *Company Law*, a company shall not distribute profits before losses are covered and the statutory common reserve fund is provided.

Amendments to the Articles of Association

Pursuant to the *Company Law*, the resolution of a shareholders' general meeting regarding any amendment to a company's articles of association requires affirmative votes by more than two-thirds of the votes held by shareholders attending the meeting.

Pursuant to the *Guidance for Articles of Association*, the company shall amend its articles of association under any of the following circumstances: (i) where, after any amendment to the *PRC Company Law* or any other applicable law or administrative regulation, the provisions of the articles of association conflict with the law and/or administrative regulations amended; (ii) where the company's circumstances change to such an extent that they are inconsistent with what is recorded in the articles of association; and (iii) where the shareholders' general meeting decides to amend the articles of association.

The *Guidance for Articles of Association* further provides that where any amendment to the articles of association adopted by a shareholders' general meeting is subject to approval by the competent authorities, such amendment shall be submitted for approval; where any amendment involves the company's registration items, the company's registration with the authority shall also be amended. In addition, an announcement shall be made in accordance with the applicable provisions provided that the amendment to the articles of association is required to be disclosed by any law or regulation.

Dissolution and Liquidation

Pursuant to the *Company Law*, a company shall be dissolved for any of the following reasons: (i) the term of its operation set out in the articles of association has expired or other events of dissolution specified in the articles of association have occurred; (ii) the shareholders have resolved at a shareholders' general meeting to dissolve the company; (iii) the company is dissolved by reason of its merger or division; (iv) the business license of the company is revoked or the company is ordered to close down or to be dissolved in accordance with the laws; or (v) the company is dissolved by a people's court in response to the request of shareholders holding shares that represent more than 10% of the voting rights of all shareholders of the company, on the grounds that the operation and management of the company has suffered serious difficulties that cannot be resolved through other means, rendering ongoing existence of the company a cause for significant losses to the shareholders' interests.

On the occurrence of the abovementioned events, the company shall make an announcement on the National Enterprise Credit Information Publicity System within ten days.

In the event of paragraphs (i) and (ii) above, the company may carry on its existence by amending its articles of association if no property has been distributed to any shareholder. The amendments to the articles of association in accordance with the provisions described above shall require the approval of more than two-thirds of voting rights of shareholders attending a shareholders' general meeting.

Where the company is dissolved under the circumstances set forth in paragraph (i), (ii), (iv) or (v) above, a liquidation group shall be formed to commence the liquidation procedure within fifteen days of the date on which the dissolution event occurs.

Where the company is dissolved under the circumstances set forth in paragraph (i), (ii), (iv) or (v) above, the liquidation procedure shall be conducted and directors shall be the company's liquidation obligor and it should establish a liquidation group within fifteen days of the date on which the dissolution event occurs. The liquidation group shall be composed of directors or any other persons determined by a shareholders' general meeting. If a liquidation group is not established within the prescribed period or the liquidation fails to effect after the establishment of a liquidation group, the interested party may file an application with a people's court, requesting that the court appoint relevant personnel to form a liquidation group to administer the liquidation. The people's court should accept such application and form a liquidation group to conduct liquidation in a timely manner.

The liquidation group may exercise following powers during the liquidation:

- to dispose of the company's assets and to prepare a balance sheet and an inventory of assets;
- to notify the creditors by notice or announcement;
- to deal with and settle any outstanding business related to the liquidation;
- to pay any outstanding tax together with any tax arising during the liquidation process;
- to settle the company's claims and liabilities;
- to distribute the company's remaining assets after its debts have been paid off; and
- to represent the company in any civil procedures.

The liquidation group shall notify the company's creditors within ten days from its establishment, and publish an announcement in newspapers or on the National Enterprise Credit Information Publicity System within sixty days.

A creditor shall lodge his claim with the liquidation group within thirty days of receipt of the notification or within forty-five days of the date of the announcement if he has not received any notification.

A creditor shall, in making his claim, state matters relevant to his creditor's rights and furnish relevant evidence. The liquidation group shall register such creditor's rights. The liquidation group shall not make any settlement to creditors during the period of the claim.

Upon disposal of the company's property and preparation of the required balance sheet and inventory of assets, the liquidation group shall draw up a liquidation plan and submit this plan to a shareholders' general meeting or a people's court for endorsement. The remaining assets of the company, after payment of liquidation expenses, employee wages, social insurance expenses and statutory compensation, outstanding taxes and the company's debts, shall be distributed to shareholders in proportion to shares held by them.

The company shall continue to exist during the liquidation period, although it cannot engage in operating activities that are not related to the liquidation. The company's property shall not be distributed to shareholders before repayments are made in accordance with the requirements described above.

Upon liquidation of the company's property and preparation of the required balance sheet and inventory of assets, if the liquidation group becomes aware that the company does not have sufficient assets to repay its liabilities, it must apply to a people's court for a declaration of bankruptcy in accordance with the laws. Following such declaration by the people's court, the liquidation group shall hand over the administration matters to the bankruptcy administrator designated by the people's court.

Upon completion of the liquidation, the liquidation group shall prepare a liquidation report and submit it to the shareholders' general meeting or a people's court for confirmation of its completion, and to the company registration authority to cancel the company's registration, and an announcement of its termination shall be published. Members of the liquidation group are required to discharge their duties in good faith and in compliance with relevant laws.

Members of the liquidation group shall be prohibited from abusing their authority in accepting bribes or other unlawful income and from misappropriating the company's properties. Members of the liquidation group are liable to indemnify the company and its creditors in respect of any loss arising from their willful or material default.

Liquidation of a company declared bankrupt according to laws shall be processed in accordance with the laws on corporate bankruptcy.

Overseas Listing

Pursuant to the Overseas Listing Trial Measures, both initial public offerings or listings in overseas markets shall be filed with the CSRC within three business days after the relevant application is submitted overseas. Subsequent securities offerings of an issuer in the same overseas market where it has previously offered and listed securities shall be filed with the CSRC within three business days after the offering is completed. Moreover, where the filing documents are complete and in compliance with stipulated requirements, the CSRC will, within twenty business days after receiving the filing documents, conclude the filing procedure and publish the filing results on the CSRC website. Where the filing documents are incomplete or do not conform to stipulated requirements, the CSRC shall request supplementation and amendment thereto within five business days after receiving the filing documents. The issuer shall then complete supplementation and amendment within thirty business days.

Loss of Share Certificates

A shareholder may, in accordance with the relevant provisions set out in the PRC Civil Procedure Law, apply to a people's court if his share certificate(s) in registered form is either stolen, lost or destroyed, for a declaration that such certificate(s) will no longer be valid. After a people's court declares that such certificate(s) are invalid, the shareholder may apply to the company for the issuance of a replacement certificate(s).

Merger and Demerger

Merger of companies may be conducted by absorption or consolidation. If companies adopt the method of absorption, the absorbed company shall be dissolved. If companies are incorporated in the form of consolidation, the parties to the merger shall be dissolved.

The parties to the merger shall enter into a merger agreement and prepare a balance sheet and a list of properties. Within ten days of the date on which the resolution on merger is made, the creditors shall be notified by the company and a public announcement shall be in the press or on the National Enterprise Credit Information Publicity System within thirty days. The creditors may require the company to repay its debts or provide guarantees for covering the debts within thirty days of receipt of the notification or within forty-five days of the date of the announcement if the creditor has not received any notification; and in case of a merger, the credits and debts of the merging parties shall be assumed by the surviving or the new company.

Where a company merges with another company in which the former holds not less than 90% of the shares, the acquired company is not required to obtain approval by resolution of its shareholders' meeting, but shall notify the other shareholders who have the right to request the company to buy its equities or shares as a reasonable price. If the price paid for a company's merger does not exceed 10% of the company's net assets, approval by resolution of its

shareholder's meeting may not be required unless otherwise provided by the company's articles of association. Where a company's merger is exempt from approval by resolution of the shareholders' meeting in the previous two cases, it shall be subject to approval by resolution of the board of directors.

In case of a division, the company's assets shall be divided and a balance sheet and an inventory of assets shall be prepared. Within ten days of the date on which the resolution on division is made, the creditors shall be notified by the company, and a public announcement shall be made in the press or on the National Enterprise Credit Information Publicity System within thirty days. The liabilities of the company which have accrued prior to the division shall be jointly borne by the separated companies, unless otherwise stipulated in the agreement in writing entered into by the company with creditors in respect of the settlement of debts prior to division.

Securities Laws and Regulations of PRC

The PRC has promulgated a number of regulations related to the issue and trading of shares as well as information disclosure. In October 1992, the State Council established the Securities Committee and the China Securities Regulatory Commission (CSRC). The Securities Committee is responsible for coordinating the drafting of securities regulations, formulating securities-related policies, planning the development of securities market, guiding, coordinating and supervising all securities-related institutions in the PRC, and administering the CSRC. The CSRC is the regulatory department of the Securities Committee, responsible for drafting regulatory provisions for the securities market, supervising securities companies, regulating the public offering of securities by PRC companies at home and abroad, overseeing securities trading, compiling securities-related statistics, and conducting relevant research and analysis. In April 1998, the State Council consolidated the two departments and reformed the CSRC.

The *Interim Provisional Regulations on the Administration of Share Issuance and Trading* covers the application and approval procedures for public offerings of equity securities, trading of equity securities, acquisition of listed companies, custody, clearing and transfer of listed equity securities, information disclosure, investigation, penalties of listed companies, and dispute resolution.

On December 25, 1995, the State Council promulgated and implemented the *Regulations of the State Council Concerning Domestic Listed Foreign Shares of Joint Stock Limited Companies* (which was repealed on March 31, 2023). The provisions mainly cover the issuance, subscription, trading and dividend declaration and other distribution of domestic listed foreign-invested shares, as well as the information disclosure of joint stock limited companies holding domestic listed foreign-invested shares.

The *Securities Law of the People's Republic of China* (the "***Securities Law***") took effect on July 1, 1999, and was revised on August 28, 2004, October 27, 2005, June 29, 2013, August 31, 2014, and December 28, 2019, respectively. The latest revision of the *Securities Law* came into effect on March 1, 2020. This is China's first national securities law, consisting of 14 chapters and 226 articles, regulating, among other things, the issuance and trading of securities, the acquisition by listed companies, and the obligations and responsibilities of stock exchanges, securities companies, and the State Council's securities regulatory authorities. The *Securities Law* comprehensively regulates the activities of securities market in PRC. Article 224 of the *Securities Law* stipulates that domestic enterprises shall comply with relevant regulations of the State Council to list their shares outside the PRC. Currently, the issuance and trading of foreign-issued shares (including H shares) are mainly governed by the rules and regulations promulgated by the State Council and the CSRC.

On November 14, 2019, the CSRC issued the *Guidance for the Application for the "Full Circulation" of Domestic Unlisted Shares of H-Share Companies*, which was partially revised on August 10, 2023 in accordance with the *Decision on Revising and Abolishing Part of Securities and Futures Policy Documents by CSRC*. The guideline aims to regulate the listing and circulation of unlisted domestic shares (including unlisted domestic shares held by domestic shareholders prior to overseas listing, unlisted domestic shares issued in China after overseas listing, and unlisted shares held by foreign shareholders) of joint-stock limited companies listed on the Hong Kong Stock Exchange (hereinafter referred to as H-Share Companies) (hereinafter referred to as "**Full Circulation**").

Unlisted domestic joint-stock companies may submit an application for "Full Circulation" when applying for overseas initial public offering and listing.

Arbitration and Enforcement of Arbitral Awards

On August 31, 1994, the SCNPC passed the *Arbitration Law of the People's Republic of China* (the "**Arbitration Law**"), which came into effect on September 1, 1995, and was amended on August 27, 2009, and September 1, 2017. According to the Arbitration Law, an arbitration committee may, before the China Arbitration Association promulgates arbitration rules, formulate interim arbitration rules in accordance with the Arbitration Law and the Civil Procedure Law. Where the parties have by agreement provided arbitration as the method for dispute resolution, the people's court will refuse to accept the case, unless the arbitration agreement is deemed invalid.

Where a dispute or claim of rights referred to in the preceding paragraph is referred to arbitration, the entire claim or dispute must be referred to arbitration, and all persons who have a cause of action based on the same facts giving rise to the dispute or claim or whose participation is necessary for the resolution of such dispute or claim, must comply with the arbitration. Disputes over the definition of shareholders and disputes over the issuer's register of shareholders need not be resolved by arbitration.

A claimant may elect for arbitration to be carried out at either the China International Economic and Trade Arbitration Commission ("**CIETAC**") in accordance with its arbitration rules, or at the Hong Kong International Arbitration Centre ("**HKIAC**") in accordance with its Securities Arbitration Rules (the "**Securities Arbitration Rules**"). Once a claimant refers a dispute or claim to arbitration, the other party shall submit to the arbitral body elected by the claimant. If the claimant elects for arbitration to be carried out at the HKIAC, any party to the dispute or claim may apply for a hearing to take place in Shenzhen in accordance with the Securities Arbitration Rules. According to the CIETAC Arbitration Rules which was amended on September 2, 2023 and implemented on January 1, 2024, CIETAC shall deal with economic and trading disputes over contractual or non-contractual transactions based on the agreement of the parties, including disputes involving Hong Kong based on the agreement of the parties. The CIETAC is established in Beijing and its branches and centers have been set up in Shenzhen, Shanghai, Tianjin, Chongqing, Zhejiang, Hubei, Fujian, Shanxi, Jiangsu, Sichuan, and Shandong.

Under the Arbitration Law and the Civil Procedure Law, an arbitral award is final and binding on the parties to the arbitration. If a party to the arbitration fails to comply with an arbitral award, the other party to the award may apply to the people's court for its enforcement. A people's court may refuse to enforce an arbitral award made by an arbitration commission if there is any irregularity on the procedures or composition of arbitrators specified by law, or if the award exceeds the scope of the arbitration agreement or is outside the jurisdiction of the arbitration commission.

A party seeking to enforce an arbitral award of a PRC arbitration tribunal against a party who, or whose property, is not within the PRC, may apply to a foreign court with jurisdiction over the case for enforcement. Similarly, an arbitral award made by a foreign arbitral body may be recognized and enforced by the PRC courts in accordance with the principle of reciprocity or any international treaty concluded or acceded to by the PRC. The PRC has acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the "**New York Convention**") adopted on June 10, 1958, pursuant to a resolution of the SCNPC passed on December 2, 1986. The New York Convention provides that all arbitral awards made in a state which is a party to the New York Convention shall be recognized and enforced by other parties thereto, subject to their rights to refuse enforcement under certain circumstances, including where the enforcement of the arbitral award is against the public policy of that state. It was declared by the SCNPC simultaneously with the accession of the PRC that (i) the PRC will only recognize and enforce foreign arbitral awards on the principle of reciprocity and (ii) the PRC will only apply the New York Convention in disputes considered under PRC laws to arise from contractual and non-contractual mercantile legal relations.

An arrangement was reached between Hong Kong and the Supreme People's Court for the mutual enforcement of arbitral awards. On June 18, 1999, the Supreme People's Court adopted the *Arrangement Concerning Mutual Enforcement of Arbitral Awards between the Mainland and the Hong Kong Special Administrative Region*, which took effect on February 1, 2000. The above arrangement was amended by the *Supplemental Arrangement Concerning the Mutual*

Enforcement of Arbitral Awards between the Mainland and the Hong Kong Special Administrative Region, which was adopted by the Supreme People's Court and took effect on November 27, 2020. In accordance with this arrangement, awards made by mainland arbitral authorities under the Arbitration Law can be enforced in Hong Kong, and Hong Kong arbitral awards are also enforceable in the mainland.

Judicial Judgement and Its Enforcement

On January 14, 2019, the Judicial Committee of the Supreme People's Court adopted the *Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region*, which came into effect on January 29, 2024 and seeks to establish a mechanism with greater clarity and certainty for recognition and enforcement of judgements in wider range of civil and commercial matters between Hong Kong and the mainland China. The arrangement discontinued the requirement for a choice of court agreement for bilateral recognition and enforcement. The arrangement further stipulates, among others, the scope and particulars of judgments, the procedures and methods of the application for recognition and enforcement, the review of the jurisdiction of the court that issued the original judgement, the circumstances where the recognition and enforcement of judgement shall be refused, and the approaches towards remedies for the reciprocal recognition and enforcement of judgements in civil and commercial matters between the courts in Mainland China and those in Hong Kong. Upon implementation of this arrangement, the *Arrangement on Reciprocal Recognition and Enforcement of Judgments in Civil and Commercial Matters by the Courts of the Mainland and of the Hong Kong Special Administrative Region Pursuant to Choice of Court Agreements between Parties Concerned*, adopted by the Judicial Committee of the Supreme People's Court on June 12, 2006 and effective from August 1, 2008, has been repealed.

This Appendix contains a summary of major provisions of the Articles of Association. This Appendix mainly provides potential [**REDACTED**] with an overview on the Articles of Association. As it is only a summary, it does not contain all the information that may be important to potential [**REDACTED**].

SHARES AND REGISTERED SHARE CAPITAL

The Company's shares shall be in the form of share certificates.

The issuance of the shares of the Company shall be conducted in the principle of openness, fairness and justness, and each share of the same class shall be entitled to equal rights.

For shares issued at the same time and within the same class, it shall be issued in the same conditions and price; and the price paid by any organization or individual for each share shall be the same.

INCREASE/DECREASE, REPURCHASE AND TRANSFER OF SHARES

Increase/Decrease of Shares

The Company may, based on its operating and development needs and in accordance with laws and regulations and the resolution of any general meeting, increase its registered capital by the following methods:

(i) a public offering of shares upon approval by the securities regulatory authority in the place where the shares of the Company are listed;

(ii) a private issuance of shares;

(iii) offering of bonus shares to existing shareholders;

(iv) the conversion of reserve funds into share capital;

(v) placement of new shares to existing shareholders; and

(vi) any other methods provided in laws and administrative regulations and approved by the securities regulatory authorities in the place where the shares of the Company are listed.

The Company may reduce its registered capital. If the Company reduces its registered capital, it shall do so by the procedures set forth in the Company Law and other related requirements and the Articles of Association.

Repurchase of Shares

In accordance with applicable laws, administrative regulations, regulations of the authorities and the Articles of Association, the Company shall not purchase its own shares other than in any of the following circumstances:

(i) reducing its registered capital;

(ii) merging with another company which holds shares in the Company;

(iii) utilizing the shares for employee stock ownership plan or equity incentive plan;

(iv) acquiring its own shares at the request of its shareholders who vote at general meeting against a resolution regarding a merger or separation;

(v) utilizing the shares for conversion of corporate bonds which are convertible into shares issued by a listed company;

(vi) maintaining corporate value and shareholders' interests by the Company as and when necessary;

(vii) such other circumstances as permitted by laws and administrative regulations.

The Company may repurchase its shares by an open centralized transaction method or other methods as permitted by laws and regulations, the CSCR and the securities regulatory authorities and the other securities exchange(s) in the place where the shares of the Company are listed, subject to compliance with the requirements prescribed by applicable laws, administrative regulations, regulations of the authorities and securities regulatory rules of the place where the shares of Company are listed.

The Company's repurchase of its own shares under the circumstance as stipulated in items (iii), (v) or (vi) of the preceding paragraph shall be conducted by an open centralized transaction method.

The Company's purchase of its own shares under the circumstance as stipulated in items (i) and (ii) of the preceding paragraph shall be subject to a resolution of the general meeting; the Company's purchase of its own shares under the circumstance as stipulated in items (iii), (v) or (vi) of the preceding paragraph may be subject to a resolution of the meeting of the Board of Directors with more than two thirds of Directors present, subject to compliance with the securities regulatory rules of the place where the shares of the Company are listed.

The shares acquired by the Company under the circumstance stipulated in item (i) hereof shall be cancelled within ten days upon the date of acquisition of shares; the shares shall be transferred or cancelled within six months if the repurchase of shares is made under the circumstances stipulated in either item (ii) or (iv); and the shares held in total by the Company after the repurchase under any of the circumstances stipulated in item (iii), (v) or (vi) shall not exceed 10% of the Company's total issued shares, and shall be transferred or cancelled within three years.

Transfer of Shares

The shares of the Company held by promoters shall not be transferred within one year of the establishment of the Company. Shares issued prior to the public issuance of shares by the Company shall not be transferred within one year from the date the shares of the Company were listed and traded at the stock exchange.

Directors, Supervisors and the senior management members of the Company shall declare to the Company their shareholdings in the Company and any changes of such shareholdings; they shall not transfer more than 25% of the total shares they hold in the Company annually during their tenure; and they shall not transfer the shares they held within one year from the date on which the Company's shares are listed and traded at the stock exchange, nor within six months after their resignation from their positions with the Company.

If a Director, Supervisor or senior management member of the Company, or a shareholder holding more than 5% of the shares sells the shares of the Company or other securities with the nature of equity within six months after buying those shares, or buys the shares within six months after selling those shares, all the gains arising thereof shall belong to the Company, and such gains shall be collected by the Board of Directors of the Company. However, the following circumstances shall be excluded where a securities company underwrites unsold shares, thereby holding more than 5% of the shares or where the provisions of the CSRC are applicable. If listing rules of the stock exchange of the place(s) where the shares of the Company are listed provide otherwise on restrictions on transfers of shares, such rules shall prevail.

Shareholders and the General Meetings

Shareholders

The Company shall keep a register of shareholders according to the evidence provided by the share registrars. The register of shareholders shall be the sufficient evidence of the shareholders' shareholding in the Company. The original register of holders of H shares shall be maintained in Hong Kong and made available for shareholders' inspection, but the Company may suspend the registration of shareholders in accordance with applicable laws and regulations and the requirements of the securities regulatory rules of the place where the shares of the Company are listed. Shareholders have rights and assume obligations in proportion to the class of shares they hold; Shareholders who hold the same class of shares shall enjoy equal rights and assume the same obligations.

The shareholders of the Company shall be entitled to the following rights:

(i) to be entitled to dividends and other forms of distribution in proportion to the number of shares held;

(ii) the right to propose, convene and preside over, to attend or appoint a proxy to attend general meetings and to exercise the corresponding voting rights in accordance with laws, unless individual shareholders are required by the securities regulatory rules of the place where the shares are listed or applicable laws and regulations to abstain from voting on individual matters;

(iii) to supervise and manage the business activities of the Company and to put forward proposals or raise inquiries;

(iv) to transfer, donate, or pledge shares held by them in accordance with the laws, administrative regulations and provisions of the Articles of Association;

(v) to review the Articles of Association, the register of shareholders, corporate bond stubs, minutes of general meeting, resolutions of the Board of Directors, resolutions of the Supervisory Committee and financial and accounting reports;

(vi) upon termination or liquidation of the Company, to participate in the distribution of remaining assets of the Company in accordance with the number of shares held;

(vii) with respect to shareholders who vote against any resolution adopted at the general meeting on the merger or division of the Company, to require the Company to acquire the shares held by them;

(viii) other rights conferred by laws, administrative regulations, regulations of the authorities, the securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association.

If the procedures for convening, or the method of voting at a general meeting or the Board of Directors are in breach of laws, administrative regulations and the Articles of Association, or the content of a resolution violates the Articles of Association, shareholders shall have the right to petition the People's Court to revoke the resolution within 60 days from the date of the adoption of such resolution.

The shareholders of the Company shall assume the following obligations:

(i) to abide by laws, administrative regulations and the Articles of Association;

(ii) to pay subscription monies according to the number of shares subscribed and the method of subscription;

(iii) not to surrender the shares unless required by the laws and regulations;

(iv) not to abuse the shareholder's rights so as to damage the interests of the Company or those of any other shareholders; not to abuse the independent legal person status of the Company and the limited liability owed by the shareholders so as to damage the interests of the Company's creditors;

(v) other obligations imposed by laws, administrative regulations and the Articles of Association.

Where shareholders of the Company abuse their shareholders' rights and thereby causing loss to the Company or other shareholders, such shareholders shall be liable for indemnity in accordance with laws.

Where shareholders of the Company abuse the Company's status as an independent legal entity and the limited liability owed by the shareholders for the purposes of evading from making debt repayments, thereby materially impairing the interests of the creditors of the Company, such shareholders shall be jointly and severally liable for the debts owed by the Company.

General Provisions on the General Meetings

The general meetings shall be the organ of power of the Company and shall exercise the following duties and powers according to laws:

(i) to decide on the operating guidelines and investment plans of the Company;

(ii) to elect and replace the Directors and Supervisors which are not appointed as representatives of the employees, and to decide on the remuneration of the relevant Directors and Supervisors;

(iii) to consider and approve reports of the Board of Directors;

(iv) to consider and approve reports of the Supervisory Committee;

(v) to consider and approve the Company's annual financial budgets and final accounts;

(vi) to consider and approve the Company's profit distribution plans and plans for making up losses;

(vii) to consider and approve adjustment or change to the Company's profit distribution policy;

(viii) to decide on increases or reductions in the Company's registered capital;

(ix) to make resolution on the issuance of corporate bonds;

(x) to make resolutions on the merger, demerger, spin-off, liquidation or change of corporate form of the Company;

(xi) to amend the Articles of Association;

(xii) to make resolutions on the issue of appointment, dismissal or non-reappointment of accounting firms;

(xiii) to examine and approve the guarantee issues as prescribed in Article 44 of the Articles of Association;

(xiv) to consider any matters on the acquisition or disposal of a substantial assets during a year, which involves an amount exceeding 30% of the latest audited total assets of the Company for the most recent period;

(xv) to examine and approve matters relating to the change of purpose of raised fund;

(xvi) To examine equity incentive plan and employee stock ownership plan;

(xvii) to examine the connected transactions between the Company and connected parties (except for the Company's provision of guarantees, donated cash assets, and debts that are simply reduced or exempted from the obligations of the listed company) exceeds RMB30 million and represents more than 5% of the absolute value of the Company's latest audited net assets, and other connected transactions subject to the general meeting for deliberation in accordance with the securities regulatory rules of the place where the shares of the Company are listed;

(xviii) to examine the proposals of the shareholders, individually or in the aggregate, holding 3% or more of the voting shares of the Company;

(xix) to examine other matters required by laws, administrative regulations, regulations of the authorities, securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association, to be resolved by the general meeting.

The following external guarantees of the Company shall be considered and approved by the general meeting:

(i) any single guarantee of which the amount exceeds 10% of the audited net assets for the latest financial year;

(ii) any guarantee provided after the total amount of the external guarantees provided by the Company and its subsidiaries reaches or exceeds 50% of the audited net assets for the latest financial year;

(iii) any guarantee provided after the total amount of the external guarantees provided by the Company and its subsidiaries exceeds 30% of the audited total assets for the latest financial year;

(iv) any guarantee whose amount exceeds 30% of the Company's latest total audited assets according to the principle of cumulative calculation of guarantee amount for 12 consecutive months;

(v) any guarantee provided to the guaranteed object with a debt-to-asset ratio of more than 70% as indicated by the data in the latest financial statements;

(vi) any guarantee provided to shareholders, actual controllers and their related parties; and

(vii) any other guarantees provided by laws, administrative regulations, rules and regulations, securities regulatory rules of the place where the shares of the Company are listed or other regulatory documents or the Articles of Association.

For guarantee matters within the scope of authorization of the Board of Directors, in addition to the approval of more than half of all Directors, the approval of over two-thirds of the Directors present at the meeting of the Board of Directors shall be required. The guarantee set out in item (iv) above shall be approved by more than two thirds of voting rights held by shareholders present at the meeting.

Shareholders' general meetings include annual general meetings and extraordinary general meetings. The annual general meeting shall be held once every year within six months after the end of the previous accounting year.

The Company shall hold an extraordinary general meeting within two months from the date of occurrence of any of the following circumstances:

(i) the number of Directors is less than that prescribed by the Company Law or less than the two thirds of the amount required by the Articles of Association;

(ii) the uncovered losses are in excess of one-third of the Company's total paid-in share capital;

(iii) shareholders individually or collectively holding 10% (including 10%) of the Company's shares request in writing;

(iv) the Board of Directors considers it necessary;

(v) the Supervisory Committee proposes to hold such a meeting;

(vi) more than two independent Directors propose to convene the meeting;

(vii) such other circumstances as provided for by laws, administrative regulations, regulations of the authorities, securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association.

Convening of the General Meetings

Independent Directors shall have the right to propose to the Board of Directors to convene extraordinary general meetings. When an independent Director proposes to convene an extraordinary general meeting, the Board of Directors shall issue written feedback on consent or non-consent to the convening of the extraordinary general meeting within 10 days from the receipt of the proposal according to the laws, administrative regulations and the Articles of Association. If the Board of Directors gives consent to convene an extraordinary general meeting, it shall, within five days from the passing of the Board of Directors resolution, issue a notice on convening the general meetings. If the Board of Directors does not give consent to convene an extraordinary general meeting, the Board of Directors shall state the reason and issue an announcement.

The Supervisory Committee shall have the right to propose the convening of extraordinary general meetings and submit such proposal in writing to the Board of Directors. In accordance with the laws, administrative regulations and the Articles of Association, the Board of Directors shall issue written feedback on consent or non-consent to the convening of the extraordinary general meetings within 10 days from the receipt of the proposal. If the Board of Directors gives consent to convene an extraordinary general meeting, it shall, within five days from the passing of the Board of Directors resolution, issue a notice on convening the general meetings. Any changes to the original proposal in the notice shall obtain the consent of the Supervisory Committee. If the Board of Directors does not give consent to convene an extraordinary general meeting or does not issue feedback within 10 days from the receipt of the proposal, the Board of Directors shall be deemed as unable to perform or failed to perform the duties of convening a general meeting. In such cases, the Supervisory Committee may proceed to convene and chair the meeting on its own.

Shareholders that, either individually or jointly, hold over 10% of shares of the Company have the right to propose to the Board of Directors for the convening of an extraordinary general meeting, and such proposal shall be made in writing to the Board of Directors and explain the topic of the meeting. The Board of Directors shall, in accordance with laws, administrative regulations, and the Articles of Association, provide a written feedback within 10 days after receiving the proposal with respect to whether it agrees with the proposal to convene an extraordinary general meeting. In event that the Board of Directors agrees to convene an extraordinary general meeting, a notice of the general meeting shall be provided within five days of such resolution by the Board of Directors. Alterations to the original proposals in the notice shall be approved by the relevant shareholders. In the event that the Board of Directors disagrees with the convening of an extraordinary general meeting, or fails to provide any feedback within 10 days after receiving the proposal, shareholders that, either individually or jointly, hold over 10% of shares of the Company have the right to propose to the Supervisory Committee for the convening of an extraordinary general meeting, and such proposal shall be made in writing to the Supervisory Committee. In event that the Supervisory Committee agrees to convene an extraordinary general meeting, a notice of the general meeting shall be issued within five days of receipt of such request. Alterations to the original proposals in the notice shall be approved by the relevant shareholders. In event that the Supervisory

Committee did not provide a notice of the general meeting within the specified timeframe, the Supervisory Committee shall be considered to be unwilling to convene and preside over the general meeting. The shareholders that, either individually or jointly, hold over 10% of shares of the Company for a period of 90 consecutive days or more may at their sole discretion convene and preside over the extraordinary general meeting.

Where the Supervisory Committee or shareholders decide to convene a general meeting on its/their own, it/they shall notify the Board of Directors in writing and file relevant evidential documents with the Shanghai Stock Exchange. The Shareholders who convene the general meeting shall hold no less than 10% shares of the Company when any resolution is made at such meeting. The Supervisory Committee or the convening shareholders shall, when the notice of general meeting or announcement of resolutions of general meeting is issued, submit relevant evidential documents to the authority appointed by CSRC in the location of the Company and the Shanghai Stock Exchange.

For the general meetings convened by the Supervisory Committee or shareholders, the Board of Directors and the secretary of the Board of Directors shall cooperate. The Board of Directors shall provide the register of shareholders as at the date of record. Where the Board of Directors fails to provide the register of shareholders, the convener(s) may apply to the securities registration and clearing institution for such a register of shareholders with the announcement relating to the notice of convening the general meeting. The register of shareholders obtained by the convener shall not be used for any purpose other than convening a general meeting.

Proposals and Notices of the General Meeting

The contents of the general meeting proposals shall be within the scope of powers of the general meeting and such proposals shall have precise agenda and specific matters to be resolved, and be in compliance with the relevant provisions of laws, administrative regulations and securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association.

As a general meeting is convened, the Board of Directors, Supervisory Committee and any of the shareholders individually or jointly holding more than 3% of the shares of the Company may propose any resolution to the Company. Any of the shareholders individually or jointly holding more than 3% of the shares of the Company may submit an interim proposal in writing to the convener at least 10 days prior to the convention of the general meeting. If the proposal meets the requirements of Article 54 of the Articles of Association, the convener shall issue a supplemental notice to the general meeting within two days upon receipt of such proposal and announce the contents of the extraordinary resolution. If, according to the securities regulatory rules of the place where the shares of the Company are listed, the general meeting needs to be postponed due to the publication of a supplementary notice of the general meeting, the convening of the general meeting shall be postponed in accordance with the securities regulatory rules of the place where the shares of the Company are listed.

The convener shall notify all shareholders in writing (including announcement) 21 days prior to the annual general meeting, and 15 days prior to an extraordinary general meeting. When calculating the interval between the notice of the general meeting and the date of the meeting, it should not include the day of the meeting, but include the day the notice is issued.

The notice of the general meeting shall contain the following details:

(i) the time, venue and duration of the meeting;

(ii) matters and proposals to be considered at the meeting;

(iii) contain a conspicuous statement that all shareholders are entitled to attend the general meeting and may appoint a proxy in writing to attend and vote on his/her behalf at the meeting, and that a proxy need not be a shareholder of the Company;

(iv) the date of registration of equity entitlements for shareholders entitled to attend the general meeting;

(v) it shall contain the names and telephone numbers of permanent contact persons for the affairs of the meeting;

(vi) the time and procedures for voting online or by other means;

(vii) other requirements stipulated by laws, administrative regulations, departmental regulations, securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association.

The notice of the general meeting and its supplementary notice shall include other matters prescribed by securities regulatory rules of the place where the shares of the Company are listed or the Articles of Association and shall fully and completely disclose the specific contents of all proposals. If any matter to be discussed requires opinions of the independent Directors, the opinions and reasons of the independent Directors shall be disclosed together with the issuance of such notice and its supplementary notice.

Holding of the General Meeting

Any shareholder in the register of shareholders on the record date or his proxy shall be entitled to attend the general meeting, and have the right to vote pursuant to the laws, regulations, and the Articles of Association. Shareholders can attend the general meeting in person or appoint proxies to attend and vote on their behalf. Such proxy needs not necessarily be a shareholder of the Company.

Individual shareholders attending the meeting in person shall present their identity cards or other valid documents or certificates, or stock account cards as a proof of their identities. Proxies attending the meeting on behalf of shareholders shall present their valid identity cards and power of attorney.

A corporate shareholder shall attend the meeting by its legal representative or by proxies appointed by the legal representative. The legal representative present at the meeting shall produce his/her identity card and valid proof showing his/her status, and the proxy present at the meeting shall present his/her identity card and the power of attorney in writing issued by the legal representative in accordance with laws, except for shareholders who are recognized clearing houses and their nominees as defined by relevant regulations or securities regulatory rules of the place where the shares of the Company are listed, which may come into effect from time to time under Hong Kong laws.

The power of attorney issued by a shareholder to appoint a proxy to attend general meeting shall specify:

(i) the name of the proxy;

(ii) whether or not the proxy has any voting right;

(iii) directive to vote for or against or abstain from voting on each and every issue included in the agenda of the general meeting;

(iv) the date of issue and validity period of the power of attorney;

(v) signature (or seal) of the principal; If the principal is a corporate shareholder, it shall be stamped with the seal of the legal person or signed by a legally authorized person.

Any form issued to a shareholder by the Board of Directors for use by him for appointing a proxy shall allow the shareholder to freely instruct the proxy to vote in favour of or against each resolution and to give instructions on the matters to be voted on in respect of each question at the meeting. Such form shall contain a statement that, in the absence of instructions by the shareholder, his proxy may vote as he thinks fit.

If the power of attorney for voting by proxy is signed by the authorized person of the principal, the power of attorney for signing or other authorization documents shall be notarized. The notarized the power of attorney or other authorization documents and the power of attorney for voting by proxy shall be placed at the domicile of the Company or other place specified in the meeting.

If the principal is a legal person, its legal representative or the person authorized by the Board of Directors or other decision-making authorities shall attend the general meeting of the Company as a representative.

If a shareholder is recognized as a clearing house (or its nominee), the shareholder is entitled to authorize one or more person(s), as it thinks fit, to act as its proxy at any general meeting or creditors' meeting. However, if more than one person is authorized, the power of attorney shall set out the number and class of shares represented by each of the persons so authorized. The power of attorney shall be signed by the authorized personnel of the recognized clearing house. A person so authorized may exercise rights (without presenting any share certificate, notarized authorization and/or other evidence indicating that he/she has been duly authorized), and must have the same legal rights as other shareholders, including the right to speak and vote, on behalf of the recognized clearing house (or its nominee), as if he/she was an individual shareholder of the Company.

When a general meeting is convened, the Directors, Supervisors and the secretary to the Board of Directors of the Company shall attend the meeting, and the President and other senior management members shall be present at the meeting. Subject to the securities regulatory rules of the place where the shares of the Company are listed, the aforementioned persons may attend or be present at the meeting via internet, video, telephone or other means with equivalent effect.

Shareholders' general meetings shall be convened by the Board of Directors in accordance with laws, and the general meeting shall be presided over by Chairman of the Board of Directors. Where the Chairman of the Board of Directors is unable or fails to perform the duty, the meeting shall be presided over by a Co-Chairman (if any) jointly elected by a simple majority of the Directors if the Company has two or more Co-Chairmen; When Co-Chairman of the Board of Directors is unable or fails to perform the duty, the meeting shall be presided over by the Deputy Chairman (if any) jointly elected by a simple majority of the Directors if the Company has two or more Deputy Chairmen. Where the Deputy Chairman of the Board of Directors is unable or fails to perform the duty, a Director jointly elected by more than half of the Directors will preside over the meeting. A general shareholders' meeting convened by the Supervisory Committee itself shall be presided over by the Chairman of the Supervisory Committee. Where the Chairman of the Supervisory Committee is unable or fails to perform the duty, the Deputy Chairman of the Supervisory Committee (if any) shall preside over the meeting, and when the Deputy Chairman of the Supervisory Committee is unable or fails to perform the duty, a Supervisor jointly elected by more than half of the Supervisors shall preside over the meeting. A general meeting convened by the shareholders themselves shall be presided over by a representative elected by the conveners. If, for any reason, the conveners are unable to elect a representative as a presider to preside over the meeting, the shareholders holding the most voting shares among the conveners (including proxies) shall act as the presider to preside over the meeting.

In the event that the general meeting cannot proceed due to violation of the rules of procedure by the presider of the meeting, the general meeting may appoint one person as the presider of the meeting upon consent of a simple majority of the voting shareholders present at the meeting and continue the meeting.

Voting of the General Meeting

Resolutions of the general meeting shall be divided into ordinary resolutions and special resolutions. An ordinary resolution must be passed by votes representing a simple majority of the voting rights represented by the shareholders (including proxies) present at the meeting. A special resolution must be passed by votes representing more than two-thirds of the voting rights represented by the shareholders (including proxies) present at the meeting.

The following matters shall be resolved by an ordinary resolution at a general meeting:

(i) the work report of the Board of Directors and the Supervisory Committee;

(ii) the profit distribution plan and plan for covering losses formulated by the Board of Directors;

(iii) the connected transaction matters subject to the general meeting for deliberation;

(iv) the election and removal of members of the Board of Directors and the Supervisory Committee and their remunerations and the method of payment thereof;

(v) the Company's annual financial budgets and final accounts plans;

(vi) make resolutions on the engagement, re-engagement or dismissal of the accounting firm or the remuneration of the accounting firm by the Company;

(vii) the annual reports of the Company;

(viii) other matters requiring approval by special resolutions in accordance with laws, administrative regulations, requirements of the securities regulatory rules of the place where the shares of the Company are listed or the Articles of Association.

The following matters shall be resolved by a special resolution at a general meeting:

(i) increase or reduction in the registered capital of the Company and issue any type of shares, warrants, and other similar securities;

(ii) issuance of corporate bonds;

(iii) division, merger, change of the corporate form, dissolution and liquidation of the Company (including voluntary liquidation of the Company);

(iv) amendments to the Articles of Association;

(v) any purchase or disposal of substantial assets made or guarantee provided by the Company within one year, the amount of which exceeds 30% of the latest audited total assets of the Company;

(vi) adjustment or amendment of profit distribution policy;

(vii) repurchase of shares of the Company;

(viii) equity incentive plan;

(ix) any other matters as required by laws, administrative regulations, securities regulatory rules of the place where the shares of the Company are listed or the Articles of Association and matters which, if resolved by way of an ordinary resolution at a general meeting, will have a material impact on the Company and need be adopted by way of special resolutions.

A shareholder (including proxies) when voting at a general meeting may exercise voting rights in accordance with the number of shares carrying the right to vote. Each share shall have one voting right.

For significant matters to be decided in general meetings that would affect the interests of medium and small investors, the votes by medium and small investors shall be counted separately. The result of such separate vote counting shall be timely disclosed.

The shares of the Company held by itself have no voting rights and shall not be counted into the total number of shares carrying voting rights at the general meeting.

If a shareholder purchases the shares of the Company with voting rights in violation of the provisions of paragraphs 1 and 2 of Article 63 of the Securities Law, the voting rights of shares exceeding the prescribed proportion shall not be exercised within 36 months after the purchase, and shall not be counted into the total number of shares carrying voting rights at the general meeting.

If any shareholders should give up the voting right for certain proposal or are restricted to be only able to vote for or against certain proposal in accordance with the provisions of applicable laws and regulations and the Hong Kong Listing Rules, the votes by those shareholders or their representatives shall not be counted in case of any violation of the relevant provisions or restriction.

The Board of Directors of the Company, independent Directors, shareholders holding more than one percent of the shares with voting rights or investor protection institutions established according to laws, administrative regulations or provisions of the CSRC may publicly solicit voting rights from the shareholders. Such information as the specific vote intention shall be sufficiently disclosed to the solicited persons in respect of solicitation of the

shareholders' right to vote. It is not permitted to solicit the shareholders' right to vote in a chargeable or disguised chargeable manner. Saving for statutory conditions, the Company shall not impose restriction on minimum shareholding proportion against solicitation of voting rights.

When a connected transaction is considered at a general meeting, the connected shareholders shall not participate in casting votes and the number of shares with voting rights represented by them shall not be counted in the total number of valid votes. The announcement of the resolutions of the general meeting shall fully disclose the voting status of the non-connected shareholders. Such connected transaction shall be voted by the non-connected shareholders attending the meeting on a poll, with the consent of more than half of the valid voting rights of the non-related shareholders who voted at the meeting; if such transaction falls within the scope of a special resolution, it shall be approved by more than two-thirds of the valid voting rights held by the shareholders (including proxies of shareholders) attending the general meeting. If any shareholders should give up the voting right for certain proposal or are restricted to be only able to vote for or against certain proposal in accordance with the provisions of applicable laws and regulations and the Hong Kong Listing Rules, the votes by those shareholders or their representatives shall not be counted in case of any violation of the relevant provisions or restriction.

Board of Directors

Directors

The Directors of the Company shall include executive Directors, non-executive Directors and independent Directors. The Directors of the Company shall be natural persons. Person falling under any of the following circumstances may not act as the Directors of the Company:

(i) a person who is unable or has limited ability to undertake any civil liabilities;

(ii) a person who has been convicted of an offense of bribery, corruption, embezzlement or misappropriation of property, or the destruction of socialist market economy order; or who has been deprived of his political rights due to his crimes, in each case where less than five years have elapsed since the date of completion of the sentence;

(iii) a person who has been a former director, factory manager or manager of a company or an enterprise that has entered into insolvent liquidation and who was personally liable for the insolvency of such company or enterprise, where less than three years have elapsed since the date of the completion of the bankruptcy and liquidation of the company or enterprise;

(iv) a person who has been a legal representative of a company or an enterprise that has had its business license revoked due to violations of the law and has been ordered to close down by law and the person was personally responsible, where less than three years have elapsed since the date of such revocation;

(v) a person who is liable for a relatively large amount of debts that are overdue;

(vi) a person who has been barred from the securities market by the CSRC for a certain period of time and such period has not expired yet;

(vii) any other circumstances stipulated by applicable laws, administrative regulations, regulations of the authorities, or requirements under the Listing Rules of the place where the shares of the Company are [**REDACTED**].

Directors shall be elected or replaced by the general meeting, and may further be removed from their office prior to the conclusion of the term thereof by the general meeting. The term of office of a Director shall not be more than three years, which is renewable upon re-election.

The tenure of a Director shall be from the date of appointment to the expiry of tenure of the current Board of Directors. If a Director's tenure expires but a re-elected Director is not elected in time, then before the re-elected Director holding office, the original Director shall still perform the duties as Director, in accordance with applicable laws, administrative regulations, regulations of the authorities and the Articles of Association.

Directors may be concurrently held by the President or other senior management members, but the total number of Directors concurrently serving as the President or other senior management members shall not exceed one half of the total number of Directors of the Company.

It is unnecessary for Directors to hold shares of the Company.

A Director may propose resignation before expiry of tenure, by filing a resignation report in writing to the Board of Directors. The Board of Directors will disclose the relevant information in a timely manner in accordance with the provisions of the securities regulatory rules of the place where the shares of the Company are listed. If the resignation of a Director causes the number of Board of Directors members to be less than the quorum, and would result in the proportion of independent Directors on the Board of Directors or its special committees not in compliance with the provisions of laws and regulations or the Articles of Association, or if there is a lack of accounting professionals among the independent Directors, then the original Director shall still perform the duties as Director under the applicable laws, administrative regulations, regulations of the authorities and the Articles of Association before the re-elected Directors take office. Otherwise, a Director's resignation shall be effective from the time such resignation report is delivered to the Board of Directors.

Board of Directors

The Company shall establish a Board of Directors, who shall be accountable to the general meeting. The Board of Directors of the Company shall comprise nine members, and the number of independent Directors shall not be less than one-third.

The Board of Directors shall exercise the following powers and duties:

(i) to convene the general meeting and to report on its work to the general meeting;

(ii) to implement the resolutions adopted by the general meeting;

(iii) to determine the Company's business plans and investment plans;

(iv) to formulate the Company's plans for annual financial budgets and final accounts;

(v) to formulate the Company's profit distribution plans and plans to cover losses;

(vi) to formulate the plans for the increase or reduction of the Company's registered capital and the plans for the issuance of the Company's bonds or other securities and listing plans;

(vii) to draft the plans for major acquisitions, repurchases of the Company's shares or merger, division, dissolution or change of the corporate form of the Company;

(viii) to determine, within the scope authorized by the general meeting, such matters as the Company's external investments, the purchase and sale of assets, asset mortgages, external guarantees, entrusted wealth management, related-party transactions and external donations;

(ix) to decide on the establishment of the Company's internal management organizations;

(x) to appoint or remove the Company's President, the secretary of the Board of Directors, and, according to the nomination of the President, to appoint or remove the senior management members of the Company, such as the Vice President and chief financial officer and decide on matters relating to their remuneration and rewards;

(xi) to formulate and amend the Company's basic management policy;

(xii) to formulate the plans for the amendment of the Articles of Association;

(xiii) to manage the Company's information disclosure;

(xiv) to propose to the general meeting the appointment or replacement of an accounting firm that performs audits for the Company;

(xv) to listen to the work report of the President of the Company and inspect the work of the President;

(xvi) Other powers and duties conferred by laws, administrative regulations, regulations of the authorities, securities regulatory rules of the place where the shares of the Company are listed, or the Articles of Association.

The Board of Directors shall have the right to dispose of, guarantee, make external investment, finance, engage in connected transactions, and make external donations within a certain limit, subject to compliance with the securities regulatory rules of the place where the shares of Company are listed. The Board of Directors shall abide by the principles of legality, compliance, prudence, and safety when exercising the above-mentioned rights, establish strict review and decision-making procedures, and organize relevant experts and professionals to review major investment projects, and submit them to the general meeting for approval. The specific approval authority of the Board of Directors is as follows:

(i) the disposal of assets other than those that require approval by the general meeting as stipulated in Article 43 of the Articles of Association refers to the purchase, sales, and restructuring of creditor's rights and debts;

(ii) external investments with a total amount not exceeding 30% of the Company's latest audited total assets within a complete accounting year, including equity investments, bond investments, entrusted wealth management, entrusted loans, and other legally compliant corporate investment activities;

(iii) financing that does not exceed 60% of the audited net assets of the previous year within a complete accounting year, which refers to the Company's bond financing to financial institutions and other enterprises (but does not include issuing bonds);

(iv) external guarantees other than those listed in Article 44 of the Articles of Association (including but not limited to asset mortgages, pledges, guarantees, etc.);

(v) connected transactions between the Company and its affiliated natural persons with a transaction amount of over RMB300,000 (excluding external guarantees), and related party transactions with affiliated legal persons with a transaction amount of over RMB3 million and accounting for more than 0.5% of the absolute value of the Company's latest audited net assets (excluding external guarantees) within a complete accounting year.

When exercising the above-mentioned powers and duties, the Board of Directors shall comply with relevant laws, regulations, rules, and the Rules Governing the Listing of Shares on the Shanghai Stock Exchange and Hong Kong Listing Rules. Subject to compliance with the listing rules of the place where the shares of Company are listed, the Board of Directors may authorize the Chairman, the President or the related internal institutions to make decisions and exercise the aforementioned powers and duties of the Board of Directors as stipulated in the Articles of Association during its closing period. The specific decision-making authority shall be clarified by the resolution of the Board of Directors or relevant rules and regulations of the Company.

The Board of Directors shall have one Chairman and may have Co-Chairman and Deputy Chairman according to the needs of the work. The Chairman, the Co-Chairman and the Deputy Chairman shall be elected or removed by more than half of all the Directors for a term of three years and shall be re-elected and re-appointment upon expiration.

The Chairman shall exercise the following powers and duties:

(i) presiding over general meeting, convening and presiding over meetings of the Board of Directors;

(ii) supervising and inspecting the implementation of resolutions of the Board of Directors;

(iii) signing the shares, corporate bonds and other securities of the Company;

(iv) signing important documents of the Board of Directors and other documents that should be signed by the Company's legal representative;

(v) exercising the powers and duties of the legal representative;

(vi) in the event of a force majeure emergency such as a catastrophic natural disaster, exercise the special right to dispose of the Company's affairs in accordance with laws, regulations, securities regulatory provisions of the place where the shares of the Company are listed and the interests of the Company, and report to the Board of Directors of the Company and general meeting afterwards;

(vii) other powers and duties granted by the Board of Directors.

The Co-Chairman and Deputy Chairman of the Company assist the Chairman in his work. Where the Chairman is unable or fails to perform its duties, such duties shall be performed by the Co-Chairman (if the Company has two or more Co-Chairmen, such duties shall be performed by the Co-Chairman jointly elected by a simple majority of Directors); if the Co-Chairman is unable or fails to perform such duties, such duties shall be performed by Deputy Chairman (if the Company has two or more Deputy Chairmen, such duties shall be performed by the Deputy Chairman jointly elected by a simple majority of Directors); if the Deputy Chairman is unable or fails to perform such duties, such duties shall be performed by a Director jointly elected by a simple majority of Directors.

The Board of Directors shall hold at least one meeting every quarter, convened by the Chairman, and notify all Directors and Supervisors in writing 14 days before the meeting is held. Shareholders representing more than one tenth of the voting rights, or more than one third of the Board of Directors or Supervisory Committee, may propose to convene an extraordinary general meeting of the Board of Directors. The Chairman shall convene and preside over the meeting of the Board of Directors within 10 days after receiving the proposal. The Chairman may also convene and preside over extraordinary general meetings of the Board of Directors when deemed necessary.

Notice of extraordinary general meeting of the Board of Directors may be delivered by notice in writing (include by hand, via facsimile), telephone, e-mail or SMS notification. The notification deadline is three days before the meeting is held. However, in case of emergency, where an extraordinary general meeting of the Board of Directors is required to be convened as soon as possible, the notice of such meeting may be issued by phone or other oral methods at any time. An extraordinary general meeting of the Board of Directors may be convened at any time on the premise of notifying all Directors, and an explanation of the emergency shall be made at the meeting by the convener.

Meetings of the Board of Directors shall be held only if more than half of the Directors are present. Any resolutions of the Board of Directors must be subject to adoption by a simple majority of all Directors. Each Director shall have one vote for the resolutions of the Board of Directors.

If Directors have associated relationship with enterprises involved in issues to be determined in the extraordinary general meeting of the Board of Directors, such Directors shall not exercise the voting power on the resolution or exercise the voting power on behalf of other Directors. The meeting of the Board of Directors may be held with over one-half Directors without associated relationship, and the resolutions of the meeting of the Board of Directors shall be approved by over one-half Directors without associated relationship. If the unassociated Directors attending the meeting of the Board of Directors are less than 3 people, the issues shall be submitted to the general meetings for examination. If a substantial shareholder or a Director has a conflict of interest in a matter to be considered by the Board of Directors which the Board of Directors has determined to be material, the matter shall be dealt with by convening a physical meeting of the Board of Directors rather than a written resolution. Independent non-executive Director who, and whose close associates, have no material interest in the transaction should be present at that the meeting of the Board of Directors. If there are any additional restrictions on Directors' participation in meeting of the Board of Directors and voting imposed by laws, regulations and securities regulatory rules of the place where the shares of the Company are listed, such provisions shall prevail.

Resolutions to be adopted at the meeting of the Board of Directors shall be voted by a show of hands or in writing. Unless otherwise provided by the securities regulatory rules of the place where the shares of the Company are listed and the Articles of Association, the extraordinary general meetings of the Board of Directors may, under the premise that Directors will be guaranteed to have their opinions fully and thoroughly expressed, be conducted via facsimile or other communication and resolutions may be passed thereat, to be signed by the Directors present at the meeting.

The Directors shall attend in person the meetings of the Board of Directors. Where any Director who cannot attend for reasons may entrust another Director in writing to attend and vote on his/her behalf. The power of attorney shall specify the name of the agent, the matters to be represented, the scope of authorization, and the period of validity, and shall be signed or stamped by the principal. The Directors who attend the meeting on behalf shall exercise the rights as Directors within the scope of authorization. Failure by a Director to attend a meeting of the Board of Directors or to authorize a representative to attend the meeting on his/her behalf shall be deemed waiver of the voting right at such meeting.

PRESIDENT AND OTHER SENIOR MANAGEMENT MEMBERS

The Company shall have one President, who shall be appointed or dismissed by the Board of Directors. The Company shall have several Vice Presidents, who shall be appointed or dismissed by the Board of Directors.

Article 99 of the Articles of Association on the duty of loyalty of Directors and Article 100 (iv) to (vi) on the duty of diligence are also applicable to senior management members.

The term of office of the President is three years and the President can renew his term of office through re-election.

The President of the Company shall be accountable to the Board of Directors and shall exercise the following powers:

(i) to preside over the operation and management of the Company and report to the Board of Directors;

(ii) to organize the implementation of the Company's annual operation plans and investment plans;

(iii) to draft the plan for the establishment of the Company's internal management organizations;

(iv) to draft the basic management policy of the Company;

(v) formulate the salary, welfare, rewards and punishments of the Company's employees, and decide on the employment and dismissal of the Company's employees;

(vi) to formulate specific rules and regulations of the Company;

(vii) to propose to the Board of Directors on the appointment or dismissal of the Company's other senior management members including Vice President and chief financial officer;

(viii) to determine to appoint or dismiss the management personnel except for those who should be appointed or dismissed by the Board of Directors;

(ix) such other powers granted by the Articles of Association or the Board of Directors.

The President of the Company shall attend meetings of the Board of Directors.

The senior management members of the Company shall faithfully perform their duties and safeguard the best interests of the Company and all shareholders. If the senior management members of the Company fail to faithfully perform their duties or violates the duty of good faith, causing damage to the interests of the Company and the shareholders of the public shares, they shall be liable for compensation in accordance with laws.

SUPERVISORY COMMITTEE

Supervisors

The Directors, the President and other senior management members shall not act concurrently as Supervisors.

Supervisors shall abide by laws, administrative regulations and the Articles of Association, have a duty of loyalty and diligence to the Company, and shall be prohibited from abusing their authority in accepting bribes or other unlawful income and from misappropriating the Company's properties.

The term of office of Supervisors shall be three years renewable upon re-election and re-appointment.

Where a Supervisor fails to be re-elected in a timely manner upon the expiration of his or her term of office, or where a Supervisor resigns during his or her term of office, resulting in a lower than the quorum of the Supervisory Committee, the original Supervisor shall still perform his or her duties as a Supervisor in accordance with the provisions of laws, administrative regulations, and the Articles of Association before a re-elected Supervisor takes office.

SUPERVISORY COMMITTEE

The Company shall have a Supervisory Committee. The Supervisory Committee shall be composed of 3 Supervisors. The Supervisory Committee shall have one Chairman and shall have a Deputy Chairman according to the needs of the work. The Chairman and the Deputy Chairman of Supervisory Committee shall be elected by a simple majority of all Supervisors. The Chairman of the Supervisory Committee convenes and presides over a meeting of the Supervisory Committee, and if the Chairman of the Supervisory Committee is unable to perform his or her duties or fails to perform his or her duties, the Deputy Chairman of the Supervisory Committee shall convene and preside over the meeting of the Supervisory

Committee, and if the Deputy Chairman of the Supervisory Committee is unable to perform his duties or fails to perform his or her duties, a simple majority of Supervisors shall jointly nominate one of the Supervisors to convene and preside over the meeting of the Supervisory Committee.

The Supervisory Committee shall be composed of Supervisors who are either Shareholder representatives or an appropriate proportion of employee representatives. The employee representative Supervisors shall account for at least one third of entire Supervisors. The employee representative Supervisors shall be democratically elected and removed at the Company's employee representative meeting, the employees' meeting or by other means. Shareholder representatives shall be elected and removed at the general meeting.

The Supervisory Committee shall be accountable to the general meeting, and shall exercise the following powers in accordance with laws:

(i) shall audit the Company's securities issuance documents and periodic reports prepared by the Board of Directors and issue auditing opinions in writing;

(ii) to check the Company's financial position;

(iii) supervise the performance of duties by Directors and senior management members, and propose the removal of Directors and management members who violate laws, administrative regulations, Articles of Association or resolutions of the general meetings;

(iv) when the behavior of Directors and senior management member harms the interests of the Company, the Directors and management members are required to make corrections;

(v) propose to convene an extraordinary general meeting to convene and preside over a general meeting when the Board of Directors fails to perform its duties of convening and presiding over a general meeting as stipulated in the Company Law;

(vi) submit proposals to the general meeting;

(vii) represent the Company in negotiations with or bringing an action against Directors and management members in accordance with Article 151 of the Company Law;

(viii) if the Company's operation is found to be abnormal, it can be investigated; When necessary, accounting firms, law firms and other professional institutions can be engaged to assist in their work, and the cost shall be borne by the Company;

(ix) to check the financial information, such as the financial reports, reports of operations and profit distribution plans to be submitted by the Board of Directors to the general meeting, and to authorize, in the Company's name, public certified accountants and licensed auditors to assist in the re-examination of such information, should any doubt arise in respect thereof;

(x) such other powers as provided by laws, administrative regulations and regulations of the authorities or provisions of the Articles of Association or other powers conferred by the general meeting.

The Supervisory Committee shall hold at least one meeting every six months, and shall be convened by the Chairman of the Supervisory Committee. Supervisors may propose to convene an extraordinary meeting of Supervisors. A resolution of the Supervisory Committee shall be passed by more than half of all the Supervisors.

FINANCIAL AND ACCOUNTING POLICY AND PROFIT DISTRIBUTION AND AUDIT

Financial And Accounting Policy

The Company shall establish its financial and accounting policies in accordance with laws, administrative regulations and provisions of competent authorities.

The Company shall submit and disclose its annual report to the CSRC and the stock exchange of the place where the shares of the Company are listed within four months from the end of each accounting year, and its announcement of interim results to the agencies of the CSRC and the stock exchange of the place where the shares of the Company are listed within two months from the end of first half of each accounting year. The above annual report and interim report shall be prepared in accordance with relevant laws, administrative regulations, regulations of the authorities and the regulations of the stock exchange of the place where the shares of the Company are listed.

Saving for the statutory accounting books, the Company does not set up separate accounting books. The Company's assets should not be deposited in any account opened under any personal name.

PROFITS DISTRIBUTION

In distributing the profits after tax for the current year, the Company shall allocate 10% of the profits to its statutory reserve. When the accumulated statutory reserve exceeds 50 percent of the Company's registered capital, the Company may cease to make such allocation. If the statutory reserve is not sufficient to cover the losses made in the previous year, the Company may make allocation to the discretionary reserve from the profits after tax. The remaining profits after tax after offsetting its losses and allocating to its reserves may be distributed to its shareholders in proportion to their shareholding percentages unless otherwise

provided in the Articles of Association. If at a general meeting, the requirements stipulated in the preceding paragraph are breached by distributing profits to the shareholders before offsetting losses of the Company and allocating to its statutory surplus reserve, the profits so distributed are required to be returned to the Company. The shares held by the Company are not entitled to any profit distribution.

The Company shall appoint one or more collection agents in Hong Kong SAR for H share shareholders. The collection agents shall collect or keep the dividends distributed by the company on H shares and other amounts payable on behalf of the relevant H share shareholders pending payment to such H share shareholders. The collection agents appointed by the Company shall meet the requirements of the laws, regulations and the securities regulatory rules of the place where the Company's shares are listed.

The common reserve funds of the Company shall be used to make up for the losses, expansion of the Company's production or operation or increase the capital of the Company. However, the capital reserve fund shall not be used to make up for losses of the Company.

After a resolution on the profit distribution plan is made at the general meeting, the Board of Directors of the Company shall complete the distribution of the dividend (or shares) within two months after the said meeting. If the specific plan cannot be implemented within two months according to the provisions of laws and regulations and the securities regulatory rules of the place where the shares of the Company are listed, the implementation date of the specific plan can be adjusted according to such provisions and the actual situation.

The Company shall distribute dividends in form of cash, shares or a combination of cash and shares, and shall prioritize profit distribution in form of cash.

INTERNAL AUDIT

The Company shall implement an internal auditing policy and appoint full time auditors to carry out internal auditing and supervision of the Company's incomes and expenses and economic activities.

The internal audit policy of the Company and the responsibilities of auditors shall be implemented upon approval by the Board of Directors. The personnel in charge of auditing is responsible to the Board of Directors and reports on relevant work.

ENGAGEMENT OF ACCOUNTING FIRMS

The Company engages an accounting firm that complies with the Securities Law, Hong Kong Listing Rules, and securities regulatory rules of the place where the shares of the Company are listed to conduct accounting statement auditing, net asset verification, and other related consulting services. The engagement period is one year and can be renewed.

The engagement of an accounting firm is decided by the General Meeting. The Board of Directors shall not engage an accounting firm prior to the decision by the General Meetings.

The Company guarantees to provide the hired accounting firm with true and complete accounting vouchers, accounting books, financial accounting reports, and other accounting data. Refusal, concealment, and false reporting are not allowed.

The audit fees of the accounting firm shall be determined by the General Meeting.

The Company shall send a 30-day prior notice to the accounting firm, in order to dismiss or not to reappoint the accounting firm, and the said accounting firm is entitled to give opinions when the General Meeting of the Company votes on the dismissal of the accounting firm.

The accounting firm, in order to resign, shall make representations whether the Company has any improper affairs to the General Meeting.

MERGER, DIVISION, CAPITAL INCREASE, CAPITAL REDUCTION, DISSOLUTION AND LIQUIDATION

Merger, Division, Capital Increase And Capital Reduction

The merger of the Company may take the form of either merger by absorption or merger by consolidation.

A company that absorbs other company is known as merger by absorption whereby the company being absorbed shall be dissolved. The merger of two or more companies by the establishment of a new company is known as merger by the establishment of a new company whereby the merged companies shall be dissolved.

In the event of merger of the Company, the parties to such merger shall execute a merger agreement and prepare a balance sheet and an inventory of assets. The Company shall notify its creditors within ten days of, and make announcement in the newspapers within thirty days of, the date of the Company's resolution for merger. A creditor may, within 30 days of receipt of the notice from the Company or, in the case of failure to receive such notice, within 45 days of the date of announcement, require the Company to repay its debts or to provide a corresponding guarantee for such debt.

After merger, any creditor's rights and indebtedness of the merged parties shall be assumed by the Company which survives the merger or the newly established company.

In the event of division of the Company, its assets shall be divided up accordingly.

In the event of division of the Company, the parties to division shall execute a division agreement and prepare a balance sheet and an inventory of assets. The Company shall notify its creditors within ten days of, and make announcement in the newspapers within 30 days, of the date of the Company's division resolution.

Debts owed by the Company prior to the division shall be assumed by the companies upon the division according to the agreement entered into unless provided otherwise in a written agreement on debt repayment reached between the Company and a creditor prior to the division.

The Company must prepare a balance sheet and an inventory list of its assets when it intends to reduce its registered capital.

The Company shall notify its creditors within 10 days of, and make announcement in the newspapers within 30 days, of the date of the Company's resolution for reduction of capital. A creditor may, within thirty days of receipt of the notice from the Company or, in the case of failure to receive such notice, within 45 days of the date of announcement, require the Company to repay its debts or to provide a corresponding guarantee for such debt.

The Company's registered capital must not, after the reduction in capital, be less than the minimum amount required by laws.

The Company shall, in accordance with laws, handle the procedures for change registration with the Company registration authority where a change in any registration items arises as a result of any merger or division. In the event of dissolution of the Company, the Company shall handle the procedures for registration of cancellation in accordance with the law. In the event of establishment of a new company, the Company shall handle the procedures for registration of establishment in accordance with laws.

Where the Company increases or reduces its registered capital, the Company shall handle the procedures for change registration with the Company registration authority in accordance with laws.

DISSOLUTION AND LIQUIDATION

The Company may be dissolved and go into liquidation in accordance with laws in any of the following circumstances:

(i) where the operation period provided herein expires or where any cause for dissolution provided herein occurs;

(ii) where the general meeting has adopted a resolution for dissolution;

(iii) where dissolution is required due to merger or division of the Company;

(iv) where the Company is declared bankrupt in accordance with laws due to its inability to pay the debts that are due;

(v) where the business license of the Company is revoked, or the Company is ordered to close down or cancelled in accordance with laws;

(vi) where the Company runs deep into difficulties in operation and management, its continuous existence may cause material losses to shareholders' interests, and such difficulties cannot be dealt with in other ways, the shareholders holding 10% or more of votes of all shareholders of the Company may file an application to the People's Court to dissolve the Company.

In the circumstance as set out in the Item (i) of the preceding article, the Company may continue to exist by amending the Articles of Association; if this Articles of Association is amended subject to the aforesaid provisions, it must be approved by shareholders representing two-thirds or above of the voting rights present at the general meeting.

Where the Company is dissolved pursuant to the items (i), (ii), (v) and (vi) of the preceding article, a liquidation team shall be established within 15 days and start to carry out liquidation. The liquidation team shall be composed of persons determined by Directors or the general meeting. In case no liquidation team is established within the specified period to carry out liquidation, the creditors may file an application to the People's Court to designate relevant persons to form a liquidation team to carry out liquidation.

The liquidation team shall notify the creditors within 10 days of, and make announcements in the newspapers within 60 days, of the date of its establishment. A creditor shall, within 30 days of receipt of the notice, or in the case of failure to receive the notice, within 45 days of the date of the announcement, claim its rights to the liquidation team.

In claiming its rights, the creditor shall explain the relevant issues on the creditor's rights, and provide evidential materials in respect thereof. The liquidation team shall register the creditor's rights in accordance with the relevant laws.

In the course of claiming of creditors' rights, the liquidation team shall not make any repayment to creditors.

After it has liquidated the Company's assets and prepared the balance sheet and an inventory of assets, the liquidation team shall formulate a liquidation plan and present it to the general meeting or to the People's Court for confirmation. The assets of the Company shall be applied in the sequence below: payment of liquidation costs, salary of employees, social insurance premiums, statutory compensation, taxes payable, and debts of the Company. The remaining assets after payment is made pursuant to the foregoing provision shall be distributed to its shareholders according to the category and proportion of the shares held by shareholders.

During the liquidation period, the Company remains in existence; however, it shall not carry out any business activities unrelated to liquidation. The Company's assets shall not be distributed to its shareholders before payment is made pursuant to the foregoing provision.

In the event of liquidation due to dissolution of the Company, after liquidation of the Company's assets and preparation of a balance sheet and an inventory of assets, the liquidation team discovers that the Company's assets are insufficient to pay the Company's debts in full, the liquidation team shall file an application to the People's Court for declaration of bankruptcy in accordance with laws. After the Company is declared bankrupt pursuant to the adjudication of the People's Court, the liquidation team shall transfer all matters relating to the liquidation to the People's Court.

Upon completion of the liquidation, the liquidation team shall prepare a liquidation report and submit it to the general meeting or the People's Court for confirmation, and shall submit the same to the registration authority of the Company and apply for cancellation of registration of the Company, and make announcement relating to the termination of the Company.

Where the Company is declared bankrupt in accordance with laws, bankruptcy liquidation shall be carried out in accordance with the laws concerning bankruptcy of enterprises.

AMENDMENTS TO THE ARTICLES OF ASSOCIATION

In any of the following circumstances, the Company shall amend the Articles of Association:

(i) the Articles of Association are contradictory to any provision of the amended version of the Company Law or other relevant laws or administrative regulations or the securities regulatory rules of the place where the shares of the Company are listed;

(ii) there is any change to the condition of the Company, which is inconsistent with any matter recorded in the Articles of Association;

(iii) the general meeting adopts a resolution for amendment of the Articles of Association.

If an amendment of the Articles of Association adopted by the resolution of the general meeting needs to be approved by the competent authority, it shall be submitted to the competent authority for approval; if there is any change relating to the registered particulars of the Company, the procedures for change registration shall be handled in accordance with laws.

The Board of Directors shall amend the Articles of Association according to the resolution of the general meeting for amendments hereof and the approval opinions of competent authority.

A. FURTHER INFORMATION ABOUT OUR GROUP

1. Incorporation of our Company

Our Company was established in the PRC as a limited liability company on June 22, 1998. On August 23, 2000, it was converted into a joint stock company with limited liability under the PRC Company Law. Since April 14, 2004, our A Shares have been listed on the Shanghai Stock Exchange with the stock code of 600988. Our registered office is located at Fumin Village, Sidaowanzi Town, Aohan, Chifeng, Inner Mongolia Autonomous Region, PRC.

We have established a principal place of business in Hong Kong at Room 1905, 19th Floor, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong, and was registered as a non-Hong Kong company under Part 16 of the Companies Ordinance on [●], 2024 under the same address. Mr. Wong Hok Bun Mario has been appointed as our agent for the acceptance of service of process and notices on our behalf in Hong Kong. The address for service of process on the Company in Hong Kong is the same as its principal place of business in Hong Kong as set out above.

As we were established in the PRC, our corporate structure and Articles of Association are subject to the relevant laws and regulations of the PRC. A summary of the relevant provisions of our Articles of Association is set out in Appendix VI to this Document. A summary of certain relevant aspects of the laws and regulations of the PRC is set out in Appendix V to this Document.

2. Changes in the share capital of our Company

For details relating to the changes in the share capital of our Company, see the section headed "History, Development and Corporate Structure — Major Changes in Shareholding and Share Capital of our Company" in this Document.

Save as disclosed above, there has been no alteration in our share capital within the two years immediately preceding the date of this Document.

3. Changes in the share capital of our subsidiaries

For details relating to the changes in the share capital of our subsidiaries, please refer to the section headed "History, Development and Corporate Structure — Our Principal Subsidiaries" in this Document.

Save as disclosed in this Document, there has been no alteration in the share capital of any of our subsidiaries within the two years immediately preceding the date of this Document.

4. Resolutions in writing of our Shareholders passed on August 23, 2024

Pursuant to the written resolutions passed by our Shareholders on August 23, 2024, it was resolved, among others:

(a) the issue by our Company of H Shares of nominal value of RMB1.00 each and such H Shares be [**REDACTED**] on the Hong Kong Stock Exchange;

(b) the number of H Shares to be issued before the exercise of the [**REDACTED**] for the [**REDACTED**] shall not exceed [**REDACTED**]% of the enlarged share capital of our Company upon completion of the [**REDACTED**] and granting the [**REDACTED**] of not more than [**REDACTED**]% of the above number of H Shares issued pursuant to the [**REDACTED**];

(c) authorization of the Board and its authorized persons to handle all matters relating to, among other things, the [**REDACTED**], the issue and [**REDACTED**] of the H Shares; and

(d) subject to the completion of the [**REDACTED**], the conditional adoption of the revised Articles of Association, which shall become effective on the [**REDACTED**].

5. Restrictions on Share Repurchase

For details of the restrictions on share repurchase by our Company, please refer to "Appendix VI — Summary of the Articles of Association" to this Document.

B. FURTHER INFORMATION ABOUT OUR BUSINESS

1. Summary of our Material Contracts

We have entered into the following contracts (not being contracts entered into in the ordinary course of business) within the two years immediately preceding the date of this Document that are or may be material:

(a) an equity transfer agreement entered into among Liu Xin (劉信), Li Yuanyuan (李媛媛), Wang Zhonghua (王忠華) and Yunnan Yuanhao Mining Co., Ltd. (雲南源浩礦業有限公司) (collectively the "**Sellers**"), our Company and Xinhenghe Mining on December 30, 2022, pursuant to which our Company agreed to acquire from the Sellers an aggregate of 51% equity interest in Xinhenghe Mining at a total consideration of RMB61.20 million;

(b) an equity transfer agreement entered into among China Investment (Property) Limited (中國投資(置業)有限公司) ("**China Investment**"), China Investment Mining (Laos) Sole Co., Ltd, Chixia Laos and Chijin Xiawu on March 4, 2024, pursuant to which Chixia Laos agreed to acquire from China Investment 90% of the equity interest in China Investment Mining (Laos) Sole Co., Ltd at a total consideration of US$18,963,000; and

(c) the [**REDACTED**].

2. Material intellectual property rights of our Group

Save as disclosed below, as of the Latest Practicable Date, there were no other intellectual property rights which are or may be material to our business in the opinion of our Directors.

(a) Trademarks

(i) Registered Trademarks

As of the Latest Practicable Date, we have registered the following trademarks which we consider to be or may be material to our business:

No.	Name of Registered Proprietor	Trademark	Registration Number	Class	Place of Registration	Expiry Date
1 . .	Our Company	赤 银 CHI YIN	12370172	37	PRC	September 13, 2024
2 . .	Our Company	CHI 赤 YIN 银	12370162	36	PRC	January 13, 2025
3 . .	Our Company	CHI 赤 YIN 银	12370161	37	PRC	September 13, 2024
4 . .	Our Company	赤 银 CHI YIN	12370176	4	PRC	January 13, 2025
5 . .	Our Company	CHI 赤 YIN 银	12370165	4	PRC	January 13, 2025
6 . .	Our Company	赤 金 CHI JIN	12370177	6	PRC	September 13, 2024
7 . .	Our Company	赤 银 CHI YIN	12370175	6	PRC	September 13, 2024
8 . .	Our Company	CHI 赤 YIN 银	12370164	6	PRC	September 13, 2024
9 . .	Our Company	CHI 赤 YIN 银	12370163	14	PRC	September 13, 2024
10 .	Our Company	赤 银 CHI YIN	12370174	14	PRC	September 13, 2024

No.	Name of Registered Proprietor	Trademark	Registration Number	Class	Place of Registration	Expiry Date
11 .	Our Company	赤 银 CHI YIN	12370173	36	PRC	January 13, 2025
12 .	Our Company	CHI 赤 JIN 金	12370170	4	PRC	September 13, 2024
13 .	Our Company	赤 金 CHI JIN	12370181	4	PRC	September 13, 2024
14 .	Our Company	CHI 赤 JIN 金	12370167	36	PRC	September 13, 2024
15 .	Our Company	赤 金 CHI JIN	12370178	36	PRC	September 13, 2024
16 .	Our Company	CHI 赤 JIN 金	12370166	37	PRC	April 6, 2025
17 .	Our Company		43088353	37	PRC	December 20, 2030
18 .	Our Company		43097556	42	PRC	December 13, 2030
19 .	Our Company	赤峰吉隆黄金矿业股份有限公司 CHIFENG JILONG GOLD MINING CO., LTD.	43204068	37	PRC	January 27, 2031
20 .	Our Company	赤峰吉隆黄金矿业股份有限公司 CHIFENG JILONG GOLD MINING CO., LTD.	43238591	42	PRC	January 27, 2031
21 .	Hanfeng Mining	HANFENG MINING 瀚丰矿业	7827527	36	PRC	March 13, 2031
22 .	Hanfeng Mining		6709701	6	PRC	March 27, 2030
23 .	Guangyuan Technology	广源科技	41834913	40	PRC	September 20, 2030
24 .	LXML	ລ້ານຊ້ຽງ ມິເນໂຣນ ລິມິເຕັດ 万象矿业有限公司 CHIFENG LXML SEPON	57702	6, 17, 40, 41, 42	Lao PDR	January 17, 2033
25 .	LXML	ລ້ານຊ້ຽງ ມິເນໂຣນ ລິມິເຕັດ 万象矿业有限公司 CHIFENG LXML SEPON	57703	6, 17, 40, 41, 42	Lao PDR	January 17, 2033

(ii) Trademarks Pending Registration

As of the Latest Practicable Date, we have applied for the registration of the following trademarks which we consider to be or may be material to our business:

No.	Name of Applicant	Trademark	Application Number	Class	Place of Application	Application Date	Status
1 . .	Our Company	(A) 	306629266	1, 6, 14, 37, 42	Hong Kong	August 2, 2024	Pending review
		(B) 					
2 . .	Our Company	(A) 	306629257	1, 6, 14, 37, 42	Hong Kong	August 2, 2024	Pending review
		(B) 					
		(C) 					
		(D) 					
3 . .	Our Company	(A)	306630994	1, 6, 14, 37, 42	Hong Kong	August 5, 2024	Pending review
		(B) 					

(b) Patents

(i) Registered Patents

As of the Latest Practicable Date, we had registered the following patents which we consider to be or may be material to our business:

No.	Name of Patentee	Name of Patent	Registration Number	Place of Registration	Registration Date	Validity Period	Category
1 . .	Wulong Mining	Miner's lamp (礦燈)	ZL201410515583.1	PRC	September 29, 2014	20 years	Original Invention
2 . .	Wulong Mining	A kind of three-quarter mine shaft hoisting mechanism (一種三分礦豎井提升機構)	ZL202121602737.2	PRC	July 15, 2021	10 years	Utility model
3 . .	Wulong Mining	A quarter mine ventilation system (一種四分礦通風系統)	ZL202121653692.1	PRC	July 20, 2021	10 years	Utility model
4 . .	Wulong Mining	A kind of reversed continuous charging structure using upper disk columns (一種採用上盤柱狀反向連續裝藥結構)	ZL202121665369.6	PRC	July 21, 2021	10 years	Utility model
5 . .	Wulong Mining	A kind of safety protection cage for mine (一種礦井用安全防護罐籠)	ZL202121666391.2	PRC	July 21, 2021	10 years	Utility model
6 . .	Wulong Mining	A kind of powder ore recycling mat (一種粉礦回收墊板)	ZL202121678701.2	PRC	July 22, 2021	10 years	Utility model
7 . .	Wulong Mining	A kind of motorcycle frame line powder failure protection device (一種電機車架線斷電保護裝置)	ZL202121690127.2	PRC	July 23, 2021	10 years	Utility model
8 . .	Wulong Mining	An ore chute structure arrangement structure (一種礦石溜井結構布置結構)	ZL202121690131.9	PRC	July 23, 2021	10 years	Utility model
9 . .	Wulong Mining	A kind of anti-electrocution device for overhead electric locomotive based on PLC architecture (一種基於PLC架構的架線電機車防觸電裝置)	ZL202320010120.4	PRC	January 4, 2023	10 years	Utility model

No.	Name of Patentee	Name of Patent	Registration Number	Place of Registration	Registration Date	Validity Period	Category
10 .	Jilong Mining	A kind of zinc powder feeding device adopted for cyanide leaching in gold mine (一種黃金礦山氰化浸出採用的鋅粉給料裝置)	ZL202121744747.X	PRC	July 29, 2021	10 years	Utility model
11 .	Jilong Mining	A positioning device for uncoupled charging of gun holes (一種炮孔不耦合裝藥的定位裝置)	ZL202121744748.4	PRC	July 29, 2021	10 years	Utility model
12 .	Jilong Mining	A kind of belt conveyor roller frame (一種皮帶運輸機托輥架)	ZL202121742523.5	PRC	July 29, 2021	10 years	Utility model
13 .	Jilong Mining	An improved mining thickening device (一種改進的礦用濃密機裝置)	ZL202121744750.1	PRC	July 29, 2021	10 years	Utility model
14 .	Jilong Mining	A kind of mine drainage ditch dredging device (一種礦井排水溝清淤裝置)	ZL202321032624.2	PRC	April 28, 2023	10 years	Utility model
15 .	Jilong Mining	A kind of underground automatic drainage system (一種井下自動排水系統)	ZL202321012760.5	PRC	April 28, 2023	10 years	Utility model
16 .	Jilong Mining	A kind of belt conveyor for washing concentrate (一種洗選精礦的皮帶輸送機)	ZL202320682501.7	PRC	March 31, 2023	10 years	Utility model
17 .	Jilong Mining	A mine shaft preheating system (一種礦井井口預熱系統)	ZL202320586472.4	PRC	March 23, 2023	10 years	Utility model
18 .	Jilong Mining	An elevator gate tile wear monitoring system (一種提升機閘瓦磨損監測系統)	ZL202310026191.8	PRC	January 9, 2023	20 years	Original Invention

(c) Domain Names

As of the Latest Practicable Date, we have registered the following domain names which we consider to be or may be material to our business:

No.	Name of Registered Owner	Domain Name	Place of Registration	Expiry Date
1 . .	Our Company	600988.com.cn	PRC	March 4, 2030
2 . .	Our Company	cfgold.cn	PRC	June 4, 2030
3 . .	Our Company	chifeng-gold.com	PRC	June 6, 2032
4 . .	Our Company	cfgold.com	PRC	May 29, 2025
5 . .	Our Company	chifeng-gold.cn	PRC	June 6, 2025
6 . .	Guangyuan Technology	gykjgroup.cn	PRC	March 31, 2030
7 . .	Wulong Mining	wulongkuangye.com	PRC	July 7, 2025

(d) Literature Copyrights

No.	Name of Registered Owner	Software Name	Registration Number	Place of Registration	Registration Date	Validity Period
1 . .	Our Company	Gold Mining LOGO (黃金礦業LOGO)	Guozuo Dengzi -2020-F-00992500 (國作登字-2020-F-00992500)	PRC	July 12, 2019	50 years

(e) Software Copyrights

No.	Name of Registered Owner	Software Name	Registration Number	Place of Registration	Registration Date	Validity Period
1 . .	Wulong Mining	Wulong Gold Mining Operator Positioning System (五龍黃金礦山作業人員定位系統)	2020SR1056189	PRC	October 20, 2019	50 years
2 . .	Wulong Mining	Wulong Gold Mining Detection System (五龍黃金地壓檢測系統)	2020SR1055710	PRC	March 11, 2019	50 years
3 . .	Wulong Mining	Intelligent Mine Gas Safety Monitoring and Early Warning Management System (礦山氣體安全智能化監測預警管理系統)	2020SR1056218	PRC	August 25, 2019	50 years

No.	Name of Registered Owner	Software Name	Registration Number	Place of Registration	Registration Date	Validity Period
4 . .	Wulong Mining	Wulong Gold Mining Video Surveillance Systems (五龍黃金礦山視頻監控系統)	2020SR1056226	PRC	June 30, 2019	50 years
5 . .	Wulong Mining	Wulong Gold Mining Fiber Optic Ring System (五龍黃金光纖環網系統)	2020SR1055738	PRC	May 17, 2019	50 years
6 . .	Wulong Mining	Wulong Gold Signal Monitoring System (五龍黃金信號監控系統)	2020SR1055695	PRC	March 31, 2019	50 years
7 . .	Wulong Mining	Control System for Locomotive Overhead Line Anti-electrocution Device (機車架線防觸電裝置控制系統)	2020SR1501182	PRC	November 30, 2019	50 years

C. FURTHER INFORMATION ABOUT OUR DIRECTORS, SUPERVISORS AND SUBSTANTIAL SHAREHOLDERS

1. Disclosure of Interests

(a) Interests and short positions of our Directors, Supervisors and the chief executive of our Company in the shares, underlying shares and debentures of our Company and our associated corporations

Save as disclosed below, immediately following the completion of the [**REDACTED**] (assuming that the [**REDACTED**] is not exercised), so far as our Directors are aware, none of our Directors, Supervisors or chief executive has any interests or short positions in our Shares, underlying shares and debentures of our Company or any associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to our Company and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO) or which will be required, pursuant to Section 352 of the SFO, to be recorded in the register referred to therein or which will be required to be notified to our Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers contained in Hong Kong Listing Rules.

Name	Position	Nature of interest	Description of Shares	Number of Shares	Approximate percentage of interest in the total issued share capital of our Company as of the Latest Practicable Date	Approximate percentage of interest in the A Shares immediately following the completion of the [REDACTED] (assuming the [REDACTED] is not exercised)	Approximate percentage of interest in the total issued share capital of our Company immediately following the completion of the [REDACTED] (assuming the [REDACTED] is not exercised)
Wang Jianhua . .	Chairman of the Board and Executive Director	Beneficial owner	A Shares	[REDACTED]	[REDACTED]%	[REDACTED]%	[REDACTED]%
Yang Yi-fang . . .	Executive Director and Chief Executive Officer	Beneficial owner	A Shares	[REDACTED]	[REDACTED]%	[REDACTED]%	[REDACTED]%
Lyu Xiaozhao . .	Executive Director, Vice President and Chief Engineer	Beneficial owner	A Shares	[REDACTED]	[REDACTED]%	[REDACTED]%	[REDACTED]%
Gao Bo	Executive Director and Vice President	Beneficial owner	A Shares	[REDACTED]	[REDACTED]%	[REDACTED]%	[REDACTED]%

(b) Interests and short positions of the Substantial Shareholders in the Shares of our Company

Save as disclosed in the section headed "Substantial Shareholders" in this Document, our Directors are not aware of any person who will, immediately following completion of the [**REDACTED**] (assuming that the [**REDACTED**] is not exercised), have interests or short positions in our Shares or underlying Shares which would be required to be disclosed to us and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or who is, directly or indirectly, interested in 10% or more of the issued voting shares of our Company.

(c) Interests of the Substantial Shareholders of any Member of Our Group (other than Our Company)

Save as disclosed in the section headed "History, Development and Corporate Structure" in this Document and the table below, so far as our Directors are aware, immediately following the completion of the [**REDACTED**], no persons will, directly or indirectly, be interested in 10% or more of the nominal value of the share capital carrying rights to vote in all circumstances at general meetings of any member of the Group (other than our Company).

Member of our Group	Name of substantial shareholder	Approximate percentage of equity interests held by the substantial shareholder
Chijin Geoexploration	Dai Lijun (戴立軍)	21%
	China Steel Group Tianjin Geological Research Institute Co., Ltd. (中鋼集團天津地質研究院有限公司)[(1)]	19%
Xinhenghe Mining	Liu Xin (劉信)	30%
	Li Yuanyuan (李媛媛)	12%
	Zhu Jiande (朱建德)	7%
Golden Star Resources	Kefei Investment (BVI) Limited[(2)]	38%

Notes

(1) China Steel Group Tianjin Geological Research Institute Co., Ltd. is held as to (i) 90% equity interest by Zhongjieneng Investment Co., Ltd. (聖金達投資有限公司) which is wholly owned by Hu Fangqi (胡芳琪); and (ii) 10% equity interest by Sinosteel Scie-Tech Development Co., Ltd. (中鋼科技發展有限公司) which is wholly owned by China Steel Capital Holdings Limited (中鋼資本控股有限公司) and in turn is wholly owned by SINOSTEEL Corporation Limited (中國中鋼股份有限公司) ("**Sinosteel Corporation**"). Sinosteel Corporation is held as to (i) 99.42% equity interest by China Steel Group Co., Ltd. (中國中鋼集團有限公司) ("**China Steel Group**") which is wholly owned by Baosteel Group Corporation (中國寶武鋼鐵集團有限公司); and (ii) 0.58% equity interest by China Steel Asset Management Co., Ltd. (中鋼資產管理有限責任公司) which is wholly owned by China Steel Group. Baosteel Group Corporation is wholly owned by State-owned Assets Supervision and Administration Commission of the State Council (國務院國有資產監督管理委員會).

(2) Kefei Investment (BVI) Limited was wholly owned by China-Africa Fund for Industrial Cooperation Co., Ltd. ("**CAFIC**"). CAFIC was held as to (i) 80% of the equity interest by Wutongshu Investment Platform Company Limited (梧桐樹投資平台有限責任公司) ("**Wutongshu Investment**"), which was wholly owned by the State Administration of Foreign Exchange Central Foreign Exchange Business Center (國家外匯管理局中央外匯業務中心); and (ii) 20% of the equity interest by the Export-Import Bank of China (中國進出口銀行), which in turn was owned as to 89.26% and 10.74% equity interest by Wutongshu Investment and MOF.

2. Particulars of Directors' Service Contracts and Letters of Appointment

(a) Directors and Supervisors

We have entered into a service contract or letter of appointment with each of our Directors and Supervisors in respect of, among other things (i) compliance of relevant laws and regulations; (ii) observance of the Articles of Association; and (iii) provisions on arbitration. The principal particulars of these service contracts and letters of appointment include (i) the term of service; and (ii) are subject to termination in accordance with their respective term. The service contracts or letters of appointment may be renewed in accordance with our Articles of Association and the applicable Hong Kong Listing Rules.

Save as disclosed above, none of our Directors or Supervisors has entered into any service contracts as a director or supervisor with any member of our Group (excluding contracts expiring or determinable by the employer within one year without payment of compensation (other than statutory compensation)).

(b) Others

(i) Save as disclosed above, none of our Directors and Supervisors has entered into any service contract with any member of our Group (excluding contracts expiring or determinable by the employer within one year without payment of compensation other than statutory compensation).

(ii) For the three years ended December 31, 2023, for the three months ended March 31, 2024, the aggregate of the remuneration and benefits in kind payable to our Directors was approximately RMB26.89 million, RMB20.34 million, RMB20.95 million and RMB3.51 million, respectively. Details of our Directors' remuneration are also set out in Note 8 to the Accountant's Report set out in Appendix IA to this Document.

(iii) For the three years ended December 31, 2023, for the three months ended March 31, 2024, the aggregate of the remuneration and benefits in kind payable to our Supervisors was approximately RMB3.99 million, RMB2.24 million, RMB1.56 million and RMB0.26 million, respectively.

(iv) None of our Directors and Supervisors has waived or agreed to waive any emolument for each of the three financial years ended December 2023 and for the three months ended March 31, 2024.

(v) Save as disclosed herein and in Note 8 to the Accountant's Report set out in Appendix IA to this Document, no other emoluments have been paid or are payable, in respect of the years ended December 31, 2021, 2022 and 2023 and for the three months ended March 31, 2024 by us to our Directors or Supervisors.

(vi) Save as disclosed herein, no remuneration was paid by us to, or receivable by, our Directors, Supervisors or the five highest paid individuals as an inducement to join or upon joining our Company for each of the three financial years ended December 2023 and for the three months ended March 31, 2024. No compensation was paid by us to, or receivable by, our Directors, former Directors, Supervisors or the five highest-paid individuals for each of the three financial years ended December 2023 and for the three months ended March 31, 2024 for the loss of any office in connection with the management of the affairs of any members of our Group.

(c) Based on the arrangements currently in force, the aggregate of the remuneration and benefits in kind payable to our Directors for the year ending December 31, 2024 is estimated to be approximately RMB15.74 million.

Based on the arrangements currently in force, the aggregate of the remuneration and benefits in kind payable to our Supervisors for the year ending December 31, 2024 is estimated to be approximately RMB1.32 million.

(d) None of our Directors and our Supervisors or any past Directors and any past Supervisors of any members of our Group has been paid any sum of money for the three years ended December 31, 2023 and the three months ended March 31, 2024 (i) as an inducement to join or upon joining us or (ii) for loss of office as a Director and Supervisor of any member of our Group or of any other office in connection with the management of the affairs of any member of our Group.

(e) There has been no arrangement under which a Director and Supervisor has waived or agreed to waive any remuneration or benefits in kind for the three years ended December 31, 2023 and three months ended March 31, 2024.

(f) None of our Directors and Supervisors has been or is interested in the promotion of, or in the property proposed to be acquired by, us, and no sum has been paid or agreed to be paid to any of them in cash or shares or otherwise by any person either to induce him to become, or to qualify him as, a Director or a Supervisor, or otherwise for services rendered by him in connection with the promotion or formation of our Company.

3. Fees or commissions received

Save as disclosed in the section headed "History, Development and Corporate Structure" in this Document, none of our Directors, Supervisors or any of the persons whose names are listed under the paragraph headed "D. Other Information — 7. Consent of Experts" in this Appendix had received any commissions, discounts, agency fee, brokerages or other special terms in connection with the issue or sale of any capital of any member of our Group within the two years immediately preceding the date of this Document.

4. Employee Stock Ownership Plans

Our Company adopted the Phase I Employee Stock Ownership Plan and the Phase II Employee Stock Ownership Plan on October 14, 2020 (as revised on May 27, 2021, October 1, 2022 and April 21, 2023) and February 11, 2023 (as revised on March 21, 2023).

The purpose of the ESOPs is to provide an incentive for the eligible participants (namely, the Directors, Supervisors, senior management and key members of our Company and its subsidiaries) a means through which our Group may grant incentives to attract, motivate, retain and reward them. They aim to foster shared interests between our Shareholders and our management team, thereby furthering our Company's focus on long-term development.

As of the Latest Practicable Date, an aggregate of 16,585,406 A Shares (including 10,000 A Shares under Phase I ESOP and 16,575,406 A Shares under Phase II ESOP) were being held under the ESOPs, accounting for approximately 1.00% of our issued Shares. The ESOPs are not subject to the provisions of Chapter 17 of the Hong Kong Listing Rules as they do not involve the grant of options by our Company to subscribe for new Shares or award of Shares upon [**REDACTED**].

The key terms and implementation of the ESOPs are as follows.

(a) Plan limit

The maximum number of participants under the Phase I ESOP and the Phase II ESOP shall not exceed 98 and 120, respectively. Meanwhile, the maximum number of A Share to be held by Phase I ESOP and Phase II ESOP shall be 41,597,732 A Shares and 16,575,406 A Shares, accounting for approximately 2.50% and 0.9962% of our Company's issued Share capital, respectively.

The total number of Shares held by each of the ESOPs shall not exceed 10% of the issued share capital of our Company. The maximum number of Shares corresponding to the awards held an individual participant shall not exceed 1% of the issued share capital of our Company.

(b) Contribution of funds to the ESOP

The eligible participants shall use their salaries and personal funds to subscribe to the ESOP, and obtain the corresponding interest in the ESOP.

(c) Source of Shares

The A Shares obtained by the ESOP shall be the A Shares repurchased by the Company through centralized price bidding process.

The Phase I ESOP has entrusted an Independent Third Party professional institution with asset management qualifications to establish a directional plan available for subscription by the eligible participants. Within six months from the approval of the ESOP by the general meeting, the directional plan would obtain and hold the A Shares repurchased by our Company through a block trade process. Such funds would not be used to purchase the shares of other companies.

Phase II ESOP is maintained by our Company. The management committee of Phase II ESOP shall the asset manager and exercise all shareholders' rights in relation to the A Shares held by the plan. It would set up a securities account designated for the plan of the Company whereby the A Shares repurchased by our Company are obtained by the plan by non-transactional transfer means and other means as permitted under applicable laws and regulations.

The purchase price of such A Shares by the ESOP shall be the average price paid by our Company for the repurchase of such Shares.

As of April 30, 2021 and April 28, 2023, our Company repurchased a total of 41,597,732 and 16,575,406 A Shares to implement the Phase I ESOP and the Phase II ESOP, respectively.

Accordingly, each ESOP had acquired the maximum number of A Shares permitted by the plan. Upon the expiry of the lock-up period, various A Shares had been disposed of by the Phase I ESOP and as of the Latest Practicable Date, the Phase I ESOP held 10,000 A Shares whilst the Phase II ESOP held 16,575,406 A Shares.

(d) Term

The term of the Phase I ESOP and the Phase II ESOP shall be 36 months and 24 months commencing from the date when the ESOP is approved by the general meeting and the Company announcing the transfer of the last batch of the subject Shares to the ESOP, respectively.

Upon expiry of the lock-up period, the ESOPs can be terminated early if all the Shares held by the ESOPs are disposed of, and all assets (if any) held by the ESOPs are in the form of cash and have been liquidated or distributed.

(e) Lock-up period

The lock-up period for each of the ESOP is 12 months from the date when the ESOP (as revised) is approved by the general meeting and our Company announces the transfer of the last batch of subject Shares to the ESOP.

Upon expiry of the lock-up period and prior to the expiration of the term of the ESOP, the management committee of the ESOP (see below) may, upon authorization from the resolutions of the participants, sell or transfer the Shares held by the ESOP as it deems appropriate.

(f) Performance target

The entitlement to the corresponding benefits from the ESOP by the participants shall be subject to the following performance targets:

- For Phase I ESOP, if our Company's cumulative gold production from 2022 to 2024 is not less than 43 tonnes, the plan could distribute an amount equivalent to the entire accumulated equity interest in the subject Shares after repaying the financing principal and interest of the directional plan.

- For Phase II ESOP, if our Company realizes an increase in net profit attributable to Shareholders of the listed company by 30% or above in 2023 when compared to that of the previous year, the plan could distribute an amount equivalent to the entire accumulated equity interest in the subject Shares.

(g) Management committee

Each of the ESOPs have established a management committee to oversee the daily management of the ESOP. The committee consists of three members who are elected through resolutions of the participants. Resolutions may only be passed by the management committee when majority members voting in favour of such resolution, and each management committee member shall have one vote.

The management committee is responsible for the daily management of the ESOP, including: (i) supervising the daily management of the ESOP on behalf of all its participants, (ii) exercising the shareholder rights in respect of the Shares held by the plan; (iii) managing the distribution of benefits from the ESOP; and (iv) making decision as to the disposal of the Shares held by the ESOP upon expiry of the lock-up period.

Save for Mr. Zhao Qiang who is a director of Chijin Xiawu serves as a management committee of the Phase I ESOP, none of the management committees of the ESOPs are core connected persons of our Company.

(h) Distribution

During the term of the ESOP, unless otherwise stipulated by laws, administrative regulations, departmental rules, or with the consent of the management committee, the corresponding interest in the plan held by the participants shall not be transferred, used as collateral, or otherwise disposed of in a similar manner.

During the term of the ESOP, participants shall not request for distribution of the equity interest in the Shares held by the ESOP.

Upon expiry of the term of the ESOP, if the assets (if any) held by the ESOP still include the Shares, the management committee shall determine the disposal method of such Shares. The management committee may also, with the authorization from the resolution of the participants, liquidate the plan within 30 working days from such expiration date, after deducting relevant taxes and fees as required by the law. The distribution shall be based on the fulfillment of the performance target and the corresponding interest in the plan held by individual participants.

5. Disclaimers

Save as disclosed in this Document:

(a) none of our Directors or Supervisors has any interests and short positions in the Shares, underlying Shares and debentures of our Company or its associated corporation (within the meaning of Part XV of the SFO) which will have to be notified to us and the Hong Kong Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which he is taken or deemed to have under such provisions of SFO) or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or will be required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers to be notified to us and the Hong Kong Stock Exchange, in each case once our Shares are [**REDACTED**] on the Hong Kong Stock Exchange;

(b) none of our Directors, Supervisors or any of the parties listed in the paragraph headed "D. Other Information — 7. Consent of Experts" in this Appendix is interested in our promotion, or in any assets which have, within the two years immediately preceding the issue of this Document, been acquired or disposed of by or leased to us, or are proposed to be acquired or disposed of by or leased to us;

(c) save in connection with the [**REDACTED**], none of our Directors, Supervisors or any of the parties listed in the paragraph headed "D. Other Information — 7. Consent of Experts" of this Appendix is materially interested in any contract or arrangement subsisting at the date of this Document which is significant in relation to the business of our Group;

(d) save in connection with the [**REDACTED**], none of the parties listed in the paragraph headed "D. Other Information — 7. Consent of Experts" in this Appendix: (i) is interested legally or beneficially in any of our Shares or any shares in any of our subsidiaries; or (ii) has any right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of our Group;

(e) taking no account of any Shares which may be taken up under the [**REDACTED**], so far as is known to any of our Directors or Supervisors, no person has an interest or short position in the Shares and underlying Shares which would fall to be

disclosed to us and the Hong Kong Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or is, directly or indirectly, interested in 10.00% or more of the nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any other member of the Group; and

(f) save as disclosed in the paragraphs headed "— Sales and Customers — Customers" and "— Procurement and Suppliers — Suppliers" in this Document, none of our Directors, Supervisors or their respective associates or any of our Shareholders (who to the knowledge of our Directors owns more than 5.00% of our issued share capital) has any interest in our five largest suppliers or our five largest customers.

D. OTHER INFORMATION

1. Estate Duty

We have been advised that no material liability for estate duty under PRC law is likely to fall upon us.

2. Litigation

During the Track Record Period and up to the Latest Practicable Date, saved as disclosed in this Document and so far as our Directors are aware, no litigation, arbitration proceedings or claim of material importance (to our Group's financial condition or results of operation) is pending or threatened against any member of our Group.

3. Sole Sponsor

The Sole Sponsor has made an application on our behalf to the [**REDACTED**] for the [**REDACTED**] of, and permission to [**REDACTED**], the Shares in issue and to be issued as mentioned in this Document (including any Shares which may be issued pursuant to the exercise of the [**REDACTED**]).

The Sole Sponsor satisfies the independence criteria applicable to sponsors set out in Rule 3A.07 of the Hong Kong Listing Rules. The fees to the Sole Sponsor are approximately US$500,000 and will be borne by our Company.

4. Preliminary expenses

We did not incur any material preliminary expenses in relation to the incorporation of our Company.

5. Promoters

Information of our promoters as of the time of our Company's conversion into a joint stock company on August 23, 2000 is as follows:

No.	Name
1.	Guangdong Jin'an Automobile Industrial Engineering Company Limited (廣東省金安汽車工業製造有限公司)
2.	Huang Yizhen (黃乙珍)
3.	Yang Wenjiang (楊文江)
4.	Yang Wenying (楊文英)
5.	Yang Jinpeng (楊金朋)

Save as disclosed in the sections headed "History, Development and Corporate Structure" and "Financial Information — Dividend" in this Document, within the two years immediately preceding the date of this Document, no cash, securities or other benefit has been paid, allotted or given nor are any proposed to be paid, allotted or given to any promoters in connection with the [**REDACTED**] and the related transactions described in this Document.

6. Qualification of Experts

The following are the qualifications of the experts who have given opinion or advice which are contained in this Document:

Name	Qualifications
CITIC Securities (Hong Kong) Limited	Licensed corporation under the SFO to engage in type 4 (advising on securities) and type 6 (advising on corporate finance) regulated activities
Ernst & Young	Certified Public Accountants and Registered Public Interest Entity Auditor
Beijing Tian Yuan Law Firm	Legal Advisor as to PRC laws
REM Law Consultancy	Legal Advisor as to Ghana laws
ZICOLaw (Laos) Sole Co., Ltd.	Legal Advisor as to Laos laws
Frost & Sullivan (Beijing) Inc., Shanghai Branch Co.	Independent industry consultant
SRK Consulting China Ltd	Competent person (with the meaning of Chapter 18 of the Hong Kong Listing Rules)

7. Consent of Experts

Each of the experts named in the paragraph headed "D. Other Information — 6. Qualification of Experts" in this Appendix has given and has not withdrawn its respective written consent to the issue of this Document with the inclusion of its report and/or letter and/or opinion and/or the references to its name included in this Document in the form and context in which it is respectively included. Each of the experts named in the paragraph headed "D. Other Information — 6. Qualification of Experts" in this Appendix has given and has not withdrawn its respective written consent to the issue of this Document with the inclusion of its report and/or letter and/or opinion and/or the references to its name included in this Document in the form and context in which it is respectively included.

As of the Latest Practicable Date, none of the experts named above has any shareholding interests in any member of our Group or the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities in any member of our Group.

8. Binding Effect

This document shall have the effect, if an application is made in pursuance of this Document, of rendering all persons concerned bound by all of the provisions (other than the penal provisions) of sections 44A and 44B of the Companies (Winding Up and Miscellaneous Provisions) Ordinance insofar as applicable.

9. Taxation of holders of H Shares

The sale, purchase and transfer of H Shares are subject to Hong Kong stamp duty if such sale, purchase and transfer are affected on the [**REDACTED**] of members of our Company, including in circumstances where such transactions are effected on the Hong Kong Stock Exchange. The current rate of Hong Kong stamp duty for such sale, purchase and transfer on each of the purchaser and the seller is 0.1% of the consideration or, if higher, the fair value of the H Shares being sold or transferred.

10. Bilingual Document

The English language and Chinese language versions of this Document are being published separately, in reliance upon the exemption provided by section 4 of the Companies (Exemption of Companies and Prospectuses from Compliance with Provisions) Notice (Chapter 32L of the Laws of Hong Kong).

E. RELATED PARTY TRANSACTIONS

Our Group entered into the related party transactions within the two years immediately preceding the date of this Document as mentioned in Note 46 to the Accountants' Report set out in Appendix IA to this Document.

F. MISCELLANEOUS

(a) Save as disclosed in the section headed "History, Development and Corporate Structure" in this Document, within the two years immediately preceding the date of this Document:

(i) no share or loan capital of our Company or any of its subsidiaries has been issued or agreed to be issued or is proposed to be fully or partly paid either for cash or a consideration other than cash;

(ii) no share or loan capital of our Company or any of its subsidiaries is under option or is agreed conditionally or unconditionally to be put under option;

(iii) no founders or management or deferred shares of our Company or any of its subsidiaries have been issued or agreed to be issued;

(iv) no commissions, discounts, brokerages or other special terms have been granted (except in connection with the [**REDACTED**]) or agreed to be granted in connection with the issue or sale of any share or loan capital of our Company or any of its subsidiaries; and

(v) no commission has been paid or is payable for subscription, agreeing to subscribe, procuring subscription or agreeing to procure subscription of any share in our Company or any of its subsidiaries.

(b) Our Group had not issued any debentures nor did it have any outstanding debentures or any convertible debt securities.

(c) Our Directors confirm that:

(i) there has been no material adverse change in the financial or trading position or prospects of the Group since March 31, 2024 (being the date to which the latest audited consolidated financial statements of the Group were prepared);

(ii) there is no arrangement under which future dividends are waived or agreed to be waived; and

(iii) there has not been any interruption in the business of the Group which may have or has had a significant effect on the financial position of the Group in the 12 months preceding the date of this Document.

(d) All necessary arrangements have been made to enable our H Shares to be admitted into [**REDACTED**] for clearing and settlement.

(e) Save for our A Shares which are listed on the Shanghai Stock Exchange and the H Shares to be issued in connection with the [**REDACTED**], none of our equity and debt securities is [**REDACTED**] or [**REDACTED**] in any other stock exchange nor is any [**REDACTED**] or permission to [**REDACTED**] being or proposed to be sought.

A. DOCUMENTS DELIVERED TO THE REGISTRAR OF COMPANIES

The documents attached to the copy of this Document delivered to the Registrar of Companies in Hong Kong for registration were, among other documents:

(a) the written consents referred to in the paragraph headed "D. Other Information — 7. Consent of Experts" in Appendix VII to this Document; and

(b) a copy of each of the material contract referred to in the paragraph headed "B. Further Information about our Business — 1. Summary of our Material Contracts" in Appendix VII to this Document.

B. DOCUMENTS ON DISPLAY

Copies of the following documents will be published at the websites of the Hong Kong Stock Exchange at **www.hkexnews.hk** and our Company at **cfgold.com** up to and including the date which

(a) the Articles of Association;

(b) the Accountant's Report prepared by Ernst & Young, the text of which is set out in Appendix IA to this Document;

(c) the audited consolidated financial statements of our Group for the years ended December 31, 2021, 2022 and 2023 and the three months ended March 31, 2024;

(d) the accountants' report of Golden Star Resources for the year ended December 31, 2021 and the one month ended January 31, 2022 prepared by Ernst & Young, the text of which is set out in Appendix IB to this Document;

(e) the report on unaudited [**REDACTED**] financial information of our Group prepared by Ernst & Young, the text of which is set out in Appendix II to this Document;

(f) the written consents referred to in the paragraph headed "D. Other Information — 7. Consent of Experts" in Appendix VII to this Document;

(g) the service contracts and letters of appointment referred to in the paragraph headed "C. Further Information about our Directors, Supervisors and Substantial Shareholders — 2. Particulars of Directors' Service Contracts and Letters of Appointment" in Appendix VII to this Document;

(h) the material contracts referred to in the paragraph headed "B. Further Information about our Business — 1. Summary of our Material Contracts" in Appendix VII to this Document;

(i) the legal opinion issued by Beijing Tian Yuan Law Firm, our legal advisor as to PRC laws, in respect of certain aspects of the PRC operations and property interests of our Group;

(j) the legal opinion issued by REM Law Consultancy, our legal advisor as to Ghana laws, in respect of certain aspects of the Ghana operations of our Group;

(k) the legal opinion issued by ZICOLaw (Laos) Sole Co., Ltd., our legal advisor as to Laos laws, in respect of certain aspects of the Laos operations of our Group;

(l) the industry report issued by Frost & Sullivan (Beijing) Inc., Shanghai Branch Co. referred to in the section headed "Industry Overview" in this Document;

(m) the Competent Person's Report for the PRC Gold Mines prepared by SRK Consulting China Ltd, the texts of which are set out in Appendix IIIA to this Document;

(n) the Competent Person's Report for the Sepon Gold and Copper Mine prepared by SRK Consulting China Ltd, the texts of which are set out in Appendix IIIB to this Document;

(o) the Competent Person's Report for the Wassa Gold Mine prepared by SRK Consulting China Ltd, the texts of which are set out in Appendix IIIC to this Document;

(p) the Competent Person's Report for the Sepon Rare Earth Mine prepared by SRK Consulting China Ltd, the texts of which are set out in Appendix IIID to this Document;

(q) the terms of the ESOPs; and

(r) the PRC Company Law, the PRC Securities Law, together with unofficial English translations thereof.