#### **FINAL**

# Technical Report on Gaocheng Silver-Lead-Zinc Project in Guangdong Province, China

Gaocheng Project, Guangdong Province, People's Republic of China Guangdong Found Mining Co., Ltd.



SRK Consulting China Ltd. • SCN845 • 20 July 2024 • Effective Date: 30 June 2024



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#### Prepared for:

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#### File Name:

SCN845 ITR on GC Mine NI43101\_20240721\_630\_Final.docx

#### **Suggested Citation:**

SRK Consulting China Ltd. Technical Report on Gaocheng Silver-Lead-Zinc Project in Guangdong Province, China. FINAL. Prepared for Guangdong Found Mining Co., Ltd.: Yunfu City, Guangdong Province. Project number: SCN845. Issued 20 July 2024. Effective Date: 30 June 2024.

#### Cover Image(s):

Mine Site Overview

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# **Acknowledgments**

SRK would like to acknowledge the support and collaboration provided by Gaocheng Mine and Sivercorp Metal Inc personnel for this assignment, who are Guoliang Ma, P.Geo, (Geologist), Yongwei Li (Geologist), Bingfei Lu (Geologist), Baofu Mo (Mining), Haijun Xie (Mining), Mingshu Ma (Processing), Yunqiang Huang (Finance) and Yanlong Wang (General Manager). Their collaboration was greatly appreciated and instrumental to the success of this project.

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# **Appendices**

Appendix A Mining Permit
Appendix B Business License

Appendix C High-Tech Enterprise Certificate

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# **Useful Definitions**

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

| Abbreviation                | Terminology   |  |  |  |  |
|-----------------------------|---|--|--|--|--|
| %                           | Percent/percentage  |  |  |  |  |
| /                           | Per   |  |  |  |  |
| ,                           | Minute of arc   |  |  |  |  |
| 0                           | Degree(s) of arc  |  |  |  |  |
| °C                          | Degree(s) Centigrade  |  |  |  |  |
| 3D                          | Three-dimensional   |  |  |  |  |
| AAS                         | Atomic absorption spectroscopy  |  |  |  |  |
| AER                         | Annual Environmental Report   |  |  |  |  |
| Ag                          | The chemical symbol for silver  |  |  |  |  |
| AgEq                        | Equivalent Ag grade, considered Pb and Zn grades after applying the equivalent factors.   |  |  |  |  |
| ALS                         | ALS Chemical Assaying Laboratory in Guangzhou, China  |  |  |  |  |
| AMC                         | AMC Mining Consultants (Canada) Ltd.  |  |  |  |  |
| 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  |  |  |  |  |
| Bi                          | The chemical symbol for bismuth   |  |  |  |  |
| BVI                         | British Virgin Island   |  |  |  |  |
| Canadian 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. |  |  |  |  |
| Capex                       | Capital expenditure and/or cost   |  |  |  |  |
| CIM                         | Canadian Institute of Mining, Metallurgy and Petroleum  |  |  |  |  |
| CIM Definition<br>Standards | The Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM   |  |  |  |  |
| cm                          | Centimetre(s)   |  |  |  |  |
| CMF                         | Consensus Market Forecasts  |  |  |  |  |
| CMP                         | Composite(s)  |  |  |  |  |
| COG                         | Cut-off grade, the grade threshold above which a mineral material is considered potentially economic and is selectively mined and processed as ore  |  |  |  |  |
| Conc.                       | Concentrate   |  |  |  |  |

CoV Coefficient of Variation
CP Competent Person

CPR Competent Person's Report

CSA Compensations for sulfuric acid

CSR Corporate social responsibility costs

CSV Comma-separated values

Cu The chemical symbol for copper DA Depreciation and amortisation

DCF Discounted cash flow

DNR of Guandong Department of Natural Resources of Guangdong Province

Dr Doctor of Philosophy

ECAP Environmental Corrective Action Plan

The Environmental Impact Assessment

EPMP Environmental Protection and Management Plan

ESHS Environmental, Social, Health and Safety

etc. et cetera (= and so on)

FA Fire Assay

FAusIMM Fellow of the AusIMM

FS Feasibility study

g Gram(s)

g/t Gram(s) per tonne

GC Gaocheng

GMADI Guangdong Metallurgical & Architectural Design Institute

GPS global positioning system
H1 2024 the first half of 2024
H2 2024 the second half of 2024

ha hectare(s)

Resource

HQ core core diameter of 63.5 mm

i.e. id Est (= that is)

ICP Inductively coupled plasma

ICP-OES Inductively Coupled Plasma - Optical Emission Spectrometer

ID3 inverse distance power of 3 IDW inverse distance squared

IFC International Finance Corporation

Indicated Mineral 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 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 Resource, INF

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

IΡ 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

**IPO** Initial Public Offering **IRR** internal rate of return

JORC Code Australasian Code for Reporting of Exploration Results, Mineral Resources and Mineral

Reserves, 2012 edition, as published by the Joint Mineral Reserves Committee.

**JORC Committee** Joint Mineral Reserves Committee of The Australasian Institute of Mining and Metallurgy,

Australian Institute of Geoscientists and Minerals Council of Australia

kilogram(s), equivalent to 1,000 grams kg

kg/t kilogram(s) per tonne

km kilometre(s), equivalent to 1,000 metres

 $km^2$ square kilometre(s) koz 1,000 troy ounces

kt kiloton(s)

kiloton(s) per annum ktpa

kV kilovolt(s) kW kilowatt(s)

kWh/t kilowatt(s) hour per tonne LxBxH length x breadth x height LHD load-haul-dump machine

LOM life of mine metre(s) m Million(s) М

m ASL metre(s) above sea level M.Eng. Master of Engineering M.Sc. Master of Science m/kt metre(s) per kiloton metre(s) per second m/s  $m^2$ square metre(s) m<sup>3</sup>cubic metre(s)

m<sup>3</sup>/d cubic metre(s) per day  $m^3/s$ cubic metre(s) per second  $m^3/t$ cubic metre(s) per tonne m<sup>3</sup>/year cubic metre(s) per year

Measured

MAusIMM

Resource

Mineral 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

Member of the AusIMM

milligram(s) per litre mg/l

mq/m<sup>3</sup> milligram(s) per cubic metre

Measured + Indicated Categories Mineral Resources MI

Mineral Reserve 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 and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, and social and government factors, as defined in the CIM Definition Standards. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Mineral Reserves are sub-divided in order of increasing confidence

into Probable Mineral Reserves and Proven Mineral Reserves.

A concentration or occurrence of material of intrinsic economic interest in or on the earth's Mineral Resources

> crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction, as defined in the CIM Definition Standards. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated

or interpreted from specific geological evidence and knowledge

millimetre(s) mm

The chemical symbol for molybdenum Мо

Moz Million ounce(s)

Mr Mister

mRL Meter(s) relative level to sea level

MW Megawatt(s), equivalent to 1,000,000 watts

**NCF** net cash flow

NI 43-101 Canadian National Instrument 43-101

NPV net present value

NQ core core diameter of 47.6 mm

O.K. **Ordinary Kriging** 

OHS occupational health and safety

Opex operating cost

οz ounce

Pb The chemical symbol for lead

PEA Preliminary Assessment Technical Report

рΗ potential of hydrogen Ph.D. Doctor of Philosophy ppb part(s) per billion

PRC People's Republic of China

Probable Reserve Mineral A Probable Mineral 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, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that

extraction could reasonably be justified

Proven Reserves Mineral A Proven Mineral 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, metallurgical, 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

QP Qualified Person

QPR Qualified Person's Report

RMB Renminbi, which is the official currency of the People's Republic of China.

ROM run-of-mine

RTK real-time kinematic

S The chemical symbol for Sulphur

SBX Sodium butyl xanthate
SD standard deviations
SG specific gravity

30 Specific gravity

SGS Tianjin SGS Laboratory in Tianjin, China

Silvercorp Metals Inc

Sn The chemical symbol for Tin

SRK ZA SRK Consulting (South Africa) (Pty) Ltd.

SRK, SRK CN SRK Consulting China Ltd. trading as SRK Consulting

Stock Exchange,

The Stock Exchange of Hong Kong Limited

t tonne(s), equivalent to 1,000kg

t/h tonne(s) per hour

t/m³ tonne(s) per cubic metre
tpa tonne(s) per annum
tpd tonne(s) per day
tph tonne(s) per hour

TSF tailings storage facility

TSX Toronto Stock Exchange
TSXV TSX Venture Exchange

USc United States cent
USD, US\$ United States Dollar

USGS United States Geological Survey

Valmin Code Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and

Securities for Independent Expert Reports

VAT value-added tax

W The chemical symbol for tungsten

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

# 1 Summary

#### 1.1 Introduction

SRK Consulting China Ltd. ("SRK") was requested by Guangdong Found Mining Co., Ltd. ("GC Mine") to prepare a Qualified Person's Report ("QPR" or Competent Person's Report, "CPR") for Gaocheng ("GC") Silver-Lead-Zinc Project, located in Yunfu City of Guangdong Province, People's Republic of China (the "PRC" or "China") in compliance with the requirements of Canadian National Instrument 43-101 (the "NI 43-101") and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") for the listing by Silvercorp Metals Inc ("Silvercorp"), who indirectly owns 99% of GC Mine.

This QPR or CPR is an independent review of the GC Project's geology, exploration, Mineral Resources, Mineral Reserves, mining, mineral processing, capital investment, operating cost, and environmental and social aspects.

The scope of work includes the review the Mineral Resources estimates, modifying factors for Mineral Reserve conversion, operation records and mining operations for the GC Mine as of the effective date of the report, conducting site visit by the Qualified Persons, and preparation of the QPR in compliance with the NI 43-101 and the Listing Rules.

The Mineral Resource statement reported herein is a collaborative effort between GC Mine, Silvercorp and SRK personnel.

The exploration database was compiled and maintained by GC Mine and was reviewed by SRK. The geological model and wireframes defining the mineralisation, the statistical analysis and block model(s) were constructed by Silvercorp, between April and July 2024. In SRK's opinion, the geological model is a reasonable representation of the distribution of the targeted mineralisation at the current level of sampling.

Based on the Mineral Resource estimates and model(s), the mine plan and operation practices, GC Mine converted the qualified Mineral Resources into Mineral Reserves and scheduled the productions of the mine under the SRK's review. SRK updated the technical-economic analysis to demonstrate the project economic viability for perspective operation.

After reviewed the Mineral Resource Estimates and the mine plan as of 31 March 2024, SRK was requested to conduct a further review to the update data as of 30 June 2024. This report is combined the initial review and the update. The update is mainly on the following:

- Update production data or record of Q1 2025;
- Update the Mineral Resource according to the mined-out voids;
- Update the mine plan which starts from the Q2 2025;
- Update the metal prices for technical- economic analysis; and
- Update the Mineral Resource and Mineral Reserve Statement.

#### 1.2 Overview

GC Mine, 99% owned by Silvercorp, in the vicinity of Gaocheng village, Gaocun Township, Yun'an District, Yunfu City, Guangdong Province, which is accessed from Guangzhou that is the capital of Guangdong Province, is via 178 km of four-lane express highway to Yunfu, then 48 km of paved road to the Project site.

The poly-metallic mineralization of the GC deposits belongs to the mesothermal vein infill style of deposit, with silver, lead and zinc elements for commercial extraction.

The Mine is an operating underground mine ("UG"), with related facilities and infrastructure that are suitable and constructed for supporting the operation, and necessary regulation permits and licenses.

The GC Mine is a producing UG Mine applying decline (ramp) and shaft hybrid access method and shrinkage, resuing and overhand cut and fill mining methods, to produce plant feed ore since Q2 2014. The GC processing plant has a nominate capacity of 330 thousand tonnes per annual ("ktpa") feed ore to produce commercial lead concentrate and zinc concentrate.

SRK has worked on the GC Project since April 2024, conducted data verification programs and carried out quality assurance and quality control programs on drill hole information. SRK reviewed the active database and economic and technical parameters provided by GC Mine and Silvercorp, and opined the estimation of Mineral Resources is reasonable.

The Mineral Resource statements for GC Mine are shown in Table 1.1.

Table 1.1: Mineral Resource Statement for GC Project, as of 30 June 2024

| Resource           | Tonnes | A a (a/4) | Db (0/)      | (0/) <b>7</b> (0/) | Contained Metal |        |        |
|--------------------|--------|-----------|--------------|--------------------|-----------------|--------|--------|
| Classification     | (Mt)   | Ag (g/t)  | Pb (%) Zn (9 | Zn (%)             | Ag (koz)        | Pb(kt) | Zn(kt) |
| Measured           | 5.87   | 88        | 1.30         | 3.11               | 16,542          | 76     | 183    |
| Indicated          | 5.62   | 80        | 1.05         | 2.57               | 14,507          | 59     | 144    |
| Measured+Indicated | 11.49  | 84        | 1.18         | 2.85               | 31,049          | 136    | 327    |
| Inferred           | 9.57   | 85        | 1.23         | 2.44               | 26,194          | 117    | 234    |

Sources: GC Mine, SRK summarized

#### Notes

- <sup>1</sup> Mineral Resource Statement as of 30 June 2024.
- <sup>2</sup> Source: Silvercorp Metals Inc, Verified by SRK
- Mineral Resource are reported at a cut-off grade of 120 g/t AgEq.
- The totals may not compute exactly due to rounding.
- <sup>5</sup> The veins within the sub-surface/ 5m below surface are not included in the Mineral Resource estimate

The mine plan prepared by GC Mine is based on the eligible Mineral Resource, that are Measure and Indicated categories ("MI"), and generates a 14-year life of mine ("LOM") for GC Mine at a production rate of about 361 ktpa run of mine ("ROM"), which was converted to Mineral Reserve after considering the modifying factors.

The capital costs and operating costs provided to SRK, were matched production capacity and the current economic conditions. The economic analysis results demonstrate the economic viability of GC Mine.

Based on the SRK's review and projection using discount cash flow modelling, the GC Mine has a net present value (the "NPV") of US Dollar (the "USD") 63.1 million at a discount rate of 8%.

The economically mineable parts of the Measured and Indicated Mineral Resources within the designed stopes, including diluting materials and allowance for losses, were classified as Proven and Probable Mineral Reserves, respectively. The Mineral Reserve is estimated based on the reference point being the primary crusher or temporary stockpile at the crusher feed. The Mineral Reserve statement for GC Mine is shown in Table 1.2.

Table 1.2: Mineral Reserve Statement for GC Mine, as of 30 June 2024

| Category | Tonnes | Ag    | Pb   | Zn   | Contained Metal |        |        |
|----------|--------|-------|------|------|-----------------|--------|--------|
| Unit     | (Mt)   | (g/t) | (%)  | (%)  | Ag (koz)        | Pb(kt) | Zn(kt) |
| Proven   | 2.73   | 81    | 1.26 | 2.95 | 7,142           | 34     | 81     |
| Probable | 2.23   | 81    | 1.15 | 2.71 | 5,791           | 26     | 61     |
| 2P Total | 4.97   | 81    | 1.21 | 2.84 | 12,933          | 60     | 141    |

Sources: GC Mine, SRK summarized

#### **Notes**

- <sup>1</sup> Any differences between totals and sum of components are due to rounding.
- 2 150 g/t AgEq and 200 g/t AgEq COG was applied to Shrinkage (including overhand cut & fill) and resuing stopes, respectively.
- The COG estimates are based on the forecast prices 22 USD/oz silver, 2,050 USD/t lead, and 2,650 USD/t zinc.
- <sup>4</sup> The Mineral Reserves are reported on a metric dry tonne basis.
- <sup>5</sup> The Mineral Reserves are reported at the reference point of ROM stockpile before crushing or directly crushing.
- <sup>6</sup> The Mineral Reserves are reported inclusive of Mineral Resources.
- <sup>7</sup> The Mineral Reserves are effective as of 30 June 2024.

# 1.3 Property Description and Ownership

The GC mine is located in the vicinity of Gaocheng Village of Gaocun Township, Yun'an District, Yunfu City, Guangdong Province, China. Altitudes in the region range from 78 to 378 m above sea level ("ASL"), usually 150 to 250 m ASL, with relative differences of 50 to 150 m. Vegetation is in the form of secondary forests of pine and hardwoods, bushes, and grasses. Topsoil covers most of the ground. Outcrops of bedrocks can only be observed in valleys.

The region belongs to a sub-tropical monsoon climate zone with average annual temperature of 20 – 22°C. Rainfall is mainly concentrated in spring and summer from March to August. Winters feature short periods of frosting. The GC Project is able to operate year-round.

In 2008, Silvercorp acquired 100% of the shares of Yangtze Gold Ltd. (Yangtze Gold), a private British Virgin Island ("BVI") company, which in turn wholly owns Yangtze Mining Ltd. (Yangtze Mining).

Guangdong Found Mining Co. Ltd. (China), (Guangdong Found), is the designated joint venture operating company of the GC Mine. Yangtze Mining (H.K.) Ltd., a wholly owned subsidiary of Yangtze Mining, owns 95% of Guangdong Found.

In October 2018, Silvercorp Metals (China) Inc., a wholly owned subsidiary of Silvercorp, acquired an additional 4% equity interest in Guangdong Found, and as a result, the Silvercorp now beneficially owns a 99% interest in Guangdong Found, who has a 100% beneficial interest in the GC Mine.

GRT Mining Investment (Beijing) Co., Ltd. is a 1% equity interest holder of Guangdong Found.

Table 1.3 summarises the status of key operational licences and permits for the GC Mine. SRK has reviewed the information provided and is satisfied that the extent of the properties described in the various rights are consistent with the maps and diagrams received from GC Mine.

Table 1.3: Key Operational Licences and Permits

| Holder  | Business<br>Licence | Mining<br>Licences | Safety<br>Production<br>Permits | Land/Forest<br>Use Permit | Water Use<br>Permit | Site Discharge<br>Permit |
|---------|---------------------|--------------------|---------------------------------|---------------------------|---------------------|--------------------------|
| GC Mine | Υ                   | Υ                  | Υ                               | Υ                         | Υ                   | Υ                        |

Notes: "Y" denotes the licence/permit is granted and has been sighted by SRK.

## 1.4 Geology and Mineralization

#### 1.4.1 History

Prior to Yangtze Mining Ltd. acquiring the then project in 2005, illegal mining activity resulted in the excavation of several tunnels and small-scale mining of veins. In 2008, Silvercorp acquired a 100% interest in the shares of Yangtze Gold Ltd. which in turn wholly owned the entirety of Yangtze Mining.

The Project (subsequently the GC Project) was discovered in 1959 by traditional prospecting methods. From 1959 to 2007, Geophysical Survey Brigade of Guangdong Bureau of Geology and Mineral Resources and Guangdong Provincial Institute of Geological Survey ("GIGS") conducted the exploration work on the GC Project, and Silvercorp started the exploration work from 2008, while detailed systematic drilling commenced in 2011 and has been on-going.

Prior to Yangtze Mining acquiring the Property, illegal mining activity resulted in the excavation of several tunnels and small-scale mining of veins V2, V2-2, V3, V4, V5, V6, and V10. GIGS reported that a total of 1,398 m of excavation comprised of 10 adits and tunnels had been completed on the Property through the illegal activity.

Since 2008, six Mineral Resource estimates for the GC project have been documented by AMC Mining Consultants (Canada) Ltd. ("AMC") following the CIM Definition Standards.

#### 1.4.2 Geological Setting and Mineralisation

The Property is located on the east margin of the Luoding basin, east of the Wuchuan – Sihui major fault within the north portion of the Yunkai uplift of the South China Orogenic Belt. Basement geology in the area comprises late Proterozoic Sinian sedimentary clastics and carbonate rocks; Palaeozoic (Ordovician, Silurian, Devonian, Carboniferous) sedimentary clastics and carbonate rocks; and Mesozoic (Triassic) coal-bearing clastic rocks and Cretaceous red clastic rocks. Ag-Pb-Zn polymetallic deposits occur within late Proterozoic rocks. Cu-Pb-Zn, Mn, and Au-Ag deposits occur within Paleozoic rocks.

The majority of Ag-Zn-Pb mineralization is hosted by the Mesozoic granite. The granite dips south and strikes west north-west, parallel to the majority of mineralized veins on the GC property.

Ag-Pb-Zn mineralization at the GC deposit can be divided into two types: primary and oxidized. The primary mineralization is mainly composed of galena-sphalerite-silver minerals, which occur sparsely, as disseminations, veinlets, and lumps. Primary mineralization accounts for 95% of the entire Mineral Resource. Oxide mineralization occurs on and near the surface. Alteration minerals associated with the GC vein systems include quartz, sericite, pyrite, and chlorite, together with clay minerals and limonite. Silicification commonly occurs near the centre of the veins. Chlorite and sericite occur near and slightly beyond the vein margins.

### 1.4.3 Deposit Types

The poly-metallic mineralization of the GC deposit belongs to the mesothermal vein infill style of deposit.

#### 1.4.4 Exploration and Data Management

Various state-sponsored Chinese Geological Brigades and companies have conducted geological and exploration work in the Project area.

During 2001 and 2002, and again in 2004 and 2005, GIGS conducted general prospecting at the GC Project area, and defined some mineralized bodies and estimated Mineral Resources for the GC deposit.

From 2006 to 2007, GIGS conducted detailed prospecting at the GC Project area, and completed a 36-hole, 11,470 m surface diamond drilling program and 1,964 m<sup>3</sup> of trenching and surface stripping to update and upgrade the Mineral Resources of the GC deposit.

In 2008, Silvercorp completed a surface exploration program including soil sampling, geological mapping, and trenching. After 2008 Silvercorp continued the underground tunnelling and sampling at the Property Area.

All Silvercorp drilling from 2008 to 2023 was conducted using NQ-sized core (47.6 mm diameter core), with all drill programs managed by Silvercorp. Drillhole collars were surveyed using a total station, and downhole surveys were completed every 50 m using a Photographical Inclinometer manufactured by Beizheng Weiye Science and Technology Co. Ltd. (Chinese equivalent of the Sperry-Sun downhole survey tool). After the completion of drilling, surface drillhole collars were cemented, and the locations were marked with concrete blocks measuring 50 x 30 x 20 cm. Core recoveries from Silvercorp's drilling programs ranged from 35.66% to 100.00%, with an average recovery rate of 99.36%. A review of the relationship between grade and core recovery showed no bias.

From 2008, Silvercorp continued the underground tunnelling and sampling at the Property Area. Details of drill programs completed between 2008 and 2023 are presented in Section 5 of this report.

Channel sampling was conducted at 5 m intervals across mineralized vein structures in the adits, with wider spacing (15 or 25 m) in non-mineralized sections. Each channel comprised multiple chip samples taken across the mineralization and wallrocks.

All data for the GC project is stored within a central Microsoft Access Database, which is managed by two designated database administrators. Drillhole data is collected in Microsoft Excel and imported into the Access database. Underground mapping is recorded on grid paper and in Excel and then imported into Access or Micromine 3D software.

Silvercorp has established QA/QC procedures which cover sample collection and processing at the GC Property. These QA/QC protocols have been progressively refined since 2011. Certified Reference Materials (CRMs) and coarse blanks have been included with drilling samples since 2011, and with underground samples since 2014. Field duplicates have been included with drilling samples since 2012 and with underground samples since 2014. Check (umpire) samples (pulp duplicates) have been sent to a separate 'umpire' laboratory since 2012.

In 2018, Silvercorp further improved their QA/QC protocols to include regular and more frequent submission of CRMs, coarse blanks, and field duplicates with drilling and underground samples. Coarse reject duplicates and pulp duplicates were also incorporated into drill sampling programs. The proportion of check samples, sent to a different laboratory was also increased. In 2019, Silvercorp initiated real-time monitoring of QA/QC protocols.

SRK has reviewed QA/QC data collected to date. Except for a small portion of data missing, all the data collected shows reasonable analytical accuracy and precision. SRK considers the GC Mineral Resource database acceptable for Mineral Resource estimation.

#### 1.5 Mineral Resource and Mineral Reserve Estimates

The Mineral Resource estimation work was completed by Mr Yongwei Li, Resource Geologist of Silvercorp under the supervision of Guoliang Ma, who is the QP of Silvercorp. Mr Mark Wanless, Principal Geologist of SRK ZA (FGSSA, Pr.Sci.Nat) and Ms Yanfang Zhao, Principal Geologists of SRK (MAusIMM) have reviewed the database, estimation methodologies and models used to prepare the Mineral Resource estimate using Isatis.Neo software. After some adjustment to the compositing, capping and search parameters, Mr Mark Wanless and Ms Yanfang Zhao are satisfied that they comply with reasonable industry practice.

The Qualified Person responsible for the Mineral Resources is Mr Mark Wanless, who is a full time employee of SRK Consulting (South Africa) (Pty) Ltd. (SRK ZA) and Registered with the South African Council for Natural Scientific Professionals as Pr.Sci. Nat, 400178/05, Fellow of the Geological Society of South Africa, Member of the Geostatistical Association of South Africa. Mr Mark Wanless visited the project between the 23 and 26 of April 2024.

The estimates are based on drilling samples and underground samples information available up to 2024. With respect to drilling and underground sample information available for the March 2024 Mineral Resource estimates, SRK believes the current drilling and channel sampling information is sufficiently reliable to interpret with confidence the boundaries for GC deposits and that the assay data is sufficiently reliable to support the Mineral Resource estimation.

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. SRK considers that the majority of the GC Project is amenable for underground mining.

Within the current mining License area, as of 30 June 2024, the GC Mine, above a cut-off grade ("COG") of 120g/ t AgEq, there are 11.49 million tonnes ("Mt") of Measured and Indicated Mineral Resources at an average grade of 84g/t Ag, 1.18% Pb, 2.85% Zn; and 9.57 Mt of Inferred Mineral

Resources at an average grade of 85g/t Ag, 1.23% Pb, 2.44% Zn. The estimated Mineral Resources are shown in Table 1.1.

The Mineral Reserve estimation work was completed by Falong Hu, Principal Mining Engineer of SRK based on the review of modifying factors supplied by GC Mine and the mine plan by Mr Haijun Xie, Mining Engineer of GC Mine, under the supervision of Alexander Thin, who is a Principal Mining Engineer of SRK.

The modifying factors relevant to metallurgical and processing are relied on the opinions from Mr. Lanliang Niu, Principal Processing Engineer of SRK; the modifying factors relevant to environmental permitting, and social impact are relied on the opinions from Mr. Nan Xue, Principal Environmental Scientist and Hongchen Huang, Environmental Scientist, of SRK; the modifying factors relevant to costings and technical-economic analysis are relied on the opinions from Ms. TzuHsuan Chuang, Senior Mining Engineer of SRK. Mr Falong Hu and engineers or scientists he reliance on are satisfied that they comply with reasonable industry practice.

The Qualified Person responsible for the Mineral Reserve is Mr Falong Hu, who is a full-time employee of SRK Consulting (China) Ltd. and, Fellow of the Australasian Institute of Mining and Metallurgy ("AusIMM"). Mr Falong Hu visited the project between the 23 and 26 of April 2024.

Within the current mining License area and mine plan scope, as of 30 June 2024, the GC Mine, by applying the Modifying Factors, the economically mineable parts of the Measured and Indicated Mineral Resources within the designed stopes, including diluting materials and allowance for losses, were classified as Proven and Probable Mineral Reserves, respectively. The feed ore is estimated based on the reference point being the primary crusher or temporary stockpile at the crusher feed. Around 44% Measured and Indicated Mineral Resources are converted into Proven and Probable Mineral Reserves in terms of tonnes, and about 43% contained metal converted when considering equivalent silver.

Above a COG of 150 g/t AgEq and 200 g/t AgEq applied to Shrinkage (including overhand cut and fill ("OCAF")) and resuing stopes, respectively, there are 4.97 Mt of Proven and Probable Mineral Reserve at an average grade of 81g/t Ag, 1.20% Pb, 2.84% Zn. The estimated Mineral Reserves are shown in Table 1.2.

# 1.6 Development and Operations

#### 1.6.1 Geotechnical and Hydrogeological Considerations

The rock mass condition is categorized as Fair to Good and it is anticipated that the vein and host rocks in the mine area will continue to be largely competent and require minimal ground support other than in weaker ground areas. For AMC's preliminary geotechnical assessments, minor water inflows (less than five litres per minute locally) were assumed. SRK notes that operating experience to date indicates that the assumption of minor water inflows is reasonable.

#### 1.6.2 Mining Method

UG mining to date has been conducted in two stages, and designing the third stage, which are horizontally defined by mine sections and vertically by elevations:

- Stage 1 targeted bringing the project into production as soon as practicable using mobile, rubbertired, diesel-powered equipment (development jumbo, loader, and truck) with surface declines access down to -50 mRL.
- Stage 2 development from -50 mRL down to -300 mRL employs conventional tracked equipment (battery powered locomotives, rail cars, electric rocker shovels and pneumatic hand-held drills) via a surface shaft access and surface decline extension.
- Stage 3 is on design, which mines the Mineral Resources occurred between -300 mRL and -500 mRL.

The mining method employed by the mine were traditional shrinkage and resuing stoping methods, prior to 2021. Overhand cut and fill method has been introduced as the backfill plant finished construction.

The underground infrastructure, including water supplier and dewatering system, hoisting system, ventilation, power supply, compressed air supply, are well constructed for the first 2 stages of mining.

The mine is scheduled to operate 8 hours per shift, 3 shifts per day, 330 days per year. The nominate capacity is to be 330 ktpa plant feed.

Annual ore production is projected to rise from the current level of around 313 kt to 363 kt by FY2026 till the remainder of its envisaged mine life. The key reason of production ramp up is due to the third stage development and more stopes employing mobile equipment. The key target of the mine plan is to achieve the planned grade, mining more efficiently and lower the cost base. The life of mine schedule summarized in Table 1.4 below.

Table 1.4: Summary of LOM Schedule

| Fiscal Year  | ROM   | AgEq | Ag  | Pb   | Zn   |  |
|--------------|-------|------|-----|------|------|--|
| Unit         | kt    | g/t  | g/t | %    | %    |  |
| FY2025 Q2-Q4 | 257   | 238  | 71  | 1.12 | 3.02 |  |
| FY2026       | 363   | 256  | 77  | 1.23 | 3.08 |  |
| FY2027       | 362   | 251  | 83  | 1.35 | 2.69 |  |
| FY2028       | 362   | 251  | 85  | 1.10 | 2.91 |  |
| FY2029       | 362   | 253  | 90  | 1.10 | 2.84 |  |
| FY2030       | 362   | 252  | 81  | 1.08 | 3.06 |  |
| FY2031       | 363   | 248  | 87  | 1.16 | 2.72 |  |
| FY2032       | 362   | 249  | 81  | 1.27 | 2.77 |  |
| FY2033       | 362   | 248  | 77  | 1.17 | 2.94 |  |
| FY2034       | 363   | 247  | 89  | 1.13 | 2.68 |  |
| FY2035       | 363   | 249  | 81  | 1.39 | 2.62 |  |
| FY2036       | 363   | 246  | 82  | 1.42 | 2.52 |  |
| FY2037       | 362   | 248  | 81  | 1.19 | 2.86 |  |
| FY2038       | 359   | 236  | 65  | 1.15 | 2.99 |  |
| LOM total    | 4,965 | 248  | 81  | 1.21 | 2.83 |  |

Source: GC Mine, summarized by SRK

Notes:

- <sup>1</sup> Fiscal yare is from 1<sup>st</sup> April to 31<sup>st</sup> March of the next year. FY2025 is from 1 April of 2024 to 31 March of 2025;
- <sup>2</sup> ROM stands for run of mine, which includes mining dilution and ore loss.
- 3 AgEq accumulated by factored Ag, Pb and Zn grade, which is 1, 44.83 and 40.02, respectively.
- <sup>4</sup> Inferred Mineral Resources are not included.
- <sup>5</sup> ROM is considered feed the GC processing plant directly or rehandled from the temporary stockpile. Therefore, the processing plan is the same as mine schedule.

### 1.6.3 Recovery Method

The GC Mine contains silver-lead-zinc polymetallic ore, with minor quantities of copper and tin available for comprehensive recovery. The processing test work conducted by the Hunan Research Institute for Nonferrous Metals in 2009 employed a preferential flotation process, sequentially yielding lead, zinc, and sulfur concentrates with favourable results, providing technical support for the design of the GC processing plant. An exploratory test on tin recovery from tailings was undertaken, achieving a recovery rate of 34% through gravity separation using classified shaking tables, which can be used as reference for the design of tin recovery facilities at the plant. Additionally, a copper-lead separation flotation test was performed on the lead concentrate, successfully producing copper concentrate.

The GC processing plant is designed with a processing capacity of 1,600 tonnes per day (tpd), and the grinding and flotation system consists of two parallel circuits. The original lead-zinc-sulphur sequential preferential flotation process was modified in 2013 to a lead preferential flotation, a zinc-sulphur mixed flotation and then zinc-sulphur separation flotation process. The actual capacity of each circuit has reached between 900 and 950 tpd. Historical production indicators are positive, with the lead concentrate averaging a lead grade of 45%, a lead recovery rate of 90%, and containing 1,500 g/t of silver with a silver recovery rate of 60%, and a zinc content of 6%. The zinc concentrate has a zinc grade of 44%, a zinc recovery rate of 89%, and contains 290 g/t of silver with a silver recovery rate of 23%. The sulphur concentrate has a sulphur grade of 45% and a sulphur recovery rate of 49%.

In 2023, the newly implemented intelligent pre-sorting system replaced the manual hand-sorting methodology, allowing for the preliminary removal of waste rock and enhancing the grade of ore fed into the mill. This advancement is particularly beneficial for the processing of low-grade ores. The system is currently undergoing continuous optimization, and it is anticipated to significantly contribute to the efficient pre-discarding of tailings, thereby yielding improved economic benefits.

The GC tailings storage facility ("TSF") is a dry-stacking tailings dam, located in a valley on the south side of the GC processing plant, 200 m away from the GC processing plant in a straight line. Between the GC processing plant and the TSF are the tailings dewatering station and the paste filling station. The tailings from the GC processing plant is pumped to the deep cone thickener for thickening, after which it is primarily used for the underground paste filling needs, and the remaining part is pressed and filtrated in the tailings press filter workshop, and the filter cake is transported to the TSF by the belt conveyor, which will be levelled and compacted by bulldozers and excavators. The total designed dam height of the TSF is 99.5 m (elevation of 233m), and the total storage capacity is 2,989,300 m³. As of April 2024, the tailings stacking height is 63m (elevation of 196.3m) with the tailings stacking stock of about 1,180,000 m³ (39% of capacity), and the remaining storage capacity is 1,809,300 m³ corresponding to a tailings stacking volume of 3,160 kt according to a tailings stacking specific gravity of 1.75t/ m³.

The GC TSF is a third-class dam with a number of displacement monitoring facilities and phreatic line monitoring systems installed to monitor the safety of the dam body and obtained the latest "Safety Production Permit" on 31 August 2023, valid until 30 August 2026.

#### 1.6.4 Operation

GC Mine has been commercial operated since Q2 2014. GC Mine operates mainly using contractors for mine development, production, ore transportation, and exploration. GC mine provides its own management, technical services, and supervisory staff to manage the mine operations. The operation records for the last 3 years are presented in Table 1.5.

Table 1.5: Operation Records from FY2022 to FY2025 Q1

| Year        | Unit      | FY2022  | FY2023  | FY2024  | FY2025 (Q1) |
|-------------|-----------|---------|---------|---------|-------------|
| Ore Mined   | dry tonne | 314,882 | 299,959 | 290,006 | 83,139      |
| Moisture    | %         | 3.07    | 2.97    | 2.67    | 3.13        |
| Processed   | dry tonne | 318,042 | 299,597 | 290,050 | 83,745      |
| Head Grades |           |         |         |         |             |
| Ag          | g/t       | 75      | 75      | 69      | 64          |
| Pb          | %         | 1.53    | 1.32    | 1.19    | 0.94        |
| Zn          | %         | 3.19    | 2.75    | 2.64    | 2.38        |

Sources: GC Mine processing annually report

# 1.7 Environmental Studies, Permitting and Social or Community Impact

The GC Mine has obtained the main environmental protection-related permits required for operation, including the safety production permit, water use permit, and site discharge permit. An environmental impact assessment report for the project was prepared by Guangdong Heli Engineering Survey Institute in March 2020. Guangdong Province Environmental Protection Bureau issued aforementioned EIA approval on 13 June 2010. The EIA report covers the main production facilities including mine site, GC processing plant and TSF.

Some treated dewatering water is reused to supplement fresh water for underground mining operations and GC processing plant production, while the remaining portion is discharged. All processing wastewater is internally recycled and not discharged externally. The project conducts comprehensive environmental monitoring every quarter, which includes water quality monitoring, noise emission and dust emission. Additionally, surface water and groundwater monitoring are conducted annually, separately during the first and second halves of the year.

The GC Mine does not cover any nature reserves, scenic spots, or cultural relics. The general project area does not include any cultural minority groups. The project area consists mostly of secondary forest land, with a few hillsides cleared for farmland. The company actively participates in a range of social welfare and charitable initiatives, such as community development, support for vulnerable groups, educational assistance, and contributions to foundations. Moreover, it offers a variety of employment opportunities for working-age residents in the local area.

### 1.8 Capital Cost and Operating Cost

Forecasting of capital expenditure ("Capex") and record of operating cost ("Opex") for the last 3 fiscal years have been provided to SRK. The associated Capex for expansion development (deepening the mine) are estimated by the Mine. The other sustainable Capex such as mine closure, facilities updates, and capital maintenance are also estimated. The summary of Capex is presented in Table 1.6 below.

Table 1.6: Summary of Capex for GC Mine

| Item                       | Unit               | LOM Total |
|----------------------------|--------------------|-----------|
| Exploration Drillings      | USD Million        | 34.6      |
| Mine Capex Development     | USD Million        | 23.6      |
| Processing Updates         | USD Million        | 2.4       |
| Infrastructure Updates     | USD Million        | 0.2       |
| Mine Closure & Reclamation | USD Million        | 1.8       |
| Total                      | <b>USD Million</b> | 62.5      |

Sources: GC Mine, summarized by SRK

Notes: Any differences between totals and sum of components are due to rounding

GC Mine has a relative stable operation which addresses the Opex forecasting via their historic production records. The Opex is forecasted from the historical operation records of the past 3 years, which is USD58.3 /t. The operating costs are categorized into mining, processing, backfill, tailings and filtration, sale, general and administrative, ("S&GA"), and corporate social responsibility costs ("CSR"). Table 1.7 presented the summary of unit costs for the last 3 year and the weighted average parameters.

Table 1.7: Summary of Opex Historical & Forecasted for GC Mine

| Item                        | Unit       | FY2022 | FY2023 | FY2024 | Weighted Average as Forecasted |
|-----------------------------|------------|--------|--------|--------|--------------------------------|
| Mining                      | USD/t ROM  | 26.5   | 31.9   | 36.6   | 31.7                           |
| Plant                       | USD/t Feed | 13.2   | 15.6   | 16.3   | 15.0                           |
| Backfill                    | USD/t ROM  | 3.2    | 3.1    | 2.9    | 3.1                            |
| Tailings filtration         | USD/t Feed | 0.4    | 0.5    | 0.3    | 0.4                            |
| S&GA                        | USD/t Feed | 7.0    | 8.2    | 8.9    | 8.0                            |
| CSR                         | USD/t Feed | 0.2    | 0.1    | 0.1    | 0.1                            |
| <b>Total Cash Unit Cost</b> | USD/t      | 50.5   | 59.4   | 65.0   | 58.3                           |
| Mine ROM                    | kt         | 315    | 300    | 290    |                                |
| Plant Feed                  | kt         | 318    | 300    | 290    |                                |

Sources: GC Mine, summarized by SRK

Notes: Mining and backfill costs are united by mine ROM and the others are united by plant feed.

## 1.9 Technical-Economic Analysis

The technical-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 an 8% discount rate.

The cash flow estimate includes only the revenue, costs, taxes, and other factors directly associated with GC Mine. The assumptions are as follows:

- The ROM and finial products of GC Mine, which are lead and zinc concentrates, are based on the LOM schedule.
- The local currency for the Project is RMB, while US dollars are used for technical-economic analysis. The exchange rate is set statically at USD1 = RMB7.22
- Annual gross revenue is calculated by applying the forecasted metal prices and payable metal percentages from contracts to the annual recovered metal for each operating year.
- SRK does not consider future inflation or currency and cost fluctuations; the cost remains constant over the LOM.
- Financing is assumed to be on a 100% equity basis; no debt or related financing costs have been included in the technical-economic analysis.
- Corporate obligations and financing costs are not considered.
- Exploration Capex, which is aimed at discovering additional Mineral Resources that are currently outside the Mineral Reserves estimates, is not considered during this analysis.
- No salvage value has been included in the technical-economic analysis.
- Working capital will be fully recovered at the end of LOM.
- The reference date or effective date is 30 June 2024.

The projection for Project operation shows a positive economic prospect. At a discount rate of 8%, the NPV of the Project is USD 63.1 million. The NPVs at various discount rates are also presented.

SRK conducted a single-factor sensitivity analysis for the Project. The analysis focused on metal prices, Capex, and Opex, each tested within a ±30% range, exploration Capex, and corporate income tax rate. The results showed that the Project is most sensitive to changes in metal prices. The break-even prices (NPV=0, at 8% discount rate) are around a change of -27.3% simultaneously of silver, lead and zinc, from the base scenario prices used in the model. In other words, all the 3 metal prices drops to about 72.7% of the forecasting prices, the Project NPV will become negative.

#### 1.10 Conclusions and Recommendations

- The data verification shows reasonable analytical accuracy and precision. The QP considers the GC Mineral Resource database acceptable for Mineral Resource estimation.
- SRK believes the current drilling and channel sampling information is sufficiently reliable to interpret with confidence the boundaries for GC deposits and that the assay data is sufficiently reliable to support Mineral Resource estimation.

- The mine is operating at industrial good practice and with a reasonable perspective feasible extraction of the eligible Mineral Resources.
- The production process and operating parameters of the GC processing plant are suitable for the ore properties of the GC Mine. The historical performance shows that the targets of producing commercial lead concentrate and zinc concentrate have been achieved, and the recovery rates of silver, lead and zinc have also reached the design value.
- The GC Mine has obtained the main environmental protection-related permits required for operation, including the safety production permit, water use permit, and site discharge permit. An environmental impact assessment report for the project was prepared by Guangdong Heli Engineering Survey Institute in March, 2020. Guangdong Province Environmental Protection Bureau issued aforementioned EIA approval on 13 June 2010. The EIA report basically covers the main production facilities including mine site, GC processing plant and TSF.
- The associated Capex for development associated with the deepening of the mine are estimated by GC Mine. The other sustainable Capex such as mine closure, facilities updates and capital maintenance are also estimated. GC Mine has a relative stable operation which addresses the Opex forecasting via their practice records.
- The economic analysis demonstrates the project could be economic viable operated according to the principal assumptions.
- As reviewed by SRK from the geology, exploration, data management and Mineral Resource estimation, the QP recommendations for the GC mine are indicated below:
  - Regarding the sample database and QA/QC samples, SRK recommends ensuring that all records, including drillhole and channel samples, are assigned a consistent year between the collar and assay files. This will help reduce reporting discrepancies.
  - Additional bulk density measurements should be conducted on representative samples with varying base metal and pyrite content.
  - Bulk density measurements should also be taken from samples of the surrounding waste material.
  - Most umpire (check) samples show slightly bias results compared to the original samples in the higher end of the assay range. This phenomenon has occurred in both the ALS Laboratory and GC laboratories ("GC Lab"), which are the principal laboratories. It is recommended that it be assessed whether the storage of samples leads to this situation, which may be related to swelling and caking during oxidation.
  - In the site underground channel sampling observed, only the larger blocks on the plastic sheet were taken, all the fines were discarded, and the sampling was biased against the hanging wall and footwall units, with a larger proportion of the mineralization zone (Figure 6.2) chipped. Although SRK recognises that channel sampling is challenging due to the variable hardness of the rock units and uneven surface for sampling, SRK recommends that the chip sampling can be improved using a diamond saw to cut a channel for the chipping, which will also reduce the volume of sample and allow the full sample of coarse and fine material to be collected.
  - The umpire samples from 2021 to 2023 were observed to have some swelling and caking, especially in the samples for 2021 and 2022, which may result in mass change or oxidation, which may affect the results.

- Based on the site visit and review of available technical information, and Mineral Reserve estimates, the QP recommendations for the GC mine are indicated below:
  - Conducting technical studies on long-hole stoping method for the relative wider veins, and well recording the test stope data, for the improvement of mining efficiency and cost reduction.
  - Conducting reconciliation on not only Mineral Resources versus Processed Feed, but also
    on the mineral flows, from the Mineral Resource model, grade control results, mining, then
    processing.
  - Conducting reconciliation on exploration investment versus Mineral Resources updates to demonstrate the Capex efficiency.
  - Considering utilising commercial mine planning software for mine scheduling, more efficient for modifying.
  - As part of ongoing operations at the mine, geotechnical and ground support aspects should be continuously reviewed in a formal and recordable manner, bearing in mind previous recommendations, local and mine-wide operating experience in all rock types encountered, any advisable data collection, and looking to future mining development.

# 2 Introduction

In April 2024, SRK Consulting China Ltd. ("SRK") was requested by Guangdong Found Mining Co., Ltd. ("GC Mine") to prepare an independent technical review report on Gaocheng Silver-Lead-Zinc Project, located in Yunfu City of Guangdong province, China. The deliverable of this project is an independent technical review report which will enable potential equity investors and possible future shareholders to review the Project's operations.

# 2.1 Purpose of the Report

The purpose of this Report is to provide an independent technical assessment for inclusion in a prospectus to be issued by Silvercorp Metal Inc, who is 99% owned GC Mine, to support the proposed listing on the Stock Exchange of Hong Kong Limited ("HKEX").

Silvercorp is a Canadian mining company producing silver, gold, lead, zinc, and other metals with a long history of profitability and growth potential. Silvercorp operates several silver-lead-zinc mines at the Ying Mining District in Henan Province, China and the GC silver-lead-zinc mine in Guangdong Province, China. The Company's common shares are traded on the Toronto Stock Exchange ("TSX") and NYSE American under the symbol "SVM".

SRK was advised that the report will be included in the listing and/or disclosure documents that the company plans to submit to the TSX and NYSE American, the report is in accordance with NI 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") format and Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standard Definition.

# 2.2 Scope of Work

The scope of work, as defined in the engagement includes the preparation of an independent technical report in compliance with NI 43-101 and Form 43-101F1 guidelines. This work typically involves the assessment of the following key aspects of this project:

- Mineral Resource Estimates ("MRE") inputs, workflow, and the results which are used and or applied by GC Mine expert(s).
- Mineral Reserve conversion review, including the mining modifying factors applied by GC Mine expert(s).
- Review of Modifying Factors of relevant disciplines, such as processing recovery method and associated infrastructure.
- Review of Modifying Factors of relevant environmental-management activities, and permitting-compliance status, environmental impact assessments ("EIA") approval, mining license, reclamation, mine safety operation license, as well as the potential impact on the Project.
- Review of Modifying Factors of relevant technical-economic parameters, such as Capex and Opex.
- Review of the any updates data by the Client operation.
- Review of the LOM for the GC Mine based on the reviewed input parameters.
- Update technical-economic model and conduct analysis for the GC Mine.

- SRK team conducted a site visit of the GC Mine.
- SRK gave recommendation on data verification procedures, all assays have been gathered and examined by independent credible entities and that the results are accessible to industry best practices.
- Summarized all findings and compile an ITR in accordance with NI 43-101 format.

SRK's scope excludes any work relating to the marketing, commodity price and exchange rate assumptions, inflation rates and financial analysis (including discount rate) adopted in the technical economic model.

### 2.3 Work Program

The Mineral Resource statement reported herein is a collaborative effort between GC Mine and SRK personnel. The exploration database was compiled and is maintained by GC Mine and was audited by SRK.

The geological model and outlines for the silver, lead and zinc mineralization were constructed by GC Mine from a two-dimensional geological interpretation. 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 GC Mine during the 2 months (April and May 2024). The Mineral Resource statement was updated to the date of 31 March 2024.

The Mineral Reserve estimate was prepared by GC Mine based on the stated Mineral Resource model and validation/consideration of the modifying factors as outlined in the engineering design for the mine and during the operation practice since 2014 to date. A technical assessment and an economic analysis was performed by SRK and indicates the Project is both technically feasible and economically viable. The Mineral Reserve statement was updated to the date of 31 March 2024.

The Mineral Resource and Mineral Reserve Statement reported herein was prepared in conformity with the generally accepted CIM Exploration Best Practices Guidelines and CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines. This technical report was prepared following the guidelines of the Canadian Securities Administrators' NI 43-101 and Form 43-101F1.

The technical report was compiled in the SRK Beijing Office during the 3 months of April and July, 2024.

After reviewed the Mineral Resource Estimates and the mine plan as of 31 March 2024, SRK was requested to conduct a further review to the update data as of 30 June 2024. The update is mainly on the following:

- Update production data or record of Q1 2025;
- Update the Mineral Resource according to the mined-out voids;
- Update the mine plan starting from the Q2 2025;
- Update the metal prices for technical- economic analysis; and
- Update the Mineral Resource and Mineral Reserve Statement as of 30 June 2024.

# 2.4 Basis of Technical Report

This report is based on information collected by SRK during a site visit performed and on additional information provided by GC Mine throughout the course of SRK's investigations. SRK has no reason to doubt the reliability of the information provided by GC Mine. Other information was obtained from the public domain. This technical report is based on the following sources of information:

- Discussions with GC Mine personnel
- Inspection of the GC project area, including outcrop and drill core
- Review of exploration data collected
- Information, models, reports and recorded data provided to SRK by GC Mine
- Additional information from public domain sources

### 2.5 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 Mineral 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. Table 2.1 below indicates SRK team who prepared or contributed to the independent technical review.

Table 2.1: SRK Team Contributed to This Report

| Contributor               | Position                | Discipline  | Professional<br>Designation | Role  | Site<br>Visit |
|---------------------------|-------------------------|-------------|-----------------------------|---|---------------|
| Falong Hu                 | Principal<br>Consultant | Mining      | FAusIMM, PMP                | Project Management, Mining and Mineral Reserve Review                 | Yes           |
| Yanfang Zhao<br>(Bonnie)  | Principal<br>Consultant | Geology     | MAusIMM                     | Geology and Mineral Resource Review                                   | Yes           |
| Mark Wanless              | Principal<br>Consultant | Geology     | Pr.Sci.Nat                  | Geology and Mineral Resource<br>Review                                | Yes           |
| TzuHsuan<br>Chuang (Shan) | Senior<br>Consultant    | Mining      | MAusIMM                     | Costs and Technical-Economic Review                                   | No            |
| Lanliang Niu              | Principal<br>Consultant | Processing  | MAusIMM                     | Metallurgical Test, Processing<br>Plant, and Infrastructure<br>Review | Yes           |
| Nan Xue                   | Principal<br>Consultant | Environment | MAusIMM                     | Environmental and Permitting Review                                   | No            |
| Hongchen Huang (Cynthia)  | Consultant              | Environment | N/A                         | Technical Support   | Yes           |

| Contributor           | Position                | Discipline | Professional<br>Designation | Role            | Site<br>Visit |
|-----------------------|-------------------------|------------|-----------------------------|-----------------|---------------|
| Alexander Thin (Alex) | Principal<br>Consultant | Mining     | FAusIMM;<br>FIMMM; FSAIMM   | Internal Review | No            |

Sources: SRK

The Mineral Resource and Mineral Reserve evaluation review work and the compilation of this technical report was completed by Mark Wanless, Pr.Sci.Nat (400178/05) and Falong Hu, FAusIMM (313608). By virtue of their education, membership to a recognized professional association and relevant work experience, Mark and Falong are independent Qualified Persons as this term is defined by NI 43-101. Falong is the project manager and the chief compiler of this report who takes overall responsibility.

Alexander (Alex) Thin, FAusIMM (CP) (227503), FIMMM (C.Eng) (47860), FSAIMM (702076), RPEQ (26347), a Principal Consultant (Mining and Evaluation) with SRK, reviewed drafts of this technical report prior to their delivery to GC Mine and/or Silvercorp as per SRK internal quality management procedures. Alex did not visit the project.

Neither SRK, nor any of the authors of this Report, has any material present or contingent interest in the outcome of this Report, nor any pecuniary or other interest that could be reasonably regarded as capable of affecting their independence or that of SRK.

SRK had prior involvement with GC Mine that is the subject of the Technical Report, in that SRK assisted the independent valuer with SRK Australian team to review the mining method recovery method as well as environment assessment, with respect to an independent technical valuation service, in 2023.

SRK has no beneficial interest in the outcome of the technical assessment capable of affecting its independence.

SRK's estimated fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The fees are agreed based on the complexity of the assignment, SRK's knowledge of the assets and availability of data. The fee payable to SRK for this engagement is estimated based on the working hours and rates of the consultants assigned to complete the project. The payment of this professional fee is not contingent upon the outcome of this Report.

#### 2.6 Site Visit

In accordance with NI 43-101 guidelines, Mark Wanless (Geology), Yanfang Zhao (Geology), Falong Hu (Mining), Langliang Niu (Processing), and Hongchen Huang (Environmental) visited the GC Mine from April 23 to 26, 2024 accompanied by Guoliang Ma P.Geo of Silvercorp.

The purpose of the site visit 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 the compilation of a technical report. During the site visit, particular attention was given to the treatment and validation of historical drilling data.

The site visits also aimed at investigating the geological and structural controls on the distribution of the mineralization, also aimed at investigating the infrastructure of the mine constructed and the operation performed by the management.

SRK was given full access to relevant data and conducted interviews with GC Mine 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 the operation data and costing data.

#### 2.7 Effective Date

The conclusions expressed in this report are appropriate as of 30 June 2024. The report and associated technical-economic analysis are only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration results.

Based on the information provided by GC Mine, there are no events that have occurred since the Effective Date that are likely to have a material impact on the Mineral Resource and Mineral Reserve statements for GC Mine, at the date of publication of this QPR.

## 2.8 Currency, Units and Year

All monetary values outlined in this assessment are expressed in United States Dollars ("US\$ or USD"), unless otherwise stated.

Quantities are generally stated in Système international d'unités ("SI") metrics units, the standard Canadian and international practices, including metric tonne ("tonne", "t") for weight, and kilometre ("km") or metre ("m") for distances.

Fiscal year ("FY") is stated in the report which start from the Q2 of last year till Q1 of this year. For example, FY2024 is from the 1 April of 2023 to 31 March 2024.

## 2.9 Limitations, Declaration and Consent

#### 2.9.1 Limitations

SRK's opinion contained herein is based on information provided to SRK by GC Mine throughout the course of SRK's investigations as described in this Report, which in turn reflects various technical and economic conditions at the time of writing. Such information as provided by GC Mine was taken in good faith by SRK. SRK has not verified Mineral Resource or Mineral Reserve estimates by means of recalculation.

This report includes technical information, which requires subsequent calculations to derive subtotals, totals, averages and weighted averages. Such calculations may involve a degree of rounding. Where such rounding occurs, SRK does not consider them to be material.

## 2.9.2 Legal Matters

SRK has not been engaged to comment on any legal matters.

SRK notes that it is not qualified to make legal representations as to the ownership and legal standing of the mineral tenements that are the subject of this review. SRK has not attempted to confirm the legal status of the tenements with respect to joint venture agreements, local heritage or potential environmental or land access restrictions.

#### 2.9.3 Consent

SRK consents to this Report being included, in full, in Silvercorp's offer document in connection with the HKEX listing and Silvercorp's documents in the form and context in which the technical assessment is provided, disclosure documents that the company plans to submit to the TSX and NYSE American, and not for any other purpose. SRK provides this consent on the basis that the technical assessment expressed in the Summary and in the individual sections of this Report is considered with, and not independently of, the information set out in the complete report.

# 3 Reliance on Other Experts

In preparing this technical report, SRK has relied upon input from GC Mine. Standard professional review procedures were also used by SRK in preparation of this report.

SRK trusts the information from GC Mine 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 4 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. A copy of the original mining license is provided in Appendix A. The reliance applies solely to the legal status of the rights disclosed in Section 4.1.

SRK was informed by GC Mine that there are no known litigations potentially affecting the GC Mine.

GC Mine provided the digital database used for geological modelling, and the geological and grade block models. SRK verified this database and reviewed the estimation. 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 GC Mine. SRK trusts the results of this survey. SRK also relied on the geological reports approved by related governmental authorities which were compiled by various Chinese geological brigades.

# 4 Property Description and Location

## 4.1 Ownership and Mining Permit

Silvercorp is the sole shareholder of Fortune Mining Limited ("Fortune") which was incorporated under the laws of BVI on August 23, 2002, to be the holding company of several other subsidiaries which are parties to agreements relating to mineral properties in China. Fortune owns 100% of Yangtze Mining Ltd. ("Yangtze Mining"), which was incorporated on February 11, 2002, under the laws of the BVI. It holds a 100% equity interest in Yangtze Mining (H.K.) Ltd. ("Yangtze Mining HK").

Yangtze Mining HK holds a 95% equity interest in Guangdong Found Mining Co. Ltd. ("Guangdong Found"), a company incorporated on October 26, 2008, under the laws of the PRC, that holds a 100% interest in the silver-lead-zinc exploration mine in Gaocheng (the "GC Mine",) in Guangdong Province.

In October 2018, Silvercorp Metals (China) Inc., a wholly owned subsidiary of the Company, acquired an additional 4% equity interest in Guangdong Found, and as a result, the Company now beneficially owns a 99% interest in Guangdong Found.

GRT Mining Investment (Beijing) Co., Ltd. is a 1% equity interest holder of Guangdong Found.

The boundaries of the mining permit were surveyed, and the boundary markers were staked in the ground by the Bureau of Land and Resources of Guangdong Province before issuing the mining permit to Guangdong Found in 2010.

On 14 June 2010 Silvercorp announced that it had been issued an Environmental Permit for the Project from the Department of Environmental Protection of Guangdong Province, an essential document required for a mining permit application.

A Mining Permit was issued to Anhui Yangtze by the Ministry of Land and Resources of China on 24 November 2010. The permit is valid for 30 years to 24 November 2040, covers the entire 5.5238 km² area of the GC Mine and permits mining from 315 mRL to minus 530 mRL. The permit was issued on the terms applied for and allows for the operation of an underground mine to produce silver, lead, and zinc. In June 2012, Anhui Yangtze transferred the mining permit to Guangdong Found, and a new mining permit was issued to Guangdong Found by the Ministry of Land and Resources of China on 6 June 2012.

SRK relies on the information provided by GC Mine, 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. Mining Permit Corner Points of the Property are as shown below in Table 4.1.

Table 4.1: Mining Permit Corner Points of Property

| Point | Gauss Coordinates | Xi'an Geodetic Coordinate System 1980 |
|-------|-------------------|---------------------------------------|
|       | X                 | Υ                                     |
| 1     | 2536958.82        | 37591830.45                           |
| 2     | 2536977.34        | 37594822.59                           |
| 3     | 2535131.42        | 37594834.19                           |
| 4     | 2535112.9         | 37591841.69                           |

Sources: The Copy of Mining Permit of GC Mine

The grid system used for the GC Project is the Xi'an Geodetic Coordinate System 1980. Altitude is referred to the Yellow Sea 1956 Elevation System. The project survey control points were generated from three nearby national survey control points. Details of the mining permit for the Project are presented in Table 4.2.

Table 4.2: Information of Mining Permit for GC Mine

| Owner               | Guangdong Found Mining Co. Ltd.                          |
|---------------------|--|
| Project Name        | GC Lead and Zinc Mine of Guangdong Found Mining Co. Ltd. |
| License No.         | No. C1000002010113210083333                              |
| Business Category   | Sino-foreign cooperative enterprise                      |
| Types Of Ore Mined  | Zinc, lead, and silver ore                               |
| Mining Method       | Underground mining                                       |
| Mining Depth        | From 315m to -530m                                       |
| Production Capacity | 330,000 tonne/year                                       |
| Mine Area           | 5.5238 km <sup>2</sup>                                   |
| Valid Period        | 6 June 2012 to 24 November 2040                          |
| Issued Date*        | 6 June 2012  |

Sources: The Copy of Mining Permit of GC Mine

#### 4.2 Permits and Authorization

Apart from the mining permit, other operational permits are required for the Project according to the relevant Chinese laws and regulations. These operational permits include:

- Business License,
- Safety Production Permit,
- Land/forest Use Permit,
- Water Use Permit, and
- Site Discharge Permit

## 4.3 Location

The Property is located in the vicinity of Gaocheng village, Gaocun Township, Yun'an District, Yunfu City, Guangdong Province, People's Republic of China (Figure 4.1).

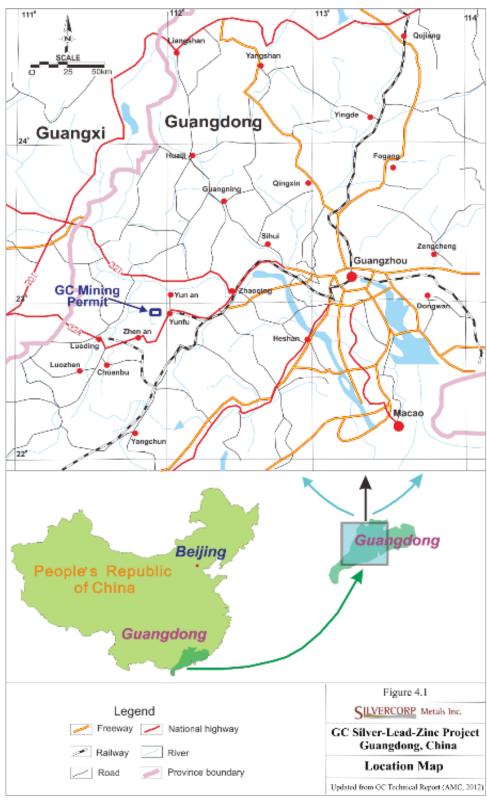


Figure 4.1: General Location Map of the Project

Sources: GC Mine

#### 4.4 Environmental Considerations

Environmental liabilities associated with the project operation are mainly from underground mining, waste rock dumps, processing plant, TSF 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/ TSF management are provided in Sections 20 of this Technical Report.

## 4.5 Taxes and Royalties

Based on the information provided by and discussions with GC Mine, the Mine has the following tax obligations.

**Enterprise Income Tax:** In China the normal enterprise income tax is 25% of the taxable income. GC Mine has advised SRK that as a Hi-New tech enterprise, the subsidiary entities operating the GC project are subject to an enterprise income tax rate of 15% of taxable income for three years term, which is renewable.

#### **Resource Tax:**

- 3% of the net amount of sales from lead (Pb) and zinc (Zn) mineral products
- 2% of the net amount of sales from silver (Ag)mineral products
- No resource tax for gold (Au) and copper (Cu), since they are by-products

#### Value Added Tax (received):

13% of the net revenue of sales, excluding the revenue from gold (Au)

#### Surtax/Surcharge:

- City construction fee: 7% of VAT Payable
- Education surtax: 5% of VAT Payable

# 5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The GC mine is located in the vicinity of Gaocheng Village of Gaocun Township, Yun'an District, Yunfu City, Guangdong Province, China. Altitudes in the region range from 78 to 378 m ASL, usually 150 to 250 m ASL, with relative differences of 50 to 150 m. Vegetation is in the form of secondary forests of pine and hardwoods, bushes, and grasses. Topsoil covers most of the ground. Outcrops of bedrocks can only be observed in valleys.

The mine is located west of the metropolitan city of Guangzhou, the capital of Guangdong Province. Guangzhou is located about 120 kilometres (km) north-west of Hong Kong and has a population of about 14 million people. It is serviced by rail and daily flights from many of China's larger population centres. Access to the mine from Guangzhou is via 178 km of four-lane express highway to Yunfu, then 48 km of paved road to the Project site. A railway connection from Guangzhou to Yunfu is also available.

The region belongs to a sub-tropical monsoon climate zone with average annual temperature of 20 – 22°C. Rainfall is mainly concentrated in spring and summer from March to August. Winters feature short periods of frosting. The GC Project is able to operate year-round.

Streams are well developed in the district, with the Hashui Creek flowing in the Gaocheng mine area. There is a reservoir upstream of the mine. Small hydropower stations are developed in the region that are connected to the provincial electrical grid. There is a 10 kilovolts (kV) power line that crosses through the Project area.

A power supply system consisting of a 5.8 km power line, a 110 kV substation, and a 10 kV safety backup-circuit was completed in 2013. This system has sufficient capacity to support the current production and any envisaged future production expansion.

The economy of Yun'an District mainly relies upon agriculture and some small township industrial enterprises. Labour is locally available, and technical personnel are available in Yunfu and nearby cities. The Gaocheng village is located within the Gaocheng mine area.

# 6 History

## 6.1 Ownership History

Prior to Yangtze Mining Ltd. acquiring the project area in 2005, illegal mining activity resulted in the excavation of several adits/ tunnels and small-scale mining of veins.

In 2008, Silvercorp acquired a 100% interest in the shares of Yangtze Gold Ltd. which in turn wholly owned the entirety of Yangtze Mining HK, who owns a 95% equity interest in GC Mine. In October 2018, Silvercorp Metals (China) Inc., a wholly owned subsidiary of Silvercorp, acquired an additional 4% equity interest in Guangdong Found, and as a result, Silvercorp now beneficially owns a 99% interest in Guangdong Found.

## 6.2 Exploration History

GC Project was discovered in 1959 by traditional prospecting methods. Follow-up exploration in the region has included soil surveying, hydrogeological survey, geological mapping, rock chip sampling and diamond drilling.

All exploration work on the GC Project from 1959 to 2007 was completed by Geophysical Survey Brigade of Guangdong Bureau of Geology and Mineral Resources and Guangdong Provincial Institute of Geological Survey ("GIGS").

Silvercorp completed its first phase of exploration work in 2008, Based on the soil geochemical and surface mapping, Silvercorp conducted trenching, pitting, and drilling programs on the Property. The program exposed additional mineralized veins. Detailed systematic drilling commenced on the Property in 2011 and has been ongoing.

#### 6.3 Production

Prior to Yangtze Mining acquiring the Property, illegal mining activity resulted in the excavation of several adits/ tunnels and small-scale mining of veins V2, V2-2, V3, V4, V5, V6, and V10. GIGS reported that a total of 1,398 m of excavation comprising 10 adits/ tunnels had been completed on the Property through the illegal activity.

In 2002, GIGS developed 66 m of tunnel to crosscut veins V5 and V5-1. GIGS sampled and mapped adits ML1 to ML5, ML6, ML7, ML9, and PD12.

Yangtze Mining, after its purchase of the Property in 2005, mapped and sampled the accessible tunnels ML5 and ML8. Tunnel ML5 had exposure to vein V10 and tunnel ML8 had exposure to vein V2-2. Assay results of tunnel samples were used in Mineral Resource estimation. Table 6.1 details the underground workings and work completed at this time. However, there are no detailed reconciliation data available for any of the mineralization extracted.

Table 6.1: Details of Historical Underground Workings

| Tunnel /<br>Adit | Length of Tunnel / Adit (m) | Vein Intersected | No. Samples<br>Collected | Mapped and<br>Sampled by |
|------------------|-----------------------------|------------------|--------------------------|--------------------------|
| ML1              | 156                         | V4               | 12                       | GIGS                     |

| Tunnel /<br>Adit | Length of Tunnel / Adit (m) | Vein Intersected          | No. Samples<br>Collected | Mapped and<br>Sampled by |
|------------------|-----------------------------|---------------------------|--------------------------|--------------------------|
| ML2              | 70                          | V3                        | 1                        | GIGS                     |
| ML3              | 2                           | V4                        | 6                        | GIGS                     |
| ML4              | 41                          | V4                        | 3                        | GIGS                     |
| ML5              | 324                         | V10                       | 13                       | Yangtze                  |
| ML6              | 438                         | V2                        | 25                       | GIGS                     |
| ML7              | 45                          | Not named, parallel to V4 |                          | GIGS                     |
| ML8              | 246                         | V2-2                      | 19                       | Yangtze                  |
| ML9              | 46                          | V4                        |                          | GIGS                     |
| PD12             | 28                          | V6                        | 3                        | GIGS                     |
| PD4401           | 66                          | V5                        | 5                        | GIGS                     |

Sources: 2021 AMC report

## 6.4 Previous Mineral Resource Estimates

During 2001 and 2002, and again in 2004 and 2005, GIGS conducted general prospecting and prepared a resource estimate for the GC project, using the old Chinese classification standard system for mineral resources/ reserves, which differs from the CIM Definition Standards.

Since 2008, six Mineral Resource estimates for the GC project have been documented, details are summarised in Table 6.2.

**Table 6.2: Historical Mineral Resource Estimates** 

| Title   | Consultant     | Date                   |
|---|----------------|------------------------|
| Technical Report on Gaocheng Ag-Zn-Pb Project and Shimentou Au-Ag-Zn-Pb Project, Guangdong Province, People's Republic of China | SRK Consulting | April 2008             |
| NI 43-101 Technical Report Update on the GC Ag-Zn-Pb Project in Guangdong Province, People's Republic of China                  | AMC            | 18 June<br>2009        |
| NI 43-101 Technical Report on the GC Ag-Zn-Pb Project in Guangdong Province, People's Republic of China'                        | AMC            | 31<br>December<br>2011 |
| NI 43-101 Technical Report Update on the Gaocheng Ag-Zn Pb Project in Guangdong Province, People's Republic of China            | AMC            | 30 June<br>2018        |
| NI 43-101 Technical Report Update on the Gaocheng Ag-Zn-Pb Project in Guangdong Province, People's Republic of China            | AMC            | 30 June<br>2019        |
| NI 43-101 Technical Report Update on the Gaocheng Ag-Zn-Pb Project in Guangdong Province, People's Republic of China            | AMC            | 31 March<br>2021       |

# 7 Geological Setting and Mineralisation

The contents of this section are mainly sourced from the 2008 SRK Technical Report and the technical report prepared by AMC in 2020 and 2021.

## 7.1 Regional Geology

The Property is located on the east margin of the Luoding basin, east of the Wuchuan – Sihui major fault within the north portion of the Yunkai uplift of the South China Orogenic Belt (Figure 7.1). Northeast striking structures and arc structures form the basic geological framework of the region. Deposits on the Property occur at the intersection of a north-easterly striking fault zone and a near east westerly striking fault zone.

Yongzhou

SOUTH CHINA OROGENIC BELT

Guanganing

Sihui

Guangzhou

Google Side Common Common

Figure 7.1: Tectonic Geology Map of Southern China

Sources: 2021 AMC report

Basement geology in the area comprises late Proterozoic Sinian sedimentary clastic and carbonate rocks; Palaeozoic (Ordovician, Silurian, Devonian, Carboniferous) sedimentary clastic and carbonate rocks; and Mesozoic (Triassic) coal-bearing clastic rocks and Cretaceous red clastic rocks. Ag-Pb-Zn poly-metallic deposits occur within late Proterozoic rocks. Cu-Pb-Zn, Mn, and Au-Ag deposits occur within Palaeozoic rocks.

Three prominent sets of structures occur within the region:

- North-easterly striking structures comprising a series of folds and faults that host some mineralized bodies.
- Approximately east-westerly striking structures which dip steeply and contain structural breccias and quartz infill within the fault zones. Prominent alteration zones occur along both sides of these structures.

Arc or ring structures which include folds and faults surrounding the Daganshan granite body. The Pb-Zn-Ag-Sn deposits, mineralization showings, and Au-Ag-Pb-Zn geochemical anomalies occur in the arc/ ring structural zone.

Palaeozoic granite batholiths and Mesozoic granite stocks and dykes occur commonly within the arc/ ring structure. These intrusions are closely related with Pb-Zn-Ag poly-metallic mineralization in the region. The Regional geological map is shown in Figure 7.2.

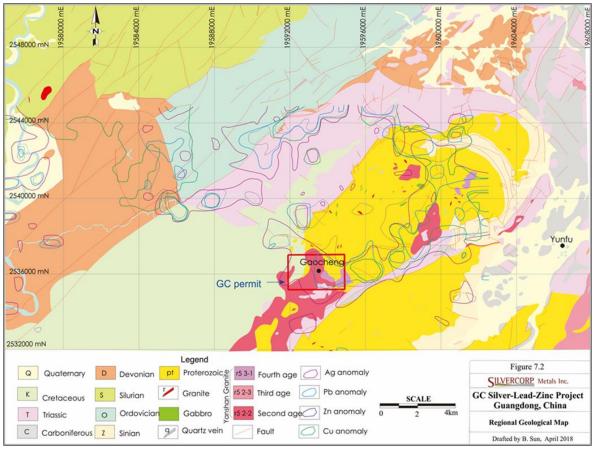


Figure 7.2: Regional Geological Map

Sources: 2021 AMC report

# 7.2 Property Geology

The GC project is located at the intersection between the Wuchuan-Sihui Deep Fault zone and Daganshan Arc-ring structural zone.

Basement rocks within the Property encompass quartz sandstone, meta-carbonaceous siltstone, carbonaceous phyllite, calcareous quartzite, and argillaceous limestone of the Sinian Daganshan Formation; quartz sandstone and shale of the Triassic Xiaoyunwushan Formation, and sandy conglomerate and conglomerate of the Cretaceous Luoding Formation. These rocks are intruded by Palaeozoic medium-grained biotite granite, and Mesozoic fine- to medium-grained adamellite, brownish, fine-grained, biotite mylonite, granite porphyry, quartz porphyry, diabase, and aplite. The Mesozoic intrusive rocks intruded along the south and south-west contacts of the Palaeozoic

granites. The majority of Ag-Zn-Pb mineralization is hosted by the Mesozoic granite. The granite dips south and strikes approximately west north-west, parallel to many of the mineralized veins on the Property. The Property geological map is shown in Figure 7.3.

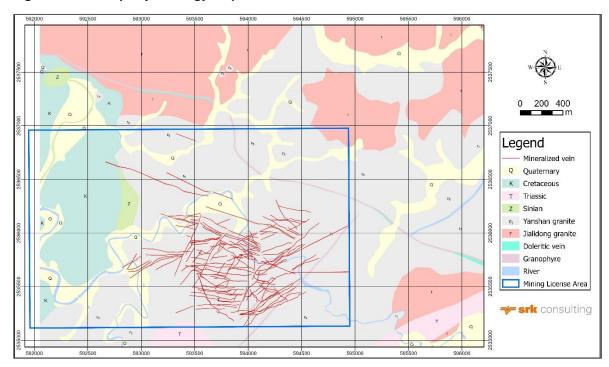


Figure 7.3: Property Geology Map

Sources: 2021 AMC report, modified by SRK

The project area is located in the southwest part of the Daganshan uplift, characterized by several fault zones, including the NWW-EW striking Gaocheng Fault zone, the NE striking Baimei Fault zone, and the Songgui Fault zone.

Mineralization at GC is primarily hosted within a WNW-ENE trending fault zone that is 4.8 km long and 2 km wide. This zone contains numerous veins with the more common WNW veins generally striking between 90° and 150° and dipping between 55° to sub-vertical to the S and SW. The average thickness of these WNW-ENE veins is 0.76 meters (m).

East-west striking veins generally strike between 50° and 130° and dip between 65° and sub-vertical to the SE and SSW. The average thickness of these veins is 0.77 m.

NE-striking faults cut through the NWW-striking structures with no or minor displacement. Mineralized veins in this trend are sub-parallel to the major NE striking faults F25 and F27, generally striking between 10° and 80° and dipping between 60° and 75° to the SE. The average thickness of these veins is 0.76 m.

Figure 7.4 shows the distribution of mineralized veins and the faults zone.

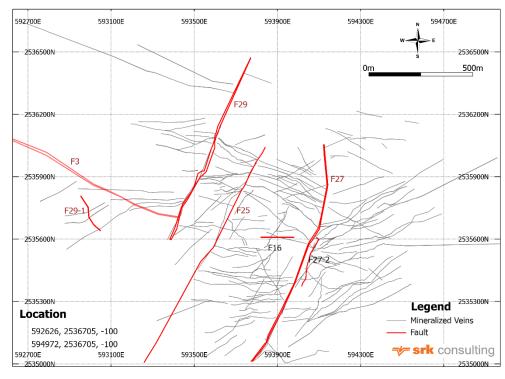


Figure 7.4: The Distribution of Mineralized Veins and Faults Zone (Level -100 m)

Sources: SRK

#### 7.3 Mineralization

The Ag-Zn-Pb mineralization at the GC deposit can be categorized into primary and oxidized types. Primary mineralization, which constitutes 95% of the total Mineral Resource, is mainly composed of galena, sphalerite, and silver minerals, appearing sparsely, as disseminations, veinlets, and lumps. Oxide mineralization occurs near the surface, primarily within fault-breccia zones that are oxidized down to about 40 m. These veins display open space and boxwork lattice textures due to sulphide mineral oxidation, with secondary minerals like kaolinite, hematite, and limonite present.

Pyrite is the dominant sulphide mineral, making up a few percent to 13% of the veins. Other minerals include sphalerite, galena, pyrrhotite, arsenopyrite, magnetite, and trace amounts of chalcopyrite and cassiterite. Metallic minerals, found in smaller quantities, include argentite, native silver, bornite, wolframite, scheelite, and antimonite. These occur in narrow bands, veinlets, or as disseminations within the gangue, which consists of chlorite, quartz, fluorite, feldspar, mica, hornblende, and minor or trace amounts of kaolinite, tremolite, actinolite, chalcedony, garnet, zoisite, apatite, and tourmaline.

Alteration minerals associated with the GC veins (Figure 7.5) include quartz, sericite, pyrite, chlorite, clay minerals, and limonite. Silicification is common near the centre of the veins, while chlorite and sericite are found near and slightly beyond the vein margins. Quartz, pyrite, fluorite, and chlorite are closely related to the mineralization.

In addition, the GC deposit exhibits several notable mineralization features:

- High-grade Ag-Zn-Pb mineralization tends to occur at the intersections of NWW and east-west striking faults, leading to east plunging shoots of high-grade mineralization.
- Fault breccia zones host the most intense, continuous, and wide mineralization of Ag-Zn-Pb.
- Grade contours indicate that Zn mineralization is more continuous across the veins, whereas Ag and Pb are more locally concentrated.

985000 S92000 S92000 S93000 S93000 S93000 S94000 S9

Figure 7.5: Ag-Zn-Pb Veins of the GC Project (Level 0 m)

Sources: SRK

The GC deposit consists of 256 mineralized Ag-Zn-Pb veins. Lithological domains were constructed for each vein. The vein domains were modelled in Micromine software. Table 7.1 presents a summary of the characteristics of the mineralized veins on the Property.

Table 7.1: Dimensions and Occurrences of the Mineralized Veins

| Vein   | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|--------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| NV1    | 0.51                        | 324           | -71-(216)    | 303        | 213                     | 75                       |
| NV10   | 0.98                        | 1032          | -593-(269)   | 235        | 145                     | 68                       |
| NV14   | 0.41                        | 362           | -114-(185)   | 283        | 193                     | 69                       |
| NV2    | 0.58                        | 1025          | -262-(128)   | 296        | 206                     | 79                       |
| NV28   | 1.20                        | 297           | -146-(137)   | 259        | 169                     | 69                       |
| NV28_1 | 0.78                        | 351           | -260-(186)   | 280        | 190                     | 63                       |
| NV28N  | 0.60                        | 257           | -197-(71)    | 247        | 157                     | 81                       |

| Vein   | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|--------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| NV3N   | 0.72                        | 120           | 54-(219)     | 273        | 183                     | 84                       |
| NV4    | 0.64                        | 486           | -127-(239)   | 300        | 210                     | 74                       |
| NV5    | 0.46                        | 197           | -80-(167)    | 299        | 209                     | 71                       |
| NV6    | 0.48                        | 181           | -64-(157)    | 237        | 147                     | 70                       |
| NV7    | 0.52                        | 385           | -101-(153)   | 320        | 230                     | 76                       |
| NV8    | 0.72                        | 396           | -105-(181)   | 276        | 186                     | 69                       |
| NV9    | 0.58                        | 366           | -138-(166)   | 270        | 180                     | 80                       |
| SV10   | 0.60                        | 181           | -227-(16)    | 253        | 163                     | 61                       |
| V1_1   | 0.54                        | 474           | -216-(44)    | 114        | 24                      | 37                       |
| V1_2   | 0.82                        | 471           | -636-(62)    | 287        | 197                     | 76                       |
| V1_3   | 0.46                        | 220           | -256-(-29)   | 136        | 46                      | 52                       |
| V1_4   | 0.58                        | 136           | -202-(-85)   | 216        | 126                     | 65                       |
| V1_6   | 0.95                        | 188           | -599-(-261)  | 81         | 351                     | 82                       |
| V10    | 1.16                        | 1361          | -531-(193)   | 241        | 151                     | 61                       |
| V10_1  | 0.74                        | 478           | -468-(196)   | 228        | 138                     | 66                       |
| V10_10 | 0.64                        | 371           | -189-(98)    | 230        | 140                     | 69                       |
| V10_11 | 0.50                        | 291           | -149-(61)    | 244        | 154                     | 60                       |
| V10_12 | 0.63                        | 204           | -283-(-91)   | 260        | 170                     | 69                       |
| V10_15 | 0.50                        | 217           | -278-(-151)  | 227        | 137                     | 65                       |
| V10_16 | 0.66                        | 184           | -237-(68)    | 249        | 159                     | 67                       |
| V10_17 | 0.75                        | 123           | -244-(-95)   | 231        | 141                     | 76                       |
| V10_2  | 0.82                        | 356           | -92-(208)    | 201        | 111                     | 79                       |
| V10_3  | 0.69                        | 320           | -309-(-30)   | 221        | 131                     | 67                       |
| V10_4  | 0.79                        | 383           | -350-(190)   | 240        | 150                     | 70                       |
| V10_5  | 0.45                        | 241           | -218-(199)   | 21         | 291                     | 72                       |
| V10W   | 0.67                        | 312           | -395-(-122)  | 237        | 147                     | 63                       |
| V11A   | 0.63                        | 415           | -450-(90)    | 239        | 149                     | 59                       |
| V11B   | 0.74                        | 428           | -280-(94)    | 244        | 154                     | 60                       |
| V12    | 0.52                        | 292           | -334-(101)   | 215        | 125                     | 72                       |
| V13    | 0.54                        | 793           | -376-(269)   | 209        | 119                     | 70                       |
| V14    | 0.66                        | 686           | -365-(251)   | 240        | 150                     | 68                       |
| V15    | 0.49                        | 336           | -146-(147)   | 240        | 150                     | 70                       |
| V15N   | 0.55                        | 645           | -280-(129)   | 250        | 160                     | 65                       |
| V15N_1 | 0.58                        | 585           | -283-(153)   | 238        | 148                     | 66                       |
| V16    | 0.75                        | 594           | -399-(242)   | 268        | 178                     | 70                       |
| V16_1  | 0.51                        | 126           | -88-(99)     | 225        | 135                     | 65                       |
| V16_4  | 0.84                        | 118           | 68-(202)     | 294        | 204                     | 61                       |
| V16_5  | 0.66                        | 221           | -263-(61)    | 261        | 171                     | 77                       |
| V17    | 0.67                        | 484           | -167-(198)   | 262        | 172                     | 70                       |
| V17_1  | 0.73                        | 349           | -443-(143)   | 268        | 178                     | 71                       |
| V18    | 0.77                        | 562           | -279-(245)   | 274        | 184                     | 64                       |
| V18_1  | 0.59                        | 490           | -247-(191)   | 278        | 188                     | 69                       |
| V18_2  | 0.60                        | 263           | -251-(39)    | 263        | 173                     | 69                       |

| Vein   | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|--------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| V18_3  | 0.56                        | 194           | -277-(77)    | 235        | 145                     | 64                       |
| V19_1  | 0.51                        | 450           | -341-(213)   | 264        | 174                     | 61                       |
| V19_12 | 0.52                        | 134           | 74-(180)     | 249        | 159                     | 70                       |
| V19_2  | 0.67                        | 148           | -119-(59)    | 279        | 189                     | 70                       |
| V19_4  | 0.52                        | 235           | -240-(-9)    | 271        | 181                     | 66                       |
| V19_7  | 0.58                        | 175           | -184-(-25)   | 261        | 171                     | 58                       |
| V19_8  | 0.58                        | 163           | -253-(-113)  | 298        | 208                     | 67                       |
| V19A   | 0.89                        | 1046          | -526-(181)   | 260        | 170                     | 59                       |
| V19B   | 0.71                        | 287           | 7-(181)      | 248        | 158                     | 65                       |
| V1A    | 0.58                        | 993           | -275-(128)   | 153        | 63                      | 27                       |
| V1B    | 0.70                        | 552           | -329-(-12)   | 142        | 52                      | 42                       |
| V1N    | 0.54                        | 188           | -261-(-154)  | 132        | 42                      | 45                       |
| V2_1   | 0.69                        | 449           | -430-(-37)   | 297        | 207                     | 57                       |
| V2_11  | 0.61                        | 190           | -411-(-99)   | 58         | 328                     | 61                       |
| V2_11E | 0.52                        | 188           | -407-(-120)  | 66         | 336                     | 64                       |
| V2_11S | 0.60                        | 147           | -216-(-111)  | 67         | 337                     | 63                       |
| V2_12  | 0.69                        | 327           | -436-(-219)  | 306        | 216                     | 60                       |
| V2_3   | 1.02                        | 253           | -139-(129)   | 294        | 204                     | 73                       |
| V2_4   | 1.31                        | 211           | -519-(-200)  | 275        | 185                     | 65                       |
| V2_7   | 0.83                        | 204           | -505-(-244)  | 278        | 188                     | 65                       |
| V2_7E  | 2.06                        | 162           | -329-(-221)  | 273        | 183                     | 68                       |
| V2_9   | 0.67                        | 201           | -471-(-189)  | 284        | 194                     | 74                       |
| V24    | 0.63                        | 220           | -227-(159)   | 259        | 169                     | 74                       |
| V24N   | 0.87                        | 313           | -277-(171)   | 215        | 125                     | 66                       |
| V24S   | 0.36                        | 201           | -97-(39)     | 50         | 320                     | 79                       |
| V25    | 0.67                        | 766           | -494-(172)   | 212        | 122                     | 69                       |
| V25_1  | 0.76                        | 183           | -7-(177)     | 214        | 124                     | 74                       |
| V25_4  | 0.63                        | 207           | -574-(-311)  | 242        | 152                     | 74                       |
| V26    | 0.89                        | 127           | -59-(125)    | 217        | 127                     | 77                       |
| V26E   | 0.99                        | 118           | -31-(171)    | 288        | 198                     | 84                       |
| V27    | 0.71                        | 561           | -354-(215)   | 325        | 235                     | 38                       |
| V27_6  | 0.70                        | 96            | -121-(141)   | 213        | 123                     | 84                       |
| V27W   | 0.96                        | 490           | -434-(-17)   | 206        | 116                     | 88                       |
| V27W_1 | 0.87                        | 139           | -269-(-165)  | 211        | 121                     | 59                       |
| V28    | 0.68                        | 349           | -131-(202)   | 215        | 125                     | 57                       |
| V28_1  | 0.40                        | 182           | -175-(40)    | 320        | 230                     | 73                       |
| V28_4A | 0.86                        | 403           | -242-(259)   | 217        | 127                     | 64                       |
| V28_4B | 0.64                        | 154           | -89-(214)    | 230        | 140                     | 68                       |
| V28_4C | 0.64                        | 382           | -278-(198)   | 216        | 126                     | 57                       |
| V29    | 0.85                        | 275           | -50-(186)    | 209        | 119                     | 83                       |
| V29_1  | 0.78                        | 892           | -621-(138)   | 210        | 120                     | 59                       |
| V29_2  | 0.51                        | 128           | -288-(-200)  | 206        | 116                     | 60                       |
| V2E    | 1.48                        | 617           | -650-(138)   | 290        | 200                     | 66                       |

| Vein   | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|--------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| V2E_4E | 0.67                        | 444           | -333-(115)   | 262        | 172                     | 66                       |
| V2E_4S | 0.55                        | 266           | -224-(102)   | 245        | 155                     | 64                       |
| V2E_8  | 0.79                        | 137           | -37-(82)     | 358        | 268                     | 86                       |
| V2E1   | 1.34                        | 475           | -631-(146)   | 262        | 172                     | 64                       |
| V2E10  | 0.70                        | 367           | -239-(125)   | 298        | 208                     | 73                       |
| V2E11  | 0.83                        | 415           | -708-(-195)  | 294        | 204                     | 69                       |
| V2E12  | 0.73                        | 452           | -522-(152)   | 292        | 202                     | 64                       |
| V2E13  | 0.81                        | 542           | -638-(154)   | 289        | 199                     | 66                       |
| V2E14  | 0.76                        | 226           | -309-(-89)   | 284        | 194                     | 65                       |
| V2E15  | 0.80                        | 521           | -731-(144)   | 284        | 194                     | 65                       |
| V2E16  | 0.76                        | 599           | -835-(143)   | 284        | 194                     | 65                       |
| V2E17  | 0.74                        | 532           | -547-(149)   | 284        | 194                     | 65                       |
| V2E18  | 0.76                        | 415           | -587-(-71)   | 296        | 206                     | 63                       |
| V2E19  | 0.67                        | 343           | -564-(32)    | 296        | 206                     | 63                       |
| V2E2   | 0.95                        | 124           | -319-(-170)  | 264        | 174                     | 67                       |
| V2E20  | 0.48                        | 165           | -152-(106)   | 292        | 202                     | 67                       |
| V2E21  | 0.51                        | 197           | -266-(91)    | 149        | 59                      | 88                       |
| V2E22  | 0.56                        | 369           | -312-(145)   | 299        | 209                     | 83                       |
| V2E3   | 1.09                        | 361           | -534-(132)   | 281        | 191                     | 66                       |
| V2E4   | 1.01                        | 256           | -561-(-250)  | 275        | 185                     | 64                       |
| V2E5   | 0.80                        | 349           | -642-(-202)  | 288        | 198                     | 67                       |
| V2E8   | 0.60                        | 118           | -208-(-98)   | 324        | 234                     | 72                       |
| V2E9   | 0.78                        | 121           | -38-(151)    | 266        | 176                     | 74                       |
| V2M    | 0.93                        | 481           | -568-(114)   | 116        | 26                      | 87                       |
| V2M_11 | 0.38                        | 197           | -329-(-175)  | 235        | 145                     | 61                       |
| V2M_13 | 0.55                        | 124           | -295-(-225)  | 255        | 165                     | 48                       |
| V2M_14 | 0.36                        | 104           | -352-(-196)  | 232        | 142                     | 77                       |
| V2M_2  | 0.83                        | 263           | -150-(70)    | 300        | 210                     | 83                       |
| V2M_3  | 0.62                        | 366           | -350-(105)   | 289        | 199                     | 75                       |
| V2M_6  | 0.56                        | 304           | -455-(-158)  | 267        | 177                     | 81                       |
| V2M_7  | 0.85                        | 218           | -509-(-200)  | 118        | 28                      | 86                       |
| V2M_8  | 0.66                        | 171           | -268-(-70)   | 258        | 168                     | 66                       |
| V2M_9  | 0.45                        | 70            | -426-(-226)  | 86         | 356                     | 85                       |
| V2N    | 2.44                        | 518           | -668-(42)    | 255        | 165                     | 69                       |
| V2N_1  | 0.65                        | 168           | -356-(-47)   | 265        | 175                     | 70                       |
| V2N_2  | 1.25                        | 284           | -396-(26)    | 266        | 176                     | 74                       |
| V2N_3  | 0.79                        | 277           | -195-(100)   | 279        | 189                     | 79                       |
| V2N_4  | 0.40                        | 225           | -371-(87)    | 260        | 170                     | 85                       |
| V2N_4N | 0.44                        | 354           | -372-(98)    | 261        | 171                     | 82                       |
| V2N_5  | 0.47                        | 500           | -465-(125)   | 282        | 192                     | 82                       |
| V2N_5S | 0.66                        | 255           | -258-(110)   | 287        | 197                     | 78                       |
| V2N_6  | 0.90                        | 412           | -539-(27)    | 266        | 176                     | 69                       |
| V2N_8  | 1.09                        | 420           | -652-(-129)  | 262        | 172                     | 63                       |

| Vein   | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|--------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| V2W_0  | 0.76                        | 204           | -99-(39)     | 265        | 175                     | 77                       |
| V2W_1  | 0.55                        | 238           | -335-(-90)   | 227        | 137                     | 58                       |
| V2W_10 | 0.75                        | 215           | -640-(-273)  | 227        | 137                     | 81                       |
| V2W_12 | 0.81                        | 516           | -655-(-89)   | 230        | 140                     | 67                       |
| V2W_14 | 1.17                        | 140           | -384-(-165)  | 255        | 165                     | 74                       |
| V2W_16 | 0.82                        | 169           | -368-(-162)  | 271        | 181                     | 65                       |
| V2W_17 | 0.49                        | 197           | -535-(-379)  | 220        | 130                     | 67                       |
| V2W_18 | 0.68                        | 157           | -317-(-148)  | 278        | 188                     | 77                       |
| V2W_3  | 0.82                        | 207           | -221-(13)    | 264        | 174                     | 58                       |
| V2W_4  | 0.89                        | 389           | -509-(180)   | 257        | 167                     | 74                       |
| V2W_5  | 0.58                        | 327           | -438-(90)    | 289        | 199                     | 67                       |
| V2W_7  | 0.74                        | 203           | -178-(-9)    | 257        | 167                     | 52                       |
| V2W_8  | 0.80                        | 355           | -625-(-67)   | 291        | 201                     | 83                       |
| V2W_9  | 0.77                        | 249           | -369-(-67)   | 262        | 172                     | 72                       |
| V2WA   | 1.30                        | 605           | -671-(183)   | 253        | 163                     | 72                       |
| V2WB   | 2.18                        | 605           | -671-(183)   | 253        | 163                     | 72                       |
| V3     | 0.35                        | 247           | -146-(138)   | 108        | 18                      | 85                       |
| V30    | 0.75                        | 188           | -95-(83)     | 286        | 196                     | 73                       |
| V31    | 0.56                        | 594           | -278-(294)   | 233        | 143                     | 67                       |
| V32    | 0.59                        | 636           | -481-(302)   | 237        | 147                     | 67                       |
| V33    | 0.63                        | 647           | -321-(309)   | 248        | 158                     | 63                       |
| V33_1  | 0.43                        | 237           | 47-(248)     | 259        | 169                     | 53                       |
| V33_2  | 0.45                        | 156           | 52-(189)     | 221        | 131                     | 62                       |
| V33E   | 0.69                        | 709           | -258-(230)   | 245        | 155                     | 66                       |
| V34    | 0.71                        | 186           | -99-(198)    | 211        | 121                     | 81                       |
| V37    | 0.64                        | 405           | -193-(209)   | 253        | 163                     | 76                       |
| V37_1  | 0.67                        | 457           | -246-(118)   | 251        | 161                     | 71                       |
| V38    | 0.57                        | 574           | -387-(155)   | 273        | 183                     | 82                       |
| V39    | 1.02                        | 463           | -499-(153)   | 267        | 177                     | 84                       |
| V4     | 1.17                        | 1184          | -421-(189)   | 288        | 198                     | 76                       |
| V4_1   | 1.06                        | 653           | -604-(149)   | 294        | 204                     | 73                       |
| V4_2   | 0.27                        | 245           | -114-(107)   | 113        | 23                      | 70                       |
| V40    | 0.61                        | 981           | -656-(185)   | 261        | 171                     | 84                       |
| V40_1  | 0.59                        | 391           | -151-(112)   | 257        | 167                     | 81                       |
| V40S   | 0.59                        | 287           | -67-(104)    | 245        | 155                     | 57                       |
| V40W   | 0.44                        | 430           | -114-(102)   | 56         | 326                     | 41                       |
| V41    | 0.68                        | 628           | -331-(297)   | 227        | 137                     | 69                       |
| V42    | 0.64                        | 507           | -229-(244)   | 237        | 147                     | 63                       |
| V44    | 0.41                        | 306           | -110-(88)    | 172        | 82                      | 52                       |
| V45    | 0.55                        | 390           | -141-(185)   | 219        | 129                     | 58                       |
| V46    | 0.34                        | 203           | 95-(202)     | 135        | 45                      | 50                       |
| V47    | 0.67                        | 201           | -355-(128)   | 251        | 161                     | 76                       |
| V49    | 0.87                        | 364           | -482-(-201)  | 29         | 299                     | 63                       |

| Vein    | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |
|---------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|
| V49S    | 0.51                        | 126           | -541-(-243)  | 63         | 333                     | 81                       |
| V5      | 0.61                        | 431           | -93-(207)    | 270        | 180                     | 81                       |
| V5_1    | 0.50                        | 84            | 26-(234)     | 264        | 174                     | 78                       |
| V5_12   | 0.38                        | 179           | -121-(85)    | 206        | 116                     | 61                       |
| V5_16   | 0.66                        | 220           | -286-(-103)  | 33         | 303                     | 75                       |
| V5_17   | 0.51                        | 154           | 10-(164)     | 271        | 181                     | 55                       |
| V5_18   | 0.59                        | 170           | -287-(-114)  | 46         | 316                     | 65                       |
| V5_19   | 0.65                        | 201           | -381-(-153)  | 236        | 146                     | 59                       |
| V5_2    | 0.54                        | 301           | -366-(-81)   | 268        | 178                     | 66                       |
| V5_20   | 0.57                        | 336           | -363-(-3)    | 209        | 119                     | 65                       |
| V5_21   | 0.55                        | 203           | -274-(-190)  | 133        | 43                      | 26                       |
| V5_24   | 0.54                        | 185           | -280-(-132)  | 228        | 138                     | 65                       |
| V5_26   | 0.46                        | 160           | -237-(-104)  | 24         | 294                     | 52                       |
| V5_28   | 0.65                        | 132           | -222-(-48)   | 71         | 341                     | 69                       |
| V5_3    | 0.56                        | 129           | 29-(112)     | 74         | 344                     | 58                       |
| V5_4    | 0.79                        | 455           | -408-(119)   | 252        | 162                     | 69                       |
| V5_5    | 0.70                        | 394           | -481-(136)   | 270        | 180                     | 69                       |
| V5_7    | 0.56                        | 148           | -15-(137)    | 79         | 349                     | 66                       |
| V5_9A   | 0.71                        | 466           | -384-(132)   | 227        | 137                     | 50                       |
| V5_9B   | 0.69                        | 351           | -279-(105)   | 223        | 133                     | 58                       |
| V51     | 0.84                        | 167           | -86-(67)     | 257        | 167                     | 79                       |
| V52     | 0.52                        | 213           | -367-(269)   | 267        | 177                     | 80                       |
| V52_2   | 0.72                        | 377           | -345-(270)   | 250        | 160                     | 66                       |
| V52_2_1 | 0.69                        | 354           | -369-(109)   | 140        | 50                      | 74                       |
| V52_3   | 0.57                        | 163           | -27-(251)    | 281        | 191                     | 80                       |
| V52_5   | 0.66                        | 345           | -374-(-118)  | 244        | 154                     | 78                       |
| V52_6   | 0.61                        | 399           | -396-(114)   | 237        | 147                     | 79                       |
| V52_7   | 0.65                        | 201           | -3-(268)     | 242        | 152                     | 78                       |
| V55     | 0.57                        | 177           | -297-(-39)   | 239        | 149                     | 72                       |
| V58     | 0.56                        | 350           | -340-(-4)    | 75         | 345                     | 68                       |
| V58S    | 0.40                        | 472           | -295-(-49)   | 56         | 326                     | 37                       |
| V59     | 0.42                        | 201           | 63-(241)     | 167        | 77                      | 56                       |
| V7      | 0.73                        | 568           | -373-(147)   | 307        | 217                     | 70                       |
| V7_1    | 0.84                        | 447           | -461-(242)   | 269        | 179                     | 68                       |
| V7_1W   | 0.56                        | 97            | 39-(192)     | 281        | 191                     | 70                       |
| V7_2    | 0.56                        | 344           | -281-(150)   | 108        | 18                      | 72                       |
| V7_3    | 0.63                        | 458           | -397-(234)   | 288        | 198                     | 67                       |
| V7_4    | 0.61                        | 227           | -157-(161)   | 266        | 176                     | 71                       |
| V7_5    | 0.69                        | 329           | -188-(239)   | 270        | 180                     | 68                       |
| V7_7    | 0.85                        | 144           | -112-(117)   | 275        | 185                     | 65                       |
| V7E     | 1.45                        | 307           | -496-(64)    | 325        | 235                     | 72                       |
| V7E_1   | 0.73                        | 113           | -401-(-176)  | 294        | 204                     | 72                       |
| V8      | 0.53                        | 302           | -479-(247)   | 265        | 175                     | 77                       |

| Vein       | Average<br>Thickness<br>(m) | Length<br>(m) | Elevation(m) | Strike (°) | Dip<br>Direction<br>(°) | Average Dip<br>Angle (°) |  |
|------------|-----------------------------|---------------|--------------|------------|-------------------------|--------------------------|--|
| V8_1       | 0.85                        | 455           | -476-(-72)   | 270        | 180                     | 76                       |  |
| V8_1E      | 0.52                        | 572           | -320-(262)   | 271        | 181                     | 81                       |  |
| V8_2       | 0.72                        | 607           | -476-(134)   | 267        | 177                     | 69                       |  |
| V8_2E      | 0.54                        | 537           | -192-(174)   | 270        | 180                     | 73                       |  |
| V8_3       | 0.61                        | 360           | -383-(-38)   | 257        | 167                     | 74                       |  |
| V8_4       | 0.70                        | 443           | -393-(5)     | 241        | 151                     | 68                       |  |
| V8_4N      | 0.55                        | 300           | -409-(-177)  | 267        | 177                     | 75                       |  |
| V8_6       | 0.50                        | 179           | -93-(9)      | 281        | 191                     | 58                       |  |
| V8_8       | 0.47                        | 236           | -306-(-28)   | 236        | 146                     | 67                       |  |
| V9_1       | 0.61                        | 233           | -177-(180)   | 273        | 183                     | 71                       |  |
| V9_10      | 1.23                        | 111           | -35-(125)    | 202        | 112                     | 70                       |  |
| V9_11      | 0.86                        | 310           | -169-(244)   | 215        | 125                     | 71                       |  |
| V9_2       | 0.72                        | 310           | -192-(91)    | 267        | 177                     | 76                       |  |
| V9_2N      | 0.49                        | 264           | 66-(191)     | 88         | 358                     | 70                       |  |
| V9_2S      | 0.79                        | 150           | -115-(76)    | 242        | 152                     | 64                       |  |
| V9_3       | 0.81                        | 488           | -189-(147)   | 275        | 185                     | 69                       |  |
| V9_4       | 0.67                        | 306           | -411-(75)    | 273        | 183                     | 68                       |  |
| V9_5A      | 0.81                        | 484           | -210-(181)   | 277        | 187                     | 72                       |  |
| V9_5B      | 1.11                        | 449           | -542-(-50)   | 272        | 182                     | 71                       |  |
| V9_6       | 0.88                        | 358           | -441-(-179)  | 82         | 352                     | 70                       |  |
| V9_9       | 0.65                        | 186           | -18-(240)    | 251        | 161                     | 67                       |  |
| V9W_2      | 0.80                        | 716           | -527-(259)   | 274        | 184                     | 67                       |  |
| V9W_2E     | 0.47                        | 294           | -245-(314)   | 310        | 220                     | 79                       |  |
| V9W_2N     | 0.45                        | 106           | -84-(50)     | 150        | 60                      | 89                       |  |
| V9W_4      | 0.78                        | 114           | 36-(225)     | 276        | 186                     | 69                       |  |
| VH1        | 0.43                        | 189           | -127-(118)   | 66         | 336                     | 81                       |  |
| VH1_1      | 0.77                        | 93            | -136-(155)   | 238        | 148                     | 83                       |  |
| VH1_2      | 0.56                        | 243           | -267-(116)   | 237        | 147                     | 78                       |  |
| VH1_3      | 0.45                        | 212           | -56-(193)    | 258        | 168                     | 67                       |  |
| VH1_4      | 0.61                        | 189           | -140-(148)   | 274        | 184                     | 80                       |  |
| _<br>VH1_5 | 0.44                        | 179           | -176-(116)   | 233        | 143                     | 73                       |  |
| X1         | 0.80                        | 293           | -302-(83)    | 68         | 338                     | 69                       |  |
| X2         | 0.93                        | 321           | -332-(93)    | 68         | 338                     | 69                       |  |
| X4         | 0.70                        | 335           | -82-(62)     | 204        | 114                     | 35                       |  |

Sources: GC Mine

# 8 Deposit Types

The poly-metallic mineralization at the GC deposit is characteristic of mesothermal vein infill deposits and exhibits the following features:

- Mineralization occurs as structurally controlled veins within broader alteration zones, which can extend several meters along both the hangingwall and footwall of the faults.
- The veins have sharp contacts with the host rocks and steeply dip at angles between 60° and 85°

Ag-Zn-Pb mineralization generally follows the strike of the faults.

# 9 Exploration

This section is a summary of the description of exploration chapter presented in the 2021 AMC Technical Report and new data from 2021 to 2023 provided by GC Mine.

## 9.1 Surface Works

Various state-sponsored Chinese Geological Brigades and companies have conducted geological and exploration work in the Project area.

During 2001 and 2002, and again in 2004 and 2005, GIGS conducted general prospecting at the GC Project area, and defined some mineralized bodies and estimated mineral resources for the GC deposit.

From 2006 to 2007, GIGS conducted detailed prospecting at the GC Project area, and completed a 36-hole, 11,470 m surface diamond drilling program and 1,964 m<sup>3</sup> of trenching and surface sampling to update and upgrade the mineral resources of the GC deposit.

In 2008, Silvercorp completed a surface exploration program including soil sampling, geological mapping, and trenching (Table 9.1), and a 22-hole, 10,083 m drilling program, which resulted in the discovery of an additional 15 mineralized veins.

The details of the soil sampling, geological mapping, and trenching programme in 2008 are as follows:

- In 2008, Silvercorp conducted a 1:10,000 scale soil geochemical survey on the southern portion of the Property. The survey involved collecting soil samples at 20m intervals along lines spaced 200m apart, covering an area of 2.22 km² that had not been previously drilled. A total of 535 soil samples were taken from C-horizon soils. These samples were analysed using aqua regia digestion and ICP analysis to detect concentrations of Au, Ag, Cu, Pb, Zn, Mo, and As. And Three significant Ag-Zn-Pb geochemical anomalies were identified.
- Contracted by Yangtze Mining, The GIGS conducted 1:10,000, 1:5,000, and 1:2,000 geological mapping programs, and a 1: 2,000 topographic survey covering the GC Project area in 2008. The geological mapping programs established stratigraphic sequences and size and distributions of intrusions and faults, which was used as a framework for exploration targeting.
- Based on the soil geochemical and surface mapping, Silvercorp conducted trenching and pitting
  programs on the Property. The program exposed the mineralized veins on the surface and at
  shallow depth. A total of seven pits and one trench were dug by Silvercorp exposing three veins.

Table 9.1: Surface Exploration Programs Completed in 2008

| Program             | Unit               | Work Completed |
|---------------------|--------------------|----------------|
| Trenching (Pitting) | m³                 | 740            |
| Soil Samples        | Samples<br>Line km | 535<br>10      |

Sources: GC Mine

The record of drilling from 2001 to 2008 is shown in Table 9.2.

Table 9.2: Record of Drilling 2001 – 2008

| Year Drilled | PQ (m) 85.0 mm | HQ (m) 63.5 mm | NQ (m) 47.6 mm | Total (m) |
|--------------|----------------|----------------|----------------|-----------|
| 2001 – 2005  |                | 1,994          |                | 1,994     |
| 2006 - 2007  | 420            | 5,180          | 5,870          | 11,470    |
| 2008         |                |                | 10,083         | 10,083    |
| Total        | 420            | 7,174          | 15,953         | 23,547    |

Sources: GC Mine

## 9.2 Underground Works

From 2008, Silvercorp continued the underground tunnelling and sampling at the Property Area. Details of drill programs completed between 2008 and 2023 are presented in Section 10 of this report.

Channel sampling was conducted at 5m intervals along mineralized vein structures in the adits, with wider spacing (15 or 25m) in non-mineralized sections. Each channel comprised multiple chip samples taken across the mineralization and wall rocks. Detailed procedures and parameters for underground channel sampling are discussed in Section 11.

A breakdown of all underground tunnelling from 2012 to 2023 is provided in Table 9.3.

Table 9.3: Summary of Underground Tunnelling Works between 2012 and 2023

| Underground<br>Works | Drift Metres | Crosscut Metres | Raise Metres | Total Metres |
|----------------------|--------------|-----------------|--------------|--------------|
| 2012                 | 2,379        |                 |              | 2,379        |
| 2013                 | 5,321        |                 |              | 5,321        |
| 2014                 | 3,355        | 1,060           |              | 4,415        |
| 2015                 | 6,734        | 2,286           | 1,038        | 10,058       |
| 2016                 | 4,328        | 1,432           | 2,461        | 8,221        |
| 2017                 | 5,286        | 2,514           | 2,668        | 10,467       |
| 2018                 | 5,894        | 2,855           | 2,666        | 11,415       |
| 2019                 | 7,581        | 3,912           | 3,752        | 15,245       |
| 2020                 | 7,359        | 3,376           | 3,199        | 13,934       |
| 2021                 | 5,965        | 2,521           | 2,743        | 11,229       |
| 2022                 | 5,127        | 2,416           | 2,047        | 9,590        |
| 2023                 | 4,153        | 4,079           | 1,113        | 9,345        |
| Total                | 63,482       | 26,451          | 21,687       | 111,619      |

Notes: The records between 2012 and 2020 are from the 2021 AMC report, however the summary from 2021 to 2023 was made by SRK from the database provided by GC Mine

# 10 Drilling

## 10.1 Historical Drilling (Pre-2008)

Between 2001 and 2007, prior to Silvercorp's acquisition of the Property, 43 diamond drillholes were completed, totalling 13,463.74m. The drilling began with PQ size in overburden, reduced to HQ size up to 100m depth, and continued with NQ size for the remainder, unless the hole exceeded 600m in length. Core recoveries ranged from 85% to 100%, with an average recovery of 99%. Drilling statistics for this period are detailed in Table 10.1.

## 10.2 Silvercorp Drilling (2008 – 2023)

All Silvercorp drilling from 2008 to 2023 was conducted using NQ-sized core, with all drill programs managed by Silvercorp. Drillhole collars were surveyed using a total station, and downhole surveys were completed every 50m using a Photographical Inclinometer manufactured by Beizheng Weiye Science and Technology Co. Ltd. (Chinese equivalent of the Sperry-Sun downhole survey tool). After the completion of drilling, surface drillhole collars were cemented, and the locations were marked with concrete blocks measuring 50 x 30 x 20 cm.

Core recoveries from Silvercorp's drilling programs ranged from 35.66% to 100.00%, with an average recovery rate of 99.36%. A review of the relationship between grade and core recovery showed no bias.

Silvercorp completed its first phase of diamond drilling on the Property in 2008, consisting of 22 surface holes, totalling 10,082.6m. This program led to the discovery of 15 mineralized veins.

In 2023, Silvercorp completed 5 surface holes within the license area. Figure 10.1 displays the locations of all surface drillholes drilled both before and after 2008.

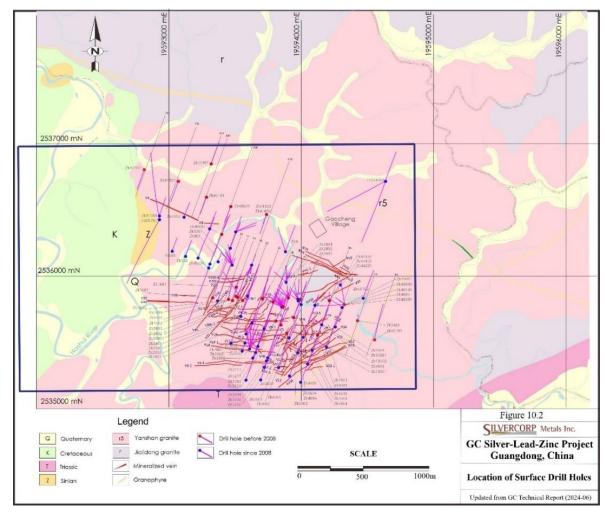


Figure 10.1: Surface Drilling Location Map

Sources: Silvercorp Metals Inc.

Detailed systematic drilling commenced on the GC project in 2011 and continued through to 2023. In 2011, most of the drilling was completed from the surface. As drill target depths increased, underground drilling was increasingly utilized. Since 2014, all diamond drilling has been completed using underground set-ups except 5 surface holes in 2023.

Table 10.1 presents drilling statistics by year for holes drilled from surface and underground set-ups.

**Table 10.1: Drilling Program Summary** 

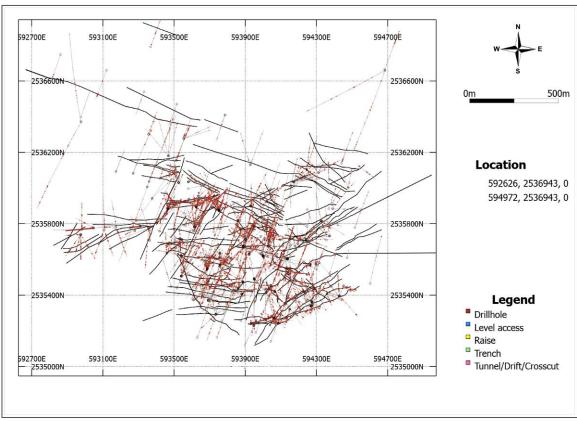
| Year      | Matros Drillad | Holes Com   | ompleted |  |  |
|-----------|----------------|-------------|----------|--|--|
| rear      | Metres Drilled | Underground | Surface  |  |  |
| 2008-2011 | 28,413         | 0           | 123      |  |  |
| 2011      | 14,484         | 2           | 34       |  |  |
| 2012      | 27,450         | 109         | 27       |  |  |
| 2013      | 46,565         | 262         | 41       |  |  |
| 2014      | 19,332         | 121         | 0        |  |  |
| 2015      | 22,431         | 150         | 0        |  |  |
| 2016      | 11,944         | 129         | 0        |  |  |
| 2017      | 21,085         | 164         | 0        |  |  |
| 2018      | 24,993         | 189         | 0        |  |  |
| 2019      | 24,946         | 192         | 0        |  |  |

| Vaar  | Matros Drillad | Holes Con   | s Completed |  |  |
|-------|----------------|-------------|-------------|--|--|
| Year  | Metres Drilled | Underground | Surface     |  |  |
| 2020  | 34,953         | 346         | 0           |  |  |
| 2021  | 65,054         | 623         | 0           |  |  |
| 2022  | 65,871         | 560         | 0           |  |  |
| 2023  | 72,115         | 487         | 5           |  |  |
| Total | 479,637        | 3,334       | 230         |  |  |

Notes: The number of holes and meters drilled between 2008 and 2020 are from the 2021 AMC report, however the summary from 2021 to 2023 has been sourced by SRK from the database provided by GC Mine

Most drillholes are inclined to test multiple vein structures. Underground drilling is conducted using fan arrays, with multiple holes drilled from single setups. High-grade mineralized zones have been significantly exposed both at and below current production levels, and major mineralized zones have been extended along strike and down dip. The drillholes and underground samples are shown in Figure 10.2 and Figure 10.3.

Figure 10.2: Location of Drillhole and Underground Samples (Level 0m)



Sources: SRK

Drillhole sample Undergroud Sample Sources: SRK

Figure 10.3: View of Drillhole and Underground Samples (Looking North)

The Photographs of underground diamond drilling is shown in Figure 10.4.









## 10.3 Bulk Density

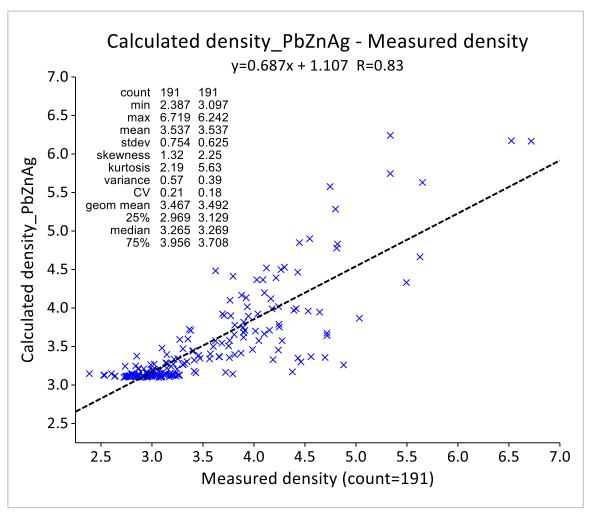
In 2019, Silvercorp has collected 192 samples from V9-5, V9-3, V6M, V5-7, V2W, V2E, V28-6, V28-4, V24, V19, V12, V10-1, V10, NV28-1 and NV10 which covers a range of mineralization styles.

AMC provided the density formula within mineralization wireframes of GC deposit based on the new samples and is a multiple linear regression model using lead, zinc, and silver grades, while barren rock is considered to have a density of 2.60.

DENSITY =  $3.094919 + (0.040827 \times Pb) + (0.034253 \times Zn) + (0.000482 \times Ag)$ 

Figure 10.5 presents a scatterplot comparing the measured density with the density estimated using linear regression.

Figure 10.5: Measured Density vs Density Estimated by Linear Regression with Pb, Zn, Ag



Sources: 2021 AMC report

# 11 Sample Preparation, Analyses, and Security

The sample preparation and assaying of primary samples from GC resource drilling was undertaken by GC Mine, ALS and SGS laboratories.

The author considers that quality control measures adopted for assaying of the GC resource drilling have established that the assaying is representative and free of any biases or other factors that may materially impact the reliability of the analytical results. The author considers that the sample preparation, security and analytical procedures adopted for the GC drilling provide an adequate basis for the current Mineral Resource estimates.

## 11.1 Sampling

Drilling at the GC project uses NQ-sized (48 mm) diamond core, conducted from both surface and underground. Drill core is collected in wooden trays by drilling personnel, with Silvercorp geologists visiting the drill site daily to check drilling progress, core quality, and depth markings. The core is then transported to the surface core shack at the mine camp for further processing.

Silvercorp personnel handle all logging and sampling, which includes collecting core recovery data, detailed lithological, vein, and mineralization logging, core photography, and core sampling. Sample intervals, determined by the geologist based on veining and sulphide content, range from 5 cm to 2 m, averaging 1.1 m.

After photographing, the core to be sampled is cut in half with a rock saw (Figure 11.1). One half is placed into cotton bags for analysis, while the other half is returned to the core tray for archival storage. If a duplicate sample is needed, the core is quartered. Sample numbers are marked on the cotton bags, and a tear-off tag with the sample number is inserted into the bag. The corresponding interval is also marked on the retained core. The sealed sample bags are then placed into larger rice bags for shipment to the laboratory.

Figure 11.1: Drill Core Cut in Half



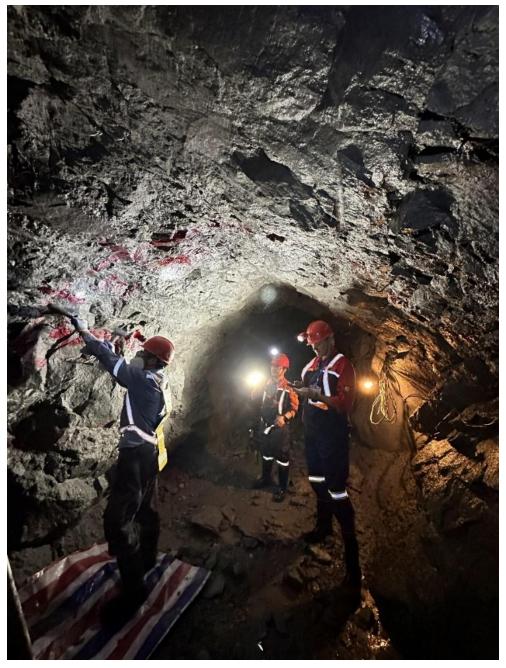


Sources: GC Mine

Underground samples are composites of chips collected from channels cut into tunnels, crosscuts, and trench bottoms. Tunnels are typically sampled along lines perpendicular to the mineralized vein structure at 5m intervals within mineralized zones, and at 15 to 25m intervals in non-mineralized

zones. Samples from crosscuts and trench bottoms are generally restricted to the thickness of the mineralized structure (Figure 11.2).

Figure 11.2: Underground Sampling



Sources: SRK Site visit, 2024

These samples include both vein material and associated wallrock. They are collected in cotton bags labelled with a unique sample number. The bags are then sealed, placed into larger rice bags, and secured for shipment to the laboratory.

## 11.2 Sample Preparation and Analysis

Since 2008, Silvercorp has used three main laboratories for sample preparation and analysis. From 2008 to 2014, ALS Chemex (Guangzhou) Co., Ltd. (ALS Guangzhou or ALS), a part of ALS Global laboratory Group located in Guangdong Province, served as the primary laboratory. Since 2014, Silvercorp's GC Lab has taken over as the primary laboratory. From 2021 to 2023, SGS (Tianjin) Lab served as the umpire laboratory for GC project.

ALS Guangzhou is accredited by the International Standards Organization (ISO) with standards 9001:2015 and 17025:2007, as well as the China National Accreditation Service (CNAS). These accreditations cover the general requirements for the competence of testing and calibration laboratories.

The GC Lab, owned and operated by Silvercorp, is not certified by any standards association.

The SGS is accredited by China Metrology Certification/ China Inspection Body and Laboratory Mandatory Approval (CMA) and China National Accreditation Service for Conformity Assessment (CNAS).

## 11.2.1 ALS Guangzhou

From 2008 to 2014, Silvercorp used ALS Guangzhou as the primary laboratory for sample preparation and analysis of GC Mine samples. After 2014, ALS Guangzhou has served as an umpire laboratory. At ALS Guangzhou, the sample preparation process involves drying the samples, followed by crushing them to ensure more than 70% pass through a <2 mm sieve. The crushed samples are then split using a riffle splitter, and up to 250 grams are pulverized to achieve 85% passing 75 microns.

The prepared samples are analysed using ALS assay procedure OG62. This involves a four-acid digestion process where the samples are treated with nitric, perchloric, hydrofluoric, and hydrochloric acids, then evaporated. Afterward, hydrochloric acid and de-ionized water are added, and the samples are heated for a specified time. Once cooled, the samples are diluted to volume with de-ionized water, homogenized, and analysed using Inductively Coupled Plasma – Atomic Emission Spectrometry ("ICP-AES") or Atomic Absorption Spectroscopy ("AAS").

Detection ranges for the OG62 method are provided in Table 11.1.

Table 11.1: ALS Chemex Lab Method and Detection Limits

| Element | ALS Method | Units | Lower Limit | Upper Limit |
|---------|------------|-------|-------------|-------------|
| Ag      | Ag-OG62    | g/t   | 1           | 1,500       |
| Pb      | Pb-OG62    | %     | 0.001       | 20          |
| Zn      | Zn-OG62    | %     | 0.001       | 30          |

Sources: 2021 AMC report

Silver samples returning assays greater than 1,500 g/t Ag are subsequently analyzed by ALS fire assay ("FA") (method AG GRA-21). This method has a lower detection limit of 5 g/t and an upper detection limit of 10,000 g/t.

## 11.2.2 Gaocheng Mine Laboratory

Since 2014, Silvercorp's GC Lab has served as the primary facility for sample preparation and analysis of Gaocheng samples. At the GC Lab, samples undergo a drying process for 12 hours at temperatures between 75 and 80°C. They are then crushed to a size of 2 to 5 mm using a jaw crusher, followed by further crushing to 0.84 to 1.0 mm with a roll crusher. The crushed sample is split using a riffle splitter to obtain a 300-gram subsample, which is ground to 0.125 to 0.074 mm using a pulverizer made in Jiangxi, China. The pulverizer is regularly cleaned by grinding quartz sand and then with high-pressure air. For analysis, 0.5 grams of the prepared sample are digested using a two-acid digest. Ag, Pb and Zn are analysed using AAS method. When Pb and Zn concentrations exceed the upper detection limit of 3%, they are analysed using a separate titration method, which has a detection range of 2% to 60%. High-grade silver is analysed using FA, with an upper detection limit of 5,000 g/t Ag.

From July 2023, Ag, Pb, and Zn are analysed using ICP-OES method first. If Ag returned assays greater than 1,000 g/t, the Ag samples were subsequently analysed by AAS, and if Ag returned assays greater 2,000 g/t by AAS, the Ag samples were analysed by FA. This atomic absorption spectrometry and fire method for Ag has an upper limit of 2,000 g/t and 10,000 g/t respectively. If Pb and Zn returned assays greater than 3%, The Lead and Zinc samples were subsequently analysed by separate titration. This method has an upper limit of 60% for both Pb and Zn.

The Detection limits for the GC Lab's analytical processes are detailed in Table 11.2.

Table 11.2: Silvercorp GC Lab Detection Limits

| Element | Detection<br>Range | Over Limit Notes   | Over Limit Upper<br>Detection Limit |
|---------|--------------------|--|-------------------------------------|
| Ag      | 2/5 - 1,000 g/t    | >1,000 g/t overlimit samples analysed by AAS,<br>>2,000 g/t overlimit samples analysed by FA | 10,000 g/t                          |
| Pb      | 0.001 - 3%         | >3% overlimit samples analysed by separate titration   | 60%                                 |
| Zn      | 0.001 - 3%         | >3% overlimit samples analysed by separate titration   | 60%                                 |

Sources: GC Mine

Notes: From July 2023, the lower detection range of Ag is changed to 2 g/t

## 11.2.3 SGS Laboratory

The SGS laboratory has been used as the umpire laboratory for GC sample analysis since 2023.

At the SGS laboratory, samples are dried at 95°C, crushed to 3 mm with a jaw crusher, then split through a riffle splitter resulting in a subsample of 500 g and is ground with a pulveriser to 0.074 mm. Ag, Pb, and Zn are analyzed using AAS method. This process has a lower detection limit of 0.002% and an upper detection limit of 2% for Pb and lower detection limit of 0.001% and an upper detection limit of 2% for Zn. The Detection range for Ag is 5-500 g/t. If Ag, Pb or Zn returned assays greater than upper detection limit, The samples were subsequently analysed by FA method for Ag and separate titration for Pb and Zn.

Detection limits for the SGS laboratory analytical process are presented in Table 11.3.

Table 11.3: SGS Laboratory Detection Limits

| Element | Detection<br>Range | Over Limit Notes                                     | Over Limit Upper<br>Detection Limit |
|---------|--------------------|--|-------------------------------------|
| Ag      | 5 - 500 g/t        | >500 g/t overlimit samples analysed by FA            | >2,000 g/t                          |
| Pb      | 0.002 - 2%         | >2% overlimit samples analysed by separate titration | 80%                                 |
| Zn      | 0.001 - 2%         | >2% overlimit samples analysed by separate titration | 80%                                 |

Sources: GC Mine

## 11.3 Sample Shipment and Security

Drill core is stored in a clean and well-maintained core shack in the GC camp complex (Figure 11.3). This core shack is locked when unattended and monitored by two security personnel 24 hours a day.

Samples are shipped to the laboratory in sample bags inside sealed poly-woven rice bags. Between 2008 and 2014, samples were transported by GC Mine personnel in a pickup truck and then couriered to the ALS laboratory in Guangzhou. Between 2014 and 2024 samples were transported to the GC lab by GC Mine personnel.

Figure 11.3: Core Tray Storage



Sources: SRK Site visit, 2024

#### 11.4 QA/QC

## 11.4.1 Monitoring Program

Silvercorp has established QA/QC procedures which cover sample collection and processing at the GC Mine. These QA/QC protocols have been progressively refined since 2011. Certified Reference Materials ("CRMs") and coarse blanks have been included with drilling samples since 2011, and with underground samples since 2014. Field duplicates have been included with drilling samples since 2012 and with underground samples since 2014. Check (umpire) samples (pulp duplicates) have been sent to a separate 'umpire' laboratory since 2012.

In 2018, Silvercorp further improved their QA/QC protocols to include regular and more frequent submission of CRMs, coarse blanks, and field duplicates with drilling and underground samples. Coarse reject duplicates and pulp duplicates were also incorporated into drill sampling programs. The proportion of check samples, sent to a different laboratory was also increased. In 2019, Silvercorp initiated real-time monitoring of QA/QC protocols.

A summary of QA/QC samples included in drilling and underground sampling programs since 2011 is provided in Table 11.4.

Table 11.4: GC Project QA/QC Samples by Year

|            |         |       |        | Drill | ing        |       |                | Underground Sampling |      |            |       |        |      |         |
|------------|---------|-------|--------|-------|------------|-------|----------------|----------------------|------|------------|-------|--------|------|---------|
| Year       | Drill   |       |        |       | Duplicates |       | Umpire Channel |                      |      | Duplicates |       | Umpire |      |         |
|            | Samples | CRMs  | Blanks | Field | Coarse     | Pulp  | Samples        | Samples              | CRMs | Blanks     | Field | Coarse | Pulp | Samples |
| Pre-2011.5 | 5,300   | -     | -      | -     | -          | -     | -              | 102                  | -    | -          | -     |        |      | -       |
| 2011       | 1,859   | 68    | 82     | -     | -          | -     | 60             | 34                   | -    | -          | -     |        |      | -       |
| 2012       | 4,707   | 98    | 133    | 94    | -          | -     | 2,247          | 1,142                | -    | -          | -     |        |      | 103     |
| 2013       | 7,235   | 105   | 132    | 106   | -          | -     | 3,094          | 2,145                | -    | -          | -     |        |      | 11      |
| 2014       | 1,617   | 44    | 50     | 44    | -          | -     | 109            | 1,991                | 31   | 29         | 35    |        |      | 102     |
| 2015       | 1,729   | 45    | 48     | 41    | -          | -     | 31             | 4,139                | 64   | 67         | 68    |        |      | -       |
| 2016       | 1,974   | 82    | 81     | 80    | -          | -     | 33             | 4,299                | 71   | 71         | 74    |        |      | -       |
| 2017       | 4,150   | 150   | 153    | 155   | -          | -     | 46             | 5,183                | 84   | 84         | 84    |        |      | -       |
| 2018       | 5,178   | 178   | 184    | 184   | 60         | 60    | 303            | 5,786                | 281  | 289        | 289   |        |      | 976     |
| 2019       | 5,085   | 164   | 176    | 163   | 163        | 163   | -              | 7,629                | 122  | 124        | 118   |        |      | 482     |
| 2020       | 9,473   | 331   | 407    | 331   | 331        | 327   | 467            | 6,961                | 136  | 141        | 138   |        |      | 382     |
| 2021       | 20,410  | 701   | 797    | 338   | 686        | 678   | 650            | 6,812                | 61   | 61         | 65    |        |      | 213     |
| 2022       | 16,955  | 590   | 679    | 598   | 596        | 593   | 517            | 5,097                | 35   | 42         | 43    |        |      | 149     |
| 2023       | 13,984  | 435   | 522    | 338   | 338        | 335   | 425            | 4,247                | 113  | 142        | 81    | 61     | 60   | 43      |
| Total      | 99,656  | 2,991 | 3,444  | 2,472 | 2,174      | 2,156 | 7,982          | 55,567               | 998  | 1,050      | 995   | 61     | 60   | 2,461   |

Notes: Consistent with the historical summary, the samples before 2021 are from the 2021 AMC report, however the summary from 2021 to 2023 has been sourced by SRK from the database provided by GC Mine

## 11.4.2 Certified Reference Material

The monitoring of assay reliability of GC Mine included insertion of samples of CRMS prepared by The Institute of Geophysical and Geochemical Exploration and approved by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China.

CRMs with prefix "CDN" were sourced from CDN Resource Laboratories Ltd. in Langley, BC, Canada.

The CRMs have been included with drilling samples since 2011 and with underground samples since 2014, and the average insert rate is 3.0% for drillholes samples and 1.9 % for underground samples.

Details and performance of the CRMs used at the GC Project are presented in Table 11.5, Table 11.6 and Figure 11.4.

Table 11.5: Summary of CRMS

|             |         |           |       |        |               | _     |           |                 |
|-------------|---------|-----------|-------|--------|---------------|-------|-----------|-----------------|
| CRM ID      | Referen | nce Value |       | 2x Sta | ndard Deviat  | tion  | In Use    | Count of Sample |
|             | Ag      | Pb        | Zn    | Ag     | Pb            | Zn    | III USE   | Count of Sample |
| CDN-FCM-7   | 220     | 2.17      | 4.26  | 10     | 0.07          | 0.15  | 2013-2020 | 534             |
| GSO-2       | 148     | 5.13      | 13.90 | 6      | 0.08          | 0.2   | 2011-2018 | 381             |
| GSO-4       | 64.7    | 0.629     | 3.85  | 4.1    | 0.042         | 0.19  | 2011-2013 | 76              |
| GBW07173    | 92      | 2.14      | 6.06  | 11     | 1.97-<br>2.17 | 0.29  | 2011      | 5               |
| CDN-ME-1801 | 108     | 3.08      | 7.43  | 6      | 0.1           | 0.3   | 2018-2020 | 336             |
| CDN-ME-1206 | 274     | 0.801     | 2.38  | 14     | 0.044         | 0.15  | 2018-2021 | 186             |
| CDN-ME-1807 | 327     | 2.34      | 2.43  | 20     | 0.1           | 0.08  | 2018-2024 | 387             |
| CDN-ME-1306 | 104     | 1.6       | 3.17  | 7      | 0.07          | 0.15  | 2018-2022 | 692             |
| CDN-ME-1604 | 299     | 4.83      | 0.72  | 15     | 0.15          | 0.03  | 2018-2024 | 727             |
| CDN-ME-1410 | 69      | 0.248     | 3.682 | 3.8    | 0.012         | 0.084 | 2018-2024 | 492             |
| CDN-ME-1201 | 37.6    | 0.465     | 4.99  | 3.4    | 0.032         | 0.29  | 2022-2024 | 140             |
| CDN-ME-1403 | 53.9    | 0.414     | 1.34  | 5.4    | 0.018         | 0.06  | 2022-2023 | 128             |
| CDN-ME-1404 | 59.1    | 0.381     | 2.08  | 2.7    | 0.018         | 0.07  | 2022-2024 | 87              |
| CDN-ME-2001 | 582     | 0.78      | 1.5   | 19     | 0.031         | 0.05  | 2022-2023 | 72              |

Sources: Summarized by SRK from the database provided by GC Mine

Table 11.6: Summary of GC CRM Results (2011 - 2023)

| <b>∜</b> sr          | k consulting                             | Statistics              | GSO-2 (Ag) | GSO-2 (Pb) | GSO-2 (Zn) |
|----------------------|--|-------------------------|------------|------------|------------|
| Project              | GC Project                               | Sample Count            | 381.00     | 381.00     | 381.00     |
| Data Series          | 2011-2018 CRM                            | Expected Value          | 220.00     | 2.17       | 4.26       |
| Data Type            | Underground & Core<br>Samples            | 2 Standard<br>Deviation | 10.00      | 0.07       | 0.15       |
| Commodity            | Ag, Pb,Zn                                | Data Mean               | 219.90     | 2.19       | 4.42       |
| Laboratory           | GC&ALS Lab                               | Outside<br>2StdDev      | 0          | 0          | 0          |
| Analytical<br>Method | ICP-AES, ICP-AAS                         | Below<br>2StdDev        | 6          | 20         | 1          |
| Detection<br>Limit   | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 16.00      | 7.00       | 14.00      |
|                      |  | Statistics              | GSO-4 (Ag) | GSO-4 (Pb) | GSO-4 (Zn) |
| Project              | GC Project                               | Sample Count            | 76         | 76         | 76         |
| Data Series          | 2011-2013 CRM                            | Expected<br>Value       | 148.00     | 5.13       | 13.90      |

**Table 11.6: Summary of GC CRM Results (2011 - 2023)** 

|   |   | 2 Standard   |  |  |   |
|---|---|--|--|--|---|
| Data Type   | Core Samples  | Deviation  | 6.00   | 0.08   | 0.20  |
| Commodity   | Ag, Pb,Zn   | Data Mean  | 154.57   | 4.94   | 13.69   |
| Laboratory  | ALS Lab   | Outside<br>2StdDev   | 14%  | 34%  | 71%   |
| Analytical<br>Method  | ICP-AES, ICP-AAS  | Below<br>2StdDev   | 0  | 20   | 5   |
| Detection<br>Limit  | 1gpt (Ag); 0.001%<br>(Pb),0.001% (Zn)   | Above<br>2StdDev   | 11   | 6  | 49  |
|   |   | Statistics   | CDN-FCM-7<br>(Ag)  | CDN-FCM-7<br>(Pb)                                    | CDN-FCM-7<br>(Zn)   |
| Project   | GC Project  | Sample Count   | 534  | 534  | 534   |
| Data Series   | 2013-2020 CRM   | Expected<br>Value  | 65.00  | 0.63   | 3.85  |
| Data Type   | Underground & Core<br>Samples   | 2 Standard<br>Deviation  | 4.00   | 0.04   | 0.19  |
| Commodity   | Ag, Pb,Zn   | Data Mean  | 64.48  | 0.61   | 3.80  |
| Laboratory  | GC&ALS Lab  | Outside<br>2StdDev   | 0%   | 1%   | 0%  |
| Analytical<br>Method  | ICP-AES, ICP-AAS  | Below<br>2StdDev   | 0  | 5  | 1   |
| Detection<br>Limit  | 1-5gpt (Ag); 0.001%<br>(Pb),0.001% (Zn)   | Above<br>2StdDev   | 0  | 0  | 0   |
|   |   | Statistics   | CDN-ME-<br>1206 (Ag)   | CDN-ME-<br>1206 (Pb)                                 | CDN-ME-<br>1206 (Zn)  |
| Project   | GC Project  | Sample Count   | 186  | 186  | 186   |
| Data Series   | 2018-2021 CRM   | Expected<br>Value  | 274.00   | 0.80   | 2.38  |
| Data Type   | Underground & Core Samples  | 2 Standard<br>Deviation  | 14.00  | 0.04   | 0.15  |
| Commodity   | Ag, Pb,Zn   | Data Mean  | 274.54   | 0.81   | 2.39  |
| Laboratory  | GC&ALS Lab  | Outside<br>2StdDev   | 0%   | 0%   | 0%  |
| Analytical<br>Method  | AAS   | Below<br>2StdDev   | 0  | 0  | 0   |
| Detection<br>Limit  | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn)  | Above<br>2StdDev   | 0  | 0  | 0   |
| -   | , .,//  | Statistics   | CDN-ME-<br>1201 (Ag)   | CDN-ME-<br>1201 (Pb)                                 | CDN-ME-<br>1201 (Zn)  |
| Project   |   |  | 1201 (719)   | 1201 (1.0)   | 1201 (211)  |
|   | GC Project  | Sample Count   | 140  | 140  | 140   |
| Data Series   | GC Project<br>2021-2023 CRM   | Sample Count<br>Expected<br>Value  |  | • •  | ` '   |
|   | ,   | Expected   | 140  | 140  | 140   |
| Data Type   | 2021-2023 CRM Underground & Core  | Expected<br>Value<br>2 Standard  | 140<br>37.60   | 140<br>0.47  | 140<br>4.99   |
| Data Type Commodity Laboratory  | 2021-2023 CRM<br>Underground & Core<br>Samples  | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev  | 140<br>37.60<br>3.40   | 140<br>0.47<br>0.03                                  | 140<br>4.99<br>0.29   |
| Commodity Laboratory Analytical   | 2021-2023 CRM<br>Underground & Core<br>Samples<br>Ag, Pb,Zn   | Expected Value 2 Standard Deviation Data Mean Outside  | 140<br>37.60<br>3.40<br>37.43  | 140<br>0.47<br>0.03<br>0.48                          | 140<br>4.99<br>0.29<br>5.01   |
| Data Type Commodity Laboratory Analytical Method Detection                            | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab   | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below  | 140<br>37.60<br>3.40<br>37.43<br>0%  | 140<br>0.47<br>0.03<br>0.48<br>1%                    | 140<br>4.99<br>0.29<br>5.01<br>1%                                   |
| Data Type Commodity Laboratory Analytical Method Detection                            | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab ICP-OES, AAS 2-5 gpt (Ag); 0.001%   | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below 2StdDev Above  | 140<br>37.60<br>3.40<br>37.43<br>0%  | 140<br>0.47<br>0.03<br>0.48<br>1%                    | 140<br>4.99<br>0.29<br>5.01<br>1%                                   |
| Data Type Commodity Laboratory Analytical Method Detection Limit                      | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab ICP-OES, AAS 2-5 gpt (Ag); 0.001%   | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below 2StdDev Above 2StdDev  | 140<br>37.60<br>3.40<br>37.43<br>0%<br>0<br>0  | 140 0.47 0.03 0.48 1% 0 2 CDN-ME-                    | 140<br>4.99<br>0.29<br>5.01<br>1%<br>2<br>0                         |
| Data Type Commodity Laboratory Analytical Method Detection Limit                      | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab ICP-OES, AAS 2-5 gpt (Ag); 0.001% (Pb),0.001% (Zn)  | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below 2StdDev Above 2StdDev Statistics   | 140<br>37.60<br>3.40<br>37.43<br>0%<br>0<br>0<br>CDN-ME-<br>1306 (Ag)                  | 140 0.47 0.03 0.48 1% 0 2 CDN-ME- 1306 (Pb)          | 140<br>4.99<br>0.29<br>5.01<br>1%<br>2<br>0<br>CDN-ME-<br>1306 (Zn) |
| Data Type Commodity Laboratory Analytical Method Detection Limit  Project Data Series | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab ICP-OES, AAS 2-5 gpt (Ag); 0.001% (Pb),0.001% (Zn)  GC Project                                  | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below 2StdDev Above 2StdDev  Statistics Sample Count Expected                  | 140<br>37.60<br>3.40<br>37.43<br>0%<br>0<br>0<br>CDN-ME-<br>1306 (Ag)<br>692           | 140 0.47 0.03 0.48 1% 0 2 CDN-ME- 1306 (Pb) 692      | 140 4.99 0.29 5.01 1% 2 0 CDN-ME- 1306 (Zn) 692                     |
| Data Type Commodity Laboratory Analytical Method Detection Limit Project              | 2021-2023 CRM Underground & Core Samples Ag, Pb,Zn GC Lab ICP-OES, AAS 2-5 gpt (Ag); 0.001% (Pb),0.001% (Zn)  GC Project 2018-2022 CRM Underground & Core | Expected Value 2 Standard Deviation Data Mean Outside 2StdDev Below 2StdDev Above 2StdDev  Statistics Sample Count Expected Value 2 Standard | 140<br>37.60<br>3.40<br>37.43<br>0%<br>0<br>0<br>CDN-ME-<br>1306 (Ag)<br>692<br>104.00 | 140 0.47 0.03 0.48 1% 0 2 CDN-ME- 1306 (Pb) 692 1.60 | 140 4.99 0.29 5.01 1% 2 0 CDN-ME- 1306 (Zn) 692 3.17                |

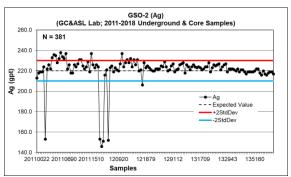
**Table 11.6: Summary of GC CRM Results (2011 - 2023)** 

| Analytical<br>Method         | ICP-OES, AAS                             | Below<br>2StdDev        | 0                    | 1                    | 0                    |
|------------------------------|--|-------------------------|----------------------|----------------------|----------------------|
| Detection<br>_imit           | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 0                    | 0                    | 0                    |
|                              | (* 2),0:00 : /0 (=::/                    | Statistics              | CDN-ME-<br>1403 (Ag) | CDN-ME-<br>1403 (Pb) | CDN-ME-<br>1403 (Zn) |
| Project                      | GC Project                               | Sample Count            | 128                  | 128                  | 128                  |
| Data Series                  | 2022-2023 CRM                            | Expected<br>Value       | 53.90                | 0.41                 | 1.34                 |
| Data Type                    | Underground & Core Samples               | 2 Standard<br>Deviation | 5.40                 | 0.02                 | 0.06                 |
| Commodity                    | Ag, Pb,Zn                                | Data Mean               | 53.71                | 0.42                 | 1.34                 |
| Laboratory                   | GC Lab                                   | Outside<br>2StdDev      | 1%                   | 0%                   | 2%                   |
| Analytical<br>Method         | ICP-OES, AAS                             | Below<br>2StdDev        | 0                    | 0                    | 0                    |
| Detection<br>Limit           | 2-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 1                    | 0                    | 3                    |
|                              | ( -,// (                                 | Statistics              | CDN-ME-<br>1404 (Ag) | CDN-ME-<br>1404 (Pb) | CDN-ME-<br>1404 (Zn) |
| Project                      | GC Project                               | Sample Count            | 87                   | 87                   | 87                   |
| Data Series                  | 2022-2023 CRM                            | Expected<br>Value       | 59.10                | 0.38                 | 2.08                 |
| Data Type                    | Underground & Core Samples               | 2 Standard<br>Deviation | 2.70                 | 0.02                 | 0.07                 |
| Commodity                    | Ag, Pb,Zn                                | Data Mean               | 58.64                | 0.39                 | 2.09                 |
| Laboratory                   | GC Lab                                   | Outside<br>2StdDev      | 3%                   | 9%                   | 1%                   |
| Analytical<br>Method         | ICP-OES, AAS                             | Below<br>2StdDev        | 2                    | 0                    | 1                    |
| Detection<br>Limit           | 2-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 1                    | 8                    | 0                    |
|                              | ( -,// (                                 | Statistics              | CDN-ME-<br>1410 (Ag) | CDN-ME-<br>1410 (Pb) | CDN-ME-<br>1410 (Zn) |
| Project                      | GC Project                               | Sample Count            | 492                  | 492                  | 492                  |
| Data Series                  | 2018-2023 CRM                            | Expected<br>Value       | 69.00                | 0.25                 | 3.68                 |
| Data Type                    | Underground & Core Samples               | 2 Standard<br>Deviation | 3.80                 | 0.01                 | 0.08                 |
| Commodity                    | Ag, Pb,Zn                                | Data Mean               | 69.05                | 0.25                 | 3.68                 |
| Laboratory                   | GC&ALS Lab                               | Outside<br>2StdDev      | 0%                   | 4%                   | 4%                   |
| Analytical<br>Method         | ICP-OES, AAS                             | Below<br>2StdDev        | 0                    | 1                    | 15                   |
| Detection<br>Limit           | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 2                    | 17                   | 3                    |
| -                            | V - 1/2                                  | Statistics              | CDN-ME-<br>1604 (Ag) | CDN-ME-<br>1604 (Pb) | CDN-ME-<br>1604 (Zn) |
| Project                      | GC Project                               | Sample Count            | 727                  | 727                  | 727                  |
| Data Series                  | 2018-2023 CRM                            | Expected<br>Value       | 299.00               | 4.83                 | 0.72                 |
| Data Type                    | Underground & Core<br>Samples            | 2 Standard<br>Deviation | 15.00                | 0.15                 | 0.03                 |
| Commodity                    | Ag, Pb,Zn                                | Data Mean               | 299.20               | 4.81                 | 0.72                 |
|                              | GC&ALS Lab                               | Outside                 | 0%                   | 6%                   | 1%                   |
| Laboratory                   | GC&ALS Lab                               | 2StdDev                 |                      |                      |                      |
| Laboratory Analytical Method | ICP-OES, AAS                             | Below<br>2StdDev        | 1                    | 46                   | 5                    |

**Table 11.6:** Summary of GC CRM Results (2011 - 2023)

|                      |  | Statistics              | CDN-ME-<br>1807 (Ag) | CDN-ME-<br>1807 (Pb) | CDN-ME-<br>1807 (Zn) |
|----------------------|--|-------------------------|----------------------|----------------------|----------------------|
| Project              | GC Project                               | Sample Count            | 387                  | 387                  | 387                  |
| Data Series          | 2018-2023 CRM                            | Expected<br>Value       | 327.00               | 2.34                 | 2.43                 |
| Data Type            | Underground & Core Samples               | 2 Standard<br>Deviation | 20.00                | 0.10                 | 0.08                 |
| Commodity            | Ag, Pb,Zn                                | Data Mean               | 325.39               | 2.34                 | 2.44                 |
| Laboratory           | GC Lab                                   | Outside<br>2StdDev      | 0%                   | 1%                   | 1%                   |
| Analytical<br>Method | ICP-OES, AAS                             | Below<br>2StdDev        | 0                    | 2                    | 3                    |
| Detection<br>Limit   | 2-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 0                    | 1                    | 1                    |
|                      |  | Statistics              | CDN-ME-<br>1801 (Ag) | CDN-ME-<br>1801 (Pb) | CDN-ME-<br>1801 (Zn) |
| Project              | GC Project                               | Sample Count            | 336                  | 336                  | 336                  |
| Data Series          | 2018-2020 CRM                            | Expected<br>Value       | 108.00               | 3.08                 | 7.43                 |
| Data Type            | Underground & Core Samples               | 2 Standard<br>Deviation | 6.00                 | 0.10                 | 0.30                 |
| Commodity            | Ag, Pb,Zn                                | Data Mean               | 108.51               | 3.08                 | 7.36                 |
| Laboratory           | GC&ALS Lab                               | Outside<br>2StdDev      | 1%                   | 0%                   | 8%                   |
| Analytical<br>Method | ICP-OES, AAS                             | Below<br>2StdDev        | 1                    | 0                    | 26                   |
| Detection<br>Limit   | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 3                    | 0                    | 0                    |
|                      |  | Statistics              | CDN-ME-<br>2001 (Ag) | CDN-ME-<br>2001 (Pb) | CDN-ME-<br>2001 (Zn) |
| Project              | GC Project                               | Sample Count            | 72                   | 72                   | 72                   |
| Data Series          | 2022-2023 CRM                            | Expected<br>Value       | 582.00               | 0.78                 | 1.50                 |
| Data Type            | Underground & Core Samples               | 2 Standard<br>Deviation | 19.00                | 0.03                 | 0.05                 |
| Commodity            | Ag, Pb,Zn                                | Data Mean               | 585.57               | 0.79                 | 1.51                 |
| Laboratory           | GC Lab                                   | Outside<br>2StdDev      | 1%                   | 1%                   | 1%                   |
| Analytical<br>Method | ICP-OES, AAS                             | Below<br>2StdDev        | 1                    | 0                    | 0                    |
| Detection<br>Limit   | 2-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) | Above<br>2StdDev        | 0                    | 1                    | 1                    |

Figure 11.4: CRMs Performances



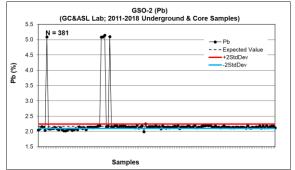


Figure 11.4: CRMs Performances

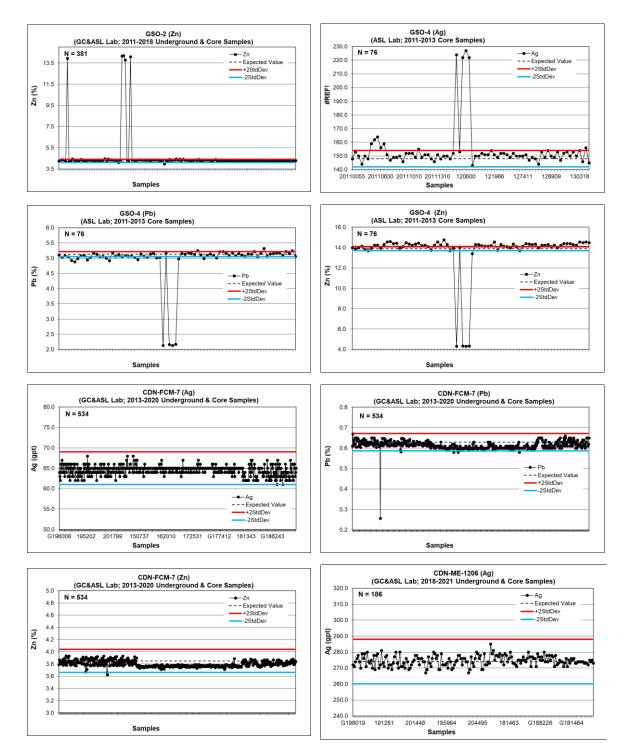
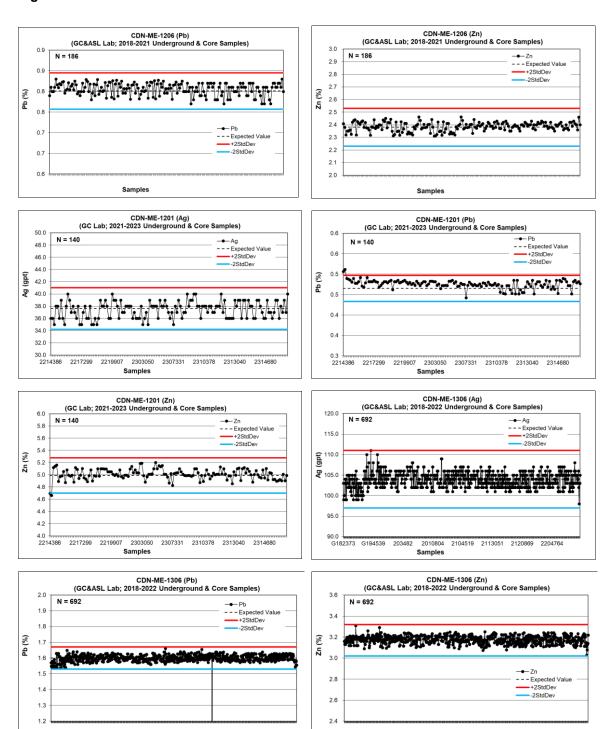


Figure 11.4: CRMs Performances



Samples

Samples

Figure 11.4: CRMs Performances

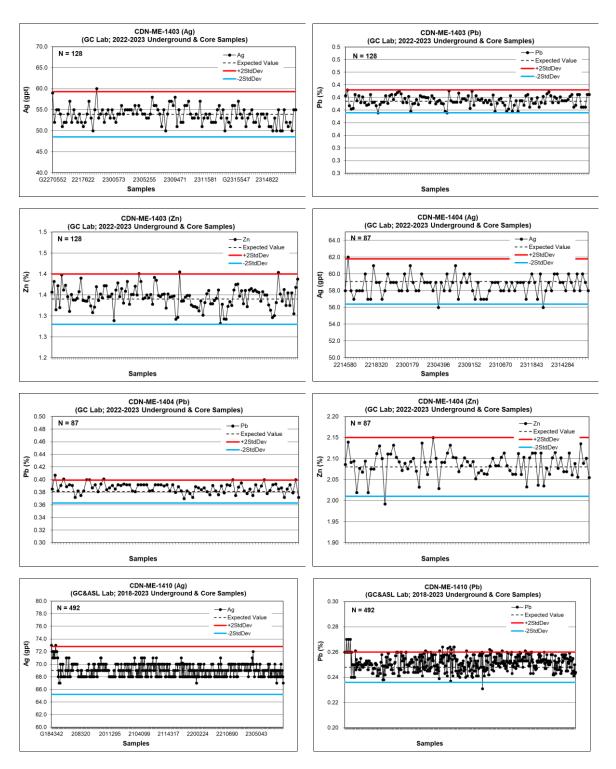
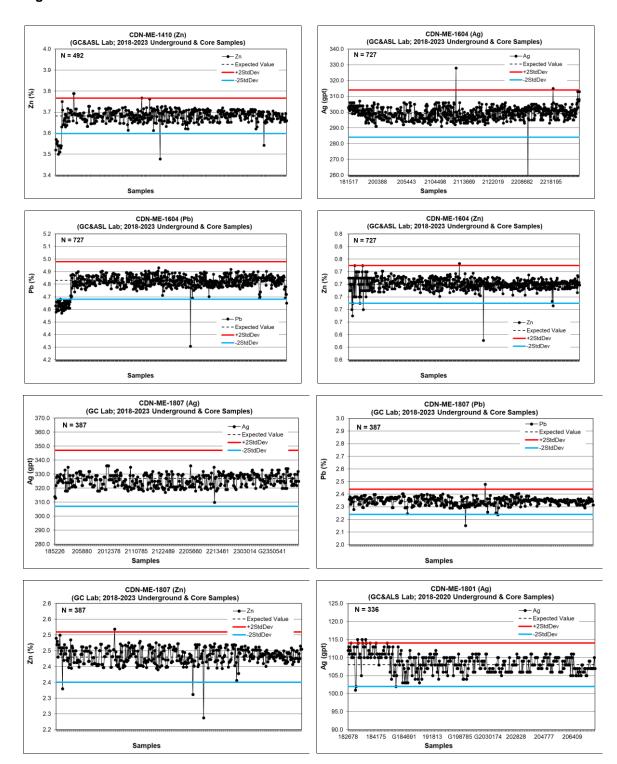


Figure 11.4: CRMs Performances



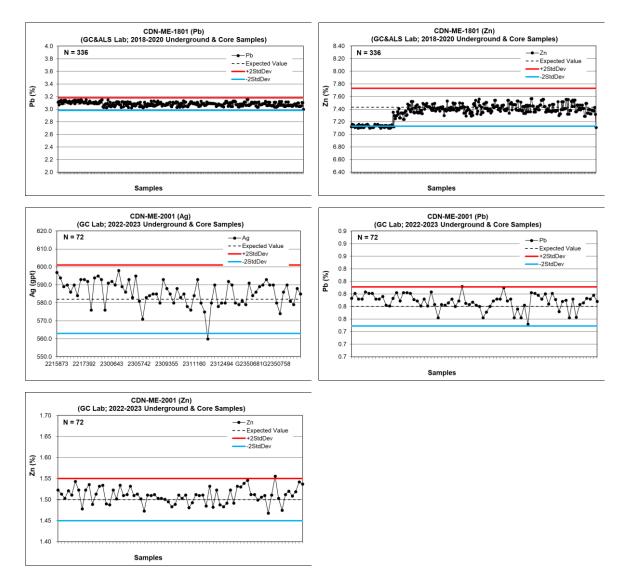


Figure 11.4: CRMs Performances

### 11.4.3 Blank Samples

Silvercorp routinely included samples of un-mineralized rock collected from a quarry outside the GC area in assay batches, since 2011, for drillholes and since 2014 for underground samples. Blank assays described in this report include all results from the assay laboratories used for resource drilling and underground samples, including data from outside the resource area. The submission insert ratio of these samples averaged 3.7% for drillholes and 2.0% for underground samples.

Prior to 2018, Silvercorp's protocol considered blank samples with assay results exceeding 30 g/t Ag, 0.3% Pb, or 0.3% Zn as failures. This protocol was revised in 2018, reducing the failure thresholds to 8 g/t Ag, 0.1% Pb, and 0.1% Zn.

Blank samples were monitored on a real-time basis as the results of samples batches are received. Failed blank samples were investigated and sample batches where contamination is identified should be re-assayed.

For assaying prior to 2023, the inserted blanks are coarse marble blanks. Starting in 2023, pulp blank samples have been inserted to monitor potential contamination during the grinding process. The generally accepted criterion is that 80% of coarse blanks should be less than three times the lower limit of analytical detection, and 90% of pulp blanks should be less than two times the lower limit of analytical detection.

Table 11.7 summarizes Silvercorp failure criteria and the generally accepted criteria for blank.

Table 11.7: GC Blank Fail Criteria

|       |     |                | Α          | \g              | F             | Pb              | Z          | n               |
|-------|-----|----------------|------------|-----------------|---------------|-----------------|------------|-----------------|
| Year  | Lab | Detection      | SVM Fail   | 3 x LDL<br>Fail | SVM Fail      | 3 x LDL<br>Fail | SVM Fail   | 3 x LDL<br>Fail |
| i cai | Lab | Limits         | Fail Limit | Fail            | Fail<br>Limit | Fail Limit      | Fail Limit | Fail Limit      |
|       |     |                | (g/t)      | (g/t)           | (g/t)         | (%)             | (%)        | (%)             |
| 2011  |     | Ag LDL=1 g/t   | 30         | 3               | 0.3           | 0.003           | 0.3        | 0.003           |
| 2012  | ALS | Pb LDL=0.001%  | 30         | 3               | 0.3           | 0.003           | 0.3        | 0.003           |
| 2013  |     | Zn LDL=0.001%  | 30         | 3               | 0.3           | 0.003           | 0.3        | 0.003           |
| 2014  |     |                | 30         | 15              | 0.3           | 0.003           | 0.3        | 0.003           |
| 2015  |     |                | 30         | 15              | 0.3           | 0.003           | 0.3        | 0.003           |
| 2016  |     |                | 30         | 15              | 0.3           | 0.003           | 0.3        | 0.003           |
| 2017  |     | Ag LDL=2-5 g/t | 30         | 15              | 0.3           | 0.003           | 0.3        | 0.003           |
| 2018  | 00  | Pb LDL=0.001%  | 8          | 15              | 0.1           | 0.003           | 0.1        | 0.003           |
| 2019  | GC  | Zn LDL=0.001%  | 8          | 15              | 0.1           | 0.003           | 0.1        | 0.003           |
| 2020  |     |                | 8          | 15              | 0.1           | 0.003           | 0.1        | 0.003           |
| 2021  |     |                | 8          | 15              | 0.1           | 0.003           | 0.1        | 0.003           |
| 2022  |     |                | 8          | 15              | 0.1           | 0.003           | 0.1        | 0.003           |
| 2023  |     |                | 8          | 6 - 15          | 0.1           | 0.003           | 0.1        | 0.003           |

#### Notes:

Table 11.8 and Figure 11.5 and Figure 11.6 show the performance of the blanks following the generally accepted criteria.

Table 11.8: Summary of GC Blanks Results (2011 - 2023)

| <del>∜</del> srk     | consulting                 | Statistics                   | Coarse<br>BLACK (Ag) | Coarse<br>BLACK (Pb) | Coarse<br>BLACK (Zn) |
|----------------------|----------------------------|------------------------------|----------------------|----------------------|----------------------|
| Project              |                            | Sample Count                 | 4,051                | 4,051                | 4,051                |
| Data Series          | 2011-2023 Blanks           | Lab Lower<br>Detection Limit | 5.000                | 0.001                | 0.001                |
| Data Type            | Underground & Core Samples | Samples Above (3x Det. Lim.) | 1                    | 124                  | 262                  |
| Commodity            | Ag,Pb,Zn                   | Data Mean                    | 2.935                | 0.002                | 0.004                |
| Laboratory           | ALS/GC LAB                 | Percentage<br>Outside (3xDL) | 0%                   | 3%                   | 6%                   |
| Analytical<br>Method | ICP-AES, AAS               | ,                            |                      |                      |                      |

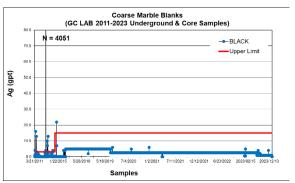
<sup>&</sup>lt;sup>1</sup> SVM - Silvercorp, ALS - ALS Guangzhou, GC - Gaocheng site laboratory

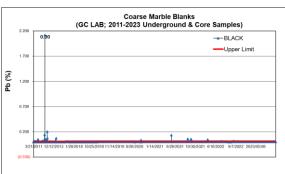
<sup>&</sup>lt;sup>2</sup> The GC Lab Lower Detection Limit of Ag changed from 5g/t to 2g/t from July 2023 due to the update of analytical equipment

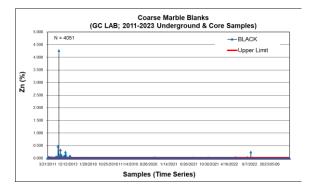
Table 11.8: Summary of GC Blanks Results (2011 - 2023)

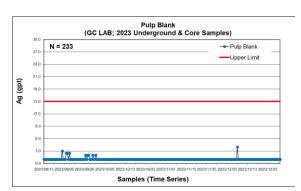
| Detection Limit      | 1-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) |                              |                    |                    |                    |
|----------------------|--|------------------------------|--------------------|--------------------|--------------------|
|                      |  | Statistics                   | Pulp Blank<br>(Ag) | Pulp Blank<br>(Pb) | Pulp Blank<br>(Zn) |
| Project              |  | Sample Count                 | 233                | 233                | 233                |
| Data Series          | 2021-2023 Blanks                         | Lab Lower<br>Detection Limit | 2-5                | 0.001              | 0.001              |
| Data Type            | Pulp Blank                               | Samples Above (3x Det. Lim.) | 0                  | 1                  | 1                  |
| Commodity            | Ag,Pb,Zn                                 | Data Mean                    | 1.062              | 0.001              | 0.001              |
| Laboratory           | GC LAB                                   | Percentage Outside (3xDL)    | 0%                 | 0.4%               | 0.4%               |
| Analytical<br>Method | ICP-AES, AAS                             | ` ,                          |                    |                    |                    |
| Detection Limit      | 2-5 gpt (Ag); 0.001%<br>(Pb),0.001% (Zn) |                              |                    |                    |                    |

Figure 11.5: Coarse Marble Blanks Performances

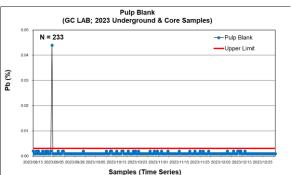


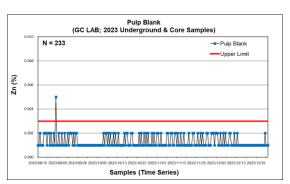












## 11.4.4 Duplicate Samples

Silvercorp's current QA/QC protocols include the insertion of field duplicates, coarse reject duplicates, and pulp duplicates. Field duplicates have been included with drilling samples since 2012 and with underground samples since 2014. Coarse duplicates and pulp duplicates have been included in drillhole sample batches since 2018, while coarse duplicates and pulp duplicates have been included in underground sample batches since 2023. The duplicates comprise the following:

- Total of 3,673 field duplicates, including 208 field duplicates assays by ALS Lab and 3,465 field duplicates assays by GC Lab,
- 2,266 coarse duplicates assays by GC Lab, and
- 2,246 pulp duplicates assays by GC Lab.

The field duplicates, coarse reject duplicates, and pulp duplicates are collected at a rate of 2.5%, 2.2%, 2.2% for drillholes samples and 1.9%, 1.4%, 1.4% for underground samples respectively.

The generally accepted criterion recommended by QP is as follows:

- Field duplicates: 80% samples should have a half absolute relative difference ("HARD") less than 30% for Ag, and less than 20% for Pb and Zn.
- Coarse duplicates: 80% samples should have a HARD less than 20% for Ag, and 85% samples less than 15% for Pb and Zn.
- Pulp duplicates: 90% samples should have a HARD less than 10% for Ag, Pb and Zn.

The Scatter and HARD plot of field duplicates, coarse duplicates and pulp duplicates are presented from Figure 11.7 to Figure 11.9.

The reduced major axis ("RMA") and ideal correlation within the Scatter plots shows an unbiased fit for the original samples and duplicates, and HARD Plots shows that about 90% of the field duplicates have a HARD value of less than 20%, while 90% coarse duplicates and pulp duplicates data pairs have a HARD value less than 10%.

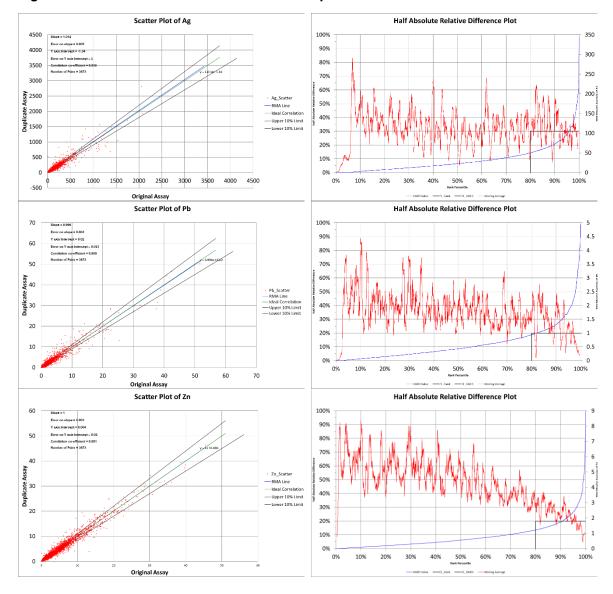


Figure 11.7: Scatter and HARD Plot of Field Duplicates

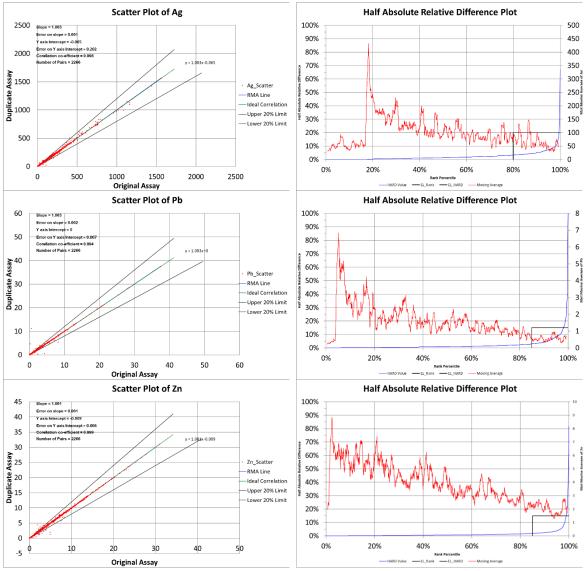


Figure 11.8: Scatter and HARD Plot of Coarse Duplicates

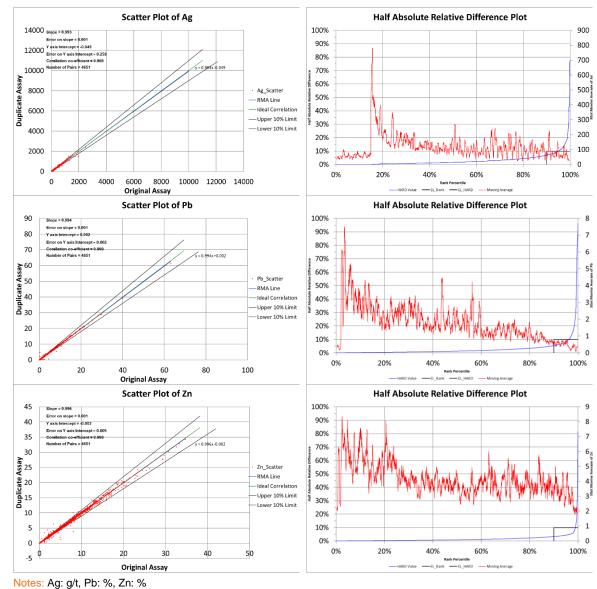


Figure 11.9: Scatter and HARD Plot of Pulp Duplicates

110100. 71g. g/t, 1 b. 70, 211. 70

### 11.4.5 Check (Umpire) Samples

Silvercorp regularly submits a portion of pulps to a third-party check (umpire) laboratory for independent analysis. Laboratories used for check analysis since 2012 have included the following:

- GC site laboratory (when not used as the primary laboratory).
- ALS Guangzhou (when not used as the primary laboratory).
- Chengde Huakan (Chengde Huakan 514 Geology and Mineral Testing and Research Institute)
   in Chengde, Hebei Province.
- The Analytical Laboratory of the Inner Mongolia Geological Exploration Bureau (Inner Mongolia) in Hohhot, Inner Mongolia.

The SGS Laboratory in Tianjin from 2023.

Table 11.9 summarizes the number of drillhole and underground samples sent to the respective check laboratories between 2011 and 2023.

Table 11.9: Gaocheng Check (Umpire) Laboratories Used 2011 - 2023

| Year  | Primary    | Umpire         | n Drillhole Check | n Underground Check |
|-------|------------|----------------|-------------------|---------------------|
| I Cai | Laboratory | Laboratory     | Assays            | Assays              |
| 2011  | ALS        | Chengde Huakan | 60                |                     |
|       |            | GC             | 2,175             |                     |
| 2012  | ALS        | Inner Mongolia | 49                | 103                 |
|       |            | Chengde Huakan | 23                |                     |
|       |            | GC -           | 2,969             |                     |
| 2013  | ALS        | Inner Mongolia | 74                | 11                  |
|       |            | Chengde Huakan | 51                |                     |
|       | ALS        | GC -           | 71                | 101                 |
| 2014  | ALS        | Inner Mongolia |                   | 1                   |
|       | GC         | Chengde Huakan | 38                |                     |
| 2015  | GC         | Chengde Huakan | 31                |                     |
| 2016  | GC         | Chengde Huakan | 33                |                     |
| 2017  | GC         | Chengde Huakan | 46                |                     |
| 2018  | GC         | ALS            | 303               | 976                 |
| 2019  | GC         | ALS            |                   | 482                 |
| 2020  | GC         | ALS            | 467               | 382                 |
| 2021  | GC         | ALS            | 650               | 213                 |
| 2022  | GC         | ALS            | 517               | 149                 |
| 2023  | GC         | SGS            | 425               | 43                  |
| Total |            |                | 6,390             | 2,056               |

#### Notes:

Table 11.10 presents the results of the major check sampling programs completed from 2011 to 2023.

Table 11.10: Results of Check Samples

| YEAR | Mean of<br>Original<br>Sample Ag<br>(g/t) | Mean of<br>Check<br>Samples Ag<br>(g/t) | Mean of<br>Original<br>Sample Pb<br>(g/t) | Mean of<br>Check<br>Samples Pb<br>(g/t) | Mean of<br>Original<br>Sample Zn<br>(g/t) | Mean of<br>Check<br>Samples Zn<br>(g/t) |
|------|---|---|---|---|---|---|
| 2011 | 9.78                                      | 8.93                                    | 0.16                                      | 0.17                                    | 0.42                                      | 0.38                                    |
| 2012 | 28.95                                     | 31.07                                   | 0.20                                      | 0.26                                    | 0.65                                      | 0.65                                    |
| 2013 | 42.46                                     | 42.18                                   | 0.36                                      | 0.36                                    | 1.15                                      | 1.13                                    |
| 2014 | 88.07                                     | 85.41                                   | 1.22                                      | 1.20                                    | 2.56                                      | 2.54                                    |
| 2015 | 68.39                                     | 64.46                                   | 1.04                                      | 0.95                                    | 2.35                                      | 2.17                                    |
| 2016 | 53.82                                     | 50.16                                   | 0.53                                      | 0.50                                    | 2.76                                      | 2.70                                    |
| 2017 | 34.22                                     | 32.71                                   | 0.65                                      | 0.62                                    | 2.56                                      | 2.60                                    |
| 2018 | 128.09                                    | 125.34                                  | 2.18                                      | 2.07                                    | 4.19                                      | 4.04                                    |
| 2019 | 147.96                                    | 148.64                                  | 1.83                                      | 1.79                                    | 4.46                                      | 4.49                                    |
| 2020 | 139.56                                    | 139.06                                  | 1.83                                      | 1.79                                    | 4.39                                      | 4.41                                    |
| 2021 | 77.16                                     | 77.63                                   | 1.23                                      | 1.28                                    | 3.14                                      | 3.15                                    |
| 2022 | 89.20                                     | 85.57                                   | 1.68                                      | 1.73                                    | 3.30                                      | 3.25                                    |

<sup>1</sup> n=number of samples

<sup>&</sup>lt;sup>2</sup> The samples before 2021 are from the 2021 AMC report, however the summary from 2021 to 2023 are reported by SRK from on the database provided by GC Mine.

| YEAR           | Mean of<br>Original<br>Sample Ag<br>(g/t) | Mean of<br>Check<br>Samples Ag<br>(g/t) | Mean of<br>Original<br>Sample Pb<br>(g/t) | Mean of<br>Check<br>Samples Pb<br>(g/t) | Mean of<br>Original<br>Sample Zn<br>(g/t) | Mean of<br>Check<br>Samples Zn<br>(g/t) |
|----------------|---|---|---|---|---|---|
| 2023           | 56.26                                     | 55.32                                   | 1.09                                      | 1.12                                    | 2.51                                      | 2.48                                    |
| Grand<br>Total | 71.66                                     | 71.37                                   | 0.98                                      | 0.98                                    | 2.30                                      | 2.27                                    |

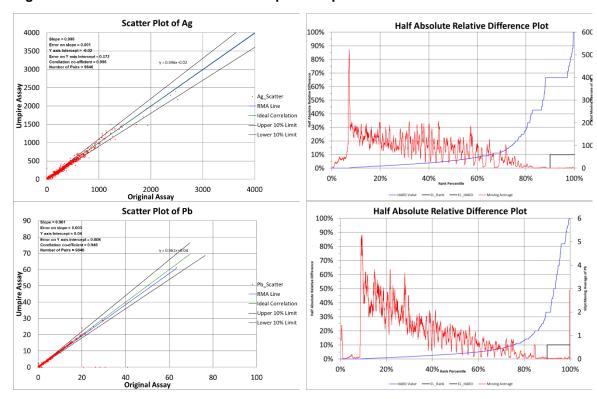
The check (umpire) samples are collected at an overall rate of 8.5% for drillholes samples and 4.4% for underground samples respectively from 2011 to 2023.

The Scatter and HARD plot of Ag, Pb and Zn for umpire samples are presented in Figure 11.10.

The RMA and ideal correlation within the Scatter plots show an unbiased fit for Ag of the original samples and umpire samples, and slight bias for Pb and Zn of the original samples and umpire samples.

The HARD plots show at about 78% and 85% of the umpire samples data pairs for Ag and Pb respectively have a HARD value of less than 20%, and about 88% of the umpire samples data pairs for Zn have a HARD value of less than 10%.

Figure 11.10: Scatter and Hard Plot of Umpire Samples from 2011 to 2023



Scatter Plot of Zn Half Absolute Relative Difference Plot 100% 90% 40 80% 35 70% Oppose Assay 15 15 60% 50% -RMA Line 3 Ideal Correlation 40% – Upper 10% Limit 15 30% Lower 10% Limit 10 10% 0% 0 0% 20% 40% Rank 60% 80% 100% 10 40 50 20 30 Original Assay

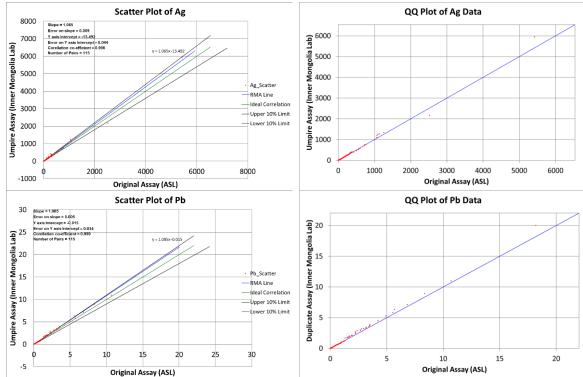
Figure 11.10: Scatter and Hard Plot of Umpire Samples from 2011 to 2023

To analyse the bias between the different Labs, The Scatter and QQ plots were applied for the primary lab and the umpire lab.

The Scatter and QQ plot of umpire samples between ALS and Inner Mongolia Lab is presented in Figure 11.11, the umpire check results returned slightly higher results than the original samples in the higher end of the assay range for Ag with slightly lower results that the original samples in the higher end of the assay range for Pb and Zn.

**Mongolia Laboratories)** Scatter Plot of Ag QQ Plot of Ag Data 8000

Figure 11.11: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples from Inner



Scatter Plot of Zn QQ Plot of Zn Data 40 <u>ब</u> 30 35 30 25 25 r Mongolia L () 15 (June 20 RMA Line Ideal Correlation **Assay** ( Assay 01 -Upper 10% Limit Lower 10% Limit Umpire A Umpir 40 0 5 15 20 Original Assay (ASL) 25 30 10 Original Assay (ASL)

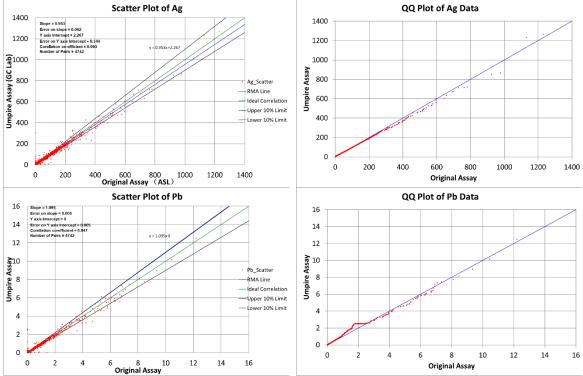
Figure 11.11: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples from Inner Mongolia Laboratories)

The Scatter and QQ plot of umpire samples between ALS and GC Lab are presented in Figure 11.12, the umpire check results returned slightly lower results than the original samples in the higher end of the assay range for Ag, an apparent positive bias for Pb grades between 1 and 4%, and no significant deviation for Zn.

Figure 11.12: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples GC Laboratories)

Scatter Plot of Ag

QQ Plot of Ag Data

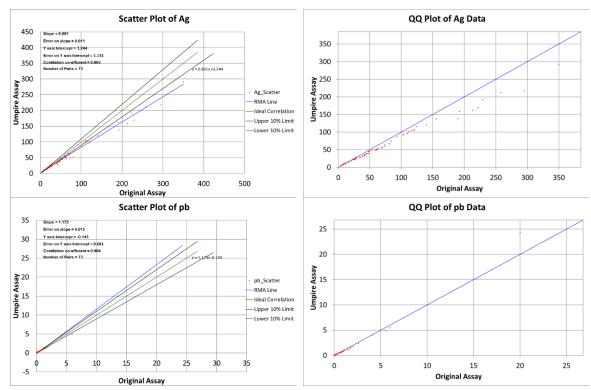


Scatter Plot of Zn QQ Plot of Zn Data 45 40 30 35 25 75 25 25 20 15 Assay 02 -RMA Line Umpire 15 Ideal Correlation — Upper 10% Limit 15 10 Lower 10% Limit 10 0 10 30 20 30 Original Assay 50 10 Original Assay

Figure 11.12: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples GC Laboratories)

The Scatter and QQ plot of umpire samples between ALS and Chengde Huakan are presented in Figure 11.13, the umpire check results returned slightly lower results than the original samples for Ag, Pb and Zn.

Figure 11.13: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples from Chengde Huakan)

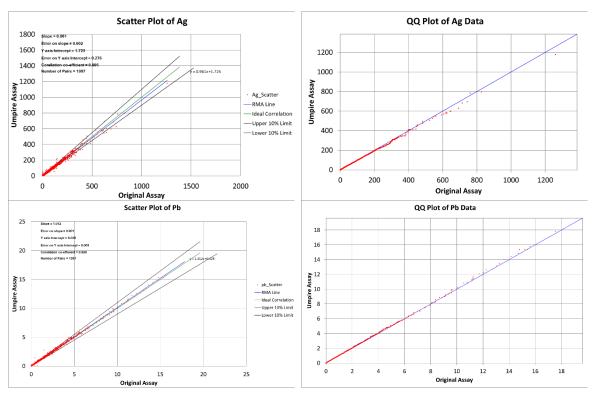


Scatter Plot of zn QQ Plot of zn Data 30 Error on slope = 0.014 Y axis Intercept = 0.024 35 25 30 opire Assay **Ombire Assay** 20 15 RMA Line -Ideal Correlation -Upper 10% Limit 10 -Lower 10% Limit 10 0 15 25 30 0 10 30 40 Original Assay

Figure 11.13: Scatter and QQ Plot (Original Samples from ALS, Umpire Samples from Chengde Huakan)

The Scatter and QQ plot of umpire samples between GC and SGS Laboratories are presented in Figure 11.14, the umpire check results returned lower results than the original samples for Ag and Zn and no significant deviation for Pb.

Figure 11.14: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from SGS Laboratories)

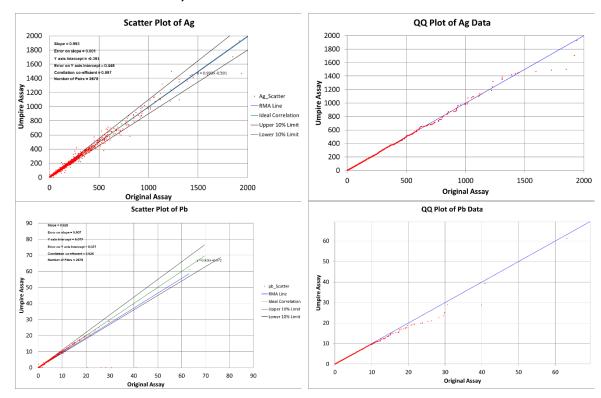


Scatter Plot of Zn QQ Plot of Zn Data 20 20 15 Umpire Assay Assay 15 RMA Line Umpire 10 Ideal Correlation -Upper 10% Limit -Lower 10% Limit 5 15 20 20 25 Original Assay Original Assay

Figure 11.14: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from SGS Laboratories)

The Scatter and QQ plot of umpire samples between GC and ALS Laboratories are presented in Figure 11.15, the umpire check results returned slightly lower results than the original samples in the higher end of the assay range for Ag, Pb and Zn.

Figure 11.15: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from ALS Laboratories)



Scatter Plot of Zn QQ Plot of Zn Data Umpire Assay 

Figure 11.15: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from ALS Laboratories)

The Scatter and QQ plot of umpire samples between GC and Chengde Huakan are presented in Figure 11.16, the umpire check results returned slightly lower results than the original samples in the higher end of the assay range for Ag and Pb, and no significant deviation for Zn.

Figure 11.16: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from Chengde Huakan)

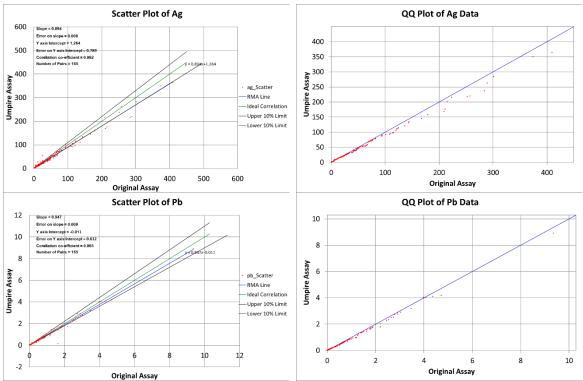
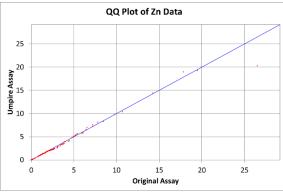


Figure 11.16: Scatter and QQ Plot (Original Samples from GC, Umpire Samples from Chengde Huakan)





## 12 Data Verification

## 12.1 Site Visit

SRK conducted the site inspections to the GC Mine from 23 to 26 April in 2024, The Principal Geologists Mark Wanless and Yanfang Zhao from SRK undertook the following verification steps:

- Site inspection of the project area.
- Meeting with GC Mine representatives.
- Discussions with geologists regarding sample collection, sample preparation, sample storage,
   QA/QC, geological interpretation, and underground mapping procedures.
- Underground visit, review of the mineralization, tunnel sampling procedure (Figure 12.1).
- Visit the drill core store and drill core intersections.
- Visit on site sample preparation lab.

SRK visited the core tray storage (Figure 12.1), drill core store/ core tray storage of GC Mine (Figure 11.3) and site laboratory (Figure 12.2), to understand the company's core storage protocols and procedures.

Tunnel Sampling

Core Catalog Room

Figure 12.1: Tunnel Sampling and Core Store Shed of GC Mine

Sources: SRK site visit

Figure 12.2: Site Laboratory of GC Mine





Sources: SRK site visit

## 12.2 Assay Validation

## 12.2.1 Pulp Duplicates Verification

The QP recommended that Silvercorp get pulps back from the laboratory and randomise the sample sequence of the pulps for a re-assay test to validate the GC Lab pulp duplicates as follows:

- Request the pulps from three batches of samples back from the laboratory;
- Record a list of original sample numbers, and then randomise the order; and
- Assign new sequence of sample numbers and submit to laboratory, with CRMS inserted in the sequence.

The results of data verification are presented in Table 12.1 and Figure 12.3. The results show acceptable repeatability at the CG laboratory.

Table 12.1: Data Verification Results of Pulp Samples

| Project | Data Pairs |      | Rela  | ative Diffe | rence |       |      |
|---------|------------|------|-------|-------------|-------|-------|------|
| Project | Count      | <10% |       | 10% - 20%   |       | > 20% |      |
| Ag      | 48         | 41   | 85.4% | 3           | 6.3%  | 4     | 8.3% |
| Pb      | 48         | 43   | 89.6% | 2           | 4.2%  | 3     | 6.3% |
| Zn      | 48         | 44   | 91.7% | -           | 0.0%  | 4     | 8.3% |

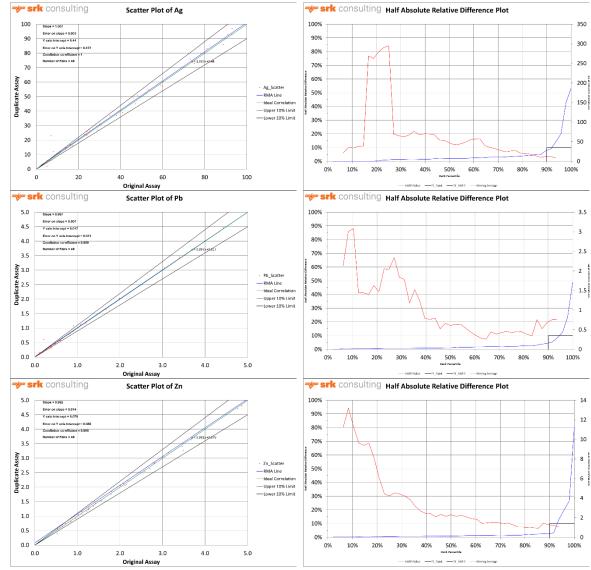


Figure 12.3: Scatter and Hard Plot of Pulp Duplicates Verification Samples

### 12.2.2 Umpire Samples

A total of 477 assays from pulp check samples from 2021 to 2023 were random selected by SRK to undertake a cross check, and included 25 blanks, 59 duplicates and 24 standards inserted. The assays were considered within mineralized wireframes comprising drillhole and underground samples. The umpire samples summary is listed in the Table 12.2.

The duplicates were collected and sent to SGS Tianjin Lab for assay using the AAS42S method in May 2024 and compared to the original assays by GC Lab.

Table 12.2: Umpire Check Samples Summary

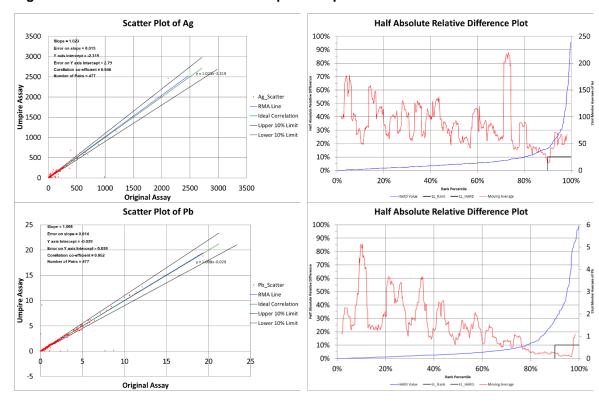
| Year               | Working Type                   | Samples |
|--------------------|--------------------------------|---------|
|                    | Tunnel/Drift/Cross-cut Samples | 35      |
| 2024               | Raise                          | 7       |
| 2021               | Drill holes                    | 120     |
|                    | Sub Total                      | 162     |
|                    | Tunnel/Drift/Cross-cut Samples | 71      |
| 2022               | Raise                          | 18      |
| 2022               | Drill holes                    | 93      |
|                    | Sub Total                      | 182     |
|                    | Tunnel/Drift/Cross-cut Samples | 50      |
| 2023               | Raise                          | 8       |
|                    | Drill holes                    | 75      |
|                    | Sub Total                      | 133     |
| <b>Grand Total</b> |                                | 477     |

The Scatter plots, HARD plots and QQ plots for Ag, Pb and Zn for umpire samples are presented from Figure 12.4 to Figure 12.5.

The HARD plots show larger differences than ideal, where 90 % of the samples have the HARD values less than 17% for Ag, 8% for Zn and 30% for Pb.

The scatter plots show a number of samples with large errors which are close to mirror images around the 1:1 line (Unity); these may be due to swapped samples.

Figure 12.4: Scatter and Hard Plot of Umpire Sample



Scatter Plot of Zn Half Absolute Relative Difference Plot 45 100% 40 90% 7 80% 35 6 70% Ombire Assay 15 5 60% 50% RMA Line Ideal Correlation 40% 3st Max -Upper 10% Limit 30% Lower 10% Limit 2 20% 10 10% 0% 0 0% 20% 60% 80% 100% 10 40 50

Figure 12.4: Scatter and Hard Plot of Umpire Sample

The Ag assays show evidence of a small bias, at lower values, (in the QQ plot) but with the GC Lab returning lower results than the Umpire lab. No bias is observed for Pb or Zn.

QQ Plot of Ag Data QQ Plot of Pb Data 2500 20 2000 15 488 1500 Umpire / 1000 5 500 0 0 500 2000 2500 15 20 1000 1500 10 Original Assay Original Assay QQ Plot of Zn Data 35 30 25 20 15 10 35 25 30 Original Assay

Figure 12.5: QQ Plot of Umpire Sample

Notes: Ag: g/t, Pb: %, Zn: %

## 12.2.3 Core Samples & Drive Samples

During the underground site visit, tunnel sampling was observed. Samples are collected by chipping with a hammer and chisel, and these are collected on a large plastic sheet on the floor. The sample is mixed on the sheet, and a portion of the chips are bagged. Only the larger blocks on the plastic sheet were included in the collected sample, and all the fines were discarded. While it is not certain,

this may result in a low bias in the chip sample results if the mineralization tends to form a larger proportion of the fines than the unmineralized units. The chip sampling observed was also biased towards collecting material from the mineralized zone compared to the harder waste units. As the unmineralized units are harder to chip, the collection of sampled material was biased towards the mineralized units, which may result in a high bias in the chip samples.

SRK's comparison between the de-clustered mean of Core Samples and the de-clustered mean of Drive samples, presented in Figure 12.6. Each point in the scatter plot represents the mean values for a vein. Only the drive samples were considered for comparison, and not the raise samples, as the raise samples are more likely to be where the grade is high enough for them to design a stope, which may result in a high bias. The drive samples may also have a bias, as they will usually target the high-grade portions of the vein, but less bias than the raise samples.

The comparison shows quite a lot of variability, but on average, the chip samples in the drives are higher grade than the drill holes. This may be due to the chip sampling introducing a bias into the drive sampling results, but this is not conclusively demonstrated. Introducing a diamond saw into the chip sampling process, to cut a channel from which material can more consistently and evenly be chipped and collecting the entire sample and not just the coarse fraction, will reduce the possibility of bias from the issues above.

Core vo Chip Samples - Po

Core vo Chip Samples

Figure 12.6: Comparison between the Core Samples and the Drive Samples

Notes: Ag: g/t, Pb: %, Zn: %

## 12.3 Data Entry Checks

Data entry checks undertaken by the author to confirm the validity of the database compiled for the Mineral Resource estimation include:

- Checking for internal consistency between the database for primary assays and QC samples with the database table of 2021 AMC report for the data before 2021
- Selection of some samples at random and comparison between the original and umpire assay entries with laboratory source files from 2021 to 2023 supplied by Silvercorp.

The resource database and the QC sample data supplied by GC Mine (Table 12.3) shows a slight deviation for the total original samples and QC samples, some larger deviations may be caused by differences in the years marked in the database and QC data missing, or adjustments and exclusions made by AMC.

Table 12.3: Historical Database Summary

|            | Drilling+Underground Sampling (Data 2024) |       |        |       |        | Drilling+Underground Sampling (2021 AMC Report) |                |         |       |        |       |            |      |                |
|------------|---|-------|--------|-------|--------|---|----------------|---------|-------|--------|-------|------------|------|----------------|
|            |   | Dupli |        |       |        | licates   |                |         |       |        | D     | Duplicates |      | Ç              |
| Year       | Samples                                   | CRMs  | Blanks | Field | Coarse | Pulp  | Umpire Samples | Samples | CRMs  | Blanks | Field | Coarse     | Pulp | Umpire Samples |
| Pre-2011 5 | 104                                       | 0     | 0      | 0     | 0      | 0   | 0              | 5,402   | 0     | 0      | 0     | 0          | 0    | 0              |
| 2011       | 34  | 68    | 82     | 0     | 0      | 0   | 76             | 1,893   | 68    | 82     | 0     | 0          | 0    | 60             |
| 2012       | 5,870                                     | 98    | 133    | 94    | 0      | 0   | 2,282          | 5,849   | 98    | 133    | 94    | 0          | 0    | 2,350          |
| 2013       | 15,748                                    | 105   | 132    | 106   | 0      | 0   | 2,553          | 9,380   | 105   | 132    | 106   | 0          | 0    | 3,105          |
| 2014       | 3,576                                     | 57    | 62     | 59    | 0      | 0   | 202            | 3,608   | 75    | 79     | 79    | 0          | 0    | 211            |
| 2015       | 6,762                                     | 76    | 81     | 75    | 0      | 0   | 31             | 5,868   | 109   | 115    | 109   | 0          | 0    | 31             |
| 2016       | 6,281                                     | 129   | 130    | 125   | 0      | 0   | 33             | 6,273   | 153   | 152    | 154   | 0          | 0    | 33             |
| 2017       | 9,329                                     | 238   | 119    | 239   | 0      | 0   | 46             | 9,333   | 234   | 237    | 239   | 0          | 0    | 46             |
| 2018       | 11,197                                    | 458   | 472    | 473   | 60     | 60  | 1,279          | 10,964  | 459   | 473    | 473   | 60         | 60   | 1,279          |
| 2019       | 12,703                                    | 287   | 300    | 281   | 163    | 163   | 302            | 12,714  | 286   | 300    | 281   | 163        | 163  | 482            |
| 2020       | 18,028                                    | 499   | 585    | 497   | 359    | 354   | 852            | 16,434  | 467   | 548    | 469   | 331        | 327  | 849            |
| Total      | 89,632                                    | 2,015 | 2,096  | 1,949 | 582    | 577   | 7,656          | 87,718  | 2,054 | 2,251  | 2,004 | 554        | 550  | 8,446          |

## 12.4 Summary

- SRK found that the procedures of core sampling, log and storage are standardized, and the analytical methods and processes are in line with good practice.
- During the underground site visit, it was observed, only the larger blocks on the plastic sheet were taken, all the fines were discarded, and the sampling was biased against the hanging wall and footwall units, with a larger proportion of the mineralization zone (Figure 11.2) chipped. Although SRK recognises that channel sampling is challenging due to the variable hardness of the rock units and uneven surface for sampling, SRK recommends that the chip sampling can be improved using a diamond saw to cut a channel for the chipping, which will also reduce the volume of sample and allow the full sample of coarse and fine material to be collected.

- The results of pulp duplicates verification are acceptable, and consistent with expectations for sufficient sample homogenisation, therefore supporting that the GC Lab assays have acceptable precision.
- For the database validation, the consistency checks for random original and umpire assay samples between the data tables and original laboratory test reports show no significant issues. The available information indicates that the database and umpire assay table has in general been carefully compiled and validated and forms an appropriately reliable basis for resource estimation.
- The resource database and the QC sample data supplied by Silvercorp shows slight deviation for the total original samples and QC samples, the historical (2011-2020) sample number difference between the resource database and the table in the 2021 AMC report is about 2%, and the sample number difference of QC data is below 9%. While not a material discrepancy, SRK recommends that the database management can be improved.
- The umpire samples from 2021 to 2023 were observed to have some swelling and caking, especially in the samples for 2021 and 2022, which may result in mass change or oxidation, which may affect the results.
- The umpire samples results show there are no major issues.

# 13 Mineral Processing and Metallurgical Testing

### 13.1 Introduction

In May 2009, Hunan Research Institute for Nonferrous Metals (Hunan) completed the mineralogical study and processing test on ore samples of GC Mine and compiled the "Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin and Sulphur for GC Lead-Zinc Mine". Although a processing laboratory is built at the mine, no systematic processing test has been carried out since then. This processing test report is the main basis for the feasibility study and engineering design of GC processing plant. The GC processing plant was completed and put into operation in 2014 and has continued in operation since that time.

In July 2020, to improve the head grade and reduce the processing costs, Beijing Honest Technology Co., Ltd. (Beijing Honest) conducted a pre-sorting test of ore and compiled the "Test Brief Report on X104 Intelligent Sorting System of Found Lead-Zinc Mine, Guangdong Province". The pre-sorting system was built in 2022 and is still at the stage of optimization.

This chapter is a summary of the above two tests, to show the ore beneficiation at the GC Mine, although the actual production records can better illustrate the historical performance.

## 13.2 Test Samples

The test samples are the basic assay samples of drilling cores of 2008. They were crushed to a grain size of less than 2mm, and predominantly from Exploration Line 24 to Exploration Line 48. The total number of test samples is 152. The samples are mixed and used as samples for mineralogical study and processing test samples.

## 13.3 Mineralogy

## 13.3.1 Chemical Components and Mineral Composition

The chemical multi-element analysis results of the test samples are shown in Table 13.1. The mineral composition analysis results are shown in Table 13.2. The elements with high content in the ore are Si, Al, Ca, S and Fe. The elements with recovery value are Ag, Au, Zn, Pb, Cu, Sn, S and Fe. The harmful element is As. These elements exist in the ore in different minerals.

Table 13.1: Chemical Multi-Element Analysis Results of the Test Samples

| Element  | Content (%) | Element          | Content (%) |
|----------|-------------|------------------|-------------|
| Cu       | 0.16        | CaF <sub>2</sub> | 7.52        |
| Pb       | 1.45        | SiO <sub>2</sub> | 44.2        |
| Zn       | 3.25        | $Al_2O_3$        | 9.01        |
| As       | 0.47        | MgO              | 0.34        |
| S        | 10.16       | CaO              | 5.82        |
| TFe      | 9.67        | Mn               | 0.92        |
| Sn       | 0.20        | Cd               | 0.019       |
| Ag (g/t) | 128.32      | Au (g/t)         | 0.20        |

Sources: Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin and Sulphur for GC Lead-Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009.

The main minerals of the ore include quartz, feldspar, chlorite, fluorite, kaolinite and mica, which are gangue minerals with no recovery value. Minerals with recovery value are sphalerite, galena, pyrite, pyrrhotite, chalcopyrite, bornite and cassiterite.

Table 13.2: Main Mineral Composition of the Test Samples

| Mineral                  | Content (%) | Mineral  | Content (%) |
|--------------------------|-------------|--|-------------|
| Sphalerite               | 4.8         | Quartz (Contain a small amount of chalcedony)              | 30          |
| Galena                   | 1.6         | Feldspar   | 8           |
| Pyrite                   | 13          | Chlorite   | 12          |
| Pyrrhotite               | 2.2         | Kaolinite  | 5.5         |
| Arsenopyrite             | 1           | Sericite and Muscovite                                     | 6           |
| Magnetite and Hematite   | 2           | Hornblende   | 2           |
| Chalcopyrite and Bornite | 0.5         | Silicate minerals such as tremolite, actinolite and garnet | 1           |
| Cassiterite              | 0.2         | Calcite and Rhodochrosite                                  | 2.2         |
| Fluorite                 | 7.5         | Others   | 0.5         |

Sources: Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin and Sulphur for GC Lead-Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009.

#### 13.3.2 Occurrence State

### Silver

Silver is the main valuable element in the ore, and its phase analysis results are shown in Table 13.3. Silver is relatively scattered, mainly in the form of silver sulphide such as argentite and acanthite, accounting for about 40.59%. Secondly, it occurs in pyrite, galena, sphalerite and other sulfides as submicroscopic natural silver particles or isomorphism state atomic state, accounting for about 32.65%. The silver that exists in the form of independent native silver minerals is also relatively high, accounting for approximately 23.39%. Additionally, approximately 2.19% of silver is hosted in gangue minerals, and about 1.18% of silver is hosted in cerargyrite.

Under the microscope, minerals such as native silver, argentite and acanthite are rare, and the embedding particle size is small, mostly below 0.04 mm. They are mainly embedded with galena and pyrite, mostly wrapped by galena, pyrite or embedded in galena, pyrite grains. Occasionally, native silver is embedded in quartz fissures or wrapped by quartz. Analysis results of monominerals show that independent silver minerals account for about 13% of the total silver. Silver in galena accounts for about 40% of the total silver, and silver in sphalerite accounts for about 14% of the total silver. Silver in other sulfides accounts for about 30% of the total silver, and silver in gangue minerals accounts for 3% of the total silver. Silver minerals are most closely related to galena, and silver has the widest distribution in galena, suggesting that most of the silver can be enriched in lead concentrate.

Table 13.3: Phase Analysis Results of Silver

| Silver Phase          | Content<br>(g/t) | Distribution (%) | Remarks   |
|-----------------------|------------------|------------------|---|
| Native Silver         | 30.24            | 23.39            | Dissociated or exposed metallic silver  |
| Silver Sulphide       | 52.47            | 40.59            | Dissociated or exposed silver sulfide minerals such as argentite and acanthite  |
| Silver in Sulfides    | 42.21            | 32.65            | Including atomic silver in pyrite, pyrrhotite, galena, sphalerite, arsenopyrite, chalcopyrite, tetrahedrite and other sulfides, as well as native silver and silver sulfide enclosed in sulfides and not exposed. |
| Silver in Cerargyrite | 1.53             | 1.18             | The content of cerargyrite in the ore is minimal.   |
| Silver in Other       | 2.83             | 2.19             | Enveloped by gangue minerals, unexposed native silver, silver sulfide, silver in sulfides, etc.   |
| Total                 | 129.28           | 100.00           |   |

Sources: Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin and Sulphur for GC Lead-Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009.

#### Tin

The phase analysis results for tin are presented in Table 13.4, with the disseminated grain size of cassiterite illustrated in Figure 13.1. Tin in the ore mainly occurs as the oxide mineral cassiterite, comprising 74.55% of the total tin content. This is followed by tin sulfide, which constitutes 13.64%. Tin in silicates and colloidal tin account for 6.36% and 5.45% respectively.

- Cassiterite: Primarily occurs as irregularly dispersed granules within the ore. It is commonly situated between particles of quartz, sericite, chlorite, and hornblende. It is also frequently observed among particles of galena and pyrite, while its association with sphalerite is comparatively less pronounced. The embedding grain size of cassiterite is fine, typically less than 0.05mm, with a substantial proportion below 0.03mm. Stannite, is mainly located between particles of sphalerite, galena, pyrite, and chalcopyrite, among other sulfides. It is embedded as irregularly shaped granules with a grain size that is slightly coarser than that of cassiterite, mainly under 0.05mm
- Tin sulfide: Mainly occurs as stannite.
- Colloidal tin: Mainly occurs as varlamoffite, which is a fine-grained colloidal aggregate resembling earthy or ochreous textures. It is typically a mixture of fine-crystalline or cryptocrystalline tin dioxide hydrate with cryptocrystalline tin-bearing hydrous limonite and alumina, frequently adsorbed by other minerals such as limonite and clay minerals. Varlamoffite generally has such a fine particle size that its morphology is challenging to discern under a microscope.
- Tin in silicates: This form of tin mainly manifests as ultrafine particles of cassiterite encapsulated within silicate minerals or quartz. Subsequently, it may occur as tin silicate or in an ionic state within the silicates.

Table 13.4: Phase Analysis of Tin

| Chemical Phase of Tin | Content (%) | Distribution (%) | Remarks            |
|-----------------------|-------------|------------------|--------------------|
| Tin in Cassiterite    | 0.164       | 74.55            | The main tin phase |
| Tin in Tin Sulfide    | 0.030       | 13.64            | Stannite           |

| Chemical Phase of Tin | Content (%) | Distribution (%) | Remarks  |
|-----------------------|-------------|------------------|--|
| Tin in Silicate       | 0.014       | 6.36             | Tin silicate and cassiterite in very fine particles encased in silicate minerals or quartz |
| Tin in Colloidal Tin  | 0.012       | 5.45             | Varlamoffite etc.  |
| Total Tin             | 0.22        | 100.00           |  |

Sources: Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin, and Sulphur for GC Lead-Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009

#### Lead

Lead mainly occurs in the form of the sulfide mineral galena, comprising 92.59% of the total, followed by carbonate mineral white lead, accounting for about 4.44%. Anglesite and plumbojarosite accounted for 1.48% each.

Some coarse galena particles exhibit hypidiomorphic granular texture, though they generally appear as allotriomorphic granular texture. These are commonly found in contact with sphalerite and pyrite, filling the spaces between pyrite grains, often accompanied by sphalerite and chalcopyrite, and exhibit minor metasomatism of the pyrite. The disseminated grain size of galena is depicted in Figure 13.1.

#### Zinc

Zinc mainly occurs as the sulfide mineral sphalerite, comprising approximately 94.17% of the total zinc content. This is followed by carbonate minerals such as smithsonite, which constitute about 2.32%. Zinc silicate accounted for approximately 2.24%, while franklinite and other zinc-bearing minerals account for around 1.27%.

Sphalerite mostly appears as allotriomorphic granular texture, with some occurring as hypidiomorphic granular texture. It is commonly found in contact with and intergrown with galena and pyrite, filling the spaces between pyrite grains along with galena and chalcopyrite, and exhibits minor metasomatism of pyrite. Some sphalerite is fine grained and coated with pyrite, meanwhile the chalcopyrite of emulsion texture also can be observed at some sphalerite internally. The disseminated grain size of sphalerite is shown in Figure 13.1.

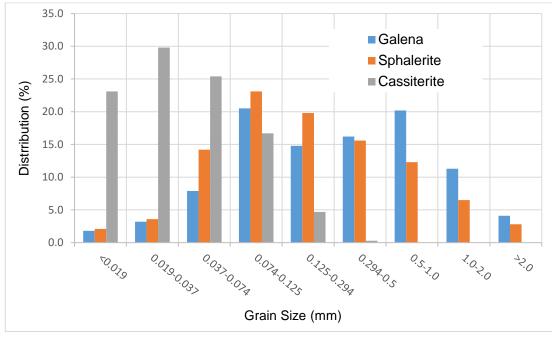


Figure 13.1: Disseminated Grain Size of Galena, Sphalerite and Cassiterite

Source: SRK, based on the data from Preliminary Design

Galena and sphalerite are primarily disseminated as medium to fine grains, mainly between 0.037 and 2 mm, with the grain size of galena being marginally larger than that of sphalerite. Cassiterite is disseminated as micro-fine grains, posing a challenge to its dissociation and recovery during the grinding process.

#### Other Elements

Copper ores in the GC deposit are primarily chalcopyrite, with a minor presence of bornite and occasional occurrences of tetrahedrite. The distribution of these ores is uneven, and the overall content is low. Exploring the feasibility of processing and concentrating copper into copper concentrate represents a significant area of research.

Arsenic minerals are mainly represented by arsenopyrite, which is considered a deleterious mineral within the ore. The arsenic content is subject to strict limitations across all concentrates.

Fluorine is mainly found in the form of fluorite, with minor occurrences within silicate minerals such as tourmaline and hornblende. In the GC deposit, fluorite is unevenly distributed and has a relatively low average content, rendering it without economic recovery value, and it is typically regarded as a gangue mineral.

Cadmium is typically presented in sphalerite through isomorphism or as inclusions of greenockite. In the zinc concentrate, cadmium is co-enriched with zinc, which is a valuable element in the concentrate.

Iron is primarily found in iron sulfide minerals such as pyrite and pyrrhotite, and to a lesser extent in magnetite and hematite, as well as in silicate minerals. These iron sulfide minerals are also the main source of sulphur, which is concentrated into sulphur concentrate during the mineral processing.

Sulphur is primarily presented in pyrite, and secondarily in minerals such as sphalerite, pyrrhotite, galena, and arsenopyrite. In the mineral processing, aside from the lead and zinc concentrates, sulphur is concentrated as pyrite and pyrrhotite into pyrite concentrate, thereby forming sulphur concentrate.

### 13.4 Processing Test

#### 13.4.1 Lead-Zinc-Sulphur Sequential Flotation Test

For ore samples less than 2mm in size, a sequential preferential flotation process for lead, zinc, and sulphur was employed. A series of condition tests were conducted, including those for grinding fineness, lead flotation reagent scheme, zinc flotation reagent scheme, and sulphur flotation reagent scheme. Based on these tests, the optimal conditions were selected for both open-circuit and closed-circuit process tests. The closed-circuit test process is depicted in Figure 13.2, with the results detailed in Table 13.5. The optimal grinding fineness was 80% passing 200 mesh (P<sub>80</sub>=75µm).

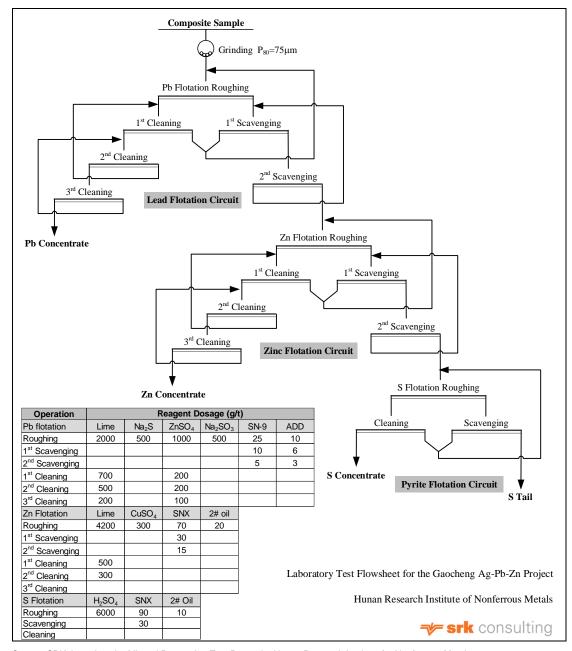


Figure 13.2: Lead-Zinc-Sulphur Flotation Closed-Circuit Test Flowsheet

 $Source: SRK, based on the \ Mineral \ Processing \ Test \ Report \ by \ Hunan \ Research \ Institute \ for \ Nonferrous \ Metals.$ 

Table 13.5: Results of the Lead-Zinc-Sulphur Flotation Closed-Circuit Process Test

| Product Mass Pull (%) |        | Grade  |        |       |          | Metal Recovery (%) |        |       |        |
|-----------------------|--------|--------|--------|-------|----------|--------------------|--------|-------|--------|
|                       |        | Pb (%) | Zn (%) | S (%) | Ag (g/t) | Pb                 | Zn     | S     | Ag     |
| Pb Conc.              | 2.65   | 45.92  | 9.72   |       | 2,903.75 | 84.25              | 7.92   |       | 63.16  |
| Zn Conc.              | 5.86   | 0.97   | 48.70  |       | 264.52   | 3.94               | 87.77  |       | 12.72  |
| S Conc.               | 15.01  | 0.79   | 0.46   | 41.85 | 170.32   | 8.21               | 2.12   | 61.83 | 20.98  |
| S Tail                | 76.48  | 0.068  | 0.093  |       | 5.00     | 3.60               | 2.19   |       | 3.14   |
| Feed                  | 100.00 | 1.44   | 3.25   | 10.16 | 121.84   | 100.00             | 100.00 |       | 100.00 |

Source: Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin, and Sulphur for GC Lead Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009

### 13.4.2 Copper-Lead Separation Exploratory Test

The lead concentrate obtained from the aforementioned closed-circuit test contained 3% copper. A copper-lead separation test was conducted using an open-circuit process with 'one roughing and one cleaning' to depress lead and float copper, producing quality-standard copper concentrate with an improved lead concentrate grade. The copper concentrate achieved a grade of 18.46% with a recovery rate of 67.56%; the lead concentrate grade was enhanced from 46.05% to 57.16%, with a recovery rate of 88.88%. The results indicate the feasibility of producing high-quality copper concentrate.

#### 13.4.3 Tin Recovery Test

Exploratory tests were conducted on the sulphur tailings from the aforementioned closed-circuit test to recover tin, utilizing various processes and equipment for gravity separation. The results are as follows:

- Flotation tests with different reagent schemes yielded a maximum concentrate grade of 0.36% and a tin recovery rate of 12.68%, which were unsatisfactory.
- Unclassified shaking tables separation produced tin concentrate at a grade of 27.72% with a tin recovery rate of 32.64%.
- Classified shaking tables separation, where tailings were classified by fineness into two categories: greater than 200 mesh (75µm) and less than 200 mesh, resulted in a tin concentrate grade of 28.34% and a tin recovery rate of 34.07%.
- The rough concentrate obtained from pre-concentration with spiral chutes was further processed with classified shaking tables for cleaning operation, resulting in a tin concentrate grade of 41.28% and a tin recovery rate of 31.57%.
- The rough concentrate, pre-concentrated by centrifugal concentrators, was then cleaned with unclassified shaking tables, resulting in a tin concentrate grade of 35.82% and a tin recovery rate of 21.49%.

The results of the tin recovery test indicate that the gravity separation is feasible, particularly the combination of spiral chutes and shaking tables, which can achieve higher concentrate grades and recovery rates.

The tin concentrate resulting from the gravity separation process contained sulphur in excess of 7%. Flotation for desulfurization was employed, and the tests showed that it was possible to reduce the sulphur content in the final tin concentrate to around 0.5%, while increasing the tin grade to over 50% and achieving an operational recovery rate of more than 84%. Particularly, the desulfurization flotation of the concentrate from the spiral chutes and shaking tables yielded a tin concentrate grade of 56.7% and a recovery rate of 93.8%.

# 13.5 Ore Pre-Sorting Test

Beijing Honest completed the ore pre-sorting test in July 2020. ROM with particle size of 10~60mm is selected. X104 intelligent sorting system is used to scan the ROM to obtain its image. Through intelligent identification algorithm, different tailings discarding rates from low to high are set for pre-discarding of tailings. The test results are shown in Table 13.6.

The test results show that when the discarding rate of tailings is 41.84%, the grade of lead and zinc in the concentrate is 6.734%, and the grade of lead and zinc in tailings is 0.333%, which meets the requirements of tailings. The recovery rate of lead and zinc is more than 96%. The grade of silver in the concentrate is 114.12 g/t, and the grade of silver in the tailings is only 13.01 g/t. It shows that the pre-sorting results of X104 intelligent sorting system is satisfactory.

Table 13.6: Intelligent Pre-Sorting Test Results

| Stone Draduct |             | Mainlet (lan) | Viold (0/) | Grade    |        |        | Recovery Rate (%) |       |       |
|---------------|-------------|---------------|------------|----------|--------|--------|-------------------|-------|-------|
| Steps         | Product     | Weight (kg)   | Yield (%)  | Ag (g/t) | Pb (%) | Zn (%) | Ag                | Pb    | Zn    |
| Stop 1        | Concentrate | 449.6         | 81.43      | 85.53    | 1.69   | 3.25   | 96.98             | 99.26 | 99.17 |
| Step 1        | Tailings    | 102.5         | 18.57      | 11.67    | 0.06   | 0.12   | 3.02              | 0.74  | 0.83  |
| Stop 2        | Concentrate | 363.6         | 65.86      | 102.77   | 2.07   | 3.96   | 94.24             | 98.39 | 97.71 |
| Step 2        | Tailings    | 188.5         | 34.14      | 12.12    | 0.07   | 0.18   | 5.76              | 1.61  | 2.29  |
| Ctop 2        | Concentrate | 321.1         | 58.16      | 114.12   | 2.32   | 4.41   | 92.42             | 97.50 | 96.09 |
| Step 3        | Tailings    | 231.0         | 41.84      | 13.01    | 0.08   | 0.25   | 7.58              | 2.50  | 3.91  |
| Stop 4        | Concentrate | 288.0         | 52.16      | 123.97   | 2.56   | 4.74   | 90.05             | 96.33 | 92.61 |
| Step 4        | Tailings    | 264.1         | 47.84      | 14.95    | 0.11   | 0.41   | 9.95              | 3.67  | 7.39  |

## 13.6 Conclusions of Testing

- The GC deposit has silver-lead-zinc polymetallic ore, and also contains a small amount of copper and tin for comprehensive recovery. Lead concentrate, zinc concentrate, and sulphur concentrate are produced sequentially by preferential flotation process. Silver and copper are mainly enriched in lead concentrate, and the test results are good. Lead preferential flotation -- zinc-sulphur mixed flotation and then zinc-sulphur separation flotation process is now adopted in the GC processing plant. It is proved to be feasible, and satisfactory recovery rates are achieved.
- It is feasible to separate copper concentrate from lead concentrate, not only to obtain copper concentrate, but also to improve the grade of lead concentrate. At present, there is no in-depth technical study on copper recovery in the GC processing plant. SRK recommends that copper-lead separation flotation test be carried out on the lead concentrate produced in the GC processing plant, including lead concentrate regrinding and flotation test. It can reduce zinc content in the lead concentrate and improve the grade of lead concentrate while obtaining copper concentrate.
- The results of experimental tin recovery from sulphur flotation tailings show that tin concentrate can be produced by gravity separation. Tin is recovered by classified gravity separation process, and qualified tin concentrate is produced, which is feasible.
- The X-ray intelligent sorting machine is the preferred equipment for ore pre-sorting. It has been developed rapidly in recent years. Tests have shown that it is feasible to conduct pre-sorting to the ore crushed to a suitable particle size. Some partings and waste rocks can be discarded in advance. It is beneficial for processing of low-grade ore. XRT intelligent sorting system was installed in the GC processing plant in March 2023, replacing the previous hand-sorting.
- There are many ore bodies in GC Mine, and the ore properties of different ore bodies vary slightly. The processing parameters and reagents should be adjusted to adapt to the changes in ore properties. SRK recommends that ore processing tests be carried out on ore from some representative ore bodies in order to guide the production of the plant.

### 14 Mineral Resource Estimates

#### 14.1 Introduction

The Mineral Resource estimation work was completed by Mr Yongwei Li, Resource Geologist of Silvercorp under the supervision of Guoliang Ma, who is the QP of Silvercorp. Mr Mark Wanless (Pr.Sci.Nat, FGSSA), and Ms Yanfang Zhao (MAusIMM), who are Principal Geologists from SRK have reviewed the database, estimation methodologies and models used to prepare the Mineral Resource estimate using Isatis.Neo. After some adjustment to the compositing, capping and search parameters, Mr Mark Wanless and Ms Yanfang Zhao were satisfied that they comply with reasonable industry practice.

The Qualified Person responsible for the Mineral Resources is Mr Mark Wanless, who is a full time employee of SRK Consulting (South Africa) Ltd. (SRK ZA) and Registered with the South African Council for Natural Scientific Professionals as Pr.Sci.Nat, 400178/05, Fellow of the Geological Society of South Africa, Member of the Geostatistical Association of South Africa. Mr Mark Wanless visited the project between the 23 and 26 of April 2024.

The estimates are based on drilling samples and underground samples information available up to 2024. With respect to drilling and underground sample information available for the March 2024 Mineral Resource estimates, SRK believes the current drilling and channel sampling information is sufficiently reliable to interpret with confidence the boundaries for GC deposits and that the assay data are sufficiently reliable to support Mineral Resource estimation.

The Mineral Resources have been estimated in accordance with generally accepted CIM Definition Standards and are reported in accordance with the Stock Exchange listing requirements. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted into Mineral Reserves. Micromine™ software was used for data compilation, domain wire-framing and grade estimation.

This section describes the Mineral Resource estimation methodology and summarizes the key assumptions. The report author is not aware of any specific environmental liabilities on the property. GC Mine has all required permits to conduct the proposed work on the property. The report author is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform on-going work programs on the property.

#### 14.2 Estimation Procedures

The Mineral Resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Geological interpretation for estimation domain;
- Data preparation (compositing and capping) for statistical analysis;
- Construction of the block model and grade interpolation;
- Mining depletion;
- Mineral Resource classification;

- Model validation;
- Assessment of "reasonable prospects for eventual economic extraction" ("RPEEE") and selection
  of appropriate cut-off grades (COG); and
- Preparation of the Mineral Resource statement.

#### 14.3 Database

The data used in the estimate consists of surface and underground diamond drillholes and channel samples. The underground channel samples are from tunnels, raises, and cross-cuts.

The data SRK received from GC Mine include a database (GC.mdb and Density Measurement in excel format), Wireframes (Ag-Pb-Zn veins, mined out area and write-off areas to be excluded from the Mineral Resource), composites in .dat format, QA/QC data, original GC Lab report from 2021 to 2023, original umpire checks report from ALS and SGS Laboratories from 2021 to 2023, block models for each veins in DM format, Topo file, etc.

As of March 2024 there were 3,582 drillholes (101,043 samples/ 482,605 m) and 56,090 underground samples in the database. Detailed information is as shown in

Table 14.1, and the drillhole and underground sample locations are shown in Figure 14.1.

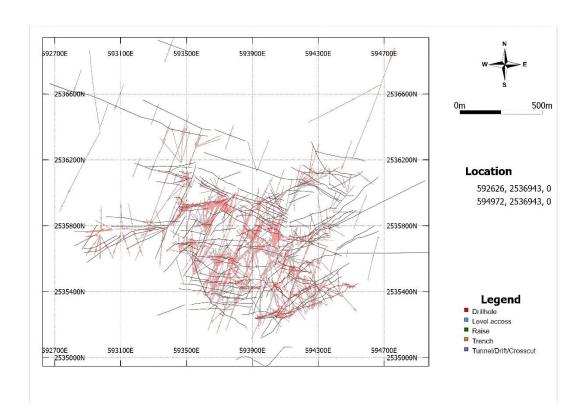


Figure 14.1: Drillholes and Underground Sampling Location

Table 14.1: Summary of Resource Database

| Туре                           | Drillhole/Channel Number | Length (m) | Samples |
|--------------------------------|--------------------------|------------|---------|
| Tunnel/Drift/Cross-cut samples | 17,382                   | 35,484     | 47,845  |
| Level access samples           | 111                      | 343        | 425     |
| Trench samples                 | 31                       | 656        | 223     |
| Raise samples                  | 3,832                    | 4,455      | 7,601   |
| Drill holes                    | 3,582                    | 482,605    | 101,043 |
| Sub-total                      | 24,938                   | 523,543    | 157,137 |

# 14.4 Domain Modelling

The wireframe models for 256 mineralized veins have been modelled and supplied by GC Mine to SRK, and were reviwed by SRK in the Beijing office and on the GC Mine site to ensure they were representative of the insitu mineralization as of March 2024.

The mineralized veins were modelled in Micromine software mainly based on the vein structure and lithology using a broad 80g/t AgEq cut-off for the resource domain boundary. A cross section of the mineralized veins is shown in Figure 14.2.

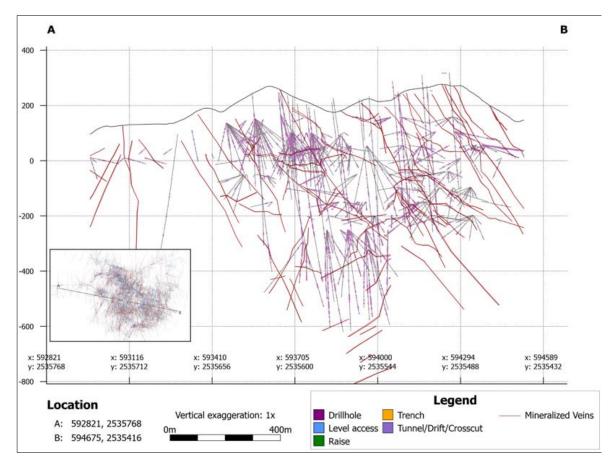


Figure 14.2: Mineralized Veins Section

The GC deposit comprises 256 veins, including numerous small veins. The 10 biggest veins, on the basis of classified tonnes, are V10, V2E, V2N, V19A, V33, NV10, V4, V9\_5B, V1A and V16 in sequence. The location of these is illustrated in Figure 14.3 as the red traces.

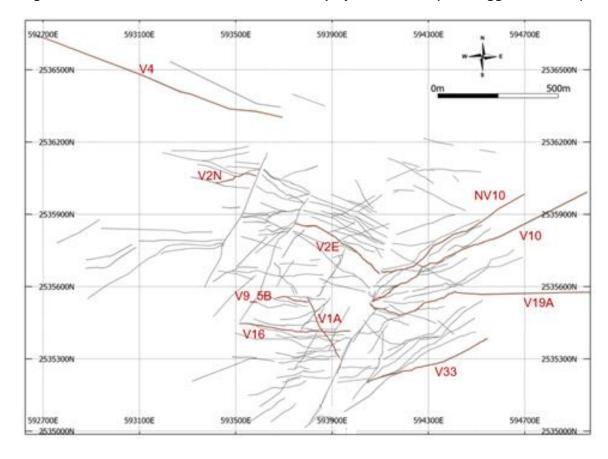


Figure 14.3: Plan View of Mineralized Veins Display at Level 0 m (Red: Biggest 10 Veins)

# 14.5 Specific Gravity

As there are no new density measurements from 2021 to 2023, the same density formula was assigned to the block model as per AMC's previous calculations:

- Within mineralization wireframes of GC deposit based on the multiple linear regression model using lead, zinc, and silver grades
- DENSITY =  $3.094919 + (0.040827 \times Pb) + (0.034253 \times Zn) + (0.000482 \times Ag)$
- 2.60 is assigned to barren rock.

# 14.6 Compositing

Assays were averaged into full-width composites across the individual veins. A 0.4m composite lengths and full width composites were tested and compared. The shrinkage stoping and resue stoping methods are employed on GC Mine, are non-selective across the width of the veins. Therefore, estimating variable grades across the thickness of the veins is not required for the mine planning, and a full width compositing strategy allows for the estimates to be length weighted, which is more appropriate for this style of mineralization. A full-width composite was deemed appropriate given the narrow geometry of the veins and lack of selectivity. The distribution of sample lengths is shown in Figure 14.4.

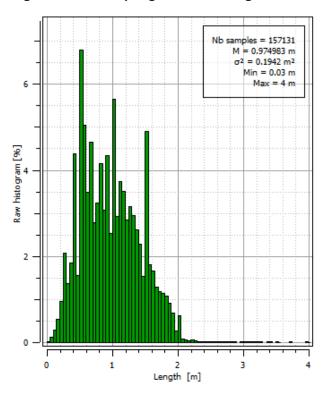


Figure 14.4: Sampling Interval Histogram

Figure 14.5 shows the comparison between raw samples and the fullwidth composites.

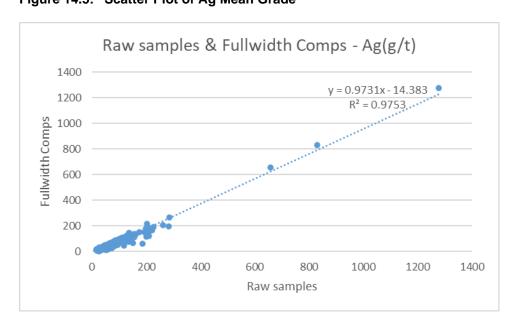


Figure 14.5: Scatter Plot of Ag Mean Grade

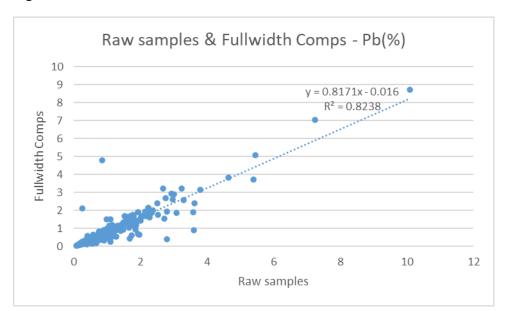
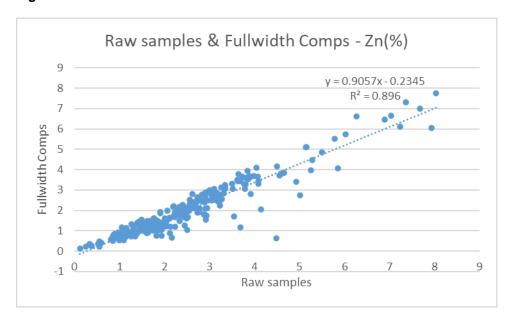


Figure 14.6: Scatter Plot of Pb Mean Grade

Figure 14.7: Scatter Plot of Zn Mean Grade



The full width composites statistics for the largest 10 veins are presented in Table 14.2.

Table 14.2: Composites (Declustered Length Weighted) Statistics of the Selected 10 Veins

| Vein | Field Name | No of Points | Maximum  | Mean  | Std Dev | Coeff. of Variation |
|------|------------|--------------|----------|-------|---------|---------------------|
|      | Ag (g/t)   | 1,118        | 933.47   | 55.52 | 79.91   | 1.44                |
| V10  | Pb (%)     | 1,118        | 28.04    | 1.49  | 2.36    | 1.58                |
|      | Zn (%)     | 1,118        | 20.10    | 2.76  | 2.41    | 0.87                |
| V2E  | Ag (g/t)   | 1,236        | 2,015.00 | 88.05 | 116.07  | 1.32                |

| Vein  | Field Name | No of Points | Maximum  | Mean   | Std Dev | Coeff. of Variation |
|-------|------------|--------------|----------|--------|---------|---------------------|
|       | Pb (%)     | 1,236        | 18.00    | 1.31   | 1.86    | 1.41                |
|       | Zn (%)     | 1,236        | 20.20    | 2.74   | 2.44    | 0.89                |
|       | Ag (g/t)   | 98           | 1,296.00 | 143.81 | 203.38  | 1.41                |
| V2N   | Pb (%)     | 98           | 17.01    | 0.95   | 2.14    | 2.25                |
|       | Zn (%)     | 98           | 31.40    | 6.58   | 6.67    | 1.01                |
|       | Ag (g/t)   | 933          | 1,308.00 | 71.08  | 97.72   | 1.37                |
| V19A  | Pb (%)     | 933          | 49.73    | 1.50   | 2.98    | 1.98                |
|       | Zn (%)     | 933          | 32.05    | 3.67   | 4.12    | 1.12                |
|       | Ag (g/t)   | 805          | 2,223.63 | 125.40 | 216.36  | 1.73                |
| V33   | Pb (%)     | 805          | 19.72    | 1.43   | 2.58    | 1.81                |
|       | Zn (%)     | 805          | 25.71    | 2.39   | 3.48    | 1.45                |
|       | Ag (g/t)   | 541          | 902.00   | 53.58  | 80.66   | 1.51                |
| NV10  | Pb (%)     | 541          | 21.92    | 1.22   | 2.30    | 1.88                |
|       | Zn (%)     | 541          | 27.58    | 2.73   | 2.99    | 1.09                |
|       | Ag (g/t)   | 28           | 416.43   | 70.42  | 108.68  | 1.54                |
| V4    | Pb (%)     | 28           | 5.50     | 0.61   | 1.07    | 1.77                |
|       | Zn (%)     | 28           | 5.99     | 0.81   | 1.40    | 1.74                |
|       | Ag (g/t)   | 442          | 359.00   | 68.85  | 58.58   | 0.85                |
| V9_5B | Pb (%)     | 442          | 23.12    | 2.16   | 2.91    | 1.35                |
|       | Zn (%)     | 442          | 15.57    | 3.24   | 2.25    | 0.69                |
|       | Ag (g/t)   | 302          | 656.00   | 58.38  | 86.86   | 1.49                |
| V1A   | Pb (%)     | 302          | 19.41    | 1.95   | 3.03    | 1.55                |
|       | Zn (%)     | 302          | 17.48    | 2.43   | 2.78    | 1.14                |
|       | Ag (g/t)   | 888          | 2,382.00 | 131.73 | 235.33  | 1.79                |
| V16   | Pb (%)     | 888          | 14.62    | 0.87   | 1.58    | 1.82                |
|       | Zn (%)     | 888          | 27.43    | 2.53   | 3.24    | 1.28                |

#### 14.7 Evaluation of Outliers

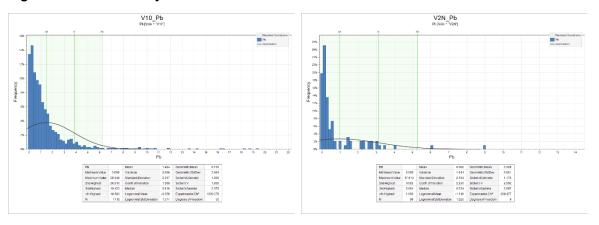
Assay capping for Ag, Pb and Zn was applied after compositing for the mineralized domains. The Probability plots and Capping Values for the largest 10 veins are presented in Figure 14.8 and Table 14.3. Capping values were selected for each vein and variable based on the visual assessment of the distribution and the outliers. No standardised value (such as at a specific percentile) was applied, but each was assessed individually to assess the most appropriate capping value. These were generally above but close to the two standard deviation value, where capping was deemed necessary.

Table 14.3: Statistics of Capping Data for the Selected 10 Veins

| Veins       | Itomo             | Sample No. Cannod | Canning Value         | Mean Grade    |       |  |
|-------------|-------------------|-------------------|-----------------------|---------------|-------|--|
| Veins Items | Sample No. Capped | Capping Value     | <b>Before Capping</b> | After Capping |       |  |
|             | Ag (g/t)          |                   | No Cap                | 55.52         | 55.52 |  |
| V10         | Pb (%)            | 18                | 9.5                   | 1.49          | 1.41  |  |
|             | Zn (%)            |                   | No Cap                | 2.76          | 2.76  |  |

|          |          | 0                 | Commission No. Commission Volume |                | Mean Grade    |  |  |
|----------|----------|-------------------|----------------------------------|----------------|---------------|--|--|
| <u> </u> |          | Sample No. Capped | Capping Value                    | Before Capping | After Capping |  |  |
|          | Ag (g/t) |                   | No Cap                           | 88.05          | 88.05         |  |  |
| V2E      | Pb (%)   |                   | No Cap                           | 1.31           | 1.31          |  |  |
|          | Zn (%)   |                   | No Cap                           | 2.74           | 2.74          |  |  |
|          | Ag (g/t) |                   | No Cap                           | 78.73          | 78.73         |  |  |
| V2N      | Pb (%)   |                   | 8.5                              | 2.09           | 2.09          |  |  |
|          | Zn (%)   |                   | No Cap                           | 3.59           | 3.59          |  |  |
|          | Ag (g/t) |                   | No Cap                           | 71.08          | 71.08         |  |  |
| V19A     | Pb (%)   | 7                 | 15                               | 1.50           | 1.43          |  |  |
|          | Zn (%)   |                   | No Cap                           | 3.67           | 3.67          |  |  |
|          | Ag (g/t) | 10                | 950                              | 100.98         | 97.61         |  |  |
| V33      | Pb (%)   | 8                 | 13                               | 0.98           | 0.97          |  |  |
|          | Zn (%)   |                   | No Cap                           | 1.84           | 1.84          |  |  |
|          | Ag (g/t) | 5                 | 330                              | 53.58          | 50.94         |  |  |
| NV10     | Pb (%)   | 9                 | 9                                | 1.22           | 1.12          |  |  |
|          | Zn (%)   |                   | No Cap                           | 2.73           | 2.73          |  |  |
|          | Ag (g/t) |                   | No Cap                           | 94.10          | 94.10         |  |  |
| V4       | Pb (%)   | 1                 | 5                                | 0.52           | 0.51          |  |  |
|          | Zn (%)   | 1                 | 5.8                              | 0.56           | 0.55          |  |  |
|          | Ag (g/t) |                   | No Cap                           | 67.19          | 67.19         |  |  |
| V9_5B    | Pb (%)   |                   | No Cap                           | 1.83           | 1.83          |  |  |
|          | Zn (%)   |                   | No Cap                           | 3.12           | 3.12          |  |  |
|          | Ag (g/t) |                   | No Cap                           | 55.24          | 55.24         |  |  |
| V1A      | Pb (%)   | 1                 | 17                               | 1.18           | 1.18          |  |  |
|          | Zn (%)   |                   | No Cap                           | 1.53           | 1.53          |  |  |
|          | Ag (g/t) | 14                | 1000                             | 131.73         | 124.44        |  |  |
| V16      | Pb (%)   | 9                 | 7.5                              | 0.87           | 0.82          |  |  |
|          | Zn (%)   |                   | No Cap                           | 2.53           | 2.53          |  |  |

Figure 14.8: Probability Plots for the Selected 10 Veins



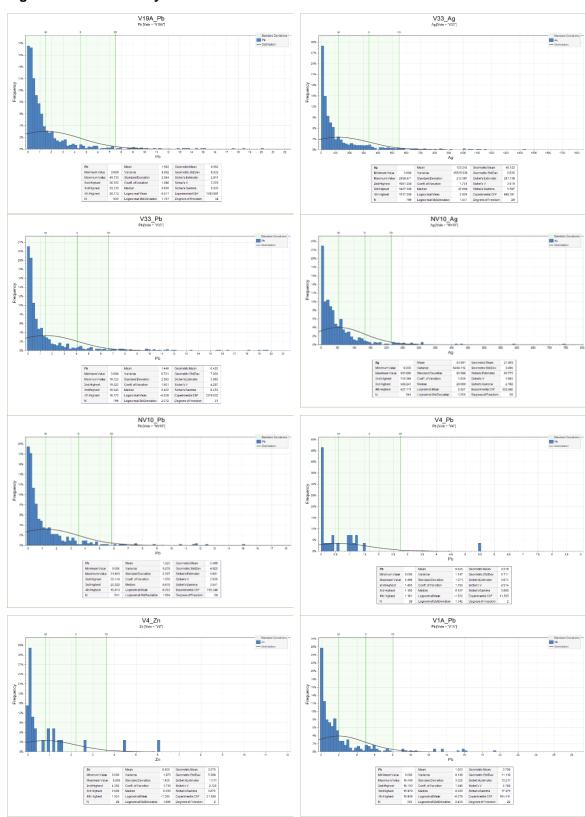


Figure 14.8: Probability Plots for the Selected 10 Veins

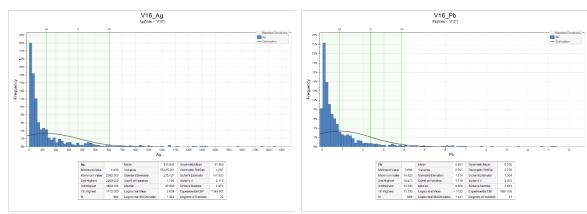


Figure 14.8: Probability Plots for the Selected 10 Veins

Sources: Silvercorp Metals Inc.

#### 14.8 Block Model and Grade Estimation

The separated Micromine (software) models with different block model origins, dimensions and rotations for each vein were generated by GC Mine in May 2024. The block size was set to 10 m  $\times$  10 m  $\times$  5 m (East  $\times$  North  $\times$  Elevation), and the sub bock size was set to 2 m  $\times$  2 m  $\times$  0.5 m (East  $\times$  North  $\times$  Elevation). In order to orient the model to follow the general strike of the mineralization, a rotation was performed for each vein. A block model parameter summary is presented in Table 14.4 for the ten largest veins.

Table 14.4: Block Model Summary

| Vein  | XMIN   | XMAX   | YMIN    | YMAX    | ZMIN | ZMAX | DIP | AZIMUTH |
|-------|--------|--------|---------|---------|------|------|-----|---------|
| V10   | 593970 | 594970 | 2535220 | 2536170 | -540 | 200  | 61  | 241     |
| V2E   | 593720 | 594110 | 2535490 | 2535990 | -660 | 140  | 66  | 290     |
| V2N   | 593400 | 593850 | 2535820 | 2536100 | -670 | 50   | 69  | 165     |
| V19A  | 594050 | 594980 | 2535240 | 2535760 | -530 | 190  | 59  | 260     |
| V33   | 594000 | 594550 | 2535120 | 2535490 | -330 | 310  | 63  | 158     |
| NV10  | 594070 | 594720 | 2535410 | 2536230 | -600 | 270  | 68  | 235     |
| V4    | 592620 | 593720 | 2536230 | 2536710 | -430 | 190  | 76  | 198     |
| V9_5B | 593590 | 593990 | 2535350 | 2535580 | -550 | -50  | 71  | 182     |
| V1A   | 593250 | 594020 | 2534980 | 2535630 | -280 | 130  | 27  | 63      |
| V16   | 593480 | 594020 | 2535320 | 2535600 | -400 | 250  | 70  | 268     |

Sources: Silvercorp Metals Inc.

Ag, Pb and Zn grade interpolation was performed using inverse distance squared (ID2) weighting for different veins, and the vein true thickness of each composite is used as a weight. The three progressively more relaxed search criteria used for estimation are presented in Table 14.5. The search ellipsoids were aligned with the general mineralization orientation.

Table 14.5: **Specific Search Parameters** 

| Pass | Search Distance (X, Y, Z) | Minimum Composites | Maximum Composites |
|------|---------------------------|--------------------|--------------------|
| 1    | 30                        | 6                  | 12                 |
| 2    | 55                        | 4                  | 20                 |
| 3    | 200                       | 5                  | 30                 |

#### 14.9 **Model Validation**

140.0

120.0

100.0

80.0

Composite Count

59420 594270 59.420

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 resource data used and of the estimation method applied. Other issues such as the relationship between the model-selectivity assumptions and mining practices are equally important when determining the appropriateness of the Mineral Resource estimate.

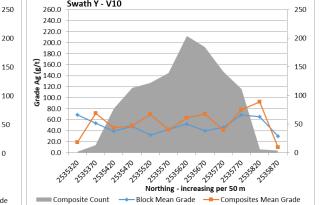
Comparisons between the global mean for the composites and block models for each vein showed some material differences, which are a result of the heterogenous nature of the mineralization, and the clustering of information in high and low grade areas of veins. SRK investigated the estimates in these veins visually and through swath plots to determine if there are any materially biased estimates. In all instances reviewed, the local estimation matched the data well, and the observed differences in the mean values were clearly due to irregular distribution of the composites. The estimation parameters in Table 14.5 were designed to result in accurate local estimates where there is dense data, and more smoothed estimates where the data is widely spaced.

The swath plot validation approach was adopted to validate the models. Swath plots of Ag, Pb and Zn for the largest 10 veins (as well as a number of other veins which showed discrepancies between the mean of the data and the mean of the estimates) were created in three orthogonal directions and elevation in particular slice thicknesses in each direction to validate the resultant block models. The swath plots of the 10 largest veins are shown in Figure 14.9 to Figure 14.11. 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 and the estimates match the trends of the data along strike and in the dip direction.

Swath X - V10 Swath Y - V10 260.0 260.0 250 240.0 240.0 220.0 220.0 200 200.0 200.0 180.0 180.0 160.0 160.0 150

0

Figure 14.9: Swath Plot of Ag for the Selected 10 Veins



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594370

594420

599270 594320

Easting - increasing per 50 m

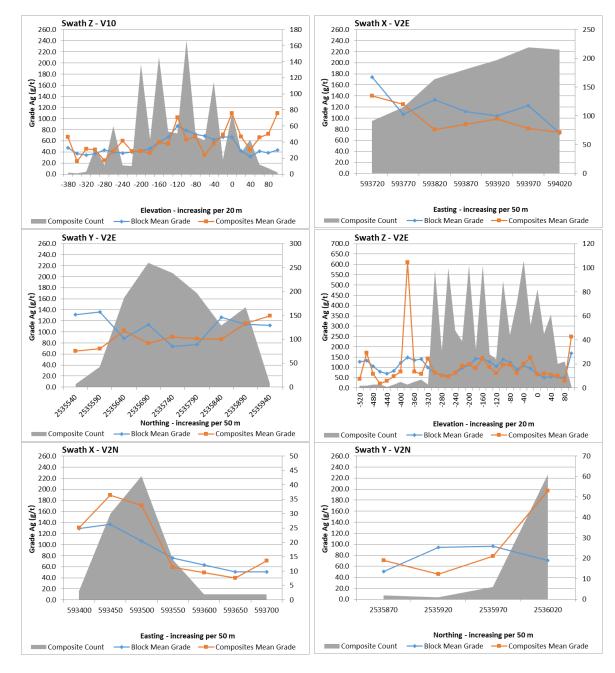


Figure 14.9: Swath Plot of Ag for the Selected 10 Veins

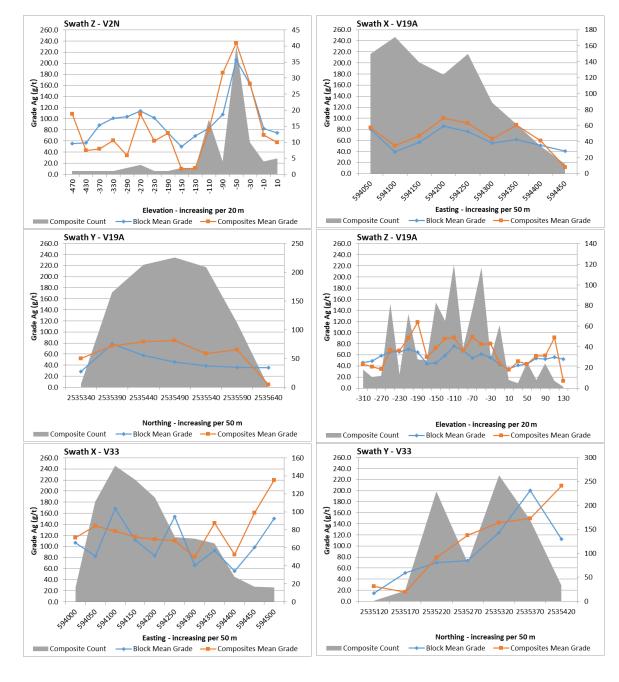


Figure 14.9: Swath Plot of Ag for the Selected 10 Veins

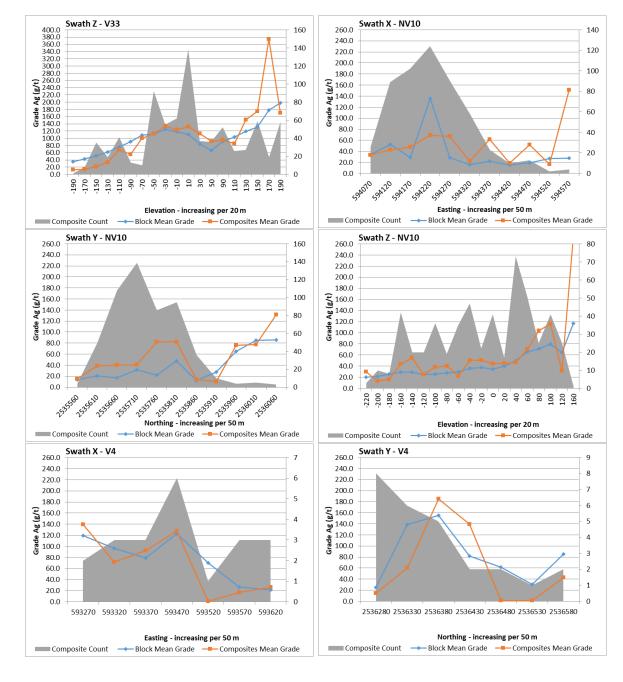


Figure 14.9: Swath Plot of Ag for the Selected 10 Veins

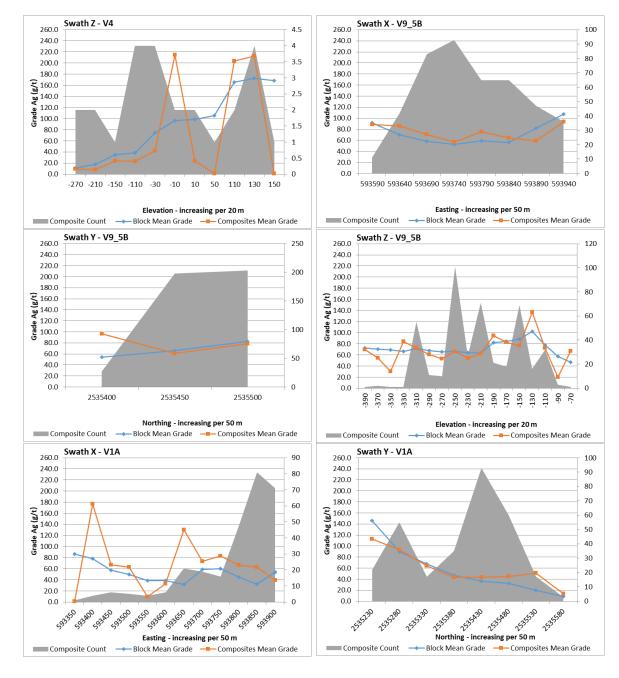


Figure 14.9: Swath Plot of Ag for the Selected 10 Veins

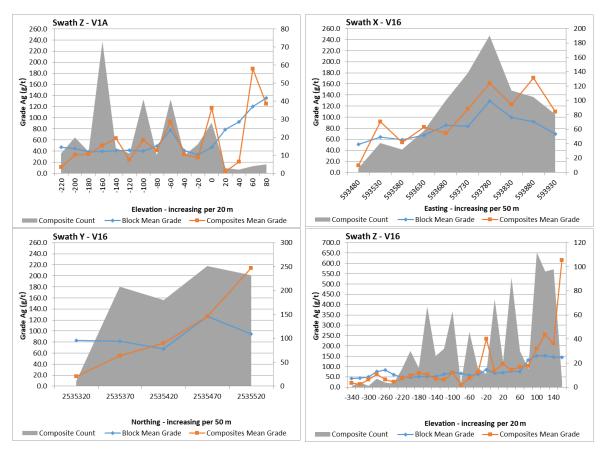
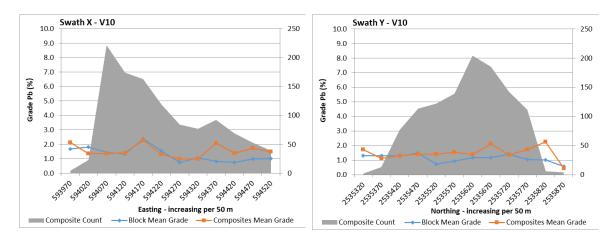


Figure 14.9: Swath Plot of Ag for the Selected 10 Veins





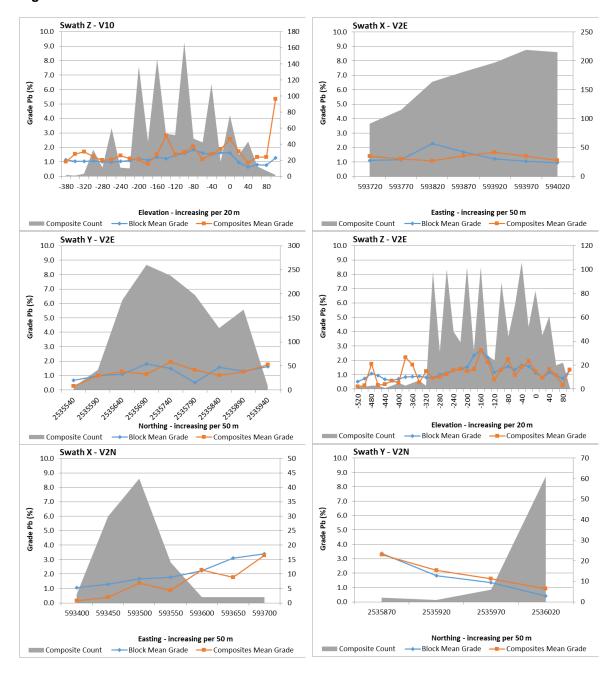


Figure 14.10: Swath Plot of Pb for the Selected 10 Veins

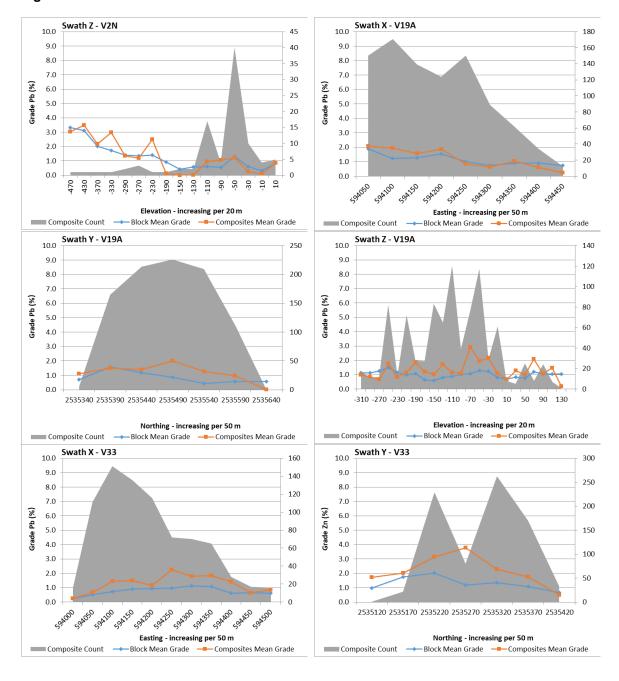


Figure 14.10: Swath Plot of Pb for the Selected 10 Veins

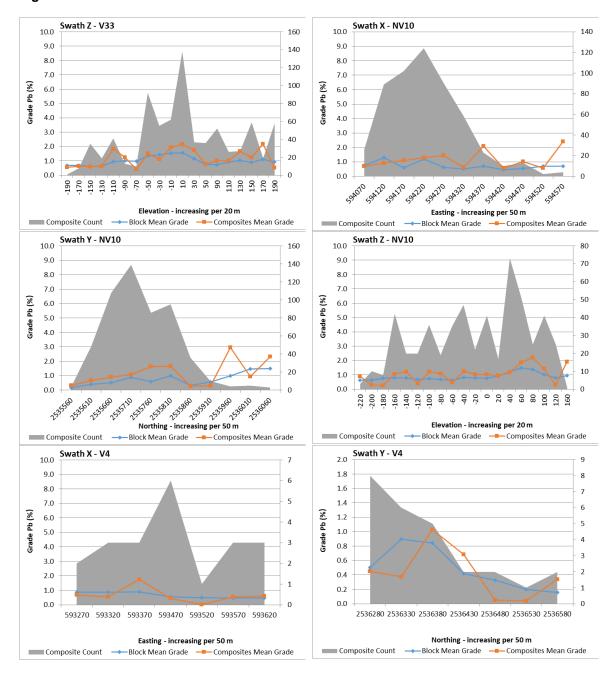


Figure 14.10: Swath Plot of Pb for the Selected 10 Veins

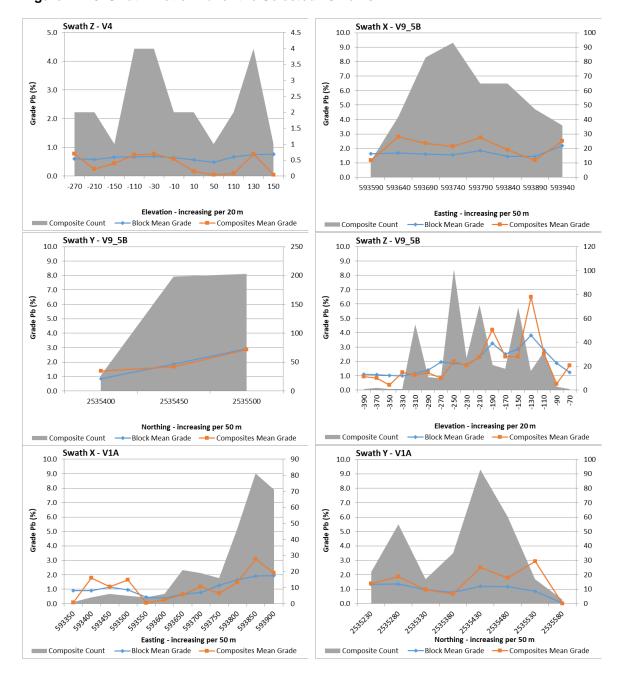


Figure 14.10: Swath Plot of Pb for the Selected 10 Veins

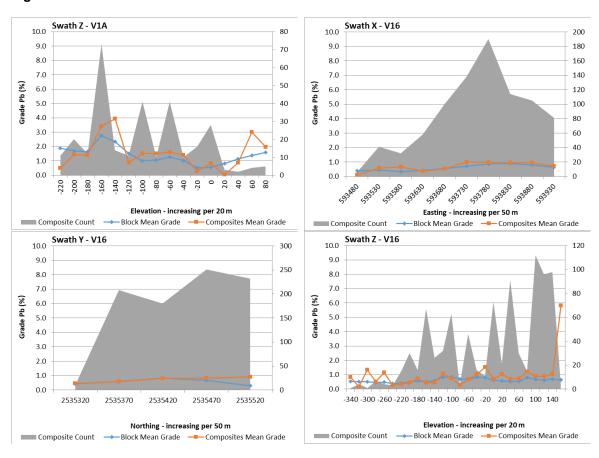
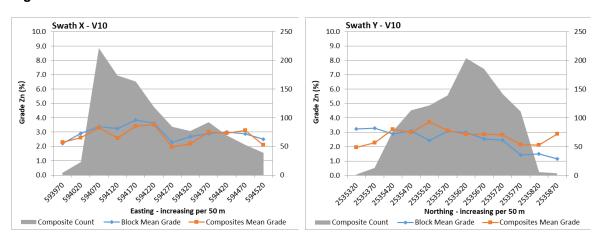


Figure 14.10: Swath Plot of Pb for the Selected 10 Veins





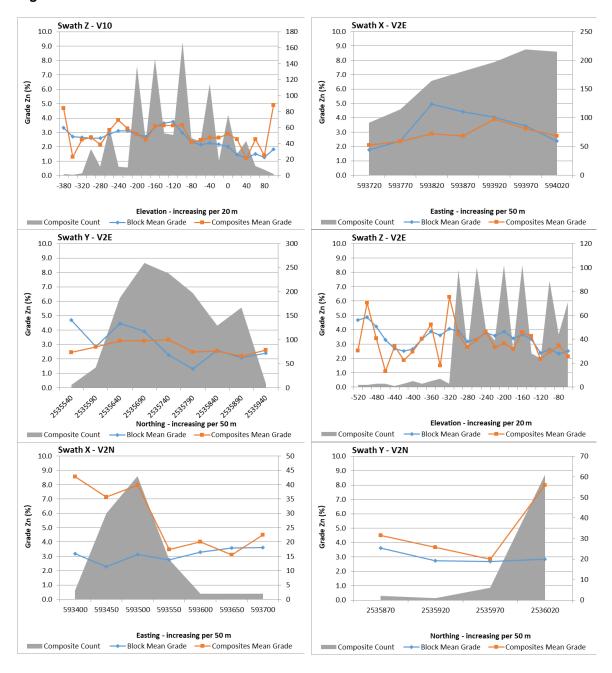


Figure 14.11: Swath Plot of Zn for the Selected 10 Veins

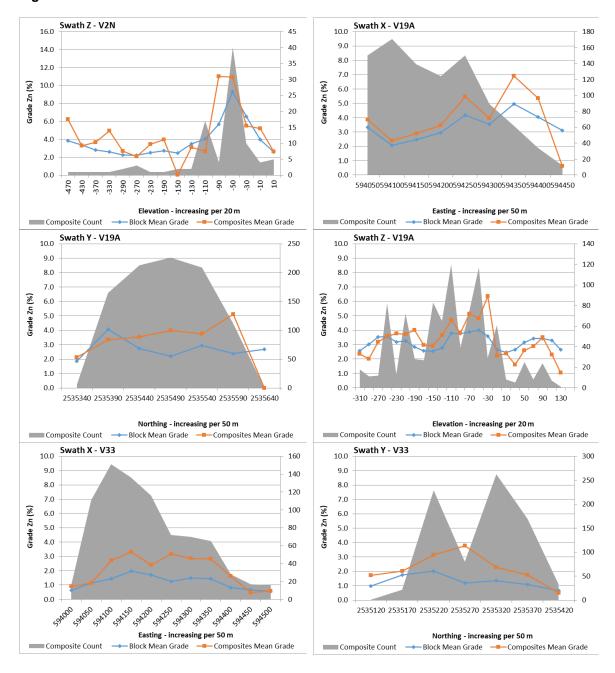


Figure 14.11: Swath Plot of Zn for the Selected 10 Veins

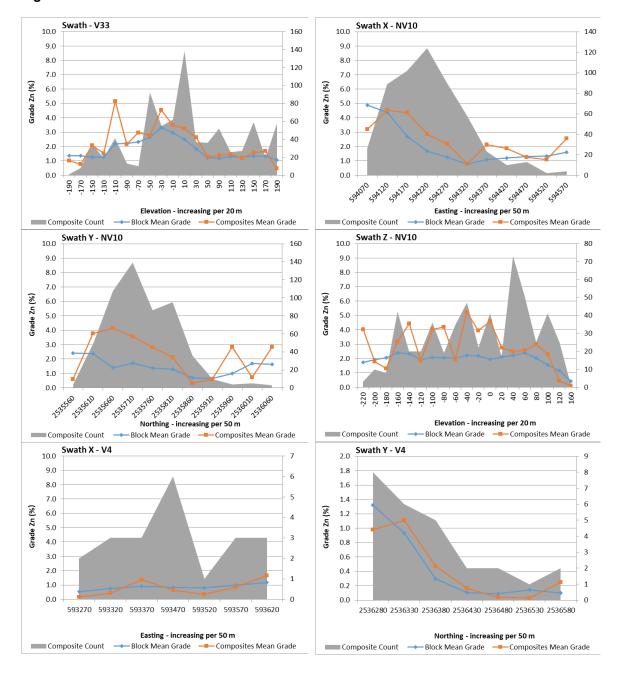


Figure 14.11: Swath Plot of Zn for the Selected 10 Veins

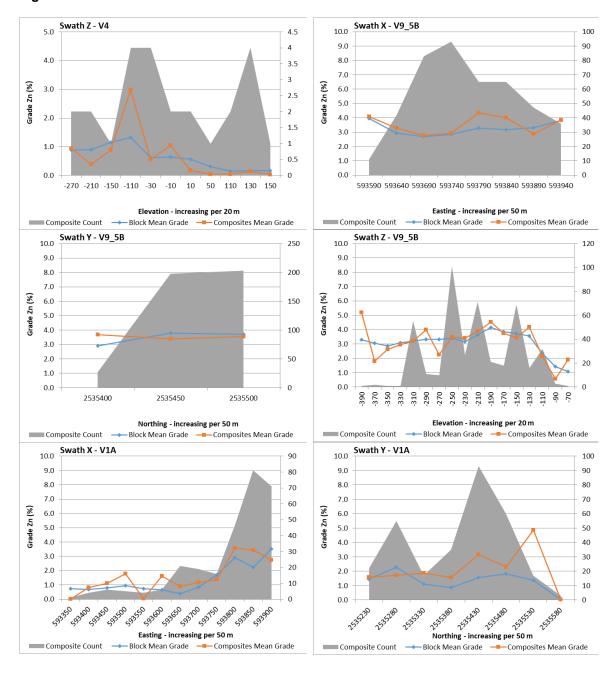


Figure 14.11: Swath Plot of Zn for the Selected 10 Veins

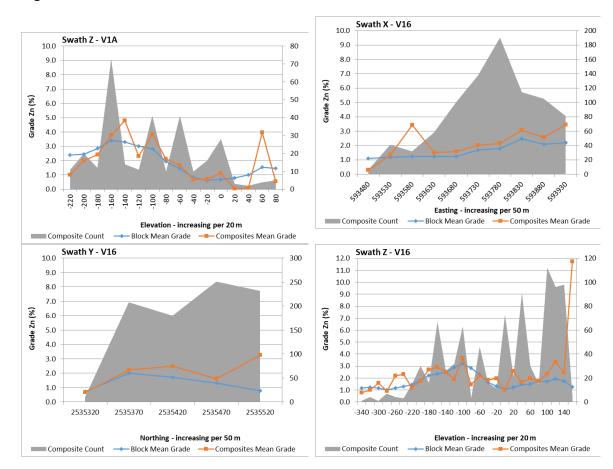


Figure 14.11: Swath Plot of Zn for the Selected 10 Veins

#### 14.10 Mineral Resource Classification

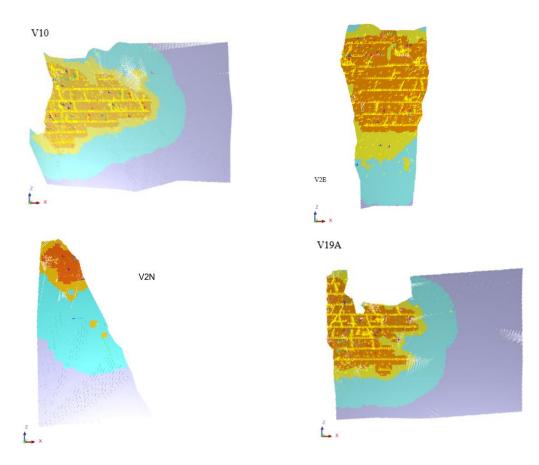
Mineral Resource classification is typically a subjective concept, industry best practices suggest that Mineral Resource classification should consider both the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating both concepts to delineate regular areas at similar resource classification.

SRK consider the quality of the drill hole data to be good, with appropriate sample collection protocols, good core recovery, adequate database management, and analytical results which generally are demonstrated to be sufficiently accurate and precise through industry standard analytical procedures and a comprehensive QA/QC management system. The chip sampling data, share the same database management protocols, and confidence in the analytical results. As discussed above, there are some concerns relating to possible bias in the sample collection methods. While these data are collected on short-spaced intervals, their confidence is not as high as the drill core data. While no bias has been conclusively demonstrated, the sample collection is sub optimal, and is likely to introduce inaccuracy in the data. This is somewhat mitigated by the quantity and spacing of the data but can be improved.

The genesis of the ore bodies is well understood, and the veins can be followed over tens to hundreds of meter distances along strike and down dip. The wireframe models show few anomalous artifacts and honour the composite data well.

Silvercorp considers the three search passes parameters (Table 14.5) as the primary discriminator for the Mineral Resource classification (Figure 14.12) under the QP's advice, with the estimates in the first pass having confidence sufficient for Measured Mineral Resources, the second pass as Indicated Mineral Resources and the third for Inferred Mineral Resources. To avoid a spotted dog phenomenon Silvercorp smoothed the classification boundaries to remove isolated pockets of higher or lower classification, with due consideration of the continuity of the veins. This approach is consistent with that previously applied by AMC.

Figure 14.12: Resource Classification for the Selected 10 Veins



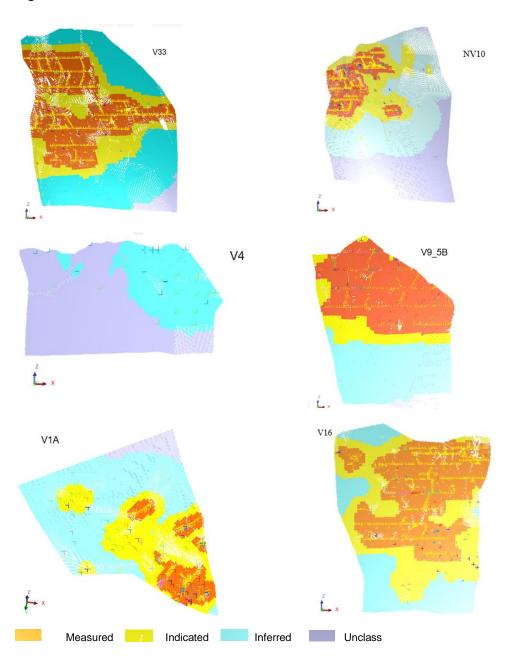


Figure 14.12: Resource Classification for the Selected 10 Veins

# 14.11 Mining Depletion

Mining depletion and write-offs were coded into the block models by Silvercorp, based on survey information on 30 June 2024. An example of depletion coding is displayed for the biggest 10 veins in Figure 14.13. Figure 14.14 shows a composite plan view of mined-out and written-off material.

Figure 14.13: Mining Depletion for the Selected 10 Veins

V10 V2E

V2N V19A V33 NV10 V4 V9\_5B

Figure 14.13: Mining Depletion for the Selected 10 Veins

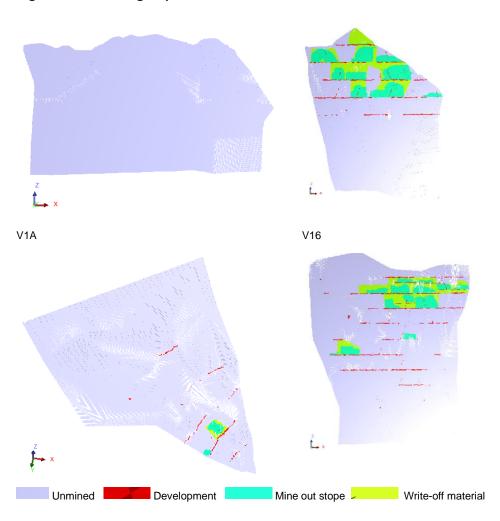


Figure 14.13: Mining Depletion for the Selected 10 Veins

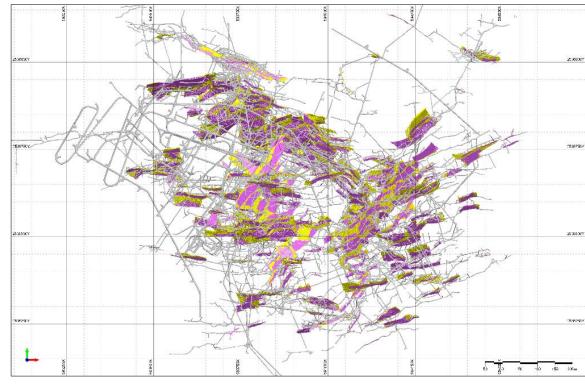


Figure 14.14: Plan View of Mined-Out Stopes (Purple) and Written-Off Shapes (Yellow)

Sources: Silvercorp Metals Inc.

#### 14.12 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) defines a Mineral Resource as:

"A Mineral Resource is 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("RPEEE").

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. In order to meet this requirement, SRK considers that major portions of the GC Project are amenable for underground mining. The assumptions made to determine the cut-off for underground mining for the GC Mine are shown in Table 14.6.

Table 14.6: RPEEE Assumptions

| Item                  | Unit      | Parameter |
|-----------------------|-----------|-----------|
| LTP Silver Price      | USD/oz    | 28.00     |
| LTP AVG Recovery Rate | %         | 81.42     |
| Payable Factor        | factor    | 0.69      |
| Mining Costs          | USD/t ROM | 32.07     |
| Backfill Plant        | USD/t ROM | 3.10      |
| Processing Plant      | USD/t ROM | 14.93     |

| Item                            | Unit      | Parameter |
|---------------------------------|-----------|-----------|
| Tailing                         | USD/t ROM | 0.44      |
| Sales, G & A                    | USD/t ROM | 8.17      |
| Reclamation                     | USD/t ROM | 0.36      |
| Corporate Social Responsibility | USD/t ROM | 0.11      |
| COG (AgEq)                      | g/t       | 120       |

#### Notes:

Within the current mining license area, as of 30 June 2024, the GC Mine, above a COG of 120g/t AgEq, there are 11.49 million tonnes ("Mt") of Measured and Indicated Mineral Resources at an average grade of 84 g/t Ag, 1.18% Pb, 2.85% Zn; and 9.57 Mt of Inferred Mineral Resources at an average grade of 85 g/t Ag, 1.23% Pb, 2.44% Zn. Details of the estimated Mineral Resources are shown in Table 14.7.

Table 14.7: Mineral Resource Statement for GC Project, as of 30 June 2024

| Resource           | Tonnes |    | DI (0/) | b (%)  Zn (%) | Contained Metal |        |        |
|--------------------|--------|----|---------|---------------|-----------------|--------|--------|
| Classification     | (Mt)   |    | PD (%)  |               | Ag (koz)        | Pb(kt) | Zn(kt) |
| Measured           | 5.87   | 88 | 1.3     | 3.11          | 16,542          | 76     | 183    |
| Indicated          | 5.62   | 80 | 1.05    | 2.57          | 14,507          | 59     | 144    |
| Measured+Indicated | 11.49  | 84 | 1.18    | 2.85          | 31,049          | 136    | 327    |
| Inferred           | 9.57   | 85 | 1.23    | 2.44          | 26,194          | 117    | 234    |

#### Notes:

# 14.13 Grade Sensitivity Analysis

Mineral Resources are sensitive to the selection of COGs. To illustrate this sensitivity, ore quantities and grade estimates at different COGs are presented in Table 14.8 and Table 14.9. 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 COG. Figure 14.15 and Figure 14.16 represent this sensitivity as grade-tonnage curves.

Table 14.8: Global Block Model Quantities and Grade Estimates for Measured and Indicated Category, GC Project at Various cut-off Grades.

| Cut-off Grade | Quantity | Grade    | Grade  | Grade  |
|---------------|----------|----------|--------|--------|
| AgEq (g/t)    | (Mt)     | Ag (g/t) | Pb (%) | Zn (%) |
| 100           | 13.13    | 78       | 1.09   | 2.65   |
| 105           | 12.72    | 80       | 1.11   | 2.70   |
| 110           | 12.30    | 81       | 1.13   | 2.75   |
| 115           | 11.90    | 82       | 1.16   | 2.79   |
| 120           | 11.49    | 84       | 1.18   | 2.85   |

<sup>&</sup>lt;sup>1</sup> The price refers to the long-term prediction published by Consensus Market Forecasts in April 2024

 $<sup>^{2}</sup>$  AgEq = Ag+44.83\*Pb+40.02\*Zn.

<sup>&</sup>lt;sup>1</sup> Mineral Resource Statement as of 30 June 2024.

<sup>&</sup>lt;sup>2</sup> Source: Silvercorp Metals Inc, Verified by SRK

Mineral Resource are reported at a cut-off grade of 120 g/t AgEg.

The totals may not compute exactly due to rounding.

<sup>&</sup>lt;sup>5</sup> The veins within the depth less than 5m below surface are not included in the Mineral Resource

| Cut-off Grade | Quantity | Grade    | Grade  | Grade  |
|---------------|----------|----------|--------|--------|
| AgEq (g/t)    | (Mt)     | Ag (g/t) | Pb (%) | Zn (%) |
| 125           | 11.12    | 85       | 1.20   | 2.89   |
| 130           | 10.76    | 87       | 1.22   | 2.94   |
| 135           | 10.40    | 88       | 1.25   | 2.99   |
| 140           | 10.06    | 90       | 1.27   | 3.03   |

Notes: 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 14.15: Grade-Tonnage Curve for Measured and Indicated Category, at Various Cut-off Grades

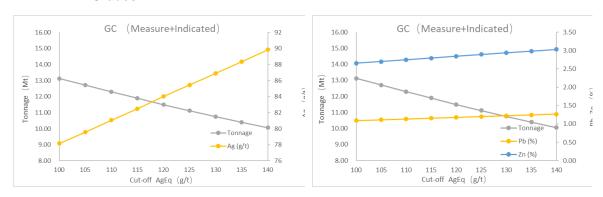
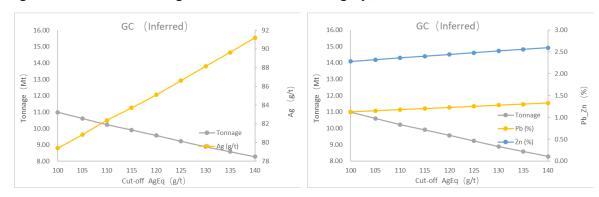


Table 14.9: Global Block Model Quantities and Grade Estimates for Inferred Category, GC Project at Various Cut-off Grades

| Cut-off Grade | Quantity | Grade    | Grade  | Grade  |  |
|---------------|----------|----------|--------|--------|--|
| AgEq (g/t)    | (Mt)     | Ag (g/t) | Pb (%) | Zn (%) |  |
| 100           | 10.99    | 79       | 1.13   | 2.28   |  |
| 105           | 10.61    | 81       | 1.15   | 2.32   |  |
| 110           | 10.23    | 82       | 1.18   | 2.36   |  |
| 115           | 9.91     | 84       | 1.20   | 2.40   |  |
| 120           | 9.57     | 85       | 1.23   | 2.44   |  |
| 125           | 9.23     | 87       | 1.25   | 2.48   |  |
| 130           | 8.89     | 88       | 1.28   | 2.52   |  |
| 135           | 8.59     | 90       | 1.30   | 2.56   |  |
| 140           | 8.29     | 91       | 1.33   | 2.59   |  |

Notes: 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 14.16: Grade-Tonnage Curve for Inferred Category, at Various Cut-off Grades



#### 14.14 Previous Mineral Resource Estimate

AMC was requested by Silvercorp to complete a NI43-101 compliant Mineral Resource estimation for the GC project in July 2021.

The last Mineral Resource was reported above a 105g/t AgEq cut-off to reflect underground mining for the RPEEE criteria under the CIM Definition Standards. The results of the estimation are shown in the Table 14.10.

Table 14.10: Mineral Resources as of 31 December 2020 (at a cut-off of 105g/t AgEq)

|                           | Tennes         |          |        |        | Contained Metal |               |               |
|---------------------------|----------------|----------|--------|--------|-----------------|---------------|---------------|
| Classification            | Tonnes<br>(Mt) | Ag (g/t) | Pb (%) | Zn (%) | Ag (koz)        | Pb (M<br>lbs) | Zn (M<br>lbs) |
| Measured                  | 5.286          | 88       | 1.3    | 3.1    | 14,906          | 154           | 360           |
| Indicated                 | 4.747          | 75       | 1.1    | 2.5    | 11,457          | 111           | 259           |
| Measured and<br>Indicated | 10.033         | 82       | 1.2    | 2.8    | 26,363          | 265           | 619           |
| Inferred                  | 8.441          | 87       | 1.0    | 2.4    | 23,562          | 195           | 442           |

Sources: 2021 AMC report

#### Notes:

The major changes to the Mineral Resource between 2021 and 2024 include:

- The addition of approximately 51,861 samples from 204,243.8 m of drilling and 16,387 channel samples,
- A change in the estimation methodology to use full width composites rather than 0.4 m composites,
- An increase in the reporting cut-off due to changes in the RPEEE assumptions.

<sup>&</sup>lt;sup>1</sup> CIM Definition standards (2014) were used for reporting the Mineral Resources.

<sup>&</sup>lt;sup>2</sup> Mineral Resource are reported at a cut-off grade of 105 g/t AgEg.

<sup>&</sup>lt;sup>3</sup> The equivalency formula is Ag g/t+50.46\*Pb%+43.53\*Zn% using prices of USD18.20/oz Ag, USD0.94/lb Pb, and USD1.08/lb Zn and estimated recoveries of 82.6% Ag, 89.5% Pb, and 87.3% Zn.

Sample results up to 31 December 2020.

<sup>&</sup>lt;sup>5</sup> Mineral Resources have been depleted to account for mining to 31 December 2020.

<sup>&</sup>lt;sup>6</sup> Veins factored to a minimum extraction width of 0.4 m.

Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

<sup>8</sup> The numbers may not compute exactly due to rounding.

# 15 Mineral Reserve Estimates

## 15.1 Introduction

The CIM Definition Standards provide for a direct relationship between Indicated Mineral Resources and Probable Mineral Reserves and between Measured Mineral Resources and Proven Mineral Reserves. As shown in Figure 15.1 below.

**Exploration** Results MINERAL MINERAL RESOURCES RESERVES Inferred Increasing level of geological knowledge and Indicated Probable confidence Measured Proven Consideration of mining, processing, metallurgical, economic, marketing, legal, environmental, infrastructure, social, and governmental factors (the "Modifying Factors").

Figure 15.1: Relationship Between Mineral Reserves and Mineral Resources

Sources: CIM Definition Standard 2014

The following statement has been extracted from the CIM Standards for reference:

"Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, market, legal, environment, socio-economic and government factors. Mineral Reserves and delivered to the treatment plant or equivalent facility. The term 'Mineral Reserve' need not necessarily signify that extraction facilities are in place or operative or that all governmental approvals have been received. It does signify that there are reasonable expectations of such approvals."

"A Mineral 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 public disclosure of a Mineral Reserve must be demonstrated by a Pre-Feasibility Study or Feasibility Study."

# 15.2 Summary of Technical Study and Operation

A preliminary engineering design named *Mining and Dressing Project of Gaocheng Lead-Zinc Ore in Yun'an County, Guangdong Province*, was conducted by Guangdong Metallurgical & Architectural Design Institute ("GDMAI"), in January 2011.

The mine was constructed based on the design by GCMAI and operated since 2014. Though some practical modifications and updates to the mining system and/or processing plant have been implemented in the 10-years of operating, SRK opines the production practice could be equivalent to or exceed a pre-feasibility study.

#### 15.3 Cut-off Grades

The Mineral Resources of GC Mine contain silver, lead, and zinc elements. The Equivalent Ag ("AgEq") grade was used for COG to define the "Ore".

The following formula is applied to estimate the economic COG of AgEq for the feed ore from underground extraction.

$$A = \frac{Cm + Cp + Cg + Cc + Ce}{P * R * F}$$

Parameters that are applied for estimates of the COG are presented in Table 15.1. The preferred COG is the estimated value which is round up to the nearest 10. SRK is of the view that material above the COG could be defined as economically extractable under those specific conditions.

Table 15.1: Estimates for COGs

| Item              | Unit         | MRE  | Shrinkage/OCAF | Resuing | Description  |
|-------------------|--------------|------|----------------|---------|--|
| Preferred<br>AgEq | g/t          | 120  | 150            | 200     | Round up to nearest 10   |
| Α                 | g/t          | 115  | 160            | 142     | Estimated COG of AgEq  |
| Cm                | USD/t<br>ROM | 32.1 | 25.0           | 45.0    | Mining cash cost   |
| Ср                | USD/t<br>ROM | 18.5 | 18.5           | 18.5    | Plant cash cost, including processing, backfill plants and tailing treatment |
| Cg                | USD/t<br>ROM | 8.2  | 8.2            | 8.2     | Sale, General & Administration cash cost                                     |
| Сс                | USD/t<br>ROM | 0.5  | 0.5            | 0.5     | Corporate social responsibility and reclamation                              |
| Se                | USD/t<br>ROM | -    | 4.6            | 4.6     | Exploration sustaining   |
| R                 | %            | 81.4 | 81.4           | 81.4    | Long-term average processing recovery rates for silver                       |
| Р                 | USD/oz       | 28.5 | 22.0           | 22.0    | Long-term forecast silver price  |
| F                 | factor       | 0.69 | 0.69           | 0.69    | Payable Factor   |

Sources: GC Mine, CMF and SRK

Notes:

<sup>&</sup>lt;sup>1</sup> OCAF – Overhand cut and fill

<sup>&</sup>lt;sup>2</sup> Costs are considerred on the last 3-year average, detailed in Section 21.2 of this Report

The saleable products of the GC Project are lead concentrate and zinc concentrate. The elements within these concentrates are payable based on various factors, depending on both the specific elements and their respective grades. The payable factors for Ag, Pb, and Zn elements within each concentrate are estimated based on the Contracts and operations records, as presented in Table 15.2 below.

Table 15.2: Estimates for Payable Factors

| Item                                      | Unit                               | Ag in Lead<br>Conc. | Pb in Lead<br>Conc. | Ag in Zinc<br>Conc. | Zn in Lead<br>Conc. |
|---|------------------------------------|---------------------|---------------------|---------------------|---------------------|
| Long-term forecast price                  | USD/oz for Ag, USD/t for Pb and Zn | 22.0                | 2,050               | 22.0                | 2,650               |
| Average element grade in Conc.            | g/t for Ag, % for Pb<br>and Zn     | 1,608               | 43.2                | 282.3               | 43.2                |
| Reference prices in RMB, incl. VAT        | RMB/g for Ag, RMB/t for Pb and Zn  | 5.8                 | 16,725              | 5.8                 | 21,620              |
| Paid considered, in RMB, incl. VAT        | RMB/g for Ag, RMB/t for Pb and Zn  | 5.3                 | 16,228              | 0.60                | 14,857              |
| Net received in USD, excl. VAT            | USD/oz for Ag, USD/t for Pb and Zn | 20.0                | 1,989               | 2.3                 | 1,821               |
| Payable Factors, Net received against LTP | Factor                             | 0.91                | 0.97                | 0.10                | 0.69                |
| Ag percentage in each Conc.               | %                                  | 73%                 | N/A                 | 27%                 | N/A                 |
| Weighted payable Factor                   | Factor                             | Ag:0.69             | Pb: 0.97            |                     | Zn 0.68             |

Sources: GC Mine, CMF and SRK

#### Notes:

The equivalent factor of Pb and Zn against Ag is estimated considering; prices, recovery rates, and payable factors differences. The estimates are presented in Table 15.3 below. It should be noted that the equivalent factors are not updated since 31 March 2024 estimation. SRK opines the prices changing for 3 months has minimum effect on the factors.

Prices are souced from Consensus Market Forecast, detailed in Section 19. The long-term silver price for Reserve is 22.0 USD/oz. It is 28.5 USD/oz. for Resources Estimates.

<sup>4 1</sup> oz=31.1035 g

<sup>&</sup>lt;sup>5</sup> 1 USD=7.22 RMB

<sup>6</sup> Average processing recovery rate is based on the last 3 year operation record, which is detailed in Section 17 of this report.

<sup>1</sup> Prices are souced from Consensus Market Forecast, detailed in Section 19. The long-term prices for Reserve are silver 22USD/oz.; lead 2,050 USD/t (0.93 USD/lb); zinc 2,650 USD/t (1.2 USD/lb)

<sup>&</sup>lt;sup>2</sup> Average element grade in concenstrates is based on the last 3 year operation record, which is detailed in Section 17 of this report.

Reference prices in RMB consider value added tax with the rate of 13%, and the currency exchange rate of 1 USD=7.22 RMB

<sup>&</sup>lt;sup>4</sup> The paid considered is depending on the grade of elements and contracts items, which is detailed in Section 19 of this report.

<sup>&</sup>lt;sup>5</sup> The Ag percentage in each concentrate is based on the proportion of last 3 years operation records.

<sup>&</sup>lt;sup>6</sup> Conc. : concentrate.

VAT : value added tax.

<sup>&</sup>lt;sup>8</sup> Incl. and excl. stand for including and excluding, respectively.

Table 15.3: Estimates for Equivalent Factors of Pb and Zn to Ag

| Item                        | Unit                               | Ag   | Pb    | Zn    |
|-----------------------------|------------------------------------|------|-------|-------|
| Long-Term Forecast Price    | USD/oz for Ag, USD/t for Pb and Zn | 21.5 | 2,000 | 2,550 |
| Average Recovery Rate       | %                                  | 81.4 | 90.0  | 89.5  |
| Weighted Payable Factor     | Factor                             | 0.69 | 0.97  | 0.68  |
| Unit Used in Resource Model | Unit                               | g/t  | %     | %     |
| Unit Value                  | USD/Unit                           | 0.39 | 17.45 | 15.58 |
| Eq Factor against Ag        | Factor                             | 1    | 44.83 | 40.02 |

Sources: GC Mine, CMF and SRK

#### Notes:

# 15.4 Modifying Factor

## 15.4.1 Mine Design Scope

Mining to date has been conducted in two stages, and design the third stage, which are horizontally defined by mine sections and vertically by elevations:

- Stage 1 access by decline down to -50 mRL
- Stage 2 is -50 mRL down to -300 mRL and employs a surface shaft access, as well as the extension of the decline
- Stage 3 is on engineering design, which mines the Mineral Resources occurred between -300 mRL and -500 mRL. The access method is a planned extension the decline.

The mine is designed to cover the deposits from the +100mRL down to -500mRL within the mining permits.

## 15.4.2 Stopes Design

The mineable shape is designed and evaluated by the followings:

- Designed mining stope outline manually against the Measure and Indicated ("MI") Mineral Resources categories, based on the 50m vertical intervals and about 50m length of the shapes.
   5m crown pillar and 5-6m rib pillars of every stope excluded in the design
- Cut the mineral structures with the stope outlines into stope blocks as mineable stope
- Boolean operation with the end of month survey of stope
- Interrogating against grade model (block model) to get the critical parameters, such as Mineral Resource category, grades, thickness, etc.
- Classify the stope into mining method base on the thickness (horizontal) then applying the modifying factors:
  - Minimum Mining Width("MMW"): 0.5m for resuing and 1.0m for shrinkage, therefore before planned dilution, 0.4m for resuing and 0.8m for shrinkage mineable shape is considered;

Ag recovery rate conbines the rates in both lead and zinc Conc., which are 58.9% and 22.5%, respectively.

<sup>&</sup>lt;sup>2</sup> Eq stands for equivalent

- Planned dilution: if the thickness is lower than those, planned dilution (zero grade) to the minimum mining width:
- Unplanned dilution: an equivalent linear overbreak/ slough ("ELOS") with zero grade is applied to the mineable shape. Factored 0.05m on hanging wall and footwall each for resuing stope and 0.1 each wall for shrinkage stope;
- Further factored dilution of 2% (if more than 2m wide), 3% (between 2m and 1m) and 4% (less 1m wide), is also applied for shrinkage as broken ore drawing when mining is finished;
- Factored ore loss as 95% and 92% for resuing and shrinkage method, respectively;
- COG filter: assess the diluted mineable shape against COG to filter out sub-economic stopes;
- Visual and manual filter the stopes considering the practical conditions with local engineer for mine planning; and
- Summation of the eligible material in stopes as the potential Mineral Reserves then conduct mine planning and scheduling.

In general, the Mineral Reserve estimates are well supported and provide a reasonable basis for ongoing production mining at these narrow vein deposits. The mining methods employed are highly selective, and GC Mine has initiated activities to minimise dilution as key strategy.

It should be noted that only stopes for resuing and shrinkage methods are considered during the stope design, the overhand cut and fill method employed as the same as the parameters as shrinkage stope.

Based on the mine design, and Mineral Resource occurrence, the Measure and Indicated Mineral Resource with dilution and diluted AgEq grade within designed stopes on each vertical interval is presented as Figure 15.2.

0 100 200 300 400 500 600 700 270.1 100 225.0 50 0 278.5 269.0 -50 -100 255.4 237.4 -150 evels (mRL -200 232.7 -250 234.3 241.8 249.2 -350 248.0 -400 249.4 -450 277.9 -500 AgEq (g/t)

Figure 15.2: Measured and Indicated Mineral Resources including Dilution Material per Vertical Interval

Sources: GC Mine, as of 31 March 2024, SRK summarized

## 15.4.3 Dilution and Loss Summary

As a result of the previously described stope design, the mining dilution and ore loss estimated stope by stope and is summarized in Table 15.4.

Table 15.4: Dilution and Loss Summary

| Mining Method     | Average Stope Width (m) | Dilution Rate | Ore Loss Rate | Reserve % |
|-------------------|-------------------------|---------------|---------------|-----------|
| Resuing           | 0.9                     | 17%           | 5%            | 33%       |
| Shrinkage or OCAF | 1.8                     | 25%           | 8%            | 67%       |
| Weighted Average  | 1.5                     | 22.3%         | 7.0%          | 100%      |

Sources: GC Mine, SRK summarized

**Notes** 

## 15.5 Mineral Reserve Estimates

The estimated Mineral Reserve, based on the Mineral Resource estimate and the application of Modifying Factors to the tonnes and contained equivalent silver ("AgEq"), is summarised in Table 15.5 and illustrated in waterfall charts shown in Figure 15.3 and Figure 15.4.

**Table 15.5:** Summary of Mineral Reserve Conversion Process

| Description                        | Tonne (kt) | AgEq (g/t) | AgEq Contained (t) |
|------------------------------------|------------|------------|--------------------|
| MI+INF MRE @ COG 120g/t AgEq       | 21,066     | 244.8      | 5,158              |
| MI MRE @ COG 120g/t AgEq           | 11,492     | 250.8      | 2,882              |
| Stope Design Scope                 | 7,727      | 256.0      | 1,978              |
| MMW                                | 6,086      | 261.8      | 1,593              |
| COG                                | 4,461      | 301.0      | 1,343              |
| Allowance for Dilution             | 954        | -          | -                  |
| Mining Ore Loss                    | -381       | 243.6      | 93                 |
| Mine Inventory as of 31 March 2024 | 5,035      | 248.3      | 1,250              |
| Mineral Reserve as of 30 June 2024 | 4,965      | 249.0      | 1,236              |

Sources: GC Mine, SRK summarized

<sup>&</sup>lt;sup>1</sup> OCAF - overhand cut and fill mining method

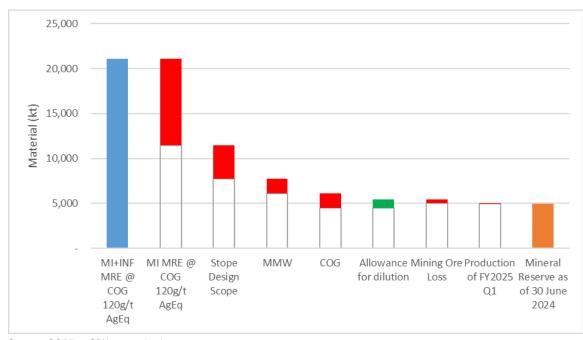


Figure 15.3: Waterfall Chart of Mineral Reserve Conversion - Tonne

Sources: GC Mine, SRK summarized

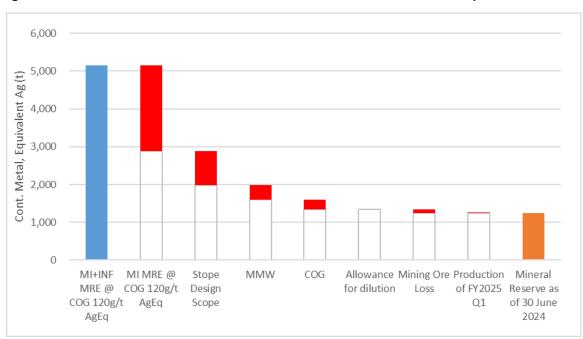


Figure 15.4: Waterfall Chart of Mineral Reserve Conversion - Contained Equivalent Silver

Sources: GC Mine, SRK summarized

#### 15.6 Mineral Reserve Statement

By applying the Modifying Factors, SRK reviewed the GC Mine Mineral Reserves estimate, in accordance with the CIM Definition Standards (2014) and NI 43-101 standard (Table 15.6). The economically mineable parts of the Measured and Indicated Mineral Resources categories within the designed stopes, including diluting materials and allowance for losses, were classified as Proven and Probable Mineral Reserves, respectively. The feed ore is estimated based on the reference point being the primary crusher or temporary stockpile at the crusher feed. Totally around 44% MI Mineral Resource converted into Mineral Reserve in tonnes, and about 43% contained metal converted when considering equivalent silver.

Table 15.6: Mineral Reserve Statement for GC Mine, as of 30 June 2024

| Category | Tonnes | Ag    | Pb   | Zn   | Contained metal |        |        |
|----------|--------|-------|------|------|-----------------|--------|--------|
| Unit     | (Mt)   | (g/t) | (%)  | (%)  | Ag (koz)        | Pb(kt) | Zn(kt) |
| Proven   | 2.73   | 81    | 1.26 | 2.95 | 7,142           | 34     | 81     |
| Probable | 2.23   | 81    | 1.15 | 2.71 | 5,791           | 26     | 61     |
| 2P Total | 4.97   | 81    | 1.21 | 2.84 | 12,933          | 60     | 141    |

Sources: GC Mine, SRK summarized

#### Notes

# 15.7 Discussion on Potentially Impacts to Mineral Reserve Estimates

As in the case for most mining projects, the extent to which the estimate of Mineral Reserves may be affected by mining, metallurgical, infrastructure, permitting, market and other factors could vary from major gains to total losses of Mineral Reserves.

There are no known issues to the Qualified/ Competent Person of this section expected to materially affect the Mineral Reserve estimates.

<sup>&</sup>lt;sup>1</sup> Any differences between totals and sum of components are due to rounding.

<sup>2 150</sup> g/t AgEq and 200 g/t AgEq COG was applied to Shrinkage (including overhand cut & fill) and resuing stopes, respectively.

<sup>3</sup> The COG estimates are based on the forecast prices 22 USD/oz silver, 2,050 USD/t lead, and 2,650 USD/t zinc.

<sup>&</sup>lt;sup>4</sup> The Mineral Reserves are reported on a metric dry tonne basis.

<sup>&</sup>lt;sup>5</sup> The Mineral Reserves are reported at the reference point of ROM stockpile before crushing or directly crushing.

<sup>&</sup>lt;sup>6</sup> The Mineral Reserves are reported inclusive of Mineral Resources.

<sup>&</sup>lt;sup>7</sup> The Mineral Reserves are effective as of 30 June 2024.

# 16 Mining Methods

#### 16.1 Introduction

Mining to date has been conducted in two stages, and designing the third stage, which are horizontally defined by mine sections and vertically by elevations:

- Stage 1 production employs conventional mobile, rubber-tired, diesel-powered equipment (development jumbo, loader, and truck) with surface declines access down to -50 mRL.
- Stage 2 development from -50 mRL down to -300 mRL employs conventional tracked equipment (battery powered locomotives, rail cars, electric rocker shovels and pneumatic hand-held drills) via a surface shaft access, as well as the extension of the decline.
- Stage 3 is on design, which mines the Mineral Resources occurred between -300 mRL and -500 mRL, with access via the extension of the surface decline.

The is operated the combination of Stage 1 and Stage 2 via three production and one ventilation systems. The production level interval is 50 m between each level. These systems include:

- The main decline production system includes one main decline from surface at 176 mRL to -300 mRL with a total length of 4,000 m.
- The exploration decline production system is one exploration decline from surface at 110 mRL to -50 mRL with a total length of 1,500m. Furthermore, the exploration decline connects to the main decline at 0 mRL and -50 mRL.
- The main shaft production system is one main shaft from surface 258 mRL to -370 mRL.
- The ventilation system includes two ventilation shafts, which are:
  - Phase 1 ventilation shaft is return air raise from 114 mRL to -50 mRL;
  - Phase 2 ventilation shaft is return air raise from 122 mRL to -200 mRL;
  - The main decline, exploration decline, and main shaft are utilized as intake fresh air.

The mining method employed by the mine were traditional shrinkage and resuing stoping methods, previously 2021. Overhand cut and fill method has been introduced as the backfill plant finished construction and is operational.

The underground infrastructure, including water supplier and dewatering system, hoisting system, ventilation, power supply, compressed air supply, are constructed for the first two stages mine.

# 16.2 Operation and Product Rate

GC Mine has been commercial operated since Q2 2014.

GC Mine operates mainly using contractors for mine development, production, ore transportation, and exploration. GC Mine provides its own management, technical services, and supervisory staff to manage the mine operations.

The design full product rate is approximately 330 ktpa. The mine operation is conducted 365 days of the year but mine production is currently scheduled on the basis of 330 days per year at an average of approximately 1,000 tpd. The operation record for the last 3 years are presented in Table 16.1.

Table 16.1: Operation Records from FY2020 to FY2025 Q1

| Year         Unit         FY2022         FY2023         FY2024         FY2025 Q1           Ore Mined         dry tonne         314,882         299,959         290,006         83,139           Moisture         %         3.07         2.97         2.67         3.13           Processed         dry tonne         318,042         299,597         290,050         83,745           Head Grades         Ag         g/t         75         75         69         64           Pb         %         1.53         1.32         1.19         0.94           Zn         %         3.19         2.75         2.64         2.38 |             |           |         |         |         |           |
|--|-------------|-----------|---------|---------|---------|-----------|
| Moisture       %       3.07       2.97       2.67       3.13         Processed       dry tonne       318,042       299,597       290,050       83,745         Head Grades         Ag       g/t       75       75       69       64         Pb       %       1.53       1.32       1.19       0.94  | Year        | Unit      | FY2022  | FY2023  | FY2024  | FY2025 Q1 |
| Processed     dry tonne     318,042     299,597     290,050     83,745       Head Grades       Ag     g/t     75     75     69     64       Pb     %     1.53     1.32     1.19     0.94   | Ore Mined   | dry tonne | 314,882 | 299,959 | 290,006 | 83,139    |
| Head Grades       Ag     g/t     75     75     69     64       Pb     %     1.53     1.32     1.19     0.94  | Moisture    | %         | 3.07    | 2.97    | 2.67    | 3.13      |
| Ag g/t 75 75 69 64<br>Pb % 1.53 1.32 1.19 0.94   | Processed   | dry tonne | 318,042 | 299,597 | 290,050 | 83,745    |
| Pb % 1.53 1.32 1.19 0.94   | Head Grades |           |         |         |         |           |
|  | Ag          | g/t       | 75      | 75      | 69      | 64        |
| Zn % 3.19 2.75 2.64 2.38   | Pb          | %         | 1.53    | 1.32    | 1.19    | 0.94      |
|  | Zn          | %         | 3.19    | 2.75    | 2.64    | 2.38      |

Sources: GC Mine processing annually report

# 16.3 Geotechnical and Hydrogeology Considerations

The rock mass condition is categorized as Fair to Good and the AMC assessment anticipated that the vein and host rocks in the mine area would generally be competent, but with areas where local conditions require, additional local ground support installed. This has largely been confirmed in operations, with most areas deemed to require little or no support. Where Poor ground conditions have been encountered, ground support is provided, with a range of strategies available depending on the local conditions. This may be either rock bolts with or without mesh, shotcrete only, shotcrete with rock bolts, shotcrete with rock bolts and mesh, timber, or heavier steel support.

Based on the review of the available geotechnical data and high-level assessments undertaken, the geotechnical aspects of the mine design were generally reasonable for mining study purposes. However, given the limited nature of the data, the geotechnical knowledge at the Project prior to commencement of operations was not considered to be at the level of detail normally associated with a mining operation or feasibility study in Canada. That geotechnical knowledge has at the practical level, been significantly advanced since the commencement of operations. SRK has recommended that, as part of ongoing operations at the mine, geotechnical and ground support aspects should be continuously reviewed in a formal and recordable manner, bearing in mind previous recommendations, local and mine-wide operating experience in all rock types encountered, any advisable data collection, and looking to future mining development.

Specific hydrogeological investigations were not conducted. The mine design report presents discussion of hydrogeological conditions at GC Mine and states that hydrogeological exploration in the district is relatively inadequate. For AMC's preliminary geotechnical assessments, minor water inflows (less than five litres per minute locally) were assumed. SRK notes that operating experience to date indicates that the assumption of minor water inflows is reasonable.

# 16.4 Mine Design

The mine design is based on the engineering work completed by the local official provincial design institute GMADI (April 2016). Refinements in areas such as profile dimensions, alignments, fleet

sizing, etc. have been made by GC Mine technical personnel on an as-needed basis during the Project construction and operations phases. Design aspects have been progressively advanced and refined as operations have progressed but without any major change in development requirements.

The mine is designed as an underground operation, developed a hybrid access system of declines and shafts, staged in 2 steps at the beginning, targeting the Mineral Resources above -300mRL. A third stage is on the progress of engineering design; however, the access method has been considered as decline access and the relayed air return raises. Figure 16.1 shows the mine design for GC Mine.

The mining stages are horizontally defined by mine sections and vertically by elevations:

- Stage 1 production employs conventional mobile, rubber-tired, diesel-powered equipment (development jumbo, loader, and truck) with surface declines access down to -50 mRL.
- Stage 2 development from -50 mRL down to -300 mRL employs conventional tracked equipment (battery powered locomotives, rail cars, electric rocker shovels and pneumatic hand-held drills) via a surface shaft access, as well as the extension of the decline.
- Stage 3 is on designing, which mines the Mineral Resources occurred between -300 mRL and -500 mRL.

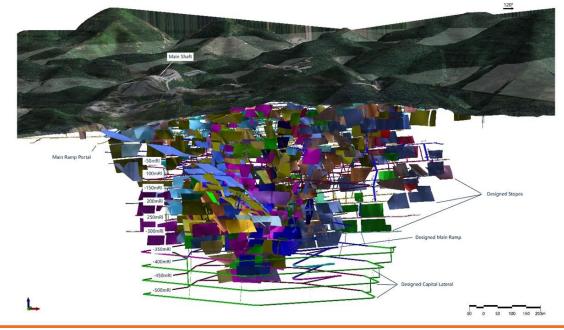


Figure 16.1: Mine Design for GC Mine

Sources: GC Mine

#### 16.4.1 Vertical Access

The mine access for men and materials, as well as the transportation of ore and waste, is provided by two declines (Exploration decline, Main decline) and a shaft (Main Shaft). The secondary means of emergency egress is provided by the Phase1 and Phase 2 return airway shafts (RAR). Table 16.2 summarizes general details for each vertical access.

Table 16.2: Summary of General Details for Mine Access

| Shaft<br>Name             | Diameter<br>(m) | Collar<br>Elevation<br>(mRL) | Bottom<br>Elevation<br>(mRL) | Depth<br>(m) | Profile     | East Collar<br>Coordinate | North<br>Collar Co-<br>ordinate | Collar<br>Access |
|---------------------------|-----------------|------------------------------|------------------------------|--------------|-------------|---------------------------|---------------------------------|------------------|
| Main<br>Decline<br>Extend | 4.2 x 3.8       | 176                          | -300                         | 706          | Rectangular | 37,593,581                | 2,535,330                       | Surface          |
| Exploration Decline       | 3.7 x 3.5       | 112                          | 50                           | 62           | Rectangular | 37,593,379                | 2,535,987                       | Surface          |
| Stage 1<br>RAR            | 3.5             | 120                          | -50                          | 170          | Circular    | 37,593,954                | 2,535,692                       | Surface          |
| Stage 2<br>RAR            | 3.5             | 122                          | -50                          | 172          | Circular    | 37,594,206                | 2,535,586                       | Adit             |
| Main Shaft                | 6.0             | 248                          | -370                         | 618          | Circular    | 37,593,562                | 2,535,544                       | Surface          |

Sources: GC Mine

The Main decline provides access to the +100 mRL, +50 mRL, 0 mRL, -50 mRL, -100 mRL, -150 mRL, -200 mRL, -250 mRL and -300 mRL levels.

The Exploration decline provides access to the +100 mRL, +50 mRL, 0 mRL, and -50 mRL. The Main decline connects to the Exploration decline at 0 mRL and -50 mRL. The average gradient is 12% (1 in 8.3) with minimum radius of 20 m. The total decline access length is 2,358 m (excluding stockpiles).

The Main Shaft collar is located at +248 mRL elevation with a circular diameter is 6.0 m.

#### 16.4.2 Horizontal Access

The level (horizontal) development/ drive is designed relative to the vein positions. The ore drive is developed primarily from the level access. Then development of the raises to the upper-level to control the vein, also well as the stope access. A third drive is developed, the footwall drive which is used as the transportation of ROM. The fourth part of the develop is the cross-cut from the foot wall drive to ore drive that is used for the extraction of ore from the stope. A typical level develop against mineralization veins is illustrates in Figure 16.2.

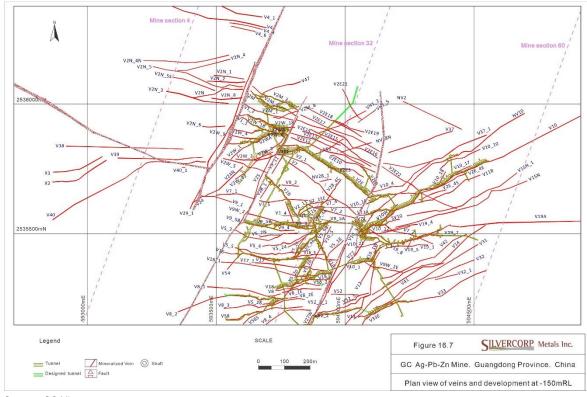


Figure 16.2: Planning View of Development and Veins - 150m RL

Sources: GC Mine

## 16.4.3 Expansion Plan for the Third Stage

Stage 3 is the planned extension of the decline downwards as the main access. Relayed air return raises are planned for ventilation. Materials and ROM will be transported to Level -300mRL then hoisted to surface via main shaft. The main decline is also a standby material movement path.

#### 16.5 Material Movement

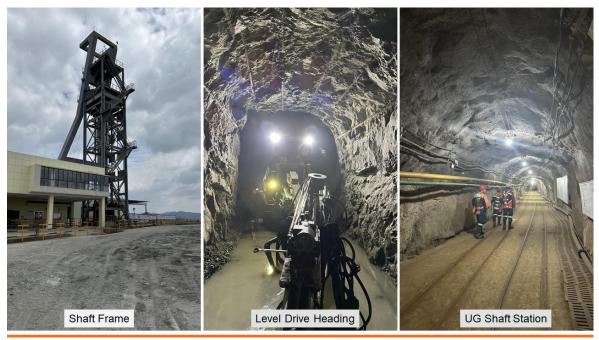
The ROM material is mined/ drawn out of the stope or waste excavated from development headings and loaded into 0.7m³ rail cars by small scale rubber-tired load-haul-dump mobile machines (LHD) from either cross-cut draw points or development headings directly. The rail cars are moved by electric locomotives along the level drive (footwall drive) to the shaft, then hoisted two at a time in the shaft cage (2 deck) to surface. The material mined near decline system, underground trucks are loaded at the stope draw points equipped with vibration feeder at the bottom of the ore pass, which is fed from upper level by rail cars or LHD directly.

The Main Shaft has one ground mounted multi-rope friction winder (Koepe winder) (600 kW rating), and is used for hoisting men and material as well ore and waste, for areas below the -50 mRL. The shaft is also used for intake air, services access (ladder, cables, and pipes) and emergency egress.

The shaft hoisting capacity is estimated to be approximately 330 ktpa. The capacities are estimated based on 330 days per year, three shifts per day, and eight-hour shifts.

Waste that is cage hoisted in rail cars to surface is transferred to the rail waste dump tip head that is within 200 m of the Main Shaft. Figure 16.3 shows the Main Shaft headframe.

Figure 16.3: Underground Access and Level Drive of GC Mine



Sources: SRK site visit

# 16.6 Stoping Method

Shrinkage stoping, overhand cut and fill (OCAF) stoping, and resue stoping are the methods utilized in GC Mine. Shrinkage stoping and resue stoping were employed at the beginning of the mine's life. Overhand OCAF stoping has been employed since 2021. The ROM per each stoping method for the last 3 years is presented in Figure 16.3.

Table 16.3: ROM Percentage per Stoping Method

| Year      | Unit  | FY2021 | FY2022 | FY2024 | FY2025 Q1 |
|-----------|-------|--------|--------|--------|-----------|
| Shrinkage | % ROM | 71%    | 77%    | 76%    | 70%       |
| Resuing   | % ROM | 29%    | 21%    | 16%    | 24%       |
| OCAF      | % ROM | 0%     | 3%     | 8%     | 6%        |

Sources: GC Mine

Notes: The final total might include some rounding inaccuracies.

## 16.6.1 Shrinkage Stoping

The method begins with establishing a sill drive along the vein to expose the vein at 2.4 m height. An access drive (conventionally a footwall drive) is also developed parallel to the vein at 2.4 m wide x 2.4 m high at a minimum stand-off distance of 6 m from the vein. Cross-cuts between the access and vein drives are developed at approximately 7.5 m strike spacing (actual spacing is dependent on the loader used, loader dimensions and the rib pillar thickness required for rib stability). The cross-

cuts act as draw points for the mucking of the stope ore. Travel way access raises, that are also used for services are established between the levels at each end of the stope block. Waste packs are built on each void side of the raise as stoping proceeds upwards. Each stoping block is normally 50 m strike length by 50 m height.

Miners use hand-held pneumatic drills (jackleg) to drill a 1.8-2.0 m stope lift that is drilled and blasted as inclined up-holes with a forward inclination of  $75-85^{\circ}$  ("half-uppers"). The typical drill pattern uses a drill burden of 0.6-0.8 m and spacing of 0.8-1.2 m, depending on vein thickness. Holes are charged with cartridge explosives and ignited with tape fuse. The powder factor is generally 0.4-0.5 kg/t. Stope blasting fills the void below with ore as the mining proceeds upwards. While mining upwards, only 30-35% of the stope ore may be removed until the entire stope is mined. At this point, all ore is removed from the stope, leaving the stoping void effectively empty. A crown pillar is maintained for the stope to provide regional stability and to minimize dilution from up-dip stopes. Ventilation, compressed air, and water are carried up the travel way raises to the stoping level. Loading of the ore from the draw points is by LHD into trucks (Stage 1) or electric rail over-throw loaders into rail cars (Stage 2).

As the backfill plant began operating in 2021, the mined out areas of shrinkage stopes in GC Mine are being backfilled in a predetermined schedule.

Figure 16.4 depicts the Shrinkage stoping method as used at GC Mine.

Figure 16.4: Typical Shrinkage Stope Layout

Sources: GC Mine

## 16.6.2 Resue Stoping

Vein and access development preparation is essentially the same as for shrinkage stoping except that an elevated sill drive (3 m on-dip height) is established along with draw points (generally limited

to two or three) to provide access to the raise positions (raises equipped with steel liners as mill holes).

Resue stoping veins are typically higher-grade and generally between 0.20 m (minimum extraction width 0.3 m) and 0.80 m width. Resue stoping involves separately blasting and mucking the high grade narrow vein and waste required to achieve a minimum stoping work width.

The mining crew consists of miners using hand-held pneumatic drills. Half-uppers lifts are drilled and blasted in essentially the same manner as for shrinkage stoping. After an ore lift is blasted and cleaned, the footwall is blasted and used to fill the void mined out. This process is repeated until the crown pillar is reached. The entire stope is left filled with waste from the cleaning of the footwall.

The blasted ore is transported by wheelbarrow and/ or hand shovelling to the steel-lined mill-hole. The steel pass is constructed in lift segments as the stope is mined upwards. The base of the steel pass is held in place with a timber set. The footwall waste is then cleaned to maintain a minimum mining width (typically 0.8 m for GC Mine) and to provide the working platform for the next stope lift. In contrast to shrinkage stoping, the mined-out stope is left filled with waste from the cleaning of the footwall necessary to maintain a minimum mining thickness and to provide a working platform.

The order of vein extraction and footwall cleaning is generally dependent on the condition of the vein hangingwall contact. Where the vein hangingwall contact is distinct and stable, the vein is extracted first; otherwise, the footwall waste is extracted first followed by vein.

Rubber mats and/ or old conveyor belting are placed on top of the levelled waste after each waste lift to minimize ore dilution with the waste (ore losses) and also to minimize over-cleaning of the waste (dilution). Cleaning of the ore consists of hand shovelling and hand carting to the steel pass which connects to the mill hole cross-cut. The rubber mats and/ or old conveyor belt are rolled up and removed for reuse prior to blasting the footwall and forming the next platform lift.

In-stope ore transporting may potentially be improved by using scraper winches with small hoes.

Figure 16.5 depicts the resue stoping method at GC Mine.

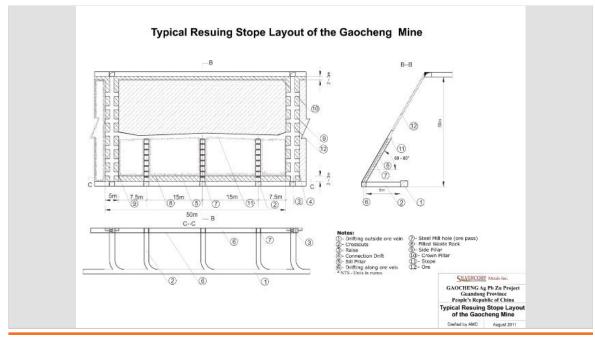


Figure 16.5: Typical Resuing Stope Layout

Sources: GC Mine

#### 16.6.3 Overhand Cut and Fill

OCAF mining is suitable for ore bodies with steep dips and vein thicknesses of 2 to 7 m. Key design factors for this method similar as shrinkage method.

Stopes are arranged along the strike of the ore body, with lengths of 80 and 100 m, widths corresponding to the ore body thickness, and heights of 50 m.

Each stope is a relatively independent mining unit, divided into lifts with heights of 1.8 to 2 m.

The lift is mined and cemented backfilled to a height of 1.8 to 2 m, matching the height of the open void. The final layer is backfilled to the roof.

There are two manways, which also serve for ventilation, are positioned on either side of the stope, with the ore pass located in the footwall level.

Ore is extracted using a scraper or loader. When a loader is used, footwall ramps and sub-levels are designed for personnel, materials, and equipment access.

Crown pillars and rib pillars are left intact, but no sill pillars are retained.

Figure 16.6 depicts the OCAF method at GC Mine, and Figure 16.7 below shows an operated OCAF stope.

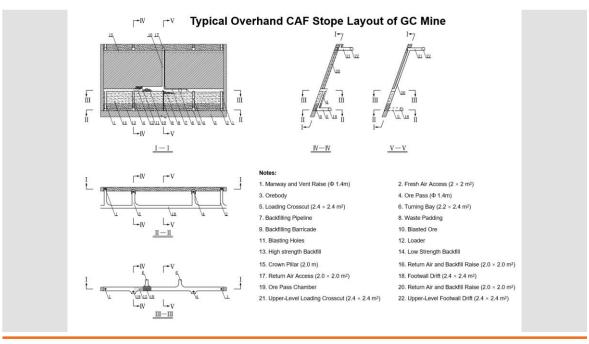


Figure 16.6: Typical OCAF Stope Layout

Sources: GC Mine

Figure 16.7: Operation of OCAF Stope



Sources: SRK site visit

## 16.6.4 Stope Management and Grade Control

The purpose of stope management is to implement stope operation procedures for dilution reduction via the Mining Quality Control Department. The department has a total of four technical staff,

including management, mine engineer, geologist, and technician. The mine engineer in the group is responsible for supervising the stope operation procedure, with stope inspection occurring at least once per day to check that mine contractors are following procedure guidelines. The geologist and geological technician are responsible for stope geological mapping and sampling, which occurs every 1.5 m of stope lift. The department also measures the mined area of a stope at the end of each month for mine contract payment and reconciliation purposes.

Key aspects of the stope inspection are as follows:

- Ensuring that the back and floor of the stope are flat prior to drilling blasting holes
- Checking to ensure the boundary of the mineralization and drillhole locations are correctly marked with red paint before drilling, as presented in Figure 16.8
- Checking to ensure the length, orientation, direction, location, slope gradient, and number of blast holes drilled
- Ensuring drillholes are inclined not less than 60 degree to the horizontal, are not longer than 2 m, and are drilled optimally relative to vein and excavation width to minimize dilution
- In a resuing stope, checking if the stope floor is covered with rubber mat/ belting before blasting
- In a resuing stope, checking to make sure that waste is sorted first and left in the stope before mucking ore to the mill holes after blasting; also ensuring that the floor and walls are cleaned with a broom to minimize ore losses before footwall slashing
- After blasting, checking that the stope back is not more than 3.5 m high and the steel mill holes in a resue stope are properly covered with steel grid.

Regarding contract payments, a mine contractor is paid based on the quantity of ore mined. As it may be seen as an incentive for the contractor to maximize material removed from the stope, contractor payments are governed by a specific formula that calculates planned ore tonnes based on extraction to design and a planned dilution factor. During mine operations, each rail car or small tricycle load of ore is weighed at a weigh station outside the mine portals. If weighed ore tonnes are greater than planned ore tonnes from a given stoping area, the mine contractor is paid solely based on the planned tonnes. For shrinkage stopes, an adjustment for paid tonnes is required to be made, since a stope usually takes several months to complete and, generally, only blast swell is removed until the stope nears completion.



Figure 16.8: Stoping Management and Blasting Holes

Sources: SRK site visit

## 16.7 Mine Services

#### 16.7.1 Ventilation

Mine ventilation is practiced as set out by Chinese laws and regulations. Among key ventilation regulations are:

- minimum ventilation volume per person (4 m³/ min/ person);
- minimum ventilation velocity (typically 0.25 0.50 m/ sec dependent on location or activity); and
- minimum diluting volume for diesel emissions (4 m³/ min/ kW).

The primary ventilation generally flows from west to east using the main levels interconnected by dedicated level vent raises (plus active stope accesses). The upper level(s) where stoping has been completed are used as return airways to separate the fresh and exhaust air. A series of air/ ventilation doors and sealed walls are utilized in the ventilation system. Inactive development headings and draw points are sealed to enhance the ventilation circuit by minimizing leakage.

#### **Primary Ventilation**

The ventilation volume is predominantly influenced by the minimum air velocity for the various development and production activities. No diesel equipment is required for Stage 2 stoping. The peak ventilation volume is estimated to be 220 m³/ sec inclusive of 30% air leakage. The total air quantity is 210 m³/ sec, with 100 m³/ sec from the decline and 110 m³/ sec from the shaft. The primary fan (FBCDZ-NO32) is powered by YBF-450-12P electrical motors (250 kW x 2, one for standby).

#### The fresh air intake airways are:

- Main Shaft (6.0 m diameter located approximately at Mine Section 22) with air flow of 110 m³/ sec at the collar. The friction factor acknowledges hoisting equipment and fittings in the shaft. For hoisting intake airways, there is a regulatory requirement for air purification prior to a level receiving fresh air from the Main Shaft
- Main decline (4.2 m x 3.6 m located approximately at Mine Section 26) with 50 m<sup>3</sup>/ sec at the portal
- Exploration decline (3.7 m x 3.45 m located approximately at Mine Section 28) with 50 m<sup>3</sup>/ sec at the portal.

#### The return air exhaust airways are:

- Stage 2 Ventilation Shaft (3.5 m diameter located approximately at Mine Section 52). The fan duty point is 140 m³/ sec at 2,070 Pa (total pressure). The friction factor assumes the shaft is furnished with a ladderway. The exhaust fan configuration is axial (250 kW/ 380 V) mounted horizontally with a fan diffuser for silencing.
- The development on the inlet side is configured to enable emergency egress
- The Stage 2 Ventilation Shaft is developed internally from within a short drift with the fan installation also established within the drift development.

#### The key airway regulation requirements are:

- Vehicle access doors (airlock system) placed in the decline level accesses for the +100 mRL,
   +50 mRL, 0 mRL, -100 mRL, -150 mRL, -200 mRL and -250 mRL levels
- Two regulators on the -100 mRL level and one on the -50 mRL level to force air to the lower level working areas
- The Stage 1 Vent Shaft is sealed at the collar and is used as an internal exhaust
- All rock passes are assumed to be filled with rock for leakage purposes
- All stope and inter-level ventilation raises include ladderway resistances
- Two mine air-conditioners at the connection with the decline and main shaft in -300 mRL to cool the fresh air from the upper level.

#### **Secondary Ventilation**

The secondary ventilation consists of auxiliary fans for ventilating development faces, infrastructure chambers, loading and tipping areas and stope faces.

Development faces are ventilated using domestically manufactured fans (5.5 kW/ 380 V). A combination of forced and exhaust ventilation is applied for long blind-heading distances as required.

Stopes are force-ventilated using domestically manufactured fans (4 kW/ 380 V) via the access timber cribbed travel way. The stope air returns to the upper level via a second access travel way at 50 m strike spacing.

#### 16.7.2 Water Supply

Water consumption underground is primarily for drilling and dust suppression. Water supply and carried via pipelines along the drives, is sourced from the nearby sump(s) of recycle uses for underground works.

Personnel carry drinking water as required to remote workplaces in water containers.

## 16.7.3 Dewatering

Underground water is discharged to surface using conventional centrifugal pumps via pipelines installed in the decline, and Main Shaft. Underground water pumped to surface in two stages, and is collected in ponds at the decline portal or Main Shaft for sediment settling prior to being pumped to the process plant water treatment station.

At the Stage 1 pump station (-300 mRL), three pumps (Model MD155-67×5, capacity 155 m³/h) are installed, as shown in Figure 16.9. Water from -300 mRL pump station is discharged through two steel pipelines installed in the shaft to the Stage 2 pump station. The effective water storage volume of the inner and outer sumps totals 2,000 m³ at -300 mRL.

At the Stage 2 pump station (-50 mRL), three pumps (Model MD280-43×8, capacity 280 m³/h) are installed. Water from -50 mRL pump station is discharged through two steel pipelines installed in the decline to the surface. The effective water storage volume of the inner and outer sumps totals 2,450 m³ at -50 mRL.

As indicated, three pumps are installed in each pump chamber. Under normal water inflow conditions one unit is running, one unit is under maintenance, and the other is on standby. Under maximum water inflow conditions, two pumps will be running. Underground pumps are specified for clean water discharge, so each pump station has its own twin compartment sediment settling arrangement. The capacity of these is equivalent to six to eight hours of normal water inflow condition (Safety Regulations on Metal and Nonmetal Mining Operation – National Standard GB16423-2006).



Figure 16.9: Pump and Power Stations at - 300mRL

Sources: SRK site visit

## 16.7.4 Power Supply

Power is provided from a 110 kV substation near Gaocun town, about 6 km from the mine site, which is fed from the Guangdong Province electrical grid system.

High voltage supply is 10 kV to the surface sub-stations. The mine has standby diesel generator power for essential mine facilities (pump stations, shaft operations, primary ventilation fans).

Underground sub-stations are located on each level. Level development utilizing electric mining equipment (drills) has incorporated additional sub-stations along the level to manage voltage drop from the sub-station.

Low voltage supply from the underground sub-stations is 415 V (drills), 380 V (pumps and fans), and 220 - 250 V (lighting and rail operation).

There are two 1,500 kW diesel power generators on standby.

## 16.7.5 Compressed Air

Compressed air is primarily used for drilling, i.e. hand-held 'jackleg' drilling in the stopes and conventional development faces. There is some minor use for shotcreting, and blasthole cleaning, as necessary.

Compressed air is reticulated to all levels and to the emergency refuge stations.

Compressors (electrically powered two-stage piston compressors) are located adjacent to the decline portal (3 x 20  $m^3$ / min, 0.8 Mpa, 110 kW, and one 40  $m^3$ / min, 0.8 Mpa, 250 kW) and Main

Shaft brace area (7 x 40 m³/ min, 0.8 Mpa, 250 kW). Compressed air is reticulated using steel and plastic piping for air distribution via the Main Shaft.

#### 16.7.6 Communications

Mine surface communications are available by landline and mobile phone services.

Telephones are the base means of communicating with underground. Phones are located adjacent to the decline level accesses (Stage 1 set-up) and adjacent to the Main Shaft level accesses.

The WiFi signal covers the capital development on each level, the air doors at the connection between the shaft area and decline area, and drift which has filling pipelines of GC Mine. This is used to remote control and monitoring the hoisting, air doors, and power switching situation.

# 16.7.7 Explosive Magazine

Underground explosive magazines are located adjacent to each level return air shaft and are limited to one day of required bulk explosives and three days of required blasting ancillaries.

## 16.7.8 Maintenance Workshop

The mining contractor have their own mobile equipment workshop for repairs and servicing located adjacent to the decline portal. There are also underground drill service bays established close to the working areas in redundant stockpile areas to minimize tramming delays, as shown in Figure 16.10 below.

Mobile equipment repairs (trucks, loaders, etc.), other equipment breakdowns and equipment major services are conducted in the mining contractor's surface workshop with minor services conducted in redundant stockpile areas underground.

Minor equipment (such as jacklegs, secondary fans, development pumps, etc.) are also serviced in the mining contractor's surface workshop.

The electric locomotive and rail cars are serviced and repaired in a service rail siding located adjacent to the Main Shaft.

Other fixed and mobile equipment (primary pumps, surface electric locomotive, rail cars, vehicles, etc.) are serviced in surface workshop located adjacent to the Main Shaft. This is fully equipped with overhead crane, welding, electrical, hydraulic, lathe services, etc.

Surface Workshop

Exploration
Ramp Portal

UG Workshop

Figure 16.10: Surface and Underground Workshops

Sources: SRK site visit

# 16.8 Mine Equipment and Machinery

All mobile equipment and some minor fixed equipment are provided by the mining contractor.

GC Mine's fixed equipment is predominantly domestically manufactured and locally sourced (Guangdong Province). The equipment manufacturers are well known, and their equipment is commonly used for Chinese mining operations. Table 16.4 summarizes the contractor's equipment. Table 16.5 summarizes the GC mine equipment.

**Table 16.4: Mining Contractor Typical Key Equipment Summary** 

| Contractor Equipment                | Units | Manufacturer                                  | Model      | Capacity                   |
|-------------------------------------|-------|---|------------|----------------------------|
| Single boom jumbo                   | 1     | Atlas Copco                                   | BoomerK41  | 3700mm rod                 |
| Single boom jumbo                   | 1     | Atlas Copco                                   | BoomerK111 | 4100 mm rod                |
| Load haul dump truck                | 20    | Shandong Derui Mining Machinery               | WJ-1       | $1 \text{ m}^3$            |
| Load haul dump truck                | 2     | Guangxi Liugong Machinery                     | CLG833     | $3 \text{ m}^3$            |
| Raise boring                        | 2     | Hunan Jinyue Machinery Equipment              | JY-AT1500  | φ1000-1500                 |
| Truck                               | 12    | Fujian Longyan Shifeng Construction Machinery | LHF30      | 18 t                       |
| Personnel carrier                   | 2     | Anhui Tongguan Machinery                      | JY-5YR-16  | 16 persons                 |
| Shotcreter                          | 2     | Hunan Changde Shotcrete Machinery Factory     | HPZ-6      | 6 m <sup>3</sup> /hr       |
| Electric loader                     | 15    | Nanchang Hengye Mining                        | Z-30       | $0.3 \; \text{m}^3$        |
| Auxiliary stoping & development fan | 60    | Zib Ventilation Machine Plant                 | JK56-No4   | 0.1~3.4 m <sup>3</sup> /hr |
| Truck                               | 15    | Suizhou Shenwei Mining Machinery              | UO-5       | 3T                         |
| Jackleg                             | 120   | Tianshui pneumatic machinery                  | YT-28      |                            |

Sources: GC Mine

Table 16.5: GC Mine's Fixed Equipment Summary

| Equipment   | Stage | Units | Manufacturer   | Model                          | Capacity   |  |
|---|-------|-------|--|--------------------------------|--|--|
| Multi-rope friction hoister                       | 2     | 1     | Luoyang Zhongzhong Automation<br>Engineering           | JKMD-2.8*4PI                   | 1,200 t/day – ore+waste                                  |  |
| Primary fan                                       | 1     | 1     | Zibo Fan Factory                                       | DK62-12-No30/2 $\times$ 200KW  | $3474{\sim}8790{\rm m}^{\scriptscriptstyle 3}/{\rm min}$ |  |
| Primary fan                                       | 2     | 1     | Yanjing Equipment Manufacturing                        | FBCDZ-12-NO32/2 $\times$ 250KW | 3000~10800m³/min   |  |
| Waste and service cage                            | 2     | 1     | Xuzou Coal Mine Safety Equipment                       | 4# lengthen cage               |  |  |
| Multiple stage centrifugal pump50 mRL             | 1     | 3     | Chongqing Xiquan Pump Industry                         | MD280-43*8                     | Q=280 m <sup>3</sup> /h, 344 m<br>head                   |  |
| Multiple stage centrifugal pump300 mRL            | 2     | 3     | Chongqing Xiquan Pump Industry                         | MD155-67*5                     | Q=155 m <sup>3</sup> /hr, 335 m<br>head                  |  |
| Air compressor – decline                          | 1     | 1     | Shanghai Kangkeer Compressor                           | KG-150A                        | 20 m³/min at 0.8 Mpa                                     |  |
|   | 1     | 1     | Q-tech Air System Technology Ltd.                      | QGD250-8.5                     | 42 m³/min at 0.8 Mpa                                     |  |
|   | 1     | 1     | Engineering The Future Ltd.                            | BK132-8T                       | 22 m³/min at 0.8 Mpa                                     |  |
|   | 1     | 1     | Engineering The Future Ltd.                            | BK110-8T                       | 20 m³/min at 0.8 Mpa                                     |  |
| Air compressor - main shaft                       | 2     | 3     | Engineering The Future Ltd.                            | JN270-8-//                     | 43.12 m <sup>3</sup> /min at 0.8 Mpa                     |  |
|   | 2     | 2     | Guangdong Hande Precision Machinery Co. Ltd.           | HJ-350A                        | 42 m <sup>3</sup> /min at 0.8 Mpa                        |  |
|   | 2     | 1     | Q-tech Air System Technology Ltd.                      | QGD250A-8.5                    | 42 m³/min at 0.8 Mpa                                     |  |
|   | 2     | 1     | Q-tech Air System Technology Ltd.                      | QGD250AC                       | 43.3 m³/min at 0.8 Mpa                                   |  |
| Voltage transformer - decline                     | 1&2   | 1     | Zhuhai Nanfang Hualitong Special Transformer Co., Ltd. | S11-1250KVA 0.4/10KV           |  |  |
|   | 1&2   | 1     | Zhuhai Nanfang Hualitong Special Transformer Co., Ltd. | S11-3150Kva                    |  |  |
| Voltage transformer - Stage2<br>Ventilation shaft | 1&2   | 1     | Zhuhai Nanfang Hualitong Special Transformer Co., Ltd. | S11-800kVA                     |  |  |
| Voltage transformer150mRL                         | 1&2   | 1     | Zhejiang Fujie Electric Co., Ltd.                      | KSG11-500/10                   |  |  |
| Voltage transformer150mRL                         | 1&2   | 1     | Zhejiang Fujie Electric Co., Ltd.                      | KSG-1000/10-0.4                |  |  |
|   | 1&2   | 1     | Zhejiang Fujie Electric Co., Ltd.                      | KSG-500/10-0.4                 |  |  |
| Voltage transformer300mRL                         | 1&2   | 1     | Zhejiang Fujie Electric Co., Ltd.                      | KSG-1000/10-0.4                |  |  |
|   | 1&2   | 1     | Zhejiang Fujie Electric Co., Ltd.                      | KSG-500/10-0.4                 |  |  |
| Electric generator - Stage2<br>Ventilation shaft  | 1&2   | 2     | Guangzhou Yinge Power Technology Co., Ltd.             | MTAA11-G3                      | 250KVA   |  |
| Electric generator - Shaft                        | 1&2   | 1     | Guangzhou Yinge Power Technology Co., Ltd.             | QSK60-G4                       | 1500KVA  |  |
| Electric locomotive                               | 2     | 24    | Hunan Xiangtan Qiankun Mining Equipment Co., Ltd.      | CKY2.5-6GB                     | 75m3/h   |  |
| Rail car  | 2     | 136   | Luanchuan County Sanli Engineering Co., Ltd.           | YFC-0.81                       | 0.75 m <sup>3</sup>                                      |  |
| Mine air-condition                                | 2     | 2     | Shenzhen Del Refrigeration Equipment Co., Ltd.         | ILG320DV (20°)                 | 10000-12000m³/h  |  |
| Ceramic plunger pump                              | 2     | 2     | Xianyang Keyu Machinery Manufacturing Co., Ltd.        | YB300                          | 45m³/h   |  |

Sources: GC Mine

# 16.9 Mine Safety

Mine safety is practiced as set out by Chinese health and safety laws and regulations.

There is an Occupational Health and Safety ("OHS") department for the GC Mine, staffed with three mine safety trainer officers and seven technicians.

The mine and mining contractors are tasked with providing appropriate Personal Protective Equipment ("PPE") to their own staff. The PPE available includes protective clothes, hard hats, safety steel toe capped boots, work gloves, face masks, back armour, respiratory protective apparatus (self-rescuers), headband lamp and ear plugs.

The OHS department provides safety training, enforces the OHS policies and procedures, makes recommendations on mine safety issues, and carries out daily inspections of the underground workings and explosive usages.

Safety committees are headed by the General Manager and made up of the Deputy General Manager, Mine Superintendent, Safety Department Supervisor, and representatives of the mining contractor. The committees are coordinated by the GC Mine Safety Department. The mine management and the safety officers are required to have valid mine safety training certificates issued by the Provincial Bureau of Safe Production and Inspection.

#### 16.9.1 Fire Prevention

Water for fire protection is provided via the Main Shaft with 200 t surge capacity. Primary reticulation and secondary reticulation are by 108 mm and 89 mm nominal bore pipes respectively, which are installed and maintained in accordance with national safety standards (Safety Regulations on Metal and Non-metal Mining Operation – National standard GB16423-2006).

Fire extinguishers are provided and maintained in accordance with regulations and good practice at the electrical installations, pump stations, service workshops, and locomotive garage and wherever a fire hazard is identified to exist.

Visible fire signs and fire safety notices are posted in appropriate areas.

A suitable number of fire extinguishers are provided and maintained at each stationary diesel motor and transformer substation. In addition, the main fan air flow can be reversed within 10 minutes.

Every light duty vehicle carries at least one fire extinguisher of adequate size and proper type.

All heavy-duty mobile mine equipment; loaders, trucks, drills, charge-up machines, etc. are equipped with on-board fire suppression systems.

A mine-wide warning system is installed at the main mine intake airway entries to alert underground workers to the event of an emergency. This consists of audible alarms, ventilation status lights, and stench gas.

#### 16.9.2 Mine Rescue

Fully trained and equipped mine rescue teams are site-based with team members provided by the mining contractor and always maintained on-site. The mine rescue teams are trained for surface and underground emergencies.

A mine rescue Emergency Response Plan has been developed and is kept up to date.

A mine rescue room is provided in the surface mine offices adjacent to the Main Shaft.

An emergency clinic is maintained on-site and manned by a physician 24 hrs per day. GC Mine also has a contract established with the Yunfu General Hospital to provide emergency services and ambulance extraction to the hospital.

At the beginning of 2023, GC Mine had signed a contract with the ShaoGuan Mine Rescue Team.

## 16.9.3 Emergency Egress

Egress to surface is available via all ventilation shafts, Exploration decline, Main decline, and Main Shaft.

The Main Shaft and ventilation shafts are equipped with staged ladderways incorporating general mine services and partitioned from other shaft activities; they are provided with appropriate ventilation profile clearance and established in accordance with good practices.

Lateral egresses are appropriately signposted and maintained for walking access.

## 16.9.4 Mine Refuge Stations

A permanent refuge station is located at -300 mRL in the bottom of the Main Shaft, as shown in Figure 16.11.

Static and/ or mobile refuge stations are established on each mine level with the exception of the +100 mRL, which is not a production level.

The static refuge stations or mobile refuge chambers are established in accordance with good practices with independent air supply (compressed bottled oxygen), communications, first aid, etc., and are of appropriate capacity to cater for the personnel numbers in the active mine areas.

For the +50 mRL, 0 mRL, and -50 mRL levels, mobile mine refuge chambers are located in close proximity to the active development and production stopes in redundant stockpile areas.

For the remaining levels from -100 mRL to -300 mRL, static mine refuge stations are located adjacent to the Main Shaft.

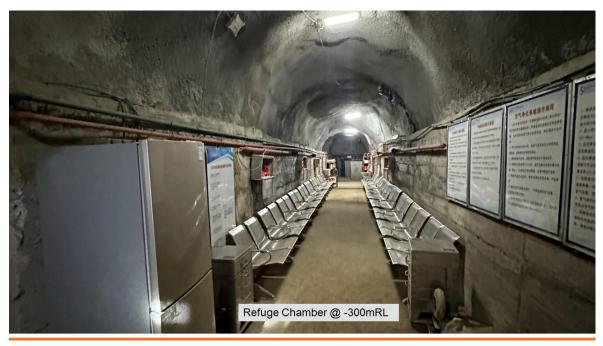


Figure 16.11: Permanent Refuge Station at -300mRL

Sources: SRK site visit

## 16.10 Mine Personnel

GC Mine operates the mine using mining contractors for development, production, as well as the operation and maintenance of GC Mines fixed equipment. GC Mine provides their own management, technical services, and supervision staff. The mine is operated on a continuous roster for 365 days per year working three eight-hour shifts per day.

Figure 16.12 summarizes the GC Mine employee numbers from year 2011 to 2023. These numbers exclude geological drilling, external consultants, and advisor. The mining contractor average yearly employee numbers are approximately 280 for all years.



Figure 16.12: GC Mine Employees over Years

Sources: GC Mine

# 16.11 Life of Mine ("LOM") Plan

The GC Mine has operated since 2014 Q4 and achieved peak capacity in 2021, which is approximately 313 ktpa. The mine has been designed as 1,000 tpd and operates 330 day/ year for the first 2 stages. The third stage is proposed to utilise the current shaft capacity, however addition capacity is also available via decline.

Annual ore production is projected to rise from the current level of around 313 kt to 342kt in FY2025 and then steady to 363 kt by FY2026 for the remainder of its envisaged mine life. The key reason of production ramp up is associated with the third stage development and more stopes employing mobile equipment. The key target of the mine plan is to achieve the planned grade, mining more efficiently and lower the cost base.

The mine schedule is directed towards achieving the grade target as provided by mine management. The progress of mine sequencing and scheduling has been designed to facilitate this target and is as following:

- Stope by stope planning considering the currently mining activities and grades target;
- Design the ore drive as grade control or production exploration development as necessary;
- Factored stope preparation development, such as level drive, cross-cut, raises based on the stope geometry parameters;
- Design and schedule the mine layout development, such as decline, lower level ore drive (exploration drive) for long-term consideration; and
- Sum up the scheduling result and optimization.

The productivity applied to mine schedule is summarised as followings:

- Resuing stope: maximum 600t/ month, the typical planned productivity is 300-500t/ month
- Shrinkage stope: 1,200t/ m including the broken ore mucking period, the typical planned productivity is about 1,000t/ m;
- OCAF stope: using as same as shrinkage stopes' parameters.
- Decline: 100m/ month with jumbo drilling
- Level drive or ore drive: 50m/ month with LHD cleaning
- Raises: all consider 50m/ month as jackleg drilling, though three raise boring machine are available on site. The boring time for a 50m raise is about 15 days.

The mine scheduled on monthly basis for the first year, and quarterly for the second year, the annually for the rest of mine life. The schedule summarized in Table 16.6 below and Figure 16.13 and Figure 16.14 below.

Table 16.6: Summary of LOM Schedule

| Fiscal<br>Year  | ROM   | AgEq | Ag  | Pb   | Zn   | Capital<br>Dev | Exploration Dev | Stope Prep<br>Dev | Total Dev |
|-----------------|-------|------|-----|------|------|----------------|-----------------|-------------------|-----------|
| Unit            | kt    | g/t  | g/t | %    | %    | m              | m               | m                 | m         |
| FY2025<br>Q2-Q4 | 257   | 238  | 71  | 1.12 | 3.02 | 5,774          | 2,580           | 8,168             | 16,522    |
| FY2026          | 363   | 256  | 77  | 1.23 | 3.08 | 11,584         | 1,595           | 5,887             | 19,067    |
| FY2027          | 362   | 251  | 83  | 1.35 | 2.69 | 4,954          | 4,513           | 9,713             | 19,180    |
| FY2028          | 362   | 251  | 85  | 1.10 | 2.91 | 3,511          | 3,794           | 10,760            | 18,066    |
| FY2029          | 362   | 253  | 90  | 1.10 | 2.84 | 1,649          | 4,498           | 11,506            | 17,653    |
| FY2030          | 362   | 252  | 81  | 1.08 | 3.06 | 100            | 5,463           | 11,442            | 17,006    |
| FY2031          | 363   | 248  | 87  | 1.16 | 2.72 | -              | 4,461           | 9,534             | 13,995    |
| FY2032          | 362   | 249  | 81  | 1.27 | 2.77 | -              | 5,563           | 8,800             | 14,364    |
| FY2033          | 362   | 248  | 77  | 1.17 | 2.94 | -              | 3,281           | 9,112             | 12,394    |
| FY2034          | 363   | 247  | 89  | 1.13 | 2.68 | -              | 2,563           | 5,282             | 7,844     |
| FY2035          | 363   | 249  | 81  | 1.39 | 2.62 | -              | 1,794           | 5,364             | 7,158     |
| FY2036          | 363   | 246  | 82  | 1.42 | 2.52 | -              | 1,562           | 5,066             | 6,629     |
| FY2037          | 362   | 248  | 81  | 1.19 | 2.86 | -              | 1,461           | 3,950             | 5,412     |
| FY2038          | 359   | 236  | 65  | 1.15 | 2.99 | -              | -               | 1,294             | 1,294     |
| LOM<br>total    | 4,965 | 248  | 81  | 1.21 | 2.83 | 27,572         | 43,128          | 105,878           | 176,584   |

Source: GC Mine, summarized by SRK

#### Notes

<sup>&</sup>lt;sup>1</sup> Fiscal year is from 1<sup>st</sup> April to 31<sup>st</sup> March of the next year. FY2025 is from 1 April of 2024 to 31 March of 2025;

<sup>&</sup>lt;sup>2</sup> ROM stands for run of mine, which includes dilution and ore loss.

<sup>3</sup> Dev stands for drive development

<sup>&</sup>lt;sup>4</sup> Stope Prep stands for stope preparation development

<sup>&</sup>lt;sup>5</sup> Inferred Mineral Resources are not included.

<sup>&</sup>lt;sup>6</sup> ROM is considered feed the processing plant directly or rehandled from the temporary stockpile. Therefore, the processing plan is the same as mine schedule.

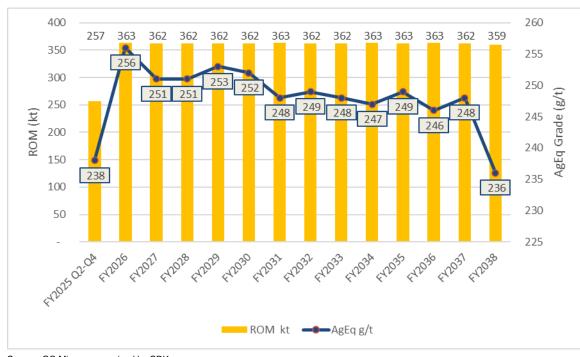


Figure 16.13: ROM Schedule over LOM

Source: GC Mine, summarized by SRK

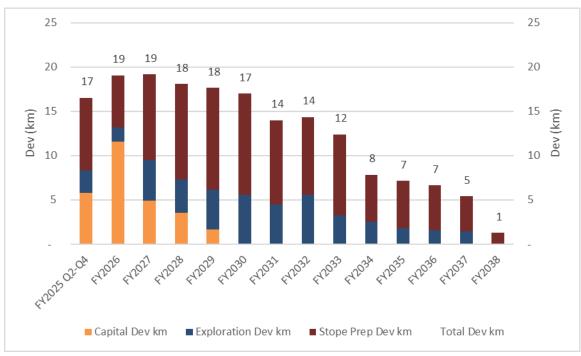


Figure 16.14: Development Schedule over LOM

Source: GC Mine, summarized by SRK

The capacity since FY 2026 (about 362-363ktpa) is over the mining permit capacity which is 330ktpa. SRK opines that there is potentially a risk of GC Mine being fined by the Regulator for over production. However, that would not be material risk for the mining activities as 10% plus the permitting could be

managed by shutting down or ramping down during the raining season or the month of Spring Festival.

# 17 Recovery Method

### 17.1 Introduction

GDMAI completed the *Preliminary Design of Mining and Processing of GC Lead-Zinc Mine in Yun'an District, Guangdong Province* in April 2011. The GC processing plant has a designed processing capacity of 528,000 tpa (1,600 tpd), and is built on a steep hillside next to the main shaft. It makes full use of the terrain to make the slurry flow (gravity flow) by itself and saves pumping costs. The GC processing plant has one crushing production line, two identical grinding and floatation production lines, one production line for tin recovery from tailings, four concentrate dewatering lines, one tailings dewatering line, and one TSF for dry tailings. The GC processing plant was completed and put into operation in 2014. Depending on the mining supply quantity, a flexible operation system is adopted for the crushing production line. One or two grinding and floatation production lines will run. The actual annual ore processing volume is between 260kt and 630kt. In March 2023, an X-ray intelligent sorting line (XRT intelligent sorting) was built to replace the previous hand-sorting operation. At present, the pre-sorting system is still in the process of adjustment/ optimisation. Figure 17.1 is the photo of the GC processing plant.



Figure 17.1: Photo of GC Processing Plant

Sources: SRK site visit in April 2024

### 17.2 Production Process

The production process of GC processing plant is shown in Figure 17.2. It includes crushing-screening, XRT intelligent sorting, grinding-classification, lead preferential flotation, zinc-sulphur mixed flotation and zinc-sulphur separation flotation, tin recovery by gravity separation, concentrate

thickening-filtering, tailings thickening-filtering, tailings piling and discharging, etc. The main workshops can be seen in Figure 17.3. A brief description of the process flowsheet is as follows:

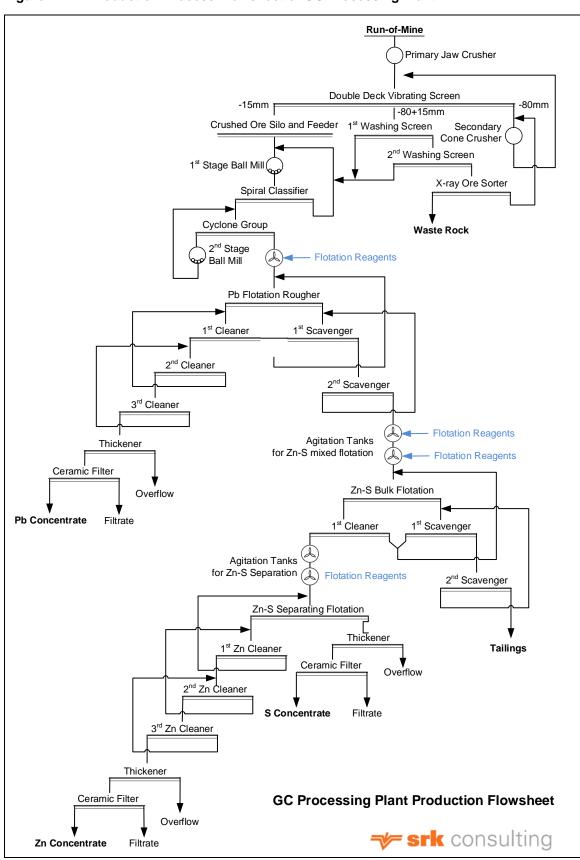


Figure 17.2: Production Process Flowsheet of GC Processing Plant

Sources: SRK site visit in April 2024

Figure 17.3: Main Production Workshop Photos of GC Processing Plant



Sources: SRK site visit in April 2024

#### Crushing and Screening

The plant adopts a two-stage closed-circuit crushing process, with the ROM feed size of no more than 350mm and the product size of less than 15mm (-15mm).

The crushing circuit consists of a ROM bin from which the ore is drawn by a vibrating feeder into the primary jaw crusher. The jaw crusher product is screened on a double deck vibrating screen, with the -15 mm fines being conveyed forwards to the fine ore bin while the +60 mm material feeds the secondary cone crusher via a buffer storage bin to maintain choke feeding of the crusher. The 15–60 mm material is transported into the XRT intelligent sorting system by belt conveyor. Currently, the feed size class of the pre-sorting system is still in the process of optimization.

### Intelligent Ore Sorting

XRT intelligent sorting system was built and put into trial production in March 2023, being expected to replace the previous hand-sorting operation to improve the throughput and reduce the cost of the plant.

The screening intermediate products (15–60 mm) enter into two stage vibrating screens (ZK2142) in the XRT intelligent sorting system by belt conveyor for two-stage washings. The pulp produced by washing is pumped to the grinding system through the pipeline while the oversize product (clean ore) is distributed to the XRT intelligent sorting machine for waste rock discarding. The waste rock is conveyed to a waste rock silo for sale, and the concentrate returns to the buffer ore bin of the secondary cone crusher.

#### Grinding and Classification

The grinding process adopts a two-stage closed circuit, equipped with grate ball mill + spiral classifier and overflow ball mill + hydrocyclone group, with a final overflow fineness of 80% passing 75  $\mu$ m ( $P_{80}$ =75 $\mu$ m) and a concentration of 35% to 38%.

The grinding circuit is configured in two parallel series, each with a capacity of 800 tpd, for reasons of flexibility and easy maintenance.

#### Flotation

Following on the grinding circuit, the flotation circuit is similarly configured in two parallel series. The overflow (O/F) of the hydrocyclone group flows to the lead rougher conditioning tank mixing with flotation reagents, and then to the lead rougher flotation cells. The lead flotation circuit is 'one roughing + two scavengings+ three cleanings', to obtain lead concentrate. The lead tailings then flow to the zinc-sulphur mixed flotation process, with the circuit of 'one roughing + two scavengings + one cleaning', to produce the tailings and zinc-sulphur mix concentrate. The mix concentrate then enters the zinc-sulphur separation flotation process, with the structure of 'one roughing + two scavengings + three cleanings', to produce the zinc concentrate and sulphur concentrate simultaneously.

#### Concentrate Dewatering

The lead, zinc, and pyrite 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 using a ceramic filter, with a final concentrate moisture content of 10% to 12%. After dewatering, the concentrate is bagged and loaded by front-end loader into trucks for transport to the smelter customers.

#### Tailings Handling

The tailings are firstly pumped to a deep cone thickener for concentration, and the underflow is switched through the valve into the press filtration system or into the backfill system. The thickener underflow concentration can reach more than 72%.

The tailings deposition method is dry stacking. The filtered tailings are conveyed to the TSF via conveyor belts and then spread by bulldozer on a bench-by-bench basis.

# 17.3 Processing Equipment

The processing facilities of GC processing plant include one crushing system and one newly built X-ray intelligent sorting system, two grinding and flotation production lines, dewatering lines for lead, zinc and sulphur concentrates, tailings dewatering and dry tailings piling facility, and tin recovery from flotation tailings by gravity separation. The main processing equipment is shown in Table 17.1.

Table 17.1: Main Processing Equipment of GC Processing Plant

| No. | Item   | Туре               | Power (kW)    | Quantity |
|-----|--|--------------------|---------------|----------|
| 1   | 1# Head Tank (Return Water)                              | Ф15000×6000        |               | 1        |
| 2   | 2# Head Tank (Raw Water)                                 | Ф13000×6000        |               | 1        |
| 3   | ROM Bin (Coarse Crushing)                                | 135m3              |               | 1        |
| 4   | Vibrating Feeder   | XZGZ-2500×1100×250 | 3             | 1        |
| 5   | Jaw Crusher  | PE600×900          | 75            | 1        |
| 6   | Middling Bin (Fine Crushing)                             | 24.8m <sup>3</sup> |               | 1        |
| 7   | Vibrating Feeder   | GZG903             | 0.75×2        | 1        |
| 8   | Cone Crusher   | PYH-3Z             | 220+5.5+4     | 1        |
| 9   | Double-deck Heavy-duty Type<br>Circular Vibrating Screen | 2YKR2460H          | 45            | 1        |
| 10  | Vibrating Screen (Washing)                               | ZKB2240            | 15 <b>×</b> 2 | 2        |

| No. | Item                                    | Туре          | Power (kW) | Quantity |
|-----|---|---------------|------------|----------|
| 11  | Electric Vibrating Feeder               | GKG903        | 1.5×2      | 1        |
| 12  | X-ray Intelligent Sorting Machine       | KK104-24-M    | 22         | 1        |
| 13  | Screw Air Compressor                    | RUO-Y110-8    | 110        | 1        |
| 14  | Waste Rock Bin                          | Ф8000×11500   |            | 1        |
| 15  | Fine Ore Bin (Ball Mill)                | 718m3         |            | 2        |
| 16  | Disk Feeder                             | DK-1000       | 1.5        | 8        |
| 17  | Grate Ball Mill                         | MQG2700×3000  | 400        | 2        |
| 18  | Overflow Ball Mill                      | MQY2700×3000  | 400        | 2        |
| 19  | High Weir Single Spiral Classifier      | FG-24         | 18.5       | 2        |
| 20  | Polyurethane Hydrocyclone Group         | FX-250GJ×8    |            | 2        |
| 21  | Slurry Pump (Cyclone Group)             | 6×4E-WXR      | 75         | 4        |
| 22  | Air Agitation Flotation Machine         | XCF-10        | 30         | 16       |
| 23  | Air Agitation Flotation Machine         | KYF-10        | 22         | 38       |
| 24  | Mechanical Agitation Flotation Machine  | BF-2.8        | 5.5        | 24       |
| 25  | Lifting Agitation Tank                  | XBT-2500      | 22         | 4        |
| 26  | Lifting Agitation Tank                  | XBJ-10        | 4          | 2        |
| 27  | Agitation Tank                          | RJ-25         | 11         | 6        |
| 28  | Agitation Tank                          | RJ-20         | 7.5        | 2        |
| 29  | Centrifugal Blower                      | C360-1.25     | 220        | 3        |
| 30  | Polyurethane Hydrocyclone Group         | FX-250GJ-15×6 |            | 1        |
| 31  | Slurry Pump (Cyclone)                   | 80SPH         | 75         | 2        |
| 32  | Reciprocated Swing Belt Sluice          | 6-10500       | 1.1        | 2        |
| 33  | Suspended Swing Belt Sluice             | 2800×5000     |            | 11       |
| 34  | 6-S Type Fine Sand Shaking Table        | 6-S1825*4520  | 1.1        | 12       |
| 35  | 6-S Type Fine Tailings Shaking<br>Table | 6-S1825*4520  | 1.1        | 25       |
| 36  | Desulphurization Flotation Machine      | 4A、5A         |            | 12       |
| 37  | Central Drive Thickener                 | TXZ-9         | 4          | 1        |
| 38  | Central Drive Thickener                 | NXZ-15        | 5.5        | 1        |
| 39  | Central Drive Thickener                 | NXZ-20        | 5.5        | 1        |
| 40  | Ceramic Disc Vacuum Filter              | HTG-12        | 2.2        | 1        |
| 41  | Ceramic Disc Vacuum Filter              | HTG-20/5      | 2.2        | 1        |
| 42  | Ceramic Disc Vacuum Filter              | HTG-45/5      | 2.2        | 2        |

Sources: GC Mine Processing Equipment Summary Table

#### 17.4 Production Records

The production records of the GC processing plant in recent years are shown in Table 17.2. The lead concentrate has a grade of about 45% Pb, and the recovery rate of lead is about 90%. It contains about 1,500g/t silver, with a recovery rate of about 60%. It also has a zinc content of about 6%. The zinc concentrate has a zinc grade of about 44%, a zinc recovery rate of about 89%, a silver content of about 290g/t, and a silver recovery rate of about 23%. The sulphur grade of sulphur concentrate is about 45%, and the sulphur recovery rate is about 49%.

XRT intelligent sorting system was completed and put into trial operation in March 2023. It has been proved that it can replace hand-sorting. At present, it is still in the process of continuous optimization to increase the tailings discarding rate and reduce the grade of waste rock.

The copper content in the lead concentrate reaches  $2\% \sim 3\%$ , and it is possible to produce copper concentrate by flotation from the lead concentrate. Given that the lead concentrate also contains

around 6% zinc, SRK proposes to carry out regrinding-flotation test on lead concentrate to reduce the zinc content and obtain copper concentrate. Reducing the zinc content of lead concentrate may improve the recovery of zinc from the zinc concentrate.

Table 17.2: Production Records of GC Processing Plant

| Item  | Unit   | FY2022  | FY2023  | FY2024  | FY2025 Q1 |
|---|--------|---------|---------|---------|-----------|
| Ore Tonnes for Pre-sorting                      | t      |         |         | 317,986 | 93,920    |
| Ore Grade for Pre-sorting                       | Pb %   |         |         | 1.10    | 0.86      |
|   | Zn %   |         |         | 2.44    | 2.17      |
|   | Ag g/t |         |         | 64      | 59        |
| Tonnes of Pre-sorting Waste                     | t      |         |         | 27,937  | 10,176    |
| Grade of Pre-sorting Waste                      | Pb %   |         |         | 0.15    | 0.14      |
|   | Zn %   |         |         | 0.42    | 0.43      |
|   | Ag g/t |         |         | 9       | 12        |
| Discarding Rate of Pre-sorting                  | %      |         |         | 8.79    | 10.83     |
| Metal Loss of Pre-sorting Waste                 | Pb %   |         |         | 1.18    | 1.77      |
|   | Zn %   |         |         | 1.50    | 2.15      |
|   | Ag %   |         |         | 1.28    | 2.26      |
| Ore tonnes for Grinding and Flotation           | t      | 318,042 | 299,597 | 290,050 | 83,745    |
| Head Grade for Grinding                         | Pb %   | 1.53    | 1.32    | 1.19    | 0.94      |
|   | Zn %   | 3.19    | 2.75    | 2.64    | 2.38      |
|   | Ag g/t | 75      | 75      | 69      | 64        |
| Output of Lead Concentrate                      | t      | 9,655   | 7,797   | 7,076   | 1,710     |
| Grade of Lead Concentrate                       | Pb %   | 44.86   | 45.46   | 44.24   | 41.65     |
|   | Zn %   | 6.13    | 5.80    | 5.34    | 5.28      |
|   | Ag g/t | 1437    | 1728    | 1686    | 1914      |
| Yield of Lead Concentrate (to grinding feed)    | %      | 3.04    | 2.60    | 2.44    | 2.04      |
| Recovery of Lead Concentrate (to grinding feed) | Pb %   | 89.20   | 89.83   | 90.54   | 90.18     |
| ,   | Zn %   | 5.83    | 5.50    | 4.94    | 4.54      |
|   | Ag %   | 58.39   | 59.81   | 59.63   | 60.87     |
| Output of Zinc Concentrate                      | t      | 20,028  | 16,726  | 15,656  | 4,267     |
| Grade of Zinc Concentrate                       | Zn %   | 45.40   | 44.24   | 43.96   | 42.15     |
|   | Ag g/t | 301     | 297     | 285     | 293       |
| Yield of Zinc Concentrate (to grinding feed)    | %      | 6.30    | 5.58    | 5.40    | 5.10      |
| Recovery of Zinc Concentrate (to grinding feed) | Zn %   | 89.61   | 89.93   | 90.00   | 90.38     |
| ,   | Ag %   | 25.39   | 22.04   | 22.34   | 23.26     |

Sources: GC Mine

# 17.5 Consumptions and Services

### 17.5.1 Reagent and Material Consumptions

The reagent and material consumptions for processing in the recent years are shown in Table 17.3, where the data in the table represent the consumptions under normal production conditions. SRK is informed by the GC processing plant manager that the crushing system typically operates at night

during low electricity price period to save crushing costs, with a price difference of about double between peak and valley electricity prices.

Table 17.3: Reagent and Material Consumptions in GC Processing Plant

| Reagents                        | Unit  | FY2022 | FY2023 | FY2024 | FY2025 Q1 |
|---------------------------------|-------|--------|--------|--------|-----------|
| ZnSO <sub>4</sub>               | kg/t  | 1.09   | 1.05   | 1.03   | 1.24      |
| W-1                             | g/t   | 99     | 93     | 86.35  | 92.41     |
| Na <sub>2</sub> SO <sub>3</sub> | g/t   | 117    | 122    | 114.64 | 163.23    |
| BK903                           | g/t   | 2.83   | 5.2    | 5.64   | 0.71      |
| ADD                             | g/t   | 2.5    | 0.7    | 0.78   | 1.89      |
| SN-9                            | g/t   | 69     | 40     | 27.44  | 4.13      |
| CuSO <sub>4</sub>               | g/t   | 193    | 168    | 161.4  | 124.79    |
| 8230                            | g/t   | 3      | 6      | 4.88   | 1.18      |
| SNX                             | g/t   | 118    | 106    | 103.46 | 124.75    |
| Sodium Humate                   | g/t   | 265    | 265    | 262.27 | 192.74    |
| Na <sub>2</sub> CO <sub>3</sub> | g/t   | 42     | 23     | 17.61  | 15.34     |
| 2# Oil                          | g/t   | 24     | 25     | 26.53  | 27.03     |
| H <sub>2</sub> SO <sub>4</sub>  | g/t   | 633    | 488    | 406.8  | 173.38    |
| Lime                            | kg/t  | 2.1    | 1.57   | 1.56   | 1.42      |
| SHMP                            | g/t   |        | 17.77  | 41.43  | 0         |
| Steel Balls                     | kg/t  | 1.29   | 1.27   | 1.24   | 1.26      |
| Electricity                     | kWh/t | 50.35  | 52.84  | 54.77  | 50.23     |

Sources: GC Mine.

### 17.5.2 Water Supply

The water consumption is about 5m³ per tonne of ore, which mainly comes from mineral processing return water and mine water. The mine water is pumped and discharged to the wastewater processing station for coagulation and sedimentation treatment, and then pumped to the TSF reclaiming basin, where it is further precipitated and clarified together with the return water from the GC processing plant, and then pumped to the return water head tank of the GC processing plant.

New water comes from the Hashui River, and a large-diameter water intake well is built by the riverside. Water is pumped to the nearby transfer pump station, from where it is pumped to the raw water processing facility on the top of the mine, and after purification, it flows to the clean water head tank at the GC processing plant, mainly used for the preparation of mineral processing reagents, pulp pump sealing and ground flushing. (Figure 17.4)

Figure 17.4: New Water Intake, Pumping and Purification Processing Facilities



Sources: SRK site visit in April 2024

### 17.5.3 Laboratory

The GC Mine has built a high-standard laboratory, GC Lab, equipped with X-ray fluorescence spectrophotometer, ICP-OES Aivo550, atomic absorption spectrophotometer, infrared carbon and sulfur analyser, fire assay analysis room, volumetric analysis room (including balance room, Au-Ag-Cu analysis room, Pb-Zn-Sn analysis room), responsible for the preparation and laboratory analysis of the production samples of the GC processing plant and mining exploration/ ore definition samples. There is also a mineral processing laboratory to conduct tests when the processing index is abnormal, to timely guide the adjustment of the operation parameters for the GC processing plant. Figure 17.5 shows some photos of the GC Lab.



Figure 17.5: Photos of the GC Laboratory

Sources: SRK site visit in April 2024

### 17.5.4 Machine Maintenance

The GC maintenance workshop is equipped with appropriate equipment to meet daily maintenance requirements. The workshop facilities are equipped with craneage, welding, and basic machine-shop capabilities.

More extensive maintenance and major overhaul needs can be outsourced, with appropriate contractors or equipment suppliers.

# 18 Project Infrastructure

#### 18.1 Introduction

GC Mine has been commercial operated since Q2 2014. Both the surface and underground infrastructure has been established. Some of the infrastructures are presented in Figure 18.1.

Mine Access

Landform of GC Mine

Magazine

Water Treatment Facility

Figure 18.1: Part of Facilities of GC Mine

Sources: SRK site visit

# 18.2 Tailings Storage Facility

Paved ROM Pad

#### 18.2.1 Overview

The GC TSF is a dry-stacking tailings dam, located in a valley on the south side of the GC processing plant, 200m away from the GC processing plant in a straight line, as shown in Figure 18-2. Between the processing plant and the TSF are the tailings dewatering station and the underground mine paste plant. The tailings from the GC processing plant are pumped to the deep cone thickener for thickening, after which they are primarily used for the underground paste filling needs, and the remaining tailings are pressed and filtrated in the tailings press filter plant, and the filter cake is transported to the TSF by the belt conveyor, which will be levelled and compacted by bulldozers and excavators. The total designed dam height of the TSF is 99.5m (elevation of 233m), and the total storage capacity is 2,989,300 m³. As of April 2024, the tailings stacking height is 63m (elevation of 196.3m) with the tailings stacking stock of about 1,180,000 m³ (39% of capacity), and the remaining storage capacity is 1,809,300 m³ corresponding to a tailings stacking volume of 3,160 kt according to a tailings stacking specific gravity of 1.75t/ m³.

Camp & Buildings

The GC TSF is a third-class dam with a number of displacement monitoring facilities and phreatic line monitoring systems installed to monitor the safety of the dam body and obtained the latest "Safety Production Permit" on 31 August 2023, valid until 30 August 2026.

Tailings Storage Pond

Reclaiming Basin

Deep Cone Thickener

Filtration Room

Tailings Triess Files

Tailings Dam Slope

Tailings Stacking Machinery

Figure 18-2: Photos of Tailings Storage Facility

Sources: SRK site visit

### 18.2.2 Tailings Dam and Tailings Discharge

The tailings dam is composed of the initial dam and the tailings stacking dam. The initial dam is 21.5m high, the stacking dam is 78.0m high, and the total dam height is 99.5m. The initial dam is rolled rockfill dam, with the dam crest elevation of 155.0m, the dam base elevation of 133.5m, the dam height of 21.5m, the dam crest width of 5.0m and the dam crest axis length of 60.0m.

The tailings stacking dam adopts the upstream damming method, and the final crest elevation is 233.0m. After thickened and press filtered, tailings are transported to the TSF by the belt conveyor, levelled and compacted by bulldozers and excavators from the front of the TSF to the tail, and a gradient of 1% to 10% is formed slightly toward the tail of the TSF, so that the rainwater on the surface of the TSF is collected at the tail of the TSF and discharged outside of the TSF through the

drainage system under the dam. The tailings' stacking dam is divided into sub-dams every 5m higher, and each sub-dam is equipped with a 2.5m wide berm with longitudinal and transverse drainage ditches of cement laid stone masonry constructed inside the berms. Dam face drainage ditches and dam abutment ditches are constructed at all the berms and dam abutments to divert and drainage the slope water catchment. The designed total height of the stacking dam is 78.0m. A total of 8 sub-dams have been built and the 9th sub-dam is currently being built. The outer slope of the stacking dam is covered with soil and planted with turf for slope protection. During the site visit, SRK noticed that the slopes of all the completed sub-dams have been planted with grass and restored to green.

After tailings are stacked to the designed final stacking dam crest elevation of 233.0m, in order to make the beach surface as a whole "high at the tail and low in front of the dam" and eliminate the possibility of beach water ponding and overtopping, a beach surface with a slope of 1.5% is formed at the tail towards the dam body. Finally, the beach surface is covered with 30 to 50cm clay, planted with grass and restored to green, and TSF surface drainage ditches are built to divert and drainage the beach water catchment.

### 18.2.3 Flood Control and Drainage System and Return Water System

In addition to the above-mentioned slope and abutment drainage ditches, permanent flood interception ditches have been built on the slopes on both sides of the TSF to intercept the upstream slope rainwater from entering the TSF. The catchment area of the TSF below the flood interception ditches is  $0.23 \, \mathrm{km^2}$ . The rainwater on the dam slope is diverted to the reclaiming basin through the slope drainage ditches, and the rainwater on the TSF surface collected at the tail of the TSF is discharged to the reclaiming basin through the drainage system in the TSF. The drainage system in the TSF is completely constructed in accordance with the wet discharge TSF, which is composed of the drainage chute at the tail of the TSF and the drainage culvert at the bottom. The drainage chute and culvert are all constructed of reinforced concrete structures and rectangular sections with the sectional dimensions (width  $\times$  height) of  $1.5 \times 1.8 \, \mathrm{m}$  and  $0.5 \times 1.05 \, \mathrm{m}$ , respectively.

The tailings seepage water is discharged to the reclaiming basin by the drainage chute, the drainage culvert and the seepage drainage zone under the TSF. The seepage drainage zone is made of woven bagged gravel and stacked next to the drainage chute and the drainage culvert on both sides to form blind ditches with a trapezoidal section.

The reclaiming basin is located downstream of the initial dam, and there is a retaining dam 100m away the initial dam, forming a reclaiming basin with a total capacity of about  $40,000 \, \text{m}^3$ , which also serves as a sedimentation and clarification sump. The retaining dam is an impermeable rolling earth-rock dam, with the dam crest elevation of 135.5m, the dam base elevation of 113.2m, the dam height of 22.3m, the dam length of about 71m, and the dam crest width of 5m. A spillway is built on each side of the abutments to prevent flood water from overflowing dam during extreme weather events and ensure the safety of the retaining dam. The section size of the spillway is  $2.0 \times 2.9 \, \text{m}$ . A return water pump house is built in the reclaiming basin, which is connected to the left bank by a trestle, and the reclaimed water in the basin is pumped to the return water head tank of the GC processing plant for the use of mineral processing production.

### 18.3 Waste Rock Dump

The +215 mRL waste rock dump ("WRD") is located a short distance to the east of the mine portal. SRK were advised that the immediate capacity of the order of 275,000 m³ (~558 kt). Previous site observations and review of surface plans referenced that there appeared to be room for a downstream extension of the waste dump location and/ or ability to increase the waste dump height to approximately +300 mRL to accommodate all waste produced over the LOM.

However, waste rock produced to date has largely been used for construction purposes transported off-site by local companies, minimum of charge, again to be used for construction activities. The WRD areas on site are thus empty. The removal of waste rock from site is anticipated to continue for the foreseeable future. The waste rock sale contracts are reviewed on annual basis. SRK has reviewed the available contract which will expire at the end of October 2024. The sale price is RMB 5.3/t (including 13% VAT) of waste rock. SRK also noted as stated by the management of GC Mine, the waste rook is free when the aggregate market is low.

### 18.4 Backfill Plant

The backfill plant is designed for cemented full tailings, with a system capacity of 60 – 80 m³/hr, or around 300 m³/day assuming seven hours operation. The envisaged concentration of the backfill is around 69 - 72% solids, at a density of approximately 1.9 t/m³. The capacity of the plant at the projected utilization is more than sufficient to supply underground backfill requirements at the LOM mining rates. The process of the backfill plant is presented in Figure 18.3.

Tailings

Cement tanker

Compressed-air discharge

Flocculant addition system

Two stage stirred mills

Backfill pump

Emergency pool

Figure 18.3: Flowsheet of Backfill Plant

Sources: GC Mine

The backfilling system is mainly composed of the sub-systems of tailings delivery, tailings thickening, tailings mixing, water addition, backfill control, cement supply, pipeline conveying, water supply, and power supply.

The full tailings with a mass concentration of 10 - 12% produced by the process plant are pumped into the deep cone thickener in order to thicken to the range of 66 - 68% solids. The concentrated tailings are conveyed to the mixing system by gravity from the bottom of the thickener.

The bulk cement is stored in a steel silo from where it is delivered to the mixer. The concentrated tailings are mixed with water and cement in the mixer to prepare a backfilling slurry, which is then pumped underground via a backfill raise or raises and pipelines, to be delivered to various underground shrinkage stope voids and OCAF stope as required.

Tailings feed to the backfill plant can come directly from the mill or from the dry stack tailings area.

GC Mine notes that underground tailings backfill has obvious advantages, including reduction of the surface storage footprint and thus being more environmentally friendly, facilitation of in situ ore pillar removal and thus maximizing ore production, enhancing mine support with associated safety benefits, and improvement of the ventilation circuit through elimination of potential short-circuiting.

The construction of the backfill plant was completed, and tested on 24 December 2019. After surface and underground full-process backfilling tests and adjustment, the system began operating on 15 July 2020. The operation record of the backfill plant is shown in Table 18.1.

Table 18.1: Operation Record of Backfill Plant

| Year      | Backfill Volume | Backfill Material | The Percentage of Tailing in Backfill |
|-----------|-----------------|-------------------|---------------------------------------|
| Unit      | m³              | t                 | %                                     |
| FY2020    | 43,900          | 53,997            | 19.90%                                |
| FY2021    | 79,050          | 97,231            | 34.20%                                |
| FY2022    | 99,531          | 122,423           | 49.30%                                |
| FY2023    | 101,118         | 124,375           | 53.90%                                |
| FY2024    | 104,011         | 127,933           | 53.81%                                |
| FY2025 Q1 | 28,128          | 34,598            | 48.82%                                |

Sources: GC Mine

# 18.5 Power Supply

There is a 110 kV substation near Gaocun Township, about 6 km from the mining area. This is fed from the Guangdong Province electrical grid system. GC Mine uses this substation as the main source of power for the mine.

There are two overhead power lines for the 6 km route. Two 15.0 MW diesel generators are designated for emergency backup to the man-hoist, underground ventilation system, water pumping and essential services in the plant.

A new 10 kV substation was built in the mining area to provide power service for the operations area as a whole. The power supply and distribution in the process plant, mining area, administrative and living areas are configured based on needs.

#### 18.6 Access Road

Access to the GC Mine from Guangzhou is via 178 km of four-lane express highway to Yunfu, then 48 km of paved road to the GC Mine site. A railway connection including high speed rail from Guangzhou to Yunfu is also available.

There are 15 road segments assigned to this Project, some are site and others general access roads. There are no issues of large equipment and/ or ore concentrates transportation.

### 18.7 Water Supply

The source of water for the mine is from local creeks and gullies that flow into the Hashui Creek. The flows typically vary from about 11,000 m³/day (dry season) to 69,000 m³/day (wet season), with the wet season being from April to September inclusive. The annual average rainfall varies in the range of 1,400 – 1,734 mm. The water quality and quantity from the local creeks is sufficient to meet the GC Mine requirements, which are of the order of 2,000 m³/day.

Water is drawn from the Datian reservoir and pumped to an elevated hilltop water tank (at approximately 343 mRL) for water treatment filtration and surge capacity storage. The treated water is then gravity fed to the mine site and processing plant (at approximately 248 mRL).

The key specifications of the water supply system are:

- Datian reservoir water tank with 100 m³ of settling capacity and 200 m³ clean water capacity.
- Hilltop water tank with 300 m<sup>3</sup> storage, and water filtration capability via two filtration units.

Water consumption underground is primarily for drilling and dust suppression.

Potable water is provided underground adjacent to the Main Shaft with water quality conforming to regulatory requirements. Personnel carry drinking water as required to remote workplaces in water containers.

# 18.8 Sewage Treatment

A sewage treatment station is located at the mine site for processing of mine camp sewage.

# 18.9 Water Treatment Facility

There is a water treatment facility at GC Mine to treat the water that is not recycled, before the water is released to the environment, to comply with standing regulations.

### 18.10 Site Communication

A dispatching system is used for production dispatching at the mine. A 200-gate digital programmed control dispatching exchange is deployed at the dispatching room of the office building under production management personnel. To facilitate external communication, 10 pairs of trunk lines are used. The internet and cell phone signal are well established on site by service providers.

### 18.11 Dams and Tunnels

GC Mine has built an approximately 1 km long diversion tunnel with two dams on the Hashui Creek to relocate the course of this river beyond the projected subsidence zone of influence.

### 18.12 Surface Maintenance Workshop

The surface maintenance facilities include a workshop building area of 756.5 m<sup>2</sup>, in which the following auxiliary services are provided:

- Tyre processing, maintenance, and servicing
- Welding
- Electrical
- Hydraulic
- Tools, parts, and material warehouse

The workshop is mainly responsible for maintenance of large-scale production equipment, vehicle repair, processing and repair of components, and the processing of emergency parts. One LD 10 t electric single-beam crane, one BC6063B shaping machine, one CD6240A saddle bed lathe, one Z3040 x 16/I radial drilling machine, and one bench drilling machine are located in the workshop, as well as alternating current arc welding, rectification arc welding, snag grinding machine, cut-off machine, electric drying oven, mobile air compressor, etc. Maintenance facilities such as tool rack, working platform, gas cutting device, etc. are also provided, along with a dynamic balancing machine, tire picking machine, tire mending machine, battery charger, and vehicle repair/ inspection pit.

Mechanical maintenance facilities also include equipment and spare parts store, dump oil depot, reserve electric locomotives, and tramcars maintenance workshop and stockpile yard.

The mining contractor has their own mobile equipment workshop for repairs and servicing adjacent to the decline portal. There are underground drill service bays established in redundant stockpile areas to minimize tramming delays for the slower moving drills.

Mobile equipment repairs (trucks, loaders, etc.), other equipment breakdowns and equipment major services are conducted in the mining contractor's surface workshop with minor services conducted in the redundant stockpile areas. Minor equipment (such as jacklegs, secondary fans, development pumps, etc.) are also serviced in the mining contractor's surface workshop.

Electric locomotives and rail cars are serviced and repaired in a service rail siding located adjacent to the Main Shaft.

Other fixed and mobile plant (primary pumps, surface electric locomotive, rail cars, vehicles, etc.) are serviced in GC Mine surface workshop located adjacent to the Main Shaft.

# 18.13 Explosive Magazine

The explosives magazine is located in the valley to the south-east of the GC Mine. It is permitted to hold two of 5t of bulk explosives magazines and 20,000 detonators, representing approximately 15

days and 30 days of supply, respectively. Security services are used, and detonators are scanned on release from the magazine for security audit purposes.

### 18.14 Fuel Farm

Diesel fuel is required for the mobile mine equipment, some small trucks, and surface vehicles. The surface fuel tank and pumping station set-up allows for refuelling of both light vehicles and heavy duty mining equipment.

A properly constructed containment for storage of fuel is located in the vicinity of the diesel generators and fuel dispensing facilities. The storage facility is located down-wind from the mine air intake fans and a reasonable distance from buildings, camp, and mine portal (referencing local occupational health and safety regulations and fire-fighting requirement). The lined containment area is constructed such that spills are confined and can readily be cleaned, so that the need for extensive and costly remediation work can be avoided during site closure.

No fuel is allowed to be stored underground. Trucks and loaders are re-fuelled at the surface fuel farm and dispensing facility.

### 18.15 Camp and Building

The mine office complex to the east of the warehouse comprises the administration and engineering buildings, which provide working space for management, supervision, geology, engineering, and other operations support staff.

Administrative, Living, and Welfare Facilities are composed of administrative office building, hostel, canteen, washroom, and residential building, as well as dining and entertainment facilities.

# 18.16 Security and Gate House

A security/ gatehouse is located on the site access road. The access road off a local village road has a manual gate with signage indicating that vehicles and persons are now entering the private Property.

## 19 Market Studies and Contracts

### 19.1 Commodity Prices

Neither GC Mine, nor SRK has conducted a market study in relation to silver, lead and zinc concentrates which will be produced by GC Mine. Silver, lead and zinc are freely traded commodities on the world market for which there is a steady demand from numerous buyers.

Figure 19.1 below represent independent analyst, Consensus Market Forecasts ("CMF") for the silver, lead, and zinc outlooks (in real USD), which was issued in June 2024. The commodity price forecasts are considered by SRK to reflect a reasonable outlook for the future.

Figure 19.1: Outlook for Silver, Lead and Zinc Prices by CMF

Sources: CMF, released on 17 June, 2024

Table 19.1 Below summarized the long-term prices quoted for Mineral Resources and Mineral Reserves estimation purposes.

Table 19.1: Long-Term Commodities Prices Applied to Estimates

| Commodity | Units    | SPOT  | Analysts | LTP-High | LTP-Low | Mineral<br>Reserves | Mineral<br>Resources |
|-----------|----------|-------|----------|----------|---------|---------------------|----------------------|
| Silver    | (USD/oz) | 29.24 | 8        | 28.48    | 16.50   | 22.00               | 28.50                |
| Lead      | (USD/t)  | 2,105 | 8        | 2,160    | 1,650   | 2,050               | 2,650                |
|           | (USc/lb) | 95    | 8        | 98       | 75      | 93                  | 121                  |
| Zinc      | (USD/t)  | 2,757 | 9        | 2,806    | 2,160   | 2,650               | 3,450                |
|           | (USc/lb) | 125   | 9        | 127      | 98      | 120                 | 156                  |

Sources: CMF, released on 17 June, 2024

## 19.2 Concentrate Marketing

It is understood that the GC mine concentrates are marketed to existing smelter customers in China and appropriate terms have been negotiated for FY2025. Totally 7 contracts with 3 smelters on zinc concentrates and 5 lead concentrates are available for reviewing. All contracts have freight and related expenses to be paid by the customers.

SRK has summarized the payable metals in concentrate prices based on the discount method which is notarized in the sale contracts. The prices mentioned in the contracts are all in RMB and including ("Incl.") 13% VAT. The discount method mentioned in the contracts is summary as below:

- Silver metal in lead concentrate. The payable factor is depending on the silver grade in the concentrate.
  - Payable 92%, Ag grade ≥ 2,500 g/t
  - Payable 91.5%, Ag grade ≥ 2,000 g/t
  - Payable 91%, Ag grade ≥ 1,500 g/t
  - Payable 90.5%, Ag grade ≥ 1,000 g/t
  - Payable 88%, Ag grade ≥ 800 g/t
- Lead metal in lead concentrate. The basic grade is Pb 50%. The abatement of price is RMB 360/t metal contained in concentrate. The penalty on grade floating are as follows:
  - Fix abatement RMB 360 /t metal in concentrate, Pb grade ≥ 50 %
  - RMB 360 /t + (50%-Grade) x 100x RMB 20, 40% ≤ Pb grade ≤ 50 %
  - RMB 560 /t + (40%-Grade) x 100x 50 RMB, 35% ≤ Pb grade ≤ 40 %
  - RMB 810 /t + (35%-Grade) x 100x 100 RMB, 30% ≤ Pb grade ≤ 35 %
- Zinc metal in zinc concentrate. The penalty is based on not only Zn grade, but also the metal prices.
  - If the zinc metal price is no more than 15,000 RMB/t incl. VAT
    - Fix abatement 5,300 RMB/t metal in concentrate, Zn grade = 50 %
    - RMB 5,300 /t (Grade-50%) x 100x 20 RMB, Zn grade > 50%
    - RMB 5,300 /t + (50%-Grade) x 100x 20 RMB, 45%≤Zn grade < 50 %</li>
    - RMB 5,400 /t + (45%-Grade) x 100x 50 RMB, 40%≤Zn grade < 45 %</li>
    - RMB 5,650 /t + (40%-Grade) x 100x 100 RMB, 35%≤Zn grade < 40 %</li>
  - If the zinc metal price is more than RMB 15,000 /t incl. VAT, additional 20% of the premium against the based price is applied together with the penalties applied as the price is lower than RMB 15,000 /t.
- Silver metal in zinc concentrate. The payable factor is depending on the silver grade in the concentrate.
  - RMB 0.8 per gram, Ag grade ≥ 400 g/t

- RMB 0.7 per gram, Ag grade ≥ 300 g/t
- RMB 0.6 per gram, Ag grade ≥ 150 g/t
- Not pay, Ag grade < 150 g/t</li>

It is also understood that an acceptable arsenic level in base metal concentrates, without penalty, for Chinese smelters is of the order of 1.0% and notes that the GC Mine lead and zinc concentrates are acceptable to those smelters. Should the arsenic level ever be higher than 1.0% in zinc concentrates, the payable Zn content would be discounted by 0.5% Zn for every 1% As above the 1.0% As level.

It is also understood that there are some other measures on valuable elements in concentrates other than silver, lead, and zinc, such as copper or gold. However, there is no available data from the Mineral Resource estimates and not material to the operation performance.

### 19.3 Operational Contracts

SRK reviewed the available mining and development contract with professional services provider dated 13 December 2022, which will expire in 2025. The items and budget support the costing records and forecasting for Opex.

The waste rock from the development which is transported to the temporary waste rock dump located near the portals of shaft, main decline and exploration decline, are available to sell. The sale price is RMB5.3 per tonne waste including 13% VAT. The freight and related expenses to be paid by the customer.

The waste from the ore sorting system is also sold at a sale price of RMB 12 per tonne incl. 13% VAT. The freight and related expenses to be paid by the customer.

The domestic garbage disposal is contracted out to local provider. Totally about RMB 302,820 per annual including 3% VAT.

The environmental impact monitoring service is contracted out to professional service providers, on waste, surface underground and TSF water, waste gas, soil, and noise. The contract budget about RMB 74,000 per annual including 6% VAT for the service.

# 20 Environmental Studies, Permitting, and Social or Community Impact

### 20.1 Review Objective

The objective of this 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 GC Mine.

### 20.2 Review Process, Scope, and Standards

The process for verifying the environmental permitting and licensing compliance and operational conformance for the GC Mine comprised a review and inspection of the projects' 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.

## 20.3 Permitting

According to the requirements of relevant laws and regulations of China, a series of environmental protection related licences and permits should be obtained during the operation of mines, such as safety production permit, water use permit and site discharge permit.

#### 20.3.1 Safety Production Permit

The safety production permits for the GC Mine are presented in Table 20.1.

Table 20.1: Details of the Safety Production Permits for the GC Mine

| Areas                        | GC Mine  |
|------------------------------|--|
| Safety Production Permit No. | [2023] Wb012 II2                               |
| Issued To                    | Guangdong Found Mining Ltd. (GC Mine)          |
| Issued By                    | Guangdong Province Emergency Management Bureau |
| Licensed Activity            | Lead-zinc-silver Mine Underground Mining       |
| Issue Date                   | 31 August 2023                                 |
| Expiry Date                  | 30 August 2026                                 |
| Areas                        | GC Mine TSF                                    |
| Safety Production Permit No. | [2023] Wc013 II2                               |
| Issued To                    | Guangdong Found Mining Ltd. (GC Mine TSF)      |
| Issued By                    | Guangdong Province Emergency Management Bureau |
| Licenced Activity            | TSF Operation                                  |

| Issue Date  | 31 August 2023 |
|-------------|----------------|
| Expiry Date | 30 August 2026 |

SRK considers that the above safety production permits cover the entire mine site and TSF of the GC Mine.

#### 20.3.2 Water Use Permit

The water use permit for the GC Mine is presented in Table 20.2.

Table 20.2: Details of the Water Use Permit for the GC Mine

| Water Use Permit No. | D445303S2022-0007  |  |  |
|----------------------|--|--|--|
| Issued To            | Guangdong Found Mining Ltd.  |  |  |
| Issued By            | Yunfu City Yun'an District Agriculture, Rural and Water Resources Bureau |  |  |
| Issue Date           | 15 March 2022  |  |  |
| Expiry Date          | 14 March 2027  |  |  |
| Water Supply Source  | Surface water  |  |  |
| Water Use Allocation | 200,000m³/year   |  |  |

### 20.3.3 Site Discharge Permit

According to relevant laws and regulations, enterprises, institutions, and other producers and operators whose production and emissions of pollutants are small and have minimal impact on the environment are not required to apply for pollutant discharge permits, but they should fill out pollutant discharge registration forms. GC Mine has registered the discharge of fixed pollution sources on 19 May 2023. The registration number is 91445300680642284X002Y. Registration is valid until 18 May 2028. The permissible discharge of waste includes dust and treated mine dewatering water.

# 20.4 Status of Environmental Approvals

The basis of environmental policy in China is contained in the 2018 Constitution of the PRC. 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 PRC (2019) and the Environmental Protection Law of the PRC (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 construction, mining and processing operations. The company provided SRK with the EIA report and approval for the project, with specific details outlined in Table 20.3.

Table 20.3: Details of the EIA Report and Approval for the GC Mine

| Project  | Produced By                                       | Production<br>Date | Approved By  | Approval<br>Date |
|--|---|--------------------|--|------------------|
| Gaocheng Pb-Zn Mine<br>Development Project<br>(0.33Mtpa) | Guangdong Heli<br>Engineering Survey<br>Institute | March, 2010        | Guangdong Province<br>Environmental Protection<br>Bureau | June 13,<br>2010 |

Furthermore, a water and soil conservation plan ("WSCP") is required for a project constructed in the area where is prone to water and soil erosion. The company provided SRK with the WSCP report and approval for the project, with specific details outlined in Table 20.4.

Table 20.4: Details of the WSCP Report and Approval for the GC Mine

| Project  | Produced By   | Production<br>Date | Approved By                           | Approval<br>Date  |
|--|---|--------------------|---------------------------------------|-------------------|
| Gaocheng Pb-Zn Mine<br>Development Project<br>(0.33Mtpa) | China Water Resources Pearl River Planning, Surveying & Designing Co., Ltd. | February,<br>2009  | Guangdong<br>Province Water<br>Bureau | March 25,<br>2009 |

SRK reviewed above EIA report and approval and concluded that the EIA basically cover the main production facilities including mine site, GC processing plant and TSF. SRK considers that the GC Mine prepared the EIA report in accordance with relevant Chinese legal requirements and obtained corresponding government approval.

## 20.5 Environmental and Social Aspects

#### 20.5.1 Flora and Fauna

According to the baseline study of EIA report, the vegetation in this area belongs to the South Asian tropical monsoon rainforest, also known as evergreen monsoon rainforest and monsoon evergreen broad-leaved forest. Due to the strong interference and destruction of human activities, only some zonal vegetation exists near the TSF in this area, such as Ficus of the mulberry family. Most of plants are secondary vegetation and artificial vegetation. No large wild mammals were seen during the survey, and small passerine birds were occasionally seen in this area. There are no endangered animals and plants in the GC Mine's area. The landform and topography in the project's area may be changed by mining, waste rock and tailings dumping, haul roads, office buildings and dormitories, and other facilities. The WSCP report anticipates that the disturbed land area due to project development will be 28.7 hm². The development of the project may also result in impacts to or loss

of flora and fauna habitat. If effective measures are not taken to manage and rehabilitate the disturbed areas, the surrounding land can become polluted and the land utilization function will be changed, causing an increase in land desertification, water loss and soil erosion. The EIA concludes that the river diversion will not cause significant impacts on the habitats of terrestrial wildlife or lead to species extinction. The impacts on terrestrial wildlife are considered temporary. However, the river diversion will alter the original habitat of aquatic organisms, particularly impacting benthic organisms to a greater extent. According to the preliminary investigation of the EIA report, there are no rare or endangered plants or animals in the mining area, TSF, or surrounding areas. Additionally, there are no natural reserves or forest parks in the vicinity.

### 20.5.2 Water Management

The region is located in a subtropical warm and humid area with abundant rainfall, characterized by well-developed surface water systems, mainly consisting of gullies and tributaries, with the largest river being the Shenbu River. The Shenbu River flows through the northeastern periphery of the mining area. All surface water sources in the region drain into the Shenbu River. Additionally, within the mining area, the Hashui River flows into the Shenbu River from the southwestern corner of the mining area.

The drinking water source for the project is mountain spring water. Before use, the spring water undergoes filtration through sand, activated carbon, and reverse osmosis. The treated mountain spring water is also provided to nearby villagers for their use. For daily domestic water needs, water is sourced from the Hashui River and treated before use. Underground mining production water and supplementary fresh water for the GC processing plant comes from treated dewatering water. SRK suggests that GC Mine adopts a sustainable water supply management strategy aimed at minimizing its effects on natural ecosystems, preventing aquifer depletion, and mitigating impacts on water users. Simultaneously, the company should engage in consultation with essential stakeholders, such as governments and potentially affected communities, to comprehend and address any conflicts arising from water demand, community reliance on water resources, and existing local conservation regulations.

The potential negative impacts of the GC Mine to surface water and ground water are due to the indiscriminate discharge of untreated production and domestic wastewater. In addition, the mining activities may lead to the change of the groundwater table. The main wastewater pollution sources of the project include dewatering water, processing wastewater, tailings and waste rock leachate, hazardous waste leachate, wastewater from maintenance workshop, industrial site rainwater, domestic sewage, etc. The EIA report states that mine dewatering may cause groundwater table to drop and have negative impacts on agricultural and domestic water sources. The EIA approval requires all the processing wastewater for the GC Mine should be collected and reused for production.

During the site visit, it was observed that the project development had led to the diversion of the Hashui River, which was accomplished through the use of culverts. SRK also observed that there was a dewatering water treatment plant constructed at the GC Mine to process the mine water. Lime, PAC (Polyaluminum chloride), and PAM (Polyacrylamide) are used to treat the mine water. After treatment, some of the mine water is reused to supplement fresh water for underground mining operations and GC processing plant production, while the remaining portion, meeting the Class III standard of the "Surface Water Environmental Quality Standards" (GB3838-2002), is discharged. All processing wastewater is internally recycled and not discharged externally. Domestic sewage is

centrally collected, undergoes biochemical treatment, and is reused for landscaping within the GC processing plant area without external discharge. The treatment methods for mine water, processing wastewater and domestic sewage for the project are generally consistent with the requirements outlined in the project's EIA approval.

According to the monitoring reports provided by the GC Mine, the project conducts comprehensive environmental monitoring every quarter, which includes water quality monitoring. Additionally, surface water and groundwater monitoring are conducted once each year, separately during the first and second halves of the year. Sampling locations for surface water include the discharge point of mine water as well as upstream and downstream points of the Hashui River from the discharge outlet. Monitoring parameters include ammonia nitrogen, copper, cadmium, arsenic, iron, manganese, etc. SRK reviewed the surface water monitoring reports provided by the company for the year 2023, which indicated that the water quality monitoring results were within the relevant standard ranges. However, the groundwater monitoring conducted in May 2023 revealed that the manganese levels in two groundwater monitoring wells and one domestic water well exceeded the relevant standard limits.

SRK recommends that water quality monitoring be undertaken upstream and downstream of the project area (including the TSF), and also any site water discharges. SRK also suggests enhancing some water pollution control measures to reduce the risk, such as surface hardening, second containment facility and accident pool, are recommended to mitigate the water pollution risks.

### 20.5.3 Waste Rock and Tailings Management

The project does not have a permanent WRD, but there is a temporary WRD where generated waste rock is temporarily stored and subsequently sold externally. SRK sighted a waste rock sales contract valid until 31 October 2024. Most of the tailings are backfilled in the mined-out area and the remaining tailings are discharged into the TSF through dry stacking. No geochemical characterisation of waste rocks or acid rock drainage (ARD) assessment has been sighted as part of this review. During the site visit, SRK did not observe clear evidence of ARD. The EIA report states that toxicity leaching tests has been conducted on the tailings from the GC Mine. The tailings for the GC Mine are not hazardous waste with leaching toxicity and belong to general industrial solid waste (Class I).

#### 20.5.4 Noise and Dust Emissions

The dust emission sources for the GC Mine are mainly from loading and unloading, waste rock dumping, ore stockpile, crashing, screening and movement of vehicles and mobile equipment. Dust management measures for the mine site and GC processing plant proposed in the EIA reports mainly comprise wet drilling, water sprinkling, using dust collector, etc. During the site visit, SRK observed that the dust collector was used for ore crushing process.

The main sources of noise emissions for the GC Mine are from the operation of the mining and GC processing plant operation (drilling, blasting, loading, haulage, crushers, ball mills, pumps and other processing equipment) and movement of vehicles/ mobile equipment. The EIA reports states that low noise equipment, foundation vibration reduction and workshop sealing are to be adopted as noise prevention measures.

No significant noise and dust emissions were observed during the site visit. SRK reviewed the quarterly noise and exhaust monitoring reports provided by the company for 2023. The reports

indicate that the particulate emissions from the crushing and screening workshop, the fugitive emissions at the mine boundary, and the noise levels at the mine boundary all comply with the relevant standards.

### 20.5.5 Hazardous Substances 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, and processing operations and include hydrocarbons (i.e. fuels, waste oils, and lubricants) and oil containers, batteries, medical waste, etc. The leaks, spills or other types of accidental releases of hazardous materials may have negative impact on soils, surface water, and groundwater resources.

The main hazardous materials for the GC Mine operations will comprise the storage and handling of processing reagents, waste oil, waste oil drum, etc. There is an explosive magazine which was generally well managed. During the site visit, SRK noted that the processing reagents are stored on a cement surface. SRK recommends that the collected waste oil, oil drums and reagents be stored with secondary containment which is in line with the recognised international industry management practices.

### 20.5.6 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 reviewed the company's safety production management system, occupational disease prevention and control plan, safety production work plan, and emergency response plan for the GC Mine, and concluded that the development of these plans complies with relevant Chinese requirements.

GC Mine has provided SRK with a historical OHS records. 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 recognized OHS accident monitoring practice.

#### 20.5.7 Mine Closure and Rehabilitation

The Chinese national requirements for mine closure are covered under Article 21 of the Mineral Resources Law of PRC (2023), the Rules for Implementation of the Mineral Resources Law of the PRC, 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 land rehabilitation, to prepare a geological environmental protection and reclamation plan, and to submit it for assessment and approval. In addition, a mine geological environment treatment and restoration fund account should be established by the GC Mine. SRK has sighted the geological environmental protection and reclamation plan for the GC Mine which was produced in July 2021.

The total cost of geological environmental protection and reclamation for the GC Mine is RMB7,754,300 which comprise geological environmental protection of RMB2,087,200 and land reclamation of RMB5,667,100 respectively. The company informed SRK that the full amount has been deposited, and withdrawals will be made based on annual reclamation and mine closure conditions, subject to approval and acceptance by relevant departments. By the end of 2021, the project had invested over USD 10.5 million (RMB 76 million) in remediation funds and restored an area of 16 hectares.

#### 20.5.8 Social Considerations

The GC Mine is located approximately 15 km southwest of Yun'an County, Guangdong Province. Administratively, it falls under the jurisdiction of Gaocun Town, Yun'an County, Yunfu City. Villages within the mining area boundary include Gaocheng Village and You Village, among others. The project area consists mostly of secondary forest land, with a few hillsides cleared for farmland.

The GC Mine does not encompass any nature reserves, scenic spots, or cultural relics. The general project area does not include any cultural minority groups. The broader Yun'an County is predominantly made up of Han Chinese. According to the relevant Chinese environmental legislation, public participation should be involved within the environmental impact assessment. The results of public participation for the GC Mine shows that 95.4% of the respondents supported the construction of the project. Public comments mainly focused on drinking water, water security for agricultural irrigation and the impact of project drainage on agricultural production.

The company actively engages in various social welfare and charity activities, including community development, assistance to vulnerable groups, educational support, and donations to foundations. Additionally, the company provides diverse employment opportunities for local residents of working age. SRK recommends that the company continuously improve its public participation and grievance mechanisms to ensure ongoing community engagement. This ensures the company receive and address specific concerns raised by affected persons or members of host communities in a timely fashion.

# 21 Capital and Operating Costs

This section summarizes the Capex and Opex.

GC Mine has been in operation since 2014 at designed nominal capacity of 330ktpa feed ore, and all necessary infrastructure for the operation is in place. The mine is designed as an underground operation developed by a hybrid access of declines and shaft, staged in 2 steps at the beginning, targeting the Mineral Resources above -300mRL. A third stage is in the engineering design phase; however, the access method has been considered as decline access and the relayed air return raises. The associated Capex for the depth extension development is estimated by the GC Mine. The other sustainable Capex such as mine closure, facilities updates and/ or capital maintenance are also estimated.

GC Mine has a relative stable operation which addresses the Opex forecasting via their historic performance records.

All the Capex and Opex are estimated in RMB by the mine management. A static exchange rate of USD 1.00: RMB7.22 is referenced.

### 21.1 Capital Cost

### **21.1.1 Summary**

The Capex for GC Mine over LOM includes mine capitalized development, processing updates, infrastructure updates and mine closure and reclamation. The summary of LOM Capex is presented in Table 21.1.

Table 21.1: Summary of LOM Capex for GC Mine

| Item                       | Unit               | LOM Total |
|----------------------------|--------------------|-----------|
| Exploration Drillings      | USD Million        | 34.6      |
| Mine Capex Development     | <b>USD Million</b> | 23.6      |
| Processing Updates         | <b>USD Million</b> | 2.4       |
| Infrastructure Updates     | <b>USD Million</b> | 0.2       |
| Mine Closure & Reclamation | USD Million        | 1.8       |
| Total                      | <b>USD Million</b> | 62.5      |

Sources: GC Mine, summarized by SRK

Notes: Any differences between totals and sum of components are due to rounding

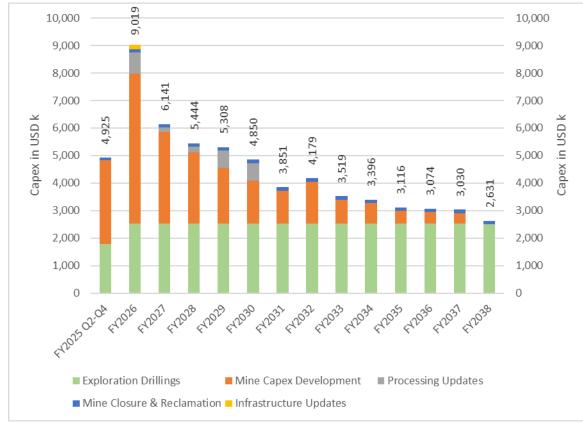


Figure 21.1: Capex Investment Plan over LOM

Sources: GC Mine, summarized by SRK

### 21.1.2 Exploration Drilling

Exploration drilling helps to define the extent and grade of the deposit/ veins for resource definition, for expanse the LOM for the currently schedule. The total exploration drilling Capex of the last 3 years, which has increased for the years FY 2022 to FY 2024 from USD2 million to USD2.1 million. The forecasted exploration Capex are based on the weighted average unit Capex rate to mined feed resulting a similar trend of the past years. Table 21.2 provides the estimates, which is USD6.96/t mined on average.

Table 21.2: Exploration Drilling Capex over Last 3 Years

| Item                        | Unit        | Average | FY2022  | FY2023  | FY2024  |
|-----------------------------|-------------|---------|---------|---------|---------|
| Exploration Drillings Capex | USD Million | 2.3     | 2.5     | 2.2     | 2.1     |
| Drilling Meters             | m           | 68,986  | 66,699  | 65,399  | 74,859  |
| ROM                         | t           | 301,616 | 314,882 | 299,959 | 290,006 |
| Exploration Capex Rate      | USD/t ROM   | 7.52    | 6.35    | 7.33    | 7.24    |

Sources: Management's Discussion and Analysis ("MDA") from Silvercorp and Operating Cost data from GC Mine

Notes: FY2023 & FY2024 data soured from MDA, FY2022 data sourced from GC Mine

### 21.1.3 Capitalized Development

Capitalized development includes the decline expansion/ deepening that is from the currently Level -300mRL down to -500mRL; and the level drive, air return raise, UG exploration drilling chamber, and exploration drives, which serve the mine more than 1 year. The stope preparation drives are classed as Opex.

The decline development is currently undergoing detail design engineering, targeting the Mineral Resources from -350 mRL to -500 mRL. The mine schedule outlines the planned development meters annually, with unit costs derived from development contracts. Figure 21.2 illustrates the projected capitalized development costs over the LOM.

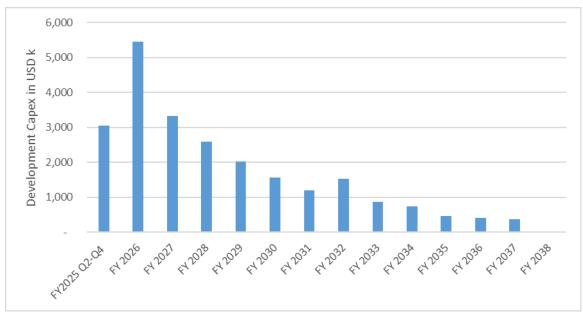


Figure 21.2: Capitalized Development over the LOM

Sources: GC Mine, summarized by SRK

#### 21.1.4 Processing and Infrastructure Updates

The processing Capex updates include the following items, and the details is presented in Table 21.3 below:

- Coarse waste rejection: The implementation of automation to improve waste management and processing efficiency, with an estimated cost of USD761,773 scheduled in FY2026
- Automation: Aiming to integrate advanced automation equipment, such as various components and electrical instruments, into the processing line to enhance operational efficiency, with an estimated cost of USD110,803 in FY2026
- Tin Ore Process Optimization: Optimizing the processing infrastructure and some equipment for the tin ore gravity separation circuit, with an estimated cost of USD41,551 in FY2026
- Detection Automation: The installation of automatic concentration density detection equipment in the grinding and floating circuit, with an estimated cost of USD207,756 for FY2027

- Dense Media Separation: The purchasing of equipment for enhancing ore separation processes. It is planned for FY2028 and FY2029, with an estimated cost of USD1,246,537
- Stockyard Rain Shelter: This infrastructure improvement is to protect stockpiled materials from weather-related impacts and is planned to be constructed in FY2026 at a cost of USD152,355.

Table 21.3: Processing and Infrastructure Updates Capex

| Item                         | Unit  | LOM Total | FY2025 | FY2026 | FY2027 | FY2028 | FY2029 | FY2030 |
|------------------------------|-------|-----------|--------|--------|--------|--------|--------|--------|
| Processing                   |       |           |        |        |        |        |        |        |
| Coarse waste rejection       | USD k | 761.8     | -      | 761.8  | -      | -      | -      | -      |
| Automation                   | USD k | 110.8     | -      | -      | 110.8  | -      | -      | -      |
| Tin ore process optimization | USD k | 41.6      | -      | -      | 41.6   | -      | -      | -      |
| Detection automation         | USD k | 207.8     | -      | -      | -      | 207.8  | -      | -      |
| Dense media separation       | USD k | 1,246.5   | -      | -      | -      | -      | 623.3  | 623.3  |
| Infrastructure               |       |           | -      | -      | -      | -      | -      | -      |
| Stockyard rain shelter       | USD k | 152.4     | -      | 152.4  | -      | -      | -      | -      |

Sources: GC Mine, summarized by SRK

### 21.1.5 Closure & Reclamation Capex

The closure costs are categorized into reclamation engineering costs, general reclamation expenses, and sustainable mine construction, and detailed in Table 21.4.

- Reclamation Engineering Cost: Includes reclamation engineering costs associated with outsourcing and construction
- Reclamation Expense: General expenses related to material, consulting, and reviewing for reclamation
- Sustainable Mine Construction: Costs associated with sustainable mine construction, appearing in 2023.

Table 21.4: Closure & Reclamation Capex over Last 3 Years

|                                  |           |         | =>/     | =>/     |         |
|----------------------------------|-----------|---------|---------|---------|---------|
| Item                             | Unit      | Average | FY2022  | FY2023  | FY2024  |
| Reclamation Engineering          | USD k     | 40.0    | 37.1    | 58.3    | 24.5    |
| Reclamation Expense              | USD k     | 44.1    | 17.5    | 32.9    | 82.0    |
| Sustainable Mine Construction    | USD k     | 6.9     | -       | -       | 20.7    |
| Mine Closure & Reclamation Total | USD k     | 91.0    | 54.6    | 91.3    | 127.2   |
| Mine ROM                         | t         | 301,616 | 314,882 | 299,959 | 290,006 |
| Closure Capex Rate               | USD/t ROM | 0.30    | 0.17    | 0.30    | 0.44    |

Sources: GC Mine, summarized by SRK

### 21.2 Operating Costs

### 21.2.1 **Summary**

The Opex is categorized into mining, processing, backfill, tailings and filtration, S&GA, and corporate social responsibility costs ("CSR"). The Opex is forecasted from the historical operation/ production records of the past 3 years. The unit Opex goes up slightly due to the variation of ROM tonnages over the past 3 years. The forecasted Opex is USD58.3 per tonne. Table 21.5 presented the summary of unit costs per last 3 year and the weighted average parameters. Figure 21.3 illustrates the distribution of each cost center of the Opex. The mining cost is the major part of the Opex.

Table 21.5: Summary of Opex Historical & Forecasted for GC Mine

| Item                        | Unit       | FY2022 | FY2023 | FY2024 | Weighted Average as Forecasted |
|-----------------------------|------------|--------|--------|--------|--------------------------------|
| Mining                      | USD/t ROM  | 26.5   | 31.9   | 36.6   | 31.7                           |
| Plant                       | USD/t Feed | 13.2   | 15.6   | 16.3   | 15.0                           |
| Backfill                    | USD/t ROM  | 3.2    | 3.1    | 2.9    | 3.1                            |
| Tailings filtration         | USD/t Feed | 0.4    | 0.5    | 0.3    | 0.4                            |
| S&GA                        | USD/t Feed | 7.0    | 8.2    | 8.9    | 8.0                            |
| CSR                         | USD/t Feed | 0.2    | 0.1    | 0.1    | 0.1                            |
| <b>Total Cash Unit Cost</b> | USD/t      | 50.5   | 59.4   | 65.0   | 58.3                           |
| Mine ROM                    | kt         | 315    | 300    | 290    |                                |
| Plant Feed                  | kt         | 318    | 300    | 290    |                                |

Sources: GC Mine, summarized by SRK

Notes: Mining and backfill costs are united by mine ROM and the others are united by plant feed.

Tailings filtration, 1%

Backfill, 5%

Mining, 54%

Plant, 26%

Plant, 26%

CSR, 0.2%

Mining

Plant

Backfill

Tailings filtration

S&GA

CSR

Figure 21.3: Pie Chat of Percentage for GC Mine Opex

Sources: GC Mine, summarized by SRK

Figure 21.4 shows the total Opex from FY2022 to FY2024. It can be seen that annual costs consistently increase from USD16 million to USD18.8 million over these periods, driven primarily by the slightly reduction of the ROM processed.

18,845 20,000 17,796 18,000 15,977 16,000 14,000 Opex in USD 12,000 10,000 8,000 6,000 4,000 2,000 0 FY2022 FY2023 FY2024 CSR 48.5 40.2 28.4 S&GA 2,235.7 2,448.5 2,570.6 ■ Tailings filtration 124.9 143.0 78.1 ■ Backfill 928.2 832.5 1,004.1 Processing 4,204.7 4,671.2 4,730.8 ■ Mining 8,358.9 9,565.2 10,604.4 Total 15,977 17,796 18,845

Figure 21.4: Opex for Historical Three-Year (in USD k)

Sources: GC Mine, summarized by SRK

### **21.2.2** Mining

The mining Opex is categorized into contractors for mining and development, materials, labour, power, maintenance, and safety management.

#### Mining Contractor

Costs for contractors of stoping operation are based on annual contracts with agreed unit mining costs. Costs vary for the three mining methods; shrinkage, OCAF, and resuing, depending on mining width (thickness) and mining depth (Table 21.6). The contract stipulates that GC Mine supplies the materials.

Table 21.6: Detailed Opex from Mining Contracts

| Item      | Thickness | Unit  | Decline at -100m<br>Level and above | Shaft at -100m Level and below |  |
|-----------|-----------|-------|-------------------------------------|--------------------------------|--|
|           |           | Cost  | Cost                                |                                |  |
| Shrinkage | d≧3.0m    | USD/t | 8.75                                | 8.96                           |  |
| Shrinkage | 3>d≧1.5m  | USD/t | 10.62                               | 10.94                          |  |

| ltem            | Thickness   | Unit  | Decline at -100m<br>Level and above | Shaft at -100m Level and below |
|-----------------|---|-------|-------------------------------------|--------------------------------|
|                 |   |       | Cost                                | Cost                           |
| Shrinkage       | d<1.5m  | USD/t | 14.32                               | 14.68                          |
| Resuing         | d≦0.5m  | USD/t | 36.15                               | 37.26                          |
| Resuing         | 0.5 <d≦0.8m< td=""><td>USD/t</td><td>33.52</td><td>34.21</td></d≦0.8m<> | USD/t | 33.52                               | 34.21                          |
| Resuing         | 0.8m <d< td=""><td>USD/t</td><td>31.99</td><td>32.55</td></d<>          | USD/t | 31.99                               | 32.55                          |
| OCAF (Gangue)   |   | USD/t | 13.07                               | -                              |
| OCAF            | Thickness<1.8m  | USD/t | 19.39                               | -                              |
| OCAF            | Thickness≧1.8m  | USD/t | 13.85                               | -                              |
| OCAF (Tailings) | Thickness<1.8m  | USD/t | -                                   | 19.39                          |
| OCAF (Tailings) | Thickness≧1.8m  | USD/t | -                                   | 13.85                          |

Source: GC Mine

#### Development Contractor

The Opex for contractors involved in mine development, such as developing ore passes, raises, drifts, and cross-cuts, are also based on annual contracts with agreed unit development costs (Table 21.7).

Table 21.7: Detailed Opex from Development Contracts (in USD/m)

| Item               | Section Width | Section Height | Decline at -100m Level and above | Shaft at -100m Level and below  Cost |  |
|--------------------|---------------|----------------|----------------------------------|--------------------------------------|--|
| item               | (m)           | (m)            | Cost                             |                                      |  |
| Raise              | 1.2           | 1.2            | 134.20                           | 132.89                               |  |
| Raise              | 1.5           | 2              | 243.17                           | 256.08                               |  |
| Raise              | 1.5           | 1.8            | 185.15                           | 200.68                               |  |
| Raise              | 1.8           | 1.8            | 204.00                           | 218.84                               |  |
| Raise              | 2             | 2              | 235.82                           | 251.79                               |  |
| Raise              | φ1.2          |                | 373.96                           | 373.96                               |  |
| Raise              | φ1.4 or φ1.5  |                | 401.66                           | 401.66                               |  |
| Ore Pass           | 1.4           | 1.4            | 150.17                           | 149.14                               |  |
| Ore Pass           | 1.5           | 1.5            | 160.40                           | 161.52                               |  |
| Ore Pass           | 1.6           | 1.6            | 169.06                           | 168.64                               |  |
| Ore Pass<br>Access | 1.2           | 1.8            | 161.77                           | 161.91                               |  |
| Ore Pass<br>Access | 1.4           | 1.8            | 175.48                           | 174.93                               |  |
| Sublevel           | 1.4           | 1.8            | 166.90                           | 167.59                               |  |

| Item           | Section Width | Section Height | Decline at -100m Level and above | Shaft at -100m Level and below |
|----------------|---------------|----------------|----------------------------------|--------------------------------|
| item           | (m)           | (m)            | Cost                             | Cost                           |
| Sublevel       | 1.6           | 1.8            | 191.41                           | 179.50                         |
| Drive          | 2             | 2              | 184.65                           | 182.51                         |
| Drive          | 2             | 2.2            | 188.55                           | 190.94                         |
| Drive          | 2             | 2.4            | 196.39                           | 196.18                         |
| Drive          | 2.2           | 2.4            | 202.29                           | 201.45                         |
| Drive          | 2.4           | 2.4            | 216.19                           | 215.19                         |
| Drive          | 2.6           | 2.6            | 238.16                           | 236.09                         |
| Drive          | 2.8           | 2.8            | 256.84                           | 264.57                         |
| Drive          | 2.5           | 2.5            | 225.07                           | 225.07                         |
| Drive          | 2.5           | 2.7            | 236.15                           | 236.15                         |
| Decline        | 4.2           | 3.75           | 562.33                           | -                              |
| Bay in Decline | 4.2           | 3.45           | 512.89                           | -                              |

Source: GC Mine

#### Material

This includes accessories, wire and cable, steel, wood, lubricating oil, and explosive/ blasting materials.

#### Labour

This category includes salaries and bonuses, insurance, welfare fees, and subsidies.

#### Water and Power

This includes water and electricity consumption during mining operations.

#### Maintenance and others

This includes general maintenance and miscellaneous costs.

#### Safety Management

This includes PPE, safety training, supplies and the monitoring.

Table 21.8 below provides the unit mining cost breakdown over past 3 years and the weighted average of them.

Table 21.8: Breakdown of Mining Opex (in USD/t ROM)

| Cost Centre            | FY2022 | FY2023 | FY2024 | Weighted Average |
|------------------------|--------|--------|--------|------------------|
| Mining Contractor      | 12.86  | 11.87  | 15.21  | 13.31            |
| Development Contractor | 4.89   | 6.56   | 9.19   | 6.88             |

| Cost Centre          | FY2022 | FY2023 | FY2024 | Weighted Average |
|----------------------|--------|--------|--------|------------------|
| Material             | 3.55   | 5.82   | 4.02   | 4.47             |
| Labour               | 1.99   | 1.97   | 2.65   | 2.20             |
| Power                | 1.22   | 1.49   | 2.47   | 1.73             |
| Maintenance & Others | 0.14   | 0.17   | 1.20   | 0.50             |
| Safety Management    | 1.90   | 4.00   | 1.83   | 2.58             |
| Mining Total         | 26.55  | 31.89  | 36.57  | 31.67            |

Sources: GC Mine, summarized by SRK

#### 21.2.3 Backfill Costs

The backfill Opex is categorized into materials, labour, power, maintenance, and safety management. Material is the major part which includes cement, backfilling pipes, wires and cables, accessories, lubricant oil, and tools. The breakdown of backfill cost is presented in Table 21.9.

Table 21.9: Breakdown of Backfill Opex (in USD/t ROM)

| Cost Centre         | FY2022 | FY2023 | FY2024 | Weighted Average |
|---------------------|--------|--------|--------|------------------|
| Material            | 1.79   | 1.60   | 1.56   | 1.65             |
| Labour              | 1.21   | 1.34   | 1.23   | 1.26             |
| Power               | 0.06   | 0.07   | 0.07   | 0.07             |
| Maintenance & Other | 0.04   | 0.07   | -0.00  | 0.03             |
| Safety Management   | 0.10   | 0.01   | 0.01   | 0.04             |
| Backfill Total      | 3.19   | 3.09   | 2.87   | 3.05             |

Sources: GC Mine, summarized by SRK

#### 21.2.4 Processing

The processing Opex is categorized into consumables, labour, power, maintenance, safety management, and outsourced manufacturing. The consumables and the labour are the major parts of processing cost.

#### Consumables

This includes steel balls, reagents, steel, wires and cables, equipment accessories, lubricant oil, tools, and equipment spare parts.

#### Labor

This includes salaries and bonuses, insurance, welfare fees, and subsidies.

#### Water and Power

Costs include water and electricity consumption for processing operations.

#### Maintenance & Other

This includes general maintenance and other miscellaneous costs.

Safety Management

This includes PPE, safety training and supplies.

Outsourced Manufacturing

This cost, which starts appearing in 2023, covers outsourced processing manufacturing activities.

The breakdown of processing Opex is presented in Table 21.10.

Table 21.10: Breakdown of Processing Opex (in USD/t Feed)

| Cost Centre              | FY2022 | FY2023 | FY2024 | Weighted Average |
|--------------------------|--------|--------|--------|------------------|
| Consumables              | 5.55   | 6.65   | 5.83   | 6.01             |
| Labour                   | 3.82   | 4.44   | 4.72   | 4.32             |
| Power                    | 3.30   | 3.90   | 4.57   | 3.92             |
| Maintenance & Other      | 0.44   | 0.54   | 0.52   | 0.50             |
| Safety Management        | 0.12   | 0.07   | 0.08   | 0.09             |
| Outsourced Manufacturing | -      | -      | 0.59   | 0.20             |

Sources: GC Mine, summarized by SRK

#### 21.2.5 Tailings Filtration

The tailings filtration Opex is divided into categories: material, labour, power, maintenance, other, and safety management. The breakdown of tailings filtration activity is shown in Table 21.11, in which power and material are the largest expenditure components.

Table 21.11: Breakdown of Taillings Filtration Opex (in USD/t Feed)

| Cost Center               | FY2022 | FY2023 | FY2024 | Weighted Average |  |
|---------------------------|--------|--------|--------|------------------|--|
| Material                  | 0.14   | 0.07   | 0.07   | 0.09             |  |
| Labour                    | 0.06   | 0.07   | 0.07   | 0.07             |  |
| Power                     | 0.15   | 0.12   | 0.09   | 0.12             |  |
| Maintenance & Other       | 0.03   | 0.01   | 0.02   | 0.02             |  |
| Safety Management         | 0.02   | 0.21   | 0.02   | 0.08             |  |
| Tailings Filtration Total | 0.39   | 0.48   | 0.27   | 0.38             |  |

Sources: GC Mine, summarized by SRK

#### 21.2.6 Selling, General and Administrative

The S&GA Opex is categorized into selling, laboratory, administration, environment, reclamation, insurance, power, service charges, travel and office expenses, and others. The breakdown of S&GA activity is shown in Table 21.12, in which admin cost is the largest expenditure components.

- Selling: Opex includes salaries and bonuses, insurance, welfare fees, and subsidies for selling personal and office expenses, which appear in 2022 and 2023.
- Laboratory: Opex for laboratory activities began in 2022, including expense for crushing, grinding, flotation, and gravity-separation metallurgical testing.

- Admin: Administrative Opex, including salaries, bonuses, insurance, and welfare fees for management personnel.
- Environment: Opex related to environmental management and compliance.
- Reclamation: Opex for reclamation management.
- Insurance: Opex for disability security fund.
- Power: Opex for water and electricity consumption.
- Service Charge: Service charges related to consulting for consulting, review, and legal matters.
- Travel and Office Expenses: Opex of travel expense, business entertainment expenses, and office-related expenses.
- Others: Miscellaneous Opex.

Table 21.12: Breakdown of S&GA Opex (in USD/t Feed)

| Cost Centre                | FY2022 | FY2023 | FY2024 | Weighted Average |
|----------------------------|--------|--------|--------|------------------|
| Selling                    | -      | 0.03   | 0.11   | 0.04             |
| Laboratory                 | -      | 0.23   | 0.24   | 0.16             |
| Admin                      | 4.35   | 5.14   | 4.93   | 4.81             |
| Environment                | 0.17   | 0.20   | 0.16   | 0.17             |
| Reclamation                | 0.07   | 0.14   | 0.14   | 0.12             |
| Insurance                  | 0.03   | 0.04   | 0.14   | 0.07             |
| Power                      | 0.19   | 0.25   | 0.32   | 0.25             |
| Service Charge             | 0.99   | 1.05   | 1.50   | 1.18             |
| Travel and Office Expenses | 0.75   | 0.84   | 1.14   | 0.91             |
| Others                     | 0.49   | 0.25   | 0.19   | 0.31             |
| S&GA Total                 | 7.03   | 8.17   | 8.86   | 8.02             |

Sources: GC Mine, summarized by  $\mathsf{SRK}$ 

#### 21.2.7 Corporate Social Responsibility Opex

CSR Opex is associated with initiatives aimed at benefiting the local community and ensuring responsible mining practices, such as charity association, donations, and foundation. The average of past 3 years is USD39 thousand per year, and the unit cost is about USD0.13/t plant feed.

## 22 Economic Analysis

The economic analysis presented in this section is based only on the results of the technical review provided above and some key assumptions. It is provided for technical evaluation and Mineral Reserve estimation purposes only.

The economic analysis of the was conducted using conventional Discounted Cash Flow ("DCF") techniques. 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 Project. 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 determined from the project's cash flow using an 8% discount rate as the base case. Since the Project is ongoing, there is no Internal Rate of Return ("IRR") or payback period due to the absence of initial Capex. Additionally, a sensitivity analysis was performed to examine the effects of changes in Capex, Opex, and pricing.

### 22.1 Principal Assumptions

The cash flow estimate includes only the revenue, costs, taxes, and other factors directly associated with GC Mine. The assumptions are as follows:

- The ROM and finial products of GC Mine, which are lead and zinc concentrates, are based on the LOM schedule.
- The local currency for GC Mine is RMB, while USD are used for technical-economic analysis. The exchange rate is set statically at USD1 = RMB7.22, based on the reference value at the effective date.
- Annual gross revenue is calculated by applying the forecasted metal prices and payable metal percentages from contracts to the annual recovered metal for each operating year.
- SRK does not consider future inflation nor currency and cost fluctuations; the cost remains constant over the LOM.
- Financing is assumed to be on a 100% equity basis; no debt or related financing costs have been included in the technical-economic analysis.
- Corporate obligations and financing costs are not considered.
- Exploration Capex, which is aimed at discovering additional Mineral Resources that are outside the Mineral Reserves estimates, is not considered during this analysis.
- No salvage value has been included in the technical-economic analysis.
- Working capital will be fully recovered at the end of LOM.
- The reference date or effective date is 30 June 2024.

#### 22.1.1 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 22.1.

Table 22.1: LOM Physical Inputs for Economic-Analysis

| Item                        | Unit | LOM Total or Average |  |
|-----------------------------|------|----------------------|--|
| Physical                    |      |                      |  |
| Mineral Reserve             | kt   | 4,965                |  |
| Ag Grade                    | g/t  | 80.9                 |  |
| Pb Grade                    | %    | 1.21                 |  |
| Zn Grade                    | %    | 2.83                 |  |
| Capacity (average over LOM) | ktpa | 355                  |  |
| Working Day                 | d/a  | 330                  |  |
| Life of Mine                | а    | 14                   |  |
| Pb Concentrate              |      |                      |  |
| Ag Recovery Rate            | %    | 59.3                 |  |
| Pb Recovery Rate            | %    | 89.9                 |  |
| Ag Grade in Conc.           | g/t  | 1,998.4              |  |
| Pb Grade in Conc.           | %    | 44.9                 |  |
| Zn Concentrate              |      |                      |  |
| Ag Recovery Rate            | %    | 23.3                 |  |
| Zn Recovery Rate            | %    | 89.8                 |  |
| Ag Grade in Conc.           | g/t  | 330.1                |  |
| Zn Grade in Conc.           | %    | 44.5                 |  |

Sources: LOM Physical Inputs for Economic Analysis

### 22.1.2 Pricing Assumptions

Table 22.2 shows the prices for Silver, Lead, and Zinc. These commodity prices are dynamic and are derived from CMF, published by Consensus Economics Inc., to which SRK subscribes annually.

Table 22.2: Pricing Assumptions for Economic Analysis

| Commodity | Units  | 2024  | 2025  | 2026  | 2027  | 2028  | 2029  | LTP   |
|-----------|--------|-------|-------|-------|-------|-------|-------|-------|
| Silver    | USD/oz | 29.3  | 29.3  | 27.0  | 27.3  | 25.8  | 22.0  | 22.0  |
| Lood      | USD/t  | 2,150 | 2,050 | 2,000 | 2,050 | 2,050 | 2,050 | 2,050 |
| Lead      | USc/lb | 98    | 93    | 91    | 93    | 93    | 93    | 93    |
| Zinc      | USD/t  | 2,750 | 2,600 | 2,550 | 2,550 | 2,500 | 2,650 | 2,650 |
| ZITIC     | USc/lb | 125   | 118   | 116   | 116   | 113   | 120   | 120   |

Source: CMF, 17 June 2024

#### 22.1.3 Payment Scales

All sales contracts are valid for one year, with key elements subject to change based on market conditions during monthly supplemental agreement negotiations. SRK has summarized these details in Table 22.3 and Table 22.4.

**Table 22.3: Pb Concentrate Payment Scales** 

| % Pb         | Deduction (RMB/t Pb) | Ag (g/t)  | % Payable |
|--------------|----------------------|-----------|-----------|
| Pb ≥ 50      | 200.0                | Ag ≥ 2500 | 92.00     |
| 40 ≤ Pb < 50 | 200+20×(50-Pb)       | Ag ≥ 2000 | 91.50     |
| 35 ≤ Pb < 40 | 400+50×(40-Pb)       | Ag ≥ 1500 | 91.00     |
| 30 ≤ Pb < 35 | 650+100×(35-Pb       | Ag ≥ 1000 | 90.50     |
| Pb < 30      | Negotiable           | Ag ≥ 800  | 88.00     |

Source: Sales Contract

Table 22.4: Zn Concentrate Payment Scales

| % Zn            | Deduction RMB/t Zn Price ≤ RMB 15,000/t | Deduction RMB/t Zn Price > RMB 15,000/t       | Ag (g/t)          | Payable<br>RMB/g Ag |
|-----------------|---|---|-------------------|---------------------|
| Zn > 50         | 5,250-20×(Zn-50)                        | 5,250 + (Price – 15,000)×20%<br>– 20×(50-Zn)  | Ag ≥ 400          | 1.00                |
| Zn = 50         | 5,250                                   | 5,250 - 0.2×(Price-15,000)                    | 300 ≤ Ag<br>< 400 | 0.70                |
| 45 ≤ Zn<br>< 50 | 5,250+20×(50-Zn)                        | 5,250 + (Price – 15,000)×20%<br>+ 20×(50-Zn)  | 150 ≤ Ag <<br>300 | 0.60                |
| 40 ≤ Zn<br>< 45 | 5,350+50×(45-Zn)                        | 5,350 + (Price - 15,000)×20%<br>+ 50×(45-Zn)  | Ag < 150          | -                   |
| 35 ≤ Zn<br>< 40 | 5,600+100×(40-Zn)                       | 5,600 + (Price – 15,000)×20%<br>+ 100×(40-Zn) |                   |                     |

Source: Sales Contract

SRK used the forecasted prices, an exchange rate of USD7.22/RMB, and a VAT of 13% to estimate the net payable factors to metal prices in USD basis, as shown below:

- Silver in Lead Conc. :
  - 91.5% when Ag grade ≥ 2,000 g/t
  - 91.0% when Ag grade ≥ 1,500 g/t
- Lead in Lead Conc. :98%
- Silver in Zinc Conc. :
  - 12.4% when Ag grade ≥ 300 g/t
  - 10.6% when Ag grade ≥ 150 g/t
- Zinc in Zinc Conc. :68.6%

#### 22.1.4 Tax and Royalties

The tax, government charges and royalties for GC Mine are mainly corporate income tax, resource tax, which is in term of royalties, and value added tax ("VAT"). The small scales tax such as stamp duty, are included in S&GA costs.

Corporate Income Tax ("CIT")

The standard corporate tax rate in China is 25% of taxable income. However, Silvercorp has informed SRK that, as a Hi-New Tech enterprise, the subsidiary entities operating the GC Mine benefit from a reduced enterprise income tax rate of 15% for a three-year term, which is renewable.

Resource Tax (Royalties)

- 3% of the net sales from lead (Pb) and zinc (Zn) mineral products
- 2% of the net sales from silver (Ag) mineral products
- No resource tax for gold (Au) and copper (Cu), as they are considered by-products

#### Value Added Tax

In China, industrial minerals prices include a VAT, which is 13% of sales, excluding revenue from gold (Au) if any. The company is allowed to deduct the VAT paid for the production costs. The final VAT payable will be the basis for paying other surtaxes and fees. SRK used the following simplified formulas to calculate the VAT payable:

- VAT received = total sales revenue/(1+13%) x 13%;
- VAT paid = VAT received x 20%; and
- VAT payable = VAT received VAT paid.
- Surtax/Surcharge
  - City construction fee: 7% of VAT Payable
  - Education surtax: 5% of VAT Payable

#### 22.1.5 Depreciation

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 10 years.

#### 22.1.6 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.

### 22.2 DCF Projection

The key economic results from the technical-economic model are shown in Table 22.5.

Table 22.5: LOM Profit, Loss & Cash Flow Forecasting

| Item                             | Unit  | LOM Total | Annually Average over LOM |
|----------------------------------|-------|-----------|---------------------------|
| Revenue (incl. VAT)              | USD k | 515,263   | 36,805                    |
| Opex                             | USD k | -290,830  | -20,774                   |
| Royalties, Charges & VAT Payable | USD k | -66,801   | -4,772                    |
| EBITDA                           | USD k | 157,633   | 11,259                    |
| Depreciation                     | USD k | -26,511   | -1,894                    |
| EBIT                             | USD k | 131,122   | 9,366                     |
| Income Tax                       | USD k | -19,668   | -1,405                    |
| Net Profit                       | USD k | 111,453   | 7,961                     |

| Item                                      | Unit  | LOM Total | Annually Average over LOM |
|---|-------|-----------|---------------------------|
| Add back Depreciation                     | USD k | 26,511    | 1,894                     |
| Less Sustaining Capex (Excl. Exploration) | USD k | -27,884   | -1,992                    |
| Free Cash Flow                            | USD k | 110,081   | 7,863                     |

The projection for Project operation shows a positive economic prospect. At a discount rate of 8%, the NPV of the Project is USD 63.1 million. The sensitivity of NPV against discount rate is presented in Figure 22.2. The annual cash flows are presented graphically in Figure 22.1 and in tabular form in Table 22.6.

Figure 22.1: Cash Flow Profile

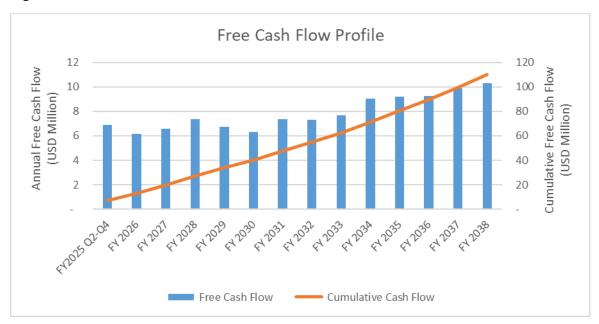


Figure 22.2: GC Mine NPV versus Discount Rate



Table 22.6: LOM Production and Cash Flow Forecast

| Year<br>Period                             | Units          | LoM      | FY2025 Q2-Q4<br>1 | FY 2026<br>2   | FY 2027<br>3   | FY 2028<br>4   | FY 2029<br>5   | FY 2030<br>6   | FY 2031<br>7   | FY 2032<br>8   | FY 2033<br>9   | FY 2034<br>10  | FY 2035<br>11  | FY 2036<br>12  | FY 2037<br>13  | FY 2038<br>14   |
|--|----------------|----------|-------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Revenues                                   |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Price                                      |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Pb price                                   |                |          | 2,150             | 2,050          | 2,000          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050          | 2,050           |
| Zn price<br>Ag price                       |                |          | 2,750<br>0.94     | 2,600<br>0.94  | 2,550<br>0.87  | 2,550<br>0.88  | 2,500<br>0.83  | 2,650<br>0.71   |
|  |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Payable Price Pb price                     | 1155/+         |          | 2,110             | 2,012          | 1,963          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012          | 2,012           |
| Ag in Pb price                             |                |          | 0.86              | 0.86           | 0.79           | 0.80           | 0.76           | 0.65           | 0.65           | 0.64           | 0.64           | 0.65           | 0.64           | 0.64           | 0.6472         | 0.64            |
| Zn price                                   |                |          | 1,886             | 1,783          | 1,749          | 1,749          | 1,715          | 1,818          | 1,818          | 1,818          | 1,818          | 1,818          | 1,818          | 1,818          | 1,818          | 1,818           |
| Ag in Zn price                             | US\$/g         |          | 0.10              | 0.10           | 0.11           | 0.11           | 0.10           | 0.09           | 0.09           | 0.09           | 0.09           | 0.09           | 0.09           | 0.09           | 0.09           | 0.08            |
| Revenue                                    |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Pb Revenue (VAT)                           |                | 10       |                   | 8.07           | 8.63           | 7.20           | 7.20           | 7.07           | 7.61           | 8.31           | 7.66           | 7.41           | 9.11           | 9.31           | 7.79           | 7.47            |
| Ag in Pb Revenue (VAT)<br>Zn Revenue (VAT) |                | 16<br>22 |                   | 14.18<br>17.91 | 14.08<br>15.32 | 14.63<br>16.56 | 14.64<br>15.85 | 11.25<br>18.10 | 12.11<br>16.12 | 11.19<br>16.38 | 10.64<br>17.39 | 12.39<br>15.88 | 11.20<br>15.51 | 11.35<br>14.93 | 11.25<br>16.91 | 8.91<br>17.55   |
| Ag in Zn Revenue (VAT)                     |                |          | 9 0.48            | 0.65           | 0.75           | 0.78           | 0.78           | 0.60           | 0.64           | 0.60           | 0.57           | 0.66           | 0.60           | 0.61           | 0.60           | 0.41            |
| Total Revenue                              |                | 51       | 15 31.92          | 40.81          | 38.79          | 39.16          | 38.47          | 37.02          | 36.49          | 36.49          | 36.25          | 36.34          | 36.42          | 36.20          | 36.55          | 34.34           |
| Total Revenue                              | USŞIVI         | 51       | 31.92             | 40.61          | 36./9          | 39.10          | 30.47          | 37.02          | 30.49          | 30.49          | 30.23          | 30.34          | 30.42          | 30.20          | 30.33          | 34.34           |
| Depreciation                               |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Depreciation                               | US\$M          | 2        | 0.30              | 0.94           | 1.29           | 1.57           | 1.83           | 2.05           | 2.17           | 2.33           | 2.41           | 2.49           | 2.23           | 2.27           | 2.31           | 2.31            |
| Royalties and Government Charges           |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| VAT received                               | USŚM           | 5        | 9 3.67            | 4.70           | 4.46           | 4.51           | 4.43           | 4.26           | 4.20           | 4.20           | 4.17           | 4.18           | 4.19           | 4.16           | 4.21           | 3.95            |
| VAT paid                                   |                |          | 2 0.73            | 0.94           | 0.89           | 0.90           | 0.89           | 0.85           | 0.84           | 0.84           | 0.83           | 0.84           | 0.84           | 0.83           | 0.84           | 0.79            |
| VAT payable                                | US\$M          | 4        | 2.94              | 3.76           | 3.57           | 3.60           | 3.54           | 3.41           | 3.36           | 3.36           | 3.34           | 3.34           | 3.35           | 3.33           | 3.36           | 3.16            |
| Surtax/Surcharge                           | US\$M          |          | 6 0.35            | 0.45           | 0.43           | 0.43           | 0.42           | 0.41           | 0.40           | 0.40           | 0.40           | 0.40           | 0.40           | 0.40           | 0.40           | 0.38            |
| Royalties                                  |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Ag Royalties                               |                |          | 4 0.22            | 0.30           | 0.30           | 0.31           | 0.31           | 0.24           | 0.26           | 0.24           | 0.22           | 0.26           | 0.24           | 0.24           | 0.24           | 0.19            |
| Pb Royalties<br>Zn Royalties               |                |          | 3 0.18<br>7 0.45  | 0.24<br>0.54   | 0.26<br>0.46   | 0.22<br>0.50   | 0.22           | 0.21<br>0.54   | 0.23<br>0.48   | 0.25<br>0.49   | 0.23<br>0.52   | 0.22<br>0.48   | 0.27<br>0.47   | 0.28<br>0.45   | 0.23<br>0.51   | 0.22<br>0.53    |
| Royalties and Charges                      |                |          | 67 4.14           | 5.28           | 5.01           | 5.06           | 4.97           | 4.81           | 4.73           | 4.74           | 4.71           | 4.71           | 4.73           | 4.70           | 4.75           | 4.48            |
|  |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Taxation                                   |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Revenue                                    |                | 51       |                   | 40.81          | 38.79          | 39.16          | 38.47          | 37.02          | 36.49          | 36.49          | 36.25          | 36.34          | 36.42          | 36.20          | 36.55          | 34.34           |
| Opex<br>Royalties and Government Charges   |                | 29       | 16.02<br>7 4.14   | 20.81<br>5.28  | 22.04          | 22.31<br>5.06  | 22.61<br>4.97  | 22.42<br>4.81  | 21.91<br>4.73  | 21.60<br>4.74  | 21.78<br>4.71  | 20.43          | 20.55<br>4.73  | 20.38          | 20.00<br>4.75  | 17.99<br>4.48   |
| Depreciation                               |                |          | 27 0.30           | 0.94           | 1.29           | 1.57           | 1.83           | 2.05           | 2.17           | 2.33           | 2.41           | 2.49           | 2.23           | 2.27           | 2.31           | 2.31            |
| Tax  | US\$M          | 2        | 1.72              | 2.07           | 1.57           | 1.53           | 1.36           | 1.16           | 1.15           | 1.17           | 1.10           | 1.31           | 1.34           | 1.33           | 1.43           | 1.43            |
| Income Statement                           |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| meome statement                            |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Revenue                                    |                | 51       |                   | 40.81          | 38.79          | 39.16          | 38.47          | 37.02          | 36.49          | 36.49          | 36.25          | 36.34          | 36.42          | 36.20          | 36.55          | 34.34           |
| Opex<br>Royalties and Charges              | US\$M<br>US\$M | 29<br>6  |                   | 20.81<br>5.28  | 22.04<br>5.01  | 22.31<br>5.06  | 22.61<br>4.97  | 22.42<br>4.81  | 21.91<br>4.73  | 21.60<br>4.74  | 21.78<br>4.71  | 20.43<br>4.71  | 20.55<br>4.73  | 20.38<br>4.70  | 20.00<br>4.75  | 17.99<br>4.48   |
| EBITDA                                     |                | 15       |                   | 14.72          | 11.74          | 11.80          | 10.90          | 9.79           | 9.86           | 10.15          | 9.76           | 11.21          | 11.14          | 11.12          | 11.81          | 11.87           |
| Depreciation                               |                | 2        | .7 0.30           | 0.94           | 1.29           | 1.57           | 1.83           | 2.05           | 2.17           | 2.33           | 2.41           | 2.49           | 2.23           | 2.27           | 2.31           | 2.31            |
|  | US\$M          | 13       |                   | 13.78          | 10.45          | 10.23          | 9.06           | 7.74           | 7.68           | 7.83           | 7.35           | 8.72           | 8.91           | 8.85           | 9.50           | 9.57            |
|  | US\$M          |          | 1.72              | 2.07           | 1.57           | 1.53           | 1.36           | 1.16           | 1.15           | 1.17           | 1.10           | 1.31           | 1.34           | 1.33           | 1.43           | 1.43            |
| Net Income                                 | USŞIVI         | 11       | 9.74              | 11.71          | 8.88           | 8.69           | 7.70           | 6.58           | 6.53           | 6.65           | 6.25           | 7.41           | 7.58           | 7.53           | 8.08           | 8.13            |
| Cash Flow                                  |                |          |                   |                |                |                |                |                |                |                |                |                |                |                |                |                 |
| Cash IN                                    |                | 51       |                   | 40.81          | 38.79          | 39.16          | 38.47          | 37.02          | 36.49          | 36.49          | 36.25          | 36.34          | 36.42          | 36.20          | 36.55          | 34.34           |
| Cash OUT                                   |                | 40       |                   | 34.65          | 32.23          | 31.82          | 31.72          | 30.72          | 29.11          | 29.16          | 28.59          | 27.31          | 27.21          | 26.95          | 26.67          | 24.03           |
| Free Cash Flow<br>Cumulative Cash Flow     |                | 11       | .0 6.91<br>6.91   | 6.16<br>13.07  | 6.55<br>19.62  | 7.34<br>26.96  | 6.75<br>33.72  | 6.30<br>40.02  | 7.38<br>47.41  | 7.32<br>54.73  | 7.66<br>62.39  | 9.03<br>71.42  | 9.21<br>80.64  | 9.25<br>89.89  | 9.88<br>99.77  | 10.31<br>110.08 |
| Cumulative CdSII FIOW                      | CODINI         |          | 0.91              | 13.07          | 15.02          | 20.30          | 33.72          | 40.02          | 47.41          | J4./3          | 02.39          | /1.42          | 00.04          | 03.03          | 33.77          | 110.00          |

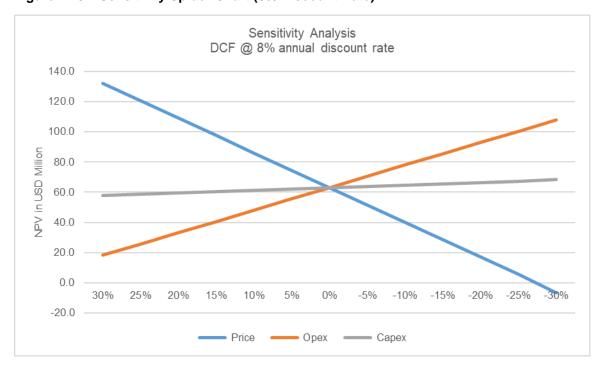
## 22.3 Sensitivity Analysis

SRK conducted a single-factor sensitivity analysis for the GC Mine to determine which factors significantly impact its economics when considered independently. The analysis focused on metal prices, Capex, and Opex, each tested within a ±30% range. The results showed that the Project is most sensitive to changes in metal prices and least sensitive to variations in Capex. Results of the sensitivity tests are presented in Table 22.7 and Figure 22.3.

Table 22.7: Sensitivity Analysis Result (@8% Discount Rate)

| Mariana  | Price                                       | Opex  | Capex | • |  |  |  |
|----------|---|-------|-------|---|--|--|--|
| Variance | NPV @ 8% Annual Discount Rate (USD Million) |       |       |   |  |  |  |
| 30%      | 132.0                                       | 18.3  | 57.9  |   |  |  |  |
| 25%      | 120.5                                       | 25.7  | 58.8  |   |  |  |  |
| 20%      | 109.0                                       | 33.2  | 59.6  |   |  |  |  |
| 15%      | 97.5  | 40.7  | 60.5  |   |  |  |  |
| 10%      | 86.1  | 48.1  | 61.3  |   |  |  |  |
| 5%       | 74.6  | 55.6  | 62.2  |   |  |  |  |
| 0%       | 63.1  | 63.1  | 63.1  |   |  |  |  |
| -5%      | 51.6  | 70.5  | 63.9  |   |  |  |  |
| -10%     | 40.1  | 78.0  | 64.8  |   |  |  |  |
| -15%     | 28.6  | 85.5  | 65.7  |   |  |  |  |
| -20%     | 17.1  | 93.0  | 66.5  |   |  |  |  |
| -25%     | 5.5   | 100.4 | 67.4  |   |  |  |  |
| -30%     | -6.7  | 107.9 | 68.3  |   |  |  |  |

Figure 22.3: Sensitivity Spider Chart (8% Discount Rate)



It can be seen that the changes in prices have the greatest impact on the GC Mine's NPV, while Opex and Capex have smaller effects.

To clarify the effects of prices on the GC Mine's NPV, SRK estimated that the break-even price (NPV=0, at 8% discount rate) is around a change of -27.3% from the base scenario prices used in the model, i.e. if the price drops to about 72.7% of the forecasting price, the GC Mine NPV will become negative.

Another sensitivity of the GC Mine against exploration Capex was also assessed. When considering this Capex on the existing Mineral Reserve mine plan, the Project is still positive as that the NPV is USD 44.4 Million at 8% discount rate.

A third sensitivity of the Project against CIT rate was also evaluated. In case where the tax reduction benefit is not renewed after 3 years, the tax rate will be at the standard 25% of taxable income. The Project is still positive as that the NPV is USD 58.1 Million at 8% discount rate.

## 23 Adjacent Properties

The GC Mine is located within the Daganshan mineralization field featuring tungsten (W), tin (Sn), gold (Au), silver (Ag), lead (Pb), and zinc (Zn) mineralization. The field is characterized by five "nested" zonations. From the centre outward, the mineralization zones are W (+Sn, Mo, and Bi), Sn, Sn-Pb-Zn, Ag-Pb-Zn, and Au (the gold zone is not shown in Figure 23.1). The following are a list of deposits that have been discovered and mined within the field:

- Dajinshan Tungsten Deposit. The deposit is located in the centre of the Daganshan field.
- Jiuquling Tin Deposit. The deposit is a quartz vein type and surrounds the tungsten mineralization zone. It is reported that the Jiuquling deposit has been developed and is in production, however detailed information such as grade, deposit size, tonnage, metal recovery, etc. are not available at this time.
- Jianshan Tin-Lead-Zinc-Silver Deposit. The deposit is located in the tin-lead-zinc mineralization zone. It is a sedimentary type of deposit.
- Yunfu Pyrite Deposit. The Yunfu pyrite mine is an open pit mine located 4.5 km north-west of the city of Yunfu. Mine production began in 1988.

Figure 23.1 illustrates the general geological understanding of properties adjacent to the GC Mine. SRK is not aware of any immediate adjacent properties that would directly affect the interpretation or evaluation of the mineralization and anomalies found on the GC Project property.

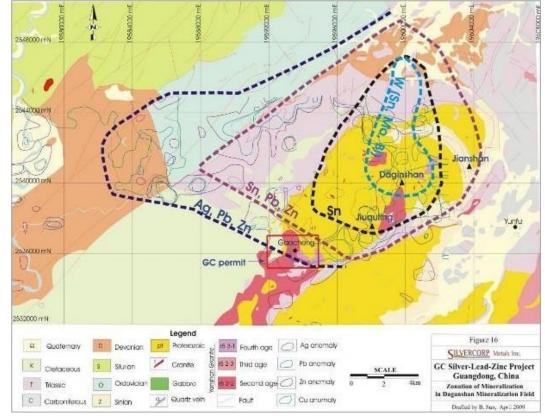


Figure 23.1: Zonation of Mineralization in the Daganshan Mineralization Field

Sources: GC Mine

## 24 Other Relevant Data and Information

There is no additional information or explanation required to make the Technical Report understandable and not misleading.

## 25 Interpretation and Conclusions

### 25.1 Geology

The GC Mine is located at the intersection between the Wuchuan-Sihui Deep Fault zone and Daganshan Arc-ring structural zone. It is situated in the south-west part of the Daganshan uplift. Structures developed in the area are mainly the NWW-EW striking Gaocheng Fault zone, the NE striking Baimei Fault zone, and the Songgui Fault zone.

Mineralization at GC Mine is primarily hosted within a WNW-ENE trending, 4.8 km long and 2 km wide fault zone. This zone encompasses numerous veins, with the more common WNW veins generally striking between 90° and 150° and dipping between 55° to sub-vertical. The average thickness of the WNW-ENE veins is about 0.8 m. There are also east-west striking veins that typically strike 50° to 130° and dip between 65° and sub-vertical to the SE and SSW. The average thickness is around 0.8 m.

The dominant sulphide mineral is pyrite, and other constituents are a few percent of sphalerite, galena, pyrrhotite, arsenopyrite, magnetite, and less than one percent of chalcopyrite and cassiterite. Gangue minerals include chlorite, quartz, fluorite, feldspar, mica, and hornblende, with a small or trace amount of kaolinite, tremolite, actinolite, chalcedony, garnet, zoisite, apatite, and tourmaline.

Alteration minerals associated with the GC Mine vein systems include quartz, sericite, pyrite, and chlorite, together with clay minerals and limonite. Silicification commonly occurs near the centre of the veins. Chlorite and sericite occur near and slightly beyond the vein margins.

The poly-metallic mineralization of the GC deposit belongs to the mesothermal vein infill style of deposit.

#### 25.2 Data verification

SRK conducted the site inspections to the GC Mine from 23 to 26 April in 2024, undertook a site inspection of the project area, visited the drill core store/ core tray storage, site sample preparation lab and reviewed the mineralization, tunnel sampling procedure during the underground visit to understand the company's protocols and procedures related to exploration management, and took the data entry check and assay validation.

The data verification shows reasonable analytical accuracy and precision. The QP considers the GC Mine Mineral Resource database acceptable for Mineral Resource estimation.

#### 25.3 Mineral Resource Estimation

The Mineral Resource estimation work was completed by Mr Yongwei Li, Resource Geologist of Silvercorp under the supervision of Guoliang Ma, who is the QP of Silvercorp. Mr Mark Wanless, Principal Geologist of SRK ZA (Pr.Sci.Nat, FGSSA) and Ms Yanfang Zhao, Principal Geologist of SRK (MAusIMM) have reviewed the database, estimation methodologies and models used to prepare the Mineral Resource estimate using Isatis.Neo software. After some adjustment to the compositing, capping and search parameters, Mr Mark Wanless and Ms Yanfang Zhao are satisfied that they comply with reasonable industry practice and the guidelines of the CIM Code.

The estimates are based on drilling samples and underground samples information available up to 2024. With respect to drilling and underground sample information available for the March 2024 Mineral Resource estimates, SRK believes the current drilling and channel sampling information is sufficiently reliable to interpret with confidence the boundaries for GC deposits and that the assay data is sufficiently reliable to support Mineral Resource estimation.

### 25.4 Mining Method

The mine is designed as an underground operation developed by a hybrid access of declines and shaft, initially in 2 stages, targeting the Mineral Resources above -300mRL. A third stage is currently being designed, with the access method being considered as decline access and the relayed air return raises.

- Stage 1 production employs conventional mobile, rubber-tired, diesel-powered equipment (development jumbo, loader, and truck) with surface declines access down to -50 mRL.
- Stage 2 development from -50 mRL down to -300 mRL employs conventional tracked equipment (battery powered locomotives, rail cars, electric rocker shovels and pneumatic hand-held drills) via a surface shaft access, as well as the extension of the decline.
- Stage 3 is being designed, which will mine the Mineral Resources occurring between -300 mRL and -500 mRL.

The mining method employed by GC Mine were traditional shrinkage and resuing stoping methods, previously to 2021. OCAF method has been introduced as the backfill plant was commissioned.

The ROM material is mined/ drawn from the stope or waste excavated from development heading and loaded into 0.7m³ rail cars by LHD from either cross-cut draw points or development headings directly. The rail cars are moved by electric locomotives along the level drive (footwall drive) to the shaft, then hoisted two at a time in the shaft cage (2 deck) to surface. The material mined near decline system, underground trucks are loaded at the stope draw point equipped with vibration feeder at the bottom of the ore pass, which is fed from upper level by rail cars or LHD directly.

The underground infrastructure, including water supplier and dewatering system, hoisting system, ventilation, power supply, compressed air supply, and so on are well constructed for the first 2 stages of mining.

GC Mine operates mainly using contractors for mine development, production, ore transportation, and exploration. GC Mine provides its own management, technical services, and supervisory staff to manage the mine operations.

All mobile equipment and some minor fixed equipment are provided by the mining contractor.

The mine is operating at industrial good practice and with a reasonable perspective feasible extraction of the eligible Mineral Resources.

## 25.5 Recovery Method

The production process and operating parameters of the GC processing plant are suitable for the ore properties of the GC Mine. The historical performance shows that the targets of producing

commercial lead concentrate and zinc concentrate have been achieved, and the recovery rates of silver, lead and zinc have also reached the design value.

The new intelligent pre-sorting system built in 2023 replaces the hand-sorting and is still in the process of continuous optimization. Intelligent pre-sorting can improve the head grade for grinding, which is conducive to the processing utilization of low-grade ore.

The crushing system operates during the electricity price valley period (low cost electricity), which is conducive to reducing crushing costs. The grinding and floating system is two identical independent series, and the processing capacity of a single series is 900 to 950 tpd, which can fully reach the designed processing capacity of 1,600 tpd. The two grinding and floating circuits has the flexibly to adapt to changes in mining ore supply.

The GC processing plant is built on a steep hillside, which can make full use of gravity to convey ore pulp, and the ROM bin is located near the main shaft, making the material conveying/ transportation costs at a low level. The layout of the GC processing plant is reasonable with good management, and the ancillary facilities are adequate.

The lead concentrate contains 2% to 3% of copper and about 6% of zinc, it is recommended to carry out flotation test for the lead concentrate to separate copper and reduce zinc, including re-grinding flotation test, in order to produce copper concentrate, improve the grade of lead concentrate and increase the recovery rate of zinc.

# 25.6 Environmental Studies, Permitting, and Social or Community Impact

The GC Mine has obtained the main environmental protection-related permits required for operation, including the safety production permit, water use permit, and site discharge permit. An EIA report for GC Mine was prepared by Guangdong Heli Engineering Survey Institute in March, 2020. Guangdong Province Environmental Protection Bureau issued aforementioned EIA approval on 13 June 2010. The EIA report basically cover the main production facilities including mine site, processing plant and TSF.

## 25.7 Capital and Operating Costs

Records of Capex and Opex have been provided to SRK for review.

The associated Capex for deepen development are estimated by GC Mine. The other sustainable Capex such as mine closure, facilities updates and/ or capital maintenance are also estimated. The Capex is forecasted as about USD 62.5 million including USD 34.6 million exploration drillings over LOM.

GC Mine has a relative stable operation which addresses the Opex forecasting via their historical production records. The Opex is forecasted from the historical operation records of the past 3 years, which is USD58.3 per tonne.

## 25.8 Economic Analysis

The NPVs at a discount rate of 8% are about USD 63.1 million These positive NPVs provide an indication that it is economically viable for the GC Mine to report Mineral Reserves.

### 26 Recommendations

### 26.1 Geology

As reviewed by SRK from the geology, exploration, data management and Mineral Resource estimation, the QP recommendations for the GC Mine are indicated below:

- Regarding the sample database and QA/QC samples, SRK recommends ensuring that all records, including drillhole and channel samples, are assigned a consistent year between the collar and assay files. This will help reduce reporting discrepancies
- Additional bulk density measurements should be conducted on representative samples with varying base metal and pyrite content
- Bulk density measurements should also be taken from samples of the surrounding waste material
- Most umpire (check) samples show slightly bias results compared to the original samples in the higher end of the assay range. This phenomenon has occurred in both the ALS and GC Lab, which are the primary laboratories. It is recommended that it be assessed whether the storage of samples leads to this situation, which may be related to swelling and caking during oxidation
- During the site underground channel sampling observations, only the larger blocks on the plastic sheet were taken, all the fines were discarded, and the sampling was biased against the hanging wall and footwall units, with a larger proportion of the mineralization zone (Figure 6.2) chipped. Although SRK recognises that channel sampling is challenging due to the variable hardness of the rock units and uneven surface for sampling, SRK recommends that the chip sampling can be improved using a diamond saw to cut a channel for the chipping, which will also reduce the volume of sample and allow the full sample of coarse and fine material to be collected
- The umpire samples from 2021 to 2023 were observed to have some swelling and caking, especially in the samples for 2021 and 2022, which may result in mass change or oxidation, which may affect the results.

## 26.2 Mining

Based on the site visit and review of available technical information, and Mineral Reserve estimates, the QP recommendations for the GC Mine are indicated below:

- Conducting technical studies on long-hole stoping method for the relative wider veins, and recording the test stope data, for the improvement of mining efficiency and cost reduction
- Conducting reconciliation on not only Mineral Resources versus Processed Feed, but also on the mineral flows, from Mineral Resource model, grade control results, mining, then processing
- Conducting reconciliation on exploration investment versus Mineral Resource updates to demonstrate the Capex efficiency
- Considering utilising commercial mine planning software for mine scheduling, more efficient for modifying
- As part of ongoing operations at the mine, geotechnical and ground support aspects should be continuously reviewed in a formal and recordable manner, bearing in mind previous

recommendations, local and mine-wide operating experience in all rock types encountered, any advisable data collection, and looking to future mining development.

### 27 References

- NI 43-101 Technical Report Update on the Gaocheng Ag-Zn-Pb Project in Guangdong Province,
   People's Republic of China, AMC Mining Consultants (Canada) Ltd. October 2021;
- Processing Test Report on the Comprehensive Recovery of Lead, Zinc, Silver, Tin and Sulphur for GC Lead-Zinc Mine, Hunan Research Institute for Nonferrous Metals, May 2009.
- Preliminary Design of Mining and Processing of GC Lead-Zinc Mine in Yun'an District,
   Guangdong Province, Guangdong Metallurgical & Architectural Design Institute, April 2011.
- GC LOM 43-101(20240613).xlsm, GC Mine
- Management's Discussion and Analysis for the year ended March 31, 2024, Silvercorp
- Production records, from FY 2020 to 2024, in xlsx format, GC Mine
- 20240718\_GC\_Reserves\_30June, in xlsx format, GC Mine
- 20240712\_GC Mine 0630 Addition data, in xlsx format, GC Mine

| Closure  |
|--|
| This report, Technical Report on Gaocheng Silver-Lead-Zinc Project in Guangdong Province, China, was prepared by |
| Original signed by Mark Wanless of SRK Consulting  |
| Mark Wanless Principal Geologist   |
| Original signed by Falong Hu of SRK Consulting China Ltd   |
| Falong Hu, FAusIMM Principal Consultant (Mining)   |
| and reviewed by  |
| Original signed by Alexander Thin of SRK Consulting China Ltd  |
| Alexander Thin, FAusIMM Principal Consultant (Mining)  |

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 Mining Permit

The copy of the Mining Permit

#### 中华人民共和国

## 采矿许可证

(副本)

证号: C1000002010113210083333

采矿权人:广东发恩德矿业有限公司

也 址: 广东省云浮市云安县高村镇镇前路48号

矿山名称:广东发恩德矿业有限公司高枨铅锌矿

经济类型: 中外合作经营企业

**廾米矿种**: 锌矿、铅矿、银矿

开采方式: 地下开采

生产规模: 33万吨/年

矿区面积: 5.5238平方公里

**有效期限:** 贰拾捌年自2012年06月06日至2040年11月24日零伍月

中华 人民共和国国土资源部印制

#### (1980西安坐标系统)

#### 矿区范围拐点坐标:

点号 X坐标 Y坐标

A

1, 2536958. 82, 37591830. 45 2, 2536977. 34, 37594822. 59

3, 2535131, 42, 37594834, 19

4, 2535112. 90, 37591841. 69

标高: 从315米至-530米

开采深度:由315米至-530米标高 共有4个拐点圈定

## **Appendix B** Business License

The copy of the Business License



国家企业信用信息公示系统网址:

市场主体应当于每年1月1日至6月30日通过国 家企业信用信息公示系统报送公示年度报告

国家市场监督管理总局监制

## **Appendix C** High-Tech Enterprise Certificate

The copy of the High-Tech Enterprise Certificate



## **Appendix D** Water Use Permit

The copy of the Water Use Permit



## **Appendix E** Safety Production Permits

The copy of the Safety Production Permit – UG Mine



MEM



编号 (粤) FM安许证 [2023] Wc013 Π2 统一社会信用代码 91445300680642284X

安全生产许可证

(副本)

企业名称 广东发恩德矿业有限公司 (高枨铅锌矿尾矿干堆场

主要负责人 王海涛

单位地址 云浮市云安区高村镇大田村委高枨铅锌矿区

经济类型 有限责任公司(台港澳与境内合作)

有效期 2023年8月31日 至 2026年8月30日

发证机关

发证日期



中华人民共和国应急管理部直制

#### I, Falong Hu, FAusIMM, PMP, do hereby certify that:

- 1) I am a Principal Mining Engineer, associate Practice Leader with the firm of SRK Consulting China Ltd. ("SRK CN") with an office at: B1301 COFCO Plaza, 8 Jianguomennei Dajie, Beijing, the People's Republic of China ("PRC" or "China").
- 2) I graduated with a bachelor's degree in mining engineering from Central South University, China (B.Eng.) in 2009, a Master of Business Administration from China University of Geoscience Beijing, China (MBA) in 2015.
- 3) I am a fellow of the Australasian Institute of Mining and Metallurgy ("FAusIMM"), (#313608), and in a good standing. I am a register Project Management Professional ("PMP").
- 4) I have practiced my profession as a Mining Engineer for a total 16 years since my graduation.
- 5) My relevant work experience includes:
  - Review and reporting on mining method and Mineral Reserve Estimates for operations and projects around the world for due diligence and regulatory requirements.
  - Technical studies (Scoping/PEA, PFS, FS) project work on both underground and open pit projects, in Africa, Asia and Australia.
  - Operational experience in operations as mine planer and technical service, in China.
  - Participation and author of several NI 43-101 Technical Report.
  - Authored/co-authored several technical reports for IPO listing or transactions in the Stock Exchange of Hong Kong Limited.
- 6) I personally did visit the subject property to the Technical Report on April 23 to 26, 2024.
- 7) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfilled the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- 8) I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101
- 9) I am an author and chief compiler of this technical report and have supervised the independent verification completed by SRK and the preparation of Section 2 to 5, 15, 16, 18 except for 18.2, 19, 23 and the relevant portions of Section 1, 24 to 27 of this technical report. I accept professional responsibility for those sections I co-authored.
- 10) I have had prior involvement with GC Project that is the subject of the Technical Report, in that I assisted the independent valuer with SRK Australia to review the mining method, with respect to an independent technical valuation service, in 2023.
- 11) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 12) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2024

"Falong Hu"

Falong Hu, FAusIMM, PMP Principal Consultant (Mining) Associate Practice Leader, Management of MPE

#### I, Mark Wanless, FGSSA, Pr.Sci.Nat, do hereby certify that:

- 1) I am a Principal Geologist with the firm SRK Consulting (South Africa) (Pty) Ltd. (SRK ZA) with an office at SRK House, 265 Oxford Road, Illovo, Johannesburg 2196, South Africa.
- 2) I am a graduate of the University of Cape Town with a BSc (Hons) in Geology in 1995. I have practised my profession continuously since 1996.
- 3) I am registered as a Geologist with the South African Council for Natural Scientific Professionals (Registration No 400178/05). I am a Fellow of the Geological Society of South African and a Member of the Geostatistical Association of South Africa and a Member of the South African Institute of Mining and Metallurgy.
- 4) I have practiced my profession as a Geologist for a total 28 years since my graduation.
- 5) My relevant work experience includes:
  - Review and reporting on geological modelling and Mineral Resource estimates for operations and projects around the world for due diligence and regulatory requirements.
  - Technical studies (Scoping/PEA, PFS, FS) and project work on polymetallic precious and base metal deposits in Southern Africa, Asia, South America, and Australia.
  - Operational experience on Gold mines in South Africa as a Geologist and Mine Planner.
  - Participation and author of several NI 43-101 Technical Report.
  - Authored/co-authored several technical reports for IPO listing or transactions on Stock Exchanges including the TSX, ASX, LSE, JSE and HKSE.
- 6) I personally did visit the subject property to the Technical Report on April 23 to 26, 2024.
- 7) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfilled the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1.
- 8) I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101
- 9) I am a co-author of this technical report and responsible for Sections 7 to 12 and 14 of this report as they pertain to GC Mine, and accept professional responsibility for these sections of this technical report.
- 10) I have had no prior involvement with GC Project that is the subject of the Technical Report.
- 11) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 12) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2024

"Mark Wanless"

Mark Wanless, FGSSA, Pr.Sci.Nat Principal Consultant (Geology)

#### I, Yanfang Zhao, MAusIMM, do hereby certify that:

- 1) I am a principal geological engineer with the firm of SRK Consulting China Ltd. ("SRK CN") with an office at: B1301 COFCO Plaza, 8 Jianquomennei Dajie, Beijing, the People's Republic of China ("PRC" or "China").
- 2) I graduated with a master's degree in mineral prospecting and exploration from China University of Geosciences (Beijing), China (M.Eng.) in 2009, a bachelor's degree in resources environment from Shandong University of Science and Technology, 2006.
- 3) I am a member of the Australasian Institute of Mining and Metallurgy ("MAusIMM"), (#315027), and in a good standing.
- 4) I have practiced my profession as a geological engineer for a total 15 years since my graduation.
- 5) My relevant work experience includes:
  - Review and reporting on geological modelling and Mineral Resource estimates for operations and projects around the world for due diligence and regulatory requirements.
  - Experience in mining company as a Geologist, in China.
  - Participation and author of several NI 43-101 Technical Report.
  - Authored/co-authored several technical reports for IPO listing or transactions in the Stock Exchange of Hong Kong Limited.
- 6) I personally did visit the subject property to the Technical Report on April 23 to 26, 2024.
- 7) I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
- 8) I am an author of this technical report and prepare of for Sections 7 to 12 and 14 for QP review.
- 9) I have had prior involvement with GC Project that is the subject of the Technical Report, in that I assisted the independent valuer with SRK Australia to review the geology and resource estimation method and procedure, with respect to an independent technical valuation service, in 2023.
- 10) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 11) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2024

"Yanfang Zhao"

Yanfang Zhao, MAusIMM Principal Consultant (Geology)

#### I, Tzuhsuan Chuang, MAusIMM, do hereby certify that:

- 1) I am a Senior Mining Engineer with the firm of SRK Consulting China Ltd. ("SRK CN") with an office at: B1301 COFCO Plaza, 8 Jianguomennei Dajie, Beijing, the People's Republic of China ("PRC" or "China").
- 2) I graduated with a master's degree in mining engineering from Colorado School of Mines, USA (M.Sc) in 2016.
- 3) I am a member of the Australasian Institute of Mining and Metallurgy ("MAusIMM"), (#3088857), and in a good standing.
- 4) I have practiced my profession as a Mining Engineer for a total 7 years since my graduation.
- 5) My relevant work experience includes:
  - Review and reporting on Capex, Opex, technical-economic evaluation for projects around the world for regulatory requirements.
  - Technical studies (Scoping/PEA, PFS, FS) project work on both underground and open pit projects, in Africa and Asia.
  - Operational experience on gold mine in Colombia as a Mine Planner.
  - Participation and author of several NI 43-101 Technical Report.
  - Authored/co-authored several technical reports for IPO listing or transactions in the Stock Exchange of Hong Kong Limited.
- 6) I personally did not visit the subject property to the Technical Report.
- 7) I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
- 8) I am a co-author of this technical report and have supervised the independent verification completed by SRK and the preparation of Section 21 and 22 of this technical report for QP review. I accept professional responsibility for those sections I co-authored.
- 9) I have had no prior involvement with GC Project that is the subject of the Technical Report.
- 10) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 11) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2024

"Tzuhsuan Chuang"

Tzuhsuan Chuang, MAusIMM Senior Consultant (Mining)

#### I, Lanliang Niu, MAusIMM, do hereby certify that:

- 1) I am a Principal Mineral Processing Engineer, worked for SRK Consulting China Ltd. ("SRK CN") with an office at: B1301 COFCO Plaza, 8 Jianguomennei Dajie, Beijing, the People's Republic of China ("PRC" or "China").
- 2) I graduated with a bachelor's degree in mineral processing from Beijing University of Iron and Steel Technology in 1987.
- 3) I am a member of the Australasian Institute of Mining and Metallurgy ("MAusIMM"), (#313608), and a member of China Association of Mineral Resources Appraisers ("CAMRA").
- 4) I have practiced my profession as a Mineral Processing Engineer for a total of 37 years since my graduation and have worked at SRK CN for 17 years as a Mineral Processing Consultant.
- 5) I worked in two mineral research institutes from 1987 to 2005, while also working in three gold mines from 1987 to 1994. I worked in a rare earth mine from 2005 to 2007. Since late 2007, I have been with SRK CN, gaining experience in over 200 mining projects.
- 6) I personally did visit the subject property to the Technical Report on April 23 to 26, 2024.
- 7) I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
- 8) I am a co-author of this technical report and have supervised the independent verification completed by SRK and the preparation of Section 13 and 17 of this technical report for QP review. I accept professional responsibility for those sections I co-authored.
- 9) I have had no prior involvement with GC Project that is the subject of the Technical Report.
- 10) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 11) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2024

"Lanliang Niu"

Lanliang Niu, MAusIMM Principal Consultant (Mineral Processing)

#### I, Nan Xue, MAusIMM, do hereby certify that:

- 1) I am a Principal Environmental Scientist of SRK Consulting China Ltd. ("SRK CN") with an office at: B1301 COFCO Plaza, 8 Jianguomennei Dajie, Beijing, the People's Republic of China ("PRC" or "China").
- 2) I graduated with a Master's degree in environmental science from Nankai University, China (M.Sc) in 2007.
- 3) I am a member of the Australasian Institute of Mining and Metallurgy ("MAusIMM"), (#314731).
- 4) I have practiced my profession as an Environmental Scientist for a total 17 years since my graduation.
- 5) My relevant work experience includes:
  - Engineering analysis, pollution source calculation and impact predictions for environmental impact assessment report.
  - Environmental technical studies (Scoping/PEA, PFS, FS) project work on mining projects.
  - Conduct environmental due diligence in accordance with equator principles, International Finance Corporation environmental and social performance standards and other international standards.
  - Participation in a number of NI 43-101 Technical Reports for IPO listing or transactions in the Stock Exchange of Hong Kong Limited.
- 6) I personally did not visit the subject property to the Technical Report.
- 7) I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
- 8) I am a co-author of this technical report and have supervised the independent verification completed by SRK and the preparation of Section 20 of this technical report for QP review. I accept professional responsibility for those sections I co-authored.
- 9) I have had prior involvement with GC Project that is the subject of the Technical Report, in that I assisted the independent valuer with SRK Australia to review the geology and resource estimation method and procedure, with respect to an independent technical valuation service, in 2023.
- 10) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- 11) That, as of the effective date of the Technical Report and the date this certificate, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Effective Date: 30 June 2024 Signing Date: 13 September 2014

"Nan Xue"

Nan Xue, MAusIMM Principal Consultant (ESG)