Final

# Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China

Muping Gold Project, Shandong Province, People's Republic of China PRG Res Holding 2 Ltd



SRK Consulting China Ltd SCN836 30 June 2024



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# **Glossary of Terms and Abbreviations**

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

Abbreviation	Terminology
%	percent/percentage
/	per or null
Φ	a symbol for diameter
0	degree(s) of arc
°C	degree(s) Celsius
μm	micrometre(s)
2H2024	the second half of 2024
3D	three-dimensional
6M2024	the months from 1 January to 30 June in 2024
6M2029	the months from 1 January to 30 June in 2029
Ag	The chemical symbol for silver
ARD	acid rock drainage
ASL	above sea level
Au	The chemical symbol for gold
AusIMM	Australasian Institute of Mining and Metallurgy
BD	bulk density
BEng	Bachelor of Engineering
Capex	capital cost(s)
CGCS 2000	China Geodetic Coordinate System 2000
CH Mine	Chahe Underground Gold Mine
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	the CIM Definition Standards on Mineral Resources and Reserves
CIT	Corporate income tax
cm	centimetre(s)
CMF	Consensus Market Forecasts
CNMC	China Nonferrous Metal Mining (Group) Co., Ltd
Со	the chemical symbol for cobalt
Constitution	the 2018 Constitution of the People's Republic of China
CoV	coefficient of variation
СР	competent person
CPGeo	Chartered Professional Geologist
CPR	competent person's report,
Cr	the chemical symbol for chromium
CSA	compensation for sulphuric acid

Abbreviation	Terminology
Cu	the chemical symbol for copper
Cut-off grade or CoG	The grade threshold above which a mineral material is considered potentially economic and is selectively mined and processed as ore
DA	depreciation and amortisation
Dahedong Processing	Yantai City Dahedong Processing Co., Ltd, 烟台市大河东选矿有限公司
DCF	discounted cash flow
DER on CH Mine in December 2015	the Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Chahe Property, Muping District, Yantai City, Shandong Province, which was prepared by the Number 3 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources and dated December 2015 (山东省地质矿产勘查开发局第三地质大队,《山东省烟台市牟平区岔河矿区深部及外围金矿详查报告》, 2015 年 12 月)
DER on DGZ Mine in May 2017	the Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Denggezhuang Property, Muping District, Yantai City, Shandong Province, which was prepared by the Number 3 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources and dated May 2017 (山东省地质矿产勘查开发局第三地质大队,《山东省烟台市牟平区邓格庄矿区深部及外围金矿详查报告》, 2017 年 5 月)
DER on HH Mine in September 2010	the Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Houzhuang-Heiniutai Property, Muping District, Yantai City, Shandong Province, which was prepared by the Number 3 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources and dated September 2010 (山东省地质矿产勘查开发局第三地质大队,《山东省烟台市牟平区后庄-黑牛台矿 区金矿详查报告》, 2010 年 9 月)
DGZ Mine	Denggezhuang Underground Gold Mine
DGZ Processing Plant	Denggezhuang Processing Plant
DNR of Shandong	Department of Natural Resources of Shandong Province
Dr or PhD	Doctor of Philosophy
DRC	Democratic Republic of the Congo
DUP on CH Mine	the Development and Utilisation Plan on Gold Mineral Resources in Chahe Property (change), prepared by Shandong Dehe Engineering Design Co., Ltd and dated December 2023. (山东德和工程设计有限公司,《岔河矿区金矿资源开发利 用方案(变更)》, 2023 年 12 月)
DUP on DGZ Mine	the Development and Utilisation Plan on Gold Mineral Resources in Denggezhuang Property (change), prepared by Shandong Gold Design Consulting Co., Ltd and dated December 2023. (山金设计咨询有限公司,《邓格 庄金矿区金矿资源开发利用方案(变更)》, 2023 年 12 月)
DUP on HH Mine	the Development and Utilisation Plan on Gold Mineral Resources in Houzhuang- Heiniutai Property (change), Muping District, Yantai City, Shandong Province, prepared by Shandong Lianchuang Mining Design Co., Ltd and dated March 2023. (山东联创矿业设计有限公司,《山东省烟台市牟平区后庄-黑牛台矿区金矿 资源开发利用方案(变更),2023年3月》
EIA	Environmental Impact Assessment
ESG	environmental, social and governance
etc.	et cetera (= and so on)

Abbreviation	Terminology
Exchange or SEHK	The Stock Exchange of Hong Kong Limited, a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited
Exchange Guidance Note 7	The Stock Exchange of Hong Kong Limited Guidance Note 7
Exchange Listing Rules	the Rules Governing the Listing of Securities
F1	fault 1
F7	fault 7
FAusIMM	Fellow of the AusIMM
Fe	the chemical symbol for iron
g	gram(s)
g/L	grams per litre
g/t	gram(s) per tonne
GIS/RS	geographic information system and remote sensing
GMZ	gold mineralised zone
HH Mine	Houzhuang-Heiniutai Underground Gold Mine
HKEX	Hong Kong Exchanges and Clearing Limited
i.e.	id Est (= that is)
IDW2	inverse distance weighting squared method
IDW3	inverse distance weighting cubed method
IDW	inverse distance weighting method
IFC	International Finance Corporation
Indicated Mineral Resource	An Indicated Mineral Resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/ or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	An Inferred Mineral Resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/ or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes which may be limited or of uncertain quality and reliability
IPO	initial public offering
IRR	internal rate of return
JNTC	Jinan Mineral Resources Supervision and Testing Centre, 济南矿产资源监督检测 中心
JORC	Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition, as published by the JORC.
kg	kilogram(s), equivalent to 1,000 grams
kg/t	kilogram(s) per tonne

Abbreviation	Terminology
km	kilometre(s), equivalent to 1,000 metres
km <sup>2</sup>	square kilometre(s), equivalent to 1,000,000 square metres
koz	1,000 troy ounces
kPa	kilopascal(s)
kt	kilotonne(s), equivalent to 1,000 tonnes
ktpa or kt/a	kilotonne(s) per annum
kV	kilovolt(s), equivalent to 1,000 volts
kVA	kilovolt-ampere(s)
kW	kilowatt(s), equivalent to 1,000 watts
kWh	kilowatt-hour(s)
kWh/t	kilowatt-hour(s) per tonne
L/s/m	litres per second per metre
Li	the chemical symbol for lithium
LoM	life of mine
m	metre(s)
m/d	metre(s) per day
m <sup>2</sup>	square metre(s)
m <sup>3</sup>	cubic metre(s)
m³/d	cubic metre(s) per day
m³/min	cubic metre(s) per minute
m³/s	cubic metre(s) per second
MAIG	Member of the Australian Institute of Geoscientists
Majestic Gold	Majestic Gold Corp., a company listed on the TSX Venture Exchange (stock code: MJS.V), holds 70.5% shares on Persistence Resources Group Ltd.
m ASL	metre(s) above sea level
MAusIMM	Member of the AusIMM
MBA	Master of Business Administration
MCAMRA	Member of China Association of Mineral Resources Appraisers
Measured Mineral Resource	A Measured 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 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
MEng	Master of Engineering
mg/L	milligram(s) per litre
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

Abbreviation	Terminology
	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.
Mineral Resources	A concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction, as defined in 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
mln	million(s)
mm	millimetre(s)
Mn	the chemical symbol for manganese
Мо	the chemical symbol for molybdenum
Moz	Million troy ounce(s)
MPa	Megapascal(s)
MSc	Master of Science
Muping Project	The Muping Gold Project in Yantai City, Shandong Province, The People's Republic of China. Muping Gold Project is operated by Yantai City Mujin Mining Company Limited. The main assets include Denggezhuang Underground Gold Mine, Houzhuang-Heiniutai Underground Gold Mine, Chahe Underground Gold Mine and the Denggezhuang Processing Plant.
MW	Megawatt(s), equivalent to 1,000,000 watts
NCF	net cash flow
NI 43-101	Canadian National Instrument 43-101, the Standards of Disclosure for Mineral Projects, including Companion Policy 43-101 as amended from time to time.
NE	north-east
NNE	north-north-east
No.1 SDGM	Number 1 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources, 山东省地质矿产勘查开发局第一地质大队
No.3 SDGM	Number 3 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources, 山东省地质矿产勘查开发局第三地质大队
No.6 SDGM	Number 6 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources, 山东省地质矿产勘查开发局第六地质大队
No.805 SDGM	Number 805 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources, 山东省地质矿产勘查开发局第八〇五地质大队
NPV	net present value
NS	north-south
NW	north-west
O.K.	Ordinary Kriging
Opex	operating cost(s)
OZ	troy ounce
Pb	the chemical symbol for lead

Abbreviation	Terminology
PD on CH Mine	the Preliminary Design on Mining Project (expanding boundary and mining capacity) of Chahe Property, prepared by Shandong Dehe Engineering Design Co., Ltd and dated February 2024. (山东德和工程设计有限公司,《岔河矿区(扩界、扩能)采矿项目初步设计》, 2024 年 2 月)
Persistence Resources	Persistence Resources Group Ltd, a public company listed in The Stock Exchange of Hong Kong Limited (Stock Code: 2489).
PFS	preliminary feasibility study
PGE	platinum group elements
PRC or China	the People's Republic of China
PRH2 or Client	PRG Res Holding 2 Ltd, a wholly owned subsidiary of Persistence Resources
Probable Mineral Reserve	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 Mineral Reserves	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.
Provincial Government	the People's Government of Shandong Province
PTL	power transmission line
QA/QC	Quality Assurance and Quality Control
QP	qualified person
QPR	Qualified Person's Report
REE	rare earth elements
RMB or CNY	Renminbi or Chinese Yuan, which is the official currency of the People's Republic of China.
RMB/g	Renminbi per gram
RMB/t	Renminbi per tonne
RoM	run-of-mine
RPEEE	reasonable prospects for eventual economic extraction
S	The chemical symbol for sulphur
Std	standard deviations
SDGM	Shandong Provincial Bureau of Geology and Minera Resources, 山东省地质矿产 勘查开发局
SD-GOLD	Shandong Gold Design Consulting Co., Ltd, 山金设计咨询有限公司
SGS Tianjin	SGS Laboratory in Tianjin, China
Shandong Dehe	Shandong Dehe Engineering Design Co., Ltd, 山东德和工程设计有限公司

Abbreviation	Terminology
Shandong Guoda	Shandong Guoda Gold Co., Ltd, 山东国大黄金股份有限公司
Shandong Humon	Shandong Humon Smelting Co., Ltd, 山东恒邦冶炼股份有限公司
Shandong Lianchuang	Shandong Lianchuang Mining Design Co., Ltd, 山东联创矿业设计有限公司
SINOPEC	China Petrochemical Corporation
SRK or SRK China	SRK Consulting China Ltd, trading as SRK Consulting
SRK Consulting	The SRK Consulting Group
t	tonne(s), equivalent to 1,000 kg
TDS	total dissolved solids
tpa or t/a	tonne(s) per annum
tpd or t/d	tonne(s) per day
tph or t/h	tonne(s) per hour
TSF	tailings storage facility
TSXV	TSX Venture Exchange
UCS	Uniaxial compressive strength
UNDP	United Nations Development Programme
USD or US\$	United States Dollar
VAT	value-added tax
VR on DGZ Mine in June 2019	the Verification Report on Gold Mineral Resource and Reserve in Denggezhuang Property, Muping District, Yantai City, Shandong Province, which was prepared by No.3 SDGM and dated June 2019.
WSCP	water and soil conservation plan
Yantai Guoda	Yantai Guoda Trading Co., Ltd, 烟台国大贸易有限公司
Yantai Mujin	Yantai City Mujin Mining Company Limited, 烟台市牟金矿业有限公司
Yantai Qingrun	Yantai Qingrun Environmental Protection Technology Co. Ltd, 烟台青润环保科技 有限公司
Zn	the chemical symbol for zinc

## **Executive Summary**

SRK Consulting China Ltd ("SRK" or "SRK China") was requested by PRG Res Holding 2 Ltd ("PRH2" or "Client"), a wholly owned subsidiary of Persistence Resources Group Ltd ("Persistence Resources"), to prepare a Qualified Person's Report ("QPR") on the Muping Gold Project ("Muping Project") located in Yantai City, Shandong Province, The People's Republic of China ("PRC" or "China"), following the guidelines of Canadian National Instrument 43-101 ("*NI 43-101*"), the Standards of Disclosure for Mineral Projects, including Companion Policy 43-101 as amened from time to time, and the requirements of The Stock Exchange of Hong Kong Limited ("Exchange" or "SEHK"), a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited ("HKEX").

Persistence Resources, a public company listed on the Exchange (stock code: 2489), is intending to acquire the interest of the Muping Project via its subsidiary, and will submit the QPR to the Exchange for the transaction. Majestic Gold Corp. ("**Majestic Gold**") is a company listed on the TSX Venture Exchange (stock code: MJS.V), and holds 70.5% via shares in Persistence Resources.

Muping Project is operated by Yantai City Mujin Mining Company Limited ("**Yantai Mujin**"). The main assets operated by Yantai Mujin include Denggezhuang Underground Gold Mine ("**DGZ Mine**"), Houzhuang-Heiniutai Underground Gold Mine ("**HH Mine**"), Chahe Underground Gold Mine ("**CH Mine**") and the Denggezhuang Processing Plant ("**DGZ Processing Plant**"). The DGZ Processing Plant is located next to the DGZ Mine to process ore from these three mines.

This QPR consists of an independent review of the geology, exploration, Mineral Resources, Mineral Reserves, mining, mineral processing, capital investment, operating cost, and environmental and social aspects of the Muping Project.

## **Outline of Work Programs**

The scope of work, as defined in a letter of engagement dated 22 January 2024 between PRH2 and SRK, includes the reviewing and estimating of the Mineral Resource of the gold mineralisation delineated within the Muping Project, and reviewing a preliminary feasibility study of the DGZ Mine, and the preparation of a QPR or competent person's report ("**CPR**") on the Muping Project in accordance with *NI* 43-101 and the requirements of the HKEX.

SRK conducted the work programs on the Muping Project in phases:

- Phase 1: SRK conducted a desktop review on the documents provided by PRH2, before conducting the site visits to the Muping Project;
- Phase 2: SRK conducted site visits to the Muping Project. During the period from 9 to 12 March 2024, SRK's personnel conducted site visit to the Muping Project, to inspect and observe the status of the Muping Project, held meetings with the management and technical personnel, sighted geology, exploration, mineralisation, trial mining operation, ore processing and metallurgical operations, as well as conducted its own data verification programs, in addition to environmental and social aspects. During the period from 18 to 20 April 2024, the SRK appointed qualified person ("QP") conducted another site visit to the Muping Project; and
- Phase 3: SRK team reviewed the information provided by PRH2, and estimated Mineral Resources and reviewed the preliminary feasibility study on the DGZ Mine, converted the qualified Mineral Resources into Mineral Reserves, reviewed other technical aspects, and

compiled a technical report about the Muping Project according to the *NI 43-101* technical report form, and submitted it to PRH2 for comments in June 2024.

SRK will further revise the report based on the feedback from PRH2 and related third parties, and will finalise it in the due course.

## Results

## Overall

A database of previous exploration programs, including trenching, drilling, tunnelling, as well as sampling and assaying, has been established for the Muping Project. SRK reviewed the database, and re-estimated the Mineral Resources of the Muping Project. As of 30 June 2024, at a cut-off grade of 1.0 gram per tonne ("g/t") gold ("Au"), the Muping Project has a Mineral Resource basis of about 1,600 kilotonnes ("kt") of Indicated Mineral Resources with an average grade of 5.1 g/t Au, and about 2,300 kt of Inferred Mineral Resources with an average grade of 4.5 g/t Au. It is noted that there are no Measured category of Mineral Resources. Table ES-1 provides details of the Mineral Resources. The exploration permit does not possess any Mineral Resources because there was no exploration work done on it yet.

Property	Category	Cut-off (g/t Au)	Tonnage (kt)	Au Grade (g/t)	Au Metal (kg)	Au Metal (koz)
DGZ Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	1,000	6.0	6,100	200
-	Inferred	1.0	1,700	4.8	8,000	260
CH Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	300	4.3	1,300	41
-	Inferred	1.0	570	3.9	2,200	71
HH Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	270	2.6	690	22
-	Inferred	1.0	76	2.3	170	5.5
Total	Measured	1.0	-	-	-	-
-	Indicated	1.0	1,600	5.1	8,100	260
-	Inferred	1.0	2,300	4.5	10,000	330

 Table ES-1:
 Mineral Resource Statement for Muping Project, as of 30 June 2024 [1, 2, 3, 4]

Sources: SRK

Notes:

<sup>1</sup> All figures were rounded to the second significant digit to reflect the relative accuracy of the estimate.

<sup>2</sup> The information in this QPR with regard to Mineral Resource estimates is based on information compiled by Dr Anshun Xu Ms Yanfang Zhao and Mr Huaixiang Li, employees of SRK Consulting China Ltd. Dr Xu, FAusIMM, Ms Zhao, MAusIMM, and Mr Li, MAIG, have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Qualified Persons as defined in the *NI 43-101*. Dr Xu, Ms Zhao and Mr Li consent to the reporting of this information in the form and context in which it appears.

<sup>3</sup> Total may not add due to rounding discrepancies.

<sup>4</sup> The conversion between troy ounce and gram used herein is 1 oz = 31.1035 g.

SRK reviewed a report which proposed a plan to extend the life of mine ("LoM") of the DGZ mine, and deemed it as a preliminary feasibility study ("PFS"). SRK also reviewed the production data of

the mine, and converted the qualified Mineral Resources of the DGZ Mine into Mineral Reserves in Table ES-2. As of 30 June 2024, the DGZ Mine has 1,300 kt of Probable Mineral Reserves with an average grade of 3.8 g/t Au, at a cut-off grade of 1.9 g/t Au. It is noted that there are no Proven category of Mineral Reserves.

Property	Category	Cut-off (g/t Au)	Ore Tonnage (kt)	Au Grade (g/t)	Au Metal (t)	Au Metal (koz)
DGZ Mine	Proven	1.9	-	-	-	-
-	Probable	1.9	1,300	3.8	5.0	161
-	Total	1.9	1,300	3.8	5.0	161

Table ES-2:	Mineral Reserve Statement for DGZ Mine, as of 30 June 2024 [1, 2, 3, 4]
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Sources: SRK

Notes:

<sup>1</sup> The information relates to Mineral Reserve conversion is based on information compiled by Mr Erwei Lu, Mr Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Dr Xu, Mr Wu and Mr Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr Wu is undertaking to qualify as Qualified Person as defined in the *NI* 43-101. Dr Xu and Mr Wu supervised the work of Mr Lu. Dr Xu, Mr Wu and Mr Lu consent to the reporting of this information in the form and context in which it appears.

<sup>2</sup> All figures are rounded to reflect the uncertainties in estimate.

<sup>3</sup> Total may not add due to rounding discrepancies.

<sup>4</sup> The Mineral Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

As the PFS proposed an ore mining capacity of 165 kilotonnes per annum ("**ktpa**" or "**kt/a**"), the Mineral Reserves may support a LoM of about 10 years. Considering the economic parameters proposed and the historical costs of the operation, SRK also conducted an economic analysis using discount cash flow ("**DCF**") method on the DGZ mine. At a discount of 10%, the DGZ mine has a positive net present value ("**NPV**") of Renminbi ("**RMB**" or "**CNY**") 94 million ("**mIn**"), showing that it is economically viable for the Muping Project.

### **Geological Setting and Mineralisation**

This region is divided, according to geotectonic sequence located, into Sulu orogenic belt (I), Jiaonan- Weihai Uplift (II), Weihai Uplift area (III), Rushan-Rongcheng fault uplift (IV), and Kunyushan-Rushan Uplift (V) of Muping-Rushan gold metallogenic belt.

The outcrop stratum in the area is mainly Paleoproterozoic, Jingshan Group and Cenozoic Quaternary. The fault structure is relatively developed. Magmatic rocks are widely distributed, and gold mineralisation conditions are good based on the *Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Denggezhuang Property, Muping District, Yantai City, Shandong Province* ("*DER on DGZ Mine in May 2017*"), which was prepared by the Number 3 Geological Brigade of Shandong Provincial Bureau of Geology and Mineral Resources ("No.3 SDGM") and dated May 2017.

#### **DGZ Mine**

The surface layer of the mining area is simple and mainly composed of faulted structures. Magmatic rocks are extremely well developed.

The DGZ Mine is located in the Mu(Ping)-Ru(Shan) gold metallogenic belt which is an important gold-producing area.

Within the DGZ Mine area, there are three mineralisation alteration belts, numbered I, II and III, which are controlled by the fracture in north-northeast ("**NNE**") direction. A total of 35 gold veins were found, of which the I 1-1, I 2-2, II-1, III-51, III-52, III-62 and X-1 are the main orebodies.

### CH Mine

The mine area is located on the west side of Jinniushan main fault in Mupuru metallogenic belt and the outcrop layer is relatively simple dominated by fault structure. Magmatic rocks are extremely well developed.

A total of 14 gold mineralised zones ("**GMZs**") domains were constructed, namely D11, D12, D13, D21, D22, D24, D25, D26, D27, D28, D29, D51, D52 and D53. D12 and D21 are the dominant GMZs.

### HH Mine

The GMZs are controlled by the Jinniushan Fracture Zone, which strike to northeast of 10 to 15 degrees (" $^{\circ}$ ") with a dip mainly to the southeast of 60° to 85°. In the mine area, the mineralised zone has a length of 1,760 metres ("m") and the width varied from 3 m to 20 m.

A total of 6 mineralised bodies (D1, D2, D3, D4, D5 and D6) were modelled and 2 (D1 and D2) were the dominant mineralised bodies. The host rock of the mineralised bodies is pyrite quartz vein, and the wall rock is composed of monzonitic granite lamprophyre and marble.

## Exploration

### **DGZ Mine**

The significant exploration work undertaken at DGZ Mine (1982-2017) is shown in Table ES-3.

 Table ES-3:
 The Main Exploration Activity at DGZ Mine (1982-2017)

Item	Unit	1982-1986	1990-1992	2005-2008	2011-2017
1/10,000 geological survey	km <sup>2</sup>	35	43	-	7.35
1/2,000 geological survey	km <sup>2</sup>	0.60	3.02	-	5.02
1/10,000 hydrogeological survey	km <sup>2</sup>	35	/	/	/
1/5,000 hydrogeological survey	km <sup>2</sup>	3	/	/	/
1/2,000 topographic survey	km <sup>2</sup>	0.60	/	/	/
1/2,000 hydrogeological survey	km <sup>2</sup>	-	43	-	-
1/10,000 hydrogeological revision survey	km²	-	-	-	120
1/2,000 topographic geological survey	km²	-	18	-	5.02
1/10,000 topographic geological survey	km²	-	50	-	50
Trenching	m <sup>3</sup>	2,400	7,926	-	-
Tunnel logging	m	400	939.9	560.1	8,342.3
Drilling depth	m/holes	11,874.22/51	63,653.34/217	17,527.48/-	66,523.72/156

Item	Unit	1982-1986	1990-1992	2005-2008	2011-2017
Water pumping test	times/wells	16/16	/	/	/
Sample quantity	piece	757	/	/	/
Hydrogeological well quantity	wells	7	/	/	/
Drifting	m	-	6,739.35	-	-
Hydrogeological drilling	m/holes	-	-	-	409.10/1
Basic analytical sample	piece		5211	971	4,788
Bulk of the sample (small)	piece	-	-	68	259
Moisture sample	piece	-	-	68	259
Internal test sample	piece	-	-	117	584
External test sample	piece	-	-	65	345
Hydrological borehole logging	m/hole	-	-	-	6,214.72/17

Sources: DER on DGZ Mine in May 2017

#### **CH Mine**

The significant exploration work undertaken at CH Mine (1981-2015) is shown in Table ES-4.

Table ES-4:	The Main Exploration	Activity at CH Mine	(1981-2015)
	The main Exploration	Additing at off millio	(1301 2010)

Item	Unit	1981-1999	2009-2010 [1]	2010-2015 [2]	2013
1/10,000 Geological Survey	km <sup>2</sup>	7.9	3.86	7.51	-
1/2,000 Geological Survey	km²	0.95	1.5	5.56	-
Trenching	m <sup>3</sup>	1,245.82	-	-	217
Tunnelling	m	7,022	-	-	-
Drilling	m/holes	3,675.36/23	2,217.62/7	20,454.12/59	4,331.43/22
Basic analytical sample	piece	426	36	493	236
BD sample	piece	58	-	56	32
Moisture sample	piece	42	-	56	32
Internal test sample	piece	50	36	55	41
External test sample	piece	65	5	43	29

Sources: DER on CH Mine in December 2015

Notes:

<sup>1</sup> Survey of deep and peripheral gold deposits

<sup>2</sup> Detailed geological survey

#### **HH Mine**

The significant exploration work undertaken at HH Mine (1985-2010) is shown in Table ES-5.

Item	Unit	1985-2005	2009-2010	
1/10,000 geological survey	km <sup>2</sup>	16	5.6	
1/2,000 geological survey	km <sup>2</sup>	4.24	0.8	
1/10,000 hydrogeological survey	km <sup>2</sup>	-	44	
1/2,000 hydrogeological survey	km <sup>2</sup>	-	7	
Trenching	m <sup>3</sup>	2,218	215	
Tunnelling	m	537	-	
Drilling	m/holes	7,903.16/25	5,800.15/19	
Basic analytical sample	piece	913	407	
Bulk of the sample(small)	piece	42	33	
Moisture sample	piece	42	27	
Internal test sample	piece	70	83	
External test sample	piece	40	43	

#### Table ES-5: The Main Exploration Activity at HH Mine (1985-2010)

Sources: DER on HH Mine in September 2010.

Notes: 2009-2010 is the detailed geological survey.

## Drilling

Borehole inclination is 60 degrees ("o") to 79° and hole depths between 148.2 2 m to 818.10 m. XY-4, XY-44 and CU-1000 type drilling rigs with hydraulic rotary small diameter diamond drilling and rope core technology were used in the DGZ Mine. The opening diameter is 91 millimetres ("**mm**") or 110 mm and the final hole diameter is 75 mm. The drilling project was carried out in strict accordance with the requirements of the *Geological Core Drilling Regulations (DZ/T 0227-2016)*. Drilling in the CH Mine and HH Mine are similar to that in DGZ Mine.

The significant exploration work undertaken at summarised in Table ES-3, Table ES-4 and Table ES-5.

## Sample Preparation, Analyses and Security

#### **Sample Preparation**

Sample preparation was undertaken by the laboratory of No.3 SDGM.

The coarse crushing, medium crushing and fine crushing process were adopted for sample preparation. Sample preparation was carried out according to the procedure of *The Specification of Testing Quality Management for Geological Laboratories-Part 2: Preparation of Rock and Mineral Samples (DZ/T 0130.2-2006)*.

#### Sample Analyses

The basic analysis was undertaken by the laboratory of No.3 SDGM with provincial metrological certification. The internal inspection analysis was carried out at the same time. The external/third-party sample inspection and analysis was undertaken by Jinan Mineral Resources Supervision and

Testing Centre ("**JNTC**") of the Ministry of Natural Resources of the People's Republic of China which has a national metrological certification.

The experimental tests were carried out in accordance with the procedures of *The Specification of Testing Quality Management for Geological Laboratories-Part 3: Chemical Components Analysis of Rock and Mineral Samples (DZ/T 0130.3-2006).* 

The basic analysis element is Au. The analysis items of combined analysis samples were silver ("**Ag**"), copper ("**Cu**") and sulphur ("**S**"). The multi-element analysis items were Ag, Cu, S and arsenic.

The Au test methodology is activated carbon adsorption - hydroquinone capacity method.

### Quality Assurance and Quality Control (QA/QC)

In order to ensure the quality of the basic analysis and to know whether there are accidental errors or systematic error in the process of analysis the samples, internal and external analysis samples are extracted from the basic analysis samples in stages and batches. The internal inspection samples are extracted by batch at the rate of 10% (1 in 10 samples) and the external inspection samples at the rate of 5% (1 in 20 samples). The internal test samples analysis was undertaken by the provincial metrological certification of No.3 SDGM (Class A qualification) and the external test samples analysis was undertaken by the national metrological certification of the JNTC (Class A qualification).

For DGZ Mine, a total of 3,653 basic analysis samples were taken and 543 samples were sent for internal inspection in 26 batches, accounting for 14.86% of the total number of samples. For external inspection, 323 samples were sent for external inspection in seven batches, accounting for 8.84% of the total number of samples. The results of the internal inspection and external inspection tests showed that there is neither accidental error nor systematic error in sample analysis.

For CH Mine, there were 493 basic analysis samples in the detailed investigation area. A total of 51 samples were collected in this detailed inspection, accounting for 10.34% of the total samples. And the qualification rate of internal inspection was 98%. 39 samples were collected for external inspection test, accounting for 7.91% of the total samples. The qualification rate is 94.87%.

For HH Mine, there were 407 basic analysis samples in the detailed investigation area. A total of 83 samples were selected from the basic analysis samples in stages and batches, accounting for 20.39% of the total samples. For external inspection and analysis, 43 samples were extracted from basic analysis samples, accounting for 10.57% of the total number of samples.

In the opinion of SRK, the sampling preparation security and analytical procedures are consistent with generally accepted industry best practices and are therefore adequate.

## **Data Verification**

#### Verifications by No.3 SDGM

From 2011 to 2017, the No.3 SDGM carried detailed geological surveys for DGZ Mine. A total of 354 samples were sampled for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 9.69%

of the total samples.

From 2010 to 2015, the No.3 SDGM carried out detailed geological surveys for CH Mine. A total of 43 samples were sampled for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 8.72% of the total samples.

From 2009 to 2010, the No.3 SDGM carried out detailed geological surveys for HH Mine. A total of 43 samples were sampled for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 10.57% of the total samples.

The analysis was undertaken by JNTC.

#### Verifications by PRH2

Five samples were appraised by PRH2 in stopes at levels -185 m and -265 m in DGZ Mine. The results are shown in Table ES-6. The test results show that the gold grade is reasonable, between 5.11 g/t and 17.2 g/t gold. PRH2 didn't conduct verifications on HH Mine and CH Mine.

Sample Number	Sampling Position	Au Grade (g/t)	
1	Stope 53 at Level -185 m	6.95	
2	Stope 79 at Level -185 m	14.8	
3	Stope 77 at Level -265 m	5.11	
4	Stope 79 at Level -265 m	11.8	
5	Stope 81 at Level -265 m	17.2	

Table ES-6: Assaying Results of PRH2's Sampling

Sources: PRH2

#### Verifications by SRK

The data verification program is only re-sampling for pulp duplicate, sample preparation and assaying by SGS Laboratory in Tianjin, China ("**SGS Tianjin**"). The re-sampling process was supervised by SRK geologists in March 2024.

DGZ Mine

A total of 79 samples were re-sampled. SRK attributes these biases to the heterogeneity of the mineralised material. It is basically acceptable, considering when the samples were collected and analysed. This batch of data can be used for Mineral Resource estimation.

SRK geologist did not find enough cores retained in DGZ Mine during the site visit conducted in March 2024. It was decided to conduct re-sampling in a mining roadway and send them to SGS Tianjin for analysis.

CH Mine

A total of 43 samples were re- sampled. SRK believes that the data is reliable. This batch of data can be used for Mineral Resource estimation.

HH Mine

A total of 43 samples were re- sampled. SRK believes that the data is reliable. This batch of data can be used for Mineral Resource estimation.

## **Mineral Processing and Metallurgical Testing**

Yantai Mujin conducted simple mineralogical studies and flotation selectivity tests on ore samples from DGZ Mine and HH Mine. The results indicated that the flotation selectivity of both ores is good with processing recovery rates of 96% and 95% respectively. Additionally, the ore grinding fineness is coarse. The process is simple and the reagent system is uncomplicated. However, both DGZ Mine and HH Mine are old mines. Historical production practices have shown that, under the condition of grinding fineness of -200 mesh accounting for 50% to 55% ( $P_{50-55} = 75$  micrometre ("µm")), a "1 roughing-2 scavenging-2 cleaning" flotation process is adopted. The concentrate grade of DGZ Mine is 18 g/t, with a gold recovery rate of 91%. The concentrate grade of HH Mine is 13 g/t, with a gold recovery rate of 90%.

The CH Mine ceased production in 1999, without processing test reports and historical production data. Based on the similar nature of the ore from the three gold mines, which are all "sulphide-quartz vein type", the ore from the CH Mine would be easily floatable. SRK estimates that the processing indices of CH Mine are roughly the same as those of HH Mine ore.

## **Mineral Resource Estimates**

#### **DGZ Mine**

SRK has used the datasets provide by PRH2 and prepared a Mineral Resource model for DGZ mine. The basic database and solid model were prepared by PRH2 in MineSight software.

SRK has revised the database and solid model for gold veins, performed grade estimation, and reported the Mineral Resource in Table ES-1.

According to its conceptual calculation, SRK considered that the blocks which are not below a cutoff grade of 1.0 g/t Au show "reasonable prospects for eventual economic extraction" ("**RPEEE**") for underground mining for DGZ Mine and can be reported as a Mineral Resource.

#### CH Mine

The database used to estimate Mineral Resources was audited by SRK. Surpac 7.3 software was used by SRK to create the grade solids, prepare assay data for analysis, construct the block model, estimate gold grades and tabulate Mineral Resources. The final model was prepared by SRK using conventional three-dimensional ("**3D**") modelling and inverse distance weighting squared method ("**IDW2**") estimation techniques.

SRK considers that the blocks which are not below a cut-off grade of 1.0 g/t Au show RPEEE for an underground mine. Table ES-1 shows the Mineral Resource statement for CH Mine.

#### HH Mine

The database used to estimate Mineral Resources was audited by SRK. Surpac 7.3 software and Leapfrog 2023.2 software were used by SRK to create the grade solids, prepare assay data for geostatistical analysis, construct the block model, estimate gold grades and tabulate Mineral Resources. The final model was prepared by SRK using conventional 3D modelling and ordinary Kriging ("**O.K.**") and IDW2 estimation techniques.

SRK considers that the blocks not below a cut-off grade of 1.0 g/t Au show RPEEE from an underground mine. Table ES-1 shows the Mineral Resource statement for HH Mine.

### **Mineral Reserve Estimates**

Based on the scope of work, only DGZ Mine was considered to estimate Mineral Reserves. DGZ Mine is being modified to expand ore mining capacity from the old 99 ktpa to 165 ktpa under the guidance of *Development and Utilisation Plan on Gold Mineral Resources in Denggezhuang Property (change)* ("*DUP on DGZ Mine*"), which was prepared by Shandong Gold Design Consulting Co., Ltd ("**SD-GOLD**") and dated December 2023.

The Mineral Reserve statement is shown in Table ES-2. The schedule for mining, starting from the second half of 2024 ("**2H2024**"), is listed in Table ES-7.

ltem	Unit	Total	2H2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Ore tonnage	kt	1,376	48	96	96	96	165	165	165	165	165	165	50
Au grade in ore	g/t	3.62	1.49	1.86	1.86	1.86	2.08	2.08	4.99	5.80	5.34	4.87	4.48
Au metal in ore	kg	4,981	72	179	179	179	342	342	823	957	881	804	225

Table ES-7: Mining Schedule for DGZ Mine

Sources: SRK

## **Mining Methods**

Similar developing and mining methods have been or will be adopted to exploit ore in the three mines. All three mines were developed with shafts, sub-shafts and inclined shafts. The mining methods include overhand cut-and-fill, shrinkage stoping and resuing. Cemented tailings had been and will be backfilled to the mined-out areas to support the wall rocks.

The ore mining capacities are 165 ktpa, 60 ktpa and 60 ktpa for DGZ Mine, CH Mine and HH Mine, respectively.

Mine service facilities are well developed for the DGZ Mine to support old mining capacity, but will be updated to support the expanded mining capacity. Mine service facilities for HH mine have been well developed and will be continually used for the future mining operations. There is neither mining industry site nor mining facilities existing on site for the CH Mine. Yantai Mujin has planned to build the required mine service facilities to restart mining operations in the CH Mine.

### **Recovery Methods**

Historically, ore from DGZ Mine, HH Mine and CH Mine is sent to the DGZ Processing Plant for

processing. The DGZ Processing Plant was expanded and upgraded from a 300 tonnes per day ("**tpd**" or "**t/d**") processing capacity to 450 tpd in 2015. It utilises a "two-stage closed-circuit crushing process" and a "single-stage closed-circuit grinding process" to crush the underground mined ore to  $P_{50-55} = 75 \mu m$  followed by a "1 roughing-2 scavenging-2 cleaning" flotation process to produce gold concentrates. The historical production performance was satisfactory with gold concentrate recovery rates ranging between 90% to 93%.

Since early 2023, the DGZ Processing Plant has been undergoing a second expansion and upgrade aiming to increase its capacity to 900 tpd with equipment renewal currently underway. SRK believes that the ore properties of the three gold mines are straightforward with good selectivity, simple processes and straightforward equipment configuration. Although there has been no feasibility study on the expansion and upgrade, there is no significant risk involved with the main risk lying in tailings management. Due to the absence of a tailings storage facility ("**TSF**"), tailings from the DGZ Processing Plant were previously discharged into the nearby TSF owned by Shandong Humon Smelting Co., Ltd ("**Shandong Humon**"). Currently Yantai Mujin has signed a tailings treatment agreement with Yantai Qingrun Environmental Protection Technology Co. Ltd ("**Yantai Qingrun**") whereby tailings generated from the DGZ Processing Plant will be used for underground back fill and the remaining portion will be handled by Yantai Qingrun. Yantai Mujin has also signed an outsourcing processing contract with Yantai City Dahedong Processing Co., Ltd ("**Dahedong Processing**") enabling Dahedong Processing to process ores on behalf of the DGZ Processing Plant in case of operational incapacity. In January 2023, the processing activity of Yantai Mujin has been taken by Dahedong Processing following their restructuring plan for processing plant in the year 2025.

## **Project Infrastructure**

The DGZ Mine, CH Mine, HH Mine, DGZ Processing Plant and office buildings are easily accessed via paved roads. Both the mined ore and gold concentrates are transported easily.

The process water is mainly sourced from the extracted groundwater in DGZ Mine. The normal yield of groundwater is about 1,520 cubic metres per day (" $m^3/d$ ") at the DGZ Mine. The domestic water is supplied by Shandong Humon via 2 kilometres ("km") long and 110" external diameter polyethylene pipelines.

Yantai Mujin owned a 35/10 kilovolts ("**kV**") general substation. The general substation is supplied with primary power from the Jinniushan Substation in Shuidao County via the 1.5 km long 35 kV overhead powerline, and the secondary power from the Yulindian Substation via a 9 km long 10 kV overhead powerline.

## **Market Studies and Contracts**

The final product is gold bullion with a gold grade no less than 99.9%. The average price of gold sold in years from 2021 to 2023 and six months from 1 January to 30 June in 2024 ("**6M2024**") varies between RMB 376.8 per gram ("**RMB/g**") and 438.8 RMB/g.

Shandong Guoda Gold Co., Ltd ("**Shandong Guoda**") has been commissioned by Yantai Mujin to refine the gold concentrate to produce gold bullion. The latest refining contract signed on 28 September 2023 shows a refining cost of RMB 200 per tonne ("**RMB/t**") dry concentrate. The gold bullion can either be returned to Yantai Mujin or sold directly to the third parties appointed by Yantai

Mujin.

Yantai Guoda Trading Co., Ltd ("**Yantai Guoda**") is one of the historic buyers of the gold. SRK viewed a sales contract signed on 1 January 2024 between Yantai Guoda and Yantai Mujin, as well as four pricing agreements.

## Environmental Studies Permitting and Social or Community Impact

DGZ Mine is currently in production and has obtained the necessary permits for operation, including the safety production licence, water use permit, and pollution discharge permit. Furthermore, DGZ Mine has conducted an environmental impact assessment ("**EIA**") in accordance with the requirements of Chinese environmental laws and has obtained approval for the environmental assessment from relevant government departments.

Currently, the mine water from the DGZ Mine undergoes treatment in surface water treatment facilities before being discharged. There are small amounts of waste rock stockpiles near the mine shaft at DGZ Mine but the majority of waste rock generated by the mine is reused. According to ecological baseline study of DGZ Mine area, it does not involve national parks, nature reserves, World Natural Heritage sites, important habitats, ecological protection red lines etc. During the site visit conducted in March 2024, SRK noted that there was a hazardous waste storage facility on the DGZ Mine site with clear warning signs outside. During the preparation of the three EIAs, public participation was conducted. The surveyed population expressed no objections to the development and construction of the Muping Project.

## **Capital and Operating Costs**

The net value of sunk capital costs ("**Capex**") is about RMB 252.4 mln as of 30 June 2024, including RMB 250.4 mln for the DGZ Mine, RMB 1.3 mln for the CH Mine and RMB 0.7 mln for the HH Mine.

Construction of the Muping Project commenced in April 1982, with production commencing in April 1986. The investments in the future years are accounted in the sustaining Capex. Yantai Mujin planned to expend RMB 124.6 mln and 12.0 mln to modify the DGZ Mine and DGZ Processing Plant in the years 2024 to 2029 to increase the mining capacity to 165 ktpa ore. Yantai Mujin also planned to expend RMB 89.4 mln to start exploitation of CH Mine in the years 2024 to 2029. There is no investment plan in place for the HH Mine.

Working capital is about RMB -241.5 mln as of 30 June 2024. The working capital increments in 6M2024 is about RMB -8.6 mln.

The operating cost ("**Opex**") records show that Yantai Mujin spent respectively 4,935 RMB/t ore, 2,097 RMB/t ore, 1,154 RMB/t ore and 751 RMB/t ore in years 2021, 2022, 2023 and 6M2024 at DGZ Mine. The production in the period between 2021 and the first seven months in 2022 was significantly interrupted due to safety production inspections conducted by the People's Government of Shandong Province ("**Provincial Government**"). Yantai Mujin has spent most of expenses on the tunnels development in the last three years. The normal mining operation was restarted in August 2022. Overall, the Opex records did not provide a fair representation of economic condition of Yantai Mujin. Yantai Mujin has provided SRK with Opex forecasting in years from 2024 to 2028 and the six months from 1 January to 30 June in 2029 ("**6M2029**") for DGZ Mine, which was partly modified by

SRK to generate Opex in future years. The year-by-year Opex forecasting is summarised in Table 20-9. The average Opex is about 609.5 RMB/t run of mine ("**RoM**") in the production years.

## **Economic Analysis**

The DCF method was adopted to conduct economic analysis.

The results in Table ES-8, showing a positive NPV, indicate that the Muping Project is economically viable.

ltem	Unit	Value	Remarks
Ore tonnage	kt	1,306	
Au grade in ore	g/t	3.8	
Au metal in ore	kg	5,000	
Au processing recovery rate	%	90	
Concentrate tonnage	kt	226	
Au grade in concentrate	g/t	20	
Au metal in concentrate	kg	4,520	
Tails tonnage	kt	1,081	
Au refining recovery	%	93	
Au returned tonnage	kg	4,203	
Production capacity	ktpa	165	
Life of mine	years	10	
Au average price	RMB/g	393	
Au sales revenue	RMB mln	1,652.8	
Opex	RMB mln	796.3	609.5 RMB/t RoM
СІТ	RMB mln	83.3	
Sunk Capex	RMB mln	250.4	
Initial Capex	RMB mln	-	
Sustaining Capex	RMB mln	135.6	
NPV	RMB mln	94	discount rate 10%
IRR	%	15.0	
Static payback period	years	7.6	
Dynamic payback period	years	9.0	discount rate 10%

Table ES-8: Summary of Overall Economics

Sources: SRK

## **Risk Analysis**

SRK completed a risk assessment of the risks identified for the Muping Project in relation to their likelihood of occurrence and consequence in accordance with *The Stock Exchange of Hong Kong Limited Guidance Note* 7 (the "**Exchange Guidance Note** 7") to the *Rules Governing the Listing of Securities* (the "**Exchange Listing Rules**").

SRK considers various technical aspects which may affect the feasibility and future cash flow of the DGZ Mine, and conducts risk assessments for the Muping Project based on similar techno-economic conditions among the three mines, which have been summarised in Table ES-9.

Table ES-9: Risk Assessment for Muping Project

Risk Source/Issue	Likelihood	Consequence	Risk
Geology and Mineral Resources			
Lack of significant Mineral Resource tonnage	Unlikely	Moderate	Low
Lower average grade of gold (i.e., 15% lower)	Unlikely	Moderate	Low
Unexpected groundwater ingress	Unlikely	Moderate	Low
Overestimate of Mineral Resource potential	Unlikely	Minor	Low
Improper classification of Mineral Resource category	Possible	Moderate	Medium
Misleading geological description (related to low- quality exploration done)	Unlikely	Moderate	Low
Lack of significant Mineral Resource tonnage	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium
Significant Geological Structure	Unlikely	Minor	Low
Excessive Surface Subsidence	Unlikely	Minor	Low
Poor Underground Condition	Unlikely	Minor	Low
Poor Mine Plan	Possible	Moderate	Medium
Significantly lacking Mineral Reserves	Possible	Moderate	Medium
Ore Processing			
Lower Throughput	Possible	Moderate	Medium
Lower Recovery	Possible	Moderate	Medium
Higher Production Cost	Possible	Moderate	Medium
Environmental and Social			
Environmental Permits and Approvals	Unlikely	Moderate	Low
Water Management	Possible	Moderate	Medium
Solid Waste Management	Possible	Minor	Low
Social Aspects	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Possible	Moderate	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Low
Operating Cost Underestimated	Possible	Moderate	Low

Sources: SRK

## Recommendations

#### Geology

As observed by SRK from the Mineral Resource model, there is significant Inferred Mineral Resources occurring at depth and in mineralisation alteration zone III. SRK suggests further exploration campaign may be performed to upgrade these Inferred Mineral Resources to reduce exploitation risks and extend the LoM.

#### **Mineral Processing and Recovery**

The sulphide-bearing quartz vein type of gold ore has the characteristic of good selectivity. Although detailed metallurgical and processing test studies have not been conducted on the ores from the three mines, the processing production has achieved good recovery rates to date. In the Yantai region, nearly all gold mines utilise simple flotation processes to produce gold concentrates which is then sold to gold smelters. With the well-developed gold mining industry in the Yantai region, there are no major risks in terms of technology or supply. However, for DGZ Processing Plant, the absence of a TSF poses a significant risk to production. SRK recommends further research and implementation of technical and commercial solutions for zero tailings discharge.

#### **Mineral Reserves**

Only the Mineral Resources in DGZ Mine was converted to Mineral Reserves as of the 30 June 2024 (the "Effective Date") based on the scope of work.

Yantai Mujin has planned to restart mining operations in HH Mine and CH Mine. The following two studies are available to SRK:

- Development and Utilisation Plan on Gold Mineral Resources in Houzhuang-Heiniutai Property (change), Muping District, Yantai City, Shandong Province ("DUP on HH Mine"), which was prepared by Shandong Lianchuang Mining Design Co., Ltd ("Shandong Lianchuang") and dated March 2023.
- Preliminary Design on Mining Project (expanding boundary and mining capacity) of Chahe Property, ("PD on CH Mine"), which was prepared by Shandong Dehe Engineering Design Co., Ltd ("Shandong Dehe") and dated February 2024.

If possible, the Mineral Resources in HH Mine and CH Mine may be converted to Mineral Reserves to bring additional economic values to the Muping Project.

#### **Environmental Studies, Permitting and Social or Community Impact**

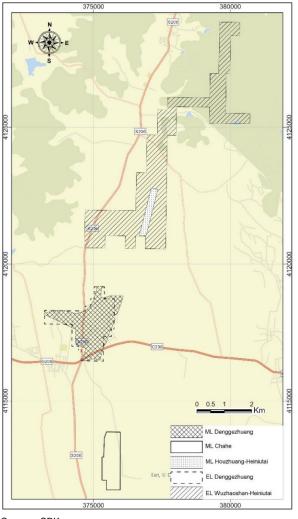
SRK recommends that the Muping Project should implement a sustainable water supply management plan to minimise its impact on natural systems through the management of water use, avoid the depletion of aquifers and reduce the impact on water users. Alternative water sources can be provided if the development affects the surrounding community's access to water. SRK also recommends that water quality monitoring be undertaken of the groundwater and surface water resources within all three mining areas (including upstream and downstream of the Muping Project area) and also any site water discharges. A Grievance Mechanism will help Yantai Mujin receive

and address specific concerns raised by affected persons or members of host communities in a timely fashion.

# 1 Introduction

SRK Consulting China Ltd ("SRK" or "SRK China") was requested by PRG Res Holding 2 Ltd ("PRH2" or "Client"), a wholly owned subsidiary of Persistence Resources Group Ltd ("Persistence Resources"), to prepare a Qualified Person's Report ("QPR") on the Muping Gold Project ("Muping Project") located in Yantai City, Shandong Province, The People's Republic of China ("PRC" or "China"), following the guidelines of the Canadian *National Instrument 43-101* ("*NI 43-101*"), the Standards of Disclosure for Mineral Projects, including Companion Policy 43-101 as amened from time to time, and the requirements of The Stock Exchange of Hong Kong Limited ("Exchange" or "SEHK"), a wholly-owned subsidiary of Hong Kong Exchanges and Clearing Limited ("HKEX").

Persistence Resources, a public company listed on the Exchange (stock code: 2489), is intending to acquire the interest of the Muping Project via its subsidiary, and will submit the QPR to the HKEX for the transaction. Majestic Gold Corp. ("**Majestic Gold**") is a company listed on the TSX Venture Exchange (stock code: MJS.V), and holds 70.5% via shares in Persistence Resources.



#### Figure 1-1: Location of Exploration and Mining Licences

Sources: SRK

The Muping Project is operated by Yantai City Mujin Mining Company Limited ("Yantai Mujin"), a

company founded on 14 November 1981 in Muping District, Yantai City. The location of the exploration and mining licences held by Yantai Mujin is shown in Figure 1-1. SRK was told by Yantai Mujin there is no exploration works conducted within the exploration licence areas of Wuzhaoshan-Heiniutai and Chahe. The main assets held by Yantai Mujin include Denggezhuang Underground Gold Mine ("**DGZ Mine**"), Houzhuang-Heiniutai Underground Gold Mine ("**CH Mine**") and the Denggezhuang Processing Plant ("**DGZ Processing Plant**").

At the time of this report, the DGZ Mine is operating, the production in HH Mine has been suspended since the end of 2020 due to the expiry of the old mining licence, while the production in CH Mine has been suspended since 1999 with all portals being sealed. The DGZ Processing Plant is located next to the DGZ Mine to process ore from these three mines.

The purpose of this QPR is to provide PRH2 with an independent technical review of the Muping Project for PRH2's acquisition of properties or assets held by Yantai Mujin. The QPR will be publicly disclosed on the Exchange or the TSX Venture Exchange ("**TSXV**") by PRH2, or Persistence Resources and Majestic Gold.

## 1.1 Scope of Work

The scope of work, as defined in a letter of engagement executed on 22 January 2024 between PRH2 and SRK, typically involves the assessment of the following aspects of the Muping Project:

- DGZ Mine
  - Desktop review of technical information provided by PRH2.
  - Conduct a site visit and communicate with the geologists of Muping Project. SRK will also conduct Mineral Resource validation and visit the laboratory that provides sample analysis services.
  - SRK would build the drillhole database based on available historic data, then interpret the three-dimensional ("3D") wireframe models of orebodies to estimate the Mineral Resources according to the CIM Definition Standards on Mineral Resources and Reserves ("CIM Definition Standards") adopted by the NI 43-101.
  - Convert Mineral Resources to Mineral Reserves based on the following assessments:
    - the scoping study, preliminary feasibility study or the feasibility study, preliminary design, mining designs, equipment, operating status, and so on ("etc.");
    - the processing plant and involved processing indices;
    - the whole environment, social, occupational health and safety, etc.;
    - the licences and permits like mining licences, pollution discharge permit, safety production permit, environmental approvals, etc.;
    - capital and operating costs; and
    - preliminary economic analysis.
  - Prepare the draft QPR following the guidelines of *NI* 43-101.
  - Revise the draft QPR based on feedback of third parties, and answer the technical questions

raised by the Exchange or TSXV.

- Finalise the draft QPR.
- CH Mine and HH Mine
  - Desktop review of technical information provided by PRH2.
  - Conduct a site visit and communicate with the geologists of Muping Project. SRK will also conduct Mineral Resource validation and visit the laboratory that provides sample analysis services.
  - SRK would build the drillhole database based on available historic data, then interpret the 3D wireframe models of orebodies to estimate the Mineral Resources according to the CIM Definition Standards.
  - Prepare the draft QPR following the guidelines of *NI* 43-101.
  - Revise the draft QPR based on feedback of third parties, and answer the technical questions raised by the Exchange or TSXV.
  - Finalise the draft QPR.

### **1.2 Work Program**

The work program for the Muping Project consists of:

- review of data provided by PRH2 and preparation of site inspection;
- site visit conducted in March 2024 to inspect and observe the status of the Muping Project, held meetings with the management and technical personnel, sighted geology, exploration, mineralisation, trial mining operation, ore processing and metallurgic operation, as well as conducted its own data verification programs, in addition to environmental and social aspects;
- discussions with Yantai Mujin management and technical personnel, as well as the relevant geological brigades' professionals and consultants who conducted the prefeasibility feasibility study;
- review of the available documents (geological reports and feasibility study reports), including operating licences and permits, Mineral Resources and Mineral Reserves, mining methodologies, mineral processing process experiments, environmental and social aspects, capital expenditure and operating costs, product quality and prices, and technical and economic analysis, etc;
- preparation of a draft report in accordance with the NI 43-101 and submitted to PRH2 for comment and feedback; and
- submission of a final report to PRH2.

### 1.3 Basis of Qualified Person's Report

This QPR is based on information collected by SRK during site visits and on additional information provided by PRH2 throughout the course of SRK's investigations. Other information was obtained from the public domain. SRK has no reason to doubt the reliability of the information provided by PRH2. This QPR is based on the following sources of information:

Discussions with Yantai Mujin personnel;

- Inspection of the Muping Project area, including drill holes, drill cores, underground mining operations, processing plant, tailings storage facility ("TSF"), public facilities and infrastructures and environmental and social aspects;
- Review of exploration and geological data provided by PRH2;
- Data verification, including re-sampling and re-assaying of duplicates and verification drilling;
- Review of production performances, mineral processing and metallurgical testing studies, mine development and utilisation plans, recovery methods;
- Review of key contracts like ore transport and processing, concentrate refining, product selling, power supply, water supply;
- Review of capital and operating costs and sustaining capital costs; and
- Additional information from public domain sources.

### 1.4 Qualifications of SRK

The SRK Consulting Group ("**SRK Consulting**") is an independent, international consulting practice that provides focused advice and solutions to clients, mainly from earth and water resource industries. For mining projects, SRK Consulting offers services from exploration through feasibility, mine planning, and production to mine closure.

Among the company's more than 1,500 clients are most of the world's major and medium-sized metal and industrial mineral mining houses, exploration companies, banks, petroleum exploration.

Formed in 1974 in Johannesburg, South Africa, SRK Consulting now employs more than 1,800 professionals internationally in 42 permanent offices across 20 countries on six continents. A broad range of internationally recognised associate consultants complements the core staff.

SRK Consulting employs leading specialists in each field of science and engineering. Its seamless integration of services, along with its global base, has made the company a world leader in due diligence, feasibility studies, and confidential internal reviews.

SRK Consulting's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This enables the company to provide its clients with objective, conflict-free recommendations on crucial judgement issues.

SRK China was established in 2005 and has three offices located in Beijing, Nanchang and Kunming. Either independently or together with other SRK Consulting offices—especially SRK Australasia, SRK China has been providing independent technical services for the Chinese mining companies. SRK has considerable experience at providing Independent Expert Reports for mining companies who have successfully listed on the stock exchanges in Hong Kong, Australia, Britain, Canada, South Africa and the United States.

SRK has prepared dozens of independent technical reports on mining projects for various Chinese companies who acquired mining projects or completed public listings on the HKEX. A summary of these past projects is shown in Table 1-1.

Company	Year	Nature of Transaction
CNNC International Ltd	2010	Acquisition of a uranium mine in Africa
Sino Prosper Mineral Products Ltd	2010	Acquisition of shareholdings in one gold project in Inner Mongolia, China
New Times Energy Corporation Ltd	2010	Acquisition of shareholding in gold projects in Hebei, China
United Company RUSAL Limited	2010	IPO Listing on HKEX
Citic Dameng Holdings Limited	2010	IPO Listing on HKEX
China Hanking Holdings Limited	2011	IPO Listing on HKEX
China Daye Non-Ferrous Metal Mining Limited	2012	Very Substantial Acquisition on HKEX
China Nonferrous Mining Corporation Limited	2012	IPO Listing on HKEX
Hengshi Mining Investments Limited	2013	IPO Listing on HKEX
Wilton Resources	2013	IPO Listing on SGX
King Stone Energy Group Limited	2014	Acquisition of Shareholding in silver mines in Fujian, China
Agritrade International Pte Ltd	2015	Acquisition of Shareholding in one coal mine in Indonesia
China Unienergy Group Limited	2016	IPO Listing on HKEX
Pizu Group	2020	Major Acquisition of shareholdings in iron-gold project in Anhui, China
China Qinfa Group Limited	2021	Annual disclosure of coal mines in Shanxi, China
China Graphite Group Limited	2022	IPO Listing on HKEX
Kinetic Development Group	2022	Major transaction of equity interest in Ningxia Sunshine
Huaibei GreenGold Industry Investment Co., Ltd	2023	IPO Listing on HKEX
Persistence Resources Group Ltd	2023	IPO Listing on HKEX

#### Table 1-1: SRK's Recent Reports for Chinese Mining Companies

#### 1.5 **Site Visits**

The site visits are shown below:

- Mr Yonggang Wu visited the Muping Project site between 28 and 31 December 2023;
- Mr Xiaofeng Qing, Ms Yanfang Zhao, Mr Yonggang Wu, Mr Lanliang Niu, Mr Chao Ding and Mr Nan Xue visited the Muping Project site between 9 and 12 March 2024; and
- Dr Anshun Xu visited the Muping Project site between 18 and 20 April 2024.

The visits covered the underground mines, processing plant, core samples, drillhole collars, laboratory at the Number 3 Geological Brigade of the Shandong Provincial Bureau of Geology and Mineral Resources ("No.3 SDGM"). The purpose of site visits was to review validation procedures, review the exploration procedures used to acquire the data, examine the drill cores, interview Yantai Mujin personnel, and collect all relevant information for the preparation of a revised Mineral Resource model and the compilation of the QPR. During these visits, particular attention was paid to the treatment and validation of historical drilling data.

SRK was given full access to relevant data and conducted interviews with Yantai Mujin personnel to obtain information on the past exploration work, to understand the procedures used to collect, record, store, and analyse historical and current exploration data.

## 1.6 Reporting Standard and Reliance

This QPR has been prepared in the format of *NI* 43-101 technical report with some modification to fit the requirements of HKEX, and the Mineral Resources and Mineral Reserves were estimated according to the *CIM Definition Standards* adopted by the *NI* 43-101. The *CIM Definition Standards* are compatible with the 2012 edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code")* which is binding upon all Australasian Institute of Mining and Metallurgy (the "AusIMM") members. The signing authors and peer reviewers are qualified as Competent Persons ("CP") as defined in the *JORC Code* with the relevant experience regarding to the type of deposit and the activity undertaken for the Muping Project.

### 1.7 Effective Date

The effective date for this QPR is deemed to be 30 June 2024 (the "**Effective Date**"). The Mineral Resource and Mineral Reserve statements set out in this QPR are reported as of 30 June 2024 and represent the Mineral Resources and Mineral Reserves at the Effective Date as audited by SRK.

The production schedule and associated technical and economic parameters included in the technoeconomic models all commence on 1 July 2024.

The economic analysis results for the Muping Project are taken to be correct on 30 June 2024, the Effective Date of this QPR.

### 1.8 Project Team

The SRK project team and responsibilities are shown in Table 1-2.

Consultant	Title	Discipline and Task	
Dr Anshun Xu	Corporate Consultant (Geology)	Project Sponsor, whole report, CP	
Xiaofeng Qing	Senior Consultant (Geology)	Data Validation	
Yanfang Zhao	Principal Consultant (Geology)	Mineral Resource estimate on DGZ Mine	
Huaixiang Li	Senior Consultant (Geology)	Mineral Resource estimate on HH Mine and CH Mine	
Yonggang Wu	Principal Consultant (Mining)	Project Manager, Mining Review	
Erwei Lu	Consultant (Mining)	ultant (Mining) Mineral Reserve estimate	
Lanliang Niu	Principal Consultant (Processing)	Processing Review	
Chao Ding	Consultant (Processing)	Assist in Processing Review	
Nan Xue	Principal Consultant (Environment)	Environment, Social, and Permitting Review	
Qiong Wu	Senior Project Coordinator	Project Coordination	
Alexander Thin	Principal Consultant (Mining)	Internal Peer Review and Quality Control	

Table 1-2: SRK Project Team

**Dr** Anshun (Anson) Xu, *Philosophy Doctor ("PhD"), Fellow of the AusIMM ("FAusIMM")*, is a Corporate Consultant (Geology) who specialises in the exploration of mineral deposits. He has more than 30 years' experience in the exploration and development of various types of mineral deposits, including copper-nickel sulphide deposits related to ultra-basic rocks, tungsten and tin deposits, diamond deposits, and especially deep expertise in various types of gold deposits, including vein-type, fracture-breccia zone type, alteration type, and Carlin type. He was responsible for the mineral resource estimations of several diamond deposits and for reviews of mineral resource estimations for several gold deposits. He recently completed for clients from both China and overseas several due diligence projects, including technical review projects, such as *NI 43-101* reports and HKEX initial public offerings ("IPO") technical reports. *Dr Xu is responsible for the whole report and is qualified as a CP with regard to the type of deposit and the activity undertaken.* 

Xiaofeng (Shawn) Qing, Bachelor of Engineering ("BEng"), Member of the AusIMM ("MAusIMM"), Registered Construction Engineer, is a Senior Consultant (Geology) at SRK China. He graduated in 1991 from the China University of Geosciences at Wuhan. He is a geologist with more than 20 years' experience in mineral exploration and geotechnical engineering. He worked in Lingbao, Henan Province, for three years in exploration management and has expertise in geotechnical engineering, mining engineering, and tunnelling engineering. Xiaofeng's experience also includes drilling, pitting design and construction management, on-site investigation of underground projects and tunnels, geo-mechanical analyses, and project management. He is responsible for data validation.

Yanfang (Bonnie) Zhao, Master of Engineering ("MEng"), MAusIMM; is a principal mineral resource geologist at SRK China, She graduated in 2009 from the China University of Geosciences (Beijing) and has 15 years of experience geological modelling, Mineral Resource estimations, technical reporting, gap analysis and due diligence studies. As a consulting geoscientist, she has been active in over 50 mineral projects including due diligence reviews, exploration design, data verification, mineral resource estimation and preparing the Qualified Person's Report in China, Mongolia, Indonesia, Cambodia, Malaysia, Serbia, Australia, Ecuador and many countries of Africa with minerals including gold ("Au"), silver ("Ag"), copper ("Cu"), iron ("Fe"), lead ("Pb"), zinc ("Zn"), molybdenum ("Mo"), cobalt ("Co"), chromium ("Cr"), bauxite and coal. She is proficient in using mining software, including Surpac, Minex, Leapfrog, ArcGIS, and AutoCAD, and so on. *She is responsible for Mineral Resources estimation on DGZ Mine*.

**Huaixiang (Hubert) Li, MEng, Member of the Australian Institute of Geoscientists ("MAIG")**, is a senior consultant (geology) with SRK China. He graduated from the China University of Geosciences (Beijing) and used to work in a geological exploration company for more than 6 years and gained lots of experiences and expertise in geological and mineral resources exploration. As a consulting geologist, he has participated a number of metal mineral projects, including exploration design review, data verification, due diligence reviews and Mineral Resource estimation. He is familiar with the principles and methods for metal ore deposits prospecting and exploration including lithium ("Li"), Au, Ag, platinum group elements ("PGE"), rare earth elements ("REE"), Cu, Pb, Zn, Mo, bauxite, and so on. He is proficient in geological modelling, mineral resources estimation, data processing and geographic information system and remote sensing ("GIS/RS") application. *He is responsible for Mineral Resources estimations on both the HH Mine and CH Mine.* 

**Yonggang Wu,** *MEng, MAusIMM,* is a Principal Consultant (Mining), joining SRK in 2007 after his graduation from the Jiangxi University of Science and Technology. He has acquired specialised knowledge of mining engineering and MineSight software and has been involved in a large number

of projects to date. He has accumulated extensive experience in mineral resource and reserve estimation, pit limit optimisation and design, underground-mining design, long-term production planning, and due diligence studies, with minerals including Au, Pb, Zn, manganese ("Mn"), Cu, Fe, fluorite, potassium, alum, and phosphorus among many others. Yonggang has expertise in geological and mining modelling and is proficient in using MineSight, AutoCAD, and other specialised software packages. *Mr Wu is the project manager and the CP who takes overall responsibility for the QPR.* 

**Erwei Lu,** *MEng,* is a Consultant (Mining) at SRK China, he obtained his bachelor's degree and master's degree in mining engineering from Central South University. He has over five years of practice of underground operation, and about one year's mineral project evaluation experience. He worked as an on-site mining engineer in Zambia for China Nonferrous Metal Mining (Group) Co., Ltd after graduation in 2017. He also worked for an autonomous driving application and mineral project investment companies since 2022. He is familiar with large scale underground mobile equipment operation and training, long-hole blasting, mine design and scheduling, and production management, as well as autonomous driving application in open pit mine, and project evaluation. *Mr Lu is responsible for Mineral Reserve estimation under the supervision of Dr Xu and Mr Wu*.

Lanliang Niu, BEng, MAusIMM, Member of the China Association of Mineral Resources Appraisers ("MCAMRA"), is a Principal Consultant (Processing) with SRK Consulting China Ltd. He has over 30 years' experience in processing testing and studies, production management and technical consultancy service. Lanliang is actively involved with the new development and application of processing technologies, facilities, and reagents and has received two national awards for his achievements in this area. Since joining SRK, he has been involved in hundreds of independent technical review projects for fund raising and acquisition and has accumulated profound experience on technical review of mining project. He is responsible for processing review.

**Chao Ding**, *MEng*, is a Consultant (Mineral Processing) at SRK China. Prior to joining SRK, he worked for Weihai Haiwang Cyclone Co., Ltd and Ramu NiCo Management Co., Ltd. He has accumulated certain experience in mineral dressing test research, and has a certain understanding and mastery of plant design; in addition, he has accumulated rich experience in production and management of hydrometallurgy of nickel laterite ore. *He will assist Mr Niu in processing review.* 

Nan Xue, Master of Science ("MSc"), Master of Business Administration ("MBA"), MAusIMM, is a Principal Consultant (Environmental) at SRK China. He holds Master of Environmental Science from Nankai University and Master of Business Administration from Beihang University, respectively. He has over fifteen years' experience in environmental impact assessment ("EIA"), environmental planning and management, environmental due diligence and the environmental, social and governance ("ESG") related field. He has been involved in a number of large environmental impact assessment ("EIA") projects and pollution source surveys for China Petrochemical Corporation ("SINOPEC") as well as in the environmental-planning project funded by United Nations Development Programme ("UNDP"). He has particular expertise in construction project engineering analysis, pollution source calculation, and impact predictions. He also has an acute understanding of equator principles, International Finance Corporation ("IFC") environmental and social performance standards and other international standards related to ESG. After joining SRK, Nan has been involved in a number of IPO and due diligence projects in China, Laos, Russia, Mongolia, Philippines, Indonesia, Kazakhstan, Kyrgyzstan, South Africa, the Democratic Republic of the Congo ("DRC"), Ecuador, Chile and Ghana; the clients include Zijin Mining, Future Bright Mining, China Nonferrous Metal Mining (Group) Co., Ltd ("CNMC"), China Gold, Shandong Gold, Chifeng Gold,

Sino Steel, Tianqi Lithium, etc. He is responsible for environment, social, and permitting review.

**Alexander (Alex) Thin, BEng (Hons), FAusIMM (CP Min)**, is a Principal Consultant (Project Evaluation and Mining) with SRK. He is an experienced mining professional with over 30 years' experience. His strategy and leadership experience spans feasibility studies, mineral asset audits and evaluations, independent technical reports, techno-economic studies, capital raising, merger and acquisitions, managing joint ventures, local and international stock exchange compliance, business development and investor/ stakeholder relations. Alex's industry experience spans operational (underground and open pit), technical, consulting and corporate within the metalliferous resources sector, covering precious metals, base metals and bulk commodities. *Mr Thin provides internal peer review to ensure the quality the QPR meets the required standard.* 

### **1.9 Statement of SRK's Independence**

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

SRK's fee for completing this QPR is based on its normal professional daily rates plus reimbursement of incidental expenses. Payment of that professional fee is not contingent upon the outcome of the QPR.

None of SRK or any authors of this report have any direct or indirect interest in any assets which had been acquired, or disposed of by, or leased to any member of the PRH2 or any of the Persistence Resources or any of its subsidiaries within the two years immediately preceding the issue of this transaction.

### 1.10 Compliance Statement

The information in this report that relates to Mineral Resources and Mineral Reserves is based on information compiled by Dr Anson Xu, a CP who is a Fellow of the Australasian Institute of Mining and Metallurgy and Chartered Professional Geologist ("**CPGeo**"), and Mr Yonggang Wu, a CP who is a Member of the Australasian Institute of Mining and Metallurgy. Both CPs are full-time employees of SRK.

This report is a Qualified Person's Report in line with the NI 43-101.

Dr Anson Xu and Mr Yonggang Wu have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a CP as defined in the *JORC Code*. They consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Peer review and quality control of the QPR were conducted by Alexander Thin, FAusIMM (CP Min), a Principal Consultant (Mining).

### 1.11 Forward-looking Statements

Estimates of Mineral Resources, Mineral Reserves, and mine and processing plant production are inherently forward-looking statements, which, being projections of future performance will

necessarily differ from actual performance. The errors in such projections result from inherent uncertainties in the interpretation of geologic data, variations in the execution of mining and processing plans, the ability to meet construction and production schedules due to many factors including weather, availability of necessary equipment and supplies, fluctuating prices, and changes in regulations. The possible sources of error in forward-looking statements are addressed in more detail in the appropriate sections of this report. Also comments are provided in the report on the risks inherent in the different areas of mining and processing operations.

### 1.12 Limitations

Mineral Reserve estimates are based on many factors, including data with respect to drilling and sampling. Mineral Reserves are derived from estimates of future technical factors, which include data with respect to operating and capital costs and product prices. The Mineral Reserve estimates contained in this QPR should not be interpreted as assurances of economic life of the Muping Project. As Mineral Reserves are only estimates based on the factors and assumptions described herein, future Mineral Reserve estimates may need to be revised. For example, if production costs increase or product prices decrease, a portion of the current Mineral Resources, from which the Mineral Reserves are derived, may become uneconomical to recover and would therefore result in lower estimated Mineral Reserves. Furthermore, should any of the assumed factors change adversely, the values and parameters for the Muping Project as reported herein may need to be revised and may result in lower estimates.

This QPR contains statements of a forward-looking nature. These forward-looking statements are estimates and involve a number of risks and uncertainties that may cause the actual results to differ materially from those anticipated in this QPR. The achievability of the projections, life of mine ("LoM") plans, budgets and forecast parameters as included in this QPR is neither warranted nor guaranteed by SRK. The projections as presented and discussed herein have been proposed by Yantai Mujin management and have been adjusted where appropriate by SRK.

The projections cannot be assured as they are based on economic assumptions, many of which are beyond the control of PRH2 and Yantai Mujin. Future cash flows and profits derived from such forecasts are inherently uncertain and actual results may be significantly more or less favourable.

This QPR may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

Unless otherwise expressly stated, all the opinions and conclusions set out in this QPR are those of SRK.

This Report is not a valuation report and does not express an opinion as to the value of the mineral assets under review.

SRK is not professionally qualified to opine upon and/ or confirm that the Yantai Mujin has 100% ownership of the Muping Project and its various associated tenements and/ or has any unresolved legal matters relating to any transfer of ownership or associated fees and royalties. SRK has therefore assumed that no legal impediments exist regarding the relevant tenements and that the Yantai Mujin has legal rights to all underlying tenements as purported. Assessing the legal tenure

and processing rights of the prospects of the Yantai Mujin is the responsibility of legal due diligence conducted by entities other than SRK.

### 1.13 Reliance on information

This QPR is addressed to and may be relied upon by PRH2 for its acquisitions of Muping Project. SRK agrees that this QPR may be made available to and relied upon by the PRH2.

SRK is responsible for this QPR and for all the technical information contained therein. SRK declares that it has taken all reasonable care to ensure that this QPR and the technical information contained therein is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

SRK believes that its opinion should be considered as a whole and selecting portions of the analysis or factors considered by it, without considering all factors and analyses together, could create a misleading view of the process underlying the opinions presented in this QPR. The preparation of a QPR is a complex process and does not lend itself to partial analysis or summary.

SRK has no obligation or undertaking to advise any person of any development in relation to the Muping Project which comes to its attention after the date of the QPR or to review, revise or update the QPR or opinion in respect of any such development occurring after the date of the QPR.

SRK's opinion, contained herein and effective 30 June 2024, is based on information collected by SRK throughout the course of SRK's investigations, which in turn reflect various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

SRK has reviewed the information provided by PRH2 and is satisfied that the extents of the properties described in the various rights are consistent with the maps and diagrams received from PRH2.

PRH2 provided the digital database used for geological modelling. SRK verified this database and removed repeated samples. It is SRK's opinion that the database used for Mineral Resource estimation has been validated and was collected and built in a professional manner.

### 1.14 Declaration

SRK is not an insider, associate, or an affiliate of PRH2, and neither SRK nor any affiliate has acted as advisor to PRH2, its subsidiaries or its affiliates in connection with Muping Project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

Consequently, SRK, the CP consider themselves to be independent of PRH2, their respective directors, senior management and PRH2's Advisers.

In this QPR, SRK provides assurances to the Board of Directors of PRH2, in compliance with the requirements of the reporting standards, that the Mineral Resources and Mineral Reserves as provided to SRK by PRH2 and reviewed and where appropriate modified by SRK, are reasonable given the information currently available.

## 1.15 Consent

SRK consents to the issuing of this QPR in the form and content in which it is to be included in documentation distributed to shareholders of PRH2.

Neither the whole nor any part of this QPR nor any reference thereto may be included in any other document without the prior written consent of the CP as to the form and context in which it appears.

### 1.16 Cautionary statements

The reader and any potential or existing shareholder or investor in PRH2 is cautioned that Yantai Mujin is involved in mining the DGZ Mine, CH Mine and HH Mine and there is no guarantee that any unmodified part of the Mineral Resources will ever be converted into Mineral Reserves nor ultimately extracted at a profit.

### 1.17 Indemnities provided by PRH2

SRK provides technical services, including preparation of the report based on the agreements between SRK and PRH2, and only charges PRH2 with the amount of fees both parties agreed on, without any other fees or charges.

# 2 Reliance on Other Experts

SRK trusts the information from PRH2 regarding mine ownership, legal and financial liability. SRK did not carry out independent validation of the information regarding land ownership and use rights summarised in "3 Property Description and Location" of this QPR. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties but have relied on PRH2. SRK was informed by PRH2 that there are no known litigations potentially affecting the Muping Project.

SRK also relied on the geological reports approved by related governmental authorities which were compiled by various Chinese geological brigades.

# **3 Property Description and Location**

SRK relied on the information provided by PRH2 and SRK understands that a legal due diligence review of Muping Project has been undertaken by PRH2's legal advisors. The following sections summarise matters related to operational licences and permits.

### 3.1 Exploration Licences

The current two exploration licences (Appendix A) owned by Yantai Mujin were issued by the Department of Natural Resources of Shandong Province ("**DNR of Shandong**"). The information pertaining to these two exploration licences are shown in Table 3-1 and Table 3-2.

Table 3-1: Exploration Licence for DGZ Mine

ltem	Description
Exploration licence number	T3700002008104010015583
Property name	Deep and peripheral area of DGZ Mine
Issued to	Yantai Mujin
Issued by	DNR of Shandong
Issue date	1 January 2023
Expiry date	31 December 2024
Area	3.35 square kilometres ("km2"), exclusive of DGZ Mine's mining licence area

Sources: SRK

Table 3-2:	Exploration Licence for Wuzhaoshan-Heiniutai Property
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ltem	Description
Exploration licence number	T3700002008034010003855
Property name	Wuzhaoshan-Heiniutai Property
Issued to	Yantai Mujin
Issued by	DNR of Shandong
Issue date	26 December 2023
Expiry date	25 December 2028
Area	6.41 km <sup>2</sup> , exclusive of HH Mine's mining licence area

Sources: SRK

### 3.2 Mining Licences

The current three mining licences (Appendix B) owned by Yantai Mujin were issued by the DNR of Shandong. The information pertaining to these three mining licences are shown in Table 3-3, Table 3-4 and Table 3-5.

ltem	Description
Mining licence number	C3700002009114120043348
Mine name	DGZ Gold Mine
Issued to	Yantai Mujin
Issued by	DNR of Shandong
Issue date	18 July 2023
Expiry date	18 July 2038
Mining method	Underground Mining
Production capacity	165 thousand tonnes per annum (" <b>ktpa</b> " or " <b>kt/a</b> ")
Area	3.0590 km <sup>2</sup>
Mining depth	between 137.0 metres (" <b>m</b> ") above sea level (" <b>ASL</b> ") and -840.0 m ASL

#### Table 3-3: Mining Licence for DGZ Mine

Sources: SRK

#### **Mining Licence for CH Mine** Table 3-4:

Item	Description
Mining licence number	C3700002008094120000994
Mine name	CH Mine
Issued to	Yantai Mujin
Issued by	DNR of Shandong
Issue date	19 February 2021
Expiry date	19 February 2031
Mining method	Underground Mining
Production capacity	60 ktpa
Area	1.2698 km <sup>2</sup>
Mining depth	between 120.0 m ASL and -626.0 m ASL

Sources: SRK

#### Table 3-5: **Mining Licence for HH Mine**

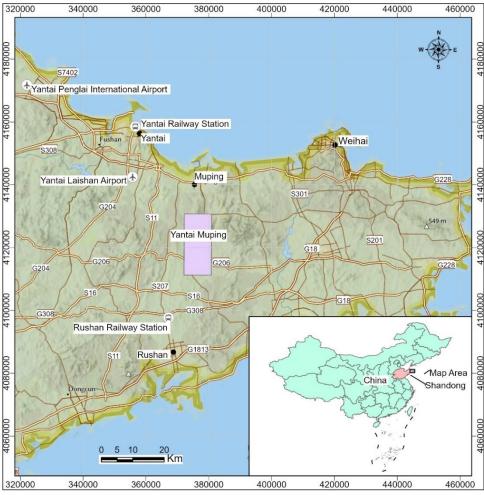
Item	Description
Mining licence number	C3700002011124210121312
Mine name	HH Mine
Issued to	Yantai Mujin
Issued by	DNR of Shandong
Issue date	31 October 2023
Expiry date	31 October 2029
Mining method	Underground Mining
Production capacity	60 ktpa
Area	0.4286 km <sup>2</sup>
Mining depth	between 158.0 m ASL and -360.0 m ASL

Sources: S

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

### 4.1 Accessibility

Yantai Mujin is situated near to the Denggezhuang Village, approximately 30 kilometres ("**km**") south of Muping District, Yantai City, Shandong Province. Yantai Mujin is situated 50 km south of Yantai Railway Station, 20 km north of Xiachu Railway Station on Weihai-Taocun Railway, and 75 km southeast of Yantai Penglai International Airport. The location map is shown in Figure 4-1.



#### Figure 4-1: Location Map

Sources: SRK

Yantai Mujin can be accessed via the local Muping-Shuidao Highway, and the National Highway 309 (G309), Weihai-Qingdao Expressway and Rongcheng-Wuhai Expressway. It is approximately 40 km north of the gate of the Rongcheng-Wuhai Expressway at Muping (Yangma Island), and about 17 km west of the gate of the Yantai-Haiyang Expressway at Muping South.

DGZ Mine is located next to the Yantai Mujin, while the HH Mine and CH Mine were located to the north and south of Yantai Mujin, as shown in Figure 1-1. There are paved roads connecting the

mines and Yantai Mujin.

### 4.2 Climate

Climate properties were summarised in Table 4-1.

#### Table 4-1: Summary of Meteorological Data from 1971 to 2018

Item	Measure of Unit	Value	Remarks
Climate	/	warm temperate monsoon	
Annual average temperature	degrees Celsius ("°C")	12.0	
Annual highest temperature	°C	24.9	July and August
Annual lowest temperature	°C	-2.6	January
Extremely highest temperature	°C	38.2	13 June 1988
Extremely lowest temperature	°C	-2.15	January 2015
Annual precipitation	millimetres (" <b>mm</b> ")	620.2	Mainly occurred from July to September.
Maximum annual precipitation	mm	977.8	Year 1990
Minimum annual precipitation	mm	257.1	Year 1986
Maximum daily precipitation	mm	107.9	25 July 1991
Annual evaporation	mm	1,554.4	
Prevailing wind	direction	South- South-West	
Wind in winter and spring seasons	direction	North	
Wind force	Beaufort scale	2-3	
Frost free period	days	218	
Initial frost period	/	early November	
Final frost period	/	early April of the following year	
Maximum frozen soil depth	centimetres (" <b>cm</b> ")	39	

Sources: Shandong Gold Design Consulting Co., Ltd, Development and Utilisation Plan on Gold Mineral Resources in Denggezhuang Property (change), December 2023.

According to the Seismic Ground Motion Parameters Zonation Map of China (GB18306-2015), the seismic fortification intensity in the area is VII degree. The peak seismic acceleration is 0.10 gravitational acceleration, and the characteristic period of the seismic response spectrum is 0.35 seconds.

### 4.3 Local Resources and Infrastructure

The region is densely populated. There is a large potential workforces living in the region.

The main industries are machinery, chemical, and construction.

Agriculture is mainly based on crops such as wheat and corn, while economic crops generally include peanuts, apples, pears, grapes, and so on.

The area is rich in mineral resources. Gold mining is the most important mineral development industry in the area and one of the pillar industries of the economy in Muping District. Other mineral resources include building stones, ceramic raw materials, etc. The building materials, machinery and spares can be supplied locally to meet the requirement of a mine's construction and during operations.

## 4.4 Physiography

The terrain of the DGZ Mine is low and gentle hills, dipping in the direction from northeast to southwest. The highest elevation in the mine area is 211.0 m ASL, and the lowest elevation is 91.3 m ASL, with a relative relief of 119.7 m. The erosion base in the mine area is 91.3 m ASL, located in a tributary of Huanglei River in the southwest of the mine area. The tributary waterflow is seasonally observed and frequently dry.

The terrain of the HH Mine is low and gentle hills, dipping in the direction from east to west. The highest elevation in the mine area is 158.2 m ASL, and the lowest elevation is 108.8 m ASL, with a relative relief of 49.4 m. The erosion base in the mine area is 62.0 m ASL, located on the riverbed of Qinshui River in the northwest of the mine area. The Qinshui River is frequently dry in the dry season.

The terrain of the CH Mine is low and gently hilly, dipping in the direction from east to west. The highest elevation in the mine area is 232.08 m ASL. The Shuidao River, one of tributaries of Huanglei River, is located west of mine, while Huanglei River is located east of mine. The Shuidao River is frequently dry in the dry season.

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# 5 History

### 5.1 Ownership

All the three mines are owned by Yantai Mujin. There is no historical ownership changes.

### 5.2 Exploration Work

### 5.2.1 DGZ Mine

From 1982 to 1986, the No.3 SDGM carried out preliminary exploration campaign on the number II vein in DGZ Mine. In 1986 the No.3 SDGM submitted the *Preliminary Exploration Report on Vein II Exploration in Denggezhuang Gold Property, Muping County, Shandong Province.* The estimated balance B, C and D classes of gold metals are 7,688 kilograms ("**kg**").

No.3 SDGM conducted an exploration campaign between January 1985 and December 1991 at the Hagoushan Section of DGZ Mine. The exploration results were summarised in a report titled *Exploration Report on Hagoushan Section of Denggezhuang Gold Property, Muping County, Shandong Province*. The main workload included: a 48 km<sup>2</sup> geological mapping on a scale of 1:10,000, a 32 km<sup>2</sup> hydrogeological survey on a scale of 1:10,000, a 0.60 km<sup>2</sup> geological survey on a scale of 1:2,000, a total of 3,453.35 m boreholes, a total of 1,023.33 m<sup>3</sup> channels, and a total of 952.90 m tunnels. A total mineral resource of former Chinese Categories C and D of 2,189 kg gold metal was reported.

From January 1988 to December 1989, the geological exploration of II-1 orebody in DGZ Mine area was carried out and the *Geological Exploration Report of North Part of Vein II in Denggezhuang Gold Property, Muping County, Shandong Province* was compiled. The combined C and D classes of gold metal is about 1,233 kg.

From 1990 to 1992, the No.3 SDGM conducted exploration of No. I vein in DGZ Mine and submitted *Geological Exploration Report of Vein I in Denggezhuang Gold Property, Muping County, Shandong Province.* The combined B, C and D classes of gold metal is about 20,992 kg.

From December 2005 to December 2008, the No.3 SDGM was entrusted by Yantai Mujin to carry out the survey of the national crisis mine replacement resource exploration project of DGZ Mine. In September 2009, the *Gold Prospecting Report of DGZ Mine and HH Mine, Muping District, Yantai City, Shandong Province* was submitted.

During December 2005 to December 2008, the No.3 SDGM was commissioned by Mujin to conduct exploration campaign. The main works included 1:2,000 geological mapping covering 2.24 km<sup>2</sup>, 1:10,000 induced polarization covering 2.24 km<sup>2</sup>, 2,018 cubic metres ("**m**<sup>3</sup>") of trenches, a total length of 7,490.72 m holes, basic analysing of 913 samples. The exploration results were summarised in a report titled *General Geological Exploration Report of Deeper Zone of Denggezhuang Deposit and Houzhuang-Heiniutai Deposit of Muping District, Yantai City, Shandong Province.* 

From March 2011 to January 2017, the No.3 SDGM was entrusted by Yantai Mujin to conduct a detailed geological survey of DGZ Mine and peripheral gold mines and submitted the *Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Denggezhuang Property,* 

*Muping District, Yantai City, Shandong Province ("DER on DGZ Mine in May 2017"),* and estimated the mineral resources within the scope of exploration rights of DGZ Mine as 10,976 kg of gold metal.

The significant exploration work undertaken at DGZ Mine from 1982 to 2017 is shown in Table 5-1.

 Table 5-1:
 The Main Exploration Activity at DGZ Mine (1982-2017)

Item	Unit	1982-1986	1990-1992	2005-2008	2011-2017
1/10,000 geological survey	km <sup>2</sup>	35	43	-	7.35
1/2,000 geological survey	km²	0.60	3.02	-	5.02
1/10,000 hydrogeological survey	km²	35	/	/	/
1/5,000 hydrogeological survey	km²	3	/	/	/
1/2,000 topographic survey	km²	0.60	/	/	/
1/2,000 hydrogeological survey	km²	-	43	-	-
1/10,000 hydrogeological revision survey	km²	-	-	-	120
1/2,000 topographic geological survey	km²	-	18	-	5.02
1/10,000 topographic geological survey	km²	-	50	-	50
Trenching	m <sup>3</sup>	2,400	7,926	-	-
Tunnel logging	m	400	939.9	560.1	8,342.3
Drilling depth	m/holes	11,874.22/51	63,653.34/217	17,527.48/-	66,523.72/156
Water pumping test	times/wells	16/16	/	/	/
Sample quantity	piece	757	/	/	/
Hydrogeological well quantity	wells	7	/	/	/
Drifting	m	-	6,739.35	-	-
Hydrogeological drilling	m/holes	-	-	-	409.10/1
Basic analytical sample	piece		5211	971	4,788
Bulk of the sample (small)	piece	-	-	68	259
Moisture sample	piece	-	-	68	259
Internal test sample	piece	-	-	117	584
External test sample	piece	-	-	65	345
Hydrological borehole logging	m/hole	-	-	-	6,214.72/17

Sources: DER on DGZ Mine in May 2017

#### 5.2.2 CH Mine

From 1958 to 1960, Changchun College of Geology and Shandong Provincial Bureau of Geology and Mineral Resources ("**SDGM**") jointly formed a team to carry out regional geological survey in the area.

From 1965 to 1968, the Number 805 Geological Brigade of Shandong Provincial Geological Bureau of Geology and Mineral Resources ("**No.805 SDGM**") published the regional geological survey report.

In 1979, the Number 6 Geological Brigade of Shandong Provincial Geological Bureau of Geology

and Mineral Resources ("**No.6 SDGM**") came to the site for mine inspection and constructed a small number of trenches.

In August 1982, the No.3 SDGM inspected the site and found it warranted further work. At the end of the year, the *Geological Design of Chahe Gold mine in Muping County, Shandong Province* was compiled.

From 1984 to 1990, the No.3 SDGM carried out the regional geological survey, the regional geological survey report and delineated 25 gold metallogenic prospect areas.

In April 1999, Yantai Mujin used the existing data to control the orebody delineated the orebody with the industrial indices from the original geological report and compiled a *Brief Report on the Mineral Reserves of CH Mine of Yantai Muping Gold Mine in Shandong Province*.

In November 2008, the No.3 SDGM submitted the Verification Report on Gold Mineral Resource and Reserve in Chahe Property, Muping District, Yantai City, Shandong Province.

Since July 2010, entrusted by Yantai Mujin, No.3 SDGM has verified the mineral resources and reserves of CH Mine and submitted the *Verification Report on Gold Mineral Resource and Reserve in Chahe Property, Muping District, Yantai City, Shandong Province* in November 2013.

From October 2010 to August 2015, No.3 SDGM began detailed field investigation. In December 2015, submitted the *Detailed Exploration Report on Gold Minerals in Deep and Peripheral Areas of Chahe Property, Muping District, Yantai City, Shandong Province ("DER on CH Mine in December 2015")*.

The significant exploration work undertaken at CH Mine (1982-2017) is shown in Table 5-2.

Item	Unit	1981-1999	2009-2010 [1]	2010-2015 <sup>[2]</sup>	2013
1/10,000 Geological Survey	km²	7.9	3.86	7.51	-
1/2,000 Geological Survey	km²	0.95	1.5	5.56	-
Trenching	m <sup>3</sup>	1,245.82	-	-	217
Tunnelling	m	7,022	-	-	-
Drilling	m/holes	3,675.36/23	2,217.62/7	20,454.12/59	4,331.43/22
Basic analytical sample	piece	426	36	493	236
BD sample	piece	58	-	56	32
Moisture sample	piece	42	-	56	32
Internal test sample	piece	50	36	55	41
External test sample	piece	65	5	43	29

#### Table 5-2: The Main Exploration Activity at CH Mine (1981-2015)

Sources: DER on CH Mine in December 2015

Notes:

<sup>1</sup> Survey of deep and peripheral gold deposits

<sup>2</sup> Detailed geological survey

### 5.2.3 HH Mine

The area has been explored by various Chinese geological explorers and brigades since the 1950s.

Between 1958 and 1960, Changchun College of Geology and the SDGM carried out regional geological mapping on a scale of 1:200,000.

Between 1965 and 1968, the No.805 SDGM conducted a geological revision on a scale of 1:200,000 and the geological report on a scale of 1:200,000 was reported.

In 1983, the Number 1 Geological Brigade of the Shandong Provincial Bureau of Geology and Mineral Resources ("**No.1 SDGM**") carried out a stream sediment survey at a scale of 1:200,000.

Between 1986 and 1989, the No.1 SDGM and No.3 SDGM undertook regional gold metallogenetic research.

Between 1984 and 1990, the No.3 SDGM carried out regional geological mapping on a scale of 1:50,000.

Between 1991 and 1992, the No.3 SDGM was commissioned to conduct an induced polarization geophysical survey covering an area of 23.85 km<sup>2</sup>.

In 2001, the No.3 SDGM conducted the general geophysical exploration of high accuracy magnetic survey covering an area of 3.01 km<sup>2</sup>.

From January 2000 to December 2003, the geological exploration team of Yantai Mujin carried out the work in Zhaodashan mining area. A *Brief Report on Gold Prospecting in Zhaodashan Mining Area, Muping District, Yantai City, Shandong Province* was compiled.

#### Table 5-3: The Main Exploration Activity at HH Mine (1985-2010)

Item	Unit	1985-2005	2009-2010
1:10,000 geological survey	km <sup>2</sup>	16	5.6
1:2,000 geological survey	km <sup>2</sup>	4.24	0.8
1:10,000 hydrogeological survey	km²	-	44
1:2,000 hydrogeological survey	km²	-	7
Trenching	m <sup>3</sup>	2,218	215
Tunnelling	m	537	-
Drilling	m/holes	7,903.16/25	5,800.15/19
Basic analytical sample	piece	913	407
Bulk of the sample(small)	piece	42	33
Moisture sample	piece	42	27
Internal test sample	piece	70	83
External test sample	piece	40	43

Sources: DER on HH Mine in September 2010.

Notes: 2009-2010 is the detailed geological survey.

Between March 2009 to September 2010, the No.3 SDGM conducted a detailed exploration campaign. The main works included 1:10,000 and 1:2,000 geological mapping, 1:10,000 hydrogeological survey, 215 m<sup>3</sup> trenches, a total length of 5,800.15 m holes, basic analysing of 407 samples. The exploration results were summarised in a report titled *Detailed Exploration Report on Houzhuang-Heiniutai Property, Muping District, Yantai City, Shandong Province ("DER on HH Mine in September 2010"*).

Between January 2019 to May 2019, the No.3 SDGM carried out the mineral resource verification work. The main works included an 8,813.3 m underground adit, collecting and analysing of 313 samples. The exploration results were summarised in a report titled *Verification Report on Gold Mineral Resource and Reserve in Houzhuang-Heiniutai Property, Muping District, Yantai City, Shandong Province*.

The significant exploration work undertaken at HH Mine (1985-2010) is shown in Table 5-3.

### 5.3 Mineral Resources

Mineral resource estimates in history were completed in accordance with Chinese standards and codes. There is no mineral resources applicable to *CIM Definitions Standards*.

### 5.4 Mineral Reserves

Mineral reserve estimates in history were completed in accordance with Chinese standards and codes. There is no mineral reserves applicable to *CIM Definitions Standards*.

### 5.5 Mining Productions

DGZ Mine started its construction in April 1982. It is an operating underground mine at the time of this report. DGZ Mine was divided, from east to west, into sections 1, 2 and 3. The production records in years from 2021 to 2023 and six months from 1 January to 30 June in 2024 ("**6M2024**") are shown in Table 5-4. These ores were extracted from the sections 1 and 2.

#### Table 5-4: Production Records of DGZ Mine

Item	Unit	2021	2022	2023	6M2024
Ore Tonnage					
Number 1 mining workshop	t	3,313	7,852	24,166	19,851
Number 2 mining workshop	t	3,993	6,337	26,948	23,255
Total	t	7,306	14,189	51,114	43,106
Development Tonnage					
Number 1 mining workshop	t	576	/	/	/
Number 2 mining workshop	t	2,760	/	/	/
Total	t	3,336	2,020	16,359	1,630
Development Length					
Number 1 mining workshop	m	48	/	/	/
Number 2 mining workshop	m	230	/	/	/
Total	m	278	177	1,435	144

Sources: Yantai Mujin

Notes: The production in the period between 2021 and the first seven months in 2022 was significantly interrupted by the People's Government of Shandong Province (the "**Provincial Government**") due to safety production inspection and expiry of old mining licence. The mine has restarted its normal production since August 2022.

Mining operations at HH Mine started in 2016, then were suspended due to the expiry of the old mining licence at the end of 2020.

Mining operation at CH Mine has been suspended since October 1999. The existing shafts were named SJ1 and SJ2. All of underground and surface facilities pertaining to these two shafts were removed. The portals of these two shafts were also sealed. A total of 98,903 tonnes of ore was mined till 1999.

## 5.6 Processing Productions

The historical processing indices in the last three years and 6M2024 are shown in Table 5-5.

 Table 5-5:
 Production Records of DGZ Processing Plant

Item	Unit	2021	2022	2023	6M2024
RoM tonnage	t	15,710	6,875	54,257	47,518
Concentrate tonnage	t	1,776	710	4,008	3,656
Yield rate	%	11.30	10.33	7.39	7.69
Au grade in RoM	g/t	2.54	1.88	1.49	1.65
Au metal in concentrate	kg	20.79	16.45	18.77	20.52
Au grade in tailings	kg	0.21	0.20	0.11	0.08
Au recovery rate	%	92.52	90.24	93.12	95.79

Sources: Yantai Mujin

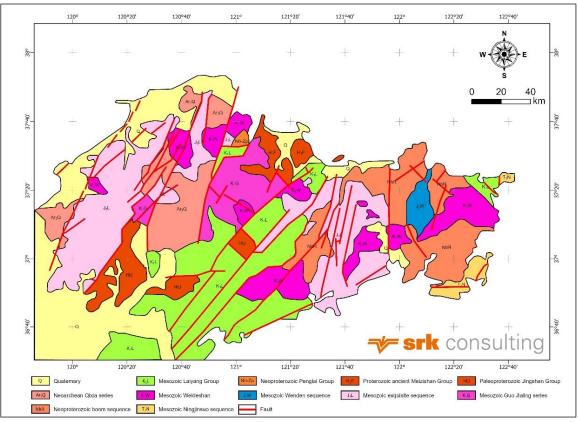
# 6 Geological Setting and Mineralisation

### 6.1 Regional Geology

This region is divided according to geotectonic sequence located in Sulu orogenic belt (I), Jiaonan-Weihai Uplift (II) ,Weihai Uplift area (III), Rushan-Rongcheng fault uplift (IV), Kunyushan-Rushan Uplift (V) of Muping-Rushan gold metallogenic belt.

Based on the DER on DGZ Mine in May 2017, SRK understands that:

- the outcrop stratum in this area is mainly paleoproterozoic Jingshan Group and Cenozoic Quaternary strata;
- the fault structure is relatively well developed;
- Magmatic rocks are widely distributed; and
- gold mineralisation conditions are good.



#### Figure 6-1: Regional Geology Map

Sources: SRK modification of the Verification Report on Gold Mineral Resource and Reserve in Denggezhuang Property, Muping District, Yantai City, Shandong Province ("VR on DGZ Mine in June 2019"), which was prepared by No.3 SDGM and dated June 2019.

### 6.1.1 Strata

The surface layer in the area is simple. The paleoproterozoic Jingshan Group is mainly composed

of inclusions scattered in intrusive rocks. There are Cenozoic quaternary alluvial and residual slope deposits distributed on both sides of mountain gullies and rivers.

### 6.1.2 Structure

The regional structure is mainly brittle fault structure according to the different distribution direction principally divided into two groups: near north-south ("**NS**") and north-east ("**NE**"), the other north-west ("**NW**") fault formation is late and small scale. Among them the NS fault structure is large in scale and closely related to gold deposits. It is the main ore-guiding and ore-controlling structure in this area. The distribution of the mineralised belt or orebody in the area is predominantly controlled by the NE-trending fault and the distribution of gold deposits (points) has the characteristics of north-south series and centralised distribution.

### 6.1.3 Magmatic Rocks

Intrusions developed throughout the region including early Mesoproterozoic Haiyangsuo sequence, Neoproterozoic Nanhua Rongcheng sequence and early Mesozoic Yanshan Linglong sequence.

### 6.1.4 Dike Rocks

Based on the *DER on DGZ Mine in May 2017*, the dike rocks in the area are mainly Mesozoic diorite porphyrite lamprophyre and quartz veins.

### 6.2 Property Geology

### 6.2.1 DGZ Mine

The DGZ Mine is situated in the middle part of the Jiaodong Muping-Rushan metallogenic belt. A simplified map of local geology is shown in Figure 6-2.

The surface layer of the mining area is simple and mainly composed of faulted structures. Magmatic rocks are extremely well developed.

#### Strata

The outcrop layer in the area is relatively simple, and mainly composed of Cenozoic quaternary sediments except for a small amount of inclusive scattered in the Paleoproterozoic Jingshan Group.

#### Structure

The structure in the area is generally brittle fracture, with the strikes of north-northeast ("**NNE**"), NNE, NE and NE.

#### **Magmatic rocks**

According to their mineral composition structure, formation time of structure magmatic rocks can be divided into Neoproterozoic Rongchang sequence and Mesozoic Linglong sequence. In addition, there are Mesozoic dike intrusion.

#### **Mineralised alteration belts**

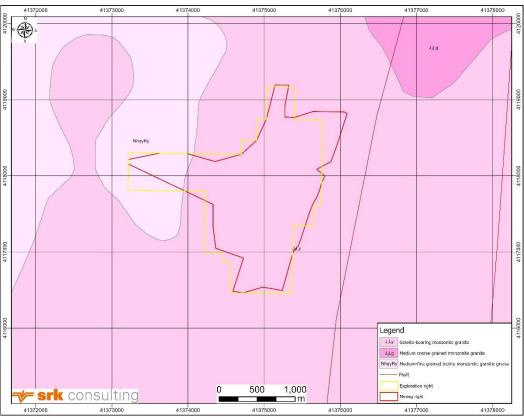


Figure 6-2: Property Geology Map of DGZ Mine

Sources: SRK modification of VR on DGZ Mine in June 2019

#### 6.2.2 CH Mine

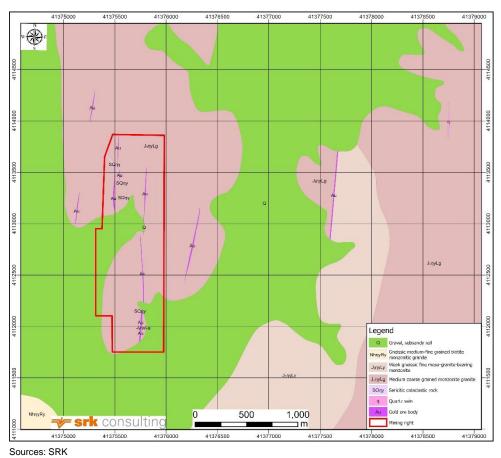
The mining area is located on the west side of Jinniushan main fault in Mupuru metallogenic belt and the outcrop layer is relatively simple dominated by fault structure. Magmatic rocks are extremely well developed. The property geology map is shown in Figure 6-3.

#### Strata

Only Cenozoic quaternary stratum is exposed in the mining area. It is found on both sides of riverbeds and in mountain valleys. The lithology is largely sandy soil sub-sandy soil clay gravel sand and other alluvial.

#### Structure

The structure of the mining area is dominated by the NNE ward and near NS ward compressive and torsional faults which control the distribution of mineralised zones I, II, III, IV and V. These faults are located several hundred metres to the east of the Jinniushan main fault and are nearly parallel to the main fault zone or at a small angle oblique belonging to the same sequence as the main fault but of a lower grade. The structures are numbered fault 1 ("F1") to fault 7 ("F7") from west to east.





#### **Magmatic rocks**

The magmatic rocks in the mining area are extremely well developed and spread throughout the region mostly for the Linglong sequence of the Guojiadian unit and the Linglong sequence of the Yunshan unit partial exposure of the Rongcheng sequence of the Yulindian unit. A small number of Mesozoic dike intrusions were also found.

#### **Dike rocks**

The Mesozoic dike rocks in the area mainly include lamprophyre quartz dike diorite porphyrite etc. Most of them are produced along the dike and are controlled by structure.

#### **Mineralised alteration belts**

The scale of surrounding rock alteration is determined by the scale of the fault structure. Based on

the *DER* on *CH Mine* in *December 2015*, the main alteration development includes sericitization pyritic sericitization silicitization and carbonation alteration as well as potassitization and chlorite alteration.

### 6.2.3 HH Mine

The HH Mine is situated in the southeastern part of the Jiaobei Terrane and to the north of the Jinniushan Fracture Zone and is regarded as part of the Muping-Rushan gold belt. A simplified map of property geology is shown in Figure 6-4.

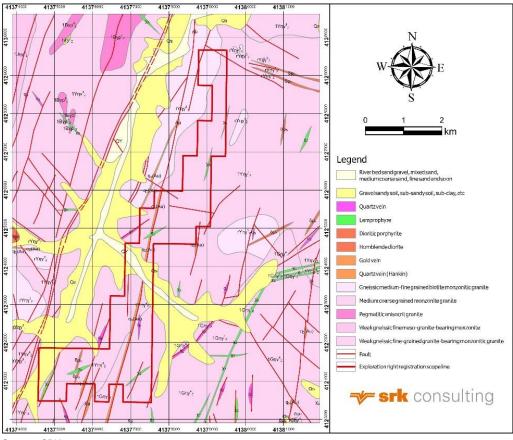


Figure 6-4: Property Geology Map of HH Mine

Sources: SRK

#### Strata

Local strata include metamorphic rocks of the Paleoproterozoic Jingshan Group and Cenozoic Quaternary Yihe and Shanqian Formation. Major magmatic activity is represented by monzonite granite including Linglong Intrusion (Bijiashan, Guojiadian, Dazhuangzi, Jiuqu) of Late Jurassic Epoch and Rongcheng Intrusion (Yulindian) of the Neoproterozoic Era. Other dykes of the Mesozoic Era include lamprophyre dioritic porphyrite quartz hornblende syenite and pegmatite. The structure in this area is mainly fault structure related.

#### Metamorphic

Paleoproterozoic metamorphic rocks of the Jingshan Group are barely exposed and are comprised of biotite granulite and marble. The biotite granulite rocks with brown-yellow colour are mainly composed of plagioclase (40%), quartz (30%-35%) and biotite (14%-20%). The marble with light green and pale colour is mainly composed of calcite (70%-90%), diopside (20%-30%) and dolomite.

Quaternary rocks in the Muping Project area is classified as Shanqian Formation represented by alluvial deposits distributed to the lower terrain.

#### Intrusion

The area is characterized by the intrusion of monzonite granite of the Neoproterozoic Era (Rongcheng Intrusion) and Late Jurassic Epoch (Linglong Intrusion). The Rongcheng intrusion is represented by Yulindian and the Linglong intrusion is represented by Bijiashan, Guojiadian, Dazhuangzi, Jiuqu and Yunshan.

Guojiadian Intrusion is the main intrusion in the Muping Project area with a typical characteristic of coarse-grained minerals. It is distributed in the southeast area of the Jinniushan Fracture Zone. The lithology is medium coarse monzonite granite and the fresh rock is grey-light red. The mineral composition is mainly plagioclase potassium feldspar quartz and a small amount of biotite.

The Yunshan Intrusion is distributed in the west of the Jinniushan Fracture Zone and northeast of the area which intruded into Yulindian intrusion. The lithology is weak gneissic fine-grained granitebearing monzonitic granite and the fresh rock is grey-light red. The main mineral composition is plagioclase potassium feldspar quartz and a small amount of biotite.

#### Structure

The local structure is the F1 fault northern part of the Jinniushan Fracture Zone. It strikes to the northeast of 10 degrees ("") with a dip mainly to the southeast of between 70° and 80°. Several sub-sequence faults are developed on F1's both sides parallel to or at a certain angle to Jinniushan Fracture Zone. It becomes curved along the strike and dip direction. Gray-green gouge is common in the fault surface. Tectonically altered rocks are distributed on both sides, mainly composed of sericite monzonite and partly altered lamprophyre. The central area is mostly filled with pyrite quartz veins. The characteristic of F1 is compression-shear, which is the gold controlling structure in this area. All mineralised bodies of the Muping Project are in this fault zone.

#### **Dike rocks**

Dykes are developed in the property area and represent intrusive activities during the Mesozoic Era. They are composed of lamprophyre, diorite, porphyrite, quartz, hornblende, syenite and pegmatite.

#### Wall rock

Alteration minerals associated with the fault zone include silica, sericite and pyrite.

### 6.3 Gold Mineralised Zones

### 6.3.1 DGZ Mine

Within the DGZ Mine area, there are three mineralisation alteration belts, numbered I, II and III, which are controlled by the fracture in NNE direction. A total of 35 gold mineralised zones ("**GMZs**") were delineated, of which the I 1-1, I 2-2, II-1, III-51, III-52, III-62 and X-1 are the main orebodies. The gold veins distribution is shown in Figure 6-5 and Figure 6-6.

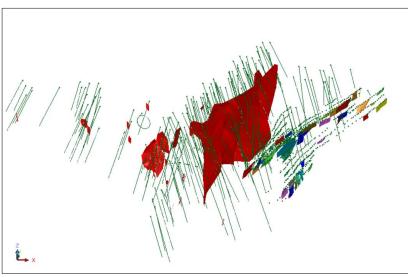
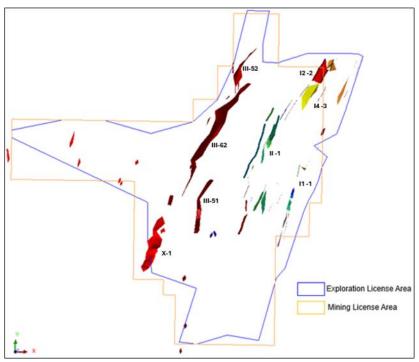


Figure 6-5: Isometric View of GMZs in DGZ Mine

Sources: SRK





Sources: SRK

The main orebodies are described as below:

The orebody II -1 occurs in the mineralised alteration zone II. The orebody strikes about 10°, dip

to northwest with an angle of 75° to 85°. The orebody extends about 1,370 m long with an occurrence elevation of +124 to -624 m ASL. The thickness of the orebody ranges from 0.10 m to 1.99 m, with an average thickness of 0.60 m. Almost all the Mineral Resources above -185 m ASL have been mined out.

- The orebody I 1- 1 occurs in the mineralised alteration zone I, with a strike of 10° to 25°, dipping to the northwest with an inclination angle of 65° to 89°. The orebody extends about 1,860 m long with an occurrence elevation of +175 m to -393 m ASL. The thickness of the orebody ranges from 0.10 m to 3.28 m, with an average thickness of 0.65 m. The orebody above the 145 m ASL has been mined out.
- The orebody I 2-2 occurs in the mineralised alteration zone I. The orebody strikes about 10° to 25°, dipping to west with an inclination angle of 45° to 81°. It is in the shape of a vein with a gentle upward slope and a steep downward slope. The length of the orebody is about 1,612 m. The occurrence elevation is about +150 m ASL to -602 m ASL. The thickness of the orebody is 0.19 m to 1.55 m. The majority of the orebody above the -225 m ASL has been mined out.
- The orebody I 4-3 is controlled by the NNE trending fault with a relatively simple shape. It strikes 10° to 25°, dips to the west with an inclination angle of 45° to 71°. The orebody is about 360 m long. The occurrence elevation is from -145 m ASL to -225 m ASL, and thickness ranges from 0.30 m to 1.10 m.
- The orebody III-51 occurs in the mineralisation alteration zone III. The strike is about 0° to 14°, the inclination angle is almost 90°. The orebody length is about 492 m. The thickness of the orebody is 0.50 m to 2.00 m and the occurrence elevation is about +86 m ASL to -600 m ASL.
- The orebody III-52 occurs in the mineralisation alteration zone III, with a strike of about 10° to 20°. The inclination angle is almost 90°. The orebody length is about 416 m. The thickness of the orebody is 0.60 m to 1.99 m, the occurrence elevation is about +70 m ASL to -585 m ASL.
- The orebody III-62 occurs in the mineralisation alteration zone III, located in the northwest of the licence area, with a strike of about 20° to 30°, dipping to the northwest with an inclination angle of 60° to 89°. The orebody length is about 1,170 m. The thickness of the orebody is 0.20 m to 3.45 m. The occurrence elevation is about +70 m ASL to -670 m ASL, and is still open at depth.
- The orebody X-1 occurs in the mineralisation alteration zone X, with a strike of about 20°, dipping to the southeast with an inclination angle of 55° to 70°. The orebody length is about 480 m. The thickness of the orebody is 0.60 m to 7.30 m. The occurrence elevation is about +95 m ASL to 220 m ASL.

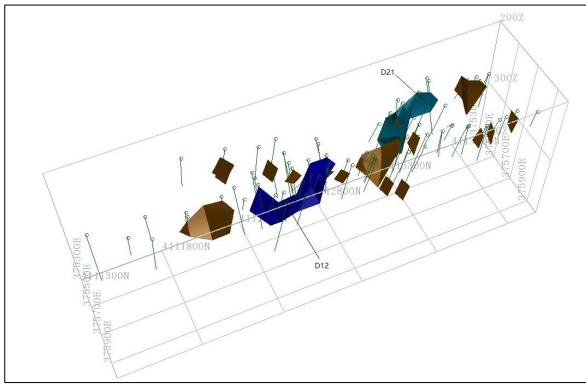
### 6.3.2 CH Mine

The mineralisation is dominated by Au. A total of 14 GMZs domains were constructed namely D11, D12, D13, D21, D22, D24, D25, D26, D27, D28, D29, D51, D52 and D53. D12 and D21 are the dominant mineralised domains shown in Figure 6-7.

The mineralised domain D12 is in mineralised zone I which has outcrops within the mining rights and exploration licences. It is developed in a vein shape striking nearly north to south with a dip angle of 50° to 86°. It is above 0 m ASL toward NW and below 0 m ASL toward NE. The control length of the orebody is nearly 600 m. The maximum control inclined depth is 230 m and the occurrence elevation of the orebody is from 100 m to -180 m ASL. The orebody has been mined above +12 m ASL. The average grade of the orebody is 2.94 grams per tonne ("g/t") and the grade coefficient of

variation are 97%. The average thickness of the orebody is 1.23 m and the thickness coefficient of variation is 63%.

The mineralised domain D21 is in mineralised zone II the orebody is vein-like with a general strike of 355°. It dips to the southeast and has a dip angle of 62° to 85°. The control strike length of the orebody is nearly 300 m. The control tilt extension is 310 m. The occurrence level is from 60 m to - 240 m ASL. The average grade is 4.16 g/t and the grade coefficient of variation are 104%. The average thickness of the orebody is 1.57 m and the thickness coefficient of variation is 73%.





Sources: SRK

#### 6.3.3 HH Mine

The gold mineralised zone is controlled by the Jinniushan Fracture Zone, which strikes to northeast of  $10^{\circ}$  to  $15^{\circ}$  with a dip mainly to the southeast of between  $60^{\circ}$  to  $85^{\circ}$ . The mineralised zone has a length of 1,760 m and the width varies from 3 m to 20 m.

A total of 6 mineralised bodies (D1, D2, D3, D4, D5 and D6) were modelled and 2 (D1 and D2) were the dominant mineralised bodies (Figure 6-8). The host rock of the mineralised bodies is pyrite quartz vein, and the wall rock is composed of monzonitic granite lamprophyre and marble.

Gold is most abundantly associated with electrum and pyrite. The secondary metallic minerals include chalcopyrite galena native gold and limonite. The associated gangue minerals are represented by quartz, sericite, plagioclase, calcite and chlorite.

Sulphur ("**S**") grades vary from 0.36% to 31.74% with an average grade of 13.57%. Silver ("**Ag**") grades have been analysed within a range of 0.5 g/t and 188 g/t Ag, with an average grade of 16.6

g/t. Deleterious arsenic was found to occur with grades ranging from 0.001% to 0.160%, with an average grade of 0.054%.

Based on observation as well as on the phase analysis results, the type of gold mineralised bodies is primary sulphide. The mineralised rocks are present in crystalline-granular mortar or clastic textures and massive or disseminated structure.

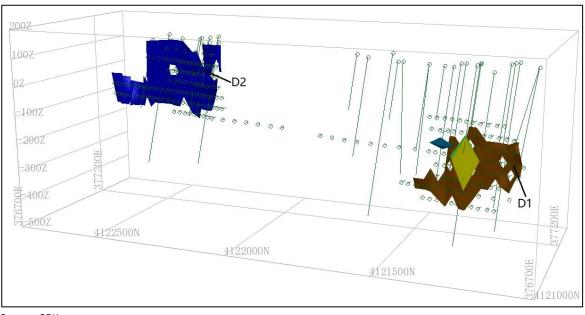


Figure 6-8: Isometric View of GMZs D1 and D2 in HH Mine

Sources: SRK

# 7 Deposit Types

The GMZs occurred primarily in the sub-fractures of NNE trending Jinniushan Fracture Zone and enriched in the intersections of fractures as well as gently dipping sub-fractures. The orebody is directly controlled and constrained by the shape and scale of fractures.

The sulphuric in the ore predominately sourced from the metamorphic rocks, while the minerals in the ore are principally sourced from the metamorphic rocks and monzonitic granite.

The main sources of ore-forming hydrothermal fluids are magmatic water and mixed groundwater.

The mineralisation temperature varies between 250 °C and 350 °C.

The deposit belongs to the pyrite quartz vein type gold deposit enriched sulphur and bearing gold that associated with mesothermal hydrothermal filling activities.

Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Exploration • Final

## 8 Exploration

The nature and extent of all relevant exploration work other than drilling are summarised in this section.

## 8.1 Sampling

At different exploration stages, trenches and tunnels (drifts/ adits) have been constructed in three mining areas. They are all developed by Yantai Mujin.

The trenches are predominately dug in the surface mineralisation zone. The general opening width of the trench construction is 1.00 m to 1.20 m, with a depth of between 60 cm to 80 cm. The depth of the bedrock is greater than 50 cm, the lower section is straight which meets the requirements of geological logging and sampling.

In tunnel development, the arch section is used when the rock is stable and the section specification is generally 2.1 m wide and 2.2 m high. The trapezoid section is used when the rock is unstable and the section specification is 2.35 m wide and 2.85 m high. The bottom and wall are straight, and the slope of the tunnel is controlled within 0.3%. During the development process the *Code for Construction and Acceptance of Drift Engineering (GBJ813)* was strictly implemented, and the development quality has to meet the requirements.

The collection processing and testing of basic analytical samples was undertaken by the laboratory of No.3 SDGM with provincial metrological certification. The samples for basic analysis sampled from the trenches and tunnels were taken according to different lithology, different ore types and different mineralisation degrees. Tunnel engineering sampling was mainly along the vein and through the vein engineering and the samples are generally arranged on one wall. The grooving method is adopted. The section size is 10 cm × 3 cm and the sample length is generally about 1.00 m. The minimum is 0.10 m and the maximum is 1.50 m.

### 8.2 Bulk Density

The bulk density sample of ore is collected in tunnel and ore within boreholes. According to the ore bearing representativeness, the block method is adopted. The sample size is not less than 60 cm<sup>3</sup> and the wax sealing is sent to the laboratory in time. In addition to the analysis of bulk density and humidity, Au and S was also analysed.

The ore-bearing property of the sample is consistent with the overall ore-bearing property of the mining area and the sample distribution is more uniform and representative which meets the test requirements.

### 8.2.1 DGZ Mine

There is total 399 specific gravity samples were taken from different type rock of drillholes, and tunnel related with gold mineralisation in year 2013, 2017 and 2018. Table 8-1 shows the bulk density ("**BD**") summary. Figure 8-1 shows the correlation between BD and sulphur content.

Considering the correlation between BD and sulphur content, the samples with high sulphur content were removed, and an average BD value 3.11 t/m<sup>3</sup> and 2.75 t/m<sup>3</sup> was applied for ore and waste

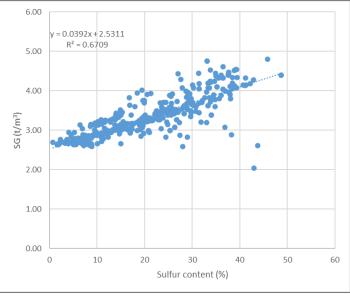
respectively.

#### Table 8-1: Bulk Density Summary

Rock Type	Sample Quantity	Minimum (t/m³)	Maximum (t/m <sup>3</sup> )	Average (t/m <sup>3</sup> )
Quartz vein	1	2.64	2.64	2.64
Sericitized monzonitic granite with quartz veins	1	3.00	3.00	3.00
Altered rock with quartz veins	16	3.08	2.72	3.68
Pyrite fossil veins	369	3.37	2.04	4.80
Monzonitic granite	12	2.89	2.59	3.69
Total	399	3.34	2.04	4.80

Sources: SRK

#### Figure 8-1: Correlation between BD and Sulphur Content



Sources: SRK

### 8.2.2 CH Mine

A total of 71 BD samples were collected. 24 samples were collected from 17 holes in the detailed exploration report in 2015. 47 samples were collected from 11 holes in the resource validation report in 2012.

Table 8-2: Bulk Density Summary

Property	Sample Quantity	Minimum (t/m³)	Maximum (t/m <sup>3</sup> )	Mean (t/m <sup>3</sup> )	Median (t/m <sup>3</sup> )	Std
CH Mine	71	2.68	4.46	3.25	3.17	0.46

Sources: SRK

Notes: Std is the abbreviation of standard deviation

Table 8-2 shows the summary descriptions. Figure 8-2 shows the correlation between BD and gold

grade. The average BD of 3.25 t/m<sup>3</sup> was used for the Mineral Resource estimation.

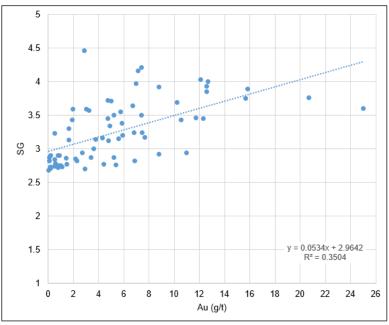


Figure 8-2: Map Showing the Correlation between BD and Gold Grade

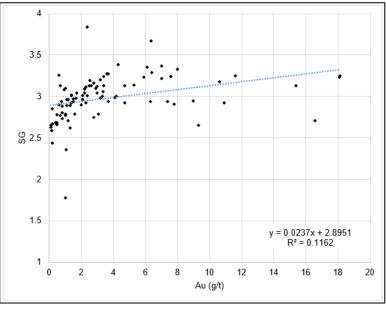
Sources: SRK

#### Table 8-3:Bulk Density Summary

Property	Sample Quantity	Minimum (t/m³)	Maximum (t/m <sup>3</sup> )	Mean (t/m <sup>3</sup> )	Median (t/m <sup>3</sup> )	Std
HH Mine	92	1.78	3.84	2.98	2.98	0.27

Sources: SRK





Sources: SRK

## 8.2.3 HH Mine

A total of 92 BD samples were collected, including the 59 samples sourced from the *Verification Report on Gold Mineral Resource and Reserve in Houzhuang-Heiniutai Property, Muping District, Yantai Shandong,* which was prepared by No.3 SDGM and dated May 2019, and the 33 samples sourced from the *Detailed Exploration Report on Houzhuang-Heiniutai Property, Muping District, Yantai City, Shandong Province,* which was prepared by No.3 SDGM and dated September 2010.

Table 8-3 shows the summary of bulk density. Figure 8-3 shows the correlation between BD and gold grade. The average BD of 2.98  $t/m^3$  was used in the Mineral Resource estimation.

# 9 Drilling

# 9.1 DGZ Mine

During the detailed Investigation stage, a total of 136 boreholes were drilled within the exploration licence area of the DGZ Mine and the total length was 54,016.40 m. Borehole inclination was 60° to 79° and the hole depth was between 148.2 2 m to 818.10 m. XY-4, XY-44 and CU-1000 type drilling rigs with hydraulic rotary small diameter diamond drilling and rope core technology were used in the Muping Project. The opening diameter is 91 mm or 110 mm and the final hole diameter is 75 mm. The drilling work was carried out in strict accordance with the requirements of the *Geological Core Drilling Regulations (DZ/T 0227-2016)*. A total of 66,523.72 m /157 holes was completed in this stage.

Table 9-1 is a summary of the drill holes at DGZ Mine.

Serial Number	Borehole ID	Azimuth (°)	Dip (°)	Depth (m)	Easting (m)	Northing (m)	Elevation (m ASL)
1	ZK129-1	100.00	75.00	369.30	4,116,037.24	41,374,460.25	107.54
2	ZK117-1	120.00	75.00	385.00	4,116,208.67	41,374,477.09	109.11
3	ZK105-2	100.00	75.00	196.97	4,116,329.94	41,374,521.47	107.14
4	ZK105-3	102.00	75.00	566.00	4,116,346.46	41,374,443.63	105.04
5	ZK89-2	79.00	58.00	196.27	4,116,508.77	41,374,500.16	104.79
6	ZK89-3	70.00	71.00	312.90	4,116,500.66	41,374,502.58	104.98
7	ZK89-4	97.00	75.00	565.30	4,116,547.23	41,374,443.31	103.34
8	ZK73-2	70.00	75.00	266.36	4,116,712.97	41,374,576.99	106.34
9	ZK73-3	130.00	78.00	454.92	4,116,804.34	41,374,497.79	105.90
10	ZK57-2	100.00	75.00	201.57	4,116,923.19	41,374,591.96	107.74
11	ZK57-3	100.00	75.00	512.70	4,116,942.92	41,374,538.31	104.53
12	ZK41-2	65.00	74.00	236.70	4,117,096.36	41,374,571.55	99.04
13	ZK41-3	48.00	75.00	384.20	4,117,038.86	41,374,513.62	98.41
14	ZK25-3	130.00	67.00	285.20	4,117,392.75	41,374,584.73	106.03
15	ZK25-4	103.00	75.00	390.90	4,117,347.52	41,374,552.10	103.40
16	ZK25-5	101.00	75.00	558.10	4,117,355.76	41,374,502.56	102.92
17	ZK13-1	103.00	75.00	622.10	4,117,501.67	41,374,547.60	108.13
18	ZK13-2	104.00	73.00	511.90	4,117,488.81	41,374,603.70	109.07
19	ZK1-3	90.00	71.00	550.70	4,117,611.06	41,374,574.53	112.01
20	ZK1-4	89.00	74.00	757.26	4,117,608.70	41,374,541.43	111.40
21	ZK6-4	100.00	68.00	338.60	4,117,774.00	41,374,425.03	102.24
22	ZK6-5	100.00	63.00	231.10	4,117,773.46	41,374,448.83	103.69
23	ZK6-6	100.00	75.00	484.90	4,117,782.57	41,374,388.23	99.41
24	ZK10-1	101.00	75.00	503.92	4,117,795.56	41,374,625.71	119.22
25	ZK14-4	106.00	64.00	328.50	4,117,855.12	41,374,571.91	113.42

Table 9-1: Summary of Boreholes in DGZ Mine

Serial Number	Borehole ID	Azimuth (°)	Dip (°)	Depth (m)	Easting (m)	Northing (m)	Elevation (m ASL)
26	ZK14-5	96.00	68.00	354.30	4,117,854.88	41,374,536.13	110.84
27	ZK14-6	100.00	64.00	493.50	4,117,872.34	41,374,457.14	103.87
28	ZK22-4	111.00	75.00	411.30	4,117,945.83	41,374,727.27	130.77
29	ZK22-5	103.00	75.00	711.50	4,117,956.72	41,374,615.58	115.78
30	ZK22-6	100.00	73.00	415.60	4,117,955.75	41,374,562.82	110.34
31	ZK26-1	101.00	77.00	751.25	4,118,008.07	41,374,546.80	108.74
32	ZK30-2	100.08	78.00	210.90	4,118,039.17	41,374,675.77	120.80
33	ZK30-3	102.00	75.00	375.90	4,118,060.80	41,374,601.44	114.71
34	ZK30-4	108.00	74.00	321.80	4,118,057.80	41,374,628.51	116.37
35	ZK30-5	100.00	79.00	148.22	4,118,030.49	41,374,703.65	124.29
36	ZK34-1	102.00	76.50	616.50	4,118,109.59	41,374,580.10	110.71
37	ZK38-3	100.25	67.00	147.90	4,118,125.43	41,374,716.17	120.55
38	ZK38-4	100.25	74.00	330.90	4,118,141.88	41,374,653.54	113.85
39	ZK38-5	97.00	73.00	602.61	4,118,150.79	41,374,590.77	109.08
40	ZK38-6	100.00	75.00	656.72	4,118,162.36	41,374,538.67	105.17
41	ZK38-7	96.00	75.00	273.10	4,118,131.16	41,374,672.97	116.20
42	ZK46-2	115.00	73.00	222.90	4,118,243.84	41,374,746.05	109.01
43	ZK46-3	100.25	71.00	300.90	4,118,223.45	41,374,700.04	104.30
44	ZK46-4	100.00	75.00	468.80	4,118,232.96	41,374,667.07	104.51
45	ZK46-5	92.00	75.00	411.30	4,118,228.15	41,374,688.78	104.38
46	ZK46-6	122.00	60.00	183.90	4,118,242.48	41,374,746.74	109.18
47	ZK54-4	109.00	73.00	519.50	4,118,339.21	41,374,703.60	108.47
48	ZK54-5	104.00	75.00	385.10	4,118,325.15	41,374,756.81	116.37
49	ZK54-6	100.00	75.00	185.50	4,118,309.14	41,374,838.38	124.10
50	ZK62-2	95.00	75.00	412.00	4,118,403.96	41,374,873.50	130.01
51	ZK62-3	99.00	73.00	618.60	4,118,413.58	41,374,711.34	101.17
52	ZK62-4	89.00	73.00	818.10	4,118,417.46	41,374,644.95	98.91
53	ZK62-5	105.00	65.00	428.90	4,118,429.80	41,374,746.14	102.54
54	ZK62-6	100.00	72.00	516.90	4,118,429.80	41,374,746.14	102.54
55	ZK66-1	100.00	75.00	321.20	4,118,452.82	41,374,877.36	131.44
56	ZK66-2	102.00	75.00	486.60	4,118,464.98	41,374,843.84	128.20
57	ZK78-4	90.00	67.00	301.10	4,118,575.42	41,374,904.87	101.63
58	ZK78-5	108.00	70.00	178.70	4,118,593.71	41,374,991.68	105.77
59	ZK78-6	111.00	72.00	502.10	4,118,633.98	41,374,859.39	102.14
60	ZK78-7	101.00	75.00	786.83	4,118,622.15	41,374,834.49	101.90
61	ZK86-1	100.00	70.00	406.90	4,118,696.03	41,374,941.69	104.46
62	ZK90-2	100.00	75.00	726.92	4,118,755.72	41,374,890.92	103.88
63	ZK92-1	140.00	69.00	240.90	4,118,787.62	41,375,033.78	106.03
64	ZK92-2	100.00	75.00	207.11	4,118,766.63	41,374,974.07	107.30

Serial Number	Borehole ID	Azimuth (°)	Dip (°)	Depth (m)	Easting (m)	Northing (m)	Elevation (m ASL)
65	ZK96-1	96.00	73.00	504.80	4,118,813.87	41,374,923.41	109.07
66	ZK102-1	100.00	75.00	587.65	4,118,892.49	41,374,949.51	110.91
67	ZK102-2	100.00	68.00	364.90	4,118,897.43	41,374,893.12	109.82
68	ZK110-1	110.00	68.00	369.50	4,118,990.34	41,375,026.59	113.30
69	ZK110-2	100.00	75.00	260.39	4,118,969.93	41,375,120.42	113.33
70	ZK118-2	76.00	75.00	392.40	4,119,066.65	41,375,013.51	117.10
71	ZK122-1	103.00	68.00	455.70	4,119,136.17	41,375,053.72	119.94
72	ZK126-1	84.00	66.00	345.70	4,119,150.92	41,375,111.72	115.79
73	ZK15-1	272.00	75.00	298.01	4,116,997.58	41,374,300.15	92.67
74	ZK11-1	290.00	75.00	174.70	4,117,110.99	41,374,316.63	95.95
75	ZK11-2	300.00	75.00	435.50	4,117,078.05	41,374,381.71	93.55
76	ZK7-1	290.00	75.00	183.15	4,117,194.19	41,374,331.75	96.94
77	ZK7-2	286.00	77.00	349.18	4,117,190.94	41,374,381.66	98.52
78	ZK7-3	290.00	78.00	291.90	4,117,204.12	41,374,356.13	98.33
79	ZK7-4	287.00	74.00	352.70	4,117,197.50	41,374,450.08	98.96
80	ZK5-1	290.00	75.00	190.10	4,117,254.76	41,374,358.01	98.79
81	ZK5-2	290.00	75.00	288.06	4,117,247.22	41,374,384.48	100.59
82	ZK3-1	85.00	78.00	186.34	4,117,304.82	41,374,295.56	95.68
83	ZK3-2	284.00	75.00	324.52	4,117,290.20	41,374,427.36	101.82
84	ZK3-3	287.00	77.00	212.60	4,117,303.68	41,374,381.28	101.60
85	ZK3-4	274.00	74.00	549.70	4,117,287.70	41,374,505.44	102.50
86	ZK3-5	290.00	79.00	247.45	4,117,293.12	41,374,391.74	102.25
87	ZK1-8	272.00	76.00	315.50	4,117,353.78	41,374,430.57	103.00
88	SK0-1	291.00	78.00	409.10	4,117,356.96	41,374,500.51	102.95
89	ZK0-1	291.00	75.00	201.58	4,117,384.05	41,374,420.73	103.66
90	ZK0-2	270.00	78.00	258.58	4,117,386.89	41,374,462.02	103.49
91	ZK0-3	265.00	75.00	562.78	4,117,421.97	41,374,604.93	106.62
92	ZK0-4	290.00	73.00	475.30	4,117,514.61	41,374,100.56	93.05
93	ZK2-1	278.00	71.00	243.53	4,117,451.90	41,374,428.65	103.92
94	ZK4-1	266.00	75.00	183.33	4,117,512.90	41,374,411.76	102.20
95	ZK4-2	266.00	78.00	217.31	4,117,513.51	41,374,449.88	104.58
96	ZK4-3	270.00	73.00	314.90	4,117,506.62	41,374,521.49	107.21
97	ZK4-4	300.00	75.00	606.70	4,117,437.39	41,374,568.78	107.20
98	ZK8-1	265.00	75.00	202.11	4,117,611.63	41,374,381.10	99.47
99	ZK8-2	294.00	75.00	256.06	4,117,576.43	41,374,428.68	103.84
100	ZK8-3	305.00	76.00	327.40	4,117,568.02	41,374,464.65	105.74
101	ZK8-4	290.00	76.00	354.70	4,117,568.43	41,374,543.81	111.29
102	ZK8-5	290.00	73.00	392.63	4,117,706.52	41,374,138.33	94.06
103	ZK12-1	275.00	75.00	475.70	4,117,687.77	41,374,519.71	111.90

Serial Number	Borehole ID	Azimuth (°)	Dip (°)	Depth (m)	Easting (m)	Northing (m)	Elevation (m ASL)
104	ZK16-1	277.00	75.00	305.31	4,117,792.25	41,374,439.45	101.82
105	ZK16-2	290.00	68.00	505.70	4,117,857.03	41,374,207.92	94.11
106	ZK16-3	290.00	73.00	356.31	4,117,902.87	41,374,136.03	94.46
107	ZK24-1	290.00	73.00	340.30	4,118,064.24	41,374,247.40	96.11
108	ZK325-1	270.00	75.00	270.90	4,118,301.67	41,373,663.53	122.18
109	ZK325-2	255.00	75.00	345.90	4,118,296.47	41,373,740.90	115.72
110	ZK325-3	262.00	75.00	522.90	4,118,304.45	41,373,811.11	112.23
111	ZK317-1	260.00	72.00	278.60	4,118,217.05	41,373,715.65	116.13
112	ZK317-2	265.00	67.00	435.90	4,118,237.62	41,373,835.27	107.68
113	ZK317-3	265.00	79.00	523.90	4,118,237.62	41,373,835.27	107.68
114	ZK317-4	265.00	78.00	198.70	4,118,215.97	41,373,684.71	119.27
115	ZK301-1	270.00	71.00	267.90	4,118,090.51	41,373,739.37	121.06
116	ZK301-2	263.00	73.00	480.90	4,118,079.21	41,373,852.98	106.90
117	ZK301-3	258.00	70.00	372.90	4,118,072.83	41,373,809.38	111.23
118	ZK308-1	256.00	68.00	279.70	4,117,915.21	41,373,765.40	117.39
119	ZK308-2	259.00	70.00	536.70	4,117,923.82	41,373,863.28	102.90
120	ZK314-1	265.00	70.00	435.70	4,117,782.29	41,373,782.35	106.49
121	ZK314-2	265.00	68.00	384.00	4,117,773.59	41,373,736.19	105.77
122	ZK320-1	265.00	70.00	391.50	4,117,664.66	41,373,784.63	95.62
123	ZK326-1	244.00	68.00	314.40	4,117,564.74	41,373,890.55	92.03
124	ZK619-1	265.00	65.00	382.70	4,118,154.54	41,373,511.70	134.28
125	ZK535-1	270.00	65.00	367.70	4,118,024.82	41,373,257.86	124.29
126	ZK519-1	270.00	65.00	372.90	4,118,175.20	41,373,290.07	116.10
127	ZK519-2	248.00	65.00	230.50	4,118,206.64	41,373,235.24	112.59
128	ZK511-1	270.00	65.00	320.40	4,118,292.34	41,373,202.32	116.15
129	ZK527-1	260.00	65.00	320.39	4,118,120.79	41,373,294.75	115.93
130	ZK6-2	90.25 `	78.00	1,078.75	4,117,685.59	41,374,701.43	120.80
131	ZK9-1	86.00	75.00	570.05	4,117,468.72	41,374,778.09	111.07
132	ZK9-2	100.25	74.00	940.23	4,117,533.41	41,374,629.03	113.41
133	ZK22-1	100.25	75.00	686.99	4,117,877.70	41,374,876.87	133.30
134	ZK22-2	100.25	69.00	864.30	4,117,919.37	41,374,742.80	139.83
135	ZK22-3	100.25	75.00	1105.27	4,117,931.42	41,374,675.92	124.12
136	ZK54-1	100.25	75.00	770.40	4,118,285.32	41,374,967.53	137.17
137	ZK54-2	100.25	75.00	924.71	4,118,294.97	41,374,914.88	133.31
138	ZK54-3	102.25	75.00	1,300.50	4,118,325.10	41,374,791.71	118.48
139	ZK78-1	111.50	75.00	530.40	4,118,563.75	41,375,360.86	114.79
140	ZK78-2	111.50	75.00	616.92	4,118,617.17	41,375,225.50	108.02
141	ZK94-1	111.50	75.00	349.97	4,118,699.93	41,375,561.01	119.86
142	ZK94-2	111.50	75.00	510.60	4,118,748.44	41,375,437.55	111.12

Serial Number	Borehole ID	Azimuth (°)	Dip (°)	Depth (m)	Easting (m)	Northing (m)	Elevation (m ASL)
143	ZK106-1	111.50	75.00	300.03	4,118,803.31	41,375,638.06	116.24
144	ZK70-2	92.25	71.00	747.60	4,118,497.61	41,374,721.23	102.35
145	ZK70-3	92.25	75.00	808.00	4,118,497.61	41,374,721.23	102.35
146	ZK78-8	100.25	72.00	695.60	4,118,631.28	41,374,836.05	101.81
147	ZK86-2	100.25	61.00	286.33	4,118,686.29	41,374,998.58	104.56
148	ZK86-3	100.25	65.00	520.64	4,118,699.01	41,374,955.33	103.54
149	ZK86-4	100.25	70.00	648.10	4,118,706.35	41,374,899.11	103.00
150	ZK94-4	100.25	75.00	341.71	4,118,794.97	41,374,954.35	108.54
151	ZK94-5	100.25	69.00	670.10	4,118,814.35	41,374,849.81	106.98
152	ZK102-3	70.00	67.00	313.41	4,118,846.68	41,375,053.38	106.39
153	ZK102-5	100.25	71.00	537.90	4,118,878.31	41,374,995.92	110.49
154	ZK114-1	100.25	70.00	305.60	4,119,024.92	41,375,097.78	110.53
155	ZK114-2	100.25	70.00	380.60	4,119,064.16	41,375,045.81	115.88
156	ZK114-3	100.25	61.00	359.57	4,119,062.16	41,375,045.81	115.88
157	ZK10-2	100.25	76.00	663.40	4,117,791.99	41,374,590.36	116.56

Sources: DER on DGZ Mine in May 2017

# 9.2 CH Mine

Drilling technics in CH Mine are similar to that in DGZ Mine.

# 9.3 HH Mine

Drilling technics in HH Mine are similar to that in DGZ Mine.

# 9.4 Sampling

For core drilling sampling, the sampling method is to split the core along the long axis centre line, with half sent to the laboratory for analysis and the other half kept in the core box and fill in the sampling plate together with those stored in the core box. The sampling is covered with cloth.

The basic analysis samples are segmented according to different rock types and mineralised alteration intensity. The length of single sample is generally about 1.00 m. The shortest sample is 0.60 m and the longest sample is 1.50 m.

# **10** Sample Preparation, Analyses and Security

# **10.1 Sample Preparation**

Sample preparation was undertaken by the laboratory of No.3 SDGM.

The coarse crushing, medium crushing and fine crushing process is adopted for sample preparation. Sample preparation was carried out according to the procedure of *The Specification of Testing Quality Management for Geological Laboratories-Part 2: Preparation of Rock and Mineral Samples (DZ/T 0130.2-2006)*.

Consider the rock types, grade variation and distribution uniformity of elements in it and the weight of the samples sent, particles are ground to a diameter of 1 mm and then divided into normal and duplicate samples. The normal sample is taken 500 grams ("g") and processed to 200 mesh. In the process of sample preparation, the sample loss rate was less than 5% and the shrinkage error is less than 3%.

# 10.2 Sample Analyses

The basic analysis was undertaken by the laboratory of No.3 SDGM with provincial metrological certification. The internal inspection analysis was carried out at the same time. The sample external inspection and analysis was undertaken by Jinan Mineral Resources Supervision and Testing Centre ("JNTC") of the Ministry of Natural Resources of the People's Republic of China, which has a national metrological certification.

The sample analysis was carried out in accordance with the procedures of *The Specification of Testing Quality Management for Geological Laboratories-Part 3: Chemical Components Analysis of Rock and Mineral Samples (DZ/T 0130.3-2006).* 

The basic analysis element is Au.

The analysis items of combined analysis samples were Ag, Cu and S.

The multi-element analysis items were Ag, Cu, S and arsenic.

The gold test method was activated carbon adsorption - hydroquinone capacity method.

# 10.3 Quality Assurance and Quality Control (QA/QC)

In order to ensure the quality of the basic analysis and to know whether there are accidental errors in the quality of the basic analysis samples, the internal test samples are extracted from the duplicate samples in stages and batches. In order to understand whether there is systematic error in the process of analysis, the samples for external analysis are extracted from the basic analysis samples in stages and batches. The internal inspection samples are extracted by batch at the rate of 10% (1 in 10 samples) and the external inspection samples at the rate of 5% (1 in 20 samples). The internal test samples are undertaken by the provincial metrological certification of No.3 SDGM (Class A qualification) and the external test samples are undertaken by the national metrological certification of the JNTC (Class A qualification).

# 10.3.1 DGZ Mine

A total of 3,653 basic analysis samples were taken and 543 samples were sent for internal inspection in 26 batches, accounting for 14.86% of the total number of samples. The samples were coded according to the regulations and sent to the laboratory for internal inspection. Through comparative calculation, the pass rate of 26 batches of basic analysis was 99.08% and the quality of basic analysis was reliable.

For external inspection, 323 samples were sent for external inspection in seven batches, accounting for 8.84% of the total number of samples. The results show that the qualified rate of eight batches of basic analysis Au is 98.14% and the systematic error of basic analysis is not excessive.

The results of internal inspection and external inspection tests showed that there is no accidental nor systematic error in sample analysis.

### 10.3.2 CH Mine

There were 493 basic analysis samples in the detailed investigation area and the analysis item was gold. According to the DZ/T 0130.3-2006, the rock mineral samples chemical composition analysis including:

- Standard reference material: inserting a blank number for each 10 samples and adding a reference material.
- Check analysis: each batch randomly 20%-50% more than the sample coded by different researchers do check analysis. For the basic Au analysis results not less than 1.0 g/t, all the samples were selected and sent to different personnel for 100% spot check and the remaining samples were checked and analysed according to 20% ratio.
- Blank sample: each batch insert two blank samples in batches the front and the rear parallel to the sample determination.

A total of 51 samples were collected in this detailed inspection, accounting for 10.34% of the total samples. And the qualified rate of internal inspection was 98%. 39 samples were collected for external inspection test, accounting for 7.91% of the total samples with a qualification rate of 94.87%. The sample collection testing and quality control was carried out in accordance with the requirements of *The Specification of Testing Quality Management for Geological Laboratories (DZ/T 0130-2006).* After internal and external examination, there is neither accidental nor systematic error in sample analysis. All indicators meet the requirements of analytical quality.

### 10.3.3 HH Mine

There are 407 basic analysis samples in the detailed investigation area and the analysis item is Au. It was undertaken by the laboratory of the No.3 SDGM in strict accordance with DZ/T 0130-2006 and the quality meets the specified requirements.

For internal inspection and analysis, a total of 83 samples were selected from the basic analysis samples in stages and batches, accounting for 20.4% of the total samples. The sampling identification code was written and sent to the laboratory of the No.3 SDGM for retesting. After inspection, the pass rate was 100%. There is no accidental error.

For external inspection and analysis, 43 samples were extracted from basic analysis samples, accounting for 10.6% of the total number of samples. They were sent to JNTC for external inspection. After inspection, only 1 sample is unqualified, the pass rate is 98%, with no systematic error.

# 10.3.4 Conclusions

In the opinion of SRK, the sampling preparation security and analytical procedures are consistent with generally accepted industry best practices and are therefore adequate.

# 11 Data Verification

# 11.1 Verifications by No.3 SDGM

The geological/ exploration studies on the DGZ Mine began March 2011 until January 2017, CH Mine began October 2010 through to August 2015, and HH Mine from March 2009 to September 2010, and was conducted by No.3 SDGM. The sample external inspection and analysis was undertaken by JNTC which has a national metrological certification.

From 2011 to 2017, the No.3 SDGM carried out a detailed geological survey for DGZ Mine. A total of 354 samples were collected for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 9.7% of the total samples. The comparison data are shown in Figure 11-1.

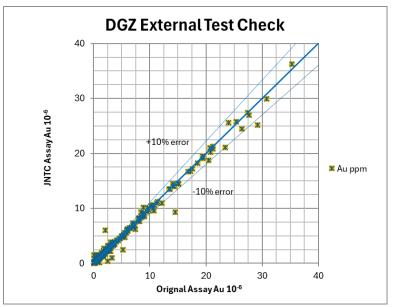


Figure 11-1: DGZ Mine Comparison of JNTC Analysis

Sources: SRK

From 2010 to 2015, the No.3 SDGM carried out a detailed geological survey of CH Mine. A total of 43 samples were collected for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 8.7% of the total samples. The comparison data are shown in Figure 11-2.

From 2009 to 2010, the No.3 SDGM carried out a detailed geological survey of HH Mine. A total of 43 samples were collected for external inspection and the samples were basically extracted from the internal samples of the mineralisation zone controlled by each single project, accounting for 10.6% of the total samples. The comparison data are shown in Figure 11-3.

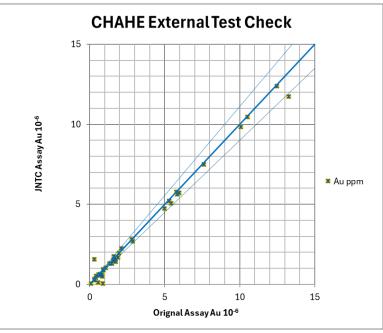
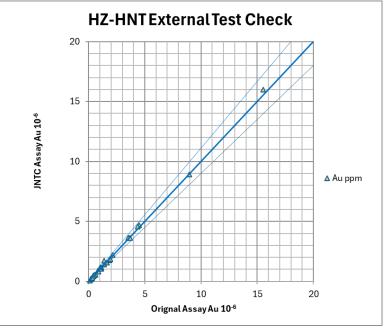


Figure 11-2: CH Mine Comparison of JNTC Analysis

Sources: SRK

Figure 11-3: HH Mine Comparison of JNTC Analysis



Sources: SRK

# 11.2 Verifications by PRH2

Five samples were collected by PRH2 in stopes at levels -185 m and -265 m in DGZ Mine in December 2023. The assaying results are shown in Table 11-1. The test results show that the gold

grade is good. PRH2 didn't conduct verifications on HH Mine and CH Mine.

Assaying Results of PRH2's Sampling

Sample Number	Sampling Position	Au Grade (g/t)	
1	Stope 53 at Level -185 m	6.95	
2	Stope 79 at Level -185 m	14.8	
3	Stope 77 at Level -265 m	5.11	
4	Stope 79 at Level -265 m	11.8	
5	Stope 81 at Level -265 m	17.2	

Sources: PRH2

Table 11-1:

# 11.3 Verifications by SRK

The data verification program was only re-assaying for pulp duplicate and sample preparation and assaying by SGS Laboratory in Tianjin, China ("**SGS Tianjin**"). The re-sampling process was supervised by SRK geologists in March 2024.

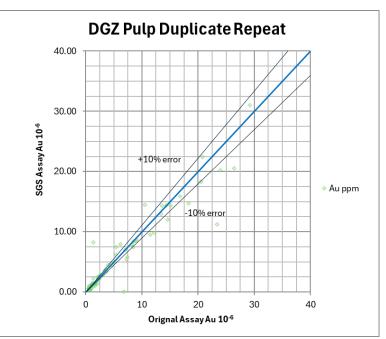


Figure 11-4: Comparison of Pulp Duplicate Analysis (DGZ Mine)

Sources: SRK

# 11.3.1 DGZ Mine

SRK geologist did not find enough cores retained in DGZ Mine during the site visit conducted in March 2024. It was decided to re-sampling in a mining roadway and send them to SGS Tianjin for analysis.

SGS Tianjin assay comparisons are plotted in Figure 11-4 and show relatively large biases in some low-grade samples and a few high-grade samples. A total of 79 samples were re-sampled. SRK

attributes these biases to the heterogeneity of the mineralised material. It is basically acceptable, considering when the samples were collected and analysed. This batch of data can be used for Mineral Resource estimation.

### 11.3.2 CH Mine

SGS Tianjin assay comparisons are plotted in Figure 11-5 and show a good correlation. A total of 43 samples were re-assayed. SRK believes the data is reliable. This batch of data can be used for Mineral Resource estimation.

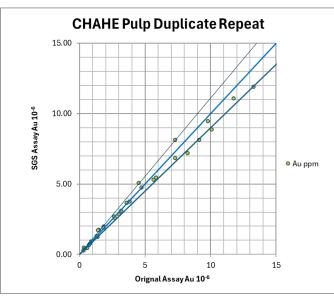
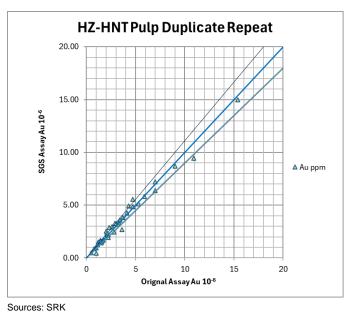


Figure 11-5: Comparison of Pulp Duplicate Analysis (CH Mine)

Figure 11-6: Comparison of Pulp Duplicate Analysis (HH Mine)



# 11.3.3 HH Mine

SGS Tianjin assay comparisons are plotted in Figure 11-6 and show a good correlation. A total of 43 samples were re-assayed. SRK believes the data is reliable. This batch of data can be used for Mineral Resource estimation.

# **12 Mineral Processing and Metallurgical Testing**

# 12.1 Overview

In May 2016, the processing laboratory of Yantai Mujin conducted a simple mineralogical study and selectivity test on ore samples from DGZ Mine. The representativeness of the samples was unknown. Flotation yielded favourable results with a gold grade of 2.79 g/t in the samples. Using a simple flotation process and reagent system at a relatively coarse grinding fineness, the gold concentrate grade reached 18.22 g/t with a high gold recovery rate of 96.34%, indicating good flotation selectivity for DGZ Mine. DGZ Mine is a longstanding operation with its own processing plant. Historically, the processing production technology indices have been good with a gold concentrate grade of around 18% and a gold recovery rate of around 91%. Given DGZ Mine's comprehensive historical processing production indices which sufficiently illustrate the ore's selectivity, SRK believes that historical production indices can be used instead of processing test indices for Mineral Resource estimation and deposit evaluation.

In August 2017, the Yantai Mujin processing laboratory conducted selectivity tests on samples of HH Mine. The representativeness of the samples was unknown and the gold grade of the samples was 1.77 g/t. Employing a simple flotation process and reagent system and at a relatively coarse grinding fineness, good indices were achieved with a gold concentrate grade of 13.25 g/t and a recovery rate of 95.06%. HH Mine ceased production in 2021 and did not have separate production records.

From 2013 to 2017, ore from the CH Mine was mixed with that from DGZ Mine for processing production with an average selected grade of 2.30 g/t and an average concentrate grade of 18.99 g/t, with an average recovery rate of 93.35%. Based on processing tests and historical production indices, SRK believes that the flotation selectivity of ore from CH Mine is slightly inferior to that of ore from DGZ Mine and recommends using a concentrate grade of 13 g/t and a gold recovery rate of 90% as the processing indices for Mineral Resource estimation and deposit evaluation.

SRK has not seen any process mineralogy research data or processing test data for CH Mine. CH Mine ceased production in 1999 and did not retain its historical processing production records so its processing recovery rate cannot be directly determined. Based on the mixed processing of ore from the three mines, before its cessation of production and considering the potential decrease in grade when CH Mine resumes production, SRK opines that its processing indices are consistent with those of HH Mine, that is ("**i.e.**") a concentrate grade of 13 g/t and a gold recovery rate of 90%.

# 12.2 DGZ Mine

# 12.2.1 Mineralogy

The main metallic minerals in DGZ mine are pyrite with small amounts of chalcopyrite pyrrhotite magnetite limonite covellite galena and sphalerite. Non-metallic minerals primarily consist of quartz with minor amounts of calcite sericite and plagioclase. Gold minerals principally comprise electrum with some native gold present. The particle size distribution of gold minerals is summarised in Table 12-1, typically ranging from 0.002 mm to 0.046 mm with predominant medium to fine-grained gold and occasional coarse-grained gold. Visible gold is rare while fine gold particles are less common.

Category	Unit	Coarse	Medium	Fine	Ultrafine	Total
Range	mm	0.295-0.074	0.074-0.037	0.037-0.01	<= 0.01	/
Quantity	/	13	21	30	4	68
Percentage	%	19.12	30.88	44.12	4.88	100.00

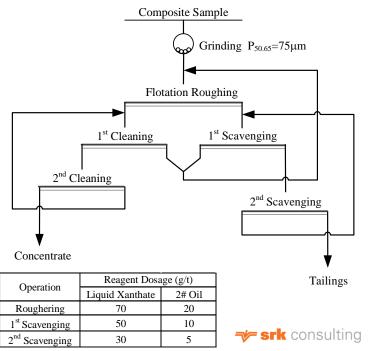
Table 12-1:	Particle Size	Distribution (	of Gold in	DGZ Mine
		Distribution		

Sources: Processing Test Report for Denggezhuang Ore conducted by the Processing Laboratory of Yantai Mujin May 2016.

The morphology of gold minerals is predominantly angular and sub-angular (accounting for 78%) followed by elongated angular grains with minor occurrences of rounded and wheat-shaped grains. Particle sizes generally range from 0.01 mm to 0.05 mm, with the smallest being 0.001 mm to 0.01 mm and the largest being 0.070 mm to 0.158 mm. The gold minerals are mainly fissuring gold and intergranular gold with a small amount of inclusion gold. The inclusion gold is primarily contained within multi-metal sulphides such as pyrite and chalcopyrite. Intergranular gold is generally distributed along the interstices of pyrite chalcopyrite and quartz crystals while fissure gold is chiefly distributed along the fractures of pyrite and chalcopyrite.

The primary gold mineral at DGZ Mine is mostly electrum which occurs within metal sulphides. The ore industrial type is sulphide-quartz vein-type gold ore.

### Figure 12-1: Closed-Circuit Flotation Test Process and Conditions for DGZ Mine



Sources: Selectivity Test Report for Denggezhuang Ore conducted by the Processing Laboratory of Yantai Mujin May 2016.

# 12.2.2 Processing Test

Through single-factor experiments on grinding fineness collector types and dosages the optimal flotation conditions were determined. Under these conditions, a "1 roughing-2 scavenging-2 cleaning" closed-circuit flotation process test was conducted. The process and reagent conditions are outlined

in Figure 12-1 and the results are summarised in Table 12-2. As indicated by the Table 12-2, when the grinding fineness reached -200 mesh accounting for 50.65% ( $P_{50}$ =75 µm), the gold concentrate grade was 18.22 g/t with a significantly high recovery rate of 96.34%. This demonstrates that a high gold recovery rate can be achieved even with relatively coarse particle sizes. The ore is amenable to processing.

Material	Yield (%)	Au Grade (g/t)	Au Recovery (%)
Concentrate	14.76	18.22	96.34
Tailings	85.24	0.12	3.66
Feed Ore	100.00	2.79	100.00

### Table 12-2: Results of Closed-Circuit Flotation Test for DGZ Mine

Sources: Selectivity Test Report for Denggezhuang Ore conducted by the Processing Laboratory of Yantai Mujin May 2016.

# 12.3 CH Mine

# 12.3.1 Mineralogy

The mineralogical properties of ore from CH Mine are documented in the *Development and Utilisation Plan on Gold Mineral Resources in Chahe Property (change)* ("**DUP on CH Mine**"), which was prepared by Shandong Dehe Engineering Design Co., Ltd ("**Shandong Dehe**") and dated December 2023, and the *Verification Report on Gold Mineral Resource and Reserve in Chahe Property (expansion), Muping District, Yantai City, Shandong Province*, which was prepared by No.3 SDGM and dated July 2019. The ore in the CH Mine is classified into two types: gold-bearing pyrite-quartz vein type and gold-bearing pyrite altered rock type.

In the deep and peripheral areas of the CH Mine, ore minerals primarily consist of metal sulphides such as pyrite, chalcopyrite, pyrrhotite, galena and arsenopyrite followed by magnetite and limonite. Gangue minerals mainly include quartz, sericite, dolomite, calcite, chlorite, plagioclase and potassium feldspar. Gold minerals principally comprise electrum and native gold primarily in the form of fine particles.

# 12.3.2 Processing Test

Since SRK has not observed any processing test data for CH Mine and considering that the mine ceased production in 1999 without retaining historical production records, it is not possible to directly determine its processing recovery rate. Taking into account the potential decrease in grade upon the resumption of production at CH Mine and the common characteristics of gold-bearing quartz vein ores in the Yantai region being easily amenable to processing, SRK estimates that its processing indices would be consistent with those of HH Mine, namely a concentrate grade of 13 g/t and a gold recovery rate of 90%.

# 12.4 HH Mine

# 12.4.1 Mineralogy

Metallic minerals in the HH Mine primarily consist of pyrite, followed by chalcopyrite and galena, with

minor amounts of limonite. Non-metallic minerals are predominantly quartz and sericite, followed by plagioclase and calcite, with small amounts of chlorite. Gold minerals mainly comprise electrum, followed by native gold. The morphology of gold minerals is generally flaky, followed by rounded grainy. Gold mineral grains are mostly fine, followed by ultrafine. The insert state of gold minerals is largely intergranular gold and fissure gold with intergranular gold essentially occurring between pyrite and vein quartz crystals and a small amount occurring within the interstices of pyrite crystals. Fissure gold only occurs within the fractures of pyrite. The HH Mine has a high content of metal sulphides and the ore type is sulphide-quartz vein-type gold ore.

# 12.4.2 Processing Test

Based on the test work conducted on grinding fineness lime dosage and collector type and dosage, a "1 roughing-2 scavenging-2 cleaning" closed-circuit flotation test was carried out. The process and conditions were the same as that depicted in Figure 12-1. The result of the test work is summarised in Table 12-3. The results indicated that, when the grinding fineness reached -200 mesh accounting for 50.65% ( $P_{50}$ =75 µm), the gold concentrate grade was 13.25 g/t with a recovery rate of 95.06%. The high gold recovery rate indicated that the ore is easy to process.

Material	Yield (%)	Au Grade (g/t)	Au Recovery (%)
Concentrate	12.68	13.25	95.06
Tailings	87.32	0.10	4.94
Feed Ore	100.00	1.77	100.00

Table 12-3:	<b>Results of Closed-Circuit Flotation Test for HH Mine</b>

Sources: Processing Test Report on Ore from Houzhuang-Heiniutai, conducted by the Processing Laboratory of Yantai Mujin August 2017.

# **13 Mineral Resource Estimates**

# 13.1 Introduction

This section describes the Mineral Resource estimation methodology and summarises the key assumptions made by SRK.

In SRK's opinion, the Mineral Resource estimates reported herein are a reasonable representation of the global gold Mineral Resources found in the Muping Project at the current level of sampling. The Mineral Resources have been estimated in conformity with generally accepted *CIM Definition Standards*. 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 Resources will be converted into Mineral Reserves.

The Mineral Resource model prepared by SRK makes use of an integrated drill hole database compiled in 2024. SRK reviewed and updated the database and solid models provided by PRH2.

SRK believes the current drilling and underground samples information is sufficiently reliable to interpret with confidence the boundaries for pyritized quartz vein type mineralisation and that the assay data are sufficiently reliable to support Mineral Resource estimation.

Geovia Surpac (versions 7.2 and 7.3), a software package used for geological modelling and grade estimation, was used for Mineral Resource estimation.

# **13.2 Estimation Procedures**

The Mineral Resource estimate involved the following procedures:

- Database compilation and verification;
- Data preparation (compositing and capping) for statistical analysis;
- Construction of the block model and grade interpolation;
- Mineral Resource classification and validation;
- Assessment of "reasonable prospects for eventual economic extraction" ("RPEEE") and selection of appropriate cut-off grades; and
- Preparation of the Mineral Resource statement.

# 13.3 DGZ Mine

### 13.3.1 Database

SRK was provided with geological exploration reports and maps, database, solid model for alter zone III, QA/QC data, BD data, etc. SRK undertook a thorough review of the database, followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

As shown in Table 13-1, the database for Mineral Resource estimation contains 4,531 samples from

183 drill holes, and 963 underground samples from tunnels. The drill holes and underground samples distribution is shown in Figure 13-1 in the China Geodetic Coordinate System 2000 ("**CGCS 2000**"), and all the solid model and block model is in the same coordinate system.

Table 13-1: Borehole Database Summary

Туре	Counts	Depth (m)	Assay Counts	
Drill hole	183	2,175,079	4,531	
Underground sample	1,024	542	963	

Sources: SRK

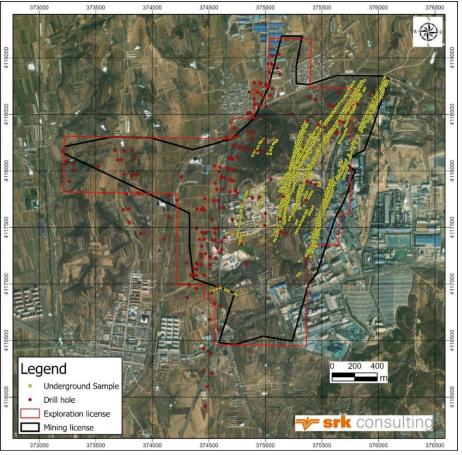


Figure 13-1: Plan View of Borehole Collars and Channels

Sources: SRK

# 13.3.2 Bulk Density

Bulk density was described in section 8.2.1.

# 13.3.3 Solid Model

The solid model for the gold veins in mineralisation alteration belt III have been modelled and supplied by PRH2. These solid models were revised by SRK to ensure that they are representative of the in-situ mineralisation in June 2023. The gold veins were created using a cut-off grade of 1.0

g/t Au in Surpac software.

For the gold veins in mineralisation alteration belt I and belt II, SRK updated the borehole database and generate the solid models according to the data and maps provided by PRH2.

Due to the long mining history, only the solid model of remaining/ un-mined gold veins in mineralisation alteration belt I and belt II was interpreted. For the gold veins in mineralisation alteration belt III, they were modelled excluding mined-out area. The solid model of gold veins of DGZ mine is shown in Figure 6-5 and Figure 6-6.

# 13.3.4 Compositing

Assay samples were composited to facilitate Mineral Resource estimate. The statistics of the assay sample length shown in Figure 13-2 indicated that the most common samples length were 0.2 m and 1.0 m, SRK chose 1.0 m as the length for compositing.

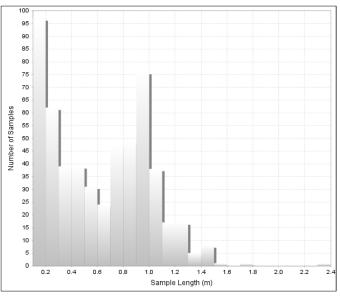


Figure 13-2: Histogram Plot of Assay Sample Length

Sources: SRK

SRK summarised statistics of composites after grade capping against raw samples for each domain as listed in Table 13-2. No material errors were found.

Туре	Counts	Minimum (g/t Au)	Maximum (g/t Au)	Mean (g/t Au)	Variance	Std <sup>[1]</sup>	CoV [2]
Raw Sample	552	0.00	37.38	5.73	41.79	6.46	1.13
Composite	291	0.05	34.71	5.93	33.78	5.81	0.98

Sources: SRK

Notes:

<sup>1</sup> Standard deviation

<sup>2</sup> Coefficient of variation

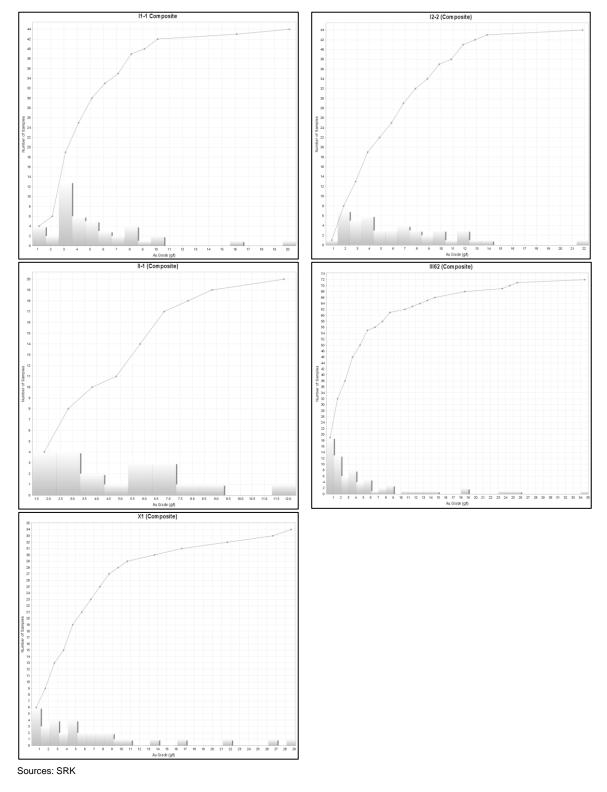


Figure 13-3: Au Histogram and Cumulative Frequence Curve

# 13.3.5 Outlier Value Assessment

Capping was applied after compositing. The capping was done using frequency plots and the decile method. The frequency plot in Figure 13-3 and decile method showed that many of the veins do not require capping. Table 13-3 shows a summary of the capping for the veins.

GMZ	Assay Cap (g/t Au)		Outlier Percentage (%)	Au Grade, before capping (g/t)	Au Grade, after capping (g/t)	Au Grade Difference (%)
11-1	10.52	2	4.55	5.22	4.87	6.70
12-2	13.75	1	2.27	6.31	6.13	2.85
II-1	8.80	1	3.33	4.92	4.77	3.05
11162	25.56	1	1.39	5.18	5.06	2.32
X1	13.81	4	11.76	6.78	5.67	16.37

Table 13-3: Grade Capping Summary

Sources: SRK

# 13.3.6 Block Model and Grade Interpolation

The block model for each domain was created using Geovia Surpac 7.2 software. A summary of the block model parameter is listed in Table 13-4. The attribute and description of the block model are presented in Table 13-5.

### Table 13-4: Block Model Parameter for DGZ Mine

Axis	Minimum	Maximum	Block Size (m)	Minimum Block Size (m)
X (Easting)	373,150	376,100.4	0.8	0.2
Y (Northing)	4,116,360	4,119,000	0.8	0.2
Z (Elevation)	-700	150	10	2.5

Sources: SRK

### Table 13-5: Description of Main Fields in Block Model

Field	Description
Au	Au grade (g/t)
density	3.11 t/m <sup>3</sup> for ore. 2.75 t/m <sup>3</sup> for waste
mined	0 for remain. 1 for mined-out
vein	gold veins number
resclass	resource class, 2=Indicated, 3=Inferred

Sources: SRK

The inverse distance weighting cubed method ("**IDW3**") was used for Au grade interpolation within the hard boundary of gold veins. The three progressively more relaxed search criteria were used for grade interpolation and presented in Table 13-6. The search ellipsoids were aligned with the general mineralisation orientation (Table 13-7 and Figure 13-4). The Au grade distribution is shown in Figure 13-5.

Table 13-6: Search Parameter	earch Parameters
------------------------------	------------------

Bearing (°)	Plunge (°)	Dip (°)	Major/semi-major	Major/minor
31	6	80	1	5

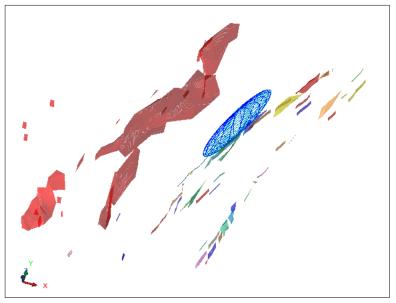
Sources: SRK

### Table 13-7: Search Distance and Samples

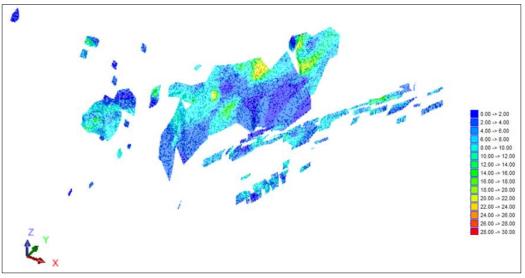
Pass	Search Distance (m)	Minimum Composites	Maximum Composites
1	75	3	15
2	150	3	15
3	300	3	30

Sources: SRK

### Figure 13-4: Search Ellipsoids for Grade Estimate







Sources: SRK

### 13.3.7 Model Validation

Model validation is a common approach for determining whether grade interpolation 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 data used and of the estimation method applied. Other issues such as the relationship between the model-selective assumptions and mining practices are equally important when determining the appropriateness of the resource estimate.

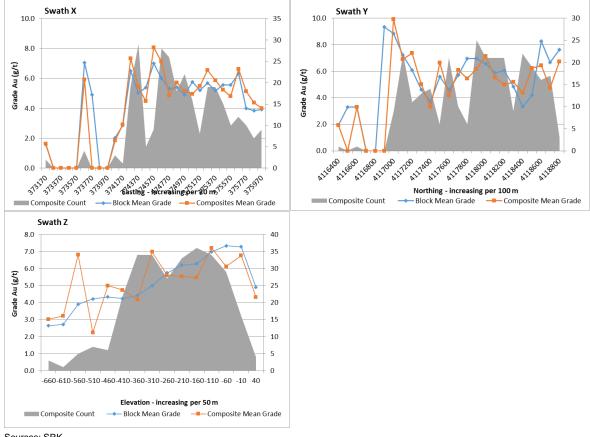
SRK adopted the swath plot validation approach to validate the model. Swath plots of Au were created in three orthogonal directions (easting, northing, and vertical, as X, Y, and Z) in particular slice thicknesses in each direction to validate the resultant block models, as shown in Figure 13-6. The block models and composites match reasonably well in all orthogonal directions. This comparison shows close agreement between the block model and composites in terms of overall distribution as a function of X, Y, and Z location.

### 13.3.8 Mineral Resource Classification

SRK considers that blocks estimated with an average sample spacing of less than 100 m can be classified in the Indicated Mineral Resource category within the meaning of the *CIM Definition Standards*. For these blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of techno-economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit.

With respect to the blocks excluded by Indicated Mineral Resource and within the mineralised domains should be appropriately classified in the Inferred Mineral Resource category because the confidence in the estimate is insufficient to allow for the meaningful application of techno-economic parameters or to enable an evaluation of economic viability.

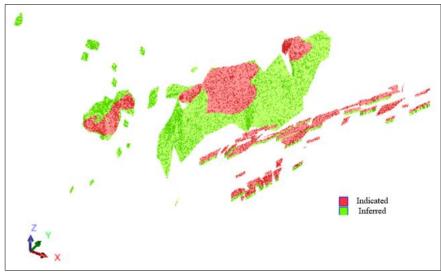
The Mineral Resource classification is shown in Figure 13-7.





Sources: SRK

Figure 13-7: Mineral Resource Classification



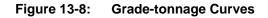
# 13.3.9 Sensitivity Analysis

The Mineral Resources of the DGZ Mine are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 13-8 and Figure 13-8 at different cut-off grades. The reader is cautioned that the figures presented in Table 13-8 should not be misconstrued with a Mineral Resource statement. The figures are only presented to illustrate the sensitivity of the block model estimates to the selection of cut-off grade. Figure 13-8 presents this sensitivity as grade-tonnage curves.

Property	Cut-off Grade (g/t Au)	Tonnage (kt)	Au Grade (g/t)
DGZ Mine	0.5	2,730	5.19
	1.0	2,700	5.24
	1.5	2,563	5.46
	2.0	2,330	5.83
	2.5	2,124	6.17
	3.0	1,810	6.77
	3.5	1,536	7.41
	4.0	1,357	7.89
	4.5	1,242	8.23
	5.0	1,149	8.51

Table 13-8: Grade and Tonnage at Different Cut-offs

Sources: SRK





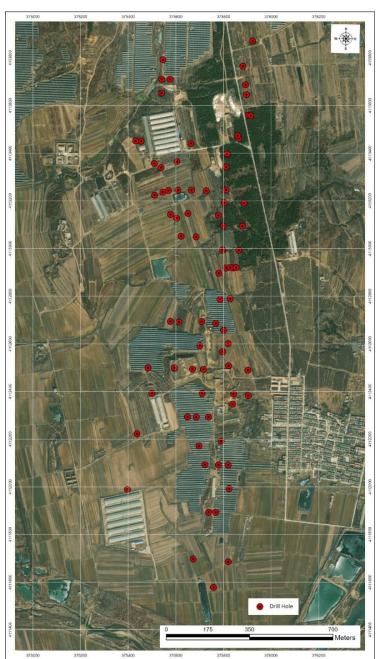
Sources: SRK

# 13.4 CH Mine

### 13.4.1 Database

SRK was provided with geological exploration reports and maps, topography, database, QA/QC data, BD data, etc. SRK undertook a thorough review for the database followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation.

Figure 13-9: Plan View of Borehole Collars



Sources: SRK

Based on the data, SRK constructed a borehole database composed of borehole collar, survey, lithology, assay and BD data. Detailed in Table 13-9, the database used for the Mineral Resource

estimation consists of 92 drill holes with a total of 706 assay samples. Top view of borehole collars is shown in Figure 13-9.

 Table 13-9:
 Borehole Database Statistics

Туре	Counts	Depth (m)	Survey Records	Assay Records
Holes	92	26,685.6	540	706

Sources: SRK

# 13.4.2 Solid Body Modelling

SRK was provided with cross section drawings of all GMZs. SRK has constructed and reviewed the solid models according to the drawings provided by PRH2, which were considered acceptable for the Mineral Resource estimation.

The mineralisation is dominated by Au. The GMZs in Figure 6-7 were interpretated by the samples collected based on a cut-off grade of 1.0 g/t Au.

# 13.4.3 Bulk Density

Bulk density was described in section 8.2.2.

### 13.4.4 Compositing

The basic statistics of geological sampling length of original samples were carried out by SRK as shown in Table 13-10.

Detailed in Figure 13-10 is the histogram plot of assay sample length. The result indicates that most of the sample intervals are 1.0 m. All raw samples were composited to 1.0 m downhole lengths with a minimum of 0.75 m for each composite sample. The 1.0 m interval composite length was applied by SRK for subsequent analysis and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 13-11. No material errors were found.

Table 13-10: Statistics of Sample Length

Property	Samples	Minimum (m)	Maximum (m)	Mean (m)	Median (m)	Std	Kurtosis	Skewness
CH Mine	143	0.16	6.50	1.14	1.00	0.53	74.30	7.38
0 001								

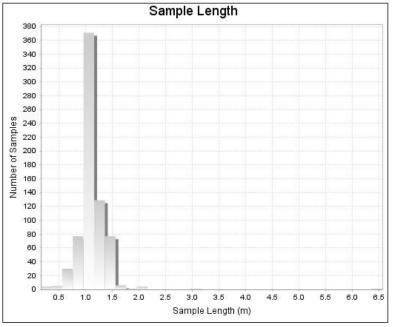


Figure 13-10: Histogram of the Sample Length of CH Mine

Table 13-11:	<b>Composite Statistics</b>

GMZ	Туре	Quantity	Minimum	Maximum	Mean	Variance	Std	CoV
D11	Assay	4	3.50	5.34	4.59	0.62	0.79	0.17
D11	Composite	4	3.50	5.34	4.59	0.62	0.79	0.17
D11	Difference (%)	-	-	-	-	-	-	-
D12	Assay	44	0.13	28.75	4.17	23.60	4.86	1.17
D12	Composite	47	0.13	24.26	3.89	16.56	4.07	1.05
D12	Difference (%)	7	-	(16.00)	(7.00)	(30.00)	(16.00)	(10.00)
D13	Assay	1	/	/	4.73	/	/	/
D13	Composite	1	/	/	4.73	/	/	/
D13	Difference (%)	-	-	/	-	/	/	/
D21	Assay	43	0.10	29.44	5.01	30.52	5.52	1.10
D21	Composite	45	0.55	19.56	5.06	23.87	4.89	0.97
D21	Difference (%)	5	450.00	(34.00)	1.00	(22.00)	(11.00)	(12.00)
D22	Assay	2	1.10	1.32	1.21	0.02	0.16	0.13
D22	Composite	3	1.10	1.32	1.21	0.01	0.11	0.09
D22	Difference (%)	50	-	-	-	(50.00)	(31.00)	(31.00)
D24	Assay	3	1.87	2.55	2.17	0.12	0.35	0.16
D24	Composite	4	1.87	2.55	2.16	0.08	0.28	0.13
D24	Difference (%)	33	-	-	-	(33.00)	(20.00)	(20.00)
D25	Assay	11	0.10	11.75	5.07	15.12	3.89	0.77

GMZ	Туре	Quantity	Minimum	Maximum	Mean	Variance	Std	CoV
D25	Composite	12	0.10	9.78	4.98	9.88	3.14	0.63
D25	Difference (%)	9	-	(17.00)	(2.00)	(35.00)	(19.00)	(18.00)
D26	Assay	1	/	/	4.72	/	/	/
D26	Composite	1	/	/	4.72	/	/	/
D26	Difference (%)	-	-	/	-	/	/	/
D27	Assay	1	/	/	5.66	/	/	/
D27	Composite	1	/	/	5.66	/	/	/
D27	Difference (%)	-	-	/	-	/	/	/
D28	Assay	9	0.05	3.81	1.68	1.89	1.37	0.82
D28	Composite	11	0.15	3.81	1.65	1.42	1.19	0.72
D28	Difference (%)	22	200.00	-	(2.00)	(25.00)	(13.00)	(12.00)
D29	Assay	1	/	/	9.31	/	/	/
D29	Composite	1	/	/	9.31	/	/	/
D29	Difference (%)	-	/	/	-	/	/	/
D51	Assay	16	1.05	15.68	3.31	12.25	3.50	1.06
D51	Composite	14	1.05	15.68	3.36	13.87	3.72	1.11
D51	Difference (%)	(13)	-	-	2.00	13.00	6.00	5.00
D52	Assay	4	1.46	8.85	3.49	12.87	3.59	1.03
D52	Composite	5	1.46	8.85	3.09	10.45	3.23	1.05
D52	Difference (%)	25	-	-	(11.00)	(19.00)	(10.00)	2.00
D53	Assay	3	1.22	3.68	2.13	1.81	1.35	0.63
D53	Composite	2	1.25	1.50	1.38	0.03	0.18	0.13
D53	Difference (%)	(33)	-	(59.00)	(35.00)	(98.00)	(87.00)	(79.00)

Sources: SRK

## 13.4.5 Outlier Value Assessment

The composite grade distributions of domains D12 and D21 were examined via histograms and cumulative probability plots to determine if capping was required and if so at what level. Figure 13-11 shows the histogram and cumulative probability curve of the composites Au for these two domains.

With regard to the other domains, top cutting was not conducted due to the insufficient number of drillholes and composites in these GMZs, which make the Mineral Resource being classified to the Inferred Mineral Resources. SRK opines the top cutting will have no material effect on the Inferred Mineral Resources.

Results of the statistical analysis of 1.0 m composites are shown in Table 13-12.

### 13.4.6 Block Model and Grade Estimation

The block model for each domain was created using Geovia Surpac 7.3 software. Appropriate block cell size was selected for the deposit.

A summary of the block model specifications is listed in Table 13-13. The attribute and description

of the block model is summarised in Table 13-14.

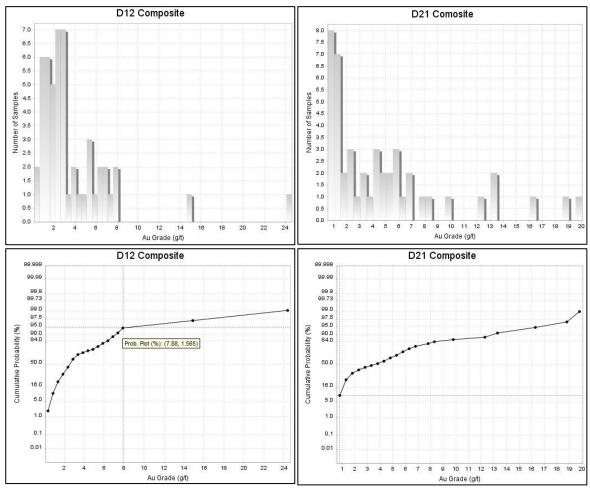


Figure 13-11: Histogram and Cumulative Probability Curve of Au in CH Mine

Sources: SRK

### Table 13-12: Grade Capping Details

GMZ	Assay Cap (g/t Au)			Au Grade, before capping (g/t)	Au Grade, after capping (g/t)	Au Grade difference (%)
D12	8.00	2	4.26	3.89	3.40	-12.60

Sources: SRK

### Table 13-13: Block Model Specification

Property	Axis	Minimum	Maximum	Block Size (m)	Minimum Block Size (m)	Rotation (°)
CH Mine	Y (Northing)	4,111,800	4,113,900	4	4	0
	X (Easting)	375,300	375,900	1	1	0
	Z (Elevation)	-700	100	4	4	0

Attribute	Description
domain	D11,D12,D13,D21,D22,D24,D25,D26,D27,D28,D29,D51,D52,D53
au_gpt_capped	Gold grade capped
category	1=Measured, 2=Indicated, 3=Inferred
bd	Bulk density, 2.98 t/m <sup>3</sup>
percentage	Partials of a block in the GMZ.
mined	0=unmined. 1=mined

$1 a b c 1 3^{-14}$ . Diver model Attribute and Description	Table 13-14:	Block Model Attribute and Description
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Sources: SRK

The inverse distance weighting squared method ("**IDW2**") was used for Au grade estimation. Search parameters are summarised in Table 13-15 and Table 13-16.

	Table 13-15:	Search Parameters Used for IDW2 Interpolation
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All 0 0 -75 1 1	GMZ	Bearing (°)	Plunge (°)	Dip (°)	Major/semi-major	Major/minor
	All	0	0	-75	1	1

Sources: SRK

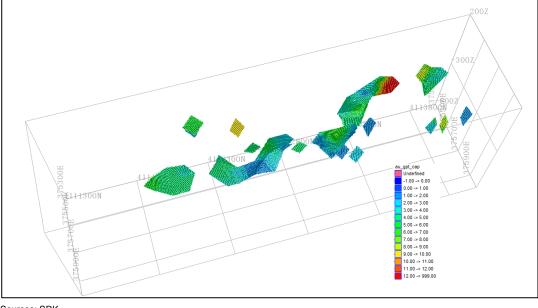
GMZ	Pass	Search Distance (m)	Minimum Composites	Maximum Composites
D11	1	220	2	4
D12, D21	1	110	3	15
D12, D21	2	220	1	15
D22	1	110	1	3
D24	1	110	1	4
D25	1	110	3	12
D25	2	220	1	12
D28	1	110	3	6
D51	1	110	3	6
D51	2	220	1	6
D52	1	110	1	3
D53	1	110	1	2

### Table 13-16: Search Distance and Samples Used in CH Mine

Sources: SRK

Au grade distribution is shown in Figure 13-12.

Figure 13-12: Au Estimation Grade in CH Mine



Sources: SRK

### 13.4.7 **Model Validation**

Swath plots of Au were created in three orthogonal directions (easting, northing and vertical as X, Y and Z) in particular slice thickness to validate the resultant block model.

As shown in Figure 13-13, the block models and composites match reasonably well in all orthogonal directions. This comparison shows a similar trend between the block model and composites in terms of overall distribution as a function of X, Y and Z location. The gold grade comparison of composites and global mean for domain D12 and D21 are listed in Table 13-17. The estimation method and parameters are appropriate.

ltem	Unit	D12	D21
Composite	g/t Au	3.40	5.06
Block Model	g/t Au	3.36	4.72
Difference	%	-1.18	-6.72

Table 13-17: **Comparison of Composites and Block Model** 

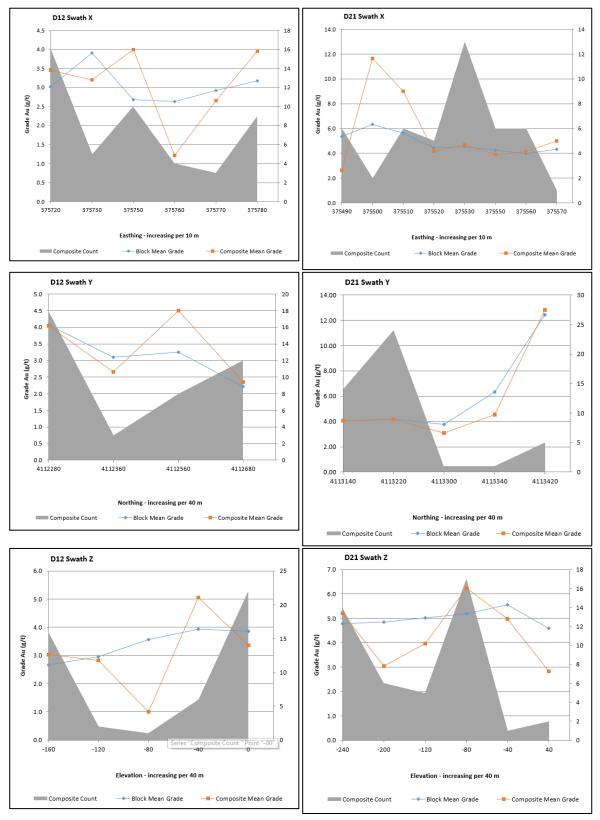


Figure 13-13: Au Swath Plot for Domains D12 and D21

# 13.4.8 Mineral Resource Classification

SRK considers that blocks estimated with an average drillhole spacing of less than 80 m can be classified in the Indicated Mineral Resource category within the meaning of the *CIM Definition Standards*. For these blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of techno-economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit.

With respect to blocks excluded by Indicated Mineral Resource and within the GMZs should be appropriately classified as Inferred Mineral Resource, because the confidence in the estimate is insufficient to allow for the meaningful application of techno-economic parameters or to enable an evaluation of economic viability.

The Mineral Resource classification is shown in Figure 13-14.

# <figure>

### Figure 13-14: Mineral Resource Classification

# 13.4.9 Sensitivity Analysis

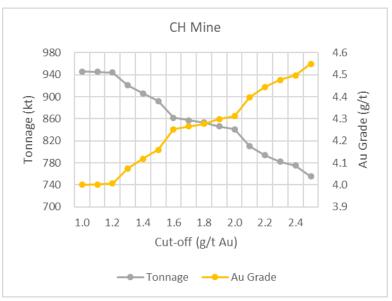
The Mineral Resources of the CH Mine are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 13-18 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource statement. The figures are only presented to illustrate the sensitivity of the block model estimates to the selection of cut-off grade. Figure 13-15 presents this sensitivity as grade-tonnage curves.

Property	Cut-off Grade (g/t Au)	Tonnage (kt)	Au Grade (g/t)
CH Mine	1.0	946	4.00
	1.1	945	4.00
	1.2	944	4.01
	1.3	921	4.08
	1.4	906	4.12
	1.5	892	4.16
	1.6	862	4.25
	1.7	857	4.27
	1.8	853	4.28
	1.9	846	4.30
	2.0	841	4.31
	2.1	810	4.40
	2.2	793	4.45
	2.3	782	4.48
	2.4	775	4.50
	2.5	755	4.55

Table 13-18: Grade and Tonnage at Various Cut-off Grades

Sources: SRK

Figure 13-15: Grade-tonnage Curves



Sources: SRK

# 13.5 HH Mine

# 13.5.1 Database

SRK was provided with geological exploration reports and maps, topography, database, QA/QC data, BD data, etc. SRK undertook a thorough review for the database followed by various verification procedures, and verified that the database was acceptable for a Mineral Resource estimation. The plan view of geological sample locations is shown in Figure 13-16.

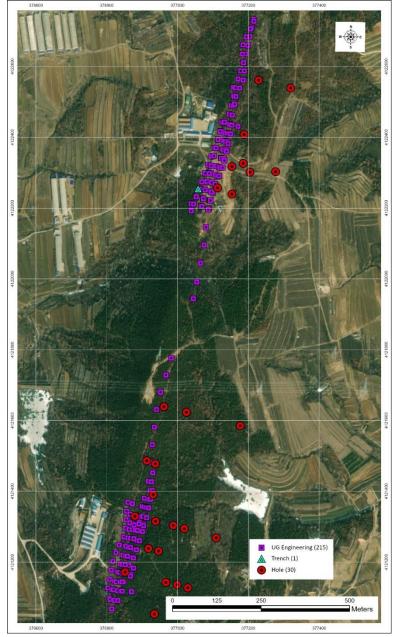


Figure 13-16: Plan View of Geological Sample Locations

Sources: SRK

Based on the data, SRK constructed a Mineral Resource database composed of borehole collar, survey, lithology, assay and BD data. Detailed in Table 13-19, the database used for the Mineral Resource estimation consists of 246 geological sample points, including 30 drill holes, 1 trench and 215 underground engineering with a total of 1,171 assay samples.

Туре	Counts	Length (m)	Assay Records
Hole	30	9,579.5	735
Trench	1	8.7	7
Underground channels	215	3,910.8	429
Total	246	13,499	1,171

Table 13-19:	<b>Geological Sample Database Statistics</b>
Table 13-13.	Geological Salliple Dalabase Statistics

Sources: SRK

# 13.5.2 Solid Body Modelling

SRK was provided with cross section drawings and mining level drawings of all GMZs. SRK has constructed and reviewed the solid models according to the drawings provided by PRH2 and they are acceptable for the estimation.

The mineralisation is dominated by Au. The GMZs were interpretated by the samples collected based on a cut-off grade of 1.0 g/t Au. A total of 6 GMZs were constructed namely D1, D2, D3, D4, D5 and D6. D1 and D2 are the dominant GMZs shown in Figure 6-8.

# 13.5.3 Bulk Density

Bulk density was described in section 8.2.3.

# 13.5.4 Compositing

The basic statistics of geological sampling length of original samples were carried out by SRK as shown in Table 13-20.

Table 13-20:	Statistics of Sample Length
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Property	Samples	Minimum (m)	Maximum (m)	Mean (m)	Median (m)	Std	Kurtosis	Skewness
HH Mine	1,171	0.10	5.80	1.04	1.00	0.50	19.06	2.91

Sources: SRK

Detailed in Figure 13-17, the result indicates that most of the sample intervals have a length of 1.0 m. All raw samples were composited to 1.0 m downhole lengths with a minimum of 0.75 m for each composite sample. The 1.0 m interval composite length was applied by SRK for subsequent geostatistical analysis and grade interpolation.

SRK summarised statistics of composites against raw samples for each domain as listed in Table 13-21. No material errors were found except the domain D2. SRK has checked both the raw and composite samples and found that the big mean difference between them was caused by some high gold grade with 0.1 m length which were excluded in the composite.

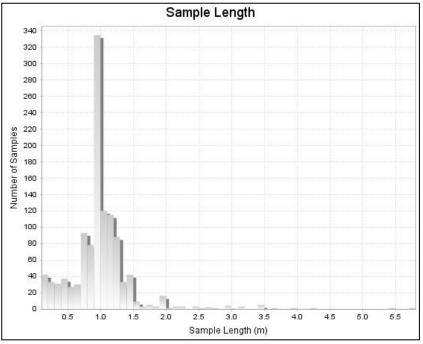


Figure 13-17: Histogram of the Sample Length of HH Mine

Sources: SRK

GMZ	Туре	Quantity	Minimum	Maximum	Mean	Variance	Std	CoV
D1	Assay	73	0.25	11.54	2.77	2.16	1.47	0.53
D1	Composite	73	1.04	5.98	2.68	0.77	0.88	0.33
D1	Difference (%)	-	316.00	(48.18)	(3.25)	(64.35)	(40.14)	(38.13)
D2	Assay	85	1.00	21.92	3.21	12.81	3.58	1.12
D2	Composite	89	1.00	21.02	2.70	7.13	2.67	0.99
D2	Difference (%)	4.71	-	(4.11)	(15.89)	(44.34)	(25.42)	(11.33)
D3	Assay	6	1.02	2.27	1.70	0.22	0.47	0.28
D3	Composite	5	1.10	2.19	1.64	0.18	0.42	0.26
D3	Difference (%)	(16.67)	7.84	(3.52)	(3.53)	(18.18)	(10.64)	(7.37)
D4	Assay	5	0.70	12.18	4.62	19.73	4.44	0.96
D4	Composite	4	1.41	11.41	4.95	19.51	4.42	0.89
D4	Difference (%)	(20.00)	-	(6.32)	7.14	(1.12)	(0.45)	(7.09)
D5	Assay	9	0.15	3.52	1.46	1.03	1.02	0.70
D5	Composite	10	0.27	3.52	1.46	0.89	0.94	0.64
D5	Difference (%)	11.11	80.00	-	-	(13.59)	(7.84)	(7.84)
D6	Assay	6	0.65	3.74	2.08	1.78	1.34	0.64
D6	Composite	5	0.67	3.59	1.83	1.40	1.18	0.64
D6	Difference (%)	(16.67)	-	(4.01)	(12.02)	(21.35)	(11.94)	0.09

## 13.5.5 Outlier Value Assessment

The composite grade distributions of domains D1 and D2 were examined via histograms and cumulative probability plots to determine if capping was required and if so at what level. Figure 13-18 shows the histogram and cumulative probability curve of the composites Au for these two domains.

With regard to the other domains, top cutting was not conducted due to the insufficient number of drillholes and composites in these GMZs, which make the Mineral Resource being classified to the Inferred Mineral Resources. SRK opines the top cutting will have no material effect on the Inferred Mineral Resources.

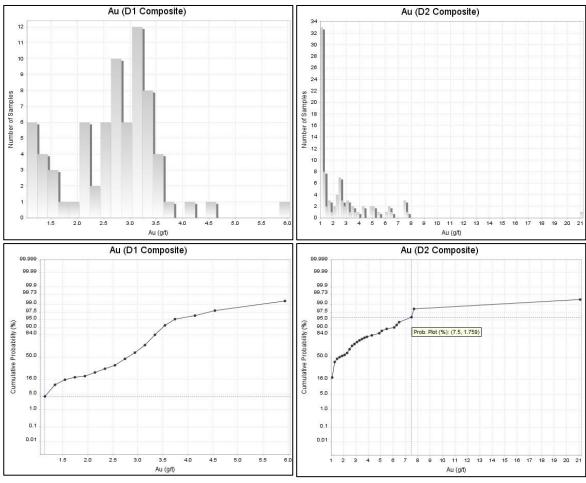


Figure 13-18: Au Histogram and Cumulative Probability Curve of HH Mine

Sources: SRK

Results of the statistical analysis of 1.0 m composites are shown in Table 13-22.

Table 13-22: Grade Capping Details

GMZ	Assay Cap (g/t Au)			Au Grade, before capping (g/t)	Au Grade, after capping (g/t)	Au Grade difference (%)
D2	7.50	2	2.25	2.70	2.55	-5.56

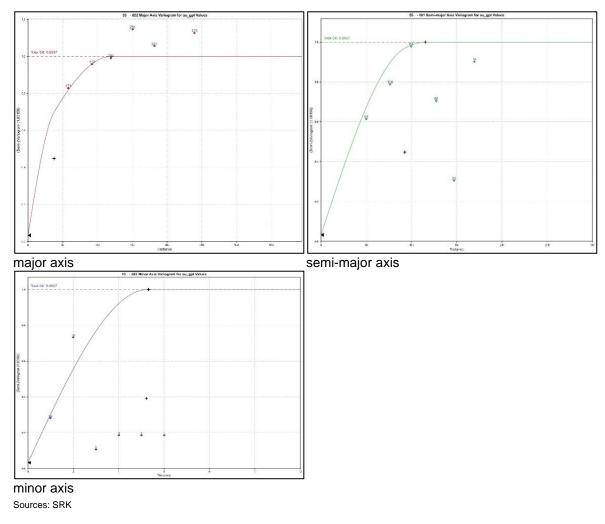
## 13.5.6 Statistical Analysis and Variography

SRK has constructed the variogram model of domains D1 and D2 for Au by adopting spherical variation function to fitting the experimental variogram and the result has the characteristics of geometric anisotropy. The structure of the variograms are detailed in Table 13-23, Figure 13-19 and Figure 13-20.

 Table 13-23:
 Variogram Structure of Au for Domain D1 and D2

GMZ		Bearing (°)		Dip (°)	Structure	Nugget		Range (m)	Major/semi-major	Major/minor
D1	Au	15	-33	-80	1	0.03	0.36	44	1.04	23.00
D1	Au	15	-33	-80	2	0.03	0.61	120	1.04	23.00
D2	Au	15	-12	-76	1	-	1.08	81	1.42	33.50





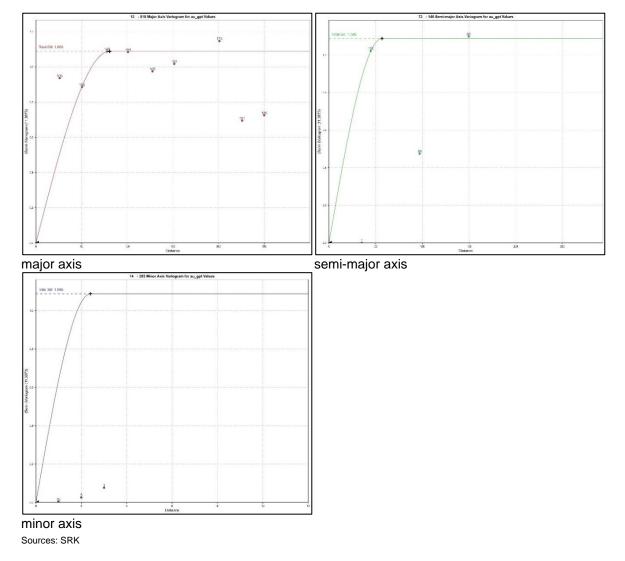


Figure 13-20: Variogram Model of Au for Damin D2

# 13.5.7 Block Model and Grade Estimation

The block model for each domain was created using Geovia Surpac 7.3 software. Appropriate block cell size was selected for the deposit.

A summary of the block model specifications is listed in Table 13-24. The attribute and description of the block model is summarised in Table 13-25.

Property	Axis	Minimum	Maximum	Block Size (m)	Minimum Block Size (m)	Rotation (°)
HH Mine	Y (Northing)	4,121,100	4,122,900	4	4	14
	X (Easting)	376,500	377,000	1	1	14
	Z (Elevation)	-450	200	4	4	0

Table 13-24: Block Model Specification

Attribute	Description
domain	D1, D2, D3, D4, D5, D6
au_gpt_capped	Gold grade capped
category	1=Measured, 2=Indicated, 3=Inferred
bd	bulk density, 2.98 t/m <sup>3</sup>
percentage	Partials of a block in the GMZ.
mined	0=unmined. 1=mined

Table 13-25:	<b>Block Model Attribute and Description</b>
	Block model / Kanbate and Beechption

Sources: SRK

The estimation method of Au for domain D1 and D2 was Ordinary Kriging ("**O.K.**"). The IDW2 method was used for Au grade interpolation for domain D3, D4, D5 and D6. Details are summarised in Table 13-26 and Table 13-27. The Au grade distribution is shown in Figure 13-21.

#### Table 13-26: Search Parameters Used for IDW2 Method

GMZ	Bearing (°)		Dip (°)	Major/semi-major	Major/minor	
D3, D4, D5, D6	15	0	-75	1	5	

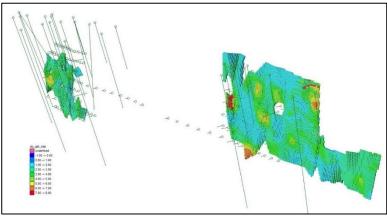
Sources: SRK

Table 13-27:	Search Distance and Samples Used in HH Mine
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GMZ	Pass	Search Distance (m)	Minimum Composites	Maximum Composites
D1, D2	1	45	3	15
D1, D2	2	90	3	15
D1, D2	3	90	1	15
D3, D4	1	45	3	15
D5, D6	1	45	3	15
D5, D6	2	90	1	15

Sources: SRK

#### Figure 13-21: Au Estimation Grade



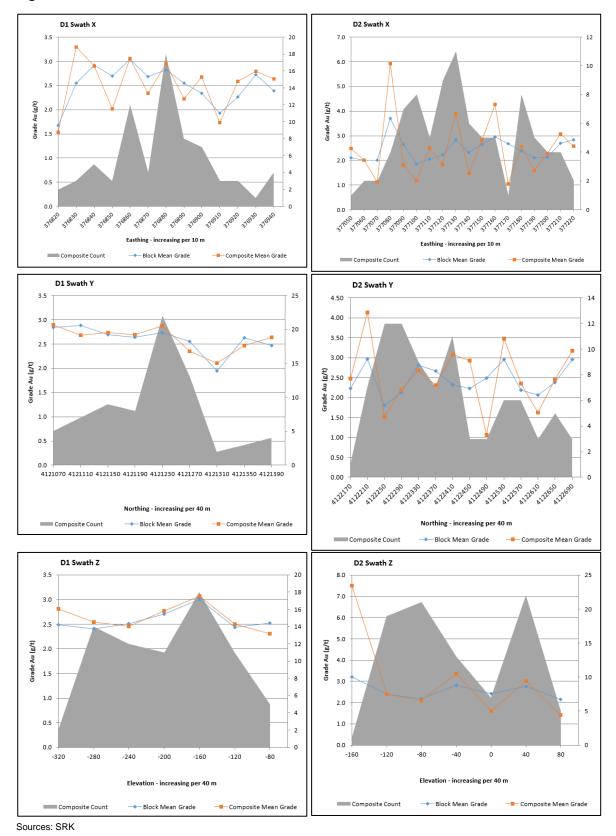


Figure 13-22: Au Swath Plot for Domains D1 and D2

# 13.5.8 Model Validation

Swath plots of Au were created in three orthogonal directions (easting, northing and vertical as X, Y and Z) in particular slice thickness in each direction to validate the resultant block model.

As shown in Figure 13-22, the block models and composites match reasonably well in all orthogonal directions. This comparison shows similar trend between the block model and composites in terms of overall distribution as a function of X, Y and Z location. The gold grade comparison of composites and global mean are listed in Table 13-28. The estimation method and parameters are appropriate.

ltem	Unit	D1	D2	D3	D4	D5	D6
Composite	g/t Au	2.68	2.55	1.64	4.95	1.46	1.83
Block Model	g/t Au	2.64	2.49	1.61	4.97	1.55	1.82
Difference	%	-1.49%	-2.35%	-1.83%	0.40%	6.16%	-0.55%

Table 13-28: Comparison of Composites and Block Model

Sources: SRK

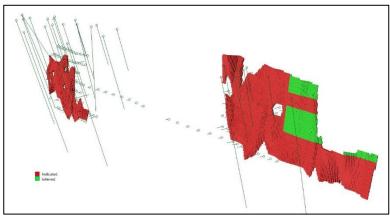
# 13.5.9 Mineral Resource Classification

SRK considers that blocks estimated with an average drillhole spacing of less than 40 m can be classified in the Indicated Mineral Resource category, within the meaning of the *CIM Definition Standards*. For these blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of techno-economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit.

With respect to blocks excluded by Indicated Mineral Resource and within the GMZs should be appropriately classified in the Inferred Mineral Resource category, because the confidence in the estimate is insufficient to allow for the meaningful application of techno-economic parameters or to enable an evaluation of economic viability.

The Mineral Resource classification is shown in Figure 13-23.

Figure 13-23: Mineral Resource Classification

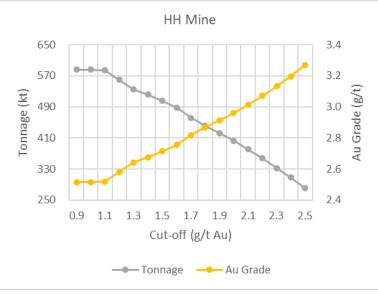


Property	Au Cut-off Grade (g/t)	Tonnage (kt)	Au Grade (g/t)
HH Mine	0.9	586	2.52
	1.0	586	2.52
	1.1	584	2.52
	1.2	559	2.58
	1.3	535	2.64
	1.4	522	2.67
	1.5	505	2.71
	1.6	489	2.75
	1.7	462	2.82
	1.8	441	2.87
	1.9	423	2.91
	2.0	403	2.96
	2.1	381	3.01
	2.2	358	3.07
	2.3	332	3.13
	2.4	308	3.20
	2.5	281	3.27

Table 13-29: Grade and Tonnage at Various Cut-off Grades

Sources: SRK

Figure 13-24: Grade-tonnage Curves



Sources: SRK

# 13.5.10 Sensitivity Analysis

The Mineral Resources of the HH Mine are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates are presented in Table 13-29 at different cut-off grades. The reader is cautioned that the data presented in this table should not be misconstrued with a Mineral Resource statement. The figures are only presented to illustrate the sensitivity of the block model estimates to the selection of cut-off grade. Figure 13-24 presents this sensitivity as grade-tonnage curves.

# 13.6 Mineral Resource Statement

SRK considers that the blocks which are not below a cut-off grade of 1.0 g/t Au show RPEEE for an underground mine.

The Mineral Resource estimates as of 30 June 2024 are provided in Table 13-30.

Property	Category	Cut-off (g/t Au)	Tonnage (kt)	Au Grade (g/t)	Au Metal (kg)	Au Metal (koz)
DGZ Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	1,000	6.0	6,100	200
-	Inferred	1.0	1,700	4.8	8,000	260
CH Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	300	4.3	1,300	41
-	Inferred	1.0	570	3.9	2,200	71
HH Mine	Measured	1.0	-	-	-	-
-	Indicated	1.0	270	2.6	690	22
-	Inferred	1.0	76	2.3	170	5.5
Total	Measured	1.0	-	-	-	-
-	Indicated	1.0	1,600	5.1	8,100	260
-	Inferred	1.0	2,300	4.5	10,000	330

Table 13-30: Mineral Resource Statement for Muping Project, as of 30 June 2024 [1, 2, 3, 4]

Sources: SRK

Notes:

<sup>1</sup> All figures were rounded to the second significant digit to reflect the relative accuracy of the estimate.

<sup>2</sup> The information in this QPR with regard to Mineral Resource estimates is based on information compiled by Dr Anshun Xu Ms Yanfang Zhao and Mr Huaixiang Li, employees of SRK Consulting China Ltd. Dr Xu, FAusIMM, Ms Zhao, MAusIMM, and Mr Li, MAIG, have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Qualified Persons as defined in the *NI* 43-101. Dr Xu, Ms Zhao and Mr Li consent to the reporting of this information in the form and context in which it appears.

<sup>3</sup> Total may not add due to rounding discrepancies.

 $^{4}$  The conversion between troy ounce and gram used herein is 1 oz = 31.1035 g.

# 14 Mineral Reserve Estimates

SRK opines, based on data reviewing and discussion with PRH2, only DGZ Mine would be considered to estimate Mineral Reserves. The location of DGZ Mine including its respective veins considered in the Mineral Reserves estimation and mining licence, are shown in Figure 6-6.

At the Effective Date, SRK will convert Mineral Reserves from these veins.

# 14.1 Feasibility Studies

For DGZ Mine, SRK was provided with the *Development and Utilisation Plan on Gold Mineral Resources in Denggezhuang Property (change)* ("*DUP on DGZ Mine*") that was prepared by Shandong Gold Design Consulting Co., Ltd ("**SD-GOLD**") and dated December 2023. The *DUP on DGZ Mine* has limited its boundary within levels +28 m and +385 m because of crown pillar and geology confidence. According to the *DUP on DGZ Mine*, the capacity of DGZ Mine is 165 ktpa run of mine ("**RoM**").

# 14.2 Cut-off Grade

Yantai Mujin suspended production from 2020 until June 2022. The costs are calculated based on Yantai Mujin's forecast costs for 2024 and 2025.

The data in Table 14-1 providing SRK's opinion was sufficient to verify the cut-off grade ("**CoG**") with assumption to estimate Mineral Reserve as of 30 June 2024. At the Effective Date, the calculated cut-off grade was rounded to 1.9 g/t gold to estimate the Mineral Reserve.

Item	Unit	Assumption
Gold price	RMB per gram (" <b>RMB/g</b> ") Au metal	370
Mining cost	RMB per tonne (" <b>RMB/t</b> ") ore	300.0
Processing cost	RMB/t ore	52.0
Refining cost	RMB/ t ore	35.0
General and administration cost	RMB/t ore	63.0
Transport and selling cost	RMB/t ore	7.0
Royalty	RMB/t ore	128.0
Au processing recovery rate	%	90.4
Return rate of Au refining	%	93.0
Break-even CoG	g/t	1.88

#### Table 14-1: Cut-off Grade Calculation

Sources: SRK

# 14.3 Mining Loss and Dilution

Most veins are thin in horizontal width. All dilution discussed in this section is considered unplanned dilution from stope wall failures, blast overbreak from stope walls and floors. Geotechnical properties are summarised in section 15.1.3.

SRK notes that the assumptions for dilution in both shrinkage and resuing stopes are closely related to a high degree of process control in terms of design, drilling, and blasting, and that such control on an ongoing basis will be critical to achieve dilution targets.

Table 14-2 summarises average dilution for the Mineral Reserve estimation for each mining method according to *DUP on DGZ Mine*. SRK notes that these dilution factors can be used for Mineral Reserve estimation. As with most narrow vein operations, a particular focus on minimising dilution via mining process control will be important to realise Mineral Reserve grades in the future.

Table 14-2: Technical and Economic Indicators

Item	Unit	Shrinkage	Resuing
Stoping Capacity	t/d	50	30
Mining Loss	%	6	6
Mining Dilution	%	20	38

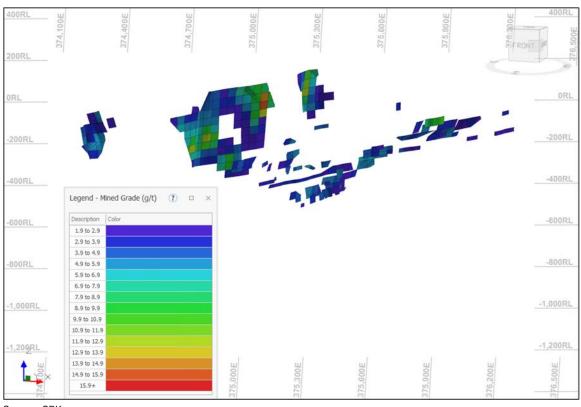
Sources: DUP on DGZ Mine

Mining loss at 6% was applied to the Mineral Reserves estimation based on DUP on DGZ Mine.

# 14.4 Mineral Reserve Model

A stope optimisation exercise was carried out using the Geovia Surpac Stope Optimizer tool with stope dimensions of 50 m long and around 40 m high.

Figure 14-1: Stope Optimization Results for DGZ Mine



In addition, economic attributes and physical constrains of the sliced stopes with modifying factors include mining licence, irregular stope shape, spatial location, mining loss, cut-off grade, were also considered to ensure the generated stopes would be technically feasible as well as economically viable. Figure 14-1 shows the stope optimization results.

# 14.5 Mineral Reserve Conversion

According to *CIM Definition Standards*, Measured Mineral Resources are typically converted to the Proven Mineral Reserves category, while the Indicated Mineral Resources are converted into Probable Mineral Reserves category.

The estimated mining inventory based on Mineral Resources and modifying factors to the tonnage and contained metal is summarised in Table 14-3. The estimate process is illustrated in waterfall charts shown in Figure 14-2 and Figure 14-3.

Process	Material Tonnage (kt)	Au Metal (kg)
Mineral Resources	2,700	14,158
Inferred Mineral Resources deduction	(1,685)	(8,032)
Remained Measured and Indicated Mineral Resources	1,015	6,126
Design boundary	(75)	(472)
Irregular shape	(5)	(32)
CoG filter	(157)	(323)
Mining dilution	576	-
Mining loss	(47)	(299)
Mineral Reserves	1,306	5,000

#### Table 14-3: Estimates Process Summary

Sources: SRK

The Mineral Reserves for the DGZ Mine are presented by Mineral Reserve category. Approximately 72% of tonnage and 82% of the contained gold have been converted from Measured and Indicated Mineral Resources to Mineral Reserves. As it is shown in Figure 14-2 and Figure 14-3, the Inferred Mineral Resources, containing 57% of Au metal in the total Mineral Resources, is the major factor that affects the Mineral Reserve conversion.

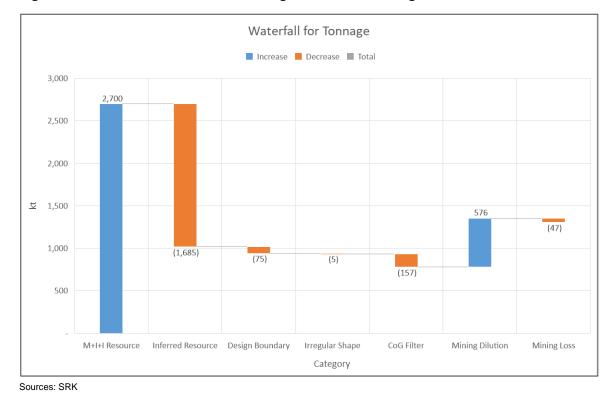
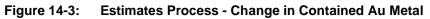
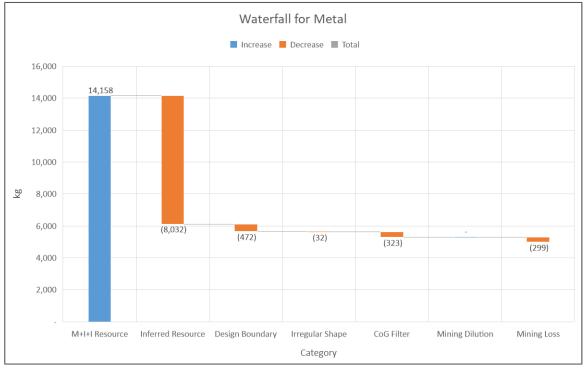


Figure 14-2: Estimates Process - Change in Material Tonnage





# 14.6 Mineral Reserve Statement

Table 14-4 summarises the Mineral Reserves estimates for the DGZ Mine.

Table 14-4: Mineral Reserve Statement for DGZ Mine, as of 30 June 2024 [1, 2, 3, 4]

Property	Category	Cut-off (g/t Au)	Ore Tonnage (kt)	Au Grade (g/t)	Au Metal (t)	Au Metal (koz)
DGZ Mine	Proven	1.9	-	-	-	-
-	Probable	1.9	1,300	3.8	5.0	161
-	Total	1.9	1,300	3.8	5.0	161

Sources: SRK

Notes:

<sup>1</sup> The information relates to Mineral Reserve conversion is based on information compiled by Mr Erwei Lu, Mr Yonggang Wu and Dr Anshun Xu, FAusIMM, employees of SRK Consulting China Ltd. Dr Xu, Mr Wu and Mr Lu have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which Mr Wu is undertaking to qualify as Qualified Person as defined in the *NI* 43-101. Dr Xu and Mr Wu supervised the work of Mr Lu. Dr Xu, Mr Wu and Mr Lu consent to the reporting of this information in the form and context in which it appears.

<sup>2</sup> All figures are rounded to reflect the uncertainties in estimate.

<sup>3</sup> Total may not add due to rounding discrepancies.

<sup>4</sup> The Mineral Reserves are included in the Mineral Resources. They should not be added to the Mineral Resources.

# 14.7 Mineral Reserve Potential

For DGZ Mine, the following recommendations are summarised as follows:

- The cut-off grade selection is sensitive for Mineral Reserve estimation. The current CoG calculation is based on an optimistic forecast of mining cost and processing. Therefore, measures, especially like cost control for mining and processing are recommended to Yantai Mujin to ensure its economic feasibility.
- Inferred Mineral Resources is the key negative factor during Mineral Reserve estimation. This should remind Yantai Mujin to increase investment for upgrading Inferred Mineral Resource's confidence and conducting necessary studies.

# 14.8 Production Schedule

DGZ Mine will operate: three 8-hour shifts per day, 330 days per year. The production capacity will be expanded to 165 ktpa ore. The production schedule, starting from the second half of 2024 ("**2H2024**"), is shown in Table 14-5. The Mineral Reserves can support 10 years of production, including four years ramp-up period, five years full production period, and one year ramp-down period.

ltem	Unit	Total	2H2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Ore tonnage	kt	1,306	48	96	96	96	165	165	165	165	165	145
Au grade in ore	g/t	3.83	1.49	1.86	1.86	1.86	3.12	3.12	4.81	5.25	6.09	4.79
Au metal in ore	kg	5,000	72	178	178	178	515	515	794	867	1,005	697
Processing recovery rate	%	90.40	90.40	90.40	90.40	90.40	90.40	90.40	90.40	90.40	90.40	90.40
Concentrate tonnage	kt	226	3	8	8	8	23	23	36	39	45	32
Au grade in concentrate	g/t	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Au metal in concentrate	kg	4,520	65	161	161	161	465	465	718	784	908	630
Tails tonnage	kt	1,081	45	88	88	88	142	142	129	126	120	114
Refining recovery	%	93.00	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.00
Au sold quantity	kg	4,203	60	150	150	150	433	433	667	729	845	586

#### Table 14-5: Production Schedule for DGZ Mine

# 15 Mining Methods

# 15.1 DGZ Mine

# 15.1.1 Current Status

The last exploration campaign was finished in May 2017 to explore for additional Mineral Resources in the deeper and peripheral areas of DGZ Mine. After that, the *DUP on DGZ Mine* was prepared by SD-GOLD.

Yantai Mujin has started its modification to expand the ore mining capacity from the original 99 ktpa to 165 ktpa ore under the guidance of *DUP on DGZ Mine*. At the time of this report, SRK prepared the mining assessment based on the *DUP on DGZ Mine* and other available data.

# 15.1.2 Hydrogeology

Groundwater is found in the following aquifers:

- The Quaternary loose rock pore aquifer is located on the banks of river and brook. It was mainly composed of gravel containing sand soil, gravel containing silty clay. The aquifer thickness varies between 4.00 m to 20.00 m. The water table is found 1.26 m to 2.28 m below surface. Single well yield is 172.88 cubic metres per day ("m³/d"), and the specific yield is 1.299 litres per second per metre ("L/s/m"). The hydraulic conductivity is 46.50 metres per day ("m/d"). The hydrochemical makeup of groundwater is associated with: HCO<sub>3</sub>·SO<sub>4</sub>·NO<sub>3</sub>·Ca·Mg and SO<sub>4</sub>·Ca·Mg. The total dissolved solids ("TDS") varies between 0.589 grams per litre ("g/L") and 1.583 g/L.
- The bedrock fissure aquifer was subdivided into following sub-aquifers:
  - Weathered fissure sub-aquifer spread in the entire mine area. It is primarily composed of weakly gneiss like fine-grained granodiorite, medium coarse granodiorite, and biotite plagioclase gneiss. The weathered depth from surface is between 2.15 m to 29.60 m, with a maximum of 42.10 m. The water table is found 1.10 m to 4.32 m below surface. Single well yield is less than 100 m<sup>3</sup>/d, and the specific yield is 0.030 L/s/m. The hydraulic conductivity is 0.065 m/d. The hydrochemical makeup of groundwater is associated with: HCO<sub>3</sub>·CI-Ca·Na and HCO<sub>3</sub>·SO<sub>4</sub>-Na. The TDS varies between 0.404 g/L and 0.545 g/L.
  - Tectonic fissure sub-aquifer spread along the fracture zones. It was mainly composed of sericitized fragmented diorite granite and sericitized diorite granite. The water table is found to be 1.10 m to 18.00 m below surface, with the maximum of 24.40 m. Single well yield is 14.43 m<sup>3</sup>/d to 25.40 m<sup>3</sup>/d, and the specific yield is 0.0032 L/s/m to 0.0047 L/s/m. The hydraulic conductivity is 0.0075 m/d to 0.0086 m/d. The hydrochemical makeup of groundwater is associated with: CI-HCO<sub>3</sub> -Ca·Na. The TDS is 0.743 g/L.

The aquiclude is located between the aquifers. The groundwater was principally recharged with precipitation, then discharged naturally by irrigation, water drainage of the mine, underground runoff and evaporation.

The orebodies occurred below the local erosion base (section 4.4), and were principally charged with fissure water from the bedrock aquifer. There is only a seasonal tributary of Huanglei River flowing

through the northwest part of DGZ Mine. The physiography condition (section 4.4) is suitable to drain run-off out of mine. Overall, SRK considered the hydrogeology condition is straightforward.

# 15.1.3 Geotechnical

The rocks were classified to the following groups based on their lithology, structure and geotechnical properties:

- The Quaternary loose rock group is also the Quaternary aquifer. The load bearing capacity of subgrade is about 180 to 220 kilopascals ("kPa").
- Semihard sericite rock fragmentation rock group is also the tectonic fissure sub-aquifer. Saturated uniaxial compressive strength ("UCS") is 33.32 megapascals ("MPa") to 49.38 MPa. The tensile strength is 2.58 MPa to 10.36 MPa. Shearing strength is 2.06 MPa to 4.30 MPa. Angle of shearing resistance is 60.3 degrees to 61.9 degrees.
- Semihard-hard lump diorite rock group is the combination of aquiclude and weathered fissure sub-aquifer. Saturated UCS is 48.34 MPa to 76.20 MPa. The tensile strength is 4.70 MPa to 11.67 MPa. The shearing strength is 2.16 MPa to 10.80 MPa. The angle of shearing resistance is 41.6 degrees to 72.1 degrees.

The tunnels are predominantly developed in the semihard-hard lump diorite rock group. Only limited parts of wall rocks and tunnels were located in the semihard sericite rock fragmentation rock group. The orebodies are surrounded with semihard sericite rock fragmentation rock group. Overall, SRK considered the geotechnical condition is moderate.

# 15.1.4 Development System

DGZ Mine is divided, from east to west, into sections 1, 2 and 3 to mine those separated gold mineralised zones. Sections 1 and 2 are connected at levels +15 m, -65 m and -385 m.

There are four shafts associated with Section 1. The properties of these four shafts are described as:

- The shaft 1 (SJ1) is located close to prospecting line 32. It has a net diameter of 3.5 m and a depth of 251.8 m. The shaft connects levels between +55 m and -105 m. The hoist 2JK-2×1P is installed to lift a double deck cage. The shaft is also used for fresh air intake and an emergency egress.
- The sub-shaft 1 (MSJ1) is located close to prospecting line 22 and worked with SJ1 to provide hoist service for levels between -145 m and -385 m. MSJ1 has a net diameter of 3.5 m and a depth of 290.0 m. The hoist 2JTP1.6x0.9 is installed to lift a single deck cage. MSJ1 is also used as a fresh air intake and being an emergency egress.
- The north ventilation shaft 1 (FJ1) is located close to prospecting line 94 to draw exhaust air out of the mine. It has a net diameter of 3.0 m and a depth of 309 m. FJ1 is also an emergency egress.
- The south ventilation shaft 2 (FJ2) is located close to prospecting line 6 to draw exhaust air out of the mine. It has a net diameter of 2.5 m and a depth of 243.0 m.

There are six shafts in place to develop the mine in Section 2. Properties of these shafts are

described below:

- The shaft 2 (SJ2) is located close to prospecting line 30. It has a net diameter of 3.5 m and a depth of 329.5 m. The shaft connects levels between +55 m and -185 m. The hoist 2JK-2.5/20B is installed to lift a double deck cage. The shaft is also used as a fresh air intake and being an emergency egress.
- The sub-shaft 2 (MSJ2) is located close to prospecting line 40 and worked with SJ2 to support mining operations from level -225 m down to the level -385 m as well as the exploration levels at -425 m and -465 m. The shaft has a net diameter of 3.5 m and a depth of 290.0 m. The hoist 2JTP1.6x0.9 is installed to lift a single deck cage. The shaft is also used as a fresh air intake and being an emergency egress.
- The shaft 3 (SJ3) is located close to prospecting line 5. It has a net diameter of 3.5 m and a depth of 352.3 m. The shaft supported mining operations between levels +28 m and -225 m. The hoist 2JK-2.5×1.5/20E is installed to lift a double deck cage. SJ3 is connected to SJ2 at levels -25 m, -145 m and -225 m. During the site visit in March 2024, SRK viewed that Yantai Mujin is upgrading the SJ3 at DGZ Mine to expand hoisting capacity to 165 ktpa ore.
- The ventilation shaft X (FJX) is located in the hanging wall of orebody X, close to the prospecting line 21. It has a net diameter of 2.5 m and a depth of 79 m. FJX is also an emergency egress.
- The north ventilation shaft 3 (FJ3) is used for drawing exhausted air out of mine. The portal elevation is +140 m ASL. The bottom elevation of the FJ3 is +55 m ASL. The cross section is 1.6 m wide by 2.5 m long.
- The south ventilation shaft 4 (FJ4) is used for drawing exhausted air out of mine. The portal elevation is +113 m ASL. The bottom elevation of the FJ3 is +55 m ASL. The cross section is 1.5 m wide by 2.5 m long.

After the upgrade of mine is completed, SJ1, MSJ1, FJ2, SJ2, MSJ2, FJ3 and FJ4 will be sealed and abandoned. The SJ3, FJ1and FJX will be modified and work together with several newly built shafts to support the expanded mining capacity. The description of planned development system is described below:

- The existing SJ3 will be extended down to the -660 m ASL, with a net diameter of 5.0 m and a depth of 777.1 m. SJ3 will connect seventeen levels between +28 m and -625 m. A multi-rope friction hoister JKMD-2.8×4(III) will be installed to lift the double deck cage 3600×1600.
- FJ1 will be extended down to the level -385 m, with a net diameter of 3.0 m and a depth of 509.0 m. FJ1 will connect thirteen levels between +55 m and -385 m. Level +55 m was sealed. Levels +28 m and those between -225 m and -385 m will be newly developed.
- The underground ventilation shaft 1 (MFJ1) will be constructed and work together with FJ1 to draw out exhaust air in Section 2. MFJ1 will be located close to prospecting line 62. It has a net diameter of 2.5 m and a depth of 240 m. It will connect six levels between -425 m and -625 m.
- Two underground ventilation shafts 2 and 3 (MFJ2 and MFJ3) will be developed to draw out exhaust air from the north side of Section 3 to the FJ1.
  - MFJ2 will be located close to prospecting line 126 and has a net diameter of 3.5 m and a depth of 213 m. MFJ2 will connect five levels between -19 m and -185 m.
  - MFJ3 will be located close to prospecting line 114 and has a net diameter of 3.5 m and a

depth of 440 m. MFJ2 will connect eleven levels between -225 m and -625 m.

The underground ventilation shaft 4 (MFJ4) will be constructed to draw out exhaust air from the south side of Section 3 to existing FJX. MFJ4 will be located close to prospecting line 43. It will have a net diameter of 2.5 m and a depth of 213 m. MFJ will connect five levels between -19 m and -185 m.

The rock movement angles are 45 degrees for the Quaternary rock, and 78 degrees for the hanging wall, footwall and extremities, respectively.

# 15.1.5 Underground Transportation

The sequence of underground transportation of ore includes hauling on levels, transferring among levels, hauling on main levels, and hoisting in shafts.

- Hauling on levels involves loading the ore into 0.75 m<sup>3</sup> bucket-tipping track wagon, then hauled with battery locomotives (type CTY2.5/6) to the ore pass.
- Transferring among levels involves dumping ore into ore passes and loading ore to 1.6 m<sup>3</sup> sidedumping track wagon on the main levels.
- Hauling on main levels involves hauling the ore with battery locomotives (type CTY5/6) to the shaft station at the bottom of shafts. Main levels were set at levels -185 m, -385 m and -625 m.
- Hoisting in shafts involves pushing individual wagons into the cage and hoisting to surface. After the upgrading of SJ3 is completed, all of ore and waste rocks, workforces, materials and machinery will be transferred via the SJ3.

# 15.1.6 Mining Methods

The mining methods have been and will be applied include overhand cut-and-fill mining for unstable orebodies thicker than 0.8 m, resuing for orebodies thinner than 0.8 m, and shrinkage stoping for stable orebodies thicker than 0.8 m.

#### **Overhand cut-and-fill mining**

The stope is usually 40 m to 50 m long. Neither crown pillar nor rib pillar are left, but the 5 m thick bottom pillar will be set to support wall rocks when mining the ore. The maximum allowed expose area is  $100 \text{ m}^2$  for the hanging wall.

The main stope development includes a raise for worker access, ventilation and water drainage, a raise for ventilation and backfilling, an ore pass and an undercut slot.

Extraction of ore starts from the bottom undercut, advancing upward at 2.0 m per slice cut. A handled, compressed air drill rig (type YT-28) is used for drilling of horizontal blast holes, which are 2.0 m long, 42 mm in diameter. Blast holes have an overburden of 0.8 m and a spacing distance of 1.0 m. Explosives are ignited with milliseconds delay digital detonators. The broken ore is moved to the ore pass by electric scraper, then loaded into wagons to transport out of the stope to the ore pass system.

After each mining cut, cemented tailings will be backfilled to support the wall rocks. Enough space is left to serve as a working platform for the next upward mining cut.

High grade bottom pillars will be recovered when mining the lower-level stope. Low grade bottom pillars will be left as the permanent loss.

The mining capacity is about 50 tonnes per day ("**tpd**") for a single stope. The mining loss and dilution rates are 5.0% and 20.0%, respectively.

#### Shrinkage stoping

The stope is usually 40 m to 50 m long. No bottom pillar is left, but 3 m thick crown pillar is left, as well as a 6 m wide rib pillar. The maximum allowed expose area is  $100 \text{ m}^2$  for the hanging wall.

The main stope development includes the level haulage way, crosscuts for loading, a raise for worker access and ventilation, connection ways and an undercut slot.

Extraction of ore starts from the bottom undercut, advancing upward at 1.8 m to 2.0 m per slice cut. The gently dipping blast holes are drilled with a 0.8 m overburden. Explosives are ignited with milliseconds delay digital detonators. Some of the broken ore is removed, with gravity assisting the movement, to the crosscuts for loading into wagons utilising electric rock/ mucking loader. The remaining broken ore is left in the stope to serve as a working platform for the next cut.

After all of the ore is mined from the stope, cemented tailings will be backfilled to support the wall rocks.

High grade crown pillars will be recovered. Low grade crown pillars will be left as the permanent loss.

The mining capacity is about 50 tpd for a single stope. The mining loss and dilution rates are 8.0% and 20.0%, respectively.

#### Resuing

The stope is usually 40 m to 50 m long, 1.0 m wide. No crown pillar is left, but a 5 m thick bottom pillar and a 6 m wide rib pillar are left. The maximum allowed expose area is 40 m<sup>2</sup> for the hanging wall.

The main stope development includes a haulage way on the footwall side of the planned stope, two crosscuts at the end of the stope, ventilation raise, connection ways, a crosscut for loading, an ore pass, and an undercut slot.

Extraction of ore starts from the bottom undercut, advancing upward at 1.5 m to 1.8 m per slice cut. A handheld, compressed air drill (type YT-28) is used for drilling of gently dipping blast holes, which are 2.0 m long. Explosives are ignited with milliseconds delay digital detonators. The extracted ore is removed to the ore pass by electric scraper, then loaded into wagons to be transport from the stope, to the ore pass system. Finally, the waste rock is blasted and left in the stope.

High grade bottom pillars will be recovered when mining the lower-level stope. Low grade bottom pillars will be left as the permanent loss.

The mining capacity is about 30 tpd for a single stope. The mining loss and dilution rates are 6.0% and 38.0%, respectively.

## 15.1.7 Mine Services

#### Ventilation

The existing ventilation systems are described as:

- With respect to Section 1, fresh air was pulled into the mine via SJ1 and MSJ1. The exhaust air is drawn out via FJ1 and FJ2.
- With respect to Section 2, fresh air was pulled into the mine via SJ2 and MSJ2. The exhaust air is drawn out via FJ1, FJ3 and FJ4.
- With respect to Section 3, fresh air was pulled into the mine via SJ3. The exhaust air is drawn out via FJ1, FJX and FJIII.

After the upgrade and modifications to the mine are completed, the ventilation system will be changed as follows:

- Fresh air will be pulled into the mine via SJ3 for all mining sections.
- Section 1, the exhaust air will be drawn out via FJ1. The fresh air demand is about 10.2 cubic metres per second ("m<sup>3</sup>/s").
- Section 2, the exhaust air will be drawn out via MFJ1 and FJ1. The fresh air demand is about 18.6 m<sup>3</sup>/s.
- Section 3, the exhaust air in the north side of mine will be drawn out via MFJ2, MFJ3 and FJ1, while the exhaust air in the south side of mine will be drawn out via MFJ4 and FJX. The fresh air demand is about 24.0 m<sup>3</sup>/s and 19.2 m<sup>3</sup>/s for the north side and south side, respectively.
- Fan installations are located at the portals of FJ1 and FJX, with a main fan to exhaust air.

#### Water drainage

The existing water drainage systems are described as:

- Two pump stations are set close to the bottom of SJ1 at level -105 m and MSJ1 at level -385 m in Section 1, respectively. The groundwater inflow is pumped out via the two stage pump stations.
- Two pump stations are set close to the bottom of SJ2 at level -185 m and MSJ2 at level -465 m in Section 2, respectively. The groundwater inflow is pumped out via the two stage pump stations.

After the upgrade and modifications to the mine are completed, the lowest level will be at -625 m. The normal and maximum groundwater inflow rates to the level were estimated to be 1,554 m<sup>3</sup>/d and 1,659 m<sup>3</sup>/d, respectively. Additional production water recycled rate is about 238 m<sup>3</sup>/d. The water drainage will be changed as follows:

- A 1,000 m<sup>3</sup> water sump is set at level -625 m, close to the SJ3 bottom. Groundwater inflows in the upper levels flows to the water sump via ditches in the level way and draining holes connecting levels.
- Three sets of MD280-83×10(A) pumps are to be installed at the water sump. The gathered water is drained into the 3,000 m<sup>3</sup> elevated water tank on surface via seamless steel pipes installed in the SJ3.

#### Compressed air supply

Currently, each mining section is equipped with a compressed air station to supply machinery with compressed air.

After the upgrade and modifications to the mine are completed, the compressed air demand is estimated to be 186 cubic metres per minute ("**m**<sup>3</sup>/**min**"). A newly built compressor station will be located close to the SJ3 portal. Three screw compressors will be installed in the newly built compressor station. Compressed air will be supplied via the main pipes installed in the SJ3.

#### Water supply

The existing water supply facilities include a 200 m<sup>3</sup> and a 500 m<sup>3</sup> static pressure water tanks close to the portals of SJ1 and SJ2, and the 4,000 m<sup>3</sup>/d wastewater treatment facility.

After the upgrade and modifications to the mine are completed, a newly built 3,000 m<sup>3</sup> elevated water tank will be located close to SJ3 portal. Water is supplied to the underground working faces via seamless steel pipes in the SJ3.

#### **Power supply**

The existing power transformation and distribution facilities for the SJ1 include:

- a transformation and distribution room close to SJ1 portal, where there is a S11-500kVA/10kV/0.4kV transformer installed to supply surface equipment with power supplied by the 35/10 kilovolts ("kV") general substation (section 17.3) and the 10 kV SJ2 high voltage distribution room;
- a transformer bay at level -185 m, where two S11-400kVA/10kV/0.4kV transformers are installed to supply underground loads with power supplied by the SJ1 transformation and distribution room; and
- two standby diesel generators (500 kilovolt-amperes ("kVA") and 600 kVA) at the SJ1 portal to supply 0.4 kV power to the SJ1 transformer.

The existing power transformation and distribution facilities for the SJ2 include:

- a transformation and distribution room close to SJ2 portal, where there is a S11-630kVA/10kV/0.4kV transformer installed to supply surface equipment with power supplied by the 35/10 kV general substation and 35/10 kV Yulindian Substation (section 17.3);
- a transformer bay at level -185 m, where two S11-500kVA/10kV/0.4kV transformers are installed to supply underground infrastructure with power supplied by the SJ2 transformation and distribution room; and
- a standby diesel generator (520 kVA) at SJ2 portal to supply 0.4 kV power to the SJ2 transformer.

The following power supply facilities will be added as part of the upgrades and modifications:

- A diesel generator will be located close to SJ3 portal to supply 10 kV power to the SJ3 hoist, in case of an emergency. The diesel generator has a power of 1,500 kilowatts ("kW").
- A substation will be constructed for SJ3, and will be supplied with 10 kV power from the 35/10 kV general substation and the 35/10 kV Yulindian Substation (section 17.3). The substation will

supply and distribute power within the DGZ Mine.

- A substation will be constructed close to the main fan room for FJ1 to supply power for the main fan. The substation will be supplied with 10 kV power from the abovementioned substation for SJ3.
- A substation will be constructed close to the main fan room for FJX to supply power for the main fan. The substation will be supplied with 10 kV power from the abovementioned substation for SJ3.
- A subsurface central substation will be constructed adjacent to the water pump bay at level -625 m. The substation will be supplied with 10 kV power from the abovementioned substation for SJ3.

#### **Explosive supply and management**

The explosive magazine is located in a hill that is 375 m south to the Denggezhuang Village. It primarily consists of two explosive magazines 101 and 102, one detonator magazine 103 and a fire extinguishing pool.

The explosive magazine 101 can store up five tonnes explosives, while the explosive magazine 102 can store up four tonnes explosive. The detonator magazine 103 can store up 20 kg (20 thousand pieces) of detonators. Each magazine is 9.0 m long, 5.0 m wide and 3.3 m high.

Yantai Mujin has a special safety production management department and explosive magazine security department to manage the safety of explosive magazine and safety production.

The explosive magazines will be continually used after the upgrades of the mine.

# Backfilling

A classified tailings backfill plant has been operating since 1996. The main facilities are two 450 m<sup>3</sup> upright sand silo bins. The mined-out areas are backfilled with 60% to 70% concentrated tailings slurry or waste rocks.

After the upgrade and modifications to the mine are completed, the ground support medium will be changed from classified tailings to cemented classified tailings. The average demand for the backfilling materials is about 139 m<sup>3</sup>/d. Added facilities include mainly a 100 t cement tank, a cement feeder and water pumps.

#### Communications

A digitally broadcasting and video system is installed for the DGZ Mine to inform and guide the escape of underground workers in case of an emergency (flood or fire). The system includes optical fibre, broadcasting facilities, waterproof loudspeakers and cameras. The fourth generation of underground mobile signal is supplied by the mobile signal base at Shanqianzhuang Village.

There is no renovation plan available to SRK to date.

# 15.2 HH Mine

# 15.2.1 Current Status

The latest annual report of mineral resources in China standard was finished in January 2021. After that, the *Development and Utilisation Plan on Gold Mineral Resources in Houzhuang-Heiniutai Property (change), Muping District, Yantai City, Shandong Province ("DUP on HH Mine")* was prepared by Shandong Lianchuang Mining Design Co., Ltd ("Shandong Lianchuang") and dated March 2023.

Yantai Mujin plans to restart the operation at the start of 2026 under the guidance of *DUP on HH Mine*. The planned mining capacity is 60 ktpa ore.

# 15.2.2 Hydrogeology

Groundwater is found in the following aquifers:

- The Quaternary loose rock pore aquifer is located in the west and east of mine area, on the banks of river and in valleys. It is primarily composed of sand, gravel containing sand soil, gravel containing silty clay. The aquifer thickness varies between 2.00 m to 5.00 m. The water table is found 0.78 m to 2.83 m below surface. Single well yield is usually between 100 and 500 m<sup>3</sup>/d. The hydrochemical makeup of groundwater is associated with SO<sub>4</sub>-Ca·Mg and Cl·SO<sub>4</sub>·-Na·Ca. The TDS varies between 0.368 g/L and 0.505 g/L.
- The weathered bedrock fissure aquifers spread across the entire mine area, and is mainly composed of weakly gneiss like fine-grained granodiorite, medium coarse granodiorite, and biotite plagioclase gneiss. The weathered depth is usually 20 m to 25 m. The water table is found 1.39 m to 5.35 m below surface. Single well yield is 45.53 m<sup>3</sup>/d to 69.64 m<sup>3</sup>/d, and specific yield is 0.124 L/s/m to 0.253 L/s/m. The hydraulic conductivity is 0.065 m/d. The hydrochemical makeup of groundwater is associated with SO<sub>4</sub>·Cl-Ca·Na and HCO<sub>3</sub>-Ca·Na. The TDS varies between 0.257 g/L and 0.495 g/L.
- The tectonic fissure aquifer spread along the fracture zones. It is primarily composed of sericitized fragmented diorite granite and sericitized diorite granite. The water table is found 12.65 m to 27.70 m below surface. Single well yield is 41.99 m<sup>3</sup>/d to 49.42 m<sup>3</sup>/d, and the specific yield is 0.0056 L/s/m to 0.0062 L/s/m. The hydraulic conductivity is 0.012 m/d to 0.029 m/d. The hydrochemical makeup of groundwater is associated with: CI-HCO<sub>3</sub> -Ca-Na and HCO<sub>3</sub>-CI-Ca-Na. The TDS is 0.404 g/L to 0.743 g/L.

The groundwater was principally recharged with precipitation, then discharged naturally by irrigation, water drainage of mine, underground run-off and evaporation.

The orebodies occurred below the local erosion base (section 4.4), and were directly charged with fissure water from the tectonic aquifer. The physiography condition (section 4.4) is suitable to drain run-off out of mine. Overall, SRK considered the hydrogeology condition is straightforward.

# 15.2.3 Geotechnical

There is not much data and information available to SRK. The historically mining practices showed that most of tunnels are stable with no supporting. SRK opine the rock mass condition are simple.

# 15.2.4 Development System

HH Mine is divided into sections north and south to mine those separated gold mineralised zones. The two sections were connected at level -140 m.

Section South has three shafts with the following specifications:

- Shaft 1 (SJ1) is located close to prospecting line 16. It has a net diameter of 3.8 m and a depth of 458.0 m. The shaft connects eight levels between -20 m and -300 m. The hoist JKMD-1.85×4I is installed to lift a double deck cage. The shaft is also used as a fresh air intake and being an emergency egress.
- Shaft 2 (SJ2) is located close to prospecting line 4. It has a net diameter of 3.0 m and a depth of 148.0 m. SJ2 is a ventilation shaft as well as an emergency egress.
- Sub-shaft 2 (MSJ2) is located close to prospecting line 4 and worked with SJ2 to draw exhaust air out of the mine. MSJ2 has a 2.2 m × 2.2 m cross section, 280.0 m deep. MSJ2 is also an emergency egress.

There are two shafts and one inclined shaft in place to develop the mine in Section North. The specifications of these tunnels are:

- Shaft 3 (SJ3) is located close to prospecting line 76. It has a net diameter of 3.5 m and a depth of 279.0 m. The shaft connects seven levels between +100 m and -140 m. The hoist 2JK-2.5×1.5 is installed to lift a double deck cage. The shaft is also used as a fresh air intake and being an emergency egress.
- The inclined shaft (XJ) has a portal elevation of 110.0 m and a bottom elevation of 100.0 m. The gradient of XJ is 14 degrees. The inclined length is 42 m. XJ has a 2.3 m x 2.6 m cross section.
- The sub-shaft 4 (MSJ4) is located close to prospecting line 60 and operated with XJ to draw exhaust air out of the mine. The shaft has a 2.2 m x 2.2 m cross section and a depth of 240.0 m. The shaft is also an emergency egress.

The rock movement angles are 45 degrees for the Quaternary rock, and 75 degrees for the hanging wall, footwall and extremities, respectively.

# 15.2.5 Underground Transportation

Battery locomotives (type CTY2.5/6B) are used for hauling of 0.75 m<sup>3</sup> bucket-tipping track wagon to transport ore and wastes to the shaft stations at the bottom of shafts SJ1 and SJ3. After manually pushing the wagon into the shaft cage, the cage is hoisted to surface.

There is no need to renovate the existing transportation system to expand mining capacity to 60 ktpa ore.

# 15.2.6 Mining Methods

The mining methods have been and will be applied include overhand cut-and-fill mining for orebodies thinner than 4.0 m or with a gold grade greater than 2.0 g/t, and shrinkage stoping for orebodies thicker than 4.0 m or with a gold grade less than 2.0 g/t.

#### **Overhand cut-and-fill mining**

The stope is 40 m long and 40 m high. No pillar will be set to support wall rocks when mining the ore. The maximum allowed expose area is 160 m<sup>2</sup> for the hanging wall.

The main stope development includes a haulage way in the footwall, crosscuts for worker access, a raise for backfilling and an undercut for developing an artificial bottom pillar.

Extraction of ore starts from the bottom artificial bottom pillar, advancing upward at 1.8 m to 2.0 m per slice cut. A handheld, compressed air drill (type 7655) is used for the drilling of horizontal or gently dipping blast holes, which are 1.8 m to 2.0 m long, and 35 to 38 mm in diameter. Blast holes have an overburden of 0.6 m to 1.0 m and a spacing distance of 0.8 m to 1.3 m. Explosives are ignited with milliseconds delay digital detonators. The broken ore is moved to the ore pass by electric scraper, then loaded to wagons to transport out of stope to the ore pass system.

After each mining cut, cemented tailings are backfilled into the stope void to support the wall rocks. Enough space is left to serve as a working platform for the next mining cut.

The mining capacity is about 50 tpd for a single stope. The mining loss and dilution rates are 6.0% and 12.0%, respectively.

## Shrinkage stoping

The stope is usually 40 m long and 40 m high. Neither crown pillar nor bottom pillar are left, but the 6 m wide rib pillar is left to support the wall rocks.

The main stope development includes the level haulage way in the footwall, crosscuts for loading, a raise for worker access and ventilation, connection ways and an undercut slot. An artificial bottom pillar is developed to support ore loading.

Extraction of ore starts from the bottom undercut, advancing upward at 2.0 m to 2.5 m per slice cut. Explosives are ignited with milliseconds delay digital detonators. Part of the broken ore are removed to the crosscut for loading by gravity, then loaded into wagons by electric rock loader (type Z30). The remaining broken ore is left in the stope to serve as a working platform for the next cut.

After all of the ore is removed out of the stope, cemented tailings is backfilled to support the wall rocks.

The mining capacity is about 50 tpd for a single stope. The mining loss and dilution rates are 8.0% and 12.0%, respectively.

# 15.2.7 Mine Services

#### Ventilation

The existing ventilation system is:

- Section South, fresh air was pulled into the mine via SJ1. The exhaust air is drawn out via MSJ2 and SJ2. Fresh air demand is 20 m<sup>3</sup>/s, and the maximum ventilation resistance is 909.16 pascal (Pa). The main fan is installed at the SJ2 portal.
- Section North, fresh air was pulled into the mine via SJ3. The exhaust air is drawn out via MSJ4 and XJ. Fresh air demand is 24 m<sup>3</sup>/s, and the maximum ventilation resistance is 937.81 Pa. The

main fan is installed at the XJ portal.

The existing ventilation systems will be continually used for the future ventilation of mine.

#### Water drainage

The existing water drainage systems are described as:

- Section South, the water pump station bay is located close to the bottom of SJ1 at level -300 m. Two water sumps are with the capacity of 680 m<sup>3</sup> of water inflows. Three units of D46-50×10 water pumps are installed in the bay. The groundwater inflow is pumped out via the pipes installed in SJ1. The normal groundwater inflow is about 322 m<sup>3</sup>/d, with a maximum groundwater inflow of about 472 m<sup>3</sup>/d.
- Section North, the water pump station bay is located close to the bottom of SJ3 at level -140 m. Two water sumps are with the capacity of 580 m<sup>3</sup> of water inflows. Three units of D46-50x7 water pumps are installed in the bay. The groundwater inflow is pumped out via the pipes installed in SJ3. The normal groundwater inflow is about 268 m<sup>3</sup>/d, with a maximum groundwater inflow is about 385 m<sup>3</sup>/d.

#### **Compressed air supply**

A compressed air station is located close to the SJ1 portal. Two screw compressors G-24/8 are installed to provide compressed air into Section South via seamless steel pipes. Compressed air supply facilities in Section North are the same as those in Section South.

#### Water supply

A 300 m<sup>3</sup> elevated water tank is located close to the SJ1 portal. The same water tank is installed for SJ3. Water is distributed via pipes installed in the shafts and tunnels to working areas.

#### **Power supply**

The power is supplied by the existing general substation (section 17.3). The existing equipment and facilities to supply electricity include an 800kW/0.4kV diesel generator, a 600 kW/0.4kV diesel generator, two S11-M-630kVA/10kV/0.4kV transformers, one S11-M-400kVA/10kV/0.4kV transformer, one S11-M-500kVA/10kV/0.4kV transformer and two electricity distribution rooms.

#### Backfilling

There is a backfill plant in Sections South and North, respectively. The hole diameter for backfilling in Section South is 250 mm, drilled to level -20 m. The hole diameter for backfilling in Section North is 250 mm, drilled to level 100 m.

The average demand for the backfilling materials is about 65  $m^3/d$ .

# 15.3 CH Mine

#### 15.3.1 Current Status

The latest verification of mineral resources in China standard was finished in July 2019. The *Preliminary Design on Mining Project (expanding boundary and mining capacity) of Chahe Property*, ("*PD on CH Mine*") was prepared by Shandong Dehe and dated February 2024.

Yantai Mujin plans to renovate the mine to restart the operation at the start of 2028 under the guidance of *PD* on *CH Mine*. The mining capacity was planned to be 60 ktpa ore.

# 15.3.2 Hydrogeology

Groundwater is found in the following aquifers:

- The Quaternary loose rock pore aquifer is located in the east and south of mine area on the banks of river and in valleys. It is primarily composed of gravel and sub-sandy soil. The aquifer thickness varies between 3.70 m to 9.60 m. The water table is found 0.84 m to 3.60 m below surface. Single well yield is 100 m<sup>3</sup>/d to 500 m<sup>3</sup>/d, and the specific yield is 0.964 L/s/m to 1.637 L/s/m. The hydraulic conductivity is 7.695 m/d to 8.638 m/d. The hydrochemical makeup of groundwater is associated with HCO<sub>3</sub>·SO<sub>4</sub> -Ca·Na and SO<sub>4</sub>-Ca·Mg·Na. The TDS varies between 0.272 g/L and 0.497 g/L.
- The weathered bedrock fissure aquifer covers the entire mine area. It is primarily composed of schistose medium to fine grained biotite diorite granite and weakly schistose fine to medium grained garnet diorite granite. The weathered depth is usually 10 m to 25 m from surface. The water table is found 2.68 m to 3.45 m below surface. Single well yield is usually less than 100 m<sup>3</sup>/d, and the specific yield is 0.593 L/s/m to 1.100 L/s/m. The hydraulic conductivity is 0.047 m/d to 0.507 m/d. The hydrochemical makeup of groundwater is associated with SO<sub>4</sub>-Ca·Na and SO<sub>4</sub>·NO<sub>3</sub>-Ca. The TDS varies between 0.281 g/L and 0.355 g/L.
- The tectonic fissure aquifer is the south part of Jinniushan Fracture. It is primarily composed of pyrite quartz veins, fractured rocks, and sericitized diorite granite. The water table is found 4.40 m to 14.00 m below surface, 20.31 m at most. Single well yield is 9.94 m<sup>3</sup>/d to 12.10 m<sup>3</sup>/d, and the specific yield is 0.0014 L/s/m to 0.0030 L/s/m. The hydraulic conductivity is 0.0039 m/d to 0.0066 m/d. The hydrochemical makeup of groundwater is associated with: HCO<sub>3</sub>-Ca-Na and Cl-SO<sub>4</sub>·HCO<sub>3</sub>-Ca-Na. The TDS is 0.290 g/L to 0.513 g/L.

The groundwater was principally recharged with precipitation, then discharged naturally by irrigation, water drainage of mine, underground run-off and evaporation.

The orebodies are directly charged with groundwater from the tectonic fissure aquifer. Overall, the hydrogeology condition is straightforward.

# 15.3.3 Geotechnical

Shafts and tunnels for hauling are mostly located in weakly gneiss like fine-grained garnet bearing diorite granite. The saturated UCS varies between 37.5 MPa and 37.6 MPa. The tensile strength is 8.67 MPa to 8.69 MPa. The shearing strength is 4.12 MPa to 5.18 MPa. The angle of shearing resistance is 63.5 degrees to 64.6 degrees.

A limited part of the stope wall rocks and tunnel side walls are composed of fragmented sericite rock. The saturated UCS varies between 23.5 MPa and 37.6 MPa. The tensile strength is 3.30 MPa to 8.67 MPa. The shearing strength is 2.17 MPa to 5.18 MPa. The angle of shearing resistance is 60.8

degrees to 64.6 degrees.

The ore rock is hard or semi-hard. Overall, the geotechnical condition is classed as simple to moderate.

## 15.3.4 Development System

CH Mine has two shafts, and the specifications are summarised as:

- Shaft 1 (SJ1) is located close to prospecting line 20. It has a net diameter of 3.5 m and a depth of 169.0 m. The shaft connects four levels between +13 m and -95 m.
- Shaft 2 (SJ2) is located close to prospecting line 34. It has a net diameter of 3.5 m and a depth of 109.0 m. SJ 2 connects two levels +25 m and -15 m.

After the upgrade and modifications to the mine are completed, following changes will be made to the existing development system:

- The main shaft will be located close to prospecting line 40. It has a net diameter of 5.0 m and a depth of 716.0 m. The shaft connects thirteen levels between +55 m and -596 m. The hoist JKMD-2.8×4I will be installed to lift double deck cage. The shaft is also used as a fresh air intake and being an emergency egress.
- The sealed SJ1 will be reopened as a ventilation shaft and an emergency egress. A ventilation sub-shaft will be located close to the prospecting line 28 (MFJ28), and will work together with existing SJ1 to draw out exhaust air in the south part of the mine. MFJ28 has a net diameter of 2.5 m and a depth of 120 m. It connects three levels between -135 m and -215 m.
- A northern ventilation shaft (FJB) will be located close to prospecting line 60 to draw out exhaust air in the north part of the mine. It has a net diameter of 2.5 m and a depth of 325.0 m. The shaft connects eight levels between +55 m and -215 m. The shaft will also be an emergency egress.
- A ventilation sub-shaft will be located close to the prospecting line 45 (MFJ45), and will work together with FJB to draw out exhaust air in the north part of the mine. MFJ45 has a net diameter of 2.5 m and a depth of 120 m. It connects three levels between -135 m and -215 m.
- A ventilation sub-shaft will be located close to the prospecting line 50 (MFJ50), and will work together with MFJ60 and FJB to draw out exhaust air in the north part of the mine. MFJ50 has a net diameter of 2.5 m and a depth of 381 m. It connects five levels between -255 m and -596 m.
- SJ2 and its associated facilities on the surface will be abandoned.

The rock movement angles are 45 degrees for the surface weathered rock layers, 75 degrees for the footwall and extremities, and 70 degrees for the hanging wall, respectively.

# 15.3.5 Underground Transportation

Battery locomotives (type CTY2.5-6GB) will be used for hauling of 0.75 m<sup>3</sup> bucket-tipping track wagon to transport ore and wastes to the shaft station at the bottom of the main shaft. After manually pushing the wagon into cage, the cage will be hoisted to surface.

# 15.3.6 Mining Methods

The mining methods utilised include overhand cut-and-fill mining for unstable orebodies thicker than 0.8 m, resuing for orebodies thinner than 0.8 m, and shrinkage stoping for stable orebodies thicker than 0.8 m.

### **Overhand cut-and-fill mining**

The stope is usually 40 m to 50 m long. Neither crown pillar nor rib pillar are left, but the 5 m thick bottom pillar is left to support wall rocks when mining the ore.

The main stope development includes a raise for backfilling, two manways, three cross-cuts for loading ore, an ore pass and an undercut slot.

Extraction of ore starts from the bottom cut, advancing upward at 1.8 m per slice cut. A handheld, compressed air drill (type YT-28) is used for drilling of horizontal blast holes, which are 2.0 m long, 38 to 40 mm in diameter. Blast holes have an overburden of 0.8 m to 1.0 m and a spacing distance of 0.6 m to 0.7 m. Emulsion explosives are ignited with milliseconds delay digital detonators. The broken ore is moved to the ore pass by electric scraper (type 2JPB-15), then loaded into wagons to transport out of stope, to the ore pass system.

After each mining cut, cemented tailings is backfilled to support the wall rocks. Enough space is left to serve as a working platform for the next mining cut.

High grade bottom pillars will be recovered when mining the lower-level stope. Low grade bottom pillars will be left as the permanent loss.

The mining capacity is about 45 tpd for a single stope. The mining recovery and dilution rates are 95.0% and 10.0%, respectively.

#### Shrinkage stoping

The stope is usually 40 m to 50 m long. No bottom pillar is left, but a 3 m thick crown pillar and a 6 m wide rib pillar are left.

The main stope development includes the level haulage way, crosscuts for loading, a raise for worker access and ventilation, connection ways and an undercut slot.

Extraction of ore starts from the bottom undercut, advancing upward at 2.0 m per slice cut. The gently dipping blast holes are drilled with a length of 2.0 m to 2.5 m and an overburden of 0.8 m. The spacing distance between blast holes is 0.8 m to 1.0 m. Emulsion explosives are ignited with milliseconds delay digital detonators. Some of the broken ore is moved to crosscuts for loading by gravity, then loaded into wagons by electric rock/ mucking loader (type ZWY-60). The remaining broken ore is left in the stope to serve as a working platform for the next mining cut.

High grade crown pillars will be recovered. Low grade crown pillars will be left as the permanent loss.

After all of the ore is removed from the stope, cemented backfill tailings is used for supporting of the wall rocks.

The mining capacity is about 45 tpd for a single stope. The mining recovery and dilution rates are 92.0% and 10.0%, respectively.

#### Resuing

The stope is usually 40 m to 50 m long, 1.0 m wide. No crown pillar is left, but a 5 m thick bottom pillar and a 6 m wide rib pillar are left.

The main stope development includes a haulage way in the footwall, a ventilation raise, connection ways, a crosscut for loading, an ore pass, and an undercut slot.

Extraction of ore starts from the bottom undercut, advancing upward at 1.5 m to 1.8 m per slice cut. A handheld, compressed air drill (type YT-28) is used for drilling of dipping blast holes, which are 1.8 m long, and the spacing distance between blast holes is 0.4 m to 0.7 m. Explosives are ignited with milliseconds delay digital detonators. The extracted ore is moved to the ore pass by electric scraper (type 2JPB-15), then loaded into wagons to transport out of stope. Finally, the waste rock is blasted and left in the stope to serve as a working platform for the next mining cut.

High grade bottom pillars will be recovered when mining the lower-level stope. Low grade bottom pillars will be left as the permanent loss. Parts of rib pillars will be recovered to increase mining recovery rate.

The mining capacity is about 30 tpd for a single stope. The mining recovery and dilution rates are 92.0% and 20.0%, respectively.

## 15.3.7 Mine Services

#### Ventilation

The mine will be divided into the following two sections to draw out exhaust air by a main fan:

- Section South, fresh air will be pulled into the mine via the main shaft. The exhaust air is drawn out via MFJ28 and SJ1. Fresh air demand is 16 m<sup>3</sup>/s. The main fan (type FKZ40-4-№11) will be installed in the fan room to be located at the SJ1 portal.
- Section North, fresh air will also be pulled into the mine via the main shaft. The exhaust air is drawn out via MFJ50 or MFJ45, and FJB. Fresh air demand is 31 m<sup>3</sup>/s. The main fan (type FKZ40-4-№16) will be installed in the fan room to be located at the FJB portal.

#### Water drainage

The observation data at level -25 m shows that the normal water inflow is 55 m<sup>3</sup>/d, the maximum water inflow is 100 m<sup>3</sup>/d. It is estimated that the normal and maximum water inflows would be 778 m<sup>3</sup>/d and 1,556 m<sup>3</sup>/d respectively when mining moves to the deepest levels.

A water pump station and two water sumps (a total volume of 1,000 m<sup>3</sup>) will be located at level -596 m close to the main shaft. Four sets of water pumps (type 3NB155/8.0) will be installed in the water pump station to drain groundwater inflows out via seamless steel pipes installed in the main shaft. The water pipe has a 273 mm external diameter and 15 mm wall thickness.

#### Compressed air supply

A compressed air station will be located close to the main shaft portal. The compressed air will be supplied via the main pipes installed in the main shaft. Three sets of air compressors (type DLGF/21-

8-132(B)) will be installed to supply compressed air via seamless steel pipes.

#### Water supply

Mining water demand is about 50 m<sup>3</sup>/d. Domestic water demand is about 8 m<sup>3</sup>/d.

A newly built 300 m<sup>3</sup> elevated water tank will be located close to the main shaft portal to receive drained groundwater inflows. Water is supplied to the underground working faces via seamless steel pipes.

Domestic water will be supplied by nearby well water.

#### **Power supply**

A 10 kV general substation will be built close to the main shaft portal. It will be supplied with power primarily by the existing general substation (section 17.3) via 5.2 km long overhead power transmission line ("**PTL**"), and secondly by the 35/10 kV Xiachu Substation via 11 km long overhead PTL. Two transformers KSG-630/10/0.4kV will be installed in the substation. A standby diesel generator near to the main shaft will be relied on to supply 2,000 kW and 10 kV power to the main hoister and underground water pumps in case of emergency.

A low voltage substation will be built adjacent to the fan room at the FJB portal to distribute power to the main fan and auxiliary facilities. One transformer KSG-80/10/0.4kV will be installed in the substation. A standby diesel generator near to the FJB portal will be relied on to supply 120 kW and 400 V power to the main fan for the FJB in case of an emergency.

A low voltage substation will be built adjacent to the fan room at the SJ1 portal to distribute power to the main fan and auxiliary facilities. One transformer KSG-50/10/0.4kV will be installed in the substation. A standby diesel generator near to the SJ1 portal will be relied on to supply 75 kW and 400 V power to the main fan for the SJ1 in case of an emergency.

A mining substation will be built at level -215 m to distribute power to mining facilities and lighting. One transformer KSG-400/10/0.4kV will be installed in the substation.

A central substation will be built adjacent to the water pump station at level -596 m to distribute power to the water pump station, water pumps for the groundwater inflows gathered at the bottom of main shaft, lighting and others. Two transformers KSG-400/10/0.4kV will be installed in the substation.

#### Explosive supply and management

The explosive magazine will be located close to prospecting line 44 at level 25 m. It can store up two tonnes explosives and ten days detonator consumables. The explosives and detonators will be supplied by the local civil explosive company.

#### Backfilling

A backfill plant will be built to the north of main shaft. The main facilities include a 300 m<sup>3</sup> sand bin silo, a 60 t cement tank, a screw feeder and a  $\Phi$ 1,500×1,500 high concentration stirred tank.

The dry tailings from the TSF will be transported to the backfill plant by truck. The tailings mix with

cement to generate a slurry containing 68% to 72% tailings. The slurry is then backfilled to the mined-out areas via high density polyethylene pipes that have an external diameter of 110 mm and a wall thickness of 10 mm.

The average demand for the backfilling material is about 66.7 m<sup>3</sup>/d.

#### Communications

A program-controlled telephone exchange will be installed in the office building to provide mining workshops and service and administration departments with daily communication services. Communication cables will also be installed in tunnels and main working areas to allow in-time communication between persons below and on surface.

# 16 Recovery Methods

## 16.1 Current Status

Figure 16-1 shows some photos of the DGZ Processing Plant including the updated crushers vibrating screens as well as the original ball mills and flotation cells.

Figure 16-1: Photos of the DGZ Processing Plant



Sources: Photographs taken during the on-site investigation by SRK in March 2024

Both the HH Mine and CH Mine do not have independent processing plants. Historically, the ores from these two mines were transported to the DGZ Processing Plant and processed together with ore from DGZ Mine. The processing plant operates on a continuous basis with an annual operating rate of 90.4% and operates for 330 days or 7,920 hours per year.

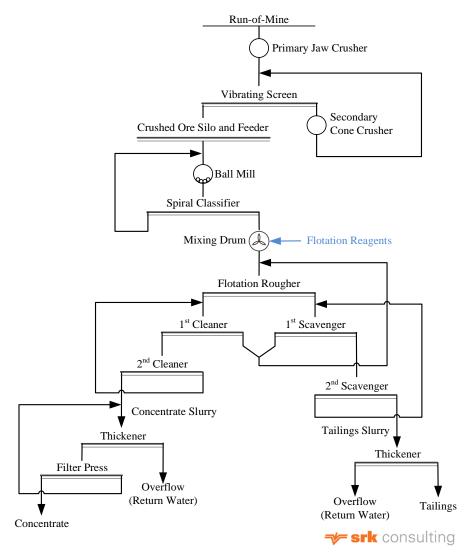
The current production capacity of the DGZ Processing Plant is 450 tpd. It employs flotation technology to process ore from three gold mines producing gold concentrate as the final product for sale. Currently the plant is undergoing technical upgrades to increase its capacity to 900 tpd. Since there is no associated TSF, the ore is transported to the Yantai City Dahedong Processing Co., Ltd ("**Dahedong Processing**") for processing on a subcontracting basis in January 2023.

The technical upgrade at the DGZ Processing Plant does not alter the production process. Instead, it involves replacing the original small-scale crushing and grinding equipment with larger equipment and increasing the number of flotation cells to achieve the production expansion goal. During SRK's site visit conducted in March 2024, it was observed that the main equipment for the crushing circuit has been updated and installed including a jaw crusher a cone crusher and a vibrating screen. However, the grinding and flotation equipment have not been updated. SRK did not see any feasibility study or plan for the plant's technical upgrade and therefore cannot determine its completion time.

## 16.2 Mineral Processing Flowsheet

The production process at the DGZ Processing Plant is conventional, as shown in Figure 16-2 and mainly consists of the following five operational steps:

- Crushing: A two-stage closed-circuit crushing process is employed with the product granularity being -15 mm.
- Grinding and classification: A single-stage closed-circuit grinding process is employed with the grinding fineness being -200 mesh accounting for 50-55% (P<sub>50-55</sub> = 75 μm).
- Flotation: A flotation process consisting of one roughing two scavenging and two cleaning stages ("1 roughing-2 scavenging-2 cleaning") is employed producing gold concentrate and tailings.
- Concentrate dewatering: A two-stage dewatering process involving concentration and pressure filtration is utilised to reduce the moisture content of the concentrate to below 8% for sale as the final product.
- Tailings treatment: Some of the tailings are used for underground backfilling while the remainder is treated by third-party companies. Yantai Mujin has signed tailings utilisation contracts with third-party companies which utilise the tailings as raw materials for new building materials.



### Figure 16-2: Flowchart of DGZ Processing Plant

Sources: Compiled by SRK based on on-site surveys and information provided by technical personnel from Yantai Mujin

## 16.3 Main Equipment and Facilities

The existing facilities of the processing plant include an ore stockpile, crushing workshop, screening workshop, powder storage, milling and flotation, concentrate dewatering facilities, and for mine water and processing process water aeration and purification facilities. The processing plant is equipped with a processing laboratory assay laboratory and maintenance workshop.

Yantai Mujin is currently undergoing expansion and renovation of the DGZ Processing Plant, increasing the ore processing capacity from the existing 450 tpd to 900 tpd. The planned equipment for 900 tpd is outlined in Table 16-1. Since the ore is of sulphide-quartz vein-type gold ore, which is easily crushed, ground and floated and the process is conventional with straightforward reagent systems, SRK believes that this equipment can achieve the processing capacity of 900 tpd. However, due to the reliance on the experience of Yantai Mujin's technicians for this expansion and renovation

and the lack of detailed technical studies and specific renovation plans, the final completion time is difficult to determine.

Name	Model	Quantity	Plan	Remarks
Crushing System				
Vibrating Feeder	GZD-700×250	1	Reuse	
Jaw Crusher	C80	1	Replace	Completed
Vibrating Screen	JLZ1848D	1	Replace	Completed
Cone Crusher	GP-220	1	Replace	Completed
Grinding and Flotation Workshop				
Ball Mill	MQG2745	1	Replace	Not yet
Spiral Classifier	FG-30	1	Replace	Not yet
Agitation Tank	Ф3×3 m	1	Reuse	
Flotation Machine	XCF-8	4	Reuse	
Flotation Machine	BSK-8	6	Reuse	
Flotation Machine	XCF-16	4	Reuse	
Flotation Machine	BSK-16	4	New	Completed
Dewatering System				
High-efficiency Thickener	NZSG-15	1	Reuse & updating	Not yet
Filter	240 m2	2	Reuse	

 Table 16-1:
 Main Equipment and Upgrade Plan for DGZ Processing Plant

Sources: On-site investigation by SRK and communication with management and technical staff of DGZ Processing

## **16.4 Historical Production Performance**

The ores from Yantai Mujin's three mines were not processed separately. Historically, they were mixed together for production. The processing capacity of the DGZ Processing Plant is 450 tpd. When the volume of ore entering the processing plant is high, nearby processing plants are also subcontracted for processing. The historical processing indices are shown in Table 5-5.

The data in Table 5-5 reflects the good selectivity of the DGZ Mine and HH Mine with gold recovery rates exceeding 90%. Although the concentrate grade is not high, it is easy to extract gold during smelting which is sold to nearby gold smelters by Yantai Mujin. The ore processing technology at the DGZ Processing Plant involves the flotation of gold minerals along with all sulphide minerals into gold concentrate. However, there is a lack of analytical data on beneficial elements such as silver and sulphur as well as deleterious elements such as arsenic content in the concentrates. Over the years, the sales of gold concentrates have not yielded any additional profits from silver or sulphur nor have any price discounts been given due to arsenic content.

## 16.5 Water Supply

All the water used for processing comes from underground mining drainage. The underground mine water inflow is pumped to the processing plant's water treatment facilities where it undergoes aeration and coagulation purification. The cleaning water is then pumped into the high-level water

tank of the processing plant for production with any excess cleaning water being discharged externally. The recycled water from the processing plant including water from the concentrate and tailings discharge is entirely reused. Historically, there have been no water shortages.

## 16.6 Power Supply

The main transformers and distribution facilities for DGZ Processing Plant are located in the plant area. There are two main transformers, one with a capacity of 5,000 kVA and another with a backup capacity of 4,000 kVA. The power is supplied from the national grid's 35 kV TPL and reduced to 10.5 kV through the main transformers and distributed to the transformers at various facilities in the dressing plant and at the portals of the underground mine. Management and power duty personnel of DGZ Processing Plant told SRK that the power supply is sufficient with almost no occurrences of power outages or restrictions.

## 16.7 Flotation Reagents and Materials Supply

The main consumables at the processing plant are steel balls, mill liners and flotation reagents. The DGZ Processing Plant is located in the resource-rich Jiaodong Peninsula where various parts consumables and processing reagents are readily available and can be purchased in Yantai City. Particularly noteworthy is that the flotation collector, liquid xanthate #1, is produced by the nearby Humon Auxiliary Plant. It has a low content of effective ingredients but is inexpensive and it yields good flotation results.

## 16.8 Tailings Storage Facility

DGZ Processing Plant does not have its own TSF. Historically, tailings were discharged into the nearby TSF owned by Shandong Humon Smelting Co., Ltd ("**Shandong Humon**"). During SRK's site visit, DGZ Processing Plant provided a tailings treatment agreement signed with Yantai Qingrun Environmental Protection Technology Co. Ltd ("**Yantai Qingrun**"). The tailings produced by the processing plant is utilised for underground backfilling, provided that the requirements for underground filling are met. The remaining portion is sent to a third-party company for treatment.

During the site visit conducted in March 2024, SRK did not observe the third-party company's actual treatment of the tailings as the DGZ Processing Plant was not in operation. SRK recognises that tailings treatment is crucial for mining production. If the tailings treatment agreement is not effectively implemented, it could significantly impact the operation of the DGZ Processing Plant, potentially leading to shutdowns. In such a scenario, the ore could be processed by entrusting it to a third-party plant. DGZ Processing Plant provided a contract signed with Dahedong Processing for entrusted processing. SRK believes that, even if the DGZ Processing Plant were to close under extreme circumstances, ore could still be processed through entrusted Dahedong Processing.

# 17 Project Infrastructure

## 17.1 Roads

Accessibility of Muping Project is described in section 4.1.

The DGZ Mine, CH Mine, HH Mine, DGZ Processing Plant and office buildings are easily accessed via paved roads. Both the mined ores and gold concentrates can be transported easily.

SRK viewed several transportation contracts about the ore's transfer from the mines to DGZ Processing Plant or the destinations specified by Yantai Mujin. The transport contractor provides drivers and vehicles. The transportation cost is RMB 12 per wet tonne ore, regardless of the transport distance. The contract is valid for one year, and is automatically renewed unless a new contract is signed.

## 17.2 Water Supply

The process water is primarily sourced from the extracted groundwater from DGZ Mine. Stacked histogram of groundwater yield at DGZ Mine is shown in Figure 17-1. The total measured groundwater extracted in 2023 from DGZ Mine is 499,940 m<sup>3</sup>. The chart shows that the groundwater yield is almost stable in the months from October to June, then rose in the months from July to September. The normal yield of groundwater is about 1,520 m<sup>3</sup>/d at the DGZ Mine. The groundwater was pumped to the surface 2,000 m<sup>3</sup> pool, then treated by the 4,000 m<sup>3</sup>/d wastewater treatment facilities to get clean water, which is distributed to underground mine and processing plant to support production. Yantai Mujin spent RMB 527 thousand per annum on fixed assets' depreciation, RMB 144 thousand per annum on workforce, RMB 257 thousand on maintenance, and RMB 223 thousand on reagents.

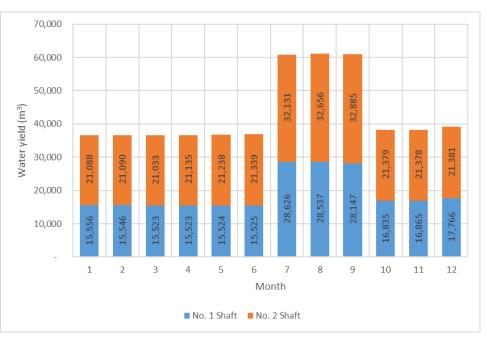


Figure 17-1: Groundwater Yield by Month in 2023 at DGZ Mine

#### Sources: PRH2

The domestic water is supplied by Shandong Humon via a 2 km long, 110 mm external diameter polyethylene pipelines. The water supplying and usage contract was signed between Shandong Humon and Yantai Mujin. The annually consumed domestic water is about 88,292 m<sup>3</sup> at a cost of RMB 0.9 per cubic metre. The water resource tax was RMB 499,940 in 2023. A water supply contract signed on 18 January 2017 between Shandong Humon and Yantai Mujin was viewed by SRK. The price of water supply is RMB 1.5 per cubic metre.

## 17.3 Power Supply

Yantai Mujin owned a 35/10 kV general substation. The general substation was supplied with primary power from the Jinniushan Substation in Shuidao County via the 1.5 km long 35 kV overhead powerline, and the secondary power from the Yulindian Substation via a 9 km long 10 kV overhead powerline. A power supply contract signed between State Grid Yantai Muping Power Supply Company and Yantai Mujin on 25 November 2019 was viewed by SRK. The power supply contract is valid until 24 November 2024. If no changes are made to the contract terms, the power supply contract is automatically renewed every five years.

Two transformers S11-5000kVA/35kV/10kV and S11-4000kVA/35kV/10kV are installed in the general substation to transform the voltage.

The electricity price is RMB 0.71 per kilowatt-hours ("**kWh**"). Electricity consumed was 567,465 kWh in 2023. Yantai Mujin spent RMB 863 thousand per annum on fixed assets' depreciation, RMB 144 thousand per annum on workforce, RMB 336 thousand on maintenance in 2023.

# **18 Market Studies and Contracts**

## 18.1 Products and Clients

The final product is gold bullion with a gold grade no less than 99.9%. Gold sales recorded in years from 2021 to 2023 and 6M2024 are shown in Table 18-1. There are four major customers of gold bullion, which bring more than 94% of revenue to the Muping Project in the period shown in Table 18-1. One of customers is Yantai Guoda Trading Co., Ltd (**"Yantai Guoda"**).

Product	Unit	2021	2022	2023	6M2024
99.9% gold bullion	koz	2.1	0.7	2.9	2.2
99.9% gold bullion	kg	66.8	23.3	89.6	70.0
Price	RMB/g	376.8	392.9	403.2	438.8
Revenue	RMB mln	25.2	9.2	36.1	30.7

Table 18-1: Gold Sales Record

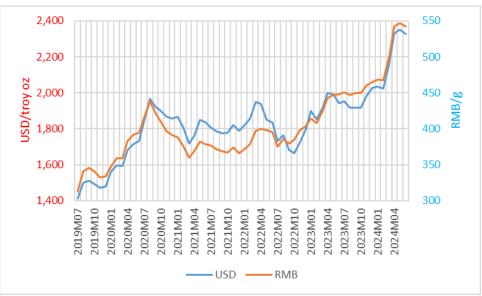
Sources: Yantai Mujin

## 18.2 Prices

The average price of gold sold in the last three years are shown in Table 18-1 for Yantai Mujin.

The World Bank monthly gold price data since July 2019, which are 99.5% fine, London afternoon fixing, average of daily rates, were used by SRK to draw the trend line shown in Figure 18-1. The exchange rate of converting United States Dollar ("**USD**" or "**US\$**") to RMB since July 2019 is shown in Figure 18-2. Summary statistics of gold prices and exchange rates in the last 36 months are presented in Table 18-2.

Figure 18-1: Gold Price Trend since July 2019



Sources: SRK analysis of World Bank price data



Figure 18-2: Exchange Rates of RMB/USD since July 2019

Sources: SRK analysis of World Bank exchange rate data from https://databank.worldbank.org/source/global-economic-monitor-(gem)#

Table 18-2:	Summary Statistics of Exchange Rate and Gold Price
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ltem	Exchange Rate (RMB/USD)	Gold Price (USD/troy oz)	Gold Price (RMB/g)
Monthly Average			
Month numbers	36	36	36
Minimum	6.34	1,664.45	366.55
Maximum	7.30	2,351.13	546.73
Standard deviation	0.3386	166.1690	50.9662
Mean	6.88	1,913.91	424.06
Yearly Average			
Month numbers	36	36	36
Minimum	6.41	1,795.38	371.74
Maximum	7.22	2,078.04	482.64
Standard deviation	0.2848	75.9856	32.2769
Mean	6.77	1,860.94	405.38

Sources: SRK analysis of World Bank price data and the exchange rate data from <a href="https://databank.worldbank.org/source/global-economic-monitor-(gem)#">https://databank.worldbank.org/source/global-economic-monitor-(gem)#</a>.

Gold price forecasts of Consensus Market Forecasts (the "**CMF**") delivered in June 2024 are shown in Table 18-3. The gold price was converted to RMB/g by considering an exchange rate of 6.77 RMB/USD (yearly mean value in Table 18-2). At the Effective Date, the long-term forecast of CMF at middle level was used for Mineral Reserve estimate, while the price forecasts of CMF at middle level were used for economic analysis after years 2026. The price forecasts in Table 18-5 were used for economic analysis in years before 2027.

Price Level	Unit	2024	2025	2026	2027	2028	2029	post-2029
High	USD/troy oz	2,613	2,891	2,614	2,576	2,566	2,700	2,700
Middle	USD/troy oz	2,350	2,310	2,210	2,170	2,010	1,700	1,700
Low	USD/troy oz	1,953	1,716	1,602	1,501	1,441	1,430	1,430
Exchange rate	RMB/USD	6.77	6.77	6.77	6.77	6.77	6.77	6.77
High	RMB/g	569	629	569	561	558	588	588
Middle	RMB/g	512	503	481	472	437	370	370
Low	RMB/g	425	373	349	327	314	311	311

#### Table 18-3: Gold Price Forecasts of CMF

Sources: SRK analysis of CMF price data and the exchange rate data from <u>https://databank.worldbank.org/source/global-economic-monitor-(gem)#</u>.

## **18.3 Refining Contract**

Shandong Guoda Gold Co., Ltd ("**Shandong Guoda**") has been commissioned by Yantai Mujin to refine the gold concentrate to produce gold bullion. The latest refining contract was signed on 28 September 2023. SRK viewed the contract and summarised the main terms below:

- Gold concentrate delivered to the Shandong Guoda should have an even grade distribution. The gold grade shouldn't be less than 6.00 g/t, while both the arsenic and carbon grades shouldn't be greater than 0.5%. Shandong Guoda conducts sampling and analysing work to verify the quality of concentrates.
- Yantai Mujin is responsible for loading of gold concentrates. Shandong Guoda is responsible for transportation of gold concentrate and bears the relevant cost and insurance.
- The gold bullion can either be returned to Yantai Mujin or sold directly to the third parties appointed by Yantai Mujin.
- Return rate of gold is shown in Table 18-4.
- Refining cost is RMB 200 per tonne of dry concentrate.
- Shandong Guoda will provide Yantai Mujin with compensation for sulphuric acid ("CSA"). The CSA measures are described below:
  - in the case of sulphuric acid price greater than RMB 400 per tonne and not greater than RMB 1,000 per tonne, the CSA = (sulphuric acid price 400) × 35%+ 100;
  - in the case of sulphuric acid price not-greater than RMB 400 per tonne, the CSA = 100; and
  - in the case of sulphuric acid price greater than RMB 1,000 per tonne, the CSA is renegotiated.
- The contract is valid until the 27 September 2024. If no changes are made to the contract terms, the gold refining contract is automatically renewed one more year.

Concentrate Grade (g/t)	Return Rate of Gold (%)	
6.00-9.99	80	
10.00-14.99	85	
15.00-17.99	91	
18.00-19.99	92	
20.00-29.99	93	
30.00-39.99	94	
40.00-49.99	95	
50.00-59.99	96	
>=60.00	97	

 Table 18-4:
 Return Rate of Gold for Refining Process

Sources: Gold Refining Contract signed between Shandong Guoda and Yantai Mujin on 28 September 2023

## **18.4 Sales contract**

SRK viewed a sales contract signed on 1 January 2024 between Yantai Guoda and Yantai Mujin. The main terms are summarised below:

- The delivered gold bullion must contain no less than 99.9% gold. The surface of gold bullion should be dry, with neither impurity nor greasy.
- The deliver point is in the Yantai Guoda's office that is situated at Number 668, Guoda Road, Zhaoyuan City, Shandong Province.
- Fire assaying is used for determination of gold content.
- Gold is the only valuable element. The spot price of Au (Trade+Delay) on the Shanghai Gold Exchange in hours either from 9:15 to 11:15 or from 13:45 to 15:15 is adopted as the base price. The base price deducts 0.6 RMB/g to get the settlement price. At the time of this report, SRK was provided with four pricing agreements, showing the key information in Table 18-5.
- The contract is valid until 31 December 2025. The sales contract is not automatically renewed.

 Table 18-5:
 Key Information of Pricing Agreements

Signing Date	Quantity (kg gold bullion)	Price (RMB/g)	
27 February 2024	50	479.95	
4 March 2024	100	489.05	
7 March 2024	50	501.90	
7 March 2024	50	502.00	

Sources: Pricing Agreements signed on 27 February 2024, 4 March and 7 March 2024 between Yantai Guoda and Yantai Mujin.

# 19 Environmental Studies, Permitting and Social or Community Impact

## 19.1 Objective

The objective of this technical 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 Muping Project.

## 19.2 Review Process Scope and Standards

The process for verifying the environmental permitting and licensing compliance and operational conformance for the Muping Project comprised a review and inspection of the Muping Project's environmental management performance against:

- Chinese national environmental regulatory requirements; and
- World Bank/ International Finance Corporation ("IFC") environmental standards and guidelines and internationally recognised environmental management practices.

The methodology applied for this environmental review of the Muping Project consisted of a combination of documentation review, site visit and interviews with Yantai Mujin's technical representatives. The site visit was conducted from 9 to 12 March 2024.

## **19.3 Environmental Permits**

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. Furthermore, SRK noted that the operation of HH Mine and CH Mine were ceased during the time of this site visit.

ltem	Description
Project	DGZ Mine
Safety production permit number	(Lu) FM [2023] 00-0051
Issued to	Yantai Mujin
Issued by	Department of Emergency Management of Shandong Province
Licenced activity	Underground Operation
Issue date	25 May 2023
Expiry date	24 May 2026

 Table 19-1:
 Safety Production Permit for DGZ Mine

Sources: SRK

### 19.3.1 Safety Production Permit

Department of Emergency Management of Shandong Province issued the safety production permit to DGZ Mine on 25 May 2023. The permit area covers gold silver and sulphur mining, and the permit

is valid until 24 May 2026.

Details for the existing safety operational permit for the DGZ Mine is presented in Table 19-1.

#### 19.3.2 Water Use Licence

Yantai Muping District Water Bureau issued a water use licence to Yantai Mujin on 29 June 2023. The licence allows the withdrawal of 721,600 m<sup>3</sup> of water per year and the water source type is groundwater, and is valid until 2 July 2025.

#### 19.3.3 Site Discharge Permit

Yantai Mujin has registered the discharge of fixed pollution sources on 29 May 2020. The registration number is 91370612165353779m001Y and is valid until 28 May 2025.

## **19.4 Environmental Approvals**

The basis of environmental policy in China is contained in the 2018 Constitution of the People's *Republic of China (the "Constitution")*. Pursuant to Article 26 of the *Constitution,* that the China protects and improves the environment in which people live and the ecological environment. It prevents and controls pollution and other public hazards. The state organizes and encourages afforestation and the protection of forests.

The following are other Chinese laws that provide environmental legislative support to the *Minerals Resources Law of the People's Republic of China (2019)* and the *Environmental Protection Law of the People's Republic of China (2014)*:

- Environmental Impact Assessment ("EIA") Law (2018).
- Law on Prevention & Control of Atmospheric Pollution (2018).
- Law on Prevention & Control of Noise Pollution (2021).
- Law on Prevention & Control of Water Pollution (2017).
- Law on Prevention & Control Environmental Pollution by Solid Waste (2020).
- Forestry Law (2021).
- Water Law (2016).
- Land Administration Law (2019).
- Protection of Wildlife Law (2023).
- Regulations on the Administration of Construction Project Environmental Protection (2017).

In accordance with Chinese legislation, the Muping 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. Yantai Mujin has provided SRK with the EIA reports and approvals for the Muping Project which are shown in Table 19-2.

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. SRK has sighted three WSCP reports and approvals for the Muping Project which are shown in the Table 19-3.

Project	Prepared by	Report Date	Approved by	Approval Date
DGZ Mine Expansion Project (165 ktpa)	Shandong Yinglin Environmental Technology Ltd	March 2023	Yantai City Environmental Protection Bureau	20 March 2023
HH Mine Mining and Processing Project (50 ktpa)	Shandong Academy of Environmental Science	August 2011	Shandong Province Environmental Protection Bureau	
CH Mine Expansion Project (60 ktpa)	Shandong Academy of Environmental Science Ltd	January 2019	Shandong Province Ecology and Environmental Protection Bureau	28 January 2019

Sources: SRK

Table 19-3: Details of the WSCP Reports and Approv	ovals
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Project	Prepared by	Report Date	Approved by	Approval Date
DGZ Mine Expansion Project (165 ktpa)	Yantai Hongjian Geological and Mining Consulting Ltd	June 2020	Shandong Province Water Bureau	6 July 2020
HH Mine Project (50 ktpa)	Yantai City Muping District Water Survey and Design Institute	April 2011	Yantai City Muping District Water Bureau	29 April 2011
CH Mine Expansion Project (60 ktpa)	Weihai Water Building Design Ltd	April 2017	Shandong Province Water Bureau	28 April 2017

Sources: SRK

SRK has reviewed environmental-related documents against Chinese legislation and recognised international industry environmental management standards guidelines and practices. In the following sections, SRK provides comments in respect to the Muping Project's proposed environmental management measures.

## 19.5 Key Environmental and Social or Community Aspects

#### 19.5.1 Water Management

There are three main rivers near the Muping Project area, including Denggezhuang River, Shuidao River and Huanglei River. The Shuidao River originates south of Denggezhuang Village, flows north to south through Shuidao Town and is an intermittent river with a drainage area of 3.78 km<sup>2</sup>. It joins the Huanglei River system at the border with Rushan City entering the territory of Rushan City and eventually empties into the Yellow Sea. Denggezhuang River is a tributary of the Shuidao River with a smaller flow rate. SRK also noted that there are some reservoirs located around the three mine sites and nearby villages.

The mine water of DGZ Mine is used as a production water source for mining and processing. SRK

has sighted a domestic water supply agreement which was signed between Yantai Mujin and Shandong Humon on 18 January 2017. SRK recommends Yantai Mujin acquire the water use permits for HH Mine and CH Mine if the two mines start operation. SRK also recommends that the Muping Project should implement a sustainable water supply management plan to minimise its impact on natural systems through the management of water use, and to avoid the depletion of aquifers and reduce the impact on other water users. Alternative water sources can be provided if the development affects the surrounding community's access to water.

The potential negative impacts of the Muping Project to surface water and groundwater 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 Muping Project include mine water, processing wastewater, tailings and waste rock leachate, hazardous waste leachate, wastewater from maintenance workshop, industrial site rainwater, domestic sewage etc. During the site visit conducted in March 2024, SRK observed that there was a mine water treatment facility constructed at the HH Mine site to dispose of the mine water. However, HH Mine is currently not in production. SRK has also sighted a mine water treatment facility operating during the site visit at DGZ Mine. Polyacrylamide is used for flocculation precipitation to purify mine water. According to the *EIA report for DGZ Mine Expansion Project*, the existing mine water treatment facility will be upgraded to dispose of more mine water. There is a clear sign at the mine water outlet. The treated mine water will be discharged through open channels into the Denggezhuang River which will then converge into Shuidao River and eventually join the Huanglei River. During the site visit conducted in March 2024, the DGZ Processing Plant is not operational. Thus, there was no processing wastewater generated.

The EIA approvals for HH Mine Mining and Processing Project and CH Mine Expansion Project requires that the mine water be prioritized for production after being treated to meet the standards and the rest to be discharged. The domestic wastewater is also required to be fully reused for water sprinkling and greening on site according to the EIA approvals.

At present, DGZ Mine conducts environmental monitoring every three months including discharged mine water and groundwater. Yantai Mujin provided a monitoring report for DGZ Mine conducted in September 2023 which included monitoring of wastewater from the mine site outfall and groundwater quality from wells in three nearby villages. SRK recommends that quality monitoring be undertaken of the groundwater and surface water resources within all three mines area (including upstream and downstream of the Muping Project area) and also any site water discharges. SRK also recommends Yantai Mujin construct an effective drainage system to divert run-off from undisturbed areas around disturbed areas. In addition, some prevention measures such as surface hardening, second containment facility and accident pool are recommended to mitigate the water pollution risks.

### 19.5.2 Waste Rock and Tailings Management

According to the *EIA report for DGZ Mine Expansion Project*, DGZ Mine has a waste rock transfer stockpile facility located on the east side of the main shaft site. The waste rock temporary storage stockpile covers an area of 500 m<sup>2</sup>. The bottom of waste rock yard adopts cement concrete to prevent seepage and interceptor ditch will be constructed around the waste rock stockpile facility. During the site visit conducted in March 2024, SRK observed there was a small waste rock dump at the DGZ Mine facility. Yantai Mujin stated that most of the waste rock generated by DGZ Mine is used for nearby village's road construction.

The EIA states that coarse tailings from DGZ Mine Expansion Project will be sold as construction materials and fine tailings are used for underground backfilling. As the processing plant was non-operational, Yantai Mujin informed SRK that the ore currently mined was transported to a third party processing plant for processing.

No geochemical characterisation of waste rocks and tailings or acid rock drainage assessment has been sighted as part of this review. Acid rock drainage ("**ARD**") refers to the acidic water that is created when sulphide minerals are exposed to air and water, and through a natural chemical reaction produce sulphuric acid. ARD has the potential to introduce acidity and dissolved metals into water which can be harmful to surface and groundwater. In addition, the EIA reports for the Muping Project did not make any descriptions relating to the toxicity identification of waste rock and tailings. However, no evidence of acid rock drainage was observed during the time of this site visit.

### 19.5.3 Site Ecological Assessment

The landform and topography in the Muping Project's area is commonly changed by mining solid, waste dumping, haul roads, office buildings and dormitories and other facilities. The development of the Muping 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 utilisation function will be changed, causing an increase in land desertification, water loss and soil erosion. The project's EIA should determine the extent and significance of any potential impacts to flora and fauna habitat. Where these potential impacts to flora and fauna habitat are determined to be significant, the EIA should also propose effective measures to reduce and manage these potential impacts.

According to ecological baseline study for DGZ Mine, the area does not involve national parks, nature reserves, World Natural Heritage sites, important habitats, ecological protection red lines etc. The vegetation types in the Muping Project area are relatively rich. Among the natural vegetation, red pine forests are predominant with other naturally coexisting tree species such as oak, cork oak and chestnut. Common shrub species in the understory include brambles, sour jujubes, chamomile, forsythia and persimmon. The main wild animals include hedgehogs, hares, sparrows, magpies etc. The areas where the mines are located are not distribution areas for protected animals and plants. During EIA on-site surveys, nationally rare and endangered protected animals and plants were not found within the mine area. The EIA concludes that the Muping Project will not cause significant changes in the species composition of the entire ecological community within the evaluation area nor will it lead to the disappearance of any specific animal or plant species. The EIA also recommends a set of ecological management measures including soil erosion control and land reclamation.

### 19.5.4 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 Muping Project's construction, mining and processing operations, and include of 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 Muping Project's operations will comprise the storage and

handling of processing reagents, waste oil, waste hydraulic oil, waste oil drum, waste lead battery, etc. The explosive magazines are located to the north of DGZ Mine site and are generally well managed. During the site visit conducted in March 2024, SRK noted that there was a hazardous waste storage facility at DGZ Mine site with clear warning signs outside. 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.

### 19.5.5 Dust and Noise Emissions

The dust emission sources for the Muping Project are mainly from drilling, loading and unloading waste rock dumping, ore stockpile crashing and movement of vehicles and mobile equipment. Dust management measures for the mine site and processing plant proposed in the EIA reports mainly comprise wet drilling, water sprinkling of haul roads and industrial sites enclosing of waste rock temporary storage yard using dust collector etc. During the site visit conducted in March 2024, SRK observed that the dust collector was used for ore crushing process.

The main sources of noise emissions for the Muping Project are from the operation of the mining and 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 workshop, sealing sound insulation cover, muffler wall, sound absorption and sound insulation are to be adopted as noise prevention measures.

No significant noise and dust emissions were observed during the site visit. However, due to the distribution of residents around the mining area, the haul road prevention measures should be strengthened to reduce the impact on the surrounding environment.

### 19.5.6 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, 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 Yantai Mujin's safety production management system, occupational health work plan, safety production work plan and emergency response plan for the DGZ Mine and concluded that the development of these plans complies with relevant Chinese requirements.

No historical occupational health and safety records for the Muping Project has been sighted as part of this review. SRK recommends Yantai Mujin conduct safety record and develop incident analysis reports for the possible injuries in future. The proposed reports analysed the cause of injuries and identified measures to prevent a recurrence which are in line with international recognised occupational health and safety accident monitoring practice.

### 19.5.7 Site Closure Planning and Rehabilitation

The Chinese national requirements for mine closure are covered under Article 21 of the Mineral Resources Law of People's Republic of China (2023), the Rules for Implementation of the Mineral Resources Law of the People's Republic of China, the Mine Site Geological Environment Protection

*Regulations (2019)* and the *Land Rehabilitation Regulation (2011)* issued by the State Council of the People's Republic of China. In summary, these legislative requirements cover the need to conduct land rehabilitation to prepare a site closure report and to submit a site closure application for assessment and approval.

According to the Chinese legal requirements, a geological environmental protection and reclamation plan should be developed for the proposed mining project. In addition, a mine geological environment treatment and restoration fund account should be established by the mine. SRK has reviewed three geological environmental protection and reclamation plan reports prepared for DGZ Mine, HH Mine, and CH Mine, respectively. These reports conducted assessments on the geological and environmental impacts of the mines as well as evaluations of land destruction. They also analysed the feasibility of geological and environmental management of the mines and land reclamation and provided cost estimates. The total estimated cost for geological environmental protection and land reclamation for DGZ Mine, HH Mine, and CH Mine are RMB 15.0 million ("mln"), 3.6 mln and 7.1 mln, respectively.

### 19.5.8 Social Aspects

The Muping Project is located in Muping District, Yantai City, Shandong Province. The general surrounding land of the mine sites is forest farmland and industrial use land.

The main administrative body for the Muping Project is the People's Government of Shandong Province with some delegation of environmental regulation to the Yantai City and Muping District. Yantai Mujin reported to SRK that there was no historical or current non-compliance notices and or other documented regulatory directives in relation to the development of Muping Project. During the site visit conducted in March 2024, Yantai Mujin also stated that there are no significant cultural heritage sites within the Muping Project area.

There are some villages and residential settlements around the Muping Project area. During the preparation of the three EIAs, public participation was conducted. The surveyed population expressed no objections to the development and construction of the Muping Project. A public consultation and disclosure plan is recommended to ensure ongoing community engagement. Furthermore, SRK recommends that Yantai Mujin develop a Grievance Mechanism to receive and address specific concerns raised by affected persons or members of host communities in a timely fashion.

# 20 Capital and Operating Costs

The deliverable of this section is to provide readers with independent opinions of SRK about the capital costs ("**Capex**") and operating costs ("**Opex**").

## 20.1 Sunk Capex

Many costs have been expended as of the Effective Date and these expended costs were treated as sunk Capex. Summary of sunk Capex is summarised in Table 20-1 and Table 20-2. The net value of sunk Capex is about RMB 252.4 mln as of 30 June 2024, including RMB 250.4 mln for the DGZ Mine, RMB 1.3 mln for the CH Mine and RMB 0.7 mln for the HH Mine.

Item	Original Value	Depreciation and Amortization	Net Value	
Electronic devices	9.7	5.8	3.9	
Buildings	233.0	189.9	43.2	
Machinery	52.6	28.7	23.9	
Transportation equipment	4.4	3.4	1.0	
Other fixed assets	15.8	5.5	10.4	
Construction in progress	47.9	-	47.9	
Right-of-use assets	15.7	10.9	4.7	
Intangible assets [1]	119.1	5.1	114.1	
Long-term deferred assets <sup>[2]</sup>	3.3	-	3.3	
Total	501.6	249.2	252.4	

Table 20-1: Summary of Combined Sunk Capex, as of 30 June 2024 (RMB mln)

Sources: PRH2

Notes:

<sup>1</sup> Mining licence and exploration licence fee.

<sup>2</sup> Exploration fee.

#### Table 20-2: Summary of Sunk Capex for Each Mine, as of 30 June 2024 (RMB mln)

Item	<b>Original Value</b>	Depreciation and Amortization	Net Value	
DGZ Mine				
Electronic devices	9.1	5.5	3.5	
Buildings	127.8	84.9	43.0	
Machinery	46.7	22.8	23.9	
Transportation equipment	4.4	3.3	1.0	
Other fixed assets	9.2	0.2	9.0	
Construction in progress	47.9	-	47.9	
Right-of-use assets	11.1	6.4	4.7	
Intangible assets <sup>[1]</sup>	119.1	5.1	114.1	
Long-term deferred assets [2]	3.3	-	3.3	
Total	378.6	128.1	250.4	

Item	<b>Original Value</b>	Depreciation and Amortization	Net Value	
CH Mine				
Electronic devices	0.3	-	0.3	
Buildings	0.4	0.2	0.2	
Machinery	0.0	0.0	-	
Transportation equipment	-	-	-	
Other fixed assets	4.0	3.3	0.7	
Construction in progress	-	-	-	
Right-of-use assets	1.8	1.8	-	
Intangible assets <sup>[1]</sup>	-	-	-	
Long-term deferred assets <sup>[2]</sup>	-	-	-	
Total	6.5	5.2	1.3	
HH Mine				
Electronic devices	0.4	0.3	0.1	
Buildings	104.8	104.8	-	
Machinery	5.8	5.8	-	
Transportation equipment	0.1	0.1	-	
Other fixed assets	2.6	2.0	0.6	
Construction in progress	-	-	-	
Right-of-use assets	2.8	2.8	-	
Intangible assets <sup>[1]</sup>	-	-	-	
Long-term deferred assets <sup>[2]</sup>	-	-	-	
Total	116.6	115.9	0.7	

Sources: PRH2

Notes:

<sup>1</sup> Mining licence and exploration licence fee.

<sup>2</sup> Exploration fee.

## 20.2 Initial Capex

Construction of the Muping Project commenced in April 1982, with production commencing in April 1986. The investments in the future years are accounted in the sustaining Capex, as shown in section 20.3.

## 20.3 Sustaining Capex

Yantai Mujin planned to invest RMB 124.6 mln, 12.0 mln and 89.4 mln to modify the DGZ Mine, DGZ Processing Plant and CH Mine in the years 2024 to 2029. The investment plan of sustaining Capex is shown in Table 20-3. There is no investment plan in place for the HH Mine.

## 20.4 Working Capital

Working capital is about RMB -241.5 mln as of 30 June 2024, which was calculated with the

current assets of RMB 39.4 mln and the current liabilities of RMB 280.9 mln. The working capital increments in 6M2024 is about RMB -8.6 mln. Based on the signed contracts, SRK noted that RMB 183 mln of current liabilities will be deferred to the year 2026.

Besides of the current liabilities, there are non-current liabilities of approximately RMB 111.1 mln, as of 30 June 2024.

Property	2024	2025	2026	2027	2028	2029	Total
DGZ Mine	2.0	2.0	3.6	6.7	98.3	11.9	124.6
DGZ Processing	-	3.6	3.6	3.6	1.2	-	12.0
CH Mine	0.8	0.8	1.4	2.5	75.4	8.6	89.4
Total	2.8	6.4	8.5	12.8	174.9	20.6	226.1

Table 20-3: Investment Plan in Years 2024 to 2029 (RMB mln)

Sources: PRH2

#### Table 20-4: Opex Records of Muping Project

Item	2021	2022	2023	6M2024
Annual Cost (RMB mIn/a)				
Workforce employment	2.7	4.2	17.8	9.3
Consumables	1.1	0.6	4.5	2.8
Fuel, electricity, water and other services	16.3	5.3	19.7	7.9
On and off-site administration	13.9	18.3	14.7	10.8
Environmental protection and monitoring	-	-	-	-
Transportation of workforce	-	-	-	-
Product marketing and transport	-	-	-	-
Non-income taxes, royalties and other governmental charges	1.4	1.2	2.0	1.4
Contingence Allowance	0.7	0.0	0.3	0.2
Total	36.1	29.8	59.0	32.4
Unit Cost (RMB/t mined)				
Workforce employment	374	297	349	215
Consumables	144	44	88	65
Fuel, electricity, water and other services	2,226	372	385	184
On and off-site administration	1,905	1,293	288	251
Environmental protection and monitoring	-	-	-	-
Transportation of workforce	-	-	-	-
Product marketing and transport	-	-	-	-
Non-income taxes, royalties and other governmental charges	185	88	39	32
Contingence Allowance	100	3	5	4
Total	4,935	2,097	1,154	751

Sources: PRH2

## 20.5 Opex Records

A summary of cash costs, which excludes the depreciation, amortisation and financial costs from the total costs, is shown in Table 20-4. It should be noted that:

- production in the period between 2021 and the first seven months in 2022 was significantly interrupted by the Provincial Government due to safety production inspection and the suspension of DGZ Mine's producing; and
- Dahedong Processing has been commissioned by the Yantai Mujin to process the ore since the suspension of DGZ Processing. The contract signed on 25 December 2022 was sighted by SRK. The processing cost is 40 RMB/t ore. The transportation cost is 12 RMB/t ore.

Overall, Opex was mainly spent on tunnels driven in years 2021, 2022 and first half of 2023. The Opex records did not provide a fair representation of economic condition of Yantai Mujin.

## 20.6 Opex Forecasting

SRK was provided with production schedules in the years from 2024 to 2028 and the six months from 1 January to 30 June in 2029 ("**6M2029**"). The forecasting of Opex was summarised in tables from Table 20-5 to Table 20-7. The Opex forecasting of DGZ Mine increased from the 515 RMB/t ore to 539 RMB/ore. The Opex forecasting of HH Mine increased from the 435 RMB/t ore to 461 RMB/ore. The Opex forecasting of CH Mine is 490 RMB/t ore.

A little modification was made to Yantai Mujin's forecast to estimate Opex of DGZ Mine by SRK. SRK's forecasting is shown in Table 20-8. SRK didn't estimate Mineral Reserves for the HH Mine and CH Mine, so the Opex forecasting on these two mines are not furtherly considered in this QPR.

The year-by-year Opex forecasting was set forth in Table 20-9. The average Opex is about 609.5 RMB/t RoM.

#### Table 20-5: Opex Forecasting of DGZ Mine

Item	2024	2025	2026	2027	2028	6M2029
Annual Cost (RMB mIn/a)						
Workforce Employment	22.0	22.0	22.0	22.0	31.3	15.7
Consumables	7.3	7.3	7.6	7.6	27.5	13.8
Fuel, Electricity, Water and Other Services	3.2	3.2	3.2	3.2	3.0	1.5
On and off site administration	13.6	13.6	14.1	14.1	20.7	10.4
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	-	-
Non-income Taxes, Royalties and Other Governmental Charges	3.3	3.8	3.9	3.9	6.5	3.2
Contingency Allowances	-	-	-	-	-	-
Total	49.4	49.9	50.8	50.8	89.0	44.5
Unit Cost (RMB/t ore)						
Workforce Employment	229	229	229	229	190	190
Consumables	76	76	79	79	167	167
Fuel, Electricity, Water and Other Services	33	33	33	33	18	18
On and off site administration	142	142	147	147	126	126
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	-	-
Non-income Taxes, Royalties and Other Governmental Charges	35	40	41	41	39	39
Contingency Allowances	-	-	-	-	-	-
Total	515	520	529	529	539	539

Sources: Yantai Mujin

Table 20-6:	Opex Forecasting of HH Mine
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Item	2024	2025	2026	2027	2028	6M2029
Annual Cost (RMB mIn/a)						
Workforce Employment	-	-	9.6	9.6	9.6	4.8
Consumables	-	-	5.9	6.0	6.0	3.0
Fuel, Electricity, Water and Other Services	-	-	6.2	6.2	6.2	3.1
On and off site administration	-	-	3.2	3.2	3.2	1.6
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	-	-
Non-income Taxes, Royalties and Other Governmental Charges	-	-	1.2	1.4	1.4	0.7
Contingency Allowances	-	-	-	1.3	1.3	0.6
Total	-	-	26.1	27.7	27.7	13.8
Unit Cost (RMB/t ore)						
Workforce Employment	-	-	160	160	160	160
Consumables	-	-	98	100	100	100
Fuel, Electricity, Water and Other Services	-	-	104	104	104	104
On and off site administration	-	-	53	53	53	53
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	-	-
Non-income Taxes, Royalties and Other Governmental Charges	-	-	20	23	23	23
Contingency Allowances	-	-	-	21	21	21
Total	-	-	435	461	461	461

Sources: Yantai Mujin

#### Table 20-7: Opex Forecasting of CH Mine

Item	2024	2025	2026	2027	2028	6M2029
Annual Cost (RMB mIn/a)	-	-	-	-	13.6	6.8
Workforce Employment	-	-	-	-	7.2	3.6
Consumables	-	-	-	-	0.8	0.4
Fuel, Electricity, Water and Other Services	-	-	-	-	5.9	3.0
On and off site administration	-	-	-	-	-	-
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	1.9	0.9
Non-income Taxes, Royalties and Other Governmental Charges	-	-	-	-	-	-
Contingency Allowances	-	-	-	-	29.4	14.7
Total	-	-	-	-	13.6	6.8
Unit Cost (RMB/t ore)						
Workforce Employment	-	-	-	-	227	227
Consumables	-	-	-	-	120	120
Fuel, Electricity, Water and Other Services	-	-	-	-	14	14
On and off site administration	-	-	-	-	98	98
Environmental protection and monitoring	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-
Product marketing and transport	-	-	-	-	-	-
Non-income Taxes, Royalties and Other Governmental Charges	-	-	-	-	31	31
Contingency Allowances	-	-	-	-	-	-
Total	-	-	-	-	490	490

Sources: Yantai Mujin

Item	Unit	Value
Workforce employment	RMB/t ore	200
Mining consumables <sup>[1]</sup>	RMB/t ore	55
Mining repairment <sup>[2]</sup>	RMB/a	3,400,000
Safety production <sup>[2]</sup>	RMB/t ore	15
Transport to processing plant <sup>[3]</sup>	RMB/t ore	12
Processing <sup>[3]</sup>	RMB/t ore	40
Refining <sup>[3]</sup>	RMB/t concentrate	100
Administration <sup>[4]</sup>	RMB/a	14,500,000
Selling <sup>[5]</sup>	% revenue	0.5
Real estate tax <sup>[6]</sup>	RMB/a	1,060,000
Mineral resources tax <sup>[6]</sup>	% revenue	4.2
Royalties for mining licence transfer <sup>[6]</sup>	RMB/a	9,560,280

#### Table 20-8: SRK's Opex Forecasting of DGZ Mine

Sources: SRK

Notes:

<sup>1</sup> Direct mining cost is the combination of workforce employment, consumables, fuel, electricity and water. This cost was simply assigned to the category consumables.

<sup>2</sup> Both the mining repairment and safety production fees are manufacturing overheads of mining operation. These two fees were assigned to the category fuel, electricity, water and other services.

<sup>3</sup> The costs related to transport and processing ore and refining concentrate were assigned to the category consumables. Regarding the refining cost, SRK assumed a CSA of 100 RMB/t.

- <sup>4</sup> The administration cost was assigned to the category on and off-site administration.
- <sup>5</sup> The selling cost was assigned to the category product marketing and transport.
- <sup>6</sup> The real estate and mineral resources taxes were assigned to the category non-income taxes, royalties and other government charges.

ltem	Total	2H2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual Cost (RMB mln)											
Workforce employment	261.3	9.6	19.2	19.2	19.2	33.0	33.0	33.0	33.0	33.0	29.1
Consumables	162.4	5.5	11.1	11.1	11.1	20.0	20.0	21.2	21.6	22.2	18.7
Fuel, electricity, water and other services	32.3	1.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
On and off-site administration	157.3	8.0	15.9	15.9	15.9	17.0	17.0	17.0	17.0	17.0	16.7
Environmental protection and monitoring	-	-	-	-	-	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-	-	-	-	-	-
Product marketing and transport	8.3	0.1	0.4	0.4	0.4	0.9	0.8	1.2	1.4	1.6	1.1
Non-income taxes, royalties and other governmental charges	174.7	10.9	13.7	13.8	13.6	18.6	17.4	21.0	22.0	23.8	19.8
Contingence Allowance	-	-	-	-	-	-	-	-	-	-	-
Total	796.3	35.8	63.7	63.8	63.6	92.9	91.5	96.9	98.3	101.0	88.7
Unit Cost (RMB/t RoM)											
Workforce employment	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
Consumables	124.3	113.8	115.4	115.4	115.4	121.1	121.1	128.7	130.7	134.5	128.7
Fuel, electricity, water and other services	24.7	35.4	35.4	35.4	35.4	20.6	20.6	20.6	20.6	20.6	23.4
On and off-site administration	120.4	166.0	166.0	166.0	166.0	102.9	102.9	102.9	102.8	102.9	114.7
Environmental protection and monitoring	-	-	-	-	-	-	-	-	-	-	-
Transportation of workforce	-	-	-	-	-	-	-	-	-	-	-
Product marketing and transport	6.3	3.0	3.9	3.9	3.7	5.8	4.9	7.5	8.2	9.5	7.5
Non-income taxes, royalties and other governmental charges	133.7	227.8	143.2	143.6	141.7	112.7	105.3	127.5	133.3	144.3	136.0
Contingence Allowance	-	-	-	-	-	-	-	-	-	-	-
Total	609.5	746.0	663.9	664.4	662.3	563.1	554.8	587.3	595.7	611.9	610.3

#### Table 20-9: Year-by-year Opex forecasting for DGZ Mine

Sources: SRK

# 21 Economic Analysis

## 21.1 Assumptions

The assumptions utilised in the economic analysis are summarised below:

- Only the DGZ Mine is reported with Mineral Reserves as of the Effective Date. Therefore, the economic analysis is only conducted on the DGZ Mine.
- The discounted cash flow method (the "DCF") was selected to conduct economic analysis. A widely accepted discount rate of 10% was used for calculation of present value.
- All the assumptions are subject to conditions obtained at the Effective Date.
- The production schedule is shown in Table 14-5 for DGZ Mine.
- The gold price is described in section 18.2.
- The sunk Capex is shown in Table 20-2. The depreciation and amortization ("DA") of sunk Capex were deducted from the taxable incomes to calculate corporate income tax ("CIT"). SRK was provided with a detail list of sunk Capex, so a detailed DA calculation was conducted with assumptions shown in Table 21-1.
- Construction of the Muping Project commenced in April 1982, with production commencing in April 1986. The investments in the future years were accounted in the sustaining Capex, as shown in Table 20-3.
- The Opex forecasting is shown in Table 14-5 for DGZ Mine.
- SRK was provided with an estimate of financial fee. The financial fees in 2H2024 and 2025 are RMB 2.3 mln and 4.3 mln, respectively. The financial fees in the later years are RMB 2.7 mln per annum.
- Neither ore nor gold bullion is stockpiled in each production year.
- The value-added tax ("VAT") is not charged in China for gold commodity.
- The rate of CIT is 15% of taxable income.

#### Table 21-1: DA Calculation Assumptions

Sunk Capex	DA Period (years)	Residual Rate (%)	Remarks
Electronic devices	3 to 6	-	Straight-line depreciation
Buildings	12 to 20	-	Straight-line depreciation
Machinery	10 to 12	-	Straight-line depreciation
Transportation equipment	4 to 12	-	Straight-line depreciation
Other fixed assets	12 to 20	-	Straight-line depreciation
Construction in progress	11	-	Unit of production amortization
Right-of-use assets	12 to 20	-	Straight-line depreciation
Intangible assets	11	-	Unit of production amortization
Long-term deferred assets	11	-	Unit of production amortization

Sources: SRK

## 21.2 Net Cash Flow Model

The net cash flow ("**NCF**") model is shown in Table 21-2.

Table 21-2:	NCF Model (RMB mln)
-------------	---------------------

ltem	Total	2H2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Cash Inflow											
Revenue	1,652.8	30.7	29.2	74.4	75.3	71.1	190.0	161.0	248.3	271.2	314.2
Reclaimed fixed assets	76.3	-	-	-	-	-	-	-	-	-	-
Reclaimed working capital	26.9	-	-	-	-	-	-	-	-	-	-
Sub-total	1,756.0	30.7	29.2	74.4	75.3	71.1	190.0	161.0	248.3	271.2	314.2
Cash Outflow											
Opex	796.3	32.4	35.8	63.7	63.8	63.6	92.9	91.5	96.9	98.3	101.0
CIT	83.3	2.0	-	-	-	-	10.0	4.5	15.0	17.9	23.3
Initial Capex	-	-	-	-	-	-	-	-	-	-	-
Sustaining Capex	135.6	1.0	1.0	5.6	7.2	10.3	99.5	11.9	-	-	-
Working capital	268.4	(8.6)	64.5	189.5	183.1	(183.4)	12.7	(2.6)	7.8	2.0	3.8
Sub-total	1,283.6	26.8	101.4	258.9	254.0	(109.5)	215.2	105.4	119.8	118.3	128.1
Net Cash Flow											
NCF	472.4	3.9	(72.1)	(184.4)	(178.7)	180.6	(25.3)	55.6	128.6	152.9	186.2

Sources: SRK

## 21.3 Net Present Value

The net present value ("NPV") is shown in Table 21-3, at the discount rate 10%.

 Table 21-3:
 NPV at Discount Rate 10% (post-tax, exclusive of sunk Capex)

Item	Unit	Value
Cumulated NCF	RMB mln	472
NPV	RMB mln	94
Internal rate of return ("IRR")	%	15.0
Static payback period	years	7.6
Dynamic payback period	years	9.0

Sources: SRK

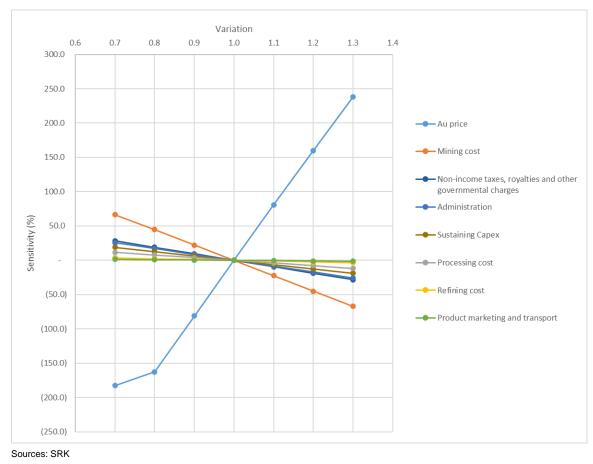
When SRK varied the discount rate, NPVs were re-calculated and presented in Table 21-4. The NPV decreased from RMB 240 mln to RMB 1 mln when the discount rate increased from 5% to 15%. The positive NPVs indicate that the Muping Project is economically viable.

Discount Rate (%)	NPV (RMB mln)	Dynamic payback period (years)	Static payback period (years)	IRR (%)
5	240	8.2		
6	206	8.3		
7	174	8.5		
8	145	8.6		
9	118	8.8		
10	94	9.0	7.6	15.0
11	72	9.2		
12	52	9.3		
13	33	9.5		
14	16	9.8		
15	1	10.0		

 Table 21-4:
 NPVs at Varied Discount Rate (post-tax, exclusive of sunk Capex)

Sources: SRK





# 21.4 Sensitivity Analysis

The sensitivity analysis of NPV, which is post-tax and exclusive of sunk Capex, is shown in Figure 21-1. The NPV is most sensitive to the gold price, the mining cost and the non-income taxes, royalties and other governmental charges.

## 21.5 Conclusions and Recommendations

A summary of economic analysis is shown in Table 21-5. The positive NPV indicate that the Muping Project is economically viable.

Item	Unit	Value	Remarks
Ore tonnage	kt	1,306	
Au grade in ore	g/t	3.8	
Au metal in ore	kg	5,000	
Au processing recovery rate	%	90	
Concentrate tonnage	kt	226	
Au grade in concentrate	g/t	20	
Au metal in concentrate	kg	4,520	
Tails tonnage	kt	1,081	
Au refining recovery	%	93	
Au returned tonnage	kg	4,203	
Production capacity	ktpa	165	
Life of mine	years	10	
Au average price	RMB/g	393	
Au sales revenue	RMB mln	1,652.8	
Opex	RMB mln	796.3	609.5 RMB/t RoM
CIT	RMB mln	83.3	
Sunk Capex	RMB mln	250.4	
Initial Capex	RMB mln	-	
Sustaining Capex	RMB mln	135.6	
NPV	RMB mln	94	discount rate 10%
IRR	%	15.0	
Static payback period	years	7.6	
Dynamic payback period	years	9.0	discount rate 10%

 Table 21-5:
 Summary of Overall Economics

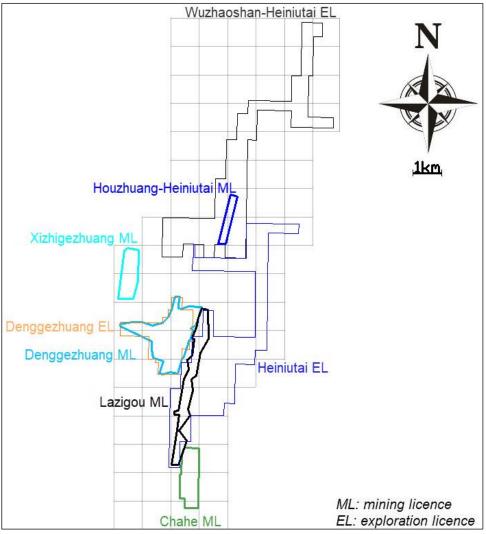
Sources: SRK

SRK noted that Yantai Mujin has a plan to restart the mining operations in CH Mine and HH Mine. It would be better to conduct economic analysis on these two mines too to get more reasonable assessment on the economic conditions of Yantai Mujin.

# 22 Adjacent Properties

Adjacent properties include Xizhigezhuang mining licence, Lazigou mining licence and Heiniutai exploration licence, which are held by Shandong Humon. Locations of these properties are presented in Figure 22-1. There is no overlap among the properties held by Yantai Mujin and Shandong Humon. It should be noted that only the valid licences are shown in Figure 22-1.

Figure 22-1: Adjacent Exploration and Mining Licences



Sources: SRK

# 23 Other Relevant Data and Information

No other relevant data or information is necessary to make the QPR understandable and not misleading.

# 24 Interpretation and Conclusions

SRK completed a risk assessment of the specific risks identified for the DGZ Mine in relation to their likelihood of occurrence within the LoM and consequence in accordance with *The Stock Exchange* of Hong Kong Limited Guidance Note 7 (the "Exchange Guidance Note 7") to the Rules Governing the Listing of Securities (the "Exchange Listing Rules").

In general, the risk of a project decreases from exploration, through development, to the production stage. The DGZ Mine is an advanced project.

SRK considered various technical aspects which may affect the feasibility and future cash flow of the DGZ Mine. SRK's final Risk Assessment is presented in Table 24-1.

In the risk assessment, various risk issues have been assessed for Likelihood, Consequence, and Overall Rating. SRK has used a matrix as described below.

The Likelihood of a risk is considered within a certain time frame, e.g., five years, as:

- Likely: will probably occur;
- **Possible:** may occur; or
- Unlikely: unlikely to occur.

The Consequence of a risk is classified as:

- Major: the factor poses an immediate danger to the Muping Project that, if uncorrected, will have a material effect on the Muping Project cash flow and performance and could lead a project failure;
- Moderate: the factor, if uncorrected, will have a significant effect on the Muping Project cash flow and performance; or
- Minor: the factor, if uncorrected, will have little or no effect on the Muping Project cash flow and performance.

The overall risk assessment combines the Likelihood and Consequence of a risk and be classified as Low (unlikely and possible minor risks, and unlikely moderate risk), Medium (likely minor, possible moderate, and unlikely major risks) and High (likely moderate and major risks, and possible major risks).

#### Table 24-1: Risk Assessment for DGZ Mine

Risk Source/Issue	Likelihood	Consequence	Risk
Geology and Mineral Resources			
Lack of significant Mineral Resource tonnage	Unlikely	Moderate	Low
Lower average grade of gold (i.e., 15% lower)	Unlikely	Moderate	Low
Unexpected groundwater ingress	Unlikely	Moderate	Low
Overestimate of Mineral Resource potential	Unlikely	Minor	Low
Improper classification of Mineral Resource category	Possible	Moderate	Medium
Misleading geological description (related to low- quality exploration done)	Unlikely	Moderate	Low
Lack of significant Mineral Resource tonnage	Unlikely	Moderate	Low
Mining			
Significant Production Shortfalls	Possible	Moderate	Medium
Significant Geological Structure	Unlikely	Minor	Low
Excessive Surface Subsidence	Unlikely	Minor	Low
Poor Underground Condition	Unlikely	Minor	Low
Poor Mine Plan	Possible	Moderate	Medium
Significantly lacking Mineral Reserves	Possible	Moderate	Medium
Ore Processing			
Lower Throughput	Possible	Moderate	Medium
Lower Recovery	Possible	Moderate	Medium
Higher Production Cost	Possible	Moderate	Medium
Environmental and Social			
Environmental Permits and Approvals	Unlikely	Moderate	Low
Water Management	Possible	Moderate	Medium
Solid Waste Management	Possible	Minor	Low
Social Aspects	Unlikely	Moderate	Low
Capital and Operating Costs			
Project Timing Delay	Possible	Moderate	Low
Capital Cost Increases	Possible	Moderate	Medium
Capital Costs- Ongoing	Possible	Moderate	Low
Operating Cost Underestimated	Possible	Moderate	Low

Sources: SRK

# **25** Recommendations

## 25.1 Geology

As observed by SRK for the Mineral Resource model, it can be noted that there are significant Inferred Mineral Resources occurring at deeply and in mineralisation alteration zone III. SRK suggests further exploration campaign may be performed to upgrade the category of these Inferred Mineral Resources to reduce exploitation risks and extend the life of mine.

Grade control should be performed to meet grade requirement of the processing plant. And SRK also suggests further surveys may be performed to construct the depletion model.

## 25.2 Mineral Processing and Recovery

The sulphide-bearing quartz vein type of gold ore has the characteristic of good selectivity. Although detailed metallurgical and processing test studies have not been conducted on the ores from the three Muping Project mines, the processing production has achieved good recovery rates. In the Yantai region, nearly all gold mines utilise simple flotation processes to produce gold concentrates which are then sold to gold smelters. With the well-developed gold mining industry in the Yantai region, there are no major risks in terms of technology or supply. However, for the DGZ Processing Plant, the absence of a TSF poses a significant risk to production. SRK recommends further research and implementation of technical and commercial solutions for zero tailings discharge.

## 25.3 Mineral Reserves

Only the Mineral Resources in DGZ Mine are converted to Mineral Reserves at the Effective Date based on the scope of work.

Yantai Mujin has planned to restart mining operations in HH Mine and CH Mine. If possible, the Mineral Resources in HH Mine and CH Mine may be converted to Mineral Reserves to bring additional economic values to the Muping Project under the guidance of *DUP on HH Mine* and *PD on CH Mine*.

## 25.4 Environmental Studies, Permitting and Social or Community Impact

SRK recommends that the Muping Project should implement a sustainable water supply management plan to minimise its impact on natural systems through the management of water use, avoid the depletion of aquifers and reduce the impact on water users. Alternative water sources can be provided if the development affects the surrounding community's access to water. SRK also recommends that water quality monitoring be undertaken of the groundwater and surface water resources within all three mines areas (including upstream and downstream of the Muping Project area) and also any site water discharges. A Grievance Mechanism will help Yantai Mujin receive and address specific concerns raised by affected persons or members of host communities in a timely fashion.

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Final

# Appendix A Exploration Licences

③次法律、法规规定,经审查 法探矿权,特发比证。          建造范囲島県単物或医体液面圖:       単進范囲島県単物或医体液面圖:         法死初元,公司       建造范囲島県単物或医体液面圖:         法死初00200810401015553       単進范囲島県北2112 20.00%,3711116.00%         第1700002008104010015553       地面加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加加								
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Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Exploration Licences - Final

#### DGZ Mine

(2000国家大地坐标系) 批准的勘查范围不包括编号为 C3700002011124210121312 的 采矿许可证(矿山名称;期台市牟金矿业有限公司后庄-黑牛台 序号 各区序号 经度 纬度 金矿区上载明的矿区范围。 15.828" 00.828" 00.828" 15.829" 45.828" 30.828" 30.828" 46.050" 46.050" 30.828" 30.828" 08.828" 45.828" 45.829" 30.829" 45.828 08.828" 30.829" 動查范围拐点坐标或区块范围图 13' 13' 14' 14' 14' 14' 15' 15' 12' 12' 12' 12' 12' 12' 12' 12' 12' 002,002,121° 35' 32,781″,37° 13 003,003,121° 35' 32,781″,37° 14 004,004,121° 35' 47,782″,37° 14 005,005,121° 35' 47,782″,37° 14 006,006,121° 37' 02,782″,37° 15 007,007,121° 37' 02,783″,37° 15 008,008,121° 37' 17,783″,37° 15 009,009,121° 36' 47,780″,37° 12 001,010,121° 36' 47,780″,37° 12 011,011,121° 36' 47,780″,37° 12 012,012,121° 36' 47,780″,37° 12 012,012,121° 36' 47,780″,37° 12 32.780", 37° , 37° , 37° , 37° , 37° ,37° 各区序号 经度 纬度 001, 001, 121° 35' 17.781" 17.780" 47.780" 17.780" 47.780" 17.780" 序号 各区序号 经度 纬 范围由 18 个拐点圈定 017, 017, 121° 35' 4 018, 018, 121° 35' 1 013, 013, 121° 36' 014,014,121° 36' 015,015,121° 36' 016,016,121°35' 经审查 中华人民共和国自然资源部印制 **勘查项目名称:**山东省烟台市牟平区五爪山-黑牛台地区金矿详 查 261 2023年12月26日至2028年12月25日 夏田市に強加 探矿权人地址:山东省烟台牟平区水道镇东山 T3700002008034010003855 (06020 法规规定 合格,授予採矿权,特发此证 权 人: 烟台市牟金矿业有限公司 2023F 山东省烟台市牟平区 6.41平方公里 J51E017007 **恨据国家法律** ۵þ יי .. Hu ор Ио 帮: 限: 证 臼 百 顒 冒 1ª 理 效 雹 蹂 嶅 有 **K**1 勘

Wuzhaoshan-Heiniutai Property

## Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Exploration Licences - Final

Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Mining licences 
Final

Appendix B Mining licences

80 80 28 76 76 94 61 03 81 64 62 51 共有36个拐点圈? 23, 4117720.60, 41375690. 24, 4117630.60, 41375639. 33, 4117048. 35, 41374364. 25, 4117536, 61, 41375601. 26, 4117087. 61, 41375453. 32, 4116920. 72, 41374729. 34, 4117328. 26, 41374329. 30, 4116463. 72, 41374729. 36.4118154.42.41373218. 27,4117002.61,41375381. 28, 4116494. 62, 41375237. 31, 4116482.13, 41374588. 35, 4117625.02, 41374329. 29, 4116538. 63, 41374981. (2000国家大地坐标系) 点号 X坐标 Y坐标 由137.0米至-840.0米标高 14, 4118844, 61, 41375639.85 16, 4118818. 59, 41376089.85 60, 41375690, 82 11, 4118772.76, 41375272.78 12, 4118764, 77, 41375398, 82 13, 4118775.61, 41375421.84 15, 4118840. 59, 41376049.85 4118184.60, 41375875.82 20, 4117996, 60, 41375797.82 10, 4118924. 15, 41375272.91 17, 4118378.60, 41375947,83 21, 4117912, 60, 41375755, 81 1, 4118215.24, 41373219.39 2, 4118298.97, 41373633.15 4117810.60, 41375727.81 3, 4118294.11, 41373983.04 4, 4118187.95, 41374356.60 5, 4118283. 16, 41374700. 75 6,4118465.21,41374900.83 7, 4118740.86, 41375028.28 8, 4119193.65, 41375143.61 9,4119191.79,41375324.96 范围拐点坐标 X坐标 Y坐标 营 4118086. 渓 山田  $\times$ 采 5 18, 19, 22, 井 中华人民共和国自然资源部印制 38年:07月18日 C370002009114120043348 烟台市年金矿业有限公司邓格庄金矿区 证 Щ K 烟台市牟金矿业有限公司 中华人民共和国 E 牟平区水道镇东山 其他有限责任公司 103年07 (劉本) 许 3.059平方公里 16.5万吨/年 地下开采 证号: 4 j 效期限: <sup>委拾伍</sup> 金司" 采 回祝: 采矿权人: 址: • • 山名称: 美型型 开采方式 开采矿种 **ア**规模 经济 X 휜 5 ₩ LOT. 5

#### DGZ Mine

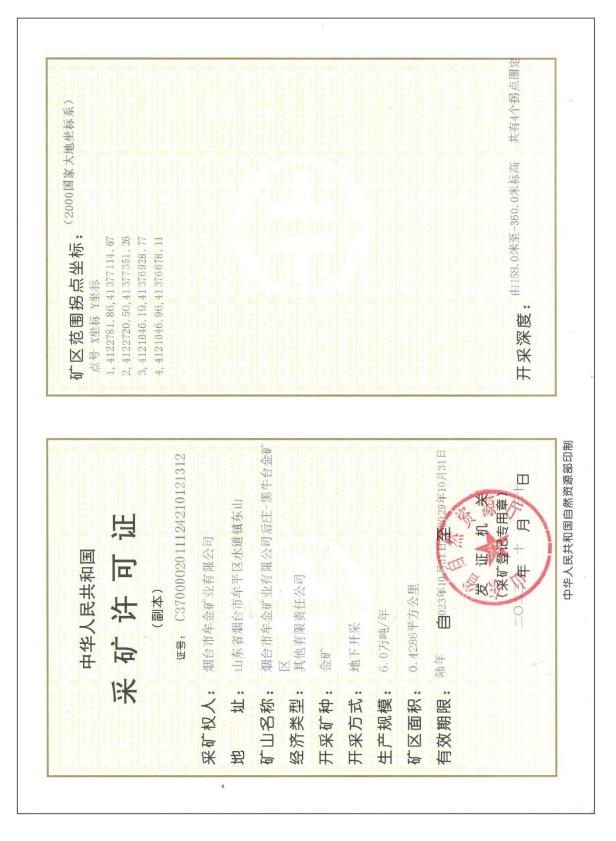
Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Mining licences 
Final

CH Mine

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中华人民共和国	采矿许可证	(副本) <sub>证号1</sub> C3700002008094120000994	采矿权人: 烟台市年金矿业有限公司	酒台市年平区水道镇东山	调台市年金矿业有限公司岔洞矿区	有限责任公司	金矿、银、硫	地下开采	6.0万吨/年	1.2698半方公里	董抬年自2021年02月19日 日 二 二 二 二 二 二 二 二 二 二 二 二 二 二 二 二 二 二	
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Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Mining licences 
Final

#### HH Mine



Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Date and Signature • Final

## Appendix C Date and Signature

This report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* with an effective date of on 30 June 2024, was prepared by

Dr Anshun (Anson) Xu, Corporate Consultant (Geology)

Xiaofeng (Shawn) Qing, Senior Consultant (Geology)

Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Date and Signature 
Final

叔

Yanfang (Bonnie) Zhao, Principal Consultant (Geology)

Huaixiang (Hubert) Li, Senior Consultant (Geology)

Yonggang Wu, Principal Consultant (Mining)

Erwei Lu, Consultant (Mining)

Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China Date and Signature 
Final

Lanliang Niu, Principal Consultant (Processing)

Chao Ding, Consultant (Processing)

Nan Xue, Principal Consultant (Environment)

and reviewed by

consult

Alexander Thin, Principal Consultant (Mining)

## Appendix D Certificate and Consent

#### Dr Anshun (Anson) Xu

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Anshun (Anson) Xu, do hereby certify that:

- I am a Corporate Consultant in Geology and Mineral Resources, partner and director with the firm of SRK Consulting China Ltd (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I graduated with a Bachelor's degree in Geology of Mineral Deposits from Nanjing University, China (B.Sc.) in 1982, a Master's degree in Geology of Mineral Deposits from Chengdu University of Technology, China (M.Sc.) in 1988, and a Doctoral degree in Geology from University of Nebraska-Lincoln, USA (Ph.D.) in 1996. I have practiced my profession since 1982. From 1982 to 1990 I worked in teaching geochemistry and geology of ore deposits in Chengdu University of Technology. From 1990 to 1996, I worked in University of Nebraska-Lincoln in teaching and researching assistance; and from 1996 to 2004 I worked in Canadian mining companies, and since 2005 I worked in mining consulting business in SRK. I worked in exploration management, mineral resource estimates, and technical review and preliminary economic assessment and reporting for various types of mineral deposits, including iron, gold, silver, copper, nickel, cobalt, lead-zinc, diamond, bauxite, and others located in China, Canada, Mongolia, Kazakhstan, Indonesian, Philippines, North Korea, Congo (King), Cameron, Madagascar, and Peru, etc. I authored/co-authored several technical reports for IPO listing or transactions in the TSX/TSXV and The Stock Exchange of Hong Kong Limited.
- I am a fellow of the Australasian Institute of Mining and Metallurgy (the "FAusIMM") (No.224861) since 2005, and in a good standing.
- I have visited the subject property from 18 to 20 April 2024.
- 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.
- I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.

- I am a co-author of this technical report and have supervised the independent verification completed by SRK and the preparation of executive summary and the mineral resource model described in Section 13 of this technical report. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project's personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Anson Xu, PhD, FAusIMM (No.224861) Corporate Consultant (Geology)

#### Xiaofeng (Shawn) Qing

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Xiaofeng (Shawn) Qing, do hereby certify that:

- I am a Senior Consultant in Geology, working in SRK Consulting China Ltd. (the "SRK") with an office at: Room 4803, Spring City 66, Panlong District, Kunming City, Yunnan Province, the People's Republic of China (the "PRC" or "China").
- I graduated with a Bachelor's degree in Geology from China University of Geosciences at Wuhan in 1991. I have practiced my profession since 1991. I am a geologist with more than 18 years' experience in mineral exploration and geotechnical engineering. My experience includes drilling, pitting design and construction management, on-site investigation of underground projects and tunnels, geo-mechanical analyses, and project management.
- I am a member of the Australasian Institute of Mining and Metallurgy (the "MAusIMM") (No.329013) since 2018.
- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Sections 8, 9, 10 and 11 of this technical report. I accept professional responsibility for those sections I co-authored.

- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project' s personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Xiaofeng (Shawn) Qing, BEng, MAusIMM (No.329013) Senior Consultant (Geology)

### Yanfang (Bonnie) Zhao

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Yanfang (Bonnie) Zhao, do hereby certify that:

- I am a Principal Consultant in Geology, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I graduated in 2009 from the China University of Geosciences (Beijing) and has 14 years of experience geological modelling, mineral resource estimations, technical reporting, gap analysis and due diligence studies. As a consulting geoscientist, I have been active in over 70 mineral projects including due diligence reviews, exploration design, data verification, resource estimation and preparing Qualified Person Report in China, Mongolia, Indonesia, Cambodia, Malaysia, Serbia, Australia, Ecuador and many countries of Africa with minerals including Au, Ag, Cu, Fe, Pb, Zn, Mo, Co, Cr, bauxite and Coal. I am proficient in using mining software, including Surpac, Minex, Leapfrog, ArcGIS, and AutoCAD etc.
- I am a member of the Australasian Institute of Mining and Metallurgy (the "MAusIMM") (No. 315027) since 2013.
- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Sections 4, 5, 6, 7 and 13 of this technical report. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.

- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project's personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

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Yanfang (Bonnie) Zhao, MEng, MAusIMM (No.315027) Principal Consultant (Geology)

### Huaixiang (Hubert) Li

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Huaixiang (Hubert) Li, do hereby certify that:

- I am a Senior Consultant in Geology, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I graduated with a Bachelor's degree in Earth Information Science and Technology from China University of Geoscience (Beijing) in 2007, a Master's degree in Mineral Resource Prospecting and Exploration from China University of Geosciences (Beijing) in 2010. I have practiced my profession since 2010. From 2010 to 2016 I worked in China Railway Resources Exploration Co., LTD and since 2021 I worked in consulting business in SRK. I have gained lots of experiences and expertise in geological and mineral resources exploration. As a consulting geologist, I have participated tens of metal mineral projects, including exploration design review, data verification, due diligence reviews and mineral resource estimation.
- I am a member of the Australian Institute of Geoscientists (the "MAIG") (No.8667) since 2023.
- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Sections 13.4 and 13.5 of this technical report. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.

- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project's personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

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Huaixiang (Hubert) Li, MEng, MAIG (No.8667) Senior Consultant (Geology)

## Yonggang Wu

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Yonggang Wu, do hereby certify that:

- I am a Principal Consultant in Mining Engineering, working in SRK Consulting China Ltd. (the "SRK") with an office at: Room 1104, Investment Building, No.66 East Yangming Road, Donghu District, Nanchang City, Jiangxi Province, the People's Republic of China (the "PRC" or "China").
- I graduated with a Bachelor's degree in Mining Engineering from Jiangxi University of Science and Technology, China (B.Eng.) in 2004, and a Master's degree in Mining Engineering from Jiangxi University of Science and Technology, China (M.Eng.) in 2007. I joined SRK after graduation from Jiangxi University of Science and Technology in 2007. I have acquired specialised knowledge of mining engineering and MineSight software and has been involved in a large number of projects to date. Minerals involved include Au, Pb, Zn, Mn, Cu, Fe, fluorite, potassium salts, alum, phosphorus, and many more. I have accumulated extensive experience in mineral resource/reserve estimation, open pit limit optimisation and design, underground mining design, long-term production planning, and due diligence studies. I have expertise in geological and mining modelling and is proficient in using MineSight, Surpac, AutoCAD, and other specialised software packages.
- I am a member of the Australasian Institute of Mining and Metallurgy (the "MAusIMM") (No.320985) since 2015, and in a good standing.
- I have visited the subject property from 28 and 31 December 2023 and from 9 to 12 March 2024.

- 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.
- I, as a Qualified Person, am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
- I am a co-author and chief compiler of this QPR and have supervised the preparation of mineral resource estimate in Section 13, mineral reserve estimate in Section 14, and Sections 1, 2, 3, 15, 17, 18, 20, 21, 22, 23, 24, 25 and 26 of this QPR. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project' s personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Yonggang Wu, MEng, MAusIMM (No.320985) Principal Consultant (Mining)

#### Erwei Lu

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Erwei Lu, do hereby certify that:

- I am a Consultant in Mining, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I obtained my bachelor's degree and master's degree in mining engineering from Central South University. I have over five years of practice of underground operation, and about one year's mineral project evaluation experience. I worked as an on-site mining engineer in Zambia for China Nonferrous Metal Mining (Group) Co.,

Ltd. after graduation in 2017. I also worked for an autonomous driving application and mineral project investment companies since 2022. I am familiar with large scale underground mobile equipment operation and training, long-hole blasting, mine design and scheduling, and production management, as well as autonomous driving application in open pit mine, and project evaluation.

- I didn't visit the subject property.
- I am a co-author of this technical report and prepared the Section 14 of this technical report under the supervision of Anshun Xu and Yonggang Wu. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project' s personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Erwei Lu, MEng Consultant (Mining)

#### **Lanliang Niu**

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Lanliang Niu, do hereby certify that:

- I am a Principal Consultant in Mineral Processing, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I graduated with a Bachelor's degree in Mineral Processing from Beijing University of Science & Technology in 1987. I have practiced my profession since 1983. From 1983 to 1995 I worked in technical research and consulting of gold industry in Rock and Mineral Test Centre of Henan Province. I am rewarded a Second Prize

and a Third Prize of Ministry of Geology and Minerals of PRC for the significant contribution to development of geological technology practices on gold heap leach. From 1996 to 2005, I am engaged in mineral processing research on various minerals. From 2005 to 2007 I worked in a rare earth mine in Sichuan Province. Since 2007 I worked in mineral processing consulting business in SRK. I participated in more than a hundred projects in SRK.

- I am a member of the Australasian Institute of Mining and Metallurgy (the "**MAusIMM**") (No.301789) since 2009.
- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Sections 12 and 16 of this technical report. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project's personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Lanliang Niu, MAusIMM (No.301789) Principal Consultant (Mineral Processing)

#### **Chao Ding**

To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Chao Ding, do hereby certify that:

- I am a Consultant in Mineral Processing, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I graduated with a Master's degree in Mineral Processing from Kunming University of Science & Technology in 2018. After graduation, between 2018 and 2019, I was employed in the R&D department of Haiwang Cyclone

Co., Ltd., where I was responsible for cyclone selection and participated in research projects on ore grinding and classification. From 2019 to 2022, I served as a production engineer at Ramu Nickel Cobalt Management (MCC) Ltd. (Papua New Guinea), overseeing the production management of lateritic nickel ore and conducting in-depth studies on the separation, enrichment, and purification processes of the ore. Between 2022 and 2023, I worked in Pu Kai Mining Co., Ltd., engaging in investment and production development projects for new energy mines. Since 2023 I worked in mineral processing consulting business in SRK.

- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Section 16 of this technical report under the supervision of Lanliang Niu. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project' s personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.

Chao Ding, MEng Consultant (Mineral Processing)

#### Nan Xue

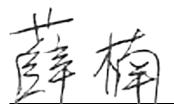
To accompany the report entitled *Independent Qualified Person's Report for the Muping Gold Project in Shandong Province, China,* the **Muping Project**, and was effective on 30 June 2024,

I, Nan Xue, do hereby certify that:

- I am a Principal Consultant in environment, working in SRK Consulting China Ltd. (the "SRK") with an office at: B1301 COFCO Plaza, No.8 Jianguomennei Dajie, Beijing, the People's Republic of China (the "PRC" or "China").
- I hold Master of Environmental Science from Nankai University and Master of Business Administration from Beihang University, respectively. I have over fifteen years' experience in environmental impact assessment,

environmental planning and management, environmental due diligence and ESG-related field. I have been involved in a number of large EIA projects and pollution source surveys for SINOPEC as well as in the environmental-planning project funded by UNDP. I have particular expertise in construction project engineering analysis, pollution source calculation, and impact predictions. I also have an acute understanding of equator principles, International Finance Corporation environmental and social performance standards and other international standards related to ESG. After joining SRK, I have been involved in a number of IPO and due diligence projects in China, Laos, Russia, Mongolia, Philippines, Indonesia, Kazakhstan, Kyrgyzstan, South Africa, DRC, Ecuador, Chile and Ghana; the clients include Zijin Mining, Future Bright Mining, CNMC, China Gold, Shandong Gold, Chifeng Gold, Sino Steel, Tianqi Lithium, etc.

- I am a member of the Australasian Institute of Mining and Metallurgy (the "MAusIMM") (No. 314731) since 2013.
- I have visited the subject property from 9 to 12 March 2024.
- I am a co-author of this technical report and prepared the Sections 19 of this technical report. I accept professional responsibility for those sections I co-authored.
- I have had no prior involvement with Muping Project.
- I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith.
- SRK was retained by PRG Res Holding 2 Ltd ("PRH2") to prepare a technical report about the Muping Project pursuant to Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1 guidelines. The preceding report is based on site visits, a review of project files, and discussions with PRH2 and Muping Project' s personnel.
- I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Muping Project or securities of PRH2.
- That, as of the date of 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.



Nan Xue, MSc, MBA, MAusIMM (No.314731) Principal Consultant (Environmental)