

NI 43-101 Technical Report for the Chang Shan Hao (CSH) Gold Property, Inner Mongolia, the People's Republic of China

**Report Prepared for
China Gold International Resources Corp. Ltd.**



Report Prepared by
CGME Consulting Limited
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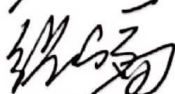
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Abbreviations

3D	Three-dimensional
°	Degree
°C	Degree Celsius
%	Percent
AFS	Atomic fluorescence spectrometry
Ag	Chemical symbol for silver
AIG	Australian Institute of Geoscientists
ALS Guangzhou	the ALS Chemex (Guangzhou) Co Ltd
Ar	Archean
ARD	Acid Rock Drainage
As	Chemical symbol for arsenic
ASL	Above sea level
Au	Chemical symbol for gold
AusIMM	Australasian Institute of Mining and Metallurgy
bcm	bulk cubic meter
Beijing 1954	Topographic projection system of Beijing 1954, 6-degree Zone, Zone 19
BGRIMM	Beijing General Research Institute of Mining & Metallurgy
Brigade 217	Brigade 2017 of the Nuclear North-western Geological Bureau
CAPEX	Changes of capital expenditure
CGG	China Gold International Resources Corp. Ltd.
CGME	CGME Consulting Ltd.
CGSC2000	China Geodetic Coordinate System 2000
Changchun Institute	Changchun Gold Design Institute
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
Client	Inner Mongolia Pacific Mining Co. Ltd.
cm	Centimetre
CNAS	the China National Accreditation Service for Conformity Assessment
CNCA	Certification and Accreditation Administration of the P. R. China
COG	Cut-off grade
Company	Inner Mongolia Pacific Mining Co. Ltd.
CRMs	Certified reference materials
CSH	Chang Shan Hao Gold Project
CSH Gold Project	Chang Shan Hao Gold Project
CV	Coefficients of variation
dB	decibel
DCF	Discount Cash Flow
deposit	Earth material of any type, either consolidated or unconsolidated, that has accumulated by some natural process or agent
DTH	Down-the-hole
dpa	Day per annual
E	East
EDS	Energy Dispersive Spectrometer
EIA	Environment Impact Assessment
EL	Exploration permit licence
ENE	East northeast

ESE	East southeast
EW	East west
FA	Fire assay
Fe	Chemical symbol for iron
Fm.	Formation, a lithologic unit
Form 43-101F1	Form 43-101F1 Technical Report and Related Consequential Amendments
g	Gram
G&A	General and administrative
g/cm ³	Gram per cubic centimetre
GIS	Global Information System
GPS	Global Position System
g/t	Gram per tonne
ha	hectare
HDPE	polyethylene
HKEx	The Stock Exchange of Hong Kong Limited
HSE	health, safety and environment
ID	Identity number, or Indicated Mineral Resource
ID2	Inverse Distance Squared
IF	Inferred Mineral Resource
ilac-MRA	the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement
IME	the International Metallurgical and Environmental Inc.
IMP	Inner Mongolia Pacific Mining Co. Ltd.
Ivanhoe	Ivanhoe Mines Ltd.
ITR	Independent Technical Review
Jinyou Geology	Beijing Jinyou Geology and Exploration Corp Ltd.
JORC	the Joint Ore Reserves Committee Code
k	Thousand
kg	Kilogram
km	Kilometre
km ²	Square kilometre
kg	Kilogram
kt	Thousand tonnes
kV	Kilovolt
kW	Kilowatt
L	Litre
l/s	Litre per second
Listing Rules	Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
LOI	Loss on ignition
LoM	Life of Mine
m	Metre
M	Million
m ²	Square meter
m ³	Cubic metre
mg	Milligram

m ³ /h	Cubic meters per hour
m ³ /s	Cubic meters per second
MAIG	Member of Australasian Institute of Geoscientists
MAusIMM	Member of the Australian Institute of Mining and Metallurgy
mm	Millimetre
ML	mining permit license
MNR	the Ministry of Natural Resources of the People's Republic of China
MS	Category of measured mineral resource
Mt	Million tonnes
Mt/d	Million tonnes per day
Mtpa	Million tonnes per annum
MW	Megawatt
N	North
NE	Northeast
NI43-101	The Canadian Securities Administrator's National Institute 43-101.
Ni	Chemical symbol for nickel
Ningxia Hejia	Ningxia Hejia Mining Co. Ltd.
Ningxia Institute	Ningxia Nuclear Geology and Exploration Institute
Ningxia Pacific	Ningxia Pacific Mining Co. Ltd.
NNE	North northeast
NNW	North northwest
NW	Northwest
NPV	Net Present Value
NQ	Drill core size (47.6 mm in diameter)
OK	Ordinary Kriging
Opex	Operating Expenditure
oz	Ounce
Pacific Minerals	Pacific Minerals Inc.
PPE	Personal Protection Equipment
P.R. China	People's Republic of China
Project	Chang Shan Hao Gold Project
Pt ₁	Paleoproterozoic
Pt ₂	Mesoproterozoic
Pt ₃	Neoproterozoic
Py	pyrite
QA/QC	Quality Assurance and Quality Control
QC	Quality control
QP	Qualified person
Report	Technical report
RL	Retain level
RMB	Chinese yuan, or yuan
ROM	run of mine
RPEEE	Reasonable Prospect for Eventual Economic Extraction
RQD	Rock Quality Designation
RTK	Real time kinematic
S	Chemical symbol for Sulphur
SD	Standard Deviation
SE	Southeast

SG	Specific Gravity
SGS Lab	SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd
SSE	South southeast
SW	Southwest
SWG	Southwestern Gold Corporation
t	Tonne
tpa	Tonne per year
tpd	Tonne per day
TSX	Toronto Stock Exchange
TSFs	Tailings storage facilities
µm	Micrometres
USD	USA dollar
UTM	Universal Transverse Mercator
WNW	West-northwest
X	Easting
Y	Northing
Z	Elevation

1 Executive Summary

The Chang Shan Hao (“CSH”) Gold Project (the “CSH Gold Project” or the “Project”) is an advanced exploration and production Project, located in Wulate Zhongqi, Bayan Nuo’er City, Inner Mongolia. It is situated about 630 kilometres (“km”) northwest (“NW”) of Beijing, the capital of the People’s Republic of China. Inner Mongolia Pacific Mining Co., Ltd. (“IMP” or the “Client”, or the “Company”) owns an 100% interest in the Project area, including all mineral resource and mineral reserve estimates, and mining operation reported in this technical report (the “Report”).

The information provided by the Company demonstrates that China Gold International Resources Corp. Ltd. (“CGG”) based in Vancouver, Canada owns 96.5% interest of the Project property, and the Ningxia Nuclear Geology and Exploration Institute (“Ningxia Institute”), based in Yingchuan, capital of Ningxia Hui Autonomous Region in China, holds 3.5% interest. The last technical report of CSH Gold Project in compliance with NI 43-101F1 was disclosed in Toronto TSX by CGG, which was titled *Technical Report Expansion Feasibility Study for the Chang Shan Hao (CSH) Gold Project Inner Mongolia, the People’s Republic of China* dated October 2012.

In March 2022, IMP commissioned CGME Consulting Ltd. (“CGME”) to prepare an updated geological and Mineral Resource/Reserves models for the CSH Gold Project. These services were rendered in from March 2022 to July 2022, leading to the preparation of the Mineral Resource/Reserve statements.

This technical report documents a Mineral Resource and Mineral Reserve Statement for the CSH Gold Project, as prepared by CGME, following the Standards of Disclosure of the Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1. The Mineral Resource and Mineral Reserve statements reported herein were prepared in conformity with the Canadian Institute of Mining, Metallurgy, and Petroleum’s (“CIM”) “Definition Standards – for Mineral Resources and Mineral Reserves” dated May 10, 2014 and “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29, 2019.

CGG is now listed in Toronto Stock Exchange (“TSX”), which is also extended to have been listed in The Stock Exchange of Hong Kong Limited (“HKEx”). CGME understands this Report will be used by CGG for disclosure of Mineral Resources and Mineral Reserves to its shareholders on the TSX and the HKEx.

Outline of Work Program

CGME’s work program included two phases as follows:

Phase I:

- CGME personnel conducted a site visit, to review the available primary database, discuss the Project with site technicians; and
- Site inspections include updated drilling programs, exploration drilling operating, core logging, onsite laboratory, exploration quality assurance and quality control (“QA/QC”) procedure, mining operation, heap-leaching, desorption workshop for gold-loaded carbon, and waste dump, etc.

Phase II:

- Date collection, further discussion with site technicians, and verification of all available primary database information;
- Analysis of QA/QC results;
- Construction of a new geological model and estimation of Mineral Resources/Reserves;
- Verification of CGME’s block model against Company’s internal geological model and mining operation records;
- Preparation of a draft report and delivery to the IMP for comment;
- Amendment of the draft report as needed; and
- Completion and finalisation of the report and presentation to the IMP.

Results

Property Description and Location

The CSH Gold Project is located approximately 60 km northeast (“NE”) of Wulate Zhongqi County Town, Inner Mongolia, or about 7 km north of Xinhure Sumu Town of Wulate Zhongqi, at geographic coordinates 41°39’01”– 41°41’01” North and 109°11’27” – 109°16’57” East.

As of 17 March 2022, the CSH Gold Project includes one mining license and one exploration licence, both of which are under the name of the Inner Mongolia Pacific Mining Co., Ltd., and were issued by the Ministry of Natural Resources of the People’s Republic of China (“MNR”).

The mine construction began in March 2004, and the trial production at a capacity of 20,000 tonnes per day (“tpd”) or 6.6 million tonnes per annum (“Mtpa”) commenced in July 2007, and the capacity was then expanded by adding a new crushing facility in September 2009 to 30,000 tpd or 9.9 Mtpa. By the end of 2013, another 30,000 t/d or 9.9 Mtpa crushing facility was commissioned, and the total processing capacity of the CSH Gold Project became 60,000 t/d or 19.8 Mtpa. In July 2019, CSH updated its mine plan based on a result of latest ultimate limit optimization then, in which the production rate was reduced to 40,000 tpd or 13.2 Mtpa with a life of mine (“LoM”) of seven years as of 2019. The southwest (“SW”) pit was closed in June 2020.

The mine infrastructure now includes NE open pit, heap leach pad, desorption workshop for gold-loaded carbon with smelting accessory, and facilities of mine camp and administration office.

History

In July 2012, Changchun Gold Design Institute (“Changchun Institute”) prepared a *Feasibility Study Report for Chang Shan Hao Gold Mine* Based on the historical data and Feasibility Study Report prepared by Changchun Institute, Nilsson Mines Services Ltd. et al submitted *Technical Report Expansion Feasibility Study for the Chang Shan Hao Gold Project* in October 2012, with Mineral Resource and Mineral Reserve estimate results listed in Table 1-1 and Table 1-2, respectively.

Table 1-1: Mineral Resource Estimate for the CSH Gold Deposit, Nilsson Mines Services Ltd.

All CSH Resources below pit surface to December 31st, 2011 within Resource Pit, 2012 Resource Model									
Cutoff (g/t)	Measured		Indicated		Measured+Indicated			Inferred	
	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Million Ounces Au	Mtonnes	Au Grade (g/t)
0.25	95.3	0.61	192.7	0.55	288.0	0.57	5.26	155.7	0.46
0.28	90.4	0.63	172.2	0.58	262.6	0.6	5.05	132.8	0.49
0.30	86.9	0.65	160.2	0.6	247.1	0.62	4.91	118.9	0.52
0.35	78.2	0.68	134.5	0.65	212.8	0.66	4.55	91.5	0.57
0.40	69.9	0.72	113.8	0.71	183.7	0.71	4.2	71.1	0.63
0.45	61.7	0.76	97	0.75	158.7	0.76	3.86	56.1	0.69
0.50	53.9	0.8	83	0.8	136.9	0.8	3.52	44.8	0.74
0.55	47.2	0.84	71.2	0.85	118.4	0.84	3.21	36.1	0.80
0.60	40.7	0.88	61	0.89	101.7	0.89	2.9	29.1	0.85
0.65	34.8	0.93	52.2	0.94	87.0	0.93	2.61	23.5	0.90
0.70	29.5	0.97	44.1	0.99	73.6	0.98	2.32	19.1	0.95
0.75	24.9	1.02	37.3	1.03	62.2	1.03	2.06	15.7	1.00

Note: Gold Price assumptions (in USD) used to calculate the cut-off grade for the “Resource Pit” is: Au=USD 1,800/oz; gold recovery used to calculate the cut-off grade for the “Resource Pit” is: 60%.

Table 1-2: Mineral Reserve Estimate for the CSH Gold Deposit, Nilsson Mines Services Ltd

Class	bcm (X 1000)	t (X 1000)	Insitu Au (g/t)	Diluted Au (g/t)
Proven	32,018.0	89,086.0	0.64	0.62
Probable	44,627.0	124,394.0	0.60	0.58
Total	76,645.0	213,480.0	0.61	0.59

Note: The gold price is UAD 1,380/oz, and the gold recovery is 60%.

Since December 2011, diamond drilling program keeps going on. As of April 1, 2022, a total of additional 65 diamond drilling holes for a cumulative length of 51,985.8 m were carried out.

Geological Setting

Tectonically, the CSH gold deposit is located in the North China platform, proximal to the edge of North China platform with contact to the Junggar–Inner Mongolia–Hinggan fold belt. The basement of the North China platform is dominated by Archean (“Ar”) and Paleoproterozoic (“Pt₁”) high-grade metamorphic rocks, overlain by Mesoproterozoic (“Pt₂”) and Neoproterozoic (“Pt₃”) low-grade metamorphic rocks. The entire North China platform was uplifted to continental environment after Hercynian orogeny in Permian Period. The Junggar–Inner Mongolia–Hinggan fold belt is referred to as a geosyncline, which was also elevated to continental environment after Hercynian orogeny. Data indicate that Hercynian orogeny is predominate tectonic event in the region.

The CSH gold deposit is hosted in the Bilute Formation of Mesoproterozoic Bayan Obo Group.

Regional intensely developed magmatic intrusions emplaced during the Hercynian orogeny, which are further recognised as early Carboniferous, and later Permian, with some emplaced in the Triassic Period. The CSH gold deposit is located at closer to Hercynian magmatic intrusions where the magmatic intrusions emplaced in the Triassic Period distribute in peripheral area.

Regional mineralization is dominated by gold (“Au”), placer gold, and iron (“Fe”), with minor nickel (“Ni”), etc. Public data indicate that gold mineralization is usually hosted preferentially in horizons of Ar and Pt₂, which are usually controlled by fault structures. Iron mineralization was considered to be of metamorphosed sedimentary origin. Nickel mineralization has a genetic relationship with magmatic intrusion.

The Property Geology and Mineralization

It demonstrates the folding structure in the Property area composed of one tight syncline trending east-northeast (“ENE”) to NE to the north, and one tight anticline trending east-west to the south. The core of the tight syncline consists of rocks of Bilute Formation with lower Halahougete Formation as limbs, where the core of tight anticline consists of Jianshan Formation with upper Halahougete Formation as limbs. Mapping data indicate that the folding structure was emplaced by Permian granite and granodiorite.

The fault structures are well developed with various trends, which sound dominating by trends of NE, east-west, and NW, respectively. CGME believes that these faults were initially generated during Pt₂ orogeny, being reactive during the Permian orogeny and even the post-Permian period.

The gold mineralization zone of the CSH gold deposit is mainly hosted in the second Member of Bilute Formation at the southeast (“SE”) limb of the syncline structure. In lithology, the Bilute Formation is mainly composed of slate and phyllite where the underlying Halahougete Formation mainly consists of limestone and meta-sandstone. Local geologists believe that the gold mineralization is controlled by brittle-ductile shear structure, which is easily developed along the contact between physical hard rocks and soft rocks, but preferentially within the soft horizon. The host structure is characterised by parallel quartz veins and various dykes including lamprophyre, diabase, diorite, aplite and pegmatite. Logging data indicate that these quartz veins and various dykes mainly developed along the bedding structure and cutting across the bedding structure at minor angle locally. The alteration of gold mineralization is very weak in general, but high-grade mineralization is always associated with stockwork quartz veinlets and pyrite veinlets.

The gold mineralization zone of the CSH Project defined by CGME strikes NE 55– 70° overall for a length of 4,400 m, dipping down to NW at the angle of 70 – 90°, and the elevation of the domain ranges from 1,688 m to 230 m above sea level (“ASL”).

A total of 18 gold mineralization domains were defined in Project area, where two sub-zones were named as NE zone, and SW zone, covering NE open pit, and SW open pit, respectively. NE zone accounts for 78% of the total mineral resources of the CSH gold deposit, where SW zone occupies 22% only. The Mineralized zone N1 is the largest of NE zone, accounting for about 98% of the total mineral resources of the NE zone. The zone W1 accounts for about 99% of the total mineral resources of the SW zone.

Gold mineralization domain N1: The largest size of gold domain at cross section of exploration line 8,800 to 11,100 was defined in the CSH deposit area, with an irregular tabular shape, and controlled by bedding-like shear structures. The mineralised domain is totally hosted in the second Member of Bilute Formation, Mesoproterozoic Bayan Obo Group, with most parts outcropped on the surface. It strikes NE 55° to 65° overall, plunging NW at a dip of 70 – 85°. So far, a total of 645 diamond drillholes on a grid of 25–100 m (strike) by 25–100 m (dip) have delineated the domain for a length of 2,346 m along the strike and a plunge extension of 1,100 – 1,540 m, with a horizontal thickness of 70 – 400 m. The elevation of the domain ranges from 1,677 m to 230 m ASL. The domain N1, accounting for about 76.5% of the total mineral resources of the CSH Gold Deposit, is dominated by gold mineralization grading 0.57 g/t Au.

Gold mineralization domain W1: The second largest size of gold domain at cross section of exploration line 6,700 to 9,100 was defined in the CSH gold deposit area, with a strata-bound shape, and controlled by bedding shear structures. The mineralised domain is totally hosted in the second Member of Bilute Formation, Mesoproterozoic Bayan Obo Group, with most parts outcropped on the surface. One post-mineralization fault offset the mineralized zone at the exploration line 7,300 to 7,500. It strikes NE 65– 70° overall, dipping NW with the angle of 85 – 90°. A total of 277 diamond drillholes on a grid of 50–100 m (strike) by 50–100 m (plunge) have delineated the domain for a length of 2,400 m along the strike and a dip extension of 610–750 m, with a horizontal thickness of 90–116 m. The elevation of the domain ranges from 1,655 m to 905 m ASL. The domain W1, accounting for about 21.6% of the total mineral resources of the CSH Gold Deposit, and is dominated by gold mineralization grading 0.56 g/t Au.

Deposit Types

It is believed that the CSH gold deposit is of an orogenic style mineralization, hosted in Mesoproterozoic low-grade metamorphic horizon and characterised by large size but low-grade gold mineralization.

Exploration and Drilling

Since December 2011, diamond drilling programs were carried out consistently, and Beijing Jinyou Geology and Exploration Corp. Ltd. (“**Jinyou Geology**”) was commissioned for the entire exploration program. As such, a total of additional 65 diamond drilling holes for a cumulative length of 51,985.8 m was completed. As of March 2022, a total of 368 diamond drilling holes were completed. On the surface, the gold mineralised zone was delineated by exploration lines being nearly perpendicular to the mineralization strike. The exploration lines are oriented NW over the entire deposit area with an overall exploration line interval of 50–100 m along the strike. For most parts of current mineralised zone, the borehole grid reached 50 m (along strike) by 50–100 m (down dip) with local grid of 25–50 m (along strike) by 25–50 m (down dip).

Sample Preparation and Analysis

The core was manually cut in half using a saw splitter, with each sample being about 2.0 m long.

The Company established an onsite laboratory including sample preparation workshop and assaying workshop. Site inspection conducted by CGME’s geologist indicates that all samples since December 2011 were prepared at the onsite laboratory, but all assays for mineral resource estimation were performed by the SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd (“**SGS Lab**”) and the ALS Chemex (Guangzhou) Co., Ltd (“**ALS Guangzhou**”). Onsite laboratory is only responsible for grade control assaying of mining operation and mine production quality supervision as well.

The flowsheet for sample preparation is summarised below:

- All wet samples were dried before crushing to diameters of not less than 80% of the materials would pass 2 millimetres (“**mm**”) using the first stage of six mm jaw crusher, followed up by two mm jaw crusher;
- The crushed materials were firstly split by riffle splitter to keep about 500 grams (“**g**”) for delivering to SGS Lab, and ALS Guangzhou, where, each sample of materials were dried again before pulverising until 200 mesh before assaying; and

- All remaining coarse rejects after the first split were collected for a long-time storage at the mine site.

Samples were analysed at SGS Lab, ALS Guangzhou, and Intertek Beijing Lab for Au using a conventional fire assay (“FA”) on 30 g sub-sample, with the lower limits of detection ranging from 0.005 to 0.01 g/t.

Quality control programs were performed throughout the exploration process since December 2011, which was managed by Jinyou Geology and supervised by IMP on a batch basis. All QC samples adopted include coarse blank, coarse duplicate, certified reference materials (“CRMs”), Internal re-assaying program, and umpire lab re-assaying program.

Data Verifications

In general, CGME believes that no material biases were recognised for the work performed by Nilsson Mines Services Ltd. et al.

Current primary database is composed of data generated as of April 1, 2022, which was totally verified by CGME. The assessment of QC data reveal that no material contamination was found in sample preparation, and most assays returned acceptable assaying level of accuracy, without remarkable laboratory system bias. CGME therefore believes that the current primary database is acceptable for the purpose of mineral resource estimation in CSH property area, and sufficiently reliable to support mineral reserve conversion within the scope of Mining License.

The median specific gravity (“SG”) value of 2.81 g/cm³ for converting volumes of primary mineralized materials into tonnages during mineral resource estimate, keeping the SG value of 2.72 g/cm³ for oxidized mineralized materials, the same figure adopted by Nilsson Mines Services Ltd. et al in October 2012. The remaining mineral resources estimated by CGME were the results that were deducted by all mined-out tonnages using the topographic data of updated open pit bottom and optimized ultimate pit shell, in which the former was provided by IMP and verified by CGME.

Mineral Processing and Metallurgical Testing

To complete the analysis of the existing metallurgical data CGME has referred to the following reports and the operations review during the site visit in June 2022:

- Expansion Project of Inner Mongolia Pacific Mining Co., Ltd, Feasibility Study (draft report), July 2012, Changchun Gold Design Institute;
- Jinshan Gold Mines Inc., Throughput Expansion Update Technical Report, K D Engineering, Tucson; and
- Changchun Gold Research Institute, Processing Mineralogy Studies on Gold Mineralization Below 1,132 m ASL of the CSH Gold Deposit, December 2021.

Heap leach operations for CSH project were commissioned in April 2007 with the first gold poured in July 2007. Initially the heap leach targeted run-of-mine oxide ore where the mineralized materials had been classified into oxide ore and sulphide ore. The initial approach to defining the ore was that if there was oxide presented in the ore it was considered suitable for the ROM leaching. In 2008 there was a significant decline in gold recovery, and it was then realized that the leach properties of the partially oxidized ore (transitional ore) were very similar to those of the sulphide ore. A metallurgical program was completed at this time with the recommendation for the addition of a 3-stage crushing plant to generate -9 mm ore to feed the leach pads. The crushing plant commissioning began in the 4th quarter 2009 with the full operation in April 2010.

The metallurgical testwork that has been completed for the CSH Gold Project was summarized in the Throughput Expansion Technical Report that was issued in February 2010. This included the details of the work concluded by METCON Research in November 2009.

The following review of the metallurgical testwork focuses on the heap leach test programs on which the design of the processing facility has been based.

Brigade 217 of the Nuclear Northwestern Geological Bureau (“**Brigade 217**”) began exploration and mining operation activities at the CSH property in 1995. Three test heaps of run-of-mine ore were constructed and leached for 32 days. Gold recovery averaged approximately 65 percent. In 2001 Brigade 217 expanded the test program to include agitation leach and column tests. Meanwhile, the International Metallurgical and Environmental Inc. (“**IME**”) completed a test program that included mineralogical examination, gravity concentration and bottle rollecyanidation studies. In 2003 SGS Lakefield initiated a program on drill samples that included Bond Work Index determination, gravity concentration, cyanidation and a leaching test to determine potential gold losses due to preg-robbing. In 2003 and 2004, SGS Lakefield completed additional tests on oxide and sulphide composite samples. In 2004 Jinshan Gold Mines conducted two demonstration heap leach tests each containing approximately 50,000 tonnes of oxide. One test was run-of-mine, and the second was crushed through 125 mm. In 2005 and 2006 oxide and sulphide column leach studies were conducted at the Baogang Technical Institute in Baotou, Inner Mongolia supervised by METCON Research.

Mineral processing and metallurgical testing and research work of CSH mineralized materials have been carried out in Canada and China from 1995 up to now. The tests include agitating leaching, heap leaching, leaching of gravity concentrate and separate gravity separation. After comprehensive analysis, the heap leaching is considered the most economically viable.

In order to ensure the recovery of gold in sulphide ore, it is necessary to carry out a three-stage crushing. In addition, the material size of heap leaching feed needs to be strictly controlled, with the final feeding material size of not more than 9 mm.

Mineral Resource Estimates

The mineral resource estimates now include Au only. CGME has independently estimated the mineral resources of the CSH gold deposit based on a cut-off grade of 0.28 g/t Au within the optimized ultimate open-pit limit and a cut-off grade of 0.30 g/t Au below the limit. The resource estimate was conducted using Ordinary Kriging, validated by Inversed Distance Squared method, and Micromine modelling software. The results are listed in Table 1-3.

Table 1-3: Mineral Resource Statement for the CSH Gold Deposit, CGME Consulting Limited as of April 1, 2022

Location	Mineral Resource Category	Tonnage (x1,000 t)	Au (g/t)	Au Metal (t)	Au Metal (Moz)
Remaining within the open pit limit at a cut-off grade of 0.28 g/t Au	Measured	23,590	0.65	15.42	0.5
	Indicated	23,790	0.68	16.13	0.52
	Measured+Indicated	47,380	0.67	31.55	1.01
	Inferred	7,280	0.42	3.08	0.1
Underground at a cut-off grade of 0.30 g/t Au	Measured	88,200	0.67	58.66	1.89
	Indicated	89,850	0.58	52.07	1.67
	Measured+Indicated	178,050	0.62	110.72	3.56
	Inferred	62,090	0.49	30.68	0.99

Notes:

Mineral Resources are reported in relation to a conceptual open-pit mining and underground block caving mining. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Raw assays have been capped. Mineral Resources include Mineral Reserves.

Mineral Resources are reported at a cut-off grade of 0.28 g/t Au for open-pit mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,980 per ounce. Additional Mineral Resources are reported at a cut-off grade of 0.30 g/t Au for underground block caving mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,980 per ounce. USD 1.0000=RMB 6.3457 dated in April 2022, and one Troy ounce is equal to 31.1035 grams.

CGME considers that blocks estimated for the first estimation pass with an average anisotropic distance to samples of less than 45 m can be classified as Measured Mineral Resources, and blocks estimated for the

second estimation pass with an average anisotropic distance to samples of less than 80 m can be classified as Indicated Mineral Resources, and blocks estimated for the third estimation pass with an average anisotropic distance to samples of not more than 150 m can be categorised as Inferred Mineral Resources. For those Measured and Indicated Mineral Resource blocks, CGME considers that the degree of confidence is sufficient to allow an appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit, which is also adequate to support the open pit mining operations.

In CGME’s opinion, the upper portions of gold mineralization at the CSH Gold Project are amenable to extraction by open pit mining with a cut-off grade optimised of 0.28 g/t Au, and the block caving mining operation would be the choice for extraction below the optimized open pit limits with a cut-off grade of 0.30 g/t Au in this estimation based on a Reasonable Prospect for Eventual Economic Extraction (“RPEEE”). It is noted that the partial mineral resources outside of the open pit limit but above the bottom plane may not be amenable to extraction in the future. Meanwhile, the mineral resources located below 840 m ASL at NE zone and 1,250 m ASL at SW zone may not be amendable to extraction in the future due to either excessive depth or high dilution. These mineral resources that may not be amendable to extraction in the future are excluded from the Mineral Resource Statement in this Report.

Mineral Reserve Estimates

After optimization design using Micromine software, an approximate elliptical open pit limit is formed and the parameters of the open pit limit and the quantity of ore and rock within the open pit limit are shown in Table 1-4 and Table 1-5.

Table 1-4: Parameters of Open Pit Limit

Item	Unit	Limit Optimization Parameters
Upper Dimension	m	1,860×1,355
Lower Dimension	m	283×37
Bench Height	m	12 (24 after partial merging)
Bench Face Angle	(°)	56--60
Safety Berm Width	m	5
Cleaning berm Width	m	8--15
Transportation Berm Width	m	32, 24 (double lane) 13.8 (single lane)
Highest Bench Elevation	m	1,684
Lowest Bench Elevation	m	1,180
Closed Level Elevation	m	1,636
Final Slope Angle	(°)	North slope 36.5, South slope 38, East end 29.3, West end 33.5

Table 1-5: Ore and Rock Quantity of East Open Pit Limit

Item	Unit	East Pit Limit
Total Quantity of Ore	10,000 t	8,258.55
Rock	10,000 m ³	2,990.03
Ore Quantity	10,000 t	4,737.95
	10,000 m ³	1,686.10
Rock Quantity	10,000 t	3,520.60
	10,000 m ³	1,303.93
Average Stripping Ratio	m ³ /m ³	0.77
	t/t	0.74
Au Metal	kg	31,744.26
Au Grade	g/t	0.67

The Mineral Reserves are stated in Table 1-6. The Proven Mineral Reserves are 23.6 Mt at a grade of 0.63 g/t Au for the gold content of 14.86 t or 0.48 Moz, and the Probable Mineral Reserves are 23.8 Mt at a grade of 0.66 g/t Au for the gold content of 15.7 t or 0.5 Moz, totaling Mineral Reserves of 47.4 Mt at a grade of 0.65 g/t Au for the gold content of 30.56 t or 0.98 Moz.

Table 1-6: Mineral Reserve Statement for the CSH Gold Deposit, CGME Consulting Limited as of April 1, 2022

Category	t (x 1,000)	Diluted Au (g/t)	Au (t)	Au (Moz)
Proven	23,593	0.63	14.86	0.48
Probable	23,787	0.66	15.7	0.5
Total	47,380	0.65	30.56	0.98

Notes:

Mineral Reserves are reported based on the optimized ultimate open pit limit. All figures are rounded to reflect the relative accuracy of the estimate. Mineral Reserves are included in Mineral Resources.

Mineral Reserves are reported at a cut-off grade of 0.28 g/t Au for open-pit mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,568 per ounce. USD 1.0000=RMB 6.3457 dated in April 2022, and one troy ounce is equal to 31.1035 grams.

Mining Methods

Production Rate and Working System

The production rate is 40,000 tpd or 13.2 Mtpa. The Life of Mine is four years. The mine working system is 330 day per annum (“dpa”), three shifts per day, and eight hours per shift.

Development and Transportation

According to the topography of the mining area, relative position of the leaching pad site and the open pit, and parameters of the open-pit, the approach of development and transportation is the road and self-dumping truck. The deep concave open-pit part of the stope adopts double spiral ramps, equipped with four exits.

The internal road grade of the stope is grade II mine road, with the maximum longitudinal slope of 10%, the gentle slope section of 60 m, and the minimum turning radius of 25 m. The width of the double-truck transportation platform is 32 m or 24 m (100 t dump truck), and the width of the single-truck transportation platform is 13.8 m (50 t dump truck).

At present, the rock is transported by 100 t dump truck, and ore is transported by 50 t dump truck.

Mining Process

The mining methods are open pit mining with road development. The strip mining is adopted in the northeast open pit, and there are three mining strips from the current limit to the optimized limit. The strip 1 with a bottom elevation of 1,372 m, the strip 2 with a bottom elevation of 1,300 m, and the strip 3 being the final strip with a strip bottom elevation of 1,180 m. The down-the-hole (“DTH”) drills, hydraulic excavators and dump trucks for mining are available for the open pit mining. Mining will continue and the Contractor's team will provide equipment operations and maintenance.

Mining Equipment

The main mining equipment fleet is shown in Table 1-7.

Table 1-7: Main Mining Equipment

Item	Quantity
Ty-370Gn Hydraulic Drill	33
5m ³ Electric Hydraulic Excavator	3
2.2-2.5m ³ Electric Hydraulic Excavator	35
100t Dump Truck	9
50t Dump Truck	171

Item	Quantity
320 Hp Bulldozer	3
Hydraulic Rock Breaker	2
50t Water Truck & Sprinkler	4
Grader	4
ZI90 Front Loader	4

Production Schedule

As of April 2022, according to the production schedule of 2022, the LoM is four years, with a steady production period of three years and a ramp-down production period of one year.

The current total production rate is 13.2 Mt of ore per year. As of March 2022, the mine has produced 3.3 Mt of ore in the first three months of 2022, without waste rocks, and the mining plan for the whole year of 2022 is to produce 13.2 Mt of ore. Thus, by the end of 2022, 9.9 Mt of ore still needs to be mined, given 15 Mt of waste rocks to be stripped. In 2023, the annual quantity of ore is 13.2 Mt, with the annual quantity of stripped waste rocks of 15 Mt. The mining operations will be completed in 2025, and the heap leaching will continue until 2029.

The production will start from April 2022, and the annual mining schedule of the Northeast open pit is shown in Table 1-8.

Table 1-8: Annual Mining Schedule of the Northeast Open Pit

Item	Year	Unit	2022	2023	2024	2025	Total
Total Quantity of Ore and Rocks		10,000 t	2,490	2,820	1,684.07	1,264.48	8,258.55
Ore		10,000 t	990	1,320	1,320	1,107.95	4,737.95
Rocks		10,000 t	1500	1500	364.07	156.53	3,520.60
Stripping Ratio		t/t	1.52	1.14	0.28	0.14	0.74
Au Metal Mined		kg	6,033.52	8,334.00	8,812.00	7,612.41	30,791.94
Diluted Au Grade		g/t	0.61	0.63	0.67	0.69	0.65
Ore Haul Distance		km	6.11	6.68	7.26	7.92	
Rock Haul Distance		km	6.5	7.14	7.68	8.34	

Recovery Methods

Ore from the open pit is transported to the crushing plant by truck, where it undergoes three-stage closed circuit crushing and screening. The final crushed ore is transported by dump trucks to the leach pad. The oxidized ore and primary ore are leached together in a heap without separation.

The processing plant has been built in two phases, i.e., there are two processing plants. At present, the Process Plant I stopped production, and the Process Plant II can meet the production requirements.

The designed pile of two heap leach pads is 80 m high. At present, Phase II leach pad has been increased to 50 m high bench.

The processing flowsheet of the plants is three-stage crushing, heaping, trickle immersion leaching, carbon adsorption, gold-loaded carbon desorption, electrolysis and gold smelting, with final product of gold bullion .

Environmental Studies, Permitting and Social Impacts

Environmental Studies

The Environmental Impact Assessment (“EIA”) for Expansion Project Phase II of IMP was approved by the Ecology and Environment Bureau of Inner Mongolia Autonomous Region in August 2015. According to the EIA, there would be no material negative environmental impacts in the proposed project construction based on the implementation of ecological protection measures, pollution control measures and precautionary measures.

Permitting

According to the implementation plans for national land and space planning, unified confirmation of natural resources, and overall planning of mineral resources, the Project geographical location, mineral structure and production meet the relevant policies. It is neither within the ecological boundary nor in the nature reserve zone, and its supporting facilities meet the industrial codes. All approvals and permits were in place to meet the requirements of regulations.

Social or Community Impacts

There are 536 personnel employed for the current operation, one-third of whom are local personnel. Currently, operators work three 8-hour shifts a day and are paid by 1.5 times of the base salary for overtime. Administrative staff work 5 days a week with weekends off. The operators can rest in a centralized manner according to the work situation of their departments.

In addition to employees, there are about 600 contractors' workers at the site. For non-local contract personnel, they work for 2 to 3 months before one month' vacation.

All personnel are required to have an annual medical examination and to report safety statistics to authorities on a monthly basis.

The current operation spends about 1 million Chinese yuan (“yuan”) per year on local community activities, equivalent to 157,728.7 USD. Depending on the needs of the community, these plans vary from year to year. The results of the work in recent years are as follows:

- (1) Continued to solve the employment of local farmers and herdsmen. Up to now, the Company has employed a total of 626 people in the autonomous region, including 380 in Bayannao'er City, 303 in Wulate Middle Banner and 111 in local minorities;
- (2) Invested 35,000 yuan to assist the local government in organizing folk activities such as Nadam Fair and Obo Fete in 2021 to contribute to local poverty alleviation;
- (3) Helped the locality consolidate poverty alleviation achievements. A student grant of 35,000 yuan was provided, and 160,000 yuan were spent to purchase 50 t of local fodder corns to help surrounding herdsmen overcome the shortage of forage in winter;
- (4) In order to boost the local economy and help solve the problem of unsalable agricultural and sideline products, the Company invested more than 310,000 yuan in 2021 to purchase the agricultural and sideline products produced by the herdsmen around;
- (5) Improved the living conditions of employees. The insulation walls were repaired, and the internal facilities were updated for staff dormitories, and the types of diets were increased in the cafeteria, as well as 11 college students were sponsored with a grant of 23,000 yuan in 2021; and
- (6) For the expansion project phase II, the costs for relocation of herdsmen's grassland and houses were 37.1 million yuan.

Capital and Operating Costs

Changchun Institute completed the investment estimate in the Feasibility Study for Chang Shan Hao Gold Mine in July 2012, in which the construction investment was estimated to be 1.26 billion yuan.

Phase II utilized the original assets of 670.1 million yuan, including fixed assets of 553.41 million yuan and intangible assets of 116.69 million yuan, and the working capital was 175 million yuan. Therefore, the total investment used was 845.1 million yuan. The estimated operating costs are 65.0 yuan /t, or USD 10.24 /t.

Economic Analysis

Under NI 43-101 rules, producing issuers may exclude the information required for this section on properties currently in production, unless the Technical Report includes a material expansion of current production.

CGME notes that CGG is a producing issuer, the CSH Mine is currently in production, and a material expansion is not being planned. CGME has performed an economic analysis of the CSH Mine using the estimates presented in this report and confirms that the outcome is a positive cash flow that supports the statement of Mineral Reserves.

Conclusions and Recommendations

Generally, CGME draws the following conclusions:

- IMP is the sole owner of the CSH Gold Project, with one mining license and one exploration license. CGME sighted documents of environmental protection measures, environmental monitoring reports, soil and water conservation plans, land rehabilitation plan, and safety production permit, etc. No material risk was noticed in these regards.
- In order to improve the economic performance of the mining production, attention should be paid to the operating cost control and current cut-off grade for mining operation as well;
- The current primary database should be updated, especially for those QC data, and the database management should be strengthened;
- With the increase of pit depth, the exposure time of final slope is longer and longer. Therefore, safety measures of slope protection, dynamic monitoring and early warning shall be required in a timely manner during the production. The pit working slope should be checked up once a week, with the high and steep slope once a day, and the unstable section should be checked in time after heavy rain, with an immediate treatment once an abnormality is found;
- With the development of mining depth, the weathered degree of ore decreases, and the recovery rate of gold in deep ore may decrease. On the other hand, with the increase of pyrrhotite in ore and decrease of alkali gangue, the dosage of leaching reagent will change. It is suggested to analyse change of recovery rate and to find optimal leaching conditions through reducing particle size of ore and carrying out various condition tests;
- It is suggested that during the implementation of the project, resources and production organization should be optimized, national tax subsidies should be applied actively, and production costs should be controlled while the production capacity should be expanded as far as possible, so as to increase revenue, reduce operating costs and prevent possible business risks; and
- CGME recommends that more infill drilling programs are required to further expand mineral resources and to upgrade the mineral resource categories, and then a Preliminary Economic Assessment (“**PEA**”) should be conducted to determine whether the project will be worthwhile to go into a Pre-Feasibility Study (“**PFS**”) for the mineral resources at depth.

2 Introduction

The Chang Shan Hao (“CSH”) Gold Project (the “CSH Gold Project” or the “Project”), also referred to as Haoyaoerhudong in local pronunciation, is an advanced exploration and production Project, located in Wulate Middle Banner, Bayannao’er City, Inner Mongolia, which is also close to the northern border of China. It is situated about 630 kilometres (“km”) northwest (“NW”) of Beijing, the capital of the People’s Republic of China. Inner Mongolia Pacific Mining Co., Ltd. (“IMP” or the “Client”, or the “Company”, or “IMP”), based in Xinhuresumu, Wulate Middle Banner, owns an 100% interest of the Project area, including all mineral resource and mineral reserve estimates, and mining operation reported in this technical report (the “Report”).

Inner Mongolia Pacific Mining Co., Ltd. used to be named Ningxia Pacific Mining Co., Ltd. (“Ningxia Pacific”). The information provided by the Company demonstrates that China Gold International Resources Corp. Ltd. (“CGG”), based in Vancouver, Canada, owns 96.5% interest of the Project property, and the Ningxia Nuclear Geology and Exploration Institute (“Ningxia Institute”), based in Yingchuan, capital of Ningxia Hui Autonomous Region, China, holds 3.5% interest. Ningxia Institute used to be named Brigade 217 of the Nuclear Northwestern Geological Bureau (“Brigade 217”). The organizational structure of IMP is shown in Figure 2-1.

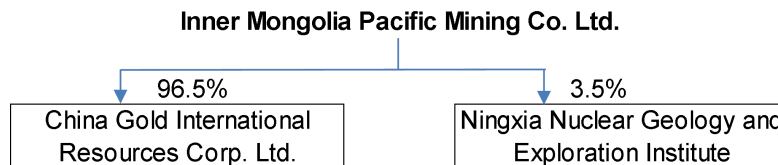


Figure 2-1: Organization Structure for Project Property

CGG is now listed in Toronto Stock Exchange (“TSX”), which is also dual listed in The Stock Exchange of Hong Kong Limited (“HKEx”). The last technical report of CSH Gold Project in compliance with NI 43-101 was disclosed in TSX by CGG, which was entitled *Technical Report Expansion Feasibility Study for the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, the People’s Republic of China*, dated October 2012.

Since 2012, a total of additional 64 diamond drilling holes for a cumulative length of 51,985.8 meters (“m”) were completed as of December 2021. As such, Beijing Jinyou Geology and Exploration Corp. Ltd. (“Jinyou Geology”) submitted the *Exploration Report at the Periphery and Depth (below 1132m ASL) of Chang Shan Hao Gold Deposit* in December 2021. Meanwhile, IMP is planning to prepare the Preliminary Economic Assessment (“PEA”) and to move onto the Pre-Feasibility Study (“PFS”) and Feasibility Study (“FS”) accordingly where viable.

In March 2022, IMP commissioned CGME Consulting Ltd. (“CGME”) to prepare an updated geological and Mineral Resource and Mineral Reserve models for the CSH Gold Project. These services were rendered in from April 2022 to June 2022, leading to the preparation of the Mineral Resource and Mineral Reserve statements.

This technical report documents Mineral Resource and Mineral Reserve statements for the CSH Project as prepared by CGME. It was prepared following the “National Instrument 43-101, Standards of Disclosure for Mineral Projects” (the “NI 43-101”) of Canadian Securities Administrators. The Mineral Resource and Mineral Reserve Statements reported herein were prepared in conformity with the “Definition Standards - for Mineral Resources and Mineral Reserves” dated May 10, 2014 and “Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines” dated November 29, 2019 of Canadian Institute of Mining, Metallurgy, and Petroleum (“CIM”).

CGME understands this Report will be used by CGG for disclosure of Mineral Resources and Mineral Reserves to its shareholders on the TSX.

2.1 Scope of Work

The scope of work, as defined in the letter of engagement executed in March 2022 between IMP and CGME, included the building of Mineral Resource and Mineral Reserve models for the orogenic-style gold (“Au”) mineralization, where, mineralization was delineated by drilling on the CSH Project, and the preparation of a Technical Report in compliance with the “*NI 43-101 Standards of Disclosure for Mineral Projects*” and “*Form 43-101F1 Technical Report*” (the “**Form 43-101F1**”). This work involved the assessment of the following aspects of this Project:

- Topography, landscape, access;
- Updated regional and local geology;
- Exploration history;
- Audit of current exploration work carried out on the CSH Project;
- Geological modelling;
- Mineral Resource and Mineral Reserve estimation and validation;
- Preparation of Mineral Resource and Mineral Reserve statements; and
- Recommendations for additional work.

2.2 Work Program

The work program included the following:

Phase I:

- CGME personnel conducted a site visit, to review the available primary database and to discuss the Project with site professionals; and
- Site inspections included updated drilling programs, exploration drilling operation, core logging, onsite laboratory, exploration quality assurance and quality control (“QA/QC”) procedure, mining operation, heap-leaching, desorption workshop for gold-loaded carbon, and waste dump, etc.

Phase II:

- Data collections, further discussions with site technicians, and verifications of all available primary database information;
- Analysis of QA/QC results;
- Construction of a new geological model and estimation of Mineral Resources and Mineral Reserves;
- Verifications of CGME’s block model against the Company’s internal geological model and mining operation records;
- Preparation of a draft report and delivery to IMP for comment;
- Amendment of the draft report as needed; and
- Completion and finalisation of the report and presentation to IMP.

The Mineral Resource and Mineral Reserve statements reported herein are a collaborative effort between IMP and CGME personnel. The primary database was organised and updated by IMP with significant contribution of Jinyou Geology and was audited by CGME. The geological model and outlines for gold mineralization were constructed by CGME with the input of IMP’s opinion.

In the opinion of CGME, the geological model is a reasonable representation of the distribution of mineralization at the current level of sampling. The geostatistical analysis, variography and grade models were completed by CGME from April 2022 to July 2022.

The Mineral Resource and Mineral Reserve statements reported herein were prepared in conformity with the CIM “*Mineral Exploration Best Practice Guidelines*” dated November 23, 2018 and “*Estimation of Mineral Resources and Mineral Reserves Best Practice guidelines*” dated November 29, 2019. This Technical Report was prepared following the guidelines of the Canadian Securities Administrators’ National Instrument 43-101 and Form 43-101F1.

The Technical Report was assembled in Vancouver in July 2022

2.3 Basis of Technical Report

This Report is based on information collected by CGME via the site visit and E-mail correspondence with IMP throughout the course of CGME’s investigations. Other information was obtained from the public domain. CGME has no reason to doubt the reliability of the information provided by IMP. This Report is mainly based on the following sources of information:

- Beijing Jinyou Geology and Exploration Corp. Ltd., Exploration Report at the Periphery and Depth (below 1132 m ASL) of Chang Shan Hao Gold Deposit, December 2021;
- Changchun Gold Research Institute, Processing Mineralogy Studies on Gold Mineralization Below 1132 m ASL of the CSH Gold Deposit, December 2021;
- Inner Mongolia Geological Engineering Survey Co., Ltd., Mining Geological Environment Protection and Land Reclamation Scheme of Inner Mongolia Pacific Mining Co., Ltd., May 2021;
- Changchun Gold Design Institute, Mine Plan Update of Chang Shan Hao Gold Mine Expansion Project (Northeast Pit), Inner Mongolia Pacific Mining Co., Ltd., March 2018;
- Manchao He, China University of Mining and Technology, Final Report of Slope Stability Evaluation and Risk Zone Study of Inner Mongolia Pacific Mining Co., Ltd., January 2018;
- Inner Mongolia Environmental Science and Technology Co., Ltd., Inner Mongolia Pacific Mining Co., Ltd. Phase II expansion Project Environmental Impact Report, August 2015;
- Nilsson Mines Services Ltd. et al, Technical Report Expansion Feasibility Study for the Chang Shan Hao Gold Project, Inner Mongolia, the People’s Republic of China, October 2012;
- Changchun Gold Design Institute, Feasibility Study Report for Chang Shan Hao Gold Mine, Inner Mongolia Pacific Mining Co., Ltd., July 2012;
- Corporate internal geological model, block model, and updated mine production records;
- Discussions and enquiry with personnel of Pacific Mining;
- Inspection of the CSH Gold Project;
- Review of all available exploration, mining, mineral processing, operational health and safety, environment protection, and relevant production records provided by IMP; and
- Additional information from public domain sources.

2.4 Qualification of CGME Team

Table 2-1 below presents the CGME project team and their areas of responsibility.

Table 2- 1: Consultant Discipline and Responsibilities

Guangpian Zhang	Principal Consultant/Mining and Economics, team leader, compiler of the Report
Yuan Chen	Associated Principal Consultant/Geology and Mineral Resources, CGME internal peer review
Yanchao Cui	Consultant/Geology, Geology
Jun Wang	Principal Consultant/Mining and Mineral Reserves, Mining
Ziyong Wu	Consultant/Mining and Mineral Reserves, Mining model and mineral reserve estimation
Qiang Ji	Principal Consultant/Mineral Processing, Mineral Processing
Mingyang Zhang	Senior Consultant/Mineral Processing, Mineral Processing
Yingxin Fu	Senior Consultant/Economics, Economics
Min Fang	Data digitalization and drafting

2.5 Site Visit

In accordance with the National Instrument 43-101 Standards of Disclosure for Mineral Projects, Mr. Guangpian Zhang and other team members visited the CSH Gold Project site between June 13 and June 15, 2022.

The purpose of the site visit was to inspect the topographic surveying, mineralization style, drill hole, open pit mapping, sampling, database entry, QA/QC protocols, onsite laboratory, mining operation, heap leaching, desorption for gold-loaded carbon, and mining infrastructures, etc.

Meanwhile, one-to-one networking mechanism was established between CGME's project team and IMP staff at the beginning of the Report preparation work. CGME was given full access to relevant data and conducted interviews of IMP staff and relevant personnel to understand procedures used to collect, record, store, and analyse historical and current exploration data and production records.

2.6 Acknowledgement

CGME would like to acknowledge the support and collaboration provided by IMP and relevant personnel for this assignment. Their collaborations were greatly appreciated and instrumental to the success of this Report.

2.7 Declaration

CGME is not professionally qualified to opine upon and/or confirm that IMP has 100% ownership of its underlying tenement and/or has any unresolved legal matters relating to any transfer of ownership or associated fees and royalties. CGME has therefore assumed that there are no legal impediments regarding the existence of the relevant tenements and that IMP has legal right to all underlying tenements as reported. Assessing the legal tenures and rights to the prospects of IMP is the responsibility of legal due diligence conducted by entities other than CGME.

IMP has a total of 536 staff, while open pit stripping and mining operation are outsourced. The administration of IMP is composed of surveyors, geologists, mining engineers, and metallurgists, etc., in which most of these professionals have wide exploration or mining operation experience.

Exploration activities and diamond drilling program on the CSH Gold Project since 2012 were mainly planned and carried out by various Chinese professional geological teams. The exploration primary database was accordingly prepared, and data validation and integrity were managed by IMP. Mining operation commenced since 1999, and gold mineralization characteristics were well understood.

CGME's opinion as presented in this Report relies mainly upon the database dated **April 1, 2022**, and mineralization interpretation of the CSH Au deposit was contributed by CGME and IMP.

CGME's opinion, contained herein and effective **April 1, 2022**, is based on information collected by CGME throughout the course of 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.

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

3 Reliance on Other Experts

CGME has not relied on the opinion of Experts who are not qualified persons for the preparation of this Report.

4 Property Description and Location

4.1 Property Location

The CSH Gold Project is located approximately 60 km northeast (“NE”) of Wulate Middle BannerTown, Inner Mongolia, or about 7 km north of Xinhuresumu Town, at geographic coordinates of 41°39’01”–41°41’01” Northern latitude and 109°11’27” – 109°16’57” Eastern longitude. Xinhuresumu Town is the nearest town, and the Project area is under the direct jurisdiction of Xinhuresumu Town, Wulate Middle Banner. IMP is commercially registered at Xinhuresumu Town, but actual management is at the mine site.

The Project’s location is shown in Figure 4-1.

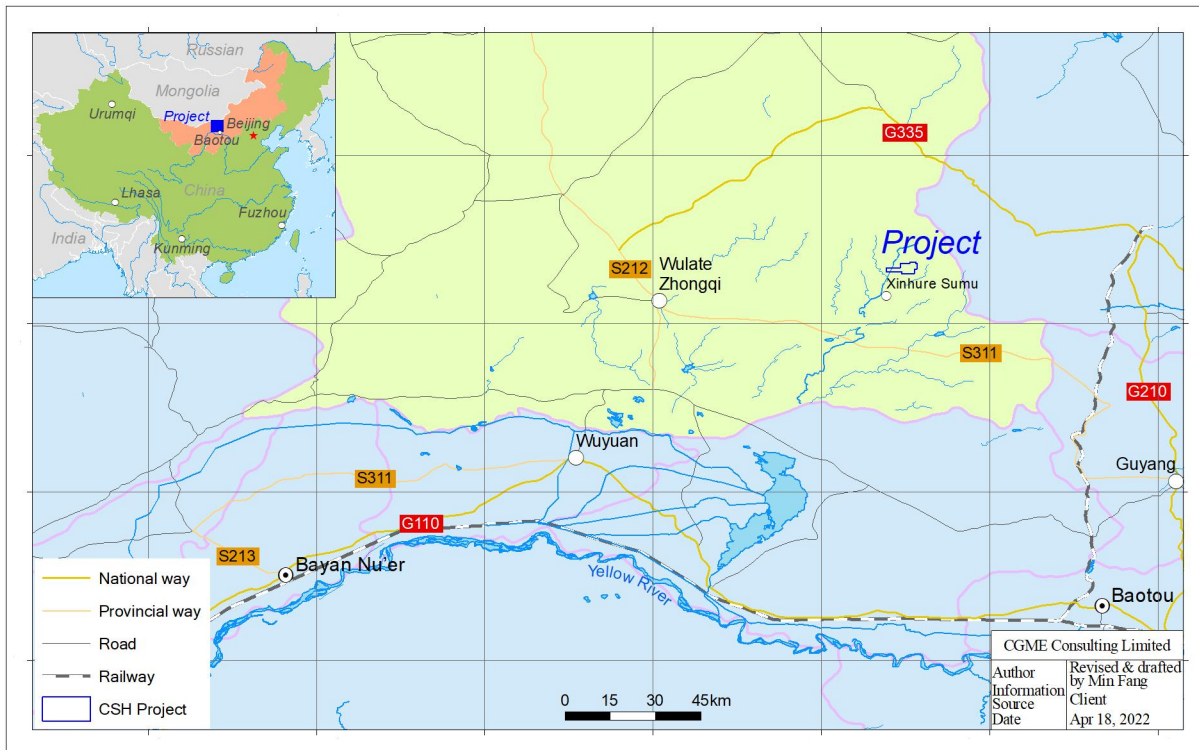


Figure 4-1: Location of the CSH Gold Project

4.2 Mining and Exploration Permits

As of April 1, 2022, the CSH Gold Project includes one mining license and one exploration licence, both of which are under the name of the Inner Mongolia Pacific Mining Co., Ltd., issued by the Ministry of Natural Resources of the People’s Republic of China (“MNR”). Table 4-1 provides summary information for mining license, and special distribution is shown in Figure 4-2.

Table 4-1: Summary Information of Mining Permit License

License No	Ownership	Area (km ²)	Depth Level (m ASL)	Allowed Mining Operation & Mineral	Valid Period	Authority	License Scope		
							Stake	Northing	Easting
C100000200910 4110041024	Inner Mongolia Pacific Mining Co., Ltd	10.0867	1,696 to 1,132	Open pit mining operation for Au at 13.2 Mtpa	December 29, 2017 to June 29, 2026	Ministry of Natural Resources of the People's Republic of China	1	4614323.87	16354335.58
							2	4614450.06	16354236.80
							3	4615057.48	16354103.07
							4	4614504.79	16352974.07
							5	4615034.07	16353110.51
							6	4615051.58	16352498.82
							7	4615732.45	16352480.75
							8	4615712.13	16353175.26

License No	Ownership	Area (km ²)	Depth Level (m ASL)	Allowed Mining Operation & Mineral	Valid Period	Authority	License Scope		
							Stake	Northing	Easting
							9	4617424.16	16353567.24
							10	4617211.64	16355071.80
							11	4617612.44	16355580.73
							12	4617612.44	16356310.72
							13	4617382.44	16356310.72
							14	4617382.44	16356735.72
							15	4617042.44	16356735.72
							16	4617037.33	16357044.25
							17	4616410.53	16357030.79
							18	4615580.81	16356170.85
							19	4614286.24	16356229.85

Note: all figures of northing and easting are the same as the license with the projection system of Chinese Geodetic Coordinate 2000.

It was told that the renewal of the current exploration license was in process. Except for the above-mentioned mining license and exploration license, IMP holds no other mineral licenses and has no other investments in other mineral projects. CGME was told that neither of the current licenses has any conflicts with other surrounding mineral licenses owned by other parties.

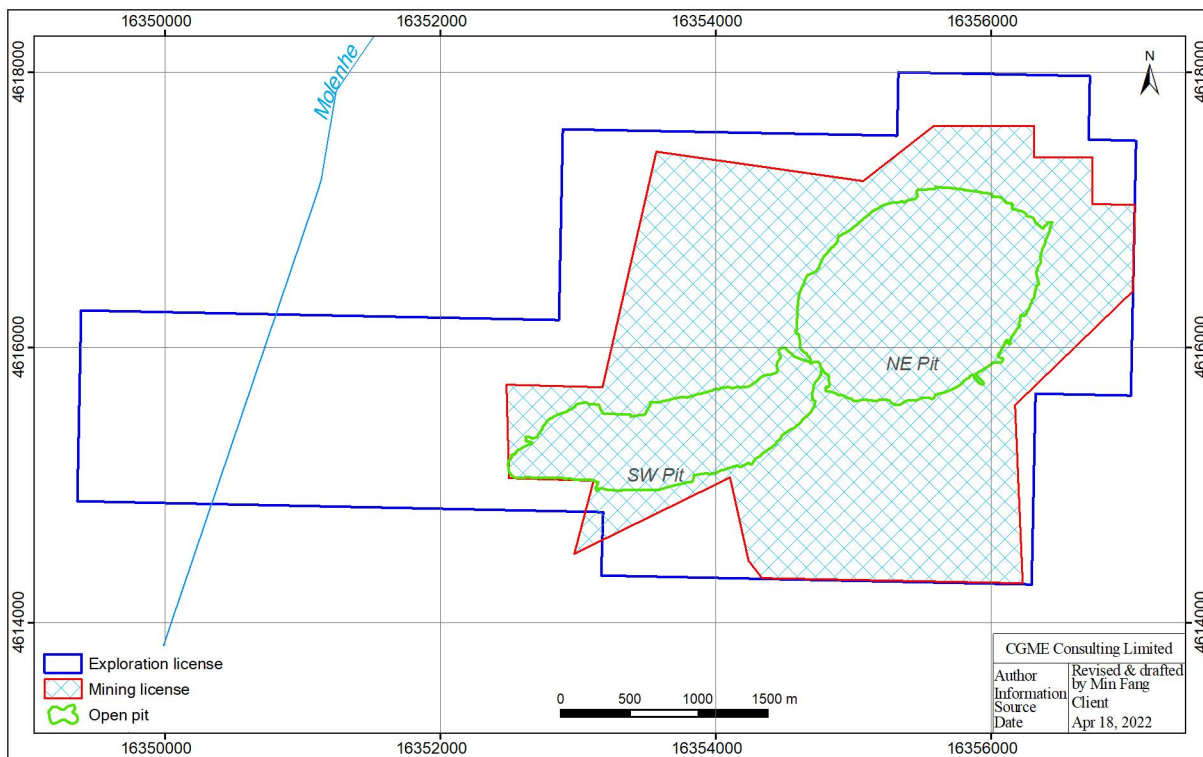


Figure 4-2: Distribution of Mining and Exploration Licenses

Almost all drilling holes are distributed within the scope of abovementioned mining license and exploration license. Therefore, all mineral resources reported in this Report are situated within the scope of the mining license and exploration license, where mineral reserves reported in this Report are totally hosted within the scope of the mining license.

4.3 Current Mine Operation

The mine construction began in March 2004, and the trial production at a capacity of 20,000 tonnes per day (“tpd”) or 6.6 million tonnes per annum (“Mtpa”) commenced in July 2007, and the capacity was then expanded by adding new crushing facilities in September 2009 reaching 30,000 tpd or 9.9 Mtpa in 2010. The Company completed Phase II expansion construction and entered into commercial production in the fourth

quarter of 2014. Since the commencement of Phase II commercial production, CSH has increased its processing capacity to 60,000 tpd or 19.8 Mtpa. As part of the Phase II expansion, a second heap leach pad was created with a valley between the initial Phase I heap leach pad and the newly created Phase II heap leach pad. In July 2019, CSH updated its mine plan based on a result of latest ultimate limit optimization, in which the production rate was reduced to 40,000 t/d or 13.2 Mtpa with a life of mine ("LoM") of seven years as of 2019. In June 2020, the operation of southwest pit was ended.

The mine infrastructure now includes NE open pit, heap leach pads, desorption workshop for gold-loaded carbon with smelting accessory, and facilities of mine camp and administration office.

Initial official approval of the Environmental Impact Assessment ("EIA") of CSH Gold Project was obtained in March 13, 2006 covering mining operation, waste dump, heap leaching, and smelting at a capacity of 6.6 Mtpa. Additional official approval of EIA at a capacity of 6.6 Mtpa was achieved on August 12, 2015. In addition, the safety production permit for mining operation at NE open pit was renewed on March 2, 2020.

CGME sighted documents of environmental protection measures, environmental monitoring report, soil and water conservation plans, and land rehabilitation plan, etc. No material risk was noticed.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The nearest urban centre to the CSH Gold Project is Xinhuresumu Town with population of about 5,600 inhabitants in 2018. There is no village located within the Project area.

The CSH Gold Project is located at about 125 km northwest (“NW”) of Baotou City. As shown in Figure 4-1, highway 311 connects Wulate Moddle Banner to Guyang, where a well-paved national highway extends Guyang to Baotao. There is about 38 km dirt road from mine site to highway 311 via Xinhuresumu Town. It takes about three hours to drive from Baotou to the Project area.

Baotou is an important regional city in Inner Mongolia, connecting to the Chinese national railway system and national highway system. There are daily flights between Baotou and Beijing, and flights in Baotao connect to major cities in China.

5.2 Local Resources and Infrastructure

Baotou has more than 2.7 million inhabitants, which is a modern city with well-developed local infrastructure, including post offices, telecommunication facilities, banks, hotels, schools, hospitals, and various stores. Most raw materials and domestic necessities are available to be purchased in Baotou, and IMP sets up a logistic office.

Agricultural products in the region include buckwheat, corn, rice, potato, flax, and rapeseed, etc., with well-developed husbandry rich in sheep, goat, cow, horse, and camel. Industries include mining operation of iron, coal and gold, etc, steel smelting, aluminium product, rare earth product, and equipment manufacturing, etc.

There are a 110 kilovolt (“kV”) public power station located at about 500 m south of mine site and a small size water reservoir located at about 5 km SW of mine site, which is adequate to use as water source of the CSH Gold Project.

5.3 Physiography and Climate

The Project area has a temperate continental climate characterised by arid, less rain, and hot summer and cold winter. The annual average temperature is +3.3°C, and the highest temperature occurs in July, averaging 19.8°C; January to February are the coldest months, with an average temperature of -16.9°C.

The annual precipitation ranges from 97.0 to 372.4 millimetres (“mm”) averaging 205.7 mm, and the frost-free period lasts for 115 days. In winter soil may freeze to a depth of 197 centimetres (“cm”) with less snow cover. Roughly, the dry season lasts from October to June, and the rainy season occurs from July to September. Winter conditions prevail usually from early October through mid-March.

Vegetation is not well developed, and most surfaces are covered by sparse grass with outcrop exposure generally being abundant. Various low bushes are developed along the valley floors.

Regionally, the Project area is located in the southern slope of the Yinshan Mountains with ridges trending nearly east-west, and various seasonal streams drain down generally south or south-southwest (“SSW”). Locally, the topography is featured of gently rolling hills, and the seasonal Molenhe stream flows down to the south crossing the exploration area of the CSH Gold Project at a flow rate of 400–600 cubic meters per day (“m³/d”) in raining season. The lowest base level of erosion in the Project area is at 1,560 m above sea level (“ASL”). Top elevations in Project area range from 1,750 m to 1,550 m ASL as shown in Figure 5-1 with the total relative range of between 50 m to 200 m.



Figure 5- 1: Landscape in the Project Area (Looking North)

6 History

6.1 Prior to December 2011

Gold mineralization in the Project area was discovered in 1991 by Brigade 217, who obtained then the first exploration permit in January 1992. Small size heap leaching activities for surface oxidized mineralization were practiced by locals from 1995 to 2005.

In February 1999, Southwestern Gold Corporation (“**SWG**”, TSX listed company at that time) along with Global Pacific Minerals Inc. engaged a cooperative agreement with Brigade 217 and set up a joint venture referred to as Ningxia Hejia Mining Co., Ltd. (“**Ningxia Hejia**”) then. In April 1999, the exploration permit which used to be held by Brigade 217 was transferred to Ningxia Hejia, commenced a diamond drilling program accordingly.

In 2001, Pacific Minerals Inc. (“**Pacific Minerals**”) was listed in TSX, inherited all interests of the CSH Project owned by SWG. In January 2002, Ivanhoe Mines Ltd. (“**Ivanhoe**”) began investment in Pacific Minerals Inc. In April 2002, Ningxia Pacific Mining Co., Ltd. (“**Ningxia Pacific**”) was established instead of Ningxia Hejia. The exploration permit used to be owned by Ningxia Hejia was transferred to Ningxia Pacific in July 2002, the diamond drilling program thus kept going on.

In March 2004, Pacific Minerals Inc. was named to Jinshan Gold Mines, actually managed by Ivanhoe, and mine construction at the CSH Gold Project kicked off. Meanwhile, the diamond drilling program continued.

In May 2006, Beijing General Research Institute of Mining & Metallurgy (“**BGRIMM**”) submitted a Feasibility Study Report of CSH Gold Deposit, Wulate Middle Banner, Inner Mongolia. In August 2006, Ningxia Pacific obtained the first mining license, and trial production at a capacity of 20,000 tpd commenced in July 2007. Meanwhile, Ningxia Pacific was named to IMP in September 2009, and the mining permit was therefore transferred to Pacific Mining.

In May 2008, China National Gold Group (“**CNG**”), the parent company of CGG, took over all interests of Ivanhoe in Jinshan Gold Mines.

In July 2010, Jinshan Gold Mines was named to China Gold International Resources Corp. Ltd. In January 2011, the exploration permit was renewed under the name of IMP.

As of December 31, 2011, a total of 296 diamond drilling holes for a combined length of 102,161 m were completed in the Project area.

In July, 2012, Changchun Gold Design Institute (“**Changchun Institute**”) prepared a *Feasibility Study Report for Chang Shan Hao Gold Mine, Inner Mongolia Pacific Mining Co., Ltd.* Based on the historical data and Feasibility Study Report prepared by Changchun Institute, Nilsson Mines Services Ltd. et al submitted *Technical Report Expansion Feasibility Study for the Chang Shan Hao Gold Project, Inner Mongolia, the People’s Republic of China* in October 2012, with Mineral Resource and Mineral Reserve estimate results listed in Table 6-1 and Table 6-2, respectively.

Table 6-1: Mineral Resource Estimate for the CSH Gold Deposit, Nilsson Mines Services Ltd.

All CSH Resources below pit surface to December 31st, 2011 within Resource Pit, 2012 Resource Model									
Cutoff (g/t)	Measured		Indicated		Measured+Indicated			Inferred	
	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Million Ounces Au	Mtonnes	Au Grade (g/t)
0.25	95.3	0.61	192.7	0.55	288.0	0.57	5.26	155.7	0.46
0.28	90.4	0.63	172.2	0.58	262.6	0.6	5.05	132.8	0.49
0.30	86.9	0.65	160.2	0.6	247.1	0.62	4.91	118.9	0.52
0.35	78.2	0.68	134.5	0.65	212.8	0.66	4.55	91.5	0.57
0.40	69.9	0.72	113.8	0.71	183.7	0.71	4.2	71.1	0.63
0.45	61.7	0.76	97	0.75	158.7	0.76	3.86	56.1	0.69
0.50	53.9	0.8	83	0.8	136.9	0.8	3.52	44.8	0.74
0.55	47.2	0.84	71.2	0.85	118.4	0.84	3.21	36.1	0.80
0.60	40.7	0.88	61	0.89	101.7	0.89	2.9	29.1	0.85
0.65	34.8	0.93	52.2	0.94	87.0	0.93	2.61	23.5	0.90

All CSH Resources below pit surface to December 31st, 2011 within Resource Pit, 2012 Resource Model									
Cutoff (g/t)	Measured		Indicated		Measured+Indicated			Inferred	
	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Mtonnes	Au Grade (g/t)	Million Ounces Au	Mtonnes	Au Grade (g/t)
0.70	29.5	0.97	44.1	0.99	73.6	0.98	2.32	19.1	0.95
0.75	24.9	1.02	37.3	1.03	62.2	1.03	2.06	15.7	1.00

Note: Gold price assumptions (in USD) used to calculate the cut-off grade for the "Resource Pit" is: Au=\$1,800/oz; gold recovery used to calculate the cut-off grade for the "Resource Pit" is: 60%.

Table 6-2: Mineral Reserve Estimate for the CSH Gold Deposit, Nilsson Mines Services Ltd.

Class	bcm (X1000)	t (X1000)	In situ Au (g/t)	Diluted Au (g/t)
Proven	32,018.0	89,086.0	0.64	0.62
Probable	44,627.0	124,394.0	0.60	0.58
Total	76,645.0	213,480.0	0.61	0.59

Note: Gold price assumptions (in USD) used to calculate the cut-off grade for the "Reserve Pit" is: Au=\$1,380/oz; gold recovery used to calculate the cut-off grade for the "Resource Pit" is: 60%.

6.2 History Since December 2011

Since December 2011, diamond drilling program keeps going on. As of April 1, 2022, a total of additional 65 diamond drilling holes for a cumulative length of 51,985.8 m were carried out.

The exploration permit was regularly renewed every other year. Based on information disclosed by the drilling program, the area covered by the exploration permit was downsized gradually. In August 2012, the area covered by the exploration permit was downsized to 26.98 square kilometres ("km²") from previous 35.98 km². In May 2016, the area covered by the exploration permit was further downsized to 17.83 km².

The current mining permit was renewed in March 2019, and the approved depth level went down to 1,132 m ASL from previous 1,436 m ASL.

7 Geological Setting and Mineralization

7.1 Regional Geology

Tectonically, the CSH Gold Deposit is located in the North China platform, proximal to the edge of North China platform with contact to the Junggar–Inner Mongolia–Hinggan fold belt, as shown in Figure 7-1. The base of the North China platform is dominated by Archean (“Ar”) and Paleoproterozoic (“Pt₁”) high-grade metamorphic rocks, overlain by Mesoproterozoic (“Pt₂”) and Neoproterozoic (“Pt₃”) low-grade metamorphic rocks. The entire North China platform was uplifted to continental environment after Hercynian orogeny in Permian Period. The Junggar–Inner Mongolia–Hinggan fold belt is referred to as a geosyncline, which was also elevated to continental environment after Hercynian orogeny. Data indicate that Hercynian orogeny is predominate tectonic event in the region.

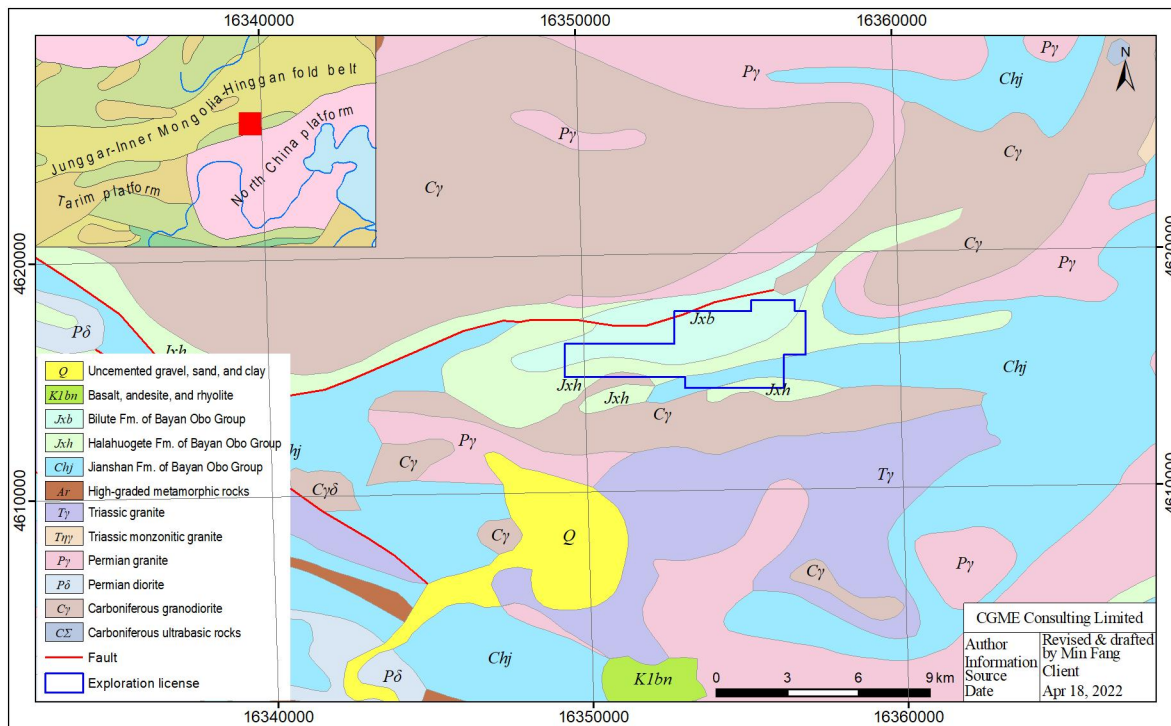


Figure 7-1: Tectonic Setting (Sourced from Jinyou Geology)

Regionally, the Ar high-grade metamorphic rocks of the base outcrop sporadically, mainly composed of mylonized schist, amphibolite, quartzite, marble, and granulite. The Pt₂ low-grade metamorphic rocks predominantly consist of Bayan Obo Group, which is further locally divided to Bilute Formation (“Fm.”), Halahuogete Fm., and Jianshan Fm. from upper to lower stratigraphic sequence. The Bayan Obo Group presents widespread, mainly composed of slate, meta-conglomerate, meta-sandstone, meta-feldspar-quartz, sandstone, meta-siltstone, and limestone, etc. The CSH gold deposit is hosted in the Bilute Fm.

Regional intensely developed magmatic intrusions emplaced during the Hercynian orogeny, which are further recognised as early Carboniferous and later Permian, with some emplaced in the Triassic Period. The lithology of all magmatic intrusions includes granite and plagiogranite, etc. The CSH gold deposit is located at closer to Hercynian magmatic intrusions where the magmatic intrusions emplaced in the Triassic Period distribute in the peripheral area.

Some folding structures composed of Bayan Obo Group are believed to have been generated in Pt₂ orogeny. Generally, regional fault structures trend NW, west-northwest (“WNW”), or east-northeast (“ENE”), most of

which offset Pt₂ horizons, and some cut through magmatic intrusions emplaced during the Carboniferous, Permian, and Triassic Periods.

Regional mineralization is dominated by Au, placer gold, and iron (“Fe”), with minor nickel (“Ni”). Public data indicate that gold mineralization is usually hosted preferentially in horizons of Ar and Pt₂ and controlled by fault structures. Iron mineralization was considered to be of metamorphosed sedimentary origin. Nickel mineralization has a genetic relationship with magmatic intrusion.

7.2 Property Geology

As shown in Figure 7-2, the property area demonstrates the folding structure composed of one tight syncline trending ENE to NE to the north, and one tight anticline trending east-west to the south. The core of the tight syncline consists of rocks of Bilute Fm. with lower Halahougete Fm. as limbs, where the core of tight anticline consists of Jianshan Fm. with upper Halahougete Fm. as limbs. Detailed lithological characteristics are listed in Table 7-1. As shown in Figure 7-2, the folding structure was emplaced by Permian granite and granodiorite.

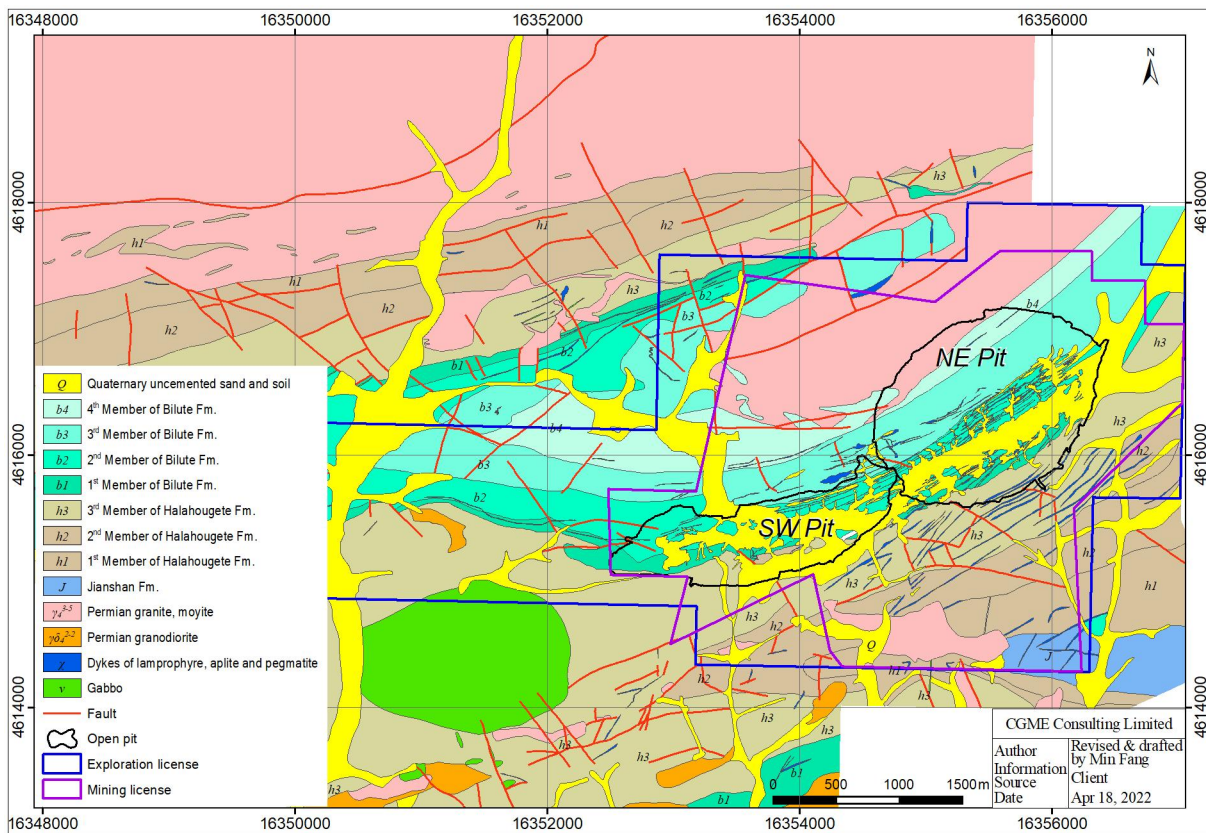


Figure 7-2: Property Geological Setting (Revised from Jinyou Geology)

Table 7-1: Summary of Property Lithostratigraphy

Group	Formation	Legend Symbol	Lithology
Quaternary	Quaternary	Q	Uncemented gravel, sand and clay
Mesoproterozoic Bayan Obo Group	Bilute	b4	black andalusite-garnet schist and phyllite
		b3	black meta-siltstone, meta-conglomerate-bearing sandstone with intercalations of andalusite-garnet schist and phyllite
		b2	Black phyllite and slate (Gold mineralization of the CSH deposit is mainly hosted in this Member.)

Group	Formation	Legend Symbol	Lithology
		b1	Black meta-siltstone and slate
		h3	Grey limestone
	Halahougete	h2	Light grey quartzite, meta-quartz sandstone with intercalation of minor limestone
		h1	Black calcareous meta-siltstone, with intercalations of minor phyllite and slate
	Jianshan	j	Black slate and phyllite

Mapping data indicate that the fault structures are well developed with various trends, dominated by trends of NE, east-west, and northwest (“NW”), respectively. CGME believes that these faults were initially generated during Pt₂ orogeny, being reactive during the Permian orogeny and even the post-Permian period.

As shown in Figure 7-2, the mineralization zone of the CSH gold deposit is mainly hosted in the b2 Member of Bilute Formation at the southeast (“SE”) limb of the syncline structure. In lithology, the Bilute Formation is mainly composed of slate and phyllite where the underlying Halahougete Formation mainly consists of limestone and meta-sandstone. Local geologists believe that the gold mineralization is controlled by brittle-ductile shear structure, which is likely developed along the contact between physical hard rocks and soft rocks, but preferentially within the soft horizon. The host structure is characterised by parallel quartz veins and various dykes including lamprophyre, diabase, diorite, aplite and pegmatite. Logging data indicate that these quartz veins and various dykes mainly developed along the bedding structure and cutting across the bedding structure at a minor angle locally. Generally, gold mineralization evolved better where quartz veins and various dykes developed more intensely. Detailed observation shows that gold mineralization is preferential to develop along the contacts of quartz veins and various dykes, indicating that gold mineralization was formed after quartz veins and various dykes. In NE open pit a major andalusite schist unit with intercalated slate-phyllite layers was observed in the footwall of the mineralization zone. As shown in Figure 7-3, the proximal hanging wall and footwall rocks of gold mineralization are referred to as schist, which CGME thinks may be type of mylonite to tectonic schist. Gold mineralization is hosted in various rocks such as slate, phyllite, and andalusite schist, etc. cutting the bedding structure locally.

The alteration of gold mineralization is very weak in general, but high-grade mineralization is always associated with stockwork quartz veinlets and pyrite veinlets, as shown in Figure 6-4. The individual veinlet of stockwork quartz veinlets presents 0.1 to 5.0 cm in thickness, and the coarse gold mineralization has a close relationship with stockwork quartz veinlets, with 10–15 veinlets at most.

The overall shape of gold mineralization zone presents an irregular shape, with features of swelling, pinching, reappearing, branched and re-joining locally, and most parallel sub-zones are located at the hanging wall of the main gold mineralization zone. High-grade mineralization within the overall gold mineralization zone at the NE open pit plunges 300 – 310° WNW down.

Based on the description above, CGME believes that gold mineralization is hosted by the synthetic shear of a dextral brittle-ductile shear structure on the horizontal plane and demonstrates transpressional characters on cross sections. The host structure was probably generated in the Permian orogeny event and characterised by parallel quartz veins, various dykes, and andalusite-garnet schist. Gold mineralization was formed at the late stage after quartz vein and various dykes, which was overall in tenso-shear state, but followed up the favourable spaces of the host structure during mineralization process.

The gold mineralization zone defined by CGME strikes NE 55– 70° in general for a length of 4,400 m, dipping down to NW at a dip of 70 – 90°, and the elevation of the domain ranges from 1,688 m to 230 m ASL.

Three-dimensional (“3D”) mineralization domains defined by CGME presents that there is a post-mineralization fault offsetting the domain at the exploration line 7300 to 7500. The post-mineralization fault occurs almost vertical with the footwall domain conspicuously warped, indicating the same dextral stress feature. It is inferred that the post-mineralization structure may be formed during Triassic orogeny.

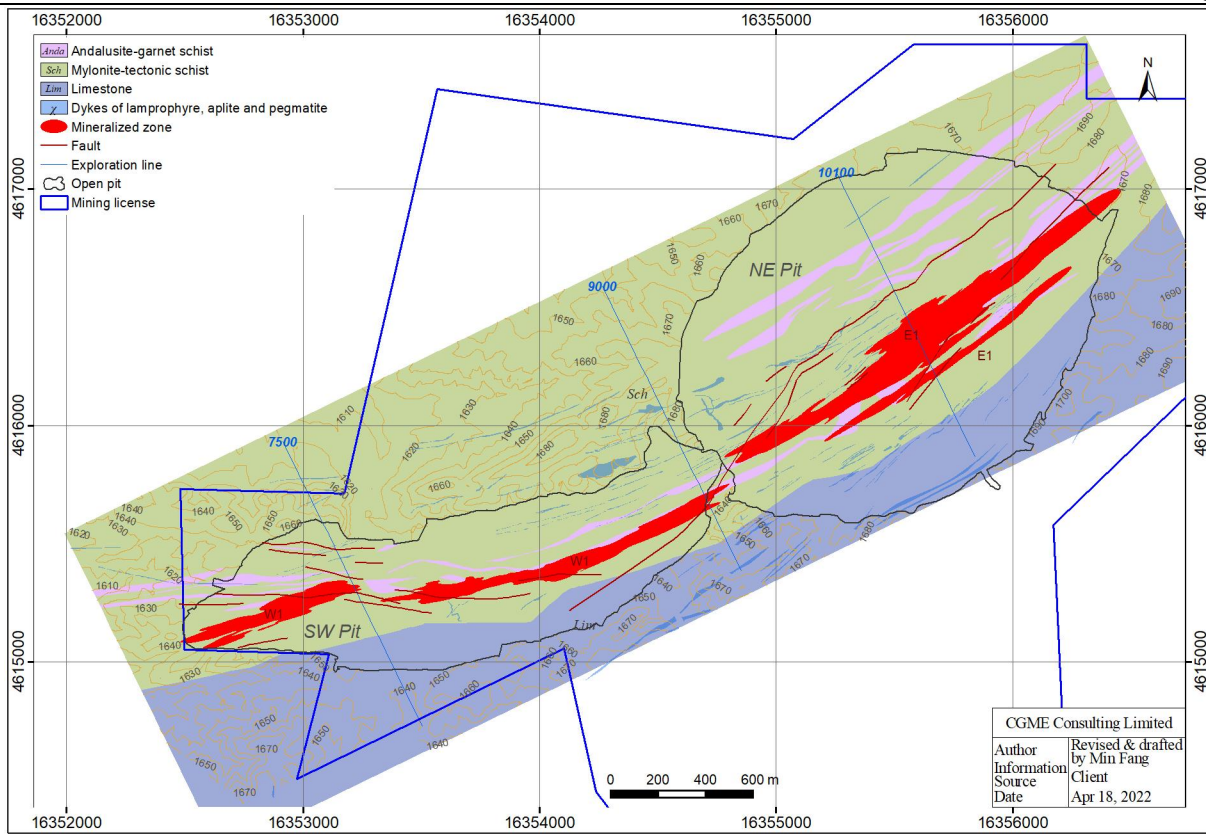


Figure 7-3: Geological Map of the NE and SW Open Pit Area (Revised from Jinyou Geology)



Typical itabirite texture composed of Mag band and quartz ("Qtz") band

Relic fine-grain Qtz in high-grade hematite mineralised materials

Figure 7-4: View of High-grade Gold Mineralization of the CSH Gold Deposit

7.3 Mineralization

As shown in Figure 7-3 and Figure 7-5, a total of 18 gold mineralization domains were defined, where two sub-zones were named as NE zone and SW zone, covering NE open pit and SW open pit, respectively. NE zone accounts for 78% of the total mineral resources of the CSH gold deposit, where SW zone occupies 22% only.

The NE zone includes N1, N2, N3, N4, N5, N6, N8, N9, N10, N11, N12, N13, N14, N16, and N17, where the mineralized zone N1 is the largest, accounting for about 98% of the total mineral resources of the NE zone. SW zone is composed of W1, W2, and W3, where zone W1 accounts for about 99% of the total mineral resources of the SW zone.

It notes that all mineralization controlled by individual drillhole was not acceptable as domain. Compared with the previous ID of mineralization domains, N1 here is the equivalence of previous E1+E2+E3, W1 is equivalent to previous W3+W2, and W2 is the equivalence of previous W1.

Gold mineralization domain N1: The largest size of gold domain at the cross section of exploration line 8,800 to 11,100 was defined in the CSH deposit area, with an irregular tabular shape, and controlled by bedding-like shear structures. The mineralised domain is totally hosted in the second Member of Bilute Formation, Mesoproterozoic Bayan Obo Group, with most parts outcropped on the surface. It strikes NE 55° to 65° overall, plunging NW at a dip of 70 – 85°. As shown in Figure 7-5, a total of 645 diamond drillholes on a grid of 50–100 m (strike) by 50–100 m (plunge) have delineated the domain for a length of 2,346 m along the strike and a plunge extension of 1,100 – 1,540 m, with a horizontal thickness of 70 – 400 m. The elevation of the domain ranges from 1,677 m to 230 m ASL. The domain N1, accounting for about 76.5% of the total mineral resources of the CSH Gold Deposit, is dominated by gold mineralization grading 0.57 g/t Au.

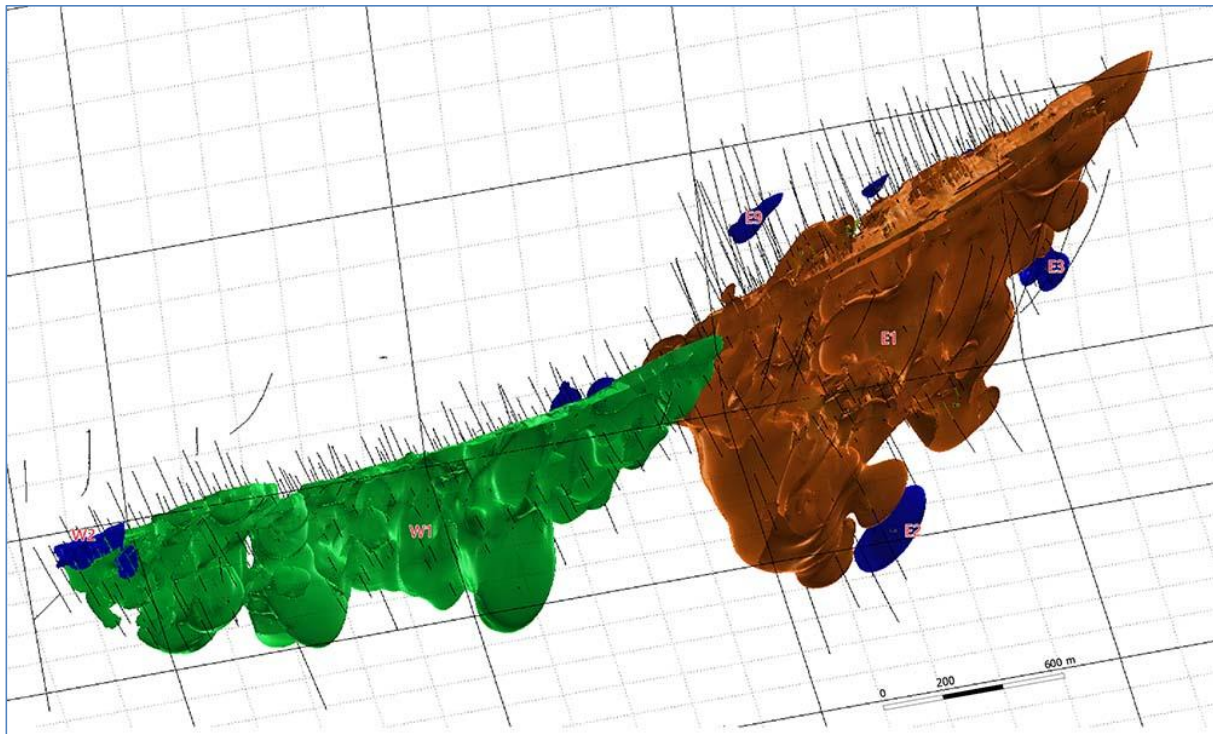


Figure 7-5: 3D View of Mineralized Domains of the CSH Gold Deposit Defined by CGME

Gold mineralization domain W1: The second largest size of gold domain at the cross section of exploration line 6,700 to 9,100 was defined in the CSH gold deposit area, with a strata-bound shape, and controlled by bedding shear structures. The mineralised domain is totally hosted in the second Member of Bilute Formation, Mesoproterozoic Bayan Obo Group, with most parts outcropped on the surface. One post-mineralization fault offset the mineralized zone at the exploration line 7,300 to 7,500. It strikes NE 65–70° overall, plunging NW with a dip of 85 – 90°. A total of 277 diamond drillholes on a grid of 25–100 m (strike) by 25–100 m (plunge) have delineated the domain for a length of 2,400 m along the strike and a plunge extension of 610–750 m, with a horizontal thickness of 90–116 m. The elevation of the domain ranges from 1,655 m to 905 m ASL. The domain W1, accounting for about 21.6% of the total mineral resources of the CSH Gold Deposit, and is dominated by gold mineralization grading 0.56 g/t Au.

Table 7-2 provides a summary of major geometric features of other hematite mineralised domains defined so far in CSH deposit areas.

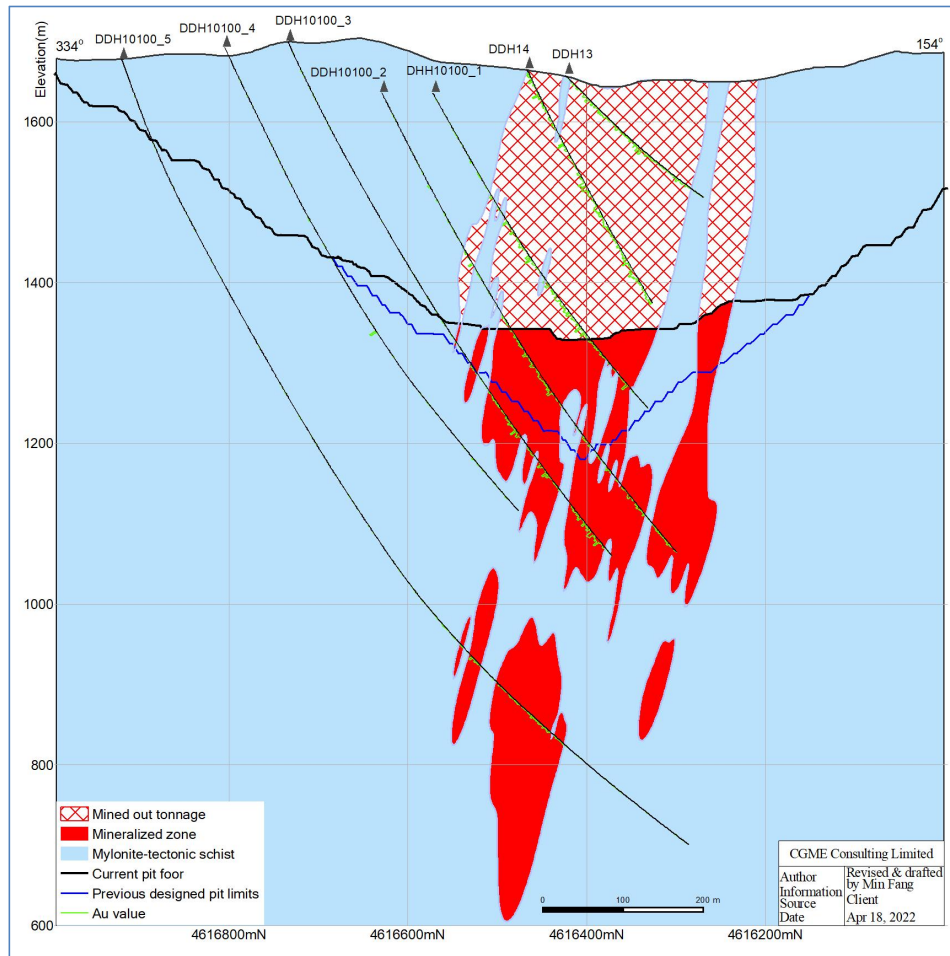


Figure 7-6: Cross Section of Exploration Line 10100 of the CSH Gold Deposit (Interpreted by CGME)

Table 7-2: Major Geometric Features of Other Gold Mineralization Domains Defined in Deposit Areas

Mineralized Domain	Location of Exploration Line	Elevation (m ASL)	Length (m)	Plunge Down (m)	Sampling Working	Au (g/t)
N2	9800-10100	176-459	350	270	2 drillholes	0.35
N3	10500-10700	991-1241	250	230	3 drillholes	0.33
N4	10200-10300	1422-1604	260	180	3 drillholes	0.56
N5	9300-9500	1067-1210	300	120	3 drillholes	0.38
N6	10300-10400	1470-1647	190	180	4 drillholes	0.63
N8	10000-10100	824-966	200	140	2 drillholes	0.40
N9	9500-9700	1564-1690	260	120	3 drillholes	0.36
N10	9500-9600	1464-1659	130	150	5 drillholes	0.37
N11	10200-10300	977-1104	185	120	2 drillholes	0.42
N12	8700-8800	1449-1595	170	120	2 drillholes	0.33
N13	9800-9900	1300-1524	170	200	5 drillholes	0.32
N14	9700-9800	1592-1659	138	70	3 drillholes	0.53
N16	8600	1444-1604	120	150	2 drillholes	0.47
N17	10000	1622-1676	110	50	2 drillholes	0.37
W2	6800-7000	1425-1649	300	210	8 drillholes	0.34
W3	6800	1563-1642	130	70	2 drillholes	0.41

7.4 Mineralogy

Since 2012, a processing mineralogy study program was conducted by Changchun Gold Design Institute (“**Changchun Design**”) using microscopic observation (thin section plus polished section), and Energy Dispersive Spectrometer (“**EDS**”), focussing on the gold mineralization below level 1132 m ASL.

As shown in Table 7-3, the metallic minerals are mainly composed of pyrrhotite and pyrite with minor chalcopyrite, sphalerite, galena, arsenopyrite, native gold, and electrum, etc., and gangue minerals consist of quartz, mica group, and feldspar, with minor calcite, diopside, tremolite, and apatite etc. Statistic data indicate that about 74% golds occur in interstitial among sulfides and gangue minerals, or hosted in fissures of various minerals (Table 7-4), implying that most gold is easy to be recovered.

The mineralization texture recognised match those of the original rocks for most mineralized materials, with sparsely disseminated sulfides, and local stockwork quartz veinlet or pyrite veinlet. Statistic data exhibit that more than 50% sulfides size less than 0.074 mm (200 mesh) (Table 7-5). Gold minerals include native gold and electrum, appearing in unregular shape with 8.42% more than 200 mesh. Gold minerals usually occur along with various sulfides, and the high-grade gold mineralization is always associated with stockwork quartz veinlets and pyrite veinlets.

Table 7-3: Mineral Composition of Mineralization Defined by Jinyou Geology at the CSH Gold Deposit

Metallic Mineral	Content (%)	Gangue Mineral	Content (%)
Pyrrhotite	3.25	Quartz	37.13
Pyrite	0.26	Mica group	28.05
Chalcopyrite	0.07	Feldspar	21.37
Sphalerite+Galena	0.04	Chloride	2.96
Arsenopyrite	0.01	Calcite, diopside, tremolite, apatite etc.	5.48
Bismuth minerals			
Magnetite hematite, goethite	1.38		
Total	5.01		94.99

Table 7-4: Occurrence of Gold Minerals at the CSH Gold Deposit

Hosted Occurrence	Relationship with Other Minerals	Proportion (%)	
Gold inclusion	Included in gangue minerals	18.31	25.83
	Included in sulfides	7.52	
Interstitial Gold	Among gangue minerals	19.55	40.35
	Among sulfides	6.17	
	Between sulfide and gangue mineral	14.63	
Hosted in fissure	Fissure of gangue mineral	28.45	33.82
	Fissure of sulfides	5.37	

Table 7-5: Statistic Results of Main Sulfide Size

Size (mm)	<0.01	0.01-0.037	0.037-0.053	0.053-0.074	0.074-0.1	0.1-0.3	>0.3	Total (%)
Pyrite	8.34	11.43	17.03	24.58	20.85	10.36	7.41	100
pyrrhotite	2.56	10.11	14.31	25.89	20.26	15.97	10.9	100
Arsenopyrite	5.30	11.64	27.01	25.35	16.96	10.28	3.46	100
Chalcopyrite	9.91	48.89	31.38	7.21	2.61			100

Outcrops of gold mineralization of the CSH deposit are characterised by appearance of gothite, which are referred to as the oxidized zone and can be defined by logging data, usually 20 to 70 m deep below the surface. Heap leaching tests and mine operations indicate that gold hosted in oxidized zone is easy to be recovered. However, the primary mineral resources below the oxidized zone are also easy to be recovered. Jinyou Geology concludes that the mineralogical characteristics of mineralized materials located below 1,132 m ASL keep the same as the above, implying that all primary mineral resources of the CSH deposit are eligible to be processed using current processing flowsheet of heap leach.

Multi-element assaying data indicate that the mineralized materials have a low-grade of Silver (“**Ag**”) (less than 2.0 g/t), with low arsenic (“**As**”) contents ranging from 0.0003 to 0.016 ppm. As such, CGME concludes that gold is the only economic element of the CSH deposit, and the mineralized material contains no deleterious elements.

8 Deposit Types

The characteristics of the gold mineralization at the CSH deposit are summarized as follows:

- The CSH gold deposit is a low-grade but large size deposit. Tectonically, the CSH gold deposit is located in the northern edge of North China platform, which was uplifted to continental environment after the Hercynian orogeny in the Permian Period and characterised by intensely developed magmatic intrusions emplaced during the Hercynian orogeny. The tectonic unit is different from the geological setting of Muruntau or Sawaya'erdun gold deposits located at the Tianshan-Mongolia Hercynian fold belt in China;
- Gold mineralization of the CSH deposit is hosted in low-grade metamorphic rocks of Mesoproterozoic Bayan Obo Group, controlled by a brittle-ductile shear structure, which is assumed to have been formed in Hercynian orogeny. Various dykes such as lamprophyre, diabase, diorite, aplite and pegmatite, etc. and quartz vein were developed along the brittle-ductile shear structure. Gold mineralization was formed at the late stage after quartz vein and various dykes, which was in tenso-shear state during mineralization process. The alteration of gold mineralization is very weak in general, but coarse gold mineralization is always associated with stockwork quartz and pyrite veinlets; and
- Data of microscopic study and various tests indicate that mineralization is dominated by native gold and electrum with minor visible gold, but low-grade silver (less than 2 g/t), less fine-grained pyrite (about 0.26%). Both oxidized and primary mineralized materials are easy for heap leaching.

It is believed that the CSH gold deposit is of an orogenic style mineralization, hosted in Mesoproterozoic low-grade metamorphic horizon and characterised by low-grade gold mineralization but large size.

9 Exploration

9.1 Prior to December 2011

In 1971, the regional geological and mineral investigation survey covering the CSH Gold Project at a scale of 1: 200k was conducted. In 1980, Brigade 214 of Nuclear Northwest Exploration Bureau carried out a regional stream sampling program at a scale of 1:200k and defined a gold anomaly of 80 km long by 2 km wide covering the CSH Gold Project. Gold mineralization was first disclosed by following up on anomaly check and trenching in 1991 by Brigade 217, who then assigned more geological work such as soil sampling survey, and geological mapping, etc. in 1992.

Since 1992, a systematic exploration for the CSH Gold Project have been undertaken, and summary information as of December 2011 is listed in Table 9-1, with detailed information seen in the *Technical Report Expansion Feasibility Study for the Chang Shan Hao Gold Project, Inner Mongolia, the People's Republic of China* submitted by Nilsson Mines Services Ltd. et al in October 2012.

Table 9-1: Summary of Exploration Work Conducted at the CSH Gold Project as of March 2022

Program		Unit	1992-2011	2012-2020	Total
Topographic Survey	Topo geodesic point	point	17	6	23
	Topographic survey (1/1000)	km ²	7	2	9
	Exploration line survey	km		5	5
	Borehole collar survey	hole	303	65	368
Geology, Sampling, and Metallurgical Testing	Geological sketch mapping (1/10k)	km ²	43.3		43.3
	Geological Mapping (1/2000)	km ²	6.3		6.3
	Geological mapping (1/500)	km ²	0.04		0.04
	Geological profile survey (1/5000)	km	2		2
	Geological profile survey (1/1000)	km	17		17
	Trenching	m ³	23,797.10		23,797.10
	Shallow pit	m	115.5		115.5
	Diamond drilling	m/hole	106,106.03/303	51,985.84/65	158,091.87/368
	Declined tunnel	m	87.5		87.5
	Adit	m	50.4		50.4
	Geological logging	m	106,106.03	51,985.94	158,091.87
	Basic sampling and assay	sample	55,528	23,975	79,503
	Multi-element assay	sample	82	23	105
	Composite sample assay	sample	60	10	70
	Petrochemical analysis	sample	26	19	45
	Quality control assay	sample	713	1,430	2,143
	Umpire lab check assay	sample	380	787	1,167
	Microscopic study	sample	105	20	125
	Specific gravity	sample	65	140	205
	Processing mineralogy study program	program		1	1
	Column leaching test	sample	7		7
	Heap leaching test	t	6,560		6,560
	Processing test	sample	2		2
Geophysical & geochemical Survey	Surface high-resolution gravity survey (1/50k)	km ²	54		54
	Induced polarization profile survey (1/5000)	km	35.6		35.6
	audio- frequency magneto-telluric profile survey (1/5000)	km	6.38		6.38
	Soil sampling survey (1/10k)	km ²	35.51		35.51
	Soil sample assay	sample	5,705		5,705
Hydrology, Geotechnical & Environmental Survey	Regional hydrology, geotechnical and environmental mapping (1/10k)	km ²	53.4		53.4
	Property hydrology, geotechnical and environmental mapping (1/2000)	km ²	25		25

Program		Unit	1992-2011	2012-2020	Total
	Open pit hydrology and geotechnical survey	km ²	2.5		2.5
	Updating of regional hydrology, geotechnical and environmental mapping (1/10k)	km ²		36	36
	Updating of property hydrology, and geotechnical profile survey	km		2	2
	Core radioactive detecting	Point		2,880	2,880
	Hydrological drilling	m		1,866.36	1,866.36
	Geotechnical logging	m		47,603.64	47,603.64
	Hole for pumping (filling) water test	hole	9	3	12
	Water sample analysis	sample	9	7	16
	Physical & mechanic parameter	group	21	10	31
	Underground water long time observation of borehole	hole		1	1
	Surface water long time observation	well		2	2

9.2 History Since December 2011

Since December 2011, diamond drilling programs were carried out consistently, and a total of 65 diamond drilling holes for a cumulative length of 51,985.8 m were completed as of March 2022. A brief information of drilling programs is summarized in Table 9-2, and Figure 9-1 gives borehole distribution information of drilling programs since December 2011 and drilling programs prior to December 2011, respectively.

All other exploration work since December 2011 are summarized in Table 9-1.

Table 9-2: Summary of Drilling Programs Conducted at the CSH Gold Project as of March 2022

Year	No. of Holes	Meter	Parent Company	Drilling Team	
1999	10	2,797.10	Southwestern Gold Corporation		
2002	23	4,996.77	Pacific Minerals Inc.		
2003	31	5,863.42			
2004	35	6,598.05	Jinshan Gold Mines		
2005	21	4,709.60			
2007	41	11,431.59			
2008	23	4,972.88			
2010	8	4,187.57			
2011	111	60,549.05	China Gold International Resources Corp. Ltd.		
2012	12	9,927.10		The 3rd Brigade of Shandong Geology and Exploration Bureau	
2014	3	2,114.00		Shandong Yantai Geology and Engineering Institute	
2015-2016	8	7,211.32		Brigade 401 of Liaoning Metallurgy Geology and Exploration Bureau	
2017-2018	9	10,843.90		Nuclear Brigade 247	
2020-2021	33	21,889.52		Nuclear Brigade 247, Brigade 214 of Shanxi Geology and Exploration Bureau, Liaoning Nonferrous Brigade 107, and Jilin Geology and Exploration Institute	
Total	368	158,091.87			

Prior to December 2011, a total of 17 topo geodesic points were established by Ningxia Geology and Mineral Survey Institute and Exploration Survey Institute of Baogang Group, respectively, using South 9800 and Trimble 4600, the global positioning systems (“GPS”) with a real-time kinematic (“RTK”) devices, along with various total stations. Since December 2011, Beijing Zhongse Survey Institute was commissioned to undertake an additional six (6) topo geodesic points using Hi Target V90, the similar GPS device.

Jinyou Geology claims that all survey data were audited by professional surveyors, and no significant deficiency was identified.

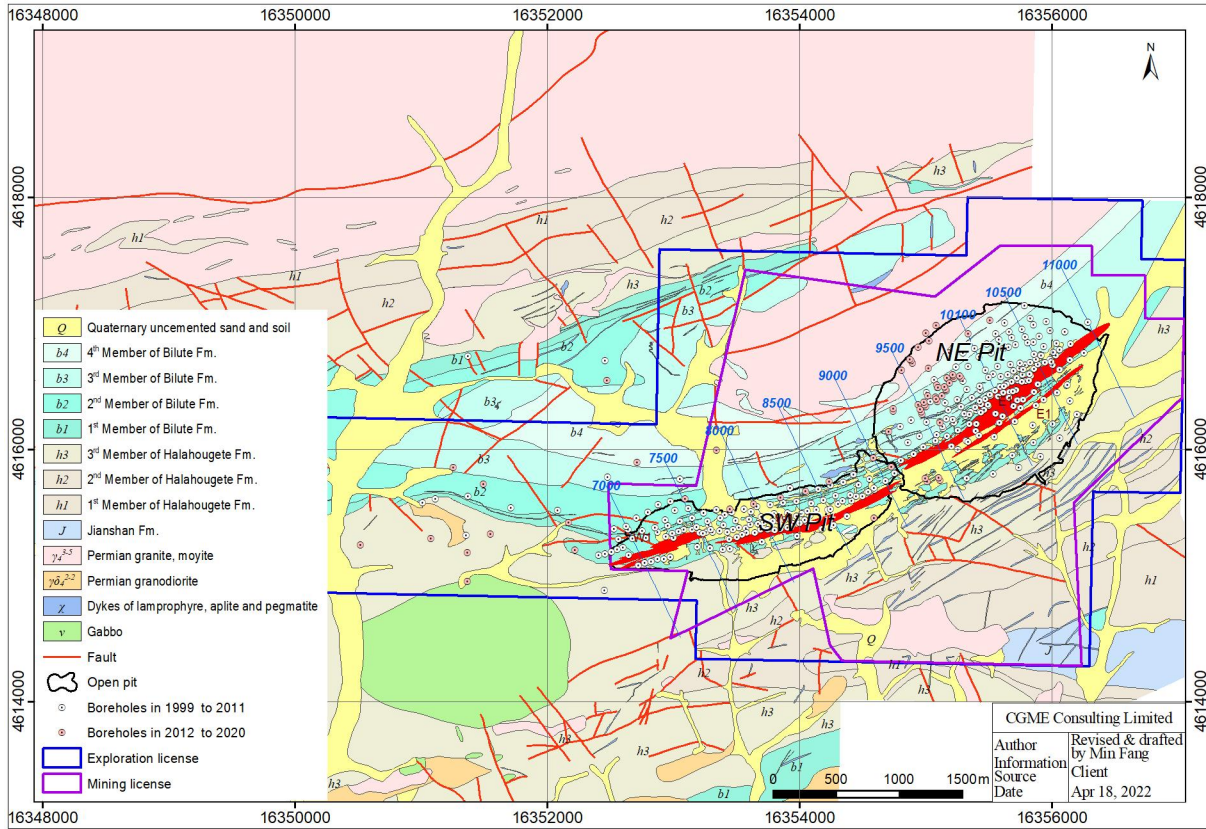


Figure 9-1: Map Showing the Distribution of All Boreholes Carried out as of March 2022

10 Drilling

10.1 Drilling since December 2011

The gold mineralization zone defined as of December 2011 keeps open on strike towards SW and down dip. As such, the objective of drilling programs since December 2011 is to define more mineral resources. Since December 2011, a total of seven drilling teams below were retained for diamond drilling programs, while Jinyou Geology was employed for the entire exploration program.

- The 3rd Brigade of Shandong Geology and Exploration Bureau;
- Shandong Yantai Geology and Engineering Institute;
- Brigade 401 of Liaoning Metallurgy Geology and Exploration Bureau;
- Nuclear Brigade 247;
- Brigade 214 of Shanxi Geology and Exploration Bureau;
- Liaoning Nonferrous Brigade 107; and
- Jilin Geology and Exploration Institute.

Chinese manufactured conventional XY-4, XY-44, XY-44A, XY-44T, XY-5, HXY-5B, HYDX-5A, XY-6B, and XY-2000 (Figure 10-1) as well as hydraulic Atlas-C6 diamond drilling machines were used. All boreholes were ended at least in NQ with wire line coring. All down-hole surveys were done by KXP-2A, KXP-2B, or KXY-2D digital gyro clinometers at a 50 m interval, and the depth verification was conducted at a 100 m interval. Acceptable errors of both dip and azimuth were controlled to be less than 3° per 100 m, and the errors of depth verification were controlled to be less than 1 m per 1,000 m. The general core recoveries are reported to exceed 90% ranging from 94.41% to 99.86%. After completion of a hole, cement was used to seal the whole hole, and a mark was left, which was surveyed by a surveyor. All core trays were transported by the Company to the core sheds for long-term storage, where the cores were geologically and geotechnically logged by trained geologists of the Jinyou Geology. After logging, all original information was input in computer database and was backed up, including geological catalogue, structure catalogue, core sampling, and delivering table, etc.

As of March 2022, a total of additional 65 diamond drilling holes for a cumulative length of 51,985.8 m were completed. Appendix A provides the detailed borehole information of various drilling programs since December 2011.



GPS-RTK device of South Plus owned by the Company



Electronic total station of Pentax owned by the Company



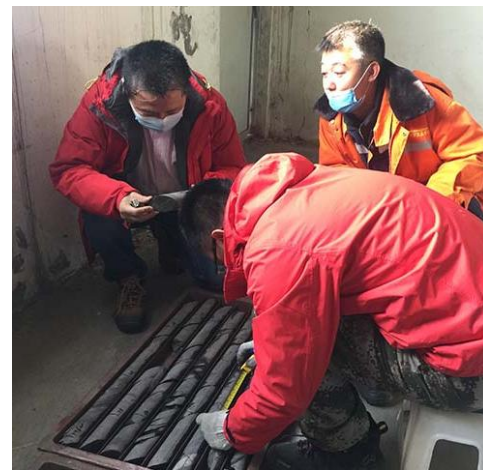
View of ongoing exploration drilling program at NE open pit



Exploration drilling rigs at the site



Onsite core shed inspected by CGME's geologist



Onsite core logging inspected by CGME's geologist



Samples preparation flowsheet inspected by CGME's geologist



Onsite crush machine for sample preparation



Onsite pulverization machine



Onsite laboratory



AAS of Thermo iCE 3000 of onsite laboratory



Onsite fire assay device

Figure 10-1: Photos Showing Site Inspection on Survey, Drilling Sampling, Core Logging, and Sample Preparation

10.2 Current Drilling Pattern and Density

On the surface, the gold mineralised zone was delineated by exploration lines being nearly perpendicular to the mineralization strike. The exploration lines are oriented NW over the entire deposit area with an overall exploration line interval of 50–100 m along the strike. For most parts of current mineralised zone, the borehole grid reached 50 m (along strike) by 50–100 m (down dip) with local grid of 25–50 m (along strike) by 25–50 m (down dip).

10.3 CGME's Comments

CGME did not physically inspect the entire drilling procedures; however, CGME's site inspection included survey instruments, onsite drilling rigs, drilling operation records, core shed, geological and geotechnical logging, and data cross-checking such as the coordinate projection system, the gap between borehole collar elevation and topographic data, etc. Despite minor lapses, the documented procedures and primary database are generally in line with the acceptable industry practice, and CGME has therefore assumed that no significant material biases have been introduced. As such, CGME concludes that the data acquisition procedures and thus the data collected are basically acceptable for the purposes of mineral resource estimation work.

In addition, CGME was told that the topographic data of updated open pit bottom was conducted by mine site surveyors. After discussions with the mine site surveyor and cross-checking on data, CGME has no reason to doubt the reliability of the topographic data provided by the Company.

The remaining mineral resources estimated by CGME were the results that were remained between the topographic data of updated open pit bottom as of April 1, 2022 and the optimized ultimate pit shell.

11 Sample Preparation, Analysis and Security

11.1 Sampling Method, Preparation and Analysis

Drill cores were placed into wooden core trays with plastic sealed labels following waterproof markers' records on the down-hole depth. All cores were photographed, and the photographs were saved as data for records. After logging, the Jinyou's geologist defined intervals to be sampled and recorded "cut from/to" intervals in a sampling sheet kept on-site. The core was manually cut in half using a saw splitter, with each sample being about 2.0 m long.

After cutting, samples were then wrapped along with sample number and sealed with packing tape, and the geologist or technician signed off the sample sheet before delivering to on-site sample preparation workshop. Jinyou Geology appointed geologists to manage the process from core sampling through sample delivery to preparation workshop.

The Company established an onsite laboratory as shown in Figure 10-1 including sample preparation workshop and assaying workshop. The sample preparation workshop was equipped with necessary jaw crusher, grinding mill, air compressor, riffle splitter, and dust-exhaust system, etc. The assaying workshop was equipped with necessary basic instruments including atomic absorption spectrometer ("AAS") of Thermo iCE 3000, fire assay ("FA") facilities, and atomic fluorescence spectrometry ("AFS"), along with the resolution scale of 0.01 milligram ("mg") resolution, etc. The onsite laboratory obtained an accreditation certificate issued by Certification and Accreditation Administration of the P. R. China ("CNCA"), who was also a signatory of the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement ("ilac-MRA"). Site inspection conducted by CGME's geologist indicate that all samples since December 2011 were prepared at the onsite laboratory, but all assays for mineral resource estimation were performed by the SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd ("SGS Lab") and the ALS Chemex (Guangzhou) Co., Ltd ("ALS Guangzhou"). Onsite laboratory is only responsible for grade control assaying of mining operation and mine production quality supervision as well.

SGS Lab is based in Tianjin, China, an internationally accredited laboratory with ISO17025 & ISO9001:2008 certifications. ALS Guangzhou is located in Guangzhou, China, also an internationally accredited laboratory with GB/T 19001-2016/ISO9001:2015 Standard.

As listed in Table 11-1, SGS Lab and ALS Guangzhou were used as primary laboratory and umpire laboratory each other for most time while Intertek Beijing Lab was used as umpire laboratory only in 2012. Intertek was also an internationally accredited laboratory, who also obtained an accreditation certificate of CNCA in China.

Table 11-1: Brief Information of Primary and Umpire Laboratories since December 2011

Year	Primary Laboratory	Umpire Laboratory
2012	SGS Lab	Intertek Beijing Lab
2014	SGS Lab	ALS Guangzhou
2015-2016	ALS Guangzhou	SGS Lab
2017-2018	SGS Lab	ALS Guangzhou
2020-2021	SGS Lab	ALS Guangzhou

The flowsheet for sample preparation is summarised as follows:

- All wet samples were dried before crushing to diameters of not less than 80% of the materials would pass 2 mm using the first stage of six mm jaw crusher, followed up by two mm jaw crusher;
- The crushed materials were firstly split by riffle splitter to keep about 500 grams ("g") for delivering to SGS Lab and ALS Guangzhou, where each sample of materials were dried again before pulverising until 200 mesh before assaying; and
- All remaining coarse rejects after the first split were collected for a long-time storage at the mine site.

Samples were analysed at SGS Lab, ALS Guangzhou, and Intertek Beijing Lab for Au using a conventional FA on 30 g sub-sample, with the lower limits of detection ranging from 0.005 to 0.01 g/t.

11.2 Sample Security

The crushed sample materials with 500 g each sample after the first splitting were wrapped by plastic bag and then packed by cardboard box, roughly 100 samples per batch and one batch per cardboard box. Sample cards in quadruplicate are prepared by Jinyou Geology’s geologists, where two sample cards were put into the plastic bag, with one used by primary laboratory as reference for further preparation, together with final pulps and the other used as the reference for assaying. Regarding the other two sample cards, one was put into coarse duplicates for a long-time storage at the mine site, and the other was kept with Jinyou Geology’s geologists. Finally, the top of the cardboard box was marked by information of total sample number and sample sequence of “from/to”.

The Company’s truck was used for transporting the sample cardboard boxes to Baotou, where the national railway network was used to deliver to destined primary laboratory.

A barcode system was adopted in primary laboratories, which could be tracked conveniently in further sample pulverizing, assaying, pulp storage, final data records, and laboratory internal QA/QC process. The information of sample card provided by Jinyou Geology was converted into barcode system in primary laboratories immediately once the cardboard box arrived.

11.3 Quality Control Programs

Quality control programs were performed throughout the exploration process since December 2011, which was managed by Jinyou Geology and supervised by IMP on a batch basis. All QC samples adopted include:

- Coarse blank: coarse blank materials were sourced from no-gold mineralized limestone, which were inserted into sample sequence before delivering to the sample preparation workshop;
- Coarse duplicate: it was operated by worker at the sample preparation workshop when the sample materials were crushed to 2 mm in diameter;
- Certified reference materials (“CRMs”) were supplied by Rocklabs Ltd. of New Zealand, which were inserted before delivering to the primary laboratory. It is reported that more than 31 CRMs were used in the QC program. Table 11-2 provides information that CGME collected;
- Internal re-sampling program: Based on assay report issued by primary laboratory, Jinyou Geology conducted the splitting of coarse rejects at 2 mm in diameter again, re-numbered, and then returned to the primary laboratory for re-assaying. The internal re-sampling program is sort of similar to coarse duplicates; and
- Umpire lab re-assaying program: Based on assay report issued by primary laboratory, Jinyou Geology conducted the splitting of pulp duplicates at 200 meshes in diameter again, re-numbered, and then returned to the umpire laboratory for re-assaying.

Table 10-3 gives the summary information of various control samples.

Table 11-2: Summary Information of Various Certified Reference Materials

ID of CRMs	Au (g/t)
OXA71	0.0849
OXC88	0.203
OXC72	0.205
Oxc145	0.212
OxC152	0.216
OXH82	0.414
OXD87	0.417
OxD128	0.424
OxD151	0.430
OXE126	0.452
SE86	0.595
SE68	0.599

ID of CRMs	Au (g/t)
SE58	0.607
OXE86	0.613
OxE143	0.621
OxE126	0.623
SE114	0.634
OXF85	0.805
OxF125	0.806
SF45	0.848
OxG124	0.918
OxC140	1.019
OXH82	1.278
SH41	1.344
OXI81	1.807
OxJ161	2.501

Table 11- 3: Summary of Various Control Samples Provided by Jinyou Geology

Type of Control Sample	Count	QC Proportion	Total Basic Sample
Certified reference materials	435	5.16%	23,975
Coarse blank	438		
Coarse duplicates	363		
Internal re-assaying	1,420	5.92%	
Umpire lab	777	3.24%	

Figure 11-1 presents the assay plots of CRMs OxF 125, showing that about 85% Au assays of CRMs returned relative errors of within $\pm 5\%$ of the standard value, but demonstrating roughly $- 2.5\%$ bias. Information of other CRMs that CGME collected revealed the similar assay accuracy as CRMs OxF 125. CGME believes that the bias of relative errors of $\pm 2.5\%$ are reasonable and acceptable, which should not be retreated as substantial laboratory system bias. In general, most assays of CRMs returned acceptable assaying level of accuracy.

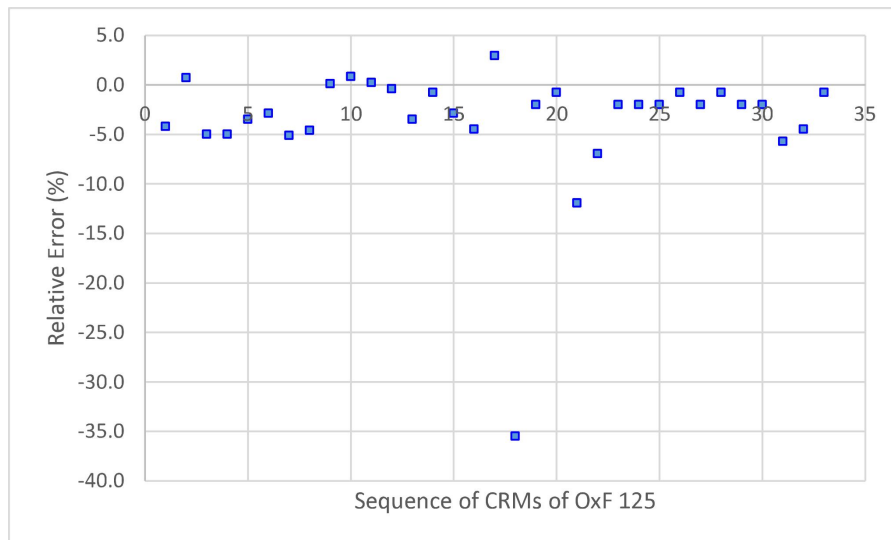


Figure 11- 1: All Au Assay Plots of CRMs OxF 125

All Au assays of coarse blanks are plotted in Figure 11-2, and some occasional abnormal values of coarse blanks were checked out, given 99% assays not more than 0.10 g/t Au. The data assessment conducted by CGME indicates that no material contamination was found in sample preparation.

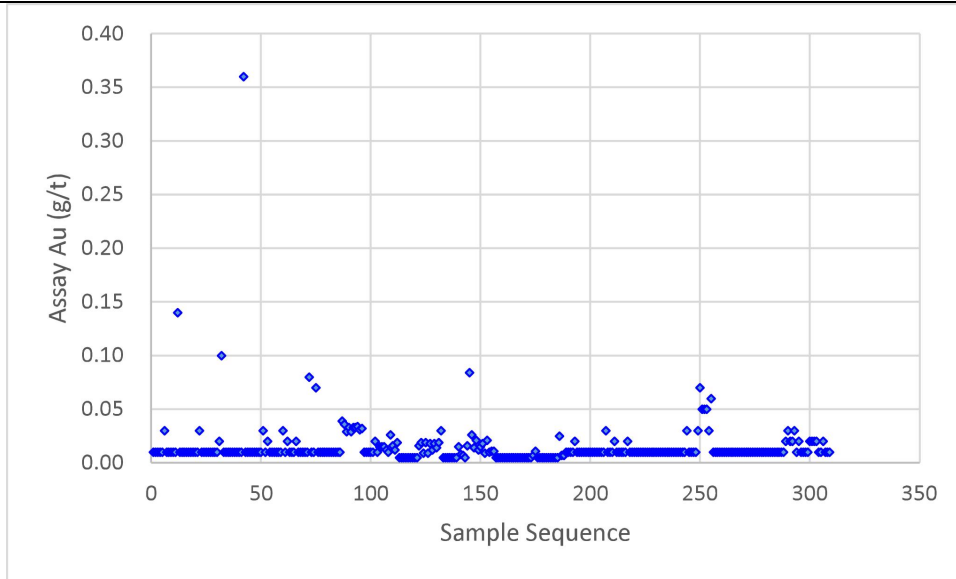
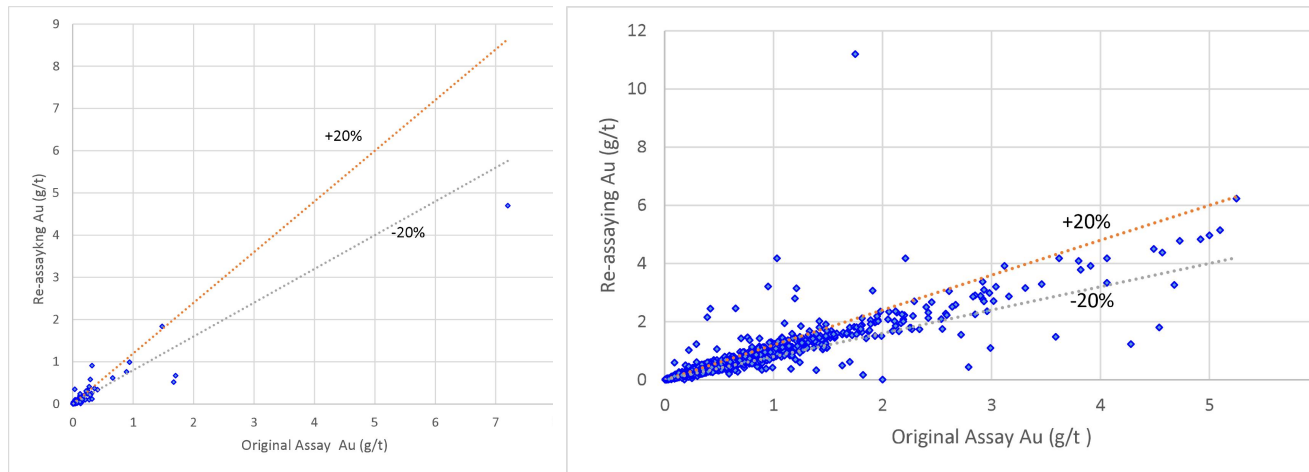


Figure 11-2: All Au Assay Plots of Coarse Blanks

As shown in Figure 11-3, statistics of coarse duplicates plays no much meaning because most assay grades are less than 0.20 g/t Au. However, the internal re-assaying program overcame this defect, which indicated that about 72% of coarse duplicates returned relative errors within $\pm 20\%$, and about 85% of coarse duplicates returned results within $\pm 30\%$ with the consideration of the mineralization grading not less than 0.20 g/t Au. The data indicate that minor coarse gold generates sort of nugget effect impaction against assaying precision, but still at the acceptable assaying level of accuracy for such mineralization style of gold deposit.



Coarse Duplicates

Internal Re-assaying

Figure 11-3: Coarse Duplicate Re-assaying Comparison over Original Assay

Meanwhile, a total of 777 pulps with QC samples inserted were selected for re-assaying using a similar method, which was carried out by cross-checking between primary laboratories and umpire laboratory. The cross-checking statistic results are plotted in Figure 11-4. The data indicate that no material deficiency was found for both ALS Guangzhou and SGS Lab's performances, and about 64% of Au assays returned relative errors within $\pm 20\%$, and about 78% of assays returned relative errors within $\pm 30\%$ with the consideration of the mineralization grading not less than 0.20 g/t Au. The data also show that minor coarse gold generates sort of nugget effect impaction against assaying precision but still at the acceptable assaying level of accuracy.

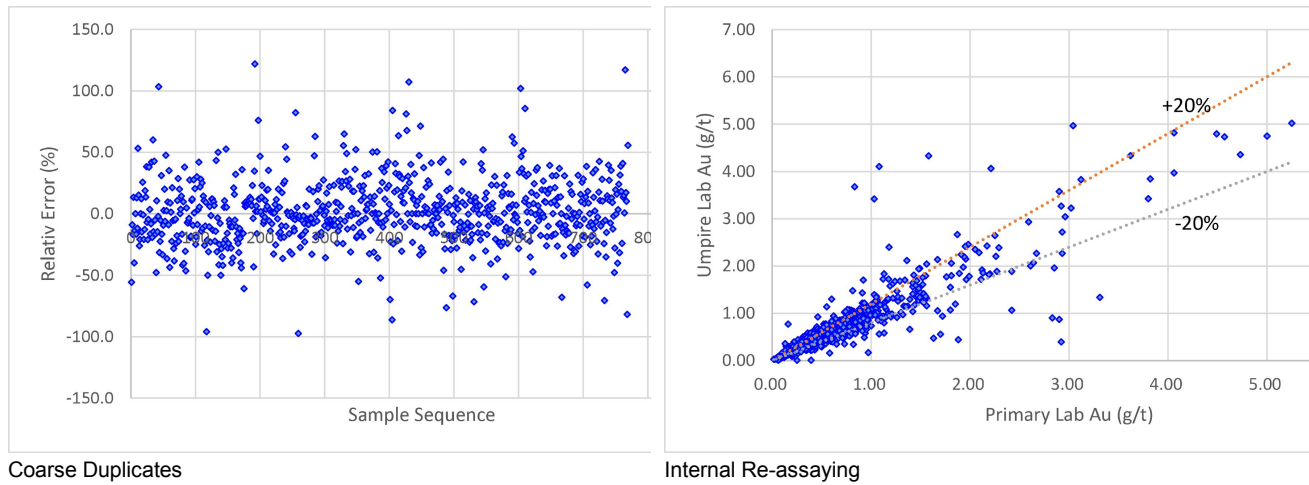


Figure 11-4: Pulp Re-assaying Comparison between Primary Labs and Umpire Labs

11.4 Bulk Density Data

Since December 2011, a total of additional 265 core samples were collected for measurements of the specific gravity (“SG”) using a conventional wax density – immersion method, operated by SGS Lab. CGME was told that the samples for SG measurements were not totally dried with accordingly moistures ranging from 0.01% to 0.19%. As such, the SG figures collected are treated as wet SG basis in this Report, even though the figures are not natural moisture basis basically.

SG data statistics is presented in Figure 11-5 and Figure 11-6, indicating that the SG values are grouped into the same population without significant positive or negative skewed distribution, and the SG values have no correlation with Au grades. As such, CGME used the median SG value of 2.81 g/cm³ for converting volumes of primary mineralized materials into tonnages during mineral resource estimate, keeping the SG value of 2.72 g/cm³ for oxidized mineralized materials, the same figure adopted by Nilsson Mines Services Ltd. et al in October 2012.

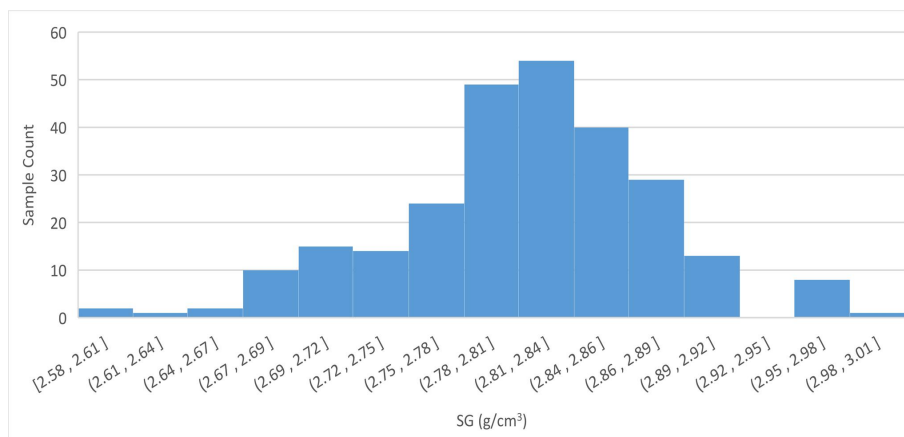


Figure 11-5: Histogram Statistics for SG Values

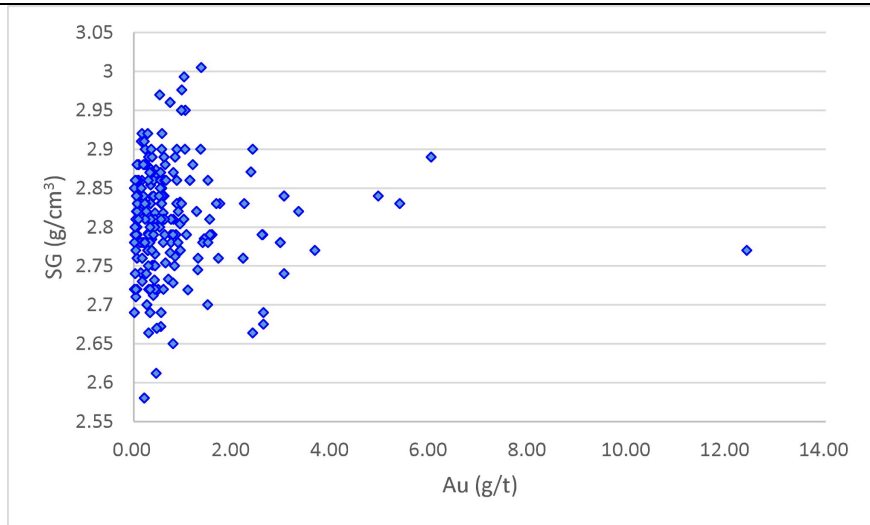


Figure 11-6: SG Value Plots against Au Assay

12 Date Verification

12.1 Verification by CGME

The exploration database provided by the Company includes exploration reports, digitised topographic data, digitised logging data, analytical data, results, and other data pertaining to the mineral resource estimate, geological and mineralization interpreted maps, as well as the QC data, a processing mineralogy study, and production records, etc.

CGME conducted the following verification procedures:

- Site inspection of the gold mineralization style at the NE open pit and core logging by a CGME qualified person (“QP”) and relevant technicians;
- Site inspection of mine site laboratory, which was responsible for assaying grade control for mining operation since December 2011;
- Interviews with staff of IMP;
- Review of the technical report submitted by Nilsson Mines Services Ltd. et al in October 2012 along with its basis of Feasibility Study Report for Chang Shan Hao Gold Mine, Inner Mongolia Pacific Mining Co., Ltd, provided by Changchun Design dated July 2012;
- Review of the updated primary database and all available relevant data provided by IMP; and
- Data verification including cross checking between borehole collars and logging, between borehole collars and topographic data, between assay and logging data, between logging and interpretation geological maps and cross sections of exploration lines, data analysis on topographic projection system, QC, and SG etc.

12.2 Site Inspection and Data Audit on Exploration Database

The last technical report of CSH Gold Project in compliance with NI 43-101 was disclosed in TSX by CGG, which was entitled Technical Report Expansion Feasibility Study for the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, the People’s Republic of China submitted by Nilsson Mines Services Ltd. et al dated October 2012. CGME’s technicians audited the resource database and mineralized domains prepared by Nilsson Mines Services Ltd. et al, minor defects were found as bellow:

- Some individual sample lengths exceeded 5.0 m each, even reached to 9.4 m each at its thickest locally. Fortunately, most cases covered the wall rocks. The deficiencies are still retained in current resource database; and
- Mineralization domain was defined based on cut-off grade of 0.20 g/t Au, which was confirmed to be reasonable during the late-stage mining operation. However, excessive redundant waste bands grading below 0.20 g/t Au were included, especially at the envelopment.

Current exploration database was compiled and updated by IMP. CGME’s technician exercised all the necessary site inspection, and all due care in reviewing the supplied information. It was found that the original QC information records were not well prepared, missed back trace back information locally.

To justify the validation of mineralized domains defined by CGME, the wireframes of all mined out tonnages provided by IMP were adopted for verification. As shown in Figure 12-1, all low-grade mineralized materials grading more or less 0.20 g/t recorded by mining operation were excluded in CGME’s domains. Table 12-1 gives the estimated results.

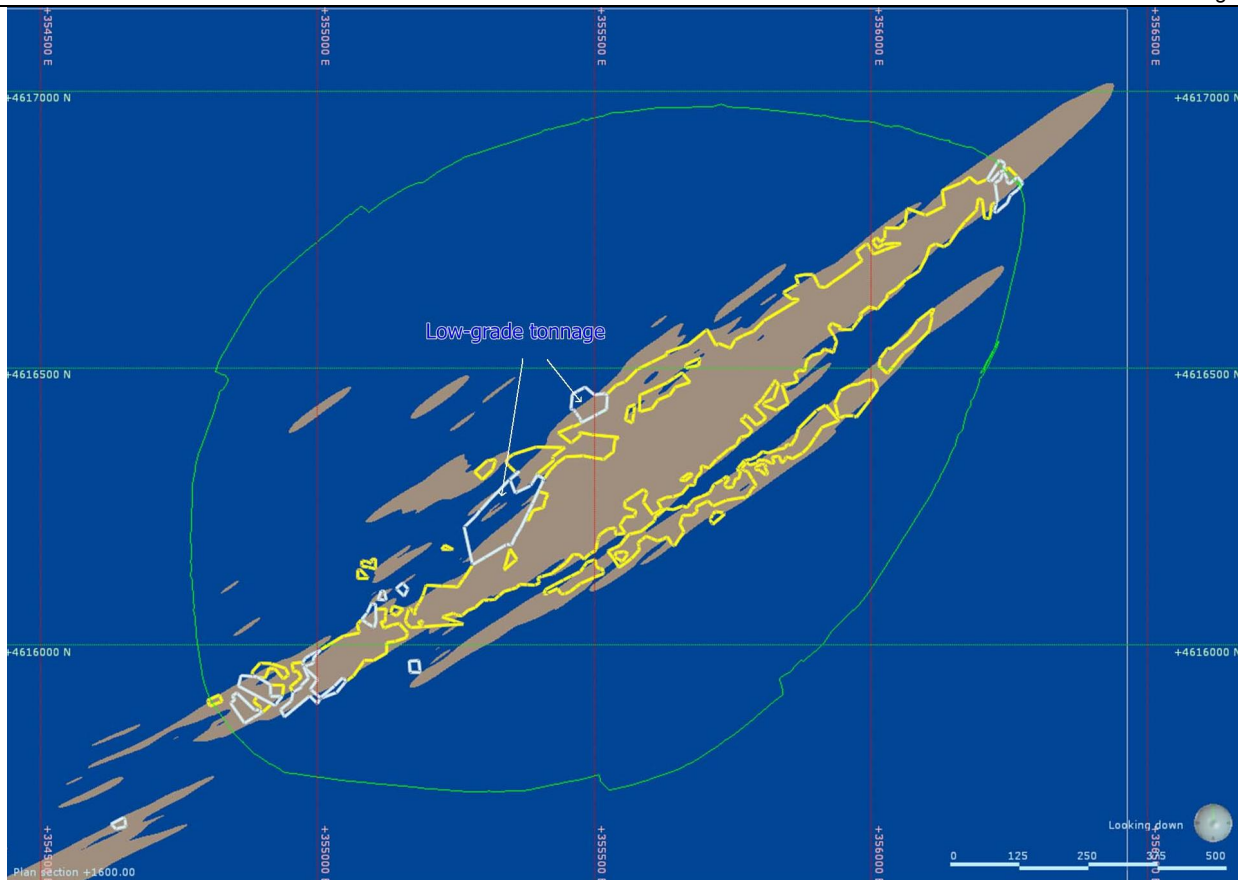


Figure 12-1: Level 1,600 m ASL View of Wireframes of All Mined-out Tonnes against the Mineralized Domains Defined by CGME

Table 12- 1: Brief Comparison between Mineral Resource Estimate and Mined-out Tonnage for Mining Operation as of March 2022

Category	Mineral Resource Estimate Conducted by CGME			Mining Operation Records Provided by IMP		
	Tonnage (t)	Au (g/t)	Au Metal (t)	Tonnage Mined-out (t)	Au (g/t)	Au Metal (t)
Measured	169,760,769	0.62	105.79			
Indicated	46,626,079	0.52	24.06			
Measured + Indicated	216,386,848	0.60	129.85	209,221,283	0.55	115.12
Inferred	55,737,392	0.40	22.31			

12.3 CGME’s Comments

In general, CGME believes that no material biases were recognised for the work performed by Nilsson Mines Services Ltd. et al.

Current primary database is composed of data generated as of April 1, 2022, which was totally verified by CGME. The assessment of QC data reveals that no material contamination was found in sample preparation, and most assays returned acceptable assaying level of accuracy, without remarkable laboratory system bias. CGME therefore believes that the current primary database is acceptable for the purpose of mineral resource estimation in CSH property area and sufficiently reliable to support mineral reserve conversion within the scope of Mining License.

The median SG value of 2.81 g/cm³ for converting volumes of primary mineralized materials into tonnages during mineral resource estimate, keeping the SG value of 2.72 g/cm³ for oxidized mineralized materials, the

same figure adopted by Nilsson Mines Services Ltd. et al in October 2012. The remaining mineral resources estimated by CGME were the results that were remained between the topographic data of updated open pit bottom and optimized ultimate pit shell, in which the former was provided by IMP and verified by CGME.

13 Mineral Processing and Metallurgical Testing

To complete the assessment of the existing metallurgical data CGME has reviewed the following reports and the operational records during the site visit in June 2022:

- Expansion Project of Inner Mongolia Pacific Mining Co., Ltd, Feasibility Study for Chang Shan Hao Gold Mine, July 2012, Changchun Gold Design Institute;
- Jinshan Gold Mines Inc., Throughput Expansion Update Technical Report, K D Engineering, Tucson; and
- Changchun Gold Research Institute, Processing Mineralogy Studies on Gold Mineralization Below 1,132 m ASL of the CSH Gold Deposit, December 2021.

Heap leach operations for the CSH project were commissioned in April 2007 with the first gold poured in July 2007. Initially the heap leach targeted run-of-mine oxide ore, and the ore had been classified into oxide ore and sulphide ore regimes. The initial approach to defining the ore was that if there was oxide presented in the ore it was considered suitable for the ROM leaching. In 2008 there was a significant decline in gold recovery, and it was realized that leach properties of the partially oxidized ore (transitional ore) were very similar to those of the sulphide ore. A metallurgical program was completed at this time with the recommendation for the addition of a 3-stage crushing plant to generate 9 mm ore to feed the leach pads. The crushing plant commissioning began in the 4th quarter 2009 with the plant fully operational in April 2010.

13.1 Metallurgical Testing

The metallurgical testwork that has been completed for the CSH Gold Project was summarized in the Throughput Expansion Technical Report that was submitted in February 2010. This included the details of the work concluded by METCON Research in November 2009.

The following review of the metallurgical testwork focuses on the heap leach test programs on which the design of the processing facility has been based.

Brigade 217 began exploration activities at the CSH site in 1995. Three test heaps of run-of-mine ore were constructed and leached for 32 days. Gold extraction averaged approximately 65 percent. In 2001 Brigade 217 expanded the test program to include agitation leach and column tests. Meanwhile the International Metallurgical and Environmental Inc. completed a test program that included mineralogical examination, gravity concentration and bottle roll cyanidation studies. In 2003 SGS Lakefield initiated a program on drill samples that included Bond Work Index determination, gravity concentration, cyanidation and a leaching test to determine potential gold losses due to preg-robbing. In 2003 and 2004, SGS completed additional tests on oxide and sulphide composite samples. In 2004 Jinshan Gold Mines conducted two pilot heap leach tests each containing approximately 50,000 tonnes of oxide. One pad was run-of-mine and the other was crushed through 125 mm. In 2005 and 2006 oxide and sulphide column leach studies were conducted at the Baogang Technical Institute in Baotou, Inner Mongolia supervised by METCON Research.

The following Table 13-1 and Table 13-2 provide the results from the column test results reported in July 2005 completed at Lakefield and at Yinchuan. Both sets of tests indicated the improved recovery experienced by crushing the ore prior to leaching.

Table 13-1: Lakefield Column Test Results

Composition	Time Day	Particle Size	Reagent Consumption kg/t of CN Feed		Total % Au Extraction	Residue Au, g/t	Head Calc. Au,g/t
			NaCN	CaO			
Oxide	83	-1 inch	1.27	1.55	47	0.62	1.17
	75	-1/4 inch	1.52	3.59	84.2	0.17	1.08
Sulphide	83	-1 inch	1.04	1.2	45.1	0.58	1.05
	83	-1 /4inch	0.99	1.32	73.1	0.25	0.94

Table 13-2: Yinchuan Column Test Results

Composition	Time Day	Particle Size	Reagent Consumption kg/t of CN Feed		Total % Au Extraction	Residue Au, g/t	Head Calc. Au,g/t
			NaCN	CaO			
Oxide	93	-50mm	0.85	1.18	65.6	0.25	0.726
	93	-25mm	1.11	1.19	75.1	0.185	0.741
	93	-10mm	0.8	1.34	79.9	0.146	0.726
Sulphide	93	-25mm	0.82	1.04	67.6	0.273	0.84
	93	-10mm	0.4	1.3	74.4	0.219	0.842

In February 2006 KD Engineering submitted a review of the metallurgical testwork that included the analysis of test columns that contained a sulphide composite having a size distribution of 80% passing 6 mm. The trend analysis indicated that the gold extraction would average about 72.6%. On the same composite the trend analysis of test column data indicated an extraction of 60% at P80=25 mm and 47% at P80=75 mm.

KD Engineering concluded that the results of the various column test programs indicated that the gold extractions from the oxide and sulphide ores were dependent on whether the ore was crushed prior to placement on the leach pads. The estimated extractions provided by KD are as follows:

- ROM oxide 80%
- Tertiary crushed oxide 85%
- ROM sulphide 40%
- Tertiary crushed sulphide 70%

In 2009 Metcon submitted a report for “On-site Open Cycle Column Leach Tests” for the recent test program that was supervised by Joseph Keane. In this program testing materials from the Northeast (NE) and Southwest (SW) ore zones were collected. The materials were crushed to P80=9 mm and P80=6 mm. The results of the P80=9 mm tests are provided in Table 13-3.

Data indicated that the average gold extraction for the NE ore zone was 77.8%. For the SW ore zone the average gold extraction was 73.5%. The lower extractions for the SW ore zone may be attributed to the lower-grade materials.

Consistent with earlier testing the results of this testwork also indicated that there could be the potential to improve extraction at the finer target crushing size P80=6mm. For the NE Zone the average test extraction for these same samples was about 6.3% higher, Whilst for the SW Zone the increase was about 2.6%.

The data for the NE and SW on-site column tests was analysed together and generated the recovery relationship against feeding grade, as shown in Figure 13-1. It concludes that the Au extraction model for the P80=9 mm tests are summarized below:

$$\text{Au Extraction} = 26.345 \times (\text{Au Feed Grade, g/t}) + 57.603$$

To apply the data from the on-site column tests to the heap leach operation it was recommended that a 5% adjustment be included to the recovery model. The adjustment provides allowance for a number of operating variables including the influence of external temperature on leaching rate and the number of lifts in the heap leach pad.

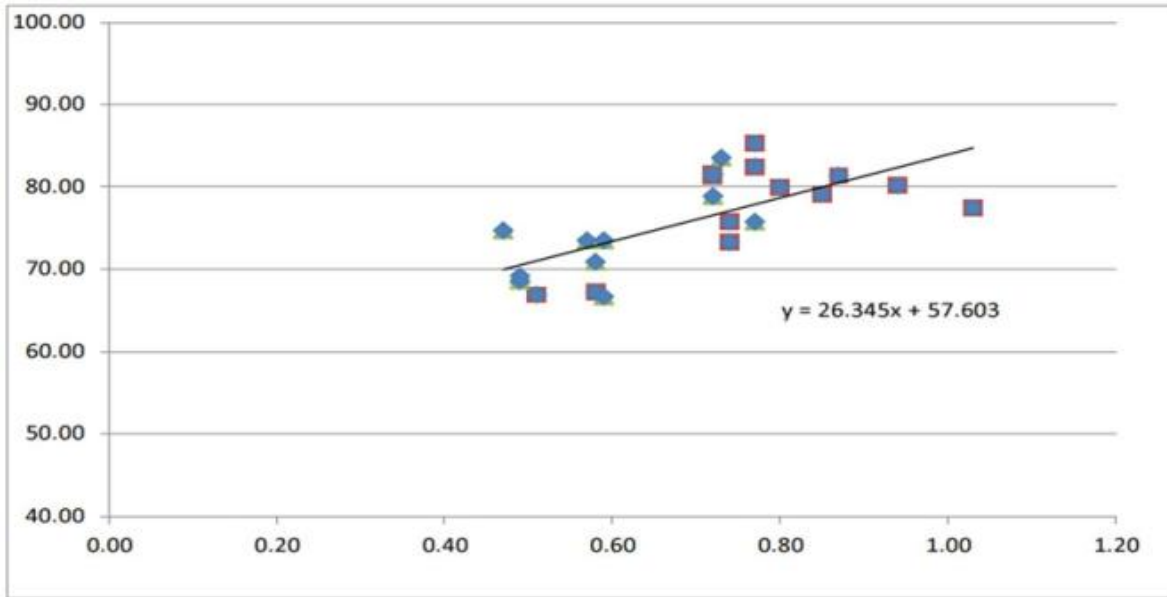


Figure 13- 1: On-Site Column Tests Recovery Analysis

The adjusted extraction model recommended for prediction of the gold extraction is:

$$\text{Au Extraction} = 26.345 \times (\text{Au Feed Grade, g/t}) + 52.603$$

Table 13-3: Open Cycle Leach Tests

Test #	Sample ID	Crush Size mm	Leach Days	Head Assay Au		Extraction %
				Screen	Calc	
1	NE09-A	9	122	0.52	0.58	67.22
2	NE09-B	9	122	0.68	0.72	81.37
3	NE09-B	9	122	0.68	0.77	82.49
4	NE09-C	9	122	0.68	0.77	85.29
5	NE09-C	9	122	0.68	0.72	81.6
6	NE09-D	9	122	0.86	0.94	80.17
7	NE09-D	9	122	0.86	0.84	81.4
8	NE09-E	9	121	0.75	0.74	73.27
9	NE09-E	9	121	0.75	0.74	75.75
10	NE09-F	9	121	0.83	0.8	79.98
11	NE09-G	9	121	0.77	0.85	79.16
12	NE09-H	9	121	0.55	0.51	66.92
13	NE09-I	9	121	1.04	1.03	77.46
14	SW09-J	9	122	0.45	0.47	74.72
15	SW09-K	9	122	0.71	0.77	75.79
16	SW09-L	9	122	0.46	0.49	68.6
17	SW09-L	9	122	0.46	0.49	69.18
18	SW09-M	9	120	0.58	0.57	73.51
19	SW09-M	9	118	0.58	0.59	73.51
20	SW09-N	9	120	0.67	0.73	83.56
21	SW09-N	9	120	0.67	0.72	78.89
22	SW09-O	9	120	0.65	0.59	66.7
23	SW09-O	9	120	0.65	0.58	70.91

13.2 Metallurgical Recovery

KD Engineering proposed the accumulated extraction model presented in Table 13-4 based on the estimated extractions for the various ore feeds.

Table 13-4: Accumulated Extraction

Ore Type	Accumulated Extraction, %				
	1	2	3	4	5
Run-of-mine oxide	65.6	74.7	78	79	80
Run-of-mine Sulphide	25.6	34.7	38	39	40
Crushed oxide	70.6	79.7	83	84	85
Crushed sulphide	55.6	64.7	68	69	70

The proposed accumulated extractions have been used to complete an analysis of the operating data since heap leach operations at CSH commenced. From the operating reports the metallurgical review assumes that oxide ore was placed on the pad from April 2007 through January 2008. In February 2008 the ore supply changed to transitional ore that responded similar to sulphide ore and this initiated the evaluation of 3-stage crushing. The commissioning of the 3-stage crushing circuit was completed in April 2010.

Since heap leach operations began, a total of 30,120 kg of Au were placed on the heap leach pad. This estimate was based on the monthly feed tonnes delivered to the heap and monthly grade.

Based on the pregnant solution flows to the carbon columns the theoretical (monthly) gold recovery is estimated at 14,550 kg, 49.4% of gold delivered to the heaps. Using the staged model in Table 13-4 the estimated extraction from the start of leaching through April 2012 is 14,450kg of gold. From the gold poured records the cumulative gold production through April 2012 for the CSH mine is 14,110 kg.

For the purpose of estimating the gold extraction for future production from the sulphide ore it is recommended that the model generated from the on-site column tests be used capping the Au extraction rate at 75% (predicted extraction at 0.85g/t).

$$\text{Au Extraction} = 26.345 \times (\text{Au Feed Grade, g/t}) + 52.603$$

13.3 Comments

Mineral processing and metallurgical testing and research work of CSH mineralized materials have been carried out in Canada and China from 1995 to now. The tests include agitating leaching, heap leaching, leaching of gravity concentrate and separate gravity separation. After a comprehensive analysis, the heap leaching is considered to be the most economically viable.

In order to ensure the recovery of gold in sulphide ore, it is necessary to carry out a three-stage crushing. The materials size of heap leaching feed needs to be strictly controlled, with the final product size of less than 9 mm. For the mineral resources defined below 1,132 m ASL, it is confirmed that the heap leach recovery is similar to that of the current operations as concluded in the Processing Mineralogy Studies on Mineralization Below 1,132 m ASL OF THE CSH Gold Deposit in December 2021.

14 Mineral Resource Estimates

14.1 Introduction

The Mineral Resource Statement presented herein represents the updated gold mineral resource evaluation prepared for the CSH Gold Project in accordance with the disclosure requirement of the Canadian Securities Administrator' National Instrument 43-101.

The mineral resource model prepared by CGME is based on a total of 368 diamond drillhole samplings completed in the Project area as of March 2022. The resource estimation work was completed by Yanchao Cui, supervised by Yuan Chen, a Member of Australian Institute of Geoscientists (MAIG/RPGeo, M4014). The effective date of the resource statement is 1st April 2022.

This section describes the resource estimation methodology and summarizes the key assumptions considered by CGME. In the opinion of CGME, the resource evaluation reported herein is a reasonable representation of the global Au mineral resources found in the CSH Project at the current status of sampling. The mineral resources have been estimated in conformity with the "CIM Estimation of Mineral Resources and Mineral Reserves Best Practice guidelines" dated November 29. Mineral resources are not mineral reserves and do not have demonstrated economic viability. However, the measured and indicated mineral resources estimated in the ultimate open pit limit can support the mineral reserve conversion requirement to meet the current and planned open pit mining operations.

Micromine v2021 was used to construct the geological domains, prepare assay data, conduct geostatistical analysis and variography, construct the block model, estimate metal grades, and tabulate mineral resources.

14.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Construction of wireframe models for the boundaries of the gold mineralization;
- Definition of resource domains;
- Data conditioning for geostatistical analysis and variography;
- Block modelling and grade interpolation;
- Resource classification and validation;
- Assessment of the "reasonable prospects for eventual economic extraction" and selection of appropriate cut-off grades; and
- Preparation of the Mineral Resource Statement.

14.3 Resource Database

The primary database provided by IMP includes digitised geological logging data, all relevant analytical data, topographic, geological, and mineralization maps along with sectional interpreted maps, etc. All data use the same projection system. CGME undertook a thorough review of the primary database, followed by various verification procedures, and no material deficiencies were found.

Based on the primary database, CGME constructed a resource database, composed of borehole collar data, survey data, lithology, and assay with brief information of database structure, as summarised in Appendix A. Table 14- 1 summarises the resource database covering the entire CSH gold deposit area, with assays of Au only.

Table 14- 1: Summary of Resource Database Records

Data Type	Borehole	
Prior to December 2011	Collar	303
	Length	106,106.03
	Survey	2,637
	Assay	53,173
	Lithology	16,996
Since December 2011	Collar	65.00
	Length	51,985.84
	Survey	1,160
	Assay	26,279
	Lithology	4,184
Sum	Collar	368
	Length	158,091.87
	Survey	3,797
	Assay	79,452
	Lithology	21,180

In summary, CGME’s estimation of the Mineral Resources documented in this Report is formed by data from 368 diamond drilling holes for a combined length of 158,092 m. Most sample locations are located within the property concession area, and all the mineral resource estimated covers the Mining License scope and immediately adjacent by the Exploration Permit scope below.

14.4 Geological Interpretation and Modelling

The gold mineralization in the CSH gold deposit is totally controlled by bedding-like shear structure. A total of 79,452 assays on an overall grid of 50 m (along strike) by 50–100 m (down dip) with local grid of 25–50 m (along strike) by 25–50 m (down dip) have delineated the gold mineralization zones.

All electronic data have been imported into a Micromine database for validation against the borehole database and topographic wireframes. In practice, drillholes were displayed, and various domain wireframes as below were constructed with the aid of software, which were then manually revised locally and validated against logging data of all cross sections of exploration lines.

- Coded gold mineralization domains: Based on geological mapping and geological understanding, various gold mineralization domains were constructed, with exception for some sporadic domains located at the outside the main domain that were defined by an individual borehole, e.g., borehole DDH9800-6. In the process, the characteristics of host structure as described in Section 7.2 were well considered. As advised, the cut-off grade of 0.20 g/t Au was adopted, which CGME believes is reasonable; and
- Waste bands were also defined within the mineralization domains with the aid of software and referred to the requirement of not less than horizontal distance of 6.0 m of downhole interception grading less than 0.20 g/t Au.

Finally, a total of 18 gold mineralization domains, which were classified as NE zone, and SW zone, covering NE open pit, and SW open pit, respectively. The NE zone includes domains of N1, N2, N3, N4, N5, N6, N8, N9, N10, N11, N12, N13, N14, N16, and N17, and SW zone is composed of domains of W1, W2, and W3, as shown in Figure 14-1 and detailed in Section 7.3 in this Report.

It is noted that the inferred distance between sample points extends more than 150 m locally within current gold mineralization domain. However, the maximum distance that the resource is extrapolated beyond the sample points is not more than 150 m under any circumstance.

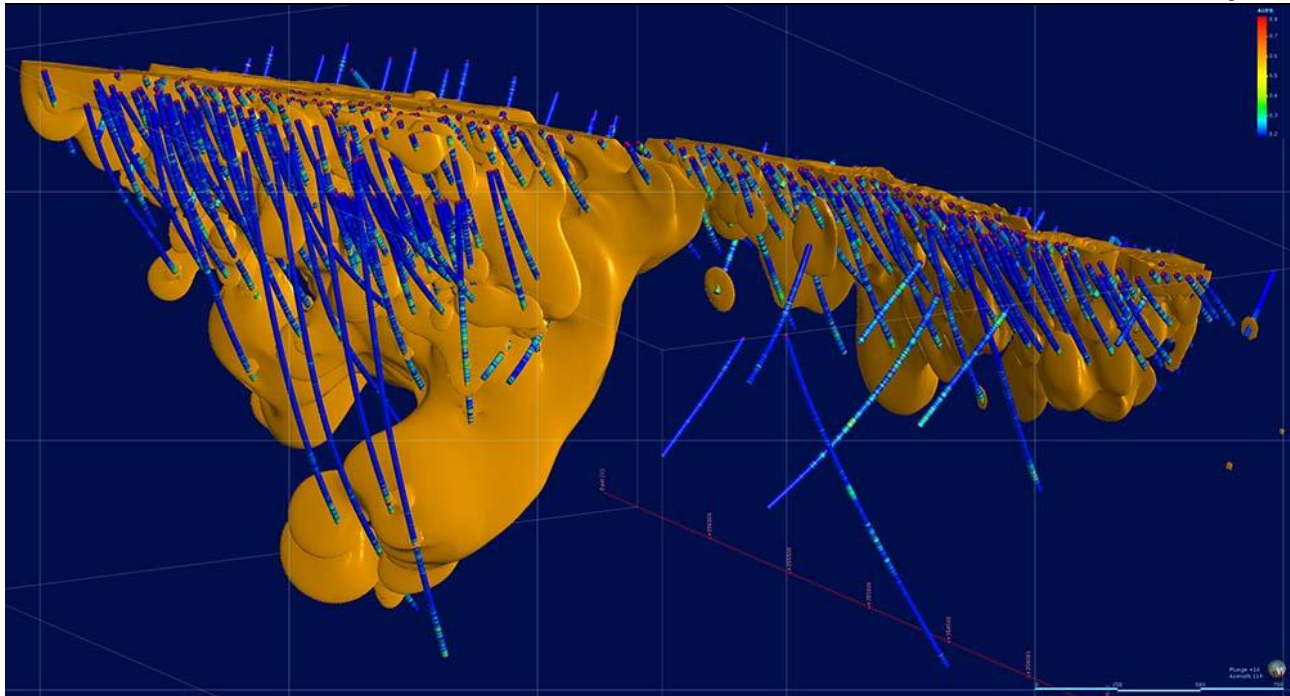


Figure 14-1: 3D Model View of Gold Mineralization Domains in the CSH Gold Deposit

14.5 Evaluation of Outliers

The raw Au grade distributions within gold mineralized domains at a cut-off grade of 0.20 g/t Au were examined via histograms and cumulative probability plots to determine if capping was required and if so at what level.

Raw Au assay statistics is shown in Figure 14-2 and listed in Table 14-2 and indicates that the distribution for raw Au is strongly skewed even within the domains, which was caused by nugget effect. CGME believes that top grade capping is required, with the same treatment as what was proposed by Nilsson Mines Services Ltd. et al in October 2012. As such, gold composite values were capped to 7.0 g/t Au at NE zone, and 6.5 g/t Au at the SW zone, i.e., as gold values were more than the top-capping values, a weighted averaging with one neighbouring sample was applied. After compositing, if the weighted average value was less than the top-capping value, the raw values involved were replaced by the weighted average value. Otherwise, the raw values were substituted by the top-capping values. As a result, a total of 10 composite values were revised as shown in Table 14-3. After capping, the composite gold distributions within the mineralized domains present moderately skewed normal distributions, as shown in Figure 14-3. In general, the standard deviation (“SD”) value becomes lower after compositing and capping, and the coefficients of variation (“CV”) for all Au composites within the domain are less than 105%.

Table 14-2: Basic Statistics of the Drill Hole Database of the CSH Gold Deposit

Item	Raw Samples	Sample within Domains	Sample Length within Domains	Composites	Composites Capped
	Au (g/t)	Au (g/t)	(m)	Au (g/t)	Au (g/t)
No of samples	79,425	24,921	24,921	22,564	22,564
Minimum value	-	-	0.04	-	-
Maximum value	55.70	55.70	7.17	33.60	7.00
Mean	0.22	0.58	1.85	0.60	0.60
Median	0.04	0.37	2.00	0.42	0.42
Variance	0.29	0.70	0.17	0.46	0.37
Standard Deviation	0.54	0.83	0.42	0.68	0.61
Coefficient of variation	2.51	1.43	0.23	1.12	1.02
25.0 Percentile	0.01	0.17	1.73	0.25	0.25
50.0 Percentile	0.04	0.37	2.00	0.42	0.42

Item	Raw Samples	Sample within Domains	Sample Length within Domains	Composites	Composites Capped
	Au (g/t)	Au (g/t)	(m)	Au (g/t)	Au (g/t)
75.0 Percentile	0.20	0.73	2.00	0.75	0.75
97.7 Percentile (+2 SD)	1.51	2.47	2.50	2.25	2.25
99.86 Percentile (+3 SD)	4.72	7.07	3.10	5.69	5.63
Skewness	21.23	16.48	-1.07	9.52	3.58
Kurtosis	4,966.29	837.96	3.98	300.67	21.59

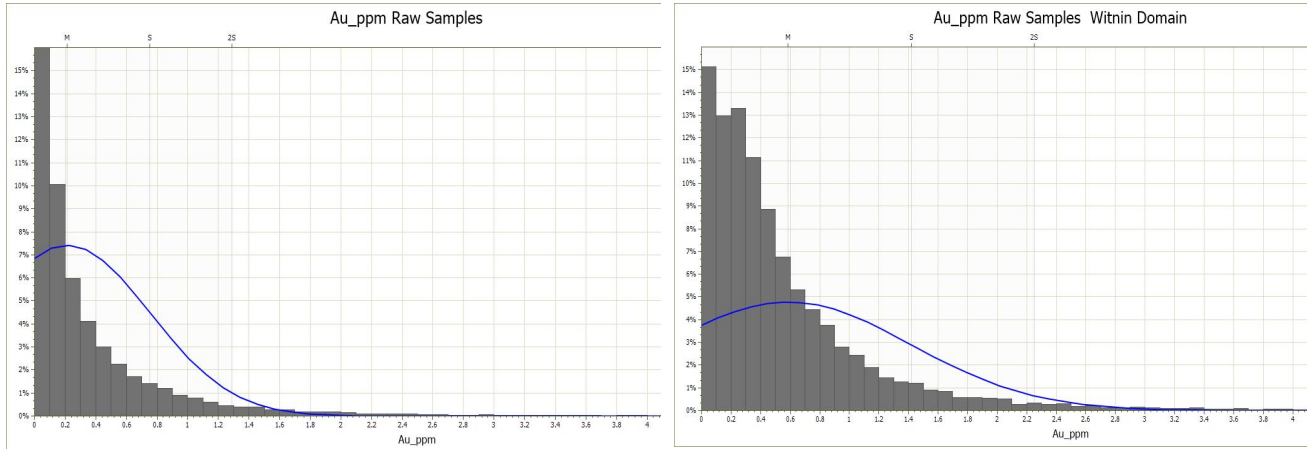


Figure 14-2: Histogram Statistics for Raw Au Assays

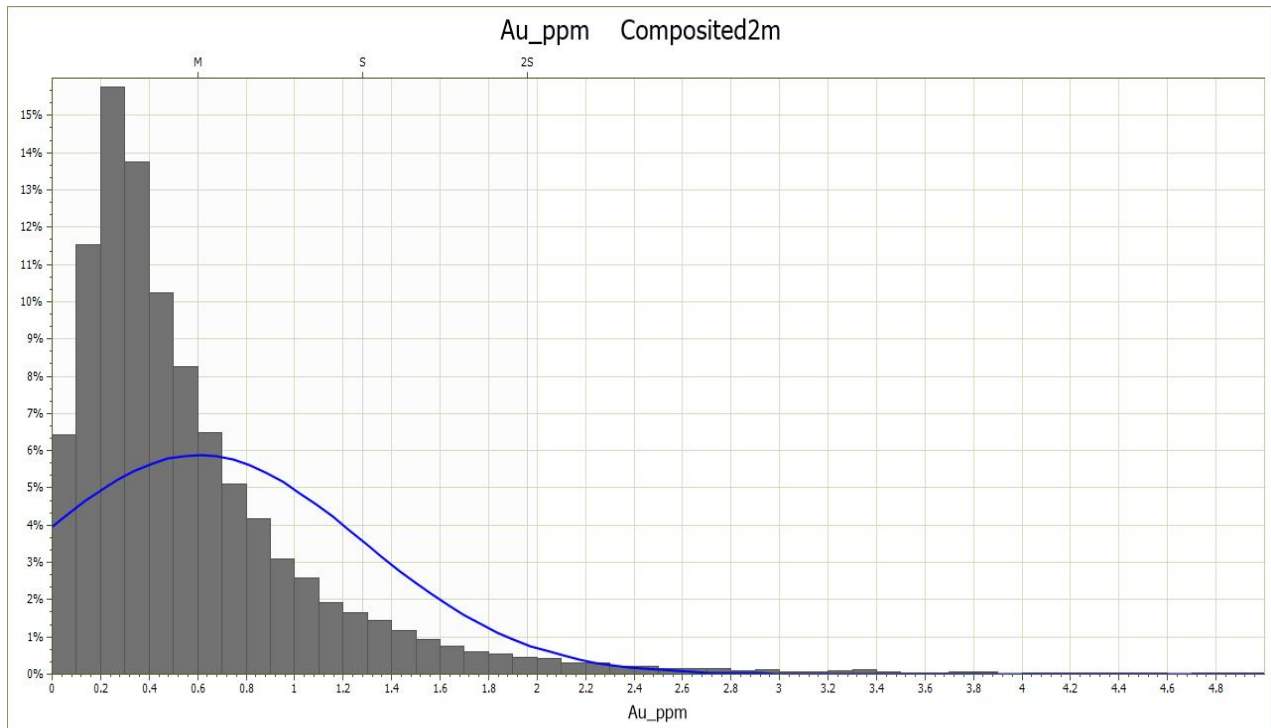


Figure 14-3: Histogram Statistics for Au Composites

Table 14-3: Brief Information of Top-Capping Carried out by CGME

Hole_ID	Assay ID	Depth from (m)	Depth to (m)	Au (g/t) Original	Au (g/t) after capping	Mineralized Zone
DDH01	H1028	58.0	59.6	1.451	7.0	N1
DDH01	H1029	59.6	61.2	26.49	7.0	N1
DDH09	H9109	224.0	226.0	0.487	6.5	W1

Hole_ID	Assay ID	Depth from (m)	Depth to (m)	Au (g/t) Original	Au (g/t) after capping	Mineralized Zone
DDH09	H9110	226.0	228.0	13.818	6.5	W1
DDH101_1	DDH101_1_198	313.0	314.2	0.08	7.0	N1
DDH101_1	DDH101_1_199	314.2	315.5	14.1	7.0	N1
DDH106	H106055	86.0	88.0	0.66	7.0	N1
DDH106	H106056	88.0	89.5	15.65	7.0	N1
DDH9800_5	DDH9800_5_591	1051.4	1053.4	0.773	7.0	N1
DDH9800_5	DDH9800_5_592	1053.4	1055.2	55.7	7.0	N1

14.6 Compositing

Prior to performing a statistical analysis, samples need to have been composited to equal lengths for constant sample volume, keeping in line with industry theories of sample support. Sampling length statistics is plotted in Figure 14-4, indicating that most samples have a length of 2.0 m. As such all assays were composited into 2.0 m downhole lengths.

Several holes were randomly selected in wireframe models, and the composited values were checked for accuracies, without material errors found. A summary statistics of composite within the mineralised domain is also listed in Table 14-2.

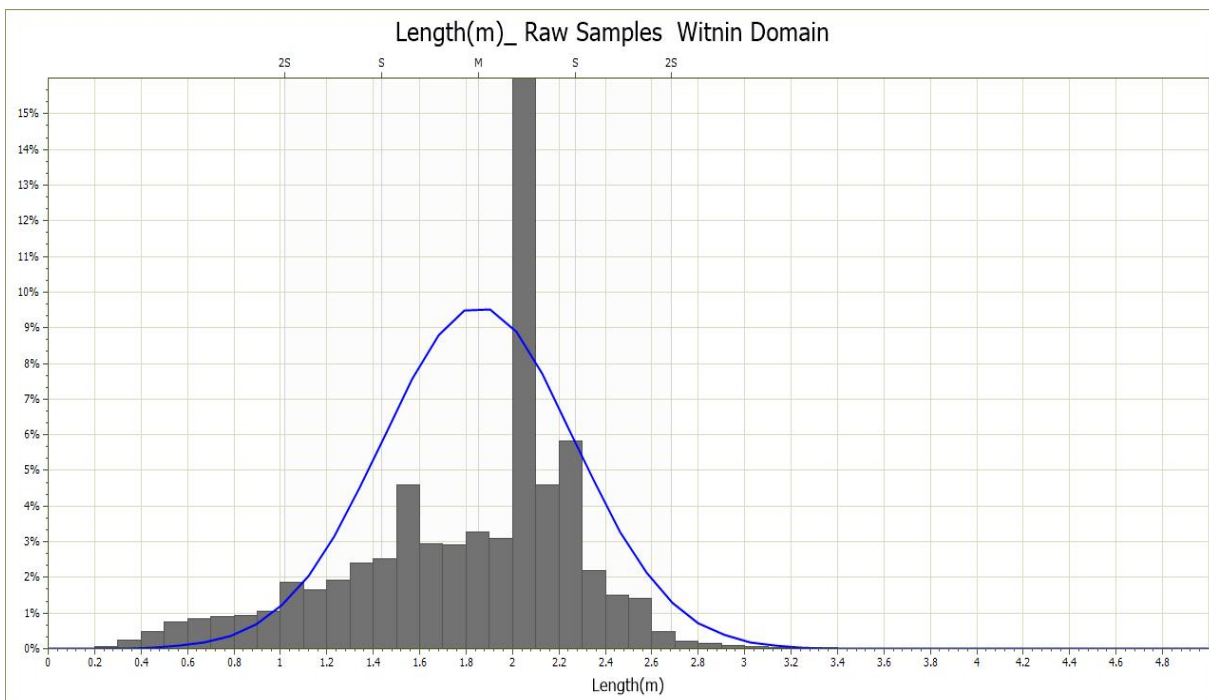


Figure 14-4: Plot of Sampling Length for All Raw Samples

14.7 Statistical Analysis and Variography

Variogram models were constructed for Au composite assays only using a pairwise relative semivariogram for gold mineralised domains, and these models were found basically to fit a statistical model. Semivariograms were produced in numerous directions in 3D space. The direction with the longest continuity was considered the major axis. The vertical plane perpendicular to this direction was then tested to determine the direction and dip of the longest range, and this was treated as the semi-major axis, with the third direction being the minor axis orthogonal to both the major and semi-major axes.

In all cases a spherical composite exponential variogram model has been fitted to the experimental variograms via geometric anisotropy. Figure 14-5 provides a typical example for Au, and the model parameters of the domains defined so far are summarized in Table 14-4.

The variogram validation was conducted in Micromine using all Au assays of each domain. The results of the validation are shown in Table 14-5 and demonstrate that roughly 95.0% of the errors for Au within two standard deviations of the mean for most domains defined. It is CGME’s opinion that the variogram models are overall acceptable for the data set used and reliable for evaluation of the block model using the Ordinary Kriging (“OK”) and the Inverse Distance Squared (“ID2”).

Table 14-4: Summary of Variogram Parameters

Element	Axes	Azimuth (°)	Dip (°)	Model	C ₀	C	Range (m)	Anisotropy Factors
Au (g/t)	Major	20	0	Spherical	0.18	0.29	60.73	1.00
	Semi-major	110	60				60.73	1.00
	Minor	110	-30				23.7	0.39

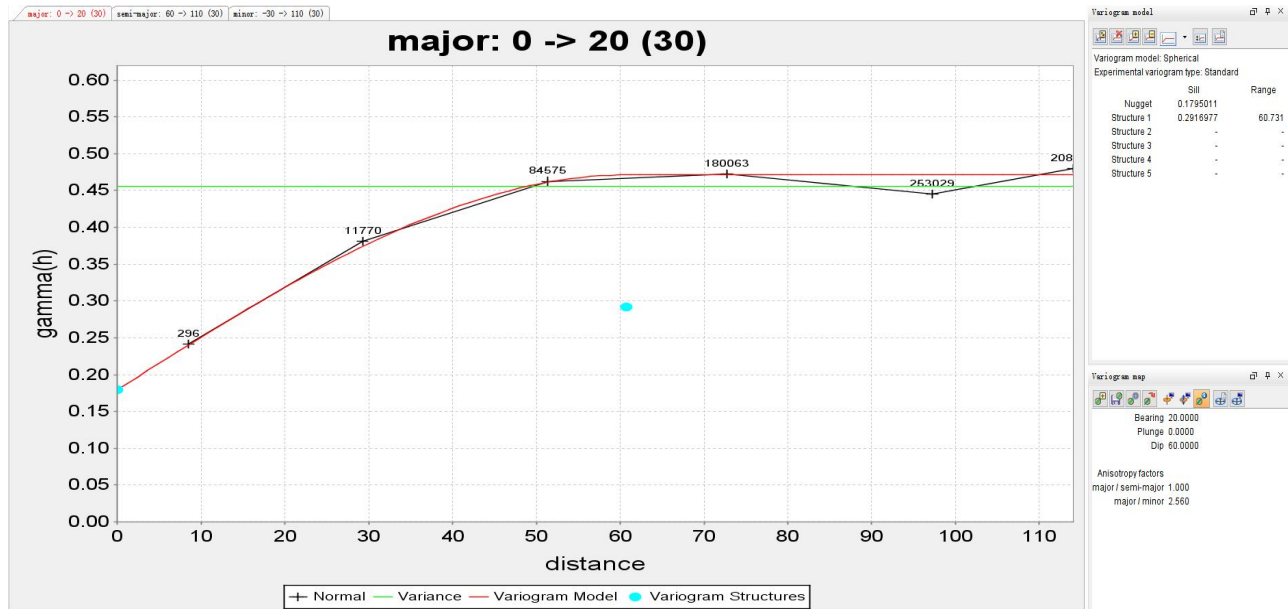


Figure 14-5: Variogram Modelling for Au on its Major Axis

Table 14-5: Results of Au Variogram Validation

Items	Value
Mean	0.00
Variance	0.37
Standard Deviation	0.61
Average Square Error	0.37
Weighted Square Error	0.38
Skewness	-7.80
Kurtosis	272.08
No. of Assays	22,561.00
Average Krig Variance	0.26
Percentage of Errors within Two Standard Deviations	95.08

14.8 Block Model and Grade Estimation

The un-rotated block model was created using Micromine and used to estimate tonnage and grade. Appropriate parent and sub-block cell sizes were selected for the deposits to enable CGME to generate a model which encapsulated the dipping mineralization.

For the defined gold mineralised domain as advised, a parent block size of 12.5 m easting (X) by 12.5 m northing (Y) by 6.0 m vertically (Z) was used, with sub-block size of 2.5 m X by 2.5 m Y by 3.0 m Z. The

block model uses the same coordinate projection system as that used in data collection. A summary of the block model specifications is presented in Table 14- 6.

Table 14-6: Block Model Specifications Conducted by CGME

Model Axes	Minimum (m)	Maximum (m)	Parent Block Size (m)	Sub-block Size (m)	Number of Block
East	16,352,400	16,356,500	12.5	2.5	1,640
North	4,615,000	4,617,100	12.5	2.5	840
Elevation	100	1,700	6.0	3.0	533

CGME notes that the volume of the block model was validated matching with the graded gold mineralization domain at the cut-off grade of 0.20 g/t Au.

The **OK** was used for estimation, and the parameters of Au variograms are summarized in Table 14-4, with other parameters listed in Table 14-7. Meanwhile, a dynamic anisotropy ellipsoid was automatically applied as shown in Figure 14-6.

As required in terms of a potential underground mining by IMP, the other block model, a parent block size of 15.0 X by 15.0 Y by 5.0 m Z and sub-block size of 3.0 m X by 3.0 m Y by 2.5 m Z, was also estimated with the same parameters described as above. Waste bands were also estimated using OK with the same parameters.

It is noted that the maximum distance that the resource is extrapolated beyond the sample points is not more than 150 m under any circumstance.

Table 14-7: Parameters Used in Grade Interpolation

Estimate Pass	Search Distance in Plane (m)	Search Distance in Vertical (m)	Minimum Samples	Maximum Samples	Major/Semi-major	Major/Minor
1	45	20	5	8	1.00	2.56
2	80	40	5	8		
3	150	60	4	10		

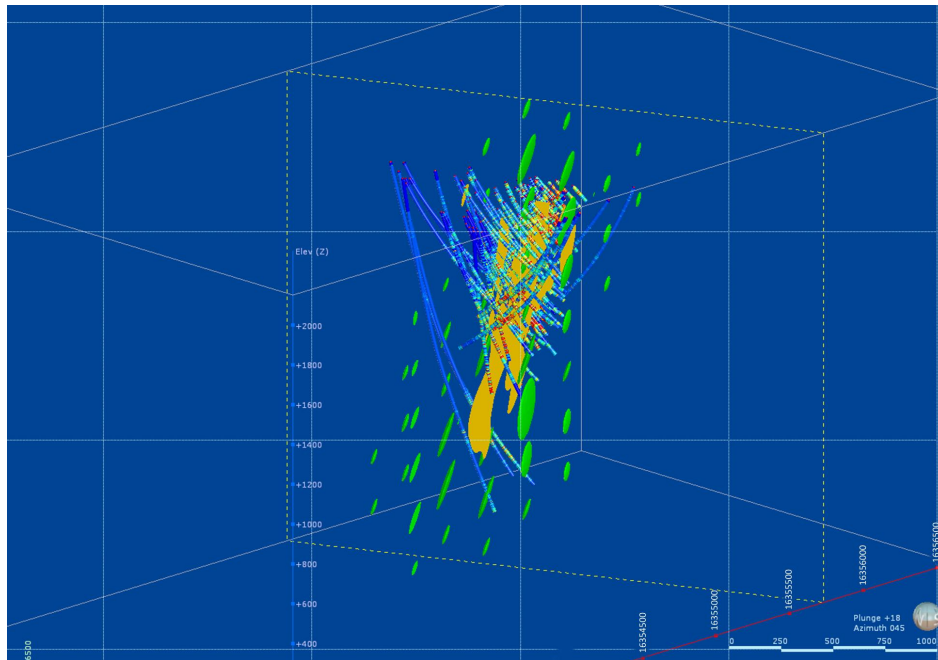


Figure 14-6: Dynamic Anisotropy Ellipsoid

14.9 Model Validation and Sensitivity

CGME has performed a thorough validation of the resultant interpolated model, including visual inspection, estimated a Mineral Resource using ID2, and followed up the parameters generated by experimental variograms, with a swath plot checking as well.

Visual inspection provides a validation of the interpolated block model on a local block scale, using visual assessments of sample grades versus estimated block grades. Table 14-8 provides a comparison of mineral resource estimates between OK and ID2 based on exactly the same parameters as described above. The details of swath plot checking are shown in Figure 14-7.

In addition, the mining operation records were used for model validation, as detailed in Section 12.2 of this Report.

These data indicate that the block model constructed by CGME is acceptable.

Table 14-8: Comparison of Global Mineral Resource Estimate between ID2 and OK

Category	Tonnage (x1000t)	Method of Estimate	Au (g/t)	Au Metal (t)
Measured	313,007	OK	0.62	194.38
		ID2	0.63	196.53
Indicated	224,789	OK	0.55	123.71
		ID2	0.56	125.13
Inferred	314,365	OK	0.43	135.06
		ID2	0.44	136.86

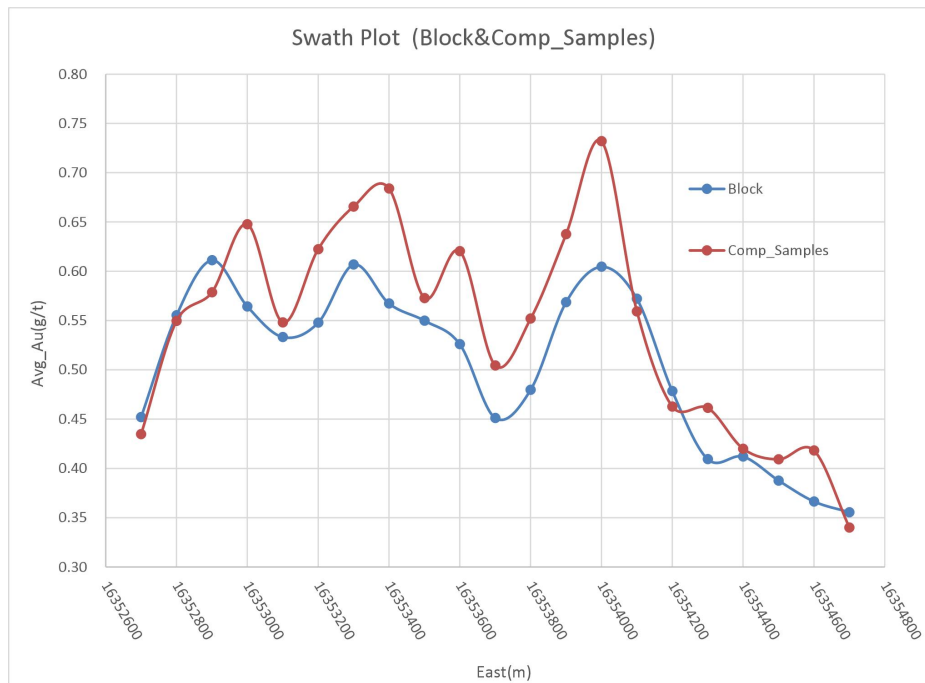


Figure 14-7: Swath Plots from West to East of Mineralised Domain W1 of the CSH Gold Deposit

14.10 Mineral Resource Classification

Block model quantity and grade estimates for the CSH gold deposit were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) by Yuan Chen, MSc., MAIG (M4014)/RPGEO (10262), an appropriate independent Qualified Person for the purposes of National Instrument 43-101.

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

CGME is acceptable that the geological modelling honours the current geological information and knowledge. The location of the samples is correctly defined, and the assay data are acceptable to support resource evaluation. The sampling information was acquired primarily from diamond drillholes with overall sampling on a grid density of 50 m (along strike) by 50–100 m (down dip) with local grid of 25–50 m (along strike) by 25–50 m (down dip).

Generally, for mineralization indicating good geological continuity investigated at an adequate spacing with acceptable sampling information accurately located, and CGME was informed by the site mining engineer that mineral resource categories proposed by Nilsson Mines Services Ltd. et al in October 2012 were reasonable. Therefore, the similar criteria were adopted. CGME considers that blocks estimated during the first estimation pass with an average anisotropic distance to samples of less than 45 m can be classified as Measured Mineral Resources (“MS”), blocks estimated during the second estimation pass with an average anisotropic distance to samples of less than 80 m can be classified as Indicated Mineral Resources (“ID”), and blocks estimated during the third estimation pass with an average anisotropic distance to samples of less than 150 m can be classified into Inferred Mineral Resources (“IF”). In order to avoid some local sporadically distributed blocks categorised of Measured or Indicated, accordingly wireframes were constructed manually.

For those Measured and Indicated Mineral Resource blocks, CGME considers that the degree of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit, which is also adequate to support mining operations.

14.11 Mineral Resource Statement

The CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) define a mineral resource as follows:

“(A) Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”

The “reasonable prospects for eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade that takes into account extraction scenarios, processing recoveries and potential environmental impacts. In order to meet this requirement, CGME considers that the upper portions of the Project area are amenable for extraction within the optimized ultimate open pit limits, and block caving mining method would be the choice for extraction below the ultimate open pit limits.

The block model quantity and grade estimates were reviewed to determine the portions of the Project that show “reasonable prospects for eventual economic extraction” from both an open pit mine and an underground block caving mining operation, based on parameters summarized in Table 14-9.

Table 14-9: Conceptual Assumptions Considered for Open Pit Mineral Resource Reporting

Parameter	Value for the Open-pit Limits	Value for the Potential Underground Mining	Unit	Comments
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Parameter	Value for the Open-pit Limits	Value for the Potential Underground Mining	Unit	Comments
Gold price	402	402	RMB per gram	Gold bullion is the final product grading 90% Au with assumed market price of USD 1,980/oz, with a reduction of RMB 1.5/g of refinery charge
Mining cost	42.0	43.0	RMB per tonne mined	Based on information of Section 20 of this Report and CGME's assumptions
Heap leaching & metallurgical cost	18.0	18.0	RMB per tonne of feed	
General and administrative	5.0	5.0	RMB per tonne of feed	
Heap leaching & metallurgical recovery	60.0	60.0	%	Same as proposal by Nilsson Mines Services Ltd. et al in October 2012
Au cut-off grade	0.28	0.30	g/t	Cut-off grade of 0.28 g/t Au was used for open-pit scenario in this Report
				Cut-off grade of 0.30 g/t Au was used for underground block caving mining in this Report

Figure 14-8 provides a level 1,250 m ASL plan for the distribution of Mineral Resource categories of the CSH gold deposit, where a cross section view is shown in Figure 14-9 accordingly.

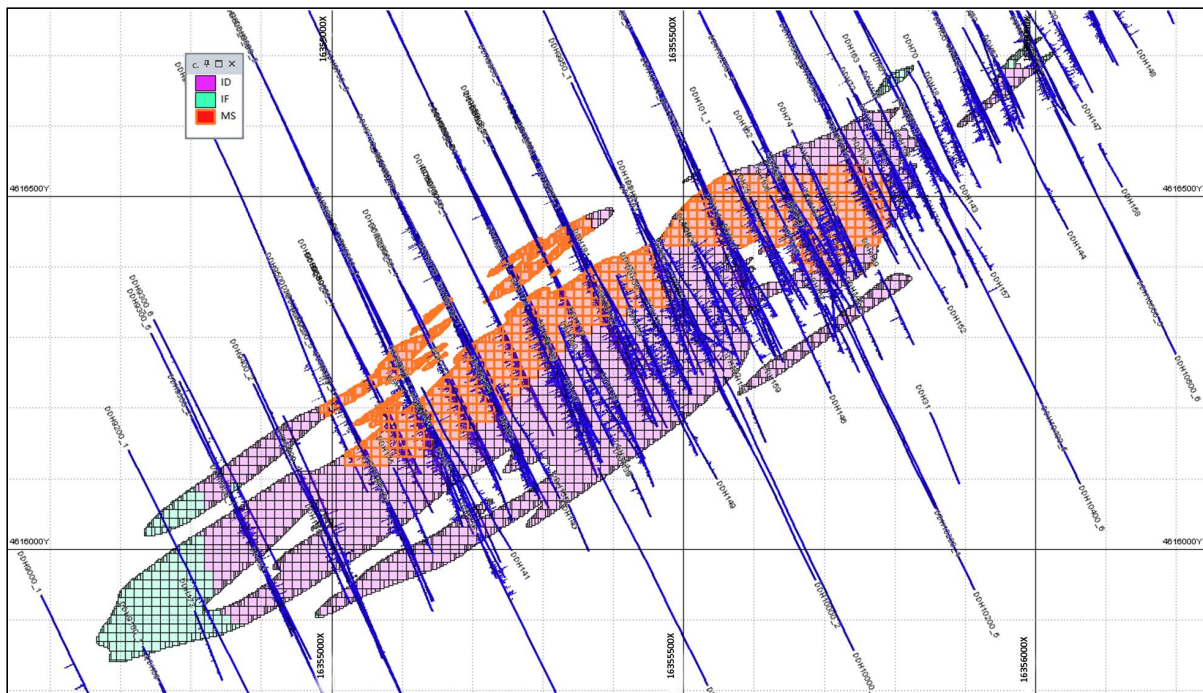


Figure 14-8: Level 1,250 m ASL Plan for Mineral Resource Category Distribution of the CSH Gold Deposit

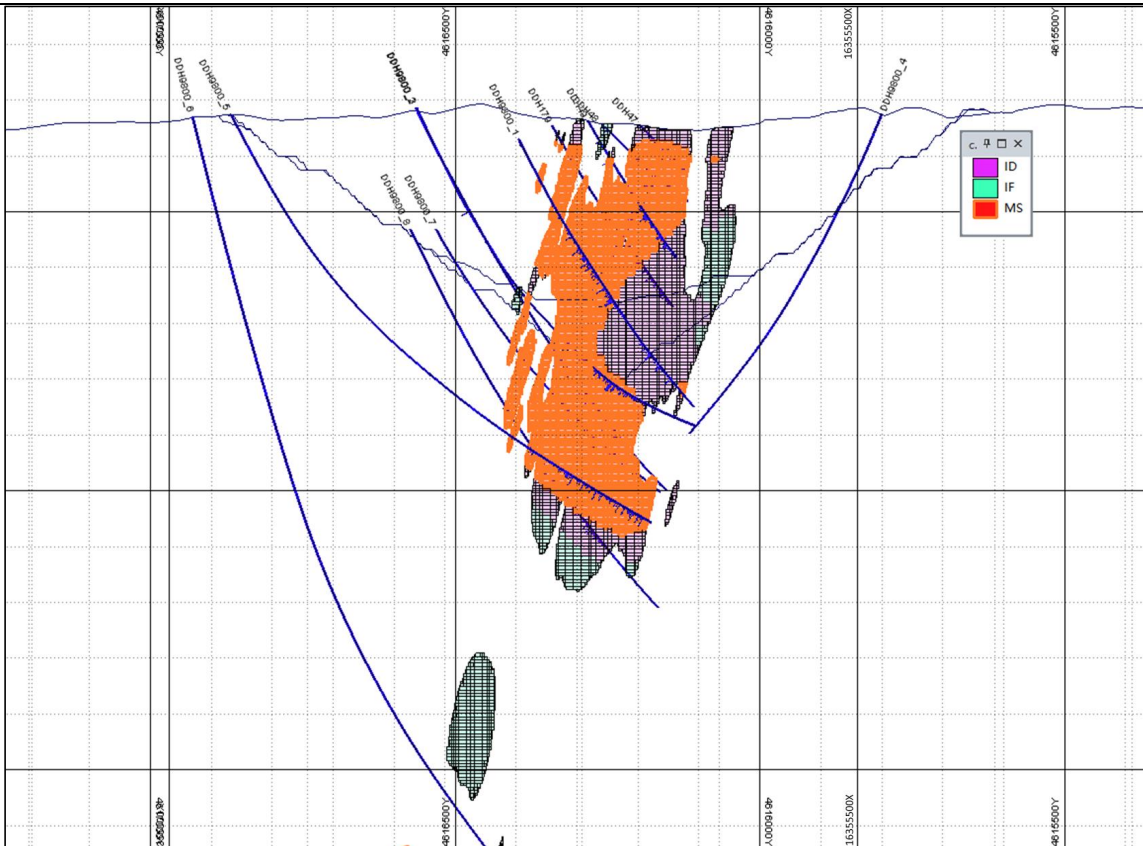


Figure 14-9: Cross Section Exploration Line 9,800 for Mineral Resource Category Distribution

CGME considers that there is no risk recognised including EIA at present for mining license and exploration license. For gold mineralization in the Project that is amenable to extraction by open pit mining, CGME considers it is appropriate to estimate mineral resources at a cut-off grade of 0.28 g/t Au. Likewise, the block caving mining method would be the choice for extraction of mineral resources at depth, in which a cut-off grade of 0.3 g/t Au is considered to be appropriate. However, the mineral resources distributed at the outside of the open pit limit but above the bottom plane may not be amenable to extraction in the future. Meanwhile, the mineral resources located below 840 m ASL at NE zone and 1,250 m ASL at SW zone may not be amendable to extraction in the future due to excessive depth or high dilution. These mineral resources that may not be amendable to extraction in the future are excluded from the Mineral Resource Statement in this Report.

Table 14- 10 summarises the Mineral Resource Statement for the Project at a cut-off grade of 0.28 g/t Au and 0.3 g/t Au, respectively. The statement includes all mineral resources located within the property area after deduction of all mined-out as of April 1, 2022 and below the ultimate open pit limits. As such, the effective date of the Mineral Resource Statement is April 1, 2022.

Table 14- 10: Mineral Resource Statement for the CSH Gold Deposit, CGME Consulting Limited as of April 1, 2022

Location	Mineral Resource Category	Tonnage (x1,000 t)	Au (g/t)	Au Metal (t)	Au Metal (Moz)
Remaining within the open pit limit at a cut-off grade of 0.28 g/t Au	Measured	23,590	0.65	15.42	0.5
	Indicated	23,790	0.68	16.13	0.52
	Measured+Indicated	47,380	0.67	31.55	1.01
	Inferred	7,280	0.42	3.08	0.1
Underground at a cut-off grade of 0.30 g/t Au	Measured	88,200	0.67	58.66	1.89
	Indicated	89,850	0.58	52.07	1.67
	Measured+Indicated	178,050	0.62	110.72	3.56
	Inferred	62,090	0.49	30.68	0.99

Notes:

Mineral Resources are reported in relation to a conceptual open-pit mining and underground block caving mining. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Raw assays have been capped. Mineral Resources include Mineral Reserves.

Mineral Resources are reported at a cut-off grade of 0.28 g/t Au for open-pit mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,980 per ounce. Additional Mineral Resources are reported at a cut-off grade of 0.30 g/t Au for underground block caving mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,980 per ounce. USD 1.0000=RMB 6.3457 dated in April 2022, and one troy ounce is equal to 31.1035 grams.

14.12 Grade Sensitivity Analysis

The mineral resources in the CSH gold deposit are subject to the selection of the cut-off grade. To illustrate this sensitivity, the global model quantity and grade estimates at different cut-off grades are shown in Figure 14- 10 and Figure 14- 11 for the open-pit portions of the CSH gold deposit. Accordingly, details are shown in Table 14-11. Additionally, the global model quantity and grade estimates at different cut-off grades are shown in Figure 14-12 and Figure 14-13 for the portions below the ultimate open-pit limits of the CSH gold deposit, with the details listed in Table 14-12.

These figures listed should not be misconstrued as representing a Mineral Resource Statement but are included for the purpose of illustrating the sensitivity of the block model estimates to the selection of cut-off grade.

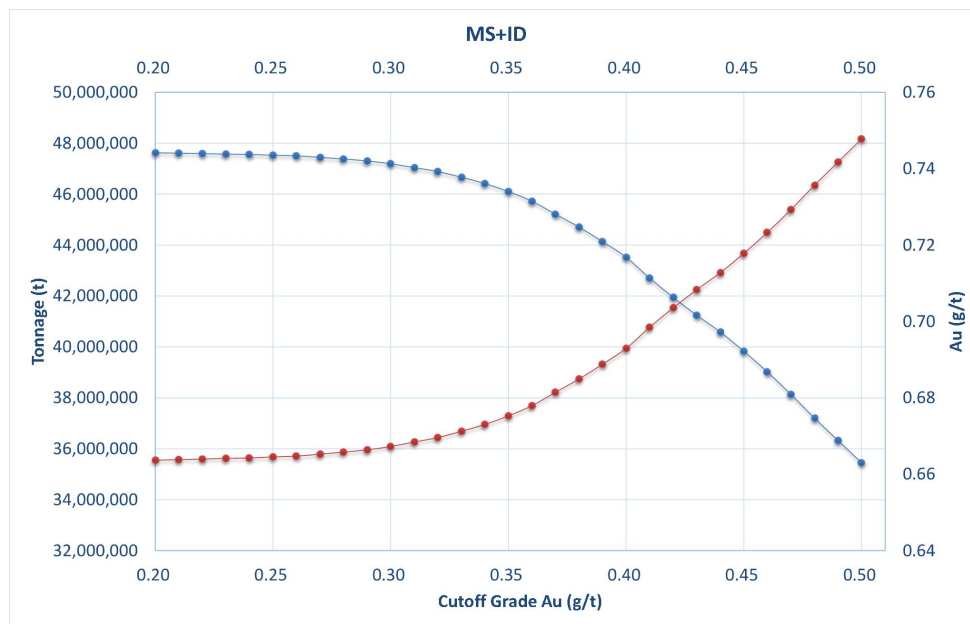


Figure 14- 10: Grade Tonnage Curves for Measured plus Indicated Mineral Resources within the Ultimate Open-pit Limits of the CSH Gold Deposit

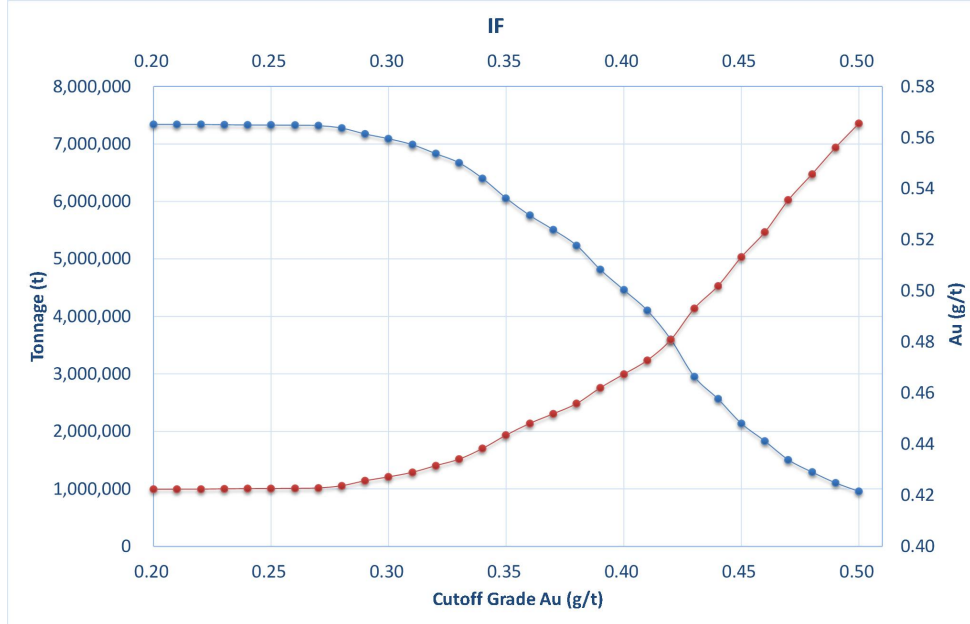


Figure 14-11: Grade Tonnage Curves for Inferred Mineral Resources within the Ultimate Open-pit Limits of the CSH Gold Deposit

Table 14-11: Global Block Model Quantity and Grade Estimates of the Ultimate Open-pit Limits of the CSH Gold Deposits

Cutoff Au (g/t)	Measured+Indicated		Inferred	
	Tonnage (t)	Au (g/t)	Tonnage (t)	Au (g/t)
0.20	47,623,019	0.664	7,341,019	0.422
0.21	47,607,529	0.664	7,340,611	0.422
0.22	47,592,250	0.664	7,340,611	0.422
0.23	47,571,122	0.664	7,335,427	0.423
0.24	47,560,374	0.664	7,331,752	0.423
0.25	47,526,707	0.665	7,330,488	0.423
0.26	47,504,999	0.665	7,327,989	0.423
0.27	47,443,355	0.665	7,320,886	0.423
0.28	47,379,498	0.666	7,277,788	0.424
0.29	47,303,786	0.666	7,175,042	0.426
0.30	47,192,879	0.667	7,091,720	0.427
0.31	47,039,980	0.668	6,990,086	0.429
0.32	46,886,659	0.670	6,833,388	0.432
0.33	46,664,528	0.671	6,672,375	0.434
0.34	46,415,738	0.673	6,399,870	0.438
0.35	46,101,668	0.675	6,056,308	0.444
0.36	45,721,001	0.678	5,758,603	0.448
0.37	45,212,250	0.681	5,508,748	0.452
0.38	44,705,344	0.685	5,233,493	0.456
0.39	44,134,949	0.689	4,815,425	0.462
0.40	43,522,826	0.693	4,461,554	0.467
0.41	42,700,374	0.699	4,104,470	0.473
0.42	41,947,469	0.704	3,601,080	0.481
0.43	41,244,829	0.708	2,951,970	0.493
0.44	40,586,024	0.713	2,567,668	0.502
0.45	39,830,169	0.718	2,138,897	0.513
0.46	39,019,414	0.723	1,831,839	0.523
0.47	38,137,057	0.729	1,505,440	0.536
0.48	37,206,121	0.736	1,293,478	0.546
0.49	36,326,135	0.742	1,105,858	0.556
0.50	35,453,208	0.748	956,752	0.566

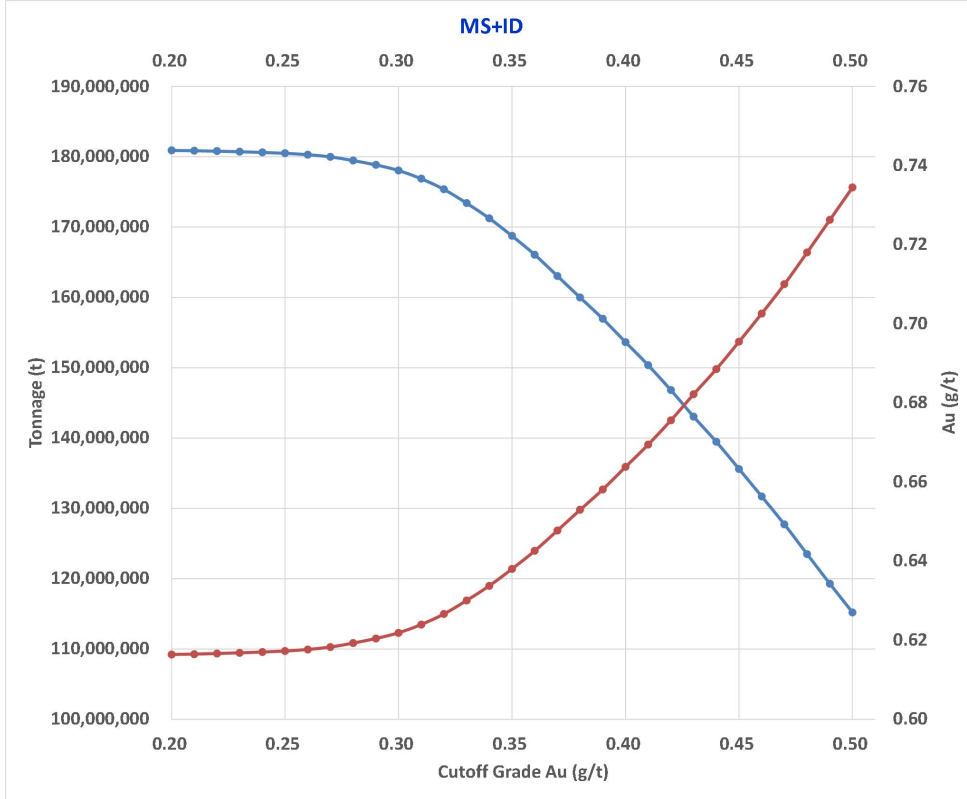


Figure 14- 12: Grade Tonnage Curves for Measured plus Indicated Mineral Resources of Underground of the CSH Gold Deposit

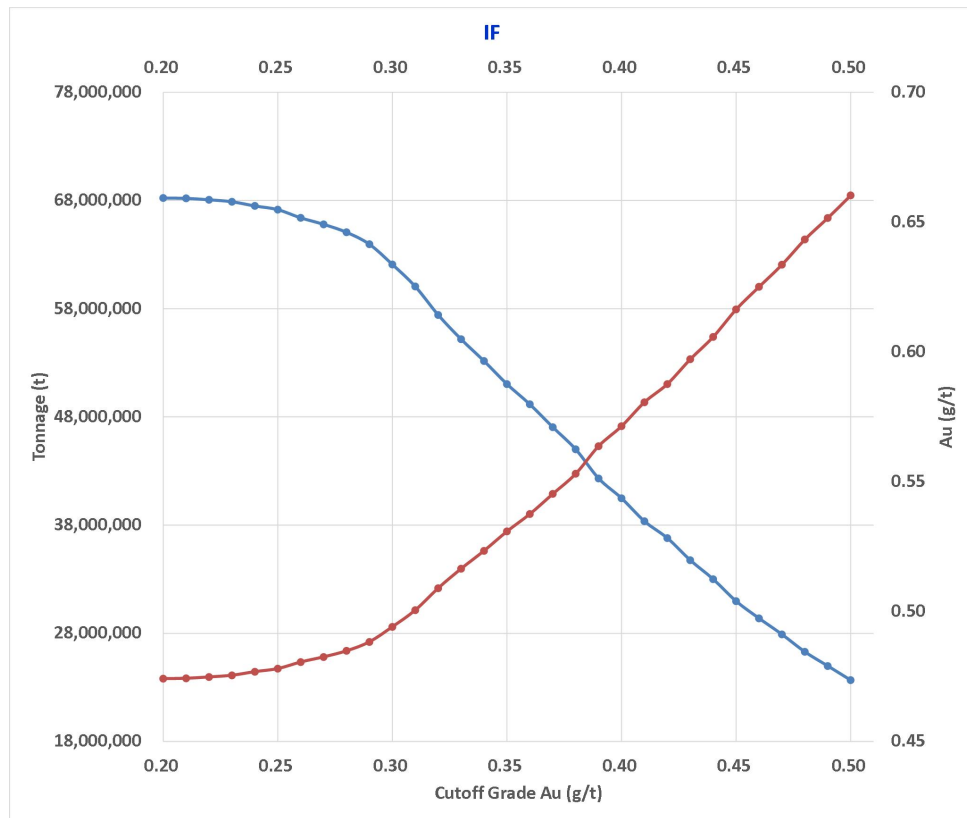


Figure 14- 13: Grade Tonnage Curves for Inferred Mineral Resources of Underground of the CSH Gold Deposit

Table 14- 12: Global Block Model Quantity and Grade Estimates of Underground of the CSH Gold Deposit

Cutoff Au (g/t)	Measured+Indicated		Inferred	
	Tonnage (t)	Au (g/t)	Tonnage (t)	Au (g/t)
0.20	180,903,743	0.616	68,229,838	0.474
0.21	180,867,758	0.616	68,201,124	0.474
0.22	180,800,634	0.617	68,066,033	0.475
0.23	180,719,969	0.617	67,887,264	0.476
0.24	180,619,916	0.617	67,497,535	0.477
0.25	180,497,312	0.617	67,158,280	0.478
0.26	180,297,257	0.618	66,398,842	0.481
0.27	179,993,461	0.618	65,798,784	0.483
0.28	179,465,901	0.619	65,061,950	0.485
0.29	178,849,247	0.620	63,957,567	0.488
0.30	178,049,292	0.622	62,088,004	0.494
0.31	176,880,157	0.624	60,052,211	0.501
0.32	175,363,336	0.627	57,426,266	0.509
0.33	173,404,257	0.630	55,181,094	0.517
0.34	171,240,908	0.634	53,166,377	0.523
0.35	168,749,000	0.638	51,034,482	0.531
0.36	166,071,948	0.643	49,164,445	0.538
0.37	163,045,736	0.648	47,054,363	0.545
0.38	159,977,006	0.653	45,004,609	0.553
0.39	156,952,691	0.658	42,320,075	0.564
0.40	153,632,272	0.664	40,487,341	0.571
0.41	150,357,217	0.669	38,357,923	0.581
0.42	146,814,088	0.676	36,803,273	0.588
0.43	143,047,511	0.682	34,757,259	0.597
0.44	139,469,239	0.689	33,007,191	0.606
0.45	135,601,608	0.695	30,972,663	0.616
0.46	131,704,261	0.703	29,390,194	0.625
0.47	127,722,403	0.710	27,904,196	0.634
0.48	123,496,971	0.718	26,291,747	0.643
0.49	119,286,239	0.726	24,986,362	0.652
0.50	115,204,960	0.734	23,674,127	0.660

15 Mineral Reserve Estimates

15.1 Mineral Reserve Statement

The Mineral Reserves are stated in Table 15-1. The Proven Mineral Reserves are 23.6 Mt at a grade of 0.63 g/t Au for the gold content of 14.86 t or 0.48 Moz, and the Probable Mineral Reserves are 23.8 Mt at a grade of 0.66 g/t Au for the gold content of 15.7 t or 0.5 Moz, totalling Mineral Reserves of 47.4 Mt at a grade of 0.65 g/t Au for the gold content of 30.56 t or 0.98 Moz.

Table 15- 1: Mineral Reserve Statement for the CSH Gold Deposit, CGME Consulting Limited as of April 1, 2022

Category	t (x 1,000)	Diluted Au (g/t)	Au (t)	Au (Moz)
Proven	23,593	0.63	14.86	0.48
Probable	23,787	0.66	15.7	0.5
Total	47,380	0.65	30.56	0.98

Notes:

Mineral Reserves are reported based on the optimized ultimate open pit limit. All figures are rounded to reflect the relative accuracy of the estimate. Mineral Reserves are included in Mineral Resources.

Mineral Reserves are reported at a cut-off grade of 0.28 g/t Au for open-pit mining, based on the following parameters: the heap leaching & metallurgical recovery of 60% and gold bullion market price of USD 1,568 per ounce. USD 1.0000=RMB 6.3457 dated in April 2022, and one troy ounce is equal to 31.1035 grams.

15.2 General Design Criteria

The CSH Gold Project is currently of a production rate of 13.20 Mtpa of ore, which is crushed and stacked on leach pad.

The block model size is 12.5 m x 12.5 m x 6.0 m. The current mining bench height is 6 m, corresponding to the vertical block size. As the production rate increased, CGME increased the bench height to 12 m, with a loss rate of 3% and a dilution rate of 3%.

15.3 Geotechnical and Pit Limit Optimization

15.3.1 Economic Parameters

The open pit limit of the CSH Gold Mine Project was optimized by Micromine Software. This section describes the input economic parameters of open-pit limit optimization, as listed in Table 15-2.

Table 15- 2: Open Pit Limit Optimization Parameters

No.	Item	Unit	Value
1	Geological Grade	g/t	0.61
2	Rock Density	t/m ³	2.7
3	Ore Mining Cost	Yuan/t	11.14
		USD/t	1.76
4	Stripping Cost	Yuan/ m ³	31.7
		USD/ m ³	5
5	Mining Loss Rate	%	3
6	Ore Dilution Rate	%	3
7	Processing Recovery	%	60
8	Processing Cost	Yuan/t	23
		USD/t	3.62
9	G&A	Yuan/t	27
		USD/t	4.25
10	Sales Tax	Yuan/t	5
		USD/t	0.79
11	Economic Stripping Ratio	m ³ /m ³	4.16

15.3.2 Block Model

The mineral resource block model used for pit optimization and mine planning is described in the sections related to mineral resources. This section used measured and indicated resources for pit optimization.

15.3.3 Geotechnical Parameters

China University of Mining and Technology carried out a study on slope stability of the northeast open pit in January 2018. The recommendations for the slope design were provided based on the site geotechnical logging, survey analysis, site point load test and laboratory rock tests, as well as techniques such as limit equilibrium analysis and finite element analysis. Slope angles were provided for different depths of excavation, as shown in Table 15-3 and Figure 15-1.

Table 15-3: Slope Angle Recommendations

Slope Zoning	Cross Section	Optimized Angle (°)	
		Hard Rock	Quaternary (Including the Weathered Layer)
North Zone 1	N0	36	34
	N1	36	34
North Zone 2	N2	37	36
	N3	38	36
	N4	38	36
	N5	36	36
South Zone 1	S0	37	36
	S1	38	36
South Zone 2	S2	39	36
	S3	38	36
East End Slope	E1	31	31
	E2	31	31
West end slope	W1	33	33
	W2	33	33

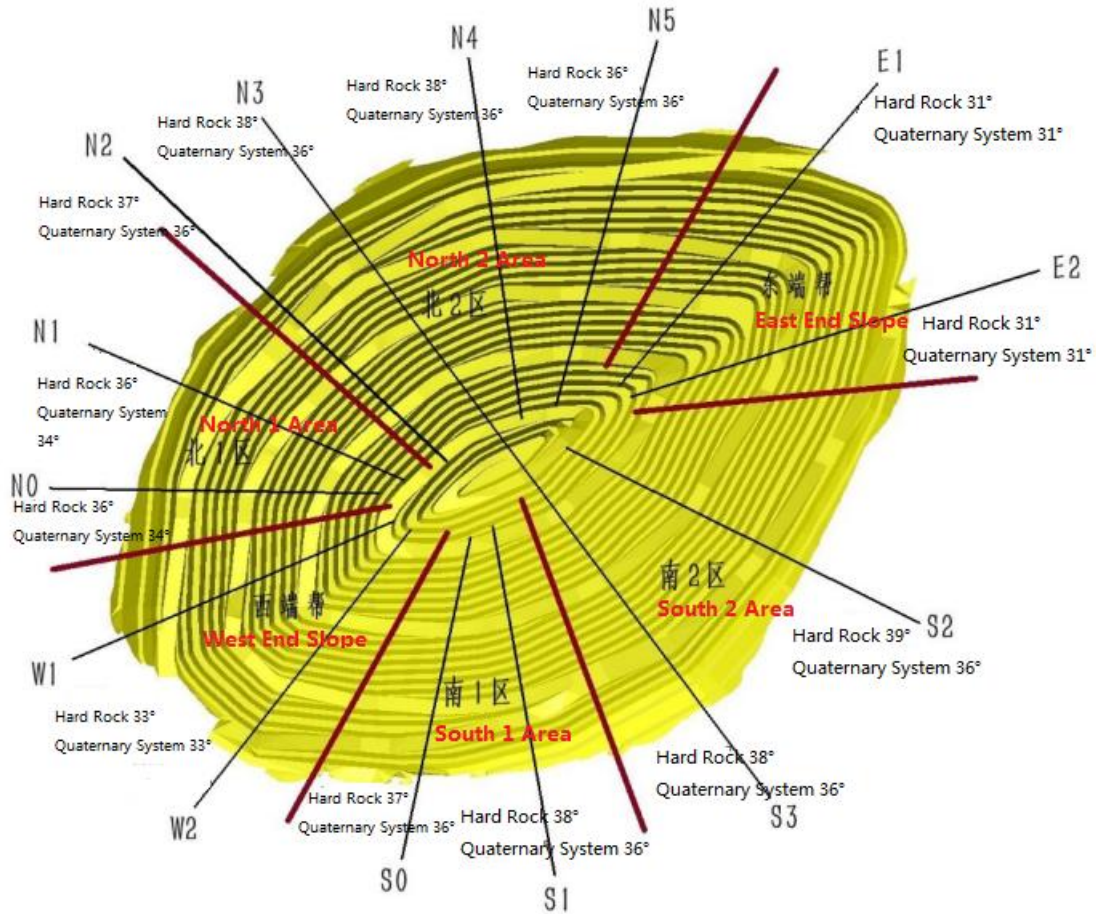


Figure 15-1: Characteristics Recommended Slope Angle of the Northeast Open Pit

According to the study, the designed final slope angles of the eastern open pit limit were 36.5° for north, 38° for south, 29.3° for east and 33.5° for west highwalls, respectively, with a bench face angle of 56-60°, safety berm width of 5 m and cleaning berm width of 8-15 m.

15.3.4 Gold Price

The gold price used for the open pit limit optimization was 1,568 USD/oz or 318.4 yuan/g.

15.3.5 Operating Costs

The costs used for the open pit limit optimization are summarized as follows:

- **Mining Costs**
The mining costs for the open pit limit optimization are based on contract mining of 11.14 yuan per tonne of ore and 31.7 yuan per cubic metre of waste rocks, including all costs such as drilling, blasting, loading, hauling and waste dumping. In addition, an increment of 0.04 yuan per tonne material for each bench is considered to adapt to the increase of the hauling distance.
- **Processing Costs**
The processing costs, including crushing, trucking to the ore heap leach pads, and processing, are estimated to be 23 yuan per tonne of ore.
- **General and Administrative Costs**
The general and administrative costs are estimated at 27 yuan per tonne of ore processed.
- **Pad Construction Costs**

For the pit optimization purpose, an allowance of 2.54 yuan per tonne processed ore was made to provide incremental pad capacity based upon an earlier experience for new pad construction.

- Exchange Rate
Operating costs are mainly calculated in yuan and converted to US dollars at an exchange rate of 6.3457 yuan to 1 USD.
- Royalties
Royalties are 4% of sales revenue. A preliminary allowance of 3 yuan per tonne of ore was made for Royalties.

15.3.6 Processing Recovery Rate

The P80 crushing size is estimated to be 9 mm. The recovery rate is estimated to vary by Au grade of RoM ore, with a comprehensive recovery rate for pit optimization of 60%.

15.3.7 Mining Losses and Dilution

The open pit mining techniques are mature following over one decade of operations, given a mining losses factor of 2.97% and dilution factor of 2.98%. Therefore, both factors were determined to be 3%.

15.3.8 Cut-off Grade

CGME selected a cut-off grade of 0.28 g/t Au for pit limit optimization.

15.3.9 Ultimate Pit Limit

The ultimate pit limit delineation principle are as follows:

- Optimize the limit by using Micromine cash flow method; and
- Check the limit of open pit with an overall stripping ratio of not greater than economical and reasonable stripping ratio.

Micromine software was employed to optimize the ultimate open pit limit, and 11 open pit limits were created based on the revenue and cost adjustment factor of 0.5-1.5 following an input of the limit optimization parameters. The optimized open pit limits are shown in Figure 15-2 and Figure 15-3, the internal ore rock quantities of several open pit limits after optimization are shown in Table 15-4, and the comparison of the scenarios is shown in Table 15-5.

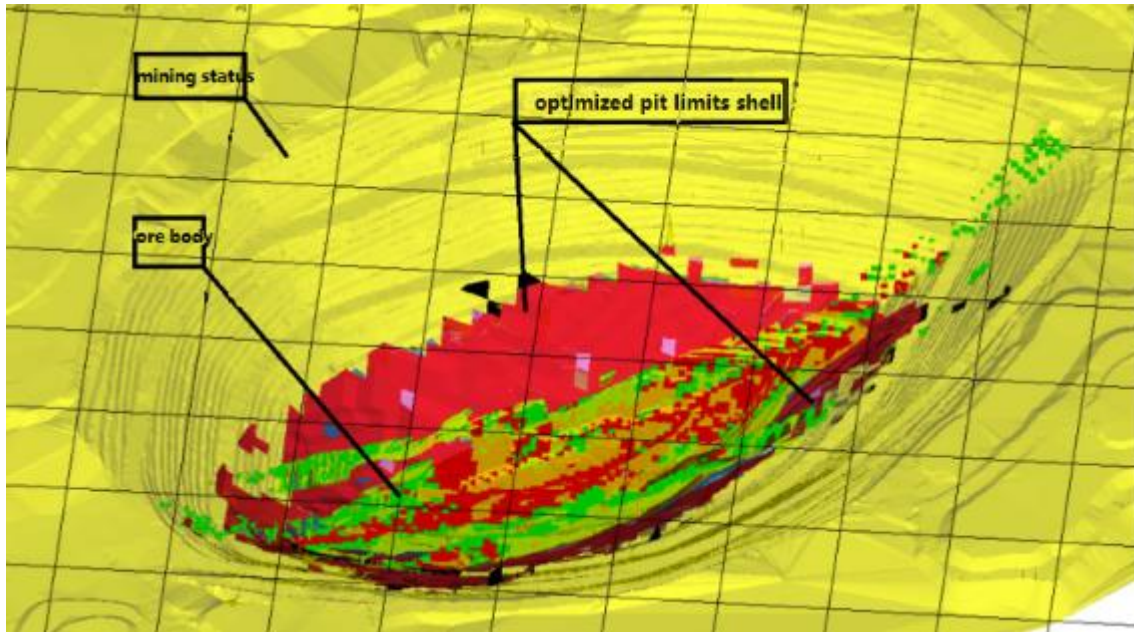


Figure 15-2: Plan of Pit Limit Delineation

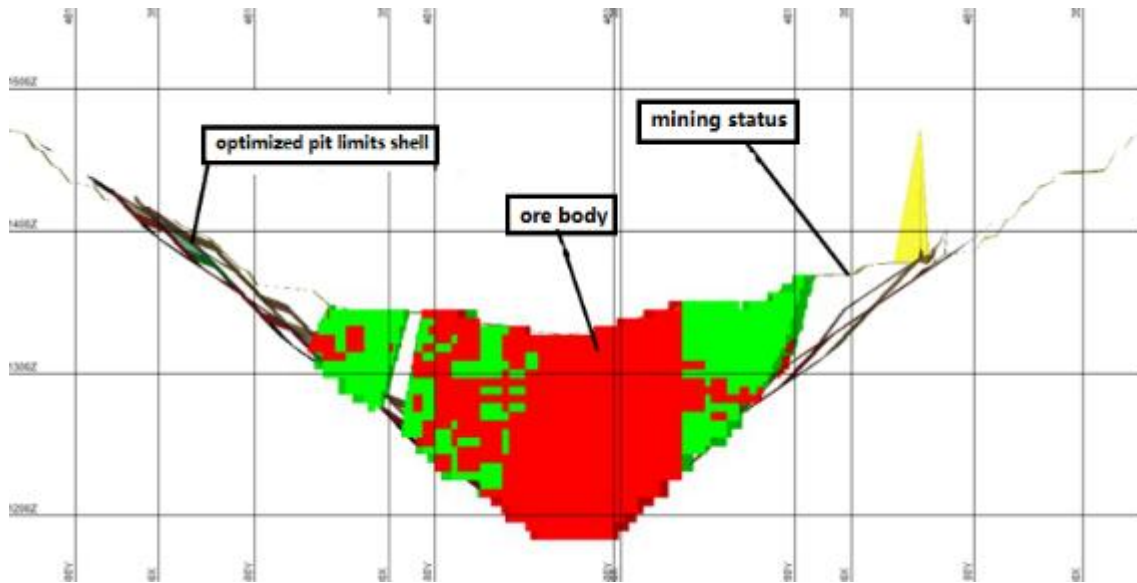


Figure 15-3: Profile of Pit Limit Delineation

Table 15-4: Ore and Rock Quantities of Multi-Open Pit Limits after Optimization

Pit Number	Ore Tonnage	Waste Rock Tonnage	Gold Grade	Au Content	Stripping Ratio
	10,000 t	10,000 t	g/t	kg	t/t
1	4212.24	3154.21	0.65	27253.19	0.75
2	4310.57	3301.98	0.65	27932.49	0.77
3	4401.74	3389.54	0.65	28655.33	0.77
4	4510.78	3415.69	0.66	29906.47	0.76
5	4711.68	3501.7	0.66	31285.56	0.74
6	4737.95	3520.6	0.67	31744.27	0.74
7	4768.46	3701.55	0.66	31686.42	0.78
8	4790.58	3834.58	0.66	31780.71	0.8
9	4801.56	3914.61	0.67	32065.13	0.82

Pit Number	Ore Tonnage	Waste Rock Tonnage	Gold Grade	Au Content	Stripping Ratio
	10,000 t	10,000 t	g/t	kg	t/t
10	4812.89	4013.54	0.67	32304.12	0.83
11	4821.35	4099.57	0.68	32679.11	0.85

Table 15-5: Comparison of Multiple Open Pit Limit Scenarios after Optimization

Scenario Variance	Mineral Reserves (10,000 t)	Rock Quantity (10,000 t)	Limit Stripping Ratio (t/t)
Scheme 2 - Scheme 1	98.33	147.77	1.5
Scheme 3 - Scheme 2	91.17	87.56	0.96
Scheme 4 - Scheme 3	109.04	26.15	0.24
Scheme 5 - Scheme 4	200.9	86.01	0.43
Scheme 6 - Scheme 5	26.27	18.9	0.72
Scheme 7 - Scheme 6	30.51	180.95	5.93
Scheme 8 - Scheme 7	22.12	133.03	6.01
Scheme 9 - Scheme 8	10.98	80.03	7.29
Scheme 10 - Scheme 9	11.33	98.93	8.73
Scheme 11 - Scheme 10	8.46	86.03	10.17

The economic reasonable stripping ratio of this design is 4.16 m³/m³ and 3.99 t/t. After comparing the schemes in Tables 15-4 and 15-5, it can be found that the stripping ratio of the open pit #6 limit and its resource utilization are the most reasonable. Thus, the open pit #6 is the optimal limit.

15.4 Mine Design

After optimization design by Micromine software, an approximate elliptical open pit limit is formed as shown in Figure 15-4, and the parameters of the open pit limit and the quantity of ore and rock within the open pit limit are shown in Table 15-6 and Table 15-7.

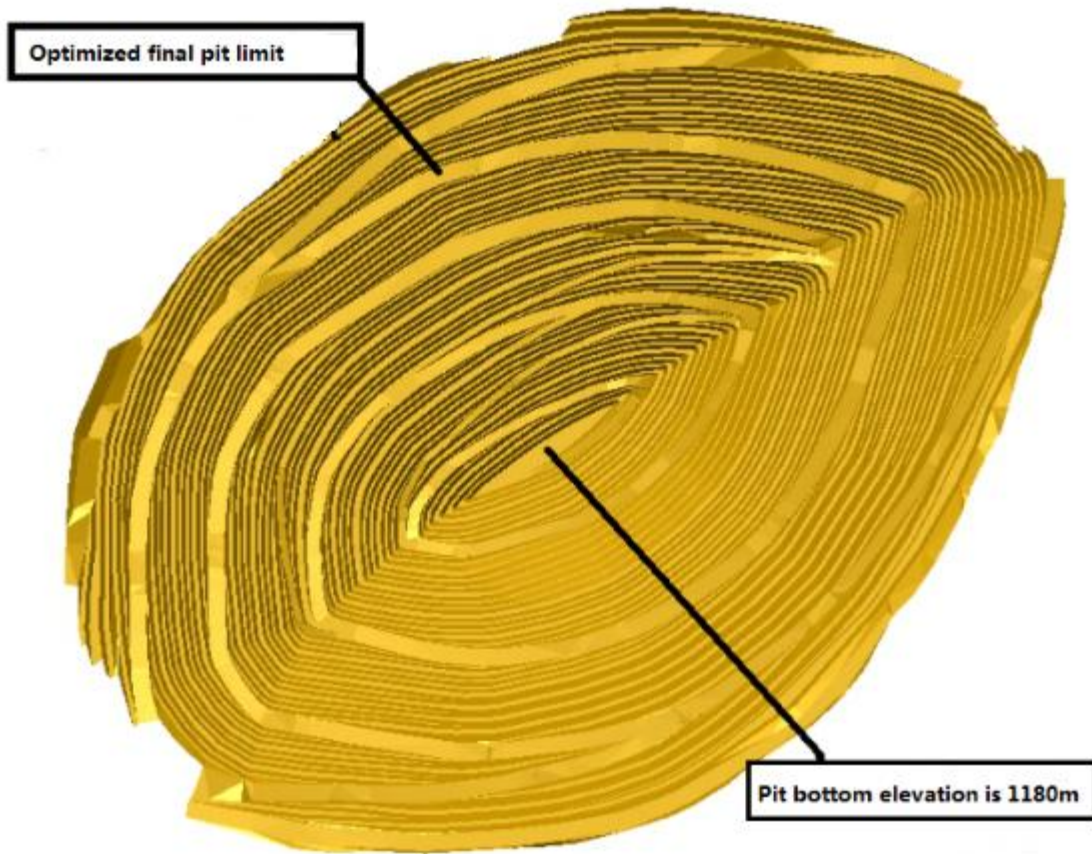


Figure 15-4: Plan Open Pit Limit

The spatial relationship of the ultimate open pit limit and current status at the end of March 2022 is shown in Figure 15-5.

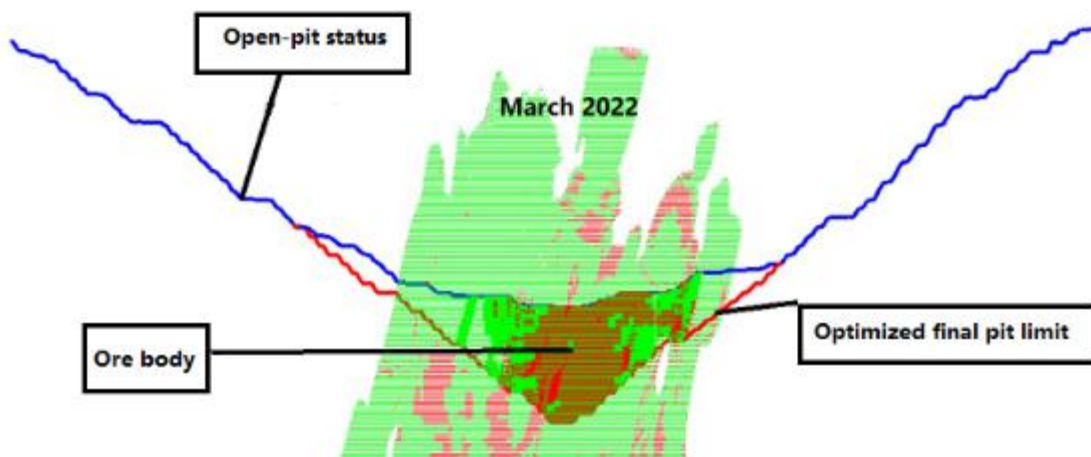


Figure 15-5: Optimized Open Pit Limit of the Northeast Open Pit and Current Status

Table 15-6: Parameters of the Ultimate Open Pit Limit

Item	Unit	Limit Optimization Parameters
Upper Dimension	m	1,860×1,355
Lower Dimension	m	283×37
Bench Height	m	12 (24 after partial merging)
Bench Face Angle	(^)	56--60
Safety Berm Width		5
Cleaning berm Width	m	8--15
Transportation Berm Width	m	32, 24 (double lane)
		13.8 (single lane)
Highest Bench Elevation	m	1,684
Lowest Bench Elevation	m	1,180
Closed Level Elevation	m	1,636
Final Slope Angle	(^)	North slope 36.5, South slope 38,
		East end 29.3, West end 33.5

Table 15-7: Ore Rock Quantity within Open Pit Limit

Elevation	Total Quantity Of Ore and Rocks	Total Quantity of Ore and Rocks	Mineral Reserves	Mineral Reserves	Rock Quantity	Rock Quantity	Au Grade	Gold Content	Stripping Ratio
m	10,000 m ³	10,000 t	10,000 m ³	10,000 t	10,000 m ³	10,000 t	g/t	kg	t/t
1432	17.56	47.53	1.06	2.97	16.5	44.55	0.45	13.46	14.99
1420	30.52	82.7	2.75	7.74	27.76	74.96	0.49	37.87	9.68
1408	48.21	130.66	4.48	12.58	43.74	118.09	0.52	65.78	9.39
1396	99.25	269.7	15.54	43.68	83.71	226.02	0.59	257.04	5.17
1384	113.94	309.72	18.85	52.96	95.1	256.76	0.57	304.3	4.85
1372	170.43	462.91	25.02	70.3	145.41	392.6	0.57	398.35	5.58
1360	191.89	522.38	38.91	109.33	152.98	413.05	0.6	654.98	3.78
1348	194.82	531.85	53.06	149.11	141.76	382.74	0.63	934.77	2.57
1336	280.61	772.27	132.95	373.59	147.66	398.68	0.61	2275.69	1.07
1324	304.21	841.63	184.32	517.94	119.88	323.69	0.64	3330.58	0.62
1312	288.57	800.33	192.53	541.01	96.04	259.32	0.66	3581.59	0.48
1300	252.35	701.09	179.41	504.14	72.94	196.95	0.66	3345.83	0.39
1288	219.12	609.91	166.1	466.75	53.02	143.16	0.67	3114.08	0.31
1276	183.04	510.7	149.93	421.3	33.11	89.4	0.68	2845.89	0.21
1264	155.06	433.2	132.24	371.59	22.82	61.6	0.68	2543.95	0.17
1252	127.6	356.64	110.24	309.77	17.36	46.87	0.7	2162.87	0.15
1240	98.85	276.39	86.42	242.83	12.43	33.56	0.72	1736.8	0.14
1228	77.66	217.24	68.71	193.07	8.95	24.17	0.72	1380.91	0.13
1216	59.4	166.26	53.33	149.85	6.08	16.4	0.75	1120.09	0.11
1204	39.25	109.78	34.61	97.26	4.64	12.52	0.81	787.06	0.13
1192	24.69	69.17	22.82	64.12	1.87	5.05	0.85	544.54	0.08
1180	13	36.51	12.83	36.05	0.17	0.45	0.85	307.82	0.01
Total	2990.03	8258.55	1686.1	4737.95	1303.93	3520.6	0.67	31744.26	0.74

16 Mining Methods

16.1 Introduction

The CSH open pit is currently mined by the Contractor China Railway 19th Bureau. The mining is carried out on 6 m high benches, and the main mobile equipment fleet includes hydraulic DTH drills with 165 mm of hole diameter, hydraulic backhoes with a bucket capacity of 5 m³, and 50 t and 100 t payload dump trucks. The current mining operation is shown in Figure 16-1.



Figure 16-1: Current Status of the NE Open Pit

16.2 Current Mining Operations

The mine has formed two open pits in the northeast and southwest, respectively. The northeast open pit has a dimension of length of 1,860 m and width of 1,355 m, with the highest elevation of 1,696 m ASL and lowest elevation of 1,180 m ASL, and a closed level elevation of 1,636 m ASL. The southwest open pit has a length of 2,250 m, width of 530 m, with the maximum elevation of 1,664 m ASL and lowest elevation of 1,462 m ASL, and a closed level elevation of 1,630 m. The waste dump is located at north of the northeast and southwest open pit limits and northeast and east of the northeast pit limit, and the processing crushing station is in south of the central part between the northeast and southwest limits, as shown in Figure 16-2.

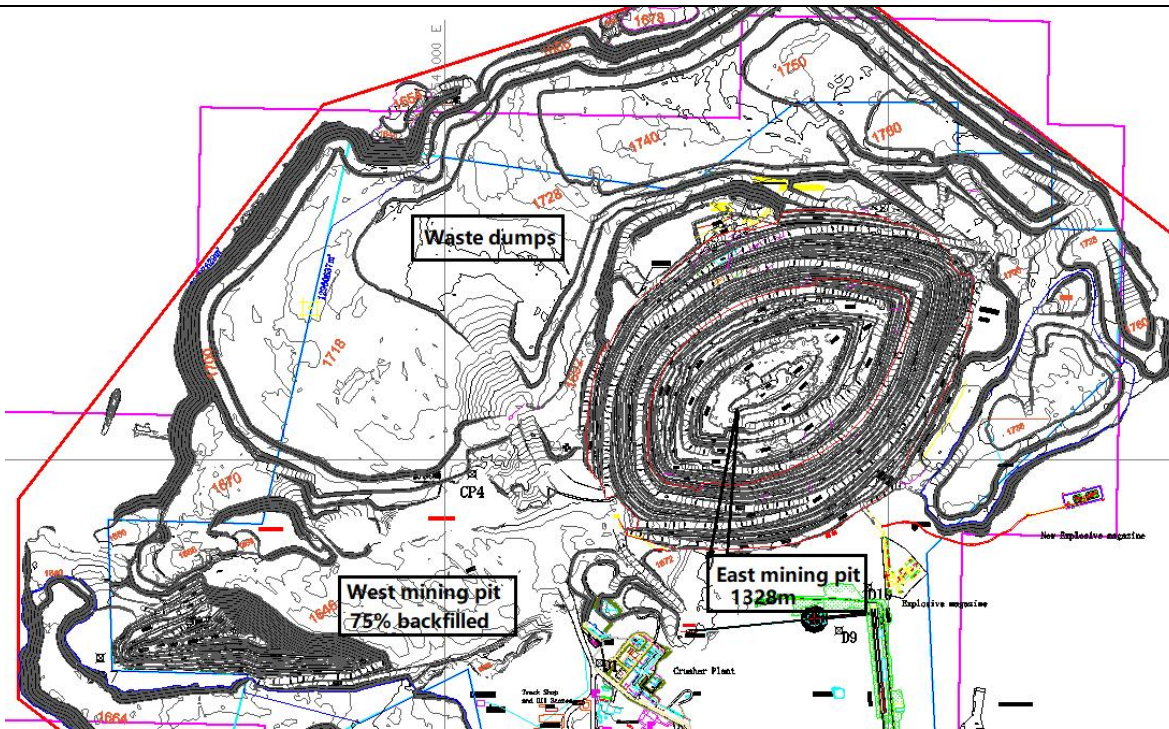


Figure 16-2: General Layout of Mine

There are two trenches in the west of the northeast open pit, both with an elevation of 1,640 m. The two trenches are located close to each other, 1,100 m away from the northern waste dump and 500 m away from the processing crushing station, giving the shortest distance for the haulage of RoM ore and waste rocks at the hanging wall.

There are two trenches in the east of the northeast open pit, one southerly and the other northerly, 600-800 m away from the east waste dump, mainly used for the waste rock transport operation of the northeast open pit.

The northeast open pit is mined in three strips. At present, the mining of the strip one is finished in August 2019, with a bottom elevation of 1,372 m ASL. The strips two and three are being mined. The design of the strip two has a strip bottom elevation of 1,300 m ASL. At the end of March 2022, it has been mined to 1,328 m ASL. The strip three is the final stripe, and the strip bottom elevation was designed to be 1,180 m ASL. At the end of March 2022, it has been mined to 1,432 m ASL, and the rock quantity is 35.206 Mt. The current status of the pit is shown in Figure 16-3 and Figure 16-4.

The mining operation of the southwest open pit was ended at the end of June 2019, and the current status following the in pit waste dump is shown in Figure 16-5.

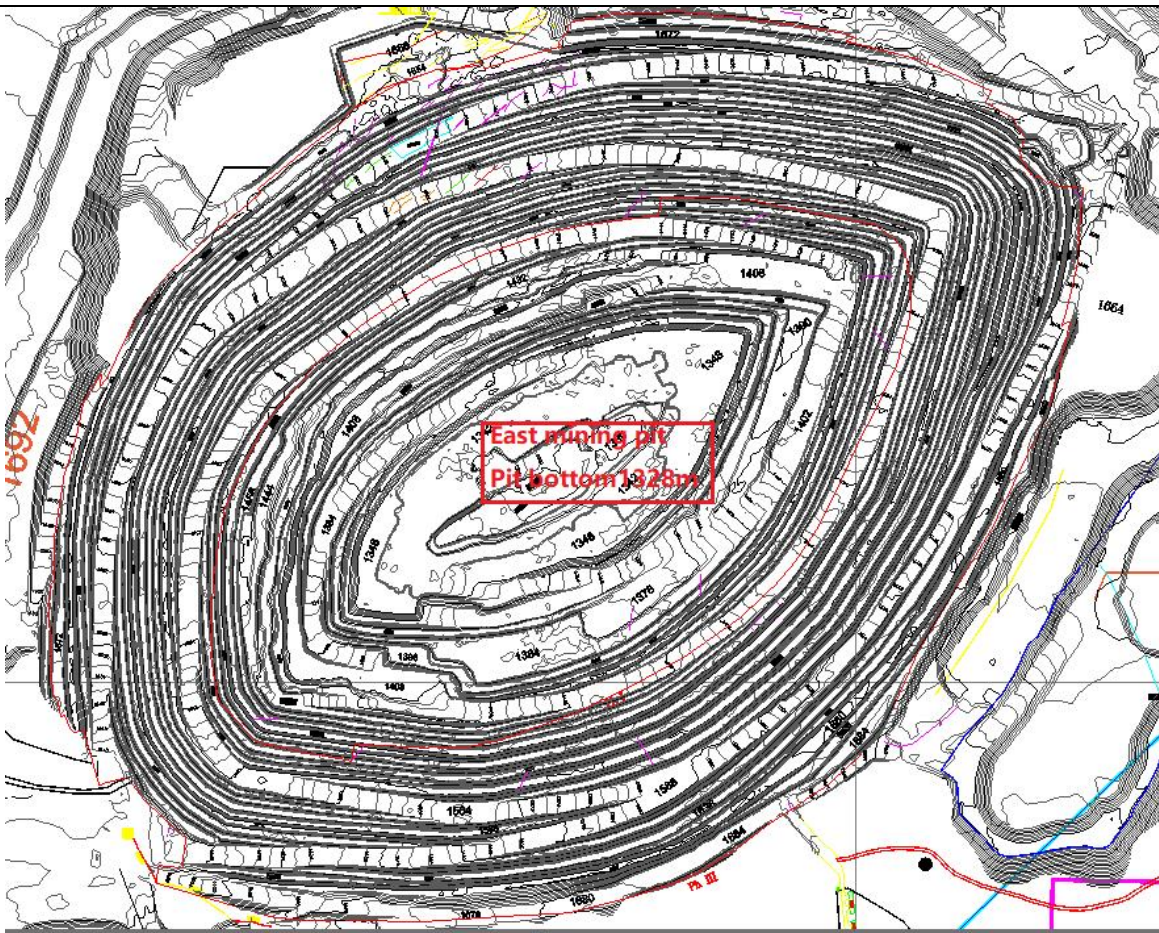


Figure 16-3: Current Status of the Northeast Pit

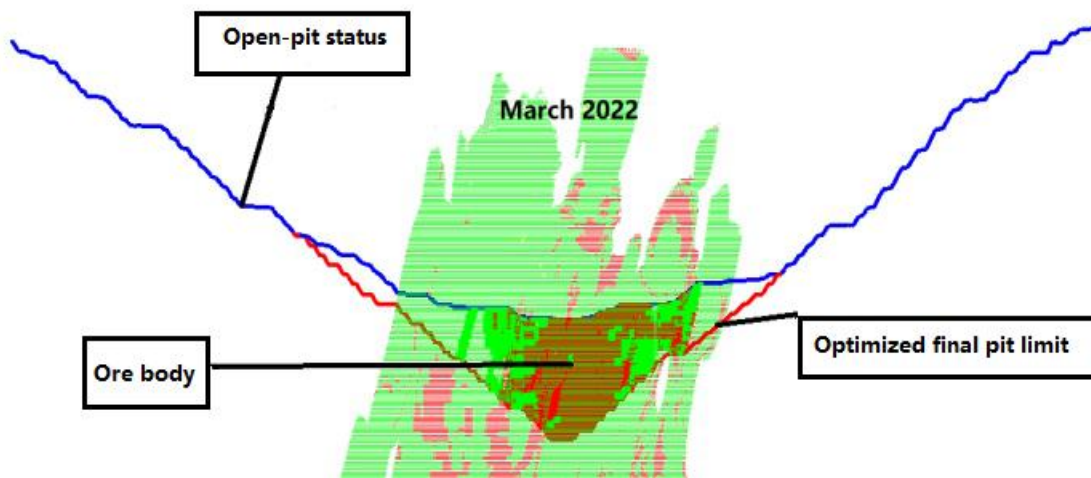


Figure 16-4: Cross Section of the Northeast Pit

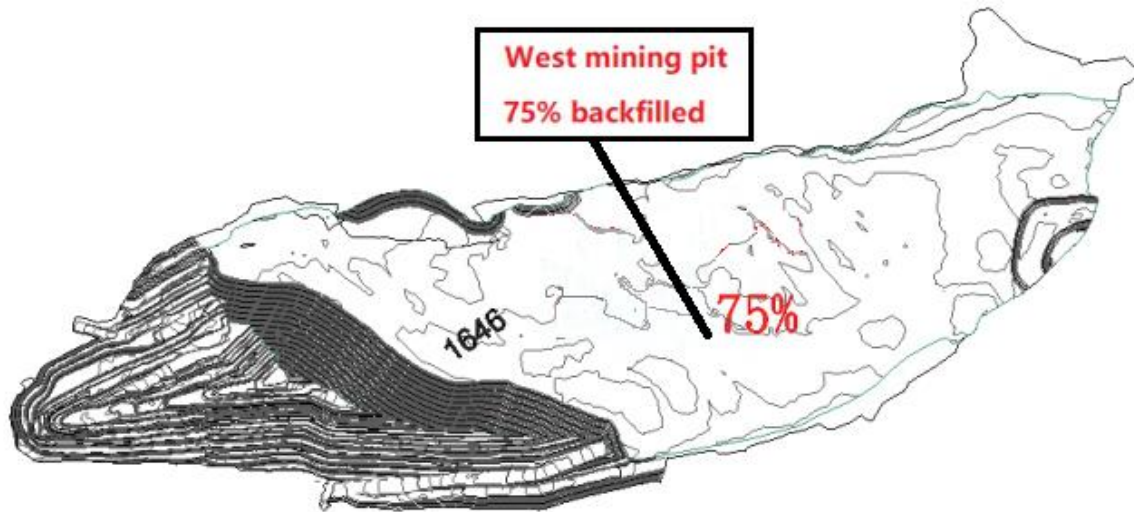


Figure 16-5: Current Status of the Southwest Pit

16.3 Production Schedule

As of April 2022, according to the production schedule of 2022, the LoM is four years, with a steady production period of three years and a ramp-down production period of one year. The current total production rate is 13.2 Mt of ore per year. As of March 2022, the mine has produced 3.3 Mt of ore in the first three months of 2022, without waste rocks, and the mining plan for the whole year of 2022 is to produce 13.2 Mt of ore. Thus, by the end of 2022, 9.9 Mt of ore still needs to be mined, given 15 Mt of waste rocks to be stripped. In 2023, the annual quantity of ore is 13.2 Mt, with the annual quantity of stripped waste rocks of 15 Mt. The mining operations will be completed in 2025, and the heap leaching will continue until 2029. The production will start from April 2022, and the annual mining schedule of the Northeast open pit is shown in Figure 16-6 and Table 16-1, respectively.



Figure 16-6: Histogram of the Annual Mining Schedule of the Northeast Open Pit

Table 16-1: Annual Mining Schedule of the Northeast Open Pit

Item	Unit	2022	2023	2024	2025	Total
Total Quantity of Ore and Rocks	10,000 t	2,490	2,820	1,684.07	1,264.48	8,258.55
Ore	10,000 t	990	1,320	1,320	1,107.95	4,737.95
Rocks	10,000 t	1500	1500	364.07	156.53	3,520.60
Stripping Ratio	t/t	1.52	1.14	0.28	0.14	0.74
Au Metal Mined	kg	6,033.52	8,334.00	8,812.00	7,612.41	30,791.94
Diluted Au Grade	g/t	0.61	0.63	0.67	0.69	0.65
Ore Haul Distance	km	6.11	6.68	7.26	7.92	
Rock Haul Distance	km	6.5	7.14	7.68	8.34	

The Northeast open pit will be mined to an elevation of 1,300 m ASL by the end of 2022, as shown in Figure 16-7.

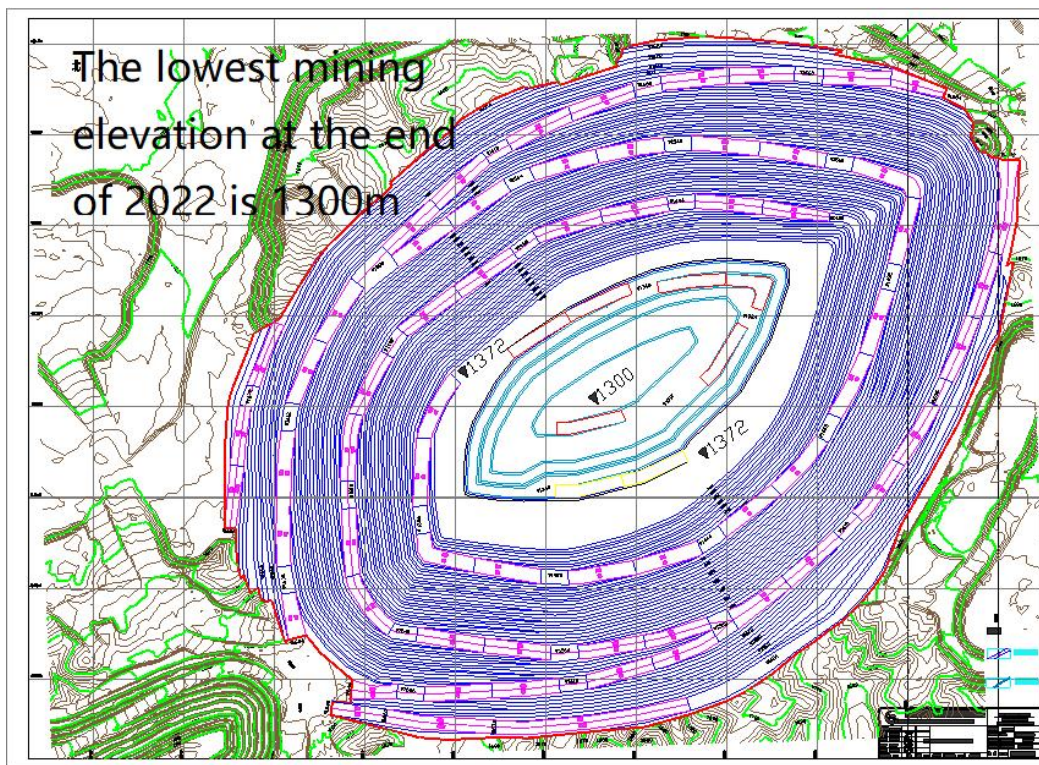


Figure 16-7: Open Pit Statue at the End of 2022

The Northeast open pit will be mined to an elevation of 1,276 m ASL by the end of 2023, as shown in Figure 16-8.

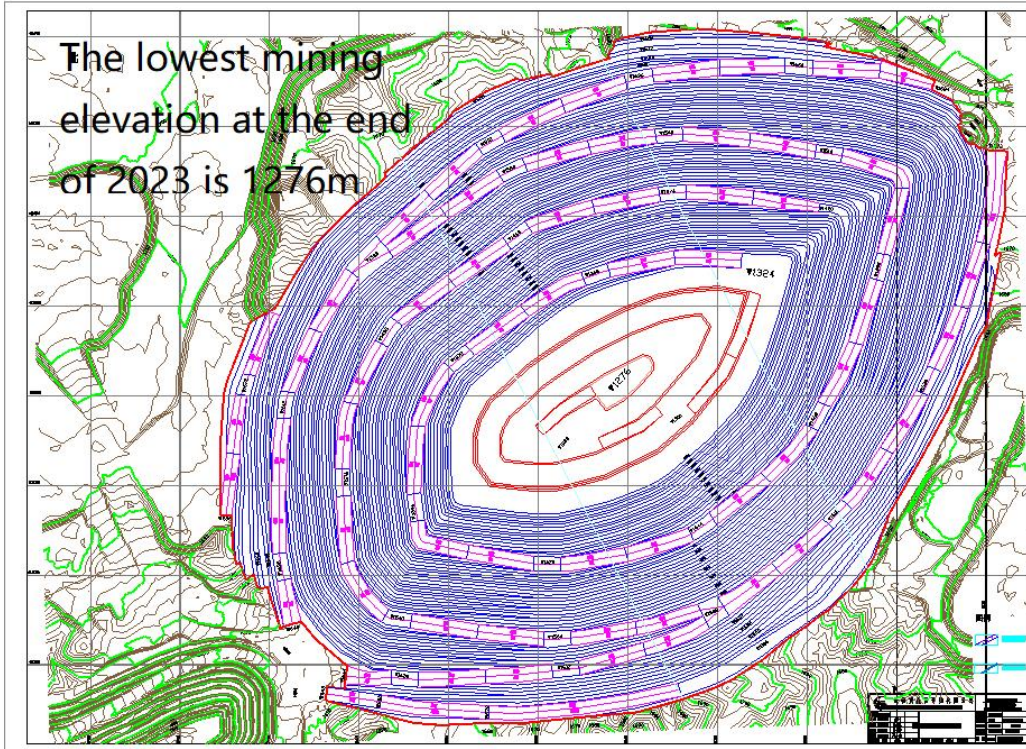


Figure 16-8: Open Pit Status at the End of 2023

The Northeast open pit will be mined to an elevation of 1,264 m ASL as of the end of 2024, as shown in Figure 16-9.

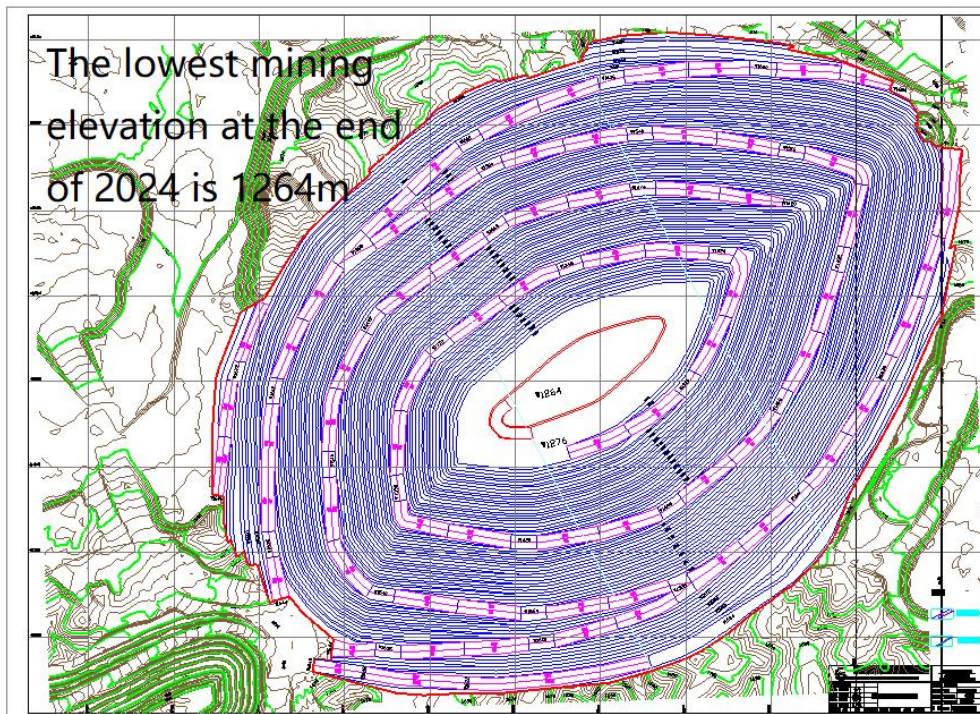


Figure 16-9: Open Pit Status at the End of 2024

As of the end of 2025, the Northeast open pit will be mined out, as shown in Figure 16-10.

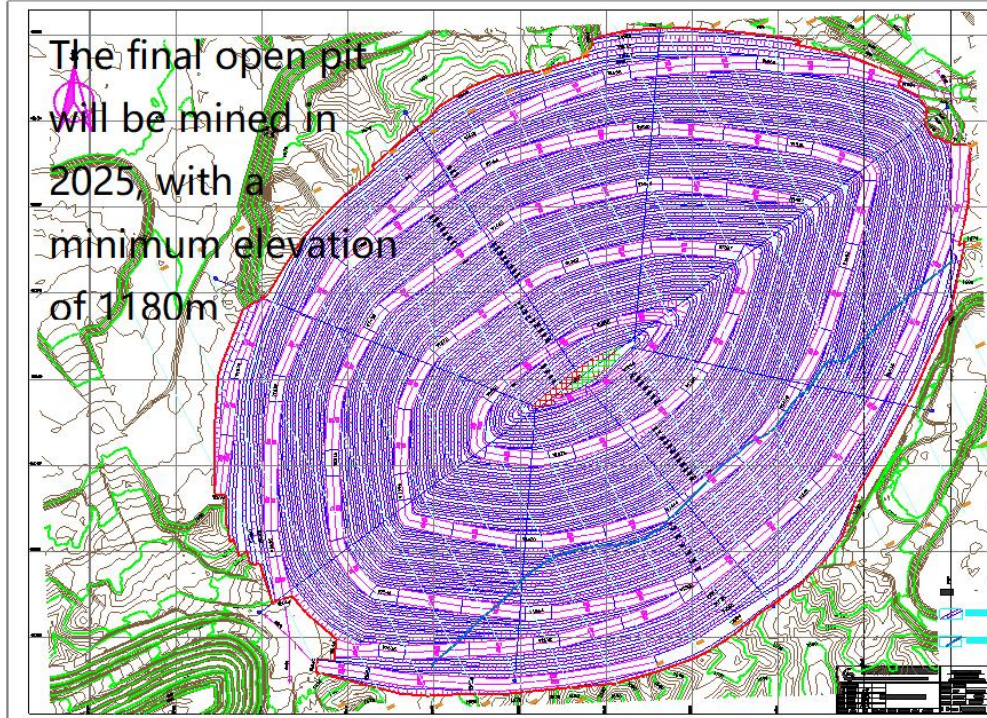


Figure 16- 10: Final Open Pit Status

16.4 Waste Dumps

Waste dumps are located at the valley to the north side of the open pit limits, which is semi-circular shaped around the east and north of the limits, with a length of 6.2 km and an area of 582 hectare (“ha”). The waste rocks were dumped in three benches, namely 1,700 m ASL, 1,730 m ASL and 1,760 m ASL benches. At present, the dumps have been heaped to the highest elevation of 1,760 m ASL in the eastern part and to 1,728 m ASL in the northern part, with the western part closed and covered with earth. Currently, the southwest pit has been used as an internal waste dump, backfilled with 41.1468 million m³ of in situ waste rocks.

As of the end of March 2022, there were still 13.0393 million m³ of waste rocks being stripped in the northeast open pit limit, and the remaining volume of the waste dumps is enough to dump waste rocks of the northeast open pit during the LoM, as shown in Figure 16-11.

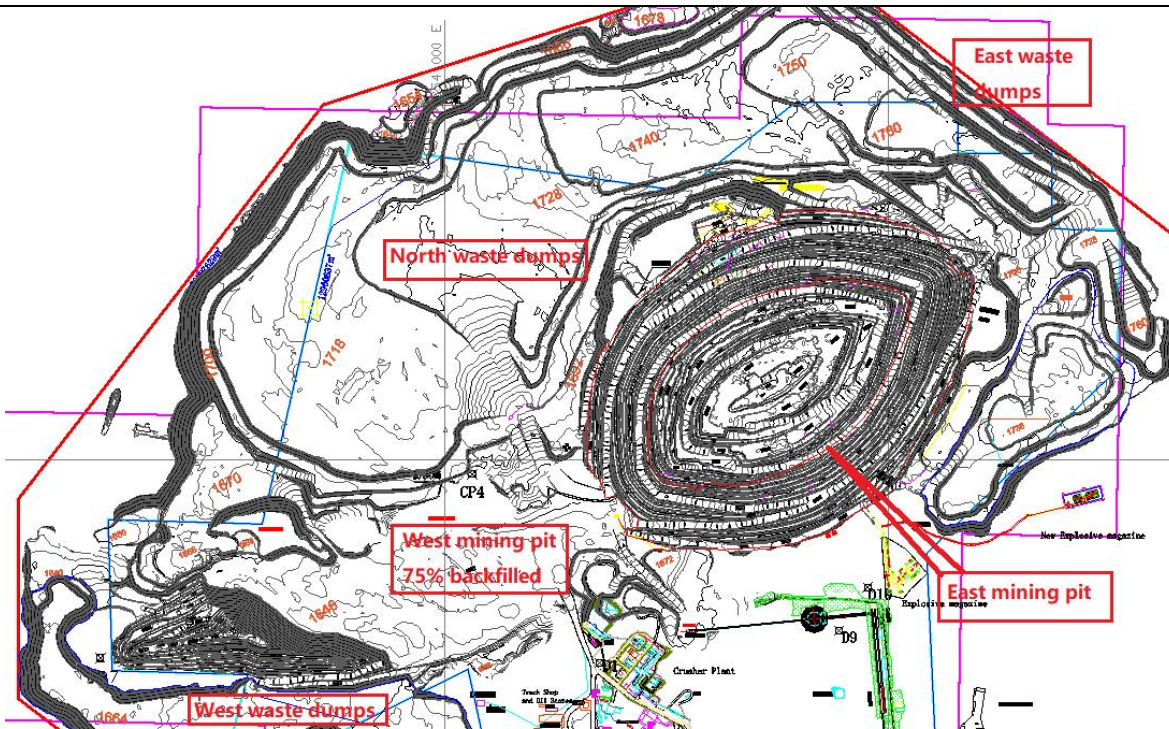


Figure 16-11: Current Status of the Waste Dumps

16.5 Mine Operations and Equipment

16.5.1 Mining Method

The mining methods are open pit mining with road development. The strip mining is adopted in the northeast open pit, and there are three mining strips from the current limit to the optimized limit. The strip 1 with a bottom elevation of 1,372 m, the strip 2 with a bottom elevation of 1,300 m, and the strip 3 being the final strip with a strip bottom elevation of 1,180 m. DTH drills, hydraulic excavators and dump trucks for mining are available for the open pit mining. Mining will continue and the Contractor's team will provide equipment operations and maintenance. For the open pit ore mining and waste rock stripping process, the bench mining is performed from top to bottom. Main parameters of the mining process of the northeast open pit are as follows:

- The working bench height of 12 m;
- The face angle of the working bench of 60-70°;
- The minimum width for the working platform of 50 m;
- The minimum length for the working platform of 150 m; and
- The safety berm width for the working pit wall of not less than 20 m.

In general, the working face is "fan-shaped" and is advanced to north and northeast. The number of working benches is three to four at the same time.

16.5.2 Equipment Fleet

The main mining equipment fleet is shown in Table 16-2.

Table 16-2: Main Mining Equipment Fleet

Item	Quantity
Ty-370Gn Hydraulic Drill	33
5m ³ Electric Hydraulic Excavator	3
2.2-2.5m ³ Electric Hydraulic Excavator	35
100t Dump Truck	9
50t Dump Truck	171
320 Hp Bulldozer	3
Hydraulic Rock Breaker	2
50t Water Truck & Sprinkler	4
Grader	4
ZI90 Front Loader	4

Drilling

At present, Xuanhua Taiye TY-370 GN down-the-hole drilling rigs have been selected for drilling, with an diameter of 140 mm and the fleet number of 33.

Blasting

Hydraulic breaker has been used for the secondary crushing of the blasted ore in the open pit, and there are two breakers at present.

Millisecond blasting has been used for long hole blasting, given emulsion explosive and liquid emulsion explosive, as well as Nonel and non-electric millisecond detonators used to initiate explosions. Powder is loaded with explosive loading trucks, with the fleet number of five. The safety warning range of long hole blasting is 300 m outside the open pit limit.

Loading and Hauling

At present, the mining equipment fleet includes 38 hydraulic backhoes, with a capacity of 2.2 m³, 2.4 m³, 2.5 m³ and 5 m³, and 180 dump trucks, including three sets of 5 m³ Volvo 700 excavators, four sets of 2.5 m³ XCMG 700 excavators, 20 sets of 2.4 m³ SDLG 460 excavators, and 11 sets of 2.2 m³ SDLG 360 excavators, as well as 9 sets of 100 t dump trucks and 171 sets of 50 t dump trucks.

Support Equipment

Ancillary equipment includes three sets of LG953, with a capacity of 5 m³, front loaders, three sets of hydraulic backhoes, with a capacity of 2 m³, mainly used for material lifting and handling, slope and road maintenance, and other ancillary operations. The bulldozers and graders are used for ground leveling during drilling, regularizing blasting piles, constructing roads, coordinating with excavator operations, etc. It is estimated that three sets of 320 HP bulldozers and two graders are required.

In order to reduce air pollution from road dusts, three sets of 50 t sprinklers and two vibratory rollers are provided for the open pit operation and road maintenance.

17 Recovery Methods

17.1 Current situation of Process Plant

The leached ore from the open pit is transported to the crushing plant by truck, where it undergoes three-stage crushing and screening with closed circuit. The final crushed product is transported by dump trucks to the heap leach pads for stacking in layers. The designed pile is 80 m high, and at present Phase II leach pad has been reached 50 m bench.

The processing plants of Inner Mongolia Pacific Mining Co., Ltd. has been built in two phases, and there are two processing plants and two heap leach pads, using the process of heaping – drip sprinkling leaching – static carbon adsorption of pregnant solution – desorption and electrolysis of gold-loaded carbon – gold mud smelting to treat low-grade primary gold-bearing ore, with a final product of gold bullion. At present, Phase I and Phase II drip immersion is carried out simultaneously. The leach pads of Phase I and Phase II are shown in Figure 17-1, and the actual outlines of the leach pads are shown in Figure 17-2 and Figure 17-3.



Figure 17-1: Plan of Phase 1 And Phase 2 Heap Leaching Field



Figure 17-2: Photo 1 of Actual Profile



Figure 17-3: Photo 2 of Actual Profile

17.2 Process Flowsheet

The process flowsheet of the plants is as follows: three-stage crushing, heaping, drip leaching, carbon adsorption, gold-loaded carbon desorption, electrolysis and gold mud smelting. At present, the Process Plant I stopped production, and the Process Plant II can meet the production requirements. The flow sheet of the Process Plant II is shown in Figure 17-4.

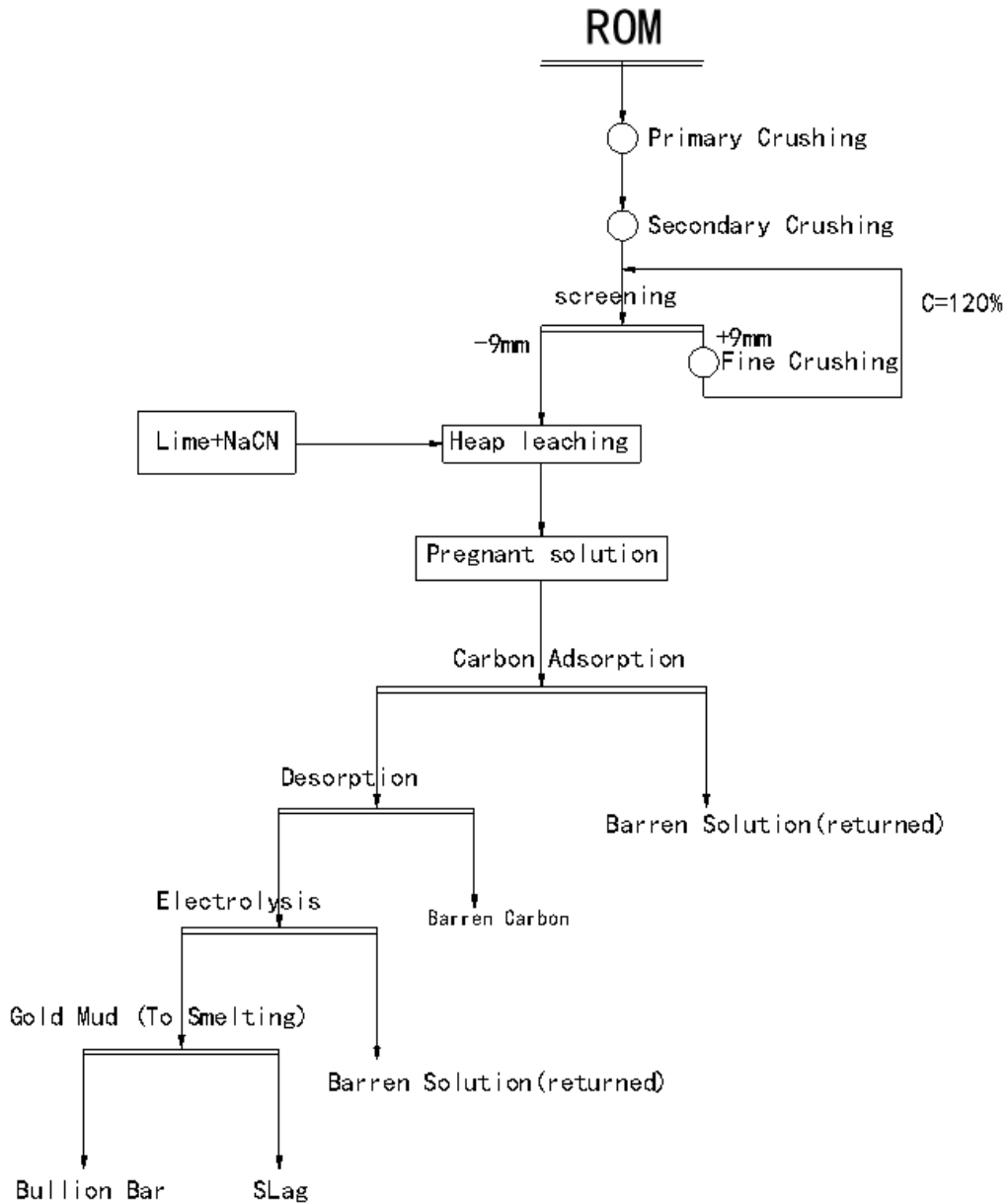


Figure 17-4: Process Flowsheet (Process Plant II)

17.3 Plant Design

The processing and smelting process is divided into five parts: crushing, heap leaching, carbon adsorption, desorption and electrolysis, and smelting. The oxidized ore and the primary ore are leached together in a heap without separation.

(1) Crushing process

A three-stage and closed-loop crushing process is adopted. The maximum feed size is 1,000 mm. The mined ore is transported by truck to the primary gyratory crusher. The coarse crushed product is sent to the coarse ore pile through the belt conveyor and then conveyed by the belt conveyor to the buffer silo before the secondary crushing prior to feeding into two secondary cone crushers. The secondary crushed product is fed into eight vibrating screens for screening through belt conveyors. The material above the sieve is fed to four tertiary cone crushers by belt conveyors. The vibrating screens and the cone crushers form a closed-circuit

crushing, and the material under the screen is fed into the loading bin by the belt conveyor and transported to the heap leaching pad by the dump trucks. The final product particle size is $P_{80} = 9$ mm. Phase II crushing station is shown in Figure 17-5.

(2) Heap leaching process

Leaching pad: The whole heap leaching pad is high in the north and low in the south, and the topography at the east and west sides are higher than that in the middle; from north to south, the longitudinal gradient is about 1%, and the transverse gradient is about 0.5%. The leaching pad is divided into three layers from bottom to top, namely the base course, impervious layer and protective layer. The base course is 300 mm thick clay, the impervious layer is 2 mm thick high-density polyethylene (“HDPE”) geomembrane, and the protective layer is 600 mm thick crushed ore (2-4 mm) cushion. Phase II leaching pad is shown in Figure 17-6.

Heaping: The crushed ore is piled with truck and bulldozer. The heap is built on the pad. The truck unloads the ore directly onto the ore pile, and the bulldozer levels it to form an expanded ore pile. The ore pile will be ploughed repeatedly with a bulldozer before heap leaching. The ore on the haul road shall be ploughed by bulldozer to reduce compactness. Each bench height of the heap leach is 10 m. The new ore pile is leached by circulating barren solution, and the barren solution is added with cyanide. The leaching solution is supplied to the ore pile through a drip irrigation emitter buried beneath the ore.

Pregnant solution collection system: The leaching solution is supplied to the ore pile through the drip irrigation pipeline laid under the ore, which effectively reduces evaporation in summer and prevents freezing in winter. It realizes the year-round drip irrigation for solution distribution on top of cyanide solution stockpile in cold areas. The pregnant solution collection system consists of pipelines laid below the 600 mm pad and above the geomembrane. The initial solution collection system is a porous solution collection tube laid throughout the heap leach field, with a spacing of 15 m and a diameter of 100 mm. The solution entering the piping with a diameter of 100 mm is collected in a collecting pipe with a diameter of 300-610 mm. The leached pregnant solution containing gold flows into the pregnant solution tank by gravity and is delivered to the smelting workshop by the pregnant solution delivery pump. The liquid-phase dissolved gold is recovered through static carbon adsorption, and the gold mud is desorbed and electrolyzed by the gold-loaded carbon and sent to smelting for producing the gold bullion. The barren solution flows into the barren solution tank by gravity and returns to drip leaching to form a closed leaching cycle after the concentration of sodium cyanide and scale inhibitor is adjusted. The current situations of dripping of the leach yard are shown in Figure 17-7.

(3) Carbon adsorption

The carbon adsorption (using a non-powered adsorption tank) is provided in the gold recovery workshop, with four series operating simultaneously. Each series has six carbon adsorption columns connected in series, each of which can handle a pregnant solution of 870 m³/h.

The direction of solution flow is opposite to that of carbon cascade. The air lifter is used to lift the carbon in a reverse direction, from the sixth column to the fifth column until the first column. An average of 10 tonnes of gold-loaded carbon is extracted from the carbon adsorption system to the desorption system on a daily basis. The solution from the sixth adsorption section passes through a safety screen and enters the barren solution tank. The reagent sodium cyanide required for leaching is added to the barren solution tank. The gold-loaded carbon grade is 550-800 g/t, and it is sent to the desorption and electrolysis system.

The carbon activation regeneration adopts the combined process of acid pickling plus pyrotechnic. The pyrotechnic regeneration temperature is 630°C, and the rotary kiln power is 315 kw, with the regeneration time of about 8 h. Carbon activation regeneration capacity is 2.5 t/batch.

(4) Desorption and electrolysis

Cyanide-free high-temperature and high-pressure desorption and electrolytic system is selected. It is composed of desorption column, heater, electrolytic cell, circulation pump, desorbent storage tank, pickling tank and anti-corrosion pump, etc. The gold-loaded carbon is washed and screened, and then is delivered hydraulically into desorption column for desorption. The electrolytic barren solution is returned to the system

for recycling. The desorption and electrolysis operation is carried out at 150°C of temperature and 0.45 Mpa of pressure, and the produced gold mud is sent to the smelting chamber.

(5) Smelting process

According to the composition of gold mud, first impurities are removed by nitric acid, then gold is immersed in aqua regia, and the high-grade gold powder is produced by reducing the gold leaching liquid, and silver is recovered from the impurities-removed filtrate. Finally, all process waste liquids are collected for alkali neutralization, and after filtration of neutralization solution the filtered cake is slags containing copper and nickel, while the filtrate is sent to the carbon adsorption; after carbon adsorption, the waste liquid is discharged centrally upon reaching the standards. The product is gold bullion with a purity of more than 90%.



Figure 17-5: Photo of Phase 2 Crushing Station



Figure 17-6: Photo of Phase 2 Heap Leach Pad



Figure 17-7: Photo of the Trickle-Down On Site

Table 17-1 lists the main technical indicators, and Table 17-2 is the main process equipment of the processing and smelting plant 2.

Table 17-1: Main Process Technical Indices

No.	Item	Unit	Indicators
1	Annual Quantity of Ore Processed	10,000 t/a	1,300
2	Grade (Au)	g/t	0.5
3	Feed Size	mm	1,000
4	Stacking Granularity (P80)	mm	9
5	Heap Height	m	10
6	Drip Intensity	L/m ² h	8-10
7	Lime Consumption	kg/t	0.5
8	Sodium Cyanide Consumption	kg/t	0.3
9	Cyanide Concentration of Barren Solution	‰	3
10	Gold-Loaded Carbon Grade	kg/t	0.55-0.8
11	Comprehensive Recovery Rate (Au)	%	60

Table 17-2: Main Process Equipment

No.	Equipment Name	Model	Quantity (Set)	Power (Kw)
1	Gyratory Crusher	KB54-75	1	600
2	Heavy Duty Apron Feeder	2400x9000	5	75
3	Secondary Cone Crusher	HP800	2	630
4	Tertiary Cone Crusher	HP800	4	630
5	Adsorption Tank	Φ4000x5600	24	
6	Air Compressor	GA110-7.5	1	110
7	Desorption Column	Φ1000x6300	4	
8	Electrolytic Cell	Φ1800x3360	4	
9	Carbon Regeneration Kiln	TZY-1000	1	315

17.4 Plant Production Schedule

The processing and smelting schedule of the concentrator is shown in Table 17-3. The period from 2026 to 2029 is the circulating drip immersion after completion of heaping.

Table 17-3: Plant Production Schedule

Item	Unit	2022	2023	2024	2025	2026	2027	2028	2029
Heap Ore Throughput	10,000 t	990	1,320	1,320	1,107.95	0	0	0	0
Heap Grade (Au)	g/t	0.61	0.63	0.67	0.69	-	-	-	-
Recovery Rate (Au)	%	60	60	60	60	67	70	71	72
Gold Yield	kg	3623.4	4989.6	5306.4	4586.91	532.87	228.37	76.12	76.12

18 Project Infrastructure

18.1 Logistics

The mining area is about 126 km northwest of Baotou, Inner Mongolia Autonomous Region, China. It takes about three hours from Baotou to the mine site through a 210 km long all-weather road. Baotou is an industrial city and a regional supply hub, with a major steelmaking industry. Baotou has business flights from Beijing every day. The highway from Guyang to Hailiudu is just south of the mining area. Xinhuresumu Township, the nearest village to the mine, is about 10 km from the mine, and there is an eight-bed clinic. The Baotou-Lanzhou Railway runs through an area about 30 kilometres from the mine.

The expansion project included the purchase of six hectares of land to improve traffic around the Xinhuresumu community. Operating consumables and product are transported according to the road transport protocols. The existing road system within the property were extended to provide new infrastructure and treatment facilities for the expansion stage.

18.2 Water Supply

There are five 10-40 m deep wells and one high-pressure secondary pumping station. The government constructed a new one million m³ reservoir to farm fishes for recreational purpose. This reservoir is now managed and maintained by the Mine. In order to expand the project, two more wells have been drilled in the reservoir enclosure area. It is pumped through a 7 km pipe into a new 3,000 m³ water tank. The expansion added 3.9 km pipe.

A site chlorination plant provides potable water.

18.3 Heap Leach Pad

All ore has been placed on the second leach pad, which is located at east of the Phase I heap leach pad. The second heap leach covers an area of 133 ha and has a capacity of 75 million m³ at its final heap height. To meet the production needs, an additional leach pad was commissioned in September 2016, given a capacity of 40 million m³.

18.4 Ponds

The capacity of the pregnant solution pond of Phase I, downstream of the leach pad, is 20,000 m³, and that of Phase II expansion project is 56,000 m³, totalling 76,000 m³.

There are three event pools with a total capacity of 200,000 m³ downstream of the pregnant solution ponds for Phase I, providing 62 hours of retention time. The Phase II expansion project has a 180,000 m³ event pool downstream of the second pregnant solution pond.

18.5 Power Supply

The mine is currently supplied by a 110 kV transforming station, with two sets of 63 MVA transformers.

18.6 Buildings

The main buildings consist of a primary crushing building, secondary crushing and screening building, refinery, laboratory, explosive magazine, security, activity centre, two dormitories, and a second mobile equipment maintenance workshop.

Boilers of three sets of 7 megawatt (“MW”) heat the Phase II crushing plant, and those of one set of 2.8 MW heat the refinery room. Satellite photos of site structures are shown in Figure 18-1.



Figure 18-1: Satellite Photo of Buildings At The Scene

18.7 Accommodations

In addition to the Phase I of 515 bed accommodations, two more two-storey dormitories were added in Phase II as well. The personnel of the Contractor are currently living in 18 separate dormitories provided by the Contractor. Figure 18-2 shows the photo of site personnel dormitories.



Figure 18-2: Photo of Staff Dormitory on Site

18.8 Bulk Fuel Storage

The bulk fuel storage is provided by Zhongjin Oil Company.

18.9 Pit Dewatering

There are two stationary pumping stations at 1,420 m and 1,324m benches, respectively, in the NE pit, accomplished by moveable submersible pumps as the mining depth increases.

18.10 Waste Dump

The waste dump is an open valley located at the north side of the open pit limits, covering an area of 5.82 ha, more than 200 m from the optimized pit limits and more than 1 km from other facilities. There are no residents within 1 km of the surrounding area. The valley is naturally open, with a gradient of about 2.0% longitudinally and about 20% on both sides. According to the geotechnical survey, the engineering geological condition of this area is good.

The total capacity of the waste dump is 406.59 million m³, and that in the southwest open pit closed is 74.5565 million m³, totalling 481.1465 million m³. By the end of March 2022, about 782.0059 million tonnes of waste rocks had been dumped, accounting for about 376.5213 million m³ of storage capacity, and therefore the actual remaining storage capacity of the waste dump is about 104.6252 million m³. The quantity of waste rocks required to be stripped for the open pit of the northeast pit of this design is 13.0393 million m³, and the density is 2.7 t/m³. According to the swell factor of 1.3, the waste dump capacity is 16.951 million m³. The capacity of the waste dump can meet the production needs during the service period, and the margin is 6.17.

18.11 Emergency Response and Medical Facilities

There is a three-bed clinic, with a doctor and a nurse, who work on a rotation basis from Baotou. The nearest hospital is about 80 km away in Wulate Middle Banner. There is a new ambulance on site.

Trained first response teams are provided within each business unit, as well as within the Contractor. There is a buried fire water pipe with a diameter of 150 mm, and the external fire hydrants are strategically placed close to the main building. In addition, there are a central emergency telephone number and fire fighting vehicles on site.

19 Market Studies and Contracts

CNG and IMP entered into a Contract for the Purchase and Sale of Doré (the “Sale Contract”) on May 7, 2014, pursuant to which the parties set out the Sale Contract by which CNG purchases gold Doré from IMP's CSH Mine, as amended on May 26, 2017, March 28, 2018, and May 6, 2020 (the “Supplemental Agreement I”, “Supplemental Agreement II”, and “Supplemental Agreement III”), respectively.

The current agreement is valid until December 31, 2023. All of the future products will continue to be sold to CNG under the current sales contract agreement.

20 Environmental Studies, Permitting, and Social or Community Impact

20.1 Introduction

The Environmental Impact Assessment Report for the full Phase II Expansion Project of IMP was approved by the Ecology and Environment Bureau of Inner Mongolia Autonomous Region in August 2015. According to the EIA, there would be no material negative environmental impacts in the proposed mining operation facilities based on the implementation of ecological protection, pollution control, and precautionary measures.

20.2 Environmental Studies

20.2.1 Ecology

The disturbance range of the surface ecological environment due to mine construction is very large. By taking vegetation restoration measures, the vegetation coverage of the mining area and waste dump of the project has been greatly improved. By 2020, the company has planted more than 15,000 square meters of trees and grass in the mining area. Eventually, the artificial ecosystem will replace the original natural ecosystem and make the environment of the area gradually suitable for plant survival. Figure 20-1 shows the site greening photo.



Figure 20-1: Photo of the Greening on Site

20.2.2 Waste Water

Domestic wastewater is discharged into the domestic sewage treatment plant after oil separation and precipitation and used as water sources of sprinkler for production after biological oxidation, without discharge outside. Water discharged from the boiler shall be used for sprinkling the waste dump and road and shall not be drained. After the purification of pit gushing water, containing a main pollutant of SS, and production waste water, they can be used for production and road dust suppression using sprinklers, etc. For the cyanide-containing solution of the heap leaching yard, going through spraying, heap leach pad, pregnant solution pond, barren solution pond, trickle pipe (returned water), and heap leach pad, the whole process is fully closed loop for recycling by using a pad of HDPE geomembrane.

20.2.3 Waste Gas

The data collected show that the SO₂ maximum ground-level concentration discharged from the boiler room in living quarter is 0.0140 mg/m³, the NO₂ maximum ground-level concentration is 0.0156 mg/m³, and the maximum ground-level concentration of flue dust is 0.0008 mg/m³. The maximum ground-level concentration of SO₂ discharged from the boiler room of the crushing station is 0.0249 mg/m³, the maximum ground-level concentration of NO₂ is 0.0197 mg/m³, and the maximum ground-level concentration of flue dust is 0.0120 mg/m³, with a percentage of standard of 2.67%. It is indicated that the emission of pollutants from the boiler rooms has little impact on the ambient air quality.

A total of 29 sets of mechanical dust collectors are selected for the crushing system, without exhaust pipe set in the dedusting system. All dusts removed by dust collectors are sent to the nearby belt conveyor through conveyor spiral groove and returned to the process flow. It has little impact on the surrounding atmospheric environment.

Wet rock drilling is adopted for mining production, and water is sprayed during loading for dust suppression. The access road is paved by asphalt and sprinkled with water for dust suppression. Concentrate powder transportation vehicles are covered to avoid escape of fine powder and to reduce dust pollution. The heap leach pad and waste dump are sprinkled regularly to prevent dusts.

20.2.4 Noise

The noise sources in the industrial site include the primary crushing workshop, medium and fine crushing workshop, screening workshop, equipment operation noise of the smelting workshop and other auxiliary workshop noise of the crushing station, and the noise intensity of the equipment is generally about 70-103 decibel (“dB”). In order to reduce noise effectively, low-noise equipment was selected first, and noise prevention measures were taken such as suspended acoustic panel and building sound insulation.

20.2.5 Solid Waste

The total quantity of waste rocks is 817 million t, which is Class I general industrial solid wastes. The waste rocks are piled in the waste dump with a total area of 3.31 million m² and a total capacity of about 312 million m³. The dust collected by the dust removal system has the same composition as ore, with a smaller particle size, so it is collected and sent to the leach pad for recycling. The domestic waste discharge is about 564.13 t/a, and the sludge generated by the sewage treatment plant in living quarters is 352.58 t/a, which is collected and discharged to the garbage discharge point on the east side of the mining area. The ash and slag discharged from the boiler is 772.97 t/a, which is used for paving the site road.

20.3 Site Monitoring and Water Management

There are eleven ground water monitoring stations, located outside of the property limits, where independent water samples are taken every third month. The Operations Environmental Department takes weekly ground water samples from five locations outside the property perimeter and from three locations within the property

limits. The ground water monitoring will continue for at least 5 years after the process plant will stop production and until the leach pile cyanide levels will be below the National Standard of 0.02 mg/m³.

Waste dumps are monitored weekly for subsurface water quality and for slope stability.

Water for production is taken from Chengyi reservoir at the upper reaches of Moleng River. A pump house is set up to transfer water to the 2,000 m³ elevated water tank in the plant area through four pumps. As domestic water is taken from groundwater, a pump house was built, with two pumps supplying water to the elevated water tank of 1,000 m³ in the plant area through piping.

The water consumption in 2021 was 1,084,290 m³, and the average water cost is 1.834 yuan/m³.

20.4 Permitting

According to the implementation plan for national land and space planning, unified confirmation of natural resources, and overall planning of mineral resources, the Inner Mongolia Pacific Mining Co., Ltd.'s geographical location, mineral structure and production meet the relevant policies. It is neither within the ecological boundary nor in the nature reserve, and its supporting facilities meet the industrial codes.

The project approvals or permits currently obtained are as follows:

- (1) Phase II Expansion Project Soil and Water Conservation Scheme approved by the Water Resources Department of Inner Mongolia Autonomous Region on October 14, 2013;
- (2) Phase II Expansion Project Environmental Impact Statement approved by Bayannao'er Municipal Ecology and Environment Bureau on August 12, 2015;
- (3) Environmental Protection Acceptance Opinions of Phase II Expansion Project Completion approved by Bayannao'er Municipal Ecology and Environment Bureau on December 22, 2015;
- (4) Land Use Certificate of plant area including explosive magazine issued by the Real Estate Registration Bureau of Wulate Middle Banner on December 4, 2017;
- (5) Pollutant Discharge Permit issued by the Bayannao'er Municipal Bureau of Ecology and Environment on September 30, 2019;
- (6) Safety Evaluation Report approved by the Ministry of Emergency Management of the People's Republic of China on December 31, 2019;
- (7) Work Safety Permit issued by the Emergency Management Department of Inner Mongolia Autonomous Region on March 2, 2020; and
- (8) Mine Geological Environmental Protection and Land Reclamation Plan approved by the Natural Resources Bureau of Bayannao'er City on May 25, 2021.

By February 2022, the company has paid 56,552,423.15 yuan to the mine geological environment recovery savings fund.

The existing operation pays a Waste Disposal fee of 600,000 yuan per year for stack emissions and noise.

20.5 Social or Community Impact

There are 536 personnel employed for the current operation, one-third of whom are local personnel. Currently, operators work three 8-hour shifts a day and are paid by 1.5 times of the base salary for overtime. Administrative staff work 5 days a week with weekends off. The operators can rest in a centralized manner according to the work situation of their departments.

In addition to employees, there are about 600 contractor's workers at the site. For non-local contract personnel, they work for 2 to 3 months before one month' vacation.

All personnel are required to have an annual medical examination and to report safety statistics to authorities on a monthly basis.

The current operation spends about 1 million yuan per year on local community activities. Depending on the needs of the community, these plans vary from year to year. The results of the work in recent years are as follows:

- (1) Continued to solve the employment of local farmers and herdsmen. Up to now, the Company has employed a total of 626 people in the autonomous region, including 380 in Bayannao'er City, 303 in Wulate Middle Banner and 111 in local minorities.
- (2) Invested 35,000 yuan to assist the local government in organizing folk activities such as Nadam Fair and Oboo Fete in 2021 to contribute to local poverty alleviation;
- (3) Helped the locality consolidate poverty alleviation achievements. A student grant of 35,000 yuan was provided, and 160,000 yuan were spent to purchase 50 t of local fodder corn to help surrounding herdsmen overcome the shortage of forage in winter;
- (4) In order to boost the local economy and help solve the problem of unsalable agricultural and sideline products, the Company invested more than 310,000 yuan in 2021 to purchase the agricultural and sideline products produced by the herdsmen around;
- (5) Improved the living conditions of employees. The insulation walls were repaired, and the internal facilities were updated for staff dormitories, and the types of diets were increased in the cafeteria, as well as 11 college students were sponsored with a grant of 23,000 yuan in 2021; and
- (6) For the expansion project phase II, the costs for relocation of herdsmen's grassland and houses were 37.1 million yuan.

20.6 Mine Closure

The existing mine closure plan will be followed at the end of the life of mine. Accruals are made annually to cover the cost of closure based upon the detailed cost estimates of the mine closure plan. Heap leach pads and waste dumps will be re-vegetated, buildings will be demolished, and the final pit berms will be made safe and abandoned.

The eastern open pit is predicted to form a body of water, and a permanent slurry stone wall will be set up around the pit to prevent people and livestock from falling off. The west open pit, waste dump and low-grade ore dump, and other areas were reclaimed by soil covering and grass planting. The related closure costs are estimated to be 69,731,800 yuan.

21 Capital and Operating Costs

21.1 Total Capital Costs (Phase II Expansion)

Changchun Institute completed the investment estimate for the expansion project in July 2012.

The incremental design capacity of Phase II is 30,000 t/d to achieve a total capacity after expansion of 60,000 t/d. The process flowsheet is three-stage crushing-heap leach-carbon adsorption-desorption and electrolysis. The investment scope includes mining, processing, utilities and welfare facilities.

The construction investment of the Feasibility Study of the phase II expansion project was estimated to be 1.26 billion yuan, Given the direct project capital costs of 932.19 million yuan, accounting for 74.10% of the investment amount, and other indirect capital costs of 325.74 million yuan, accounting for 25.90% of the investment amount.

Table 21-1 lists a summary of the investment estimated by Changchun Institute for the Phase II expansion project.

Table 21- 1: Capital Cost Summary

NO.	Item	Million RMB	Million USD	%
I	Engineering Capital costs	932.19	146.90	74.10
1	Mining	11.87	1.87	0.94
2	Mineral Processing	756.61	119.23	60.15
2.1	Crushing System	484.90	76.41	38.55
2.2	Heap Leaching	156.13	24.60	12.41
2.3	Gold Recovery	115.58	18.21	9.19
3	Utilities	149.19	23.51	11.86
4	Accommodations & Facilities	14.52	2.29	1.15
II	Other Capital Costs	232.56	36.65	18.49
III	Contingency	93.18	14.68	7.41
Total	(I + II +III) Total Capital Costs	1,257.93	198.23	100

21.2 Assets Used

Phase II utilized the original assets of 670.1 million yuan, including fixed assets of 553.41 million yuan and intangible assets of 116.69 million yuan, and the working capital was 175 million yuan. Therefore, the total investment used was 845.1 million yuan.

21.3 Operating Costs

The estimation of the operating costs are based on the actual mine costs in conjunction with the forecasted production schedule.

The mining costs are subject to outsourced contract cost calculated on a per cubic metre basis and adjusted as the haulage distance is greater than 2.5 km. The all-in rate of mining is 24.1 yuan/m³, with an increase of 2 yuan/m³ for a distance increase of every 1 km and a decrease of 0.8 yuan/m³ for a distance decrease of every 1 km.

The processing costs are estimated based on the actual conditions of the mine, and the future maintenance costs of the heap leaching pads are also included.

The general and administrative (G&A) costs are estimated based on the actual mine conditions, taking into account the reclamation costs of 69.73 million yuan due to mine closure, which will be included equally from 2022 to 2025.

The estimated operating costs are shown in Table 21-2.

Table 21-2: The Estimated Operating Costs

NO.	Item	Unit Costs	
		yuan/t	USD /t
1	Mining Costs	42.00	6.62
2	Processing Costs	18.00	2.84
3	G&A Costs	5.00	0.79
4	Total Operating Costs	65.00	10.24

22 Economic Analysis

Under NI 43-101 rules, producing issuers may exclude the information required for Section 22 - Economic Analysis, on properties currently in production, unless the Technical Report includes a material expansion of current production. CGME notes that CGG is a producing issuer, the CSH Mine is currently in production, and a material expansion is not being planned. CGME has performed an economic analysis of the CSH Mine using the estimates presented in this report and confirms that the outcome is a positive cash flow that supports the statement of Mineral Reserves.

23 Adjacent Properties

There are no adjacent properties that are considered material to the Project at present.

24 Other Relevant Data and Information

In the past three years, the Company had one minor injury accident and two near-miss accidents in 2020. No work-related fatality accidents occurred, and no major equipment, fire, traffic and environmental pollution accidents happened. The incidence of occupational diseases is zero.

The Company has formulated a health, safety and environment (“HSE”) work plan for 2022, with the following objectives:

- The mortality per 1,000,000 hours worked shall be zero;
- The injury frequency per 1,000,000 hours worked will be ≤ 0.2 ;
- Zero accident of major equipment, fire and explosion, and traffic;
- No environmental pollution accident shall occur, and all kinds of pollutants will be discharged to the standards, as well as 100% hazardous wastes are treated according to the standards; and
- Zero public health incident and zero new occupational disease.

25 Interpretation and Conclusions

The last NI 43-101 Technical Report of CSH Gold Project was disclosed in TSX, which was entitled *Technical Report Expansion Feasibility Study for the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, the People's Republic of China* dated October 2012. Since then, several diamond drilling programs have been carried out consistently, and Beijing Jinyou Geology and Exploration Corp. Ltd. was employed for the entire exploration program. As such, a total of additional 65 diamond drilling holes for a cumulative length of 51,985.8 m were completed. As of March 2022, a total of 368 diamond drilling boreholes were undertaken over an overall grid of 50 m (along strike) by 50 –100 m (down dip).

CMGE conducted various verifications including site inspection, data review, cross-checking, integrity, validation, data processing of QC, and SG and justified the validation of mineralized domain defined by CGME through comparing against mining operation records as well. CGME considers the current primary database of the CSH Gold Project to be reliable in general and suitable for the purposes of conducting an update of the mineral resource estimate. The economic viability of the mineral resource estimate is supported by RPEEE justified by CGME.

However, some deficiencies were found including some missed track back QC information of QC, nugget effect impaction against assaying precision, SG samples not dried enough for measurements, and inadequate infill drilling programs completed, etc.

Generally, CGME draws the following conclusions:

- IMP is the sole owner of the CSH Gold Project, with one mining license and one exploration license. CGME sighted documents of environmental protection measures, environmental monitoring reports, soil and water conservation plans, land rehabilitation plan, and safety production permit, etc. No material risk was noticed in these regards;
- The exploration potential towards dip down extension of all main gold domains defined so far keeps open, especially at the cross sections of exploration lines between 9400 and 9500, where the high-grade gold mineralization plunges down there. However, the deposit is characterized by low-grade gold mineralization, and the economic viability may become weaker with depth increasing;
- This ultimate open pit limit optimization was mainly based on the relevant data collected from the site and communications with the site production personnel to determine the various costs. Amongst the 11 open pit limits created by using Micromine was the most reasonable open pit limit of this design;
- The design basis was sufficient, and the mining method has been verified by the mine production for many years, which is safe and reasonable. The mine has four years left in service, with promising economic benefits in the next four years. The open pit limit optimization can be used as technical support for the subsequent production of the mine; and
- Through the financial analysis, we can see that the project has good economic benefits.

26 Recommendations

Based on current sampling information and knowledge of the CSH Gold Project, CGME recommends the following work programs.

- In order to improve the economic performance of the mining production, attention should be paid to the operating cost control and current cut-off grade for mining operation as well;
- The current primary database should be updated, especially for those QC data, and the database management should be strengthened;
- With the increase of pit depth, the exposure time of final slope is longer and longer. Therefore, safety measures of slope protection, dynamic monitoring and early warning shall be required in a timely manner during the production. The pit working slope should be checked up once a week, with the high and steep slope once a day, and the unstable section should be checked in time after heavy rain, with an immediate treatment once an abnormality is found;
- With the development of mining depth, the weathered degree of ore decreases, and the recovery rate of gold in deep ore may decrease. On the other hand, with the increase of pyrrhotite in ore and decrease of alkali gangue, the dosage of leaching reagent will change. It is suggested to analyse change of recovery rate and to find optimal leaching conditions through reducing particle size of ore and carrying out various condition tests;
- It is suggested that during the implementation of the project, resources and production organization should be optimized, national tax subsidies should be applied actively, and production costs should be controlled while the production capacity should be expanded as far as possible, so as to increase revenue, reduce operating costs and prevent possible business risks; and
- CGME recommends that more infill drilling programs are required to further expand mineral resources and to upgrade the mineral resource categories, and then a Preliminary Economic Assessment (“PEA”) should be conducted to determine whether the project will be worthwhile to go into a Pre-Feasibility Study (“PFS”) for the mineral resources at depth.

Table 26-1 provides an estimated budget for the work proposed by CGME, which is classified into two phases. Phase 1 includes a further preparation work for supporting a PFS, where a further infill drilling program is recommended.

Based on the progress of PEA, a PFS is required to evaluate the economic viability of the mineral resources defined within the Exploration License scope of the CSH Gold Project, which will provide a better basis for a sustainable mine development.

Table 26-1: Estimated Costs for the Exploration Program Proposed for the CSH Gold Project

Phase	Description	Work	Total Cost (Yuan)	Comments
Phase 1	Infill drilling program	3,900 m/44 holes	3,900,000	Yuan 1,000/m
	Preparation of primary database		300,000	
	Other geological work		200,000	
	Administration and logistics		1,320,000	30% of total above budget
	Sub-total		5,720,000	
	Contingency		572,000	10% of above budget
	Total		6,292,000	
Phase 2	Geotechnical work		2,000,000	
	Preliminary Economic Assessment (PEA)		2,000,000	
	Other geological work		200,000	
	Administration and logistics		1,260,000	30% of total above budget
	Sub-total		5,460,000	
	Contingency		546,000	10% of above budget
	Total		6,006,000	

27 References

Nilsson Mines Services Ltd. et al, Technical Report Expansion Feasibility Study for the Chang Shan Hao Gold Project, Inner Mongolia, the People's Republic of China, October 2012.

Changchun Gold Design Institute, Feasibility Study Report for Chang Shan Hao Gold Mine, Inner Mongolia Pacific Mining Co., Ltd., July 2012.

Inner Mongolia Environmental Science and Technology Co., Ltd., Inner Mongolia Pacific Mining Co., Ltd. Phase II expansion Project Environmental Impact Report, August 2015.

Manchao He, China University of Mining and Technology, Final Report of Slope Stability Evaluation and Risk Zone Study of Inner Mongolia Pacific Mining Co., Ltd., January 2018.

Changchun Gold Design Institute, Mining Plan Update of Chang Shan Hao Gold Mine Expansion Project (Northeast Pit), Inner Mongolia Pacific Mining Co., Ltd., March 2018.

Beijing Jinyou Geology and Exploration Corp. Ltd., Exploration Report at the Periphery and Depth (below 1132m ASL) of Chang Shan Hao Gold Deposit, December 2021.

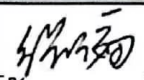

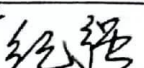
Changchun Gold Research Institute, Processing Mineralogy Studies on Gold Mineralization Below 1132 m ASL of the CSH Gold Deposit, December 2021.

Inner Mongolia Geological Engineering Survey Co., Ltd., Mining Geological Environment Protection and Land Reclamation Scheme of Inner Mongolia Pacific Mining Co., Ltd., May 2021.

28 Date and Signature Page

This TR documents the Mineral Resource and Mineral Reserve statements for the Chang Shan Hao Project located in the People's Republic of China and is effective as of August 19, 2022. A list of QPs is shown in Table 28-1.

Table 28-1: List of QPs

Author	Role	Qualifications and Affiliations	Responsible for Chapters	Date Signed	Signature
Guangpian Zhang	Principal Mining Engineer	FAusIMM	1, 15-16, 19, 21-22, 24-26	Aug 18/2022	
Yuan Chen	Principal Geologist	MSc, MAIG, RPGeo	1, 2-12, 14, 23, 25-26	Aug 19/2022	
Qiang Ji	Principal Processing Engineer	FAusIMM	1, 13, 17-18, 20, 25-26	Aug 19/2022	

Appendices

Borehole ID	Easting	Northing	Elevation	From (m)	To (m)	Intersection (m)	Au (g/t)	ID of Mineralized Domain
DDH9900_5	16355084.220	4616983.860	1676.790	1,333.90	1,368.66	34.76	0.46	N1
DDH9900_5	16355084.220	4616983.860	1676.790	1,400.17	1,416.69	16.52	0.32	N2
DDH9900_5	16355084.220	4616983.860	1676.790	1,421.31	1,454.67	33.36	0.37	N2
DDH9900_6	16355283.074	4616567.214	1467.937	212.36	214.86	2.50	0.39	N1
DDH9900_6	16355283.074	4616567.214	1467.937	218.11	240.23	22.12	0.35	N1
DDH9900_6	16355283.074	4616567.214	1467.937	241.97	257.13	15.16	0.46	N1
DDH9900_6	16355283.074	4616567.214	1467.937	316.46	325.40	8.93	0.28	N1
DDH9900_6	16355283.074	4616567.214	1467.937	326.34	563.53	237.18	0.63	N1
DDH9900_6	16355283.074	4616567.214	1467.937	572.22	575.23	3.01	0.22	N1
DDH9900_7	16355273.610	4616586.098	1468.182	281.56	293.37	11.82	0.28	N1
DDH9900_7	16355273.610	4616586.098	1468.182	303.02	307.70	4.68	0.27	N1
DDH9900_7	16355273.610	4616586.098	1468.182	318.47	320.63	2.16	0.49	N1
DDH9900_7	16355273.610	4616586.098	1468.182	355.42	358.28	2.86	0.32	N1
DDH9900_7	16355273.610	4616586.098	1468.182	380.46	614.52	234.06	0.58	N1
DDH10100_5	16355336.428	4616920.725	1677.722	842.64	851.38	8.74	0.35	N1
DDH10100_5	16355336.428	4616920.725	1677.722	859.80	883.26	23.46	0.42	N1
DDH10100_5	16355336.428	4616920.725	1677.722	907.96	1,003.57	95.61	0.39	N1
DDH10100_5	16355336.428	4616920.725	1677.722	1,007.07	1,025.16	18.09	0.26	N1
DDH10300_6	16355508.724	4617023.732	1668.140	979.07	999.77	20.69	0.26	N1
DDH10300_6	16355508.724	4617023.732	1668.140	1,005.78	1,012.52	6.74	0.32	N1
DDH10300_6	16355508.724	4617023.732	1668.140	1,028.06	1,038.12	10.06	0.25	N1
DDH10300_6	16355508.724	4617023.732	1668.140	1,042.12	1,050.39	8.27	0.25	N1
DDH10300_6	16355508.724	4617023.732	1668.140	1,066.89	1,068.67	1.78	0.29	N1
DDH10300_6	16355508.724	4617023.732	1668.140	1,070.36	1,087.39	17.03	0.28	N1
ESHK03	16355117.161	4616211.614	1422.952	73.68	101.00	27.32	0.35	N1
ESHK03	16355117.161	4616211.614	1422.952	192.07	609.13	417.06	0.65	N1
ESHK03	16355117.161	4616211.614	1422.952	623.32	627.77	4.45	0.33	N1
ESHK03	16355117.161	4616211.614	1422.952	648.26	653.88	5.62	0.43	N1
ESHK03	16355117.161	4616211.614	1422.952	660.57	745.00	84.43	0.79	N1

Brief Information of Resource Database Structure

Table	Field	Description
Collar	Year	Year for carrying out borehole
	hole_id	ID of borehole
	hole_path	Borehole path
	max_depth	Borehole depth (m)
	x	Easting (m)
	y	Northing (m)
	z	Elevation (m)
Survey	Stage	Prior to December 2011, and since December 2011
	hole_id	ID of borehole
	depth	Borehole depth (m)
	azimuth	Azimuth direction
Assay	dip	Dip angle
	hole_id	ID of borehole
	samp_id	ID of sample
	depth_from	Depth from (m)
	depth_to	Depth to (m)
Lith	au	Grade of Au (g/t)
	hole_id	ID of borehole
	depth_from	Depth from (m)
	depth_to	Depth to (m)
	code_rock	Geological code
	name_rock	Rock name
	Lith	Lith code

Block Model Attributes

Variable	Description
x	Easting (m)
y	Northing (m)
z	Elevation (m)
_x	Block size for easting
_y	Block size for northing
_z	Block size for elevation
oreid	ID of domain, where NE1 is referred to as N1, and SW1 is referred to as W1 in the Report, and so on.
Pit	Mined-out; Final limits
right	M-mining license; E-exploration license
au_ok	Au, result performed by Ordinary Kriging
KR_VAR	Kriging variance
KR_STDERR	Kriging standard deviation
Point	count of composites for estimation with search distance of 150m
ave_dis	Average distance of composites for estimation with search distance of 150m
C	Degree of sampling working: point/average distance
Cat	Category (MS, ID, IF)
OX	Oxidized zone (0=primary resource; 1=oxidized resource)
SG	Specific gravity
band	Waste band
au_idw	Result performed by IDW
order	Estimation order

APPENDIX B

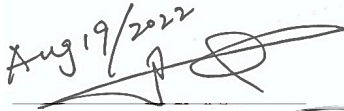
Certificates of Author

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: Technical Report on the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, People's Republic of China, dated August 19, 2022.

I, Yuan Chen, residing at No.18 Dingfuzhuang Xijie, Chaoyang District, Beijing, China 100024 do hereby certify that:

- 1) I am an associated Principal Consultant (Geology) with CGME Consulting Limited ("CGME") with an office at Suite 660, One Bentall Centre No. 505 Burrard Street, Vancouver, British Columbia, Canada V7X 1M4;
- 2) I am a graduate of the China University of Geosciences, China in 1985 and 1988, I obtained a final M.Sc. I have practiced my profession continuously since 1984. I have been directly involved in geological studies and mineral exploration for more than 30 years and my experience includes gold, silver, copper, lead, zinc, iron, nickel, chromium, tungsten, molybdenum, and aluminium etc. I attended geological exploration program on the Liba gold deposit in Li County, Gansu Province, China in 1989 to 1991. Acted as a chief geologist worked at the Pargum gold mine located in Paracale, Camarines Norte, Central Philippines in 1995 to 1997. As a qualified person and project manager, I conducted independent technical assessment and mineral resource estimates for more than twenty gold projects in 1999 to 2021, including the Wadi Gabgaba gold project in Republic of the Sudan in 2017, the similar style mineralization as the CSH gold deposit;
- 3) I am a Professional Geologist registered with the Australasian Institute of Geoscientists (MAIG) with membership number 4014 and Registered Professional Geoscientist of No.10262;
- 4) I have not personally inspected the subject project;
- 5) 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 fulfil the requirements to be a "qualified person" for the purposes of National Instrument 43-101;
- 6) As deputy project manager I supervised and attended the compilation of the technical report and accept, on behalf of CGME Consulting Limited, the professional responsibility for the geological and mineral resource estimate contents of this technical report;
- 7) I, as a qualified person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 8) I have had no prior involvement with the subject property;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) CGME Consulting Limited was retained by China Gold International Resources Corp. Ltd. ("CGG") to prepare a technical audit of the CSH Gold Project. In conducting our audit, a gap analysis of Project technical data was completed using CIM "Best practices" and Canadian Securities Administrators National Instrument 43-101 guidelines. The report is based on a site visit, a review of Project files and discussions with the mine site and CGG personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the CSH Gold Deposit or securities of CGG;
- 12) As of the date of this technical report, 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; and
- 13) I consent to the filing of the technical report with any stock exchange and other regulatory authority and any publication for regulatory purposes, including electronic publication in the public company files on their websites accessible to the public.

Aug 19/2022


Beijing, China
[August 19, 2022]

Yuan Chen, M.Sc., MAIG, RPGeo
Principal Geology Consultant




CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: Technical Report on the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, People's Republic of China, dated August 19, 2022.

I, Guangpian Zhang, residing at gate 4, building 74, Nanhu Xincun West Street, Chaoyang District, Changchun City, China, zip code 130012, hereby certify that:

- 1) I am the board member, technical director (mining and Technical Economics) of CGME Consulting Limited ("CGME"), with the office located in box27 Vancouver B, Burrard Street, Suite 660505 C Canada V7X1M4;
- 2) I graduated from Northeastern University in 1988 with a Bachelor of Science Degree in mining engineering. Since 1988, I have been directly engaging in the design and research of mining for 33 years, and my working experience of the mining include gold, silver, copper, lead, zinc, iron, nickel, chromium, tungsten, molybdenum, aluminum, etc. As the technical director, I participated in the following representative projects:
 - Chief Engineer---Wushan Copper-Molybdenum Mine Phase II (expansion) EPC project (26 million T / a) by China Gold Inner Mongolia Mining Co., Ltd. in 2011;
 - Chief Engineer---Inner Mongolia Changshanhao Gold Mine Phase II Expansion Project (13.6 million T / a) by China National Gold Engineering Co. in 2012;
 - Chief Engineer---Tibet Jiama Copper Polymetallic Mine Phase II Expansion Project (13.2 million T / a) by Tibet Huatailong Mining Development Co., Ltd. In 2014;
 - Chief Engineer&Designer --- Shaling Gold Mine (12000t / D) by Shandong Laizhou Huijin Mining Investment Co., Ltd in 2017;
 - Project Director---Mining and Beneficiation Project of Buchuk Gold Mine in Kyrgyzstan (2000T/ d) by China Kyrgyzstan Mining Co., Ltd. in 2018;
 - Project Director---Mining& Processing Project (2000t/d) of Dongduaoba Gold Mine in Tadjikistan by TEBA Co. Ltd., in 2020;
 - Project Director---Feasibility Study (BFS) and Preliminary Design for Ecuador Mirador Copper Mine Phase II by Ecuacorriente S.A. (46.2 million T / a) in 2021;
- 3) I have obtained fellowship conferment of AusIMM, with registration number of 318443;
- 4) I inspected the project from June 22 to June 24, 2022;
- 5) I have read the definition of "qualified person" in 43-101 national standard, and I prove that my educational background, professional association and previous relevant working experience meet the requirements of "qualified person" in 43-101 national standard;
- 6) As the director of mining, technology and economy for the project, I am responsible for supervising the preparation of the technical report and the contents of mining and technology& economy part for the technical report;
- 7) I, as a qualified person, am independent of the issuer as defined in article 1.5 of National Instrument 43-101 Report;
- 8) I have not participated in the subject property before;
- 9) I have read the national standard 43-101 and confirmed that this technical report is prepared in accordance with the national standard 43-101;
- 10) Inner Mongolia Taiping Mining Co., Ltd. entrusted "CGME" to conduct technical audit on Changshanhao Gold Mine Project. During the audit, we completed the gap analysis of the project technical data using CIM's "Best Practices" and the Canadian Securities Manager's national tool 43-101 guide. The above report is based on site visit, review of project documents and discussion with personnel of Inner Mongolia Taiping Mining Co., Ltd.;

- 11) I have not received, nor do I wish to receive, directly or indirectly, any interest from Changshanbao Gold Mine or securities of Inner Mongolia Taiping Mining Co., Ltd;
- 12) As of the date of issuance of this technical report, to the best of my knowledge and belief, this technical report contains all scientific and technical information that needs to be disclosed in order to make this technical report not misleading; and
- 13) I consent to the filing of the technical report with any stock exchange and other regulatory authority and any publication for regulatory purposes, including electronic publication in the public company files on their websites accessible to the public.

Aug 19/2022


Changchun, China
[August 19, 2022]

Guangpian Zhang, FAusIMM
Principal Mining Consultant

CERTIFICATE OF QUALIFIED PERSON


To Accompany the report entitled: Technical Report on the Chang Shan Hao (CSH) Gold Project, Inner Mongolia, the People's Republic of China, dated August 19, 2022.

I, Qiang Ji, residing at No. 410, gate 4, building 74, Nanhu Xincun West Street, Chaoyang District, Changchun City, China, zip code 130012, hereby certify that:

- 1) I am the board member, chairman and technical director (processing and metallurgy) of CGME Consulting Limited ("CGME"), with the office located in box27 Vancouver B, Burrard Street, Suite 660505 C Canada V7X1M4;
- 2) I graduated from Northeastern University in 1987 with a Bachelor of Science Degree in beneficiation engineering. Since 1987, I have been directly engaging in the design and research of beneficiation and metallurgy for 34 years, and my working experience of the beneficiation include gold, silver, copper, lead, zinc, iron, nickel, chromium, tungsten, molybdenum, aluminum, etc. As the technical director, I participated in the following representative projects:
 - Wushan Copper-Molybdenum Mine Phase II (expansion) EPC project (26 million T / a) by China Gold Inner Mongolia Mining Co., Ltd. in 2011 ;
 - Eritrea Koka Gold Resources Development Project by Shanghai Foreign Economic Cooperation Group Holding Co., Ltd. (2000t / D) in 2012;
 - Kuru Jegelek Mine Resource Development Project (6000t / D) by Kichi-charat company in 2014;
 - M1553 Gold Mine Development Project in Mara Province, Tanzania by Henan Tanrui Mining Co., Ltd. in 2016;
 - Mining and Beneficiation Project of Buchuk Gold Mine in Kyrgyzstan (2000t / D) by China Kyrgyzstan Mining Co., Ltd. in 2018;
 - Northern International Nigeria segilola Gold Mine Ni43-101 Feasibility Study Report Audit Project in 2019;
 - Mining& Processing Project (2000t/d) of Dongduaoba Gold Mine in Tadjhikistan by TEBA Co. Ltd., in 2020;
 - Feasibility Study (BFS) and Preliminary Design for Ecuador Mirador Copper Mine Phase II by Ecu Corriente S.A. (46.2 million T / a) in 2021.
- 3) I have obtained fellowship conferment of AusIMM, with registration number of 322442;
- 4) I have not inspected the project;
- 5) I have read the definition of "qualified person" in 43-101 national standard, and I prove that my educational background, professional association and previous relevant working experience meet the requirements of "qualified person" in 43-101 national standard;
- 6) As the director of the beneficiation and metallurgy discipline, i am responsible for supervising the preparation of the technical report and the contents of the beneficiation and metallurgy part for the technical report;
- 7) I, as a qualified person, am independent of the issuer as defined in article 1.5 of National Instrument 43-101 Report;
- 8) I I have not participated in the subject property before;
- 9) 9)I have read the national standard 43-101 and confirmed that this technical report is prepared in accordance with the national standard 43-101;
- 10) Inner Mongolia Taiping Mining Co., Ltd. entrusted "CGME" to conduct technical audit on Changshan Hao Gold Mine Project. During the audit, we completed the gap analysis of the project technical data using CIM's "Best Practices" and the Canadian Securities Manager's national tool 43-101 guide. The above report is based on site visit, review of project documents and discussion with personnel of Inner

Mongolia Taiping Mining Co., Ltd;

- 11) I have not received, nor do I wish to receive, directly or indirectly, any interest from Changshanbao Gold Mine or securities of Inner Mongolia Taiping Mining Co., Ltd;
- 12) As of the date of issuance of this technical report, to the best of my knowledge and belief, this technical report contains all scientific and technical information that needs to be disclosed in order to make this technical report not misleading; and
- 13) I consent to the filing of the technical report with any stock exchange and other regulatory authority and any publication for regulatory purposes, including electronic publication in the public company files on their websites accessible to the public.

Aug 19/2022


Changchun, China
[August 19, 2022]

Qiang Ji, FAusIMM
Principal Processing Consultant