

**AMC Consultants Pty Ltd**  
ABN 58 008 129 164

Level 29, 140 William Street  
Melbourne Vic 3000  
Australia

T +61 3 8601 3300  
E [melbourne@amcconsultants.com](mailto:melbourne@amcconsultants.com)  
W [amcconsultants.com](http://amcconsultants.com)



# Technical Report

## **Copalquin Property Mineral Resource Estimate** Newrange Gold Corp.

### **Durango State, Mexico**

In accordance with the requirements of National Instrument 43-101 "Standards of Disclosure for Mineral Projects" of the Canadian Securities Administrators

#### Qualified Persons:

Rodney Webster, MAIG

Robert Chesher, FAusIMM (CPMet)

José Olmedo, SME 426799RM

AMC Project: 123016

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## 1 Summary

### 1.1 Introduction

This Technical Report on the Copalquin Property (Property) has been prepared by AMC Consultants Pty Ltd (AMC) of Melbourne, Australia for Newrange Gold Corporation (Newrange) in connection with the proposed acquisition (the Acquisition) by Newrange, of the Australian Securities Exchange (ASX) listed Mithril Resources Limited (Mithril), pursuant to a Scheme Implementation Deed (SID) entered into between Newrange and Mithril on 25 May 2023.

Under the terms of the SID, Newrange will acquire 100% of the issued share capital of Mithril, resulting in Newrange remaining as the surviving entity. The transaction will be classified as a Reverse Take Over (RTO) under the rules of the TSX Venture Exchange (TSX.V) and the resulting issuer will be a Tier 2 mining issuer.

The Technical Report has been prepared in accordance with the disclosure requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), to support the disclosure to be made by Newrange regarding Mithril's Copalquin Property in the information circular for the meeting of the shareholders of Newrange to be held to approve the Acquisition.

### 1.2 Property description and ownership

The Property is in the Copalquin Mining District, which is located in the municipality of Tamazula, Durango State and the municipality of Badiriguato, Sinaloa State along the western slopes of the Sierra Madre Occidental physiographic province of western Mexico. The Project is centred at 25° 31' 29" north latitude and 107° 04' 42" west longitude on map sheet SGM G13-C23.

On completion of the Acquisition, Mithril will be wholly owned by Newrange and through its wholly owned subsidiary, Drummond Gold S.A. de C.V. (Drummond), Mithril has an exclusive option to acquire 100% interest in the Copalquin Gold-Silver District mining concessions located in Durango State, Mexico in which it currently owns 50% interest. Mithril has been exploring the Copalquin District since May 2020, and reported a maiden Mineral Resource estimate in accordance with the JORC Code<sup>1</sup> (2012), in November 2021, for the first target area in the district.

### 1.3 Geology and mineralization

Northwestern Mexico, where the Property is located, lies near the western limit of the Sierra Madre Occidental, a north-west trending volcanic plateau composed of thick accumulations of andesitic to rhyolitic volcanic rocks. The rocks of the Sierra Madre Occidental are generally thought to reflect subduction-related continental arc magmatism that slowly migrated eastward during the early Tertiary in a long period of compressional stress and then retreated westward more quickly, reaching the western margin of the continent by the end of the Oligocene (Sedlock et al., 1993).

Vein textures and mineralogy are consistent with low sulfidation epithermal veins developed from low salinity, near-neutral pH fluids dominated by meteoric water. Pulses of magmatic waters transported gold and silver into the hydrothermal system and the processes of boiling, fluid mixing, and cooling were triggers for deposition of the precious metals. Veins are filled with quartz as both early crystalline quartz and later crustiform bands of alternating chalcedony, finely crystalline quartz, carbonate minerals (ankerite, kutnahorite, rhodocrosite, and calcite) and adularia. Quartz

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<sup>1</sup> Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.

after platy calcite is absent or rare suggesting that boiling occurred in intense, brief pulses that generated broad zones of hydrothermal breccia. Mineralized zones have silver sulfides present as black bands up to 8 millimetres (mm) wide and as disseminated aggregates. Visible gold in flecks up to 2 mm occurs in several drillholes in both the Refugio and Soledad veins.

## 1.4 Historical exploration

The Copalquin district was probably discovered in the mid-1800s. Evidence of early work remains as numerous small workings and prospects throughout the district. Many small tahonas (rock mortars used to grind gold-bearing material) cut into bedrock or boulders along the Copalquin arroyo near Los Reyes and along the El Limon river below El Limon village have been located. Los Reyes is the oldest mine in the district and was mined in the late 1800s. In the early 1880s Major A. Warren acquired ~8,000 acres including seven known mines from the De La Rocha family. In 1883, unable to meet a scheduled property payment, Warren vended the properties into the Refugio Gold and Silver Company of Nashville, Tennessee following receipt of Killebrew's (1883) property examination report (Champion, 1887). Development of the properties seems to have commenced in mid-1885 when Dr Sharpe assumed responsibility for the operation (Champion, *ibid.*). Production at San Manuel, La Soledad and Refugio mines was probably curtailed by the Mexican Revolution (1910 – 1920). In the 1930s The Compania Minera La Cibola developed several mines on the recommendation of Mr J.W. Patterson. Patterson mapped all the known workings and collected hundreds of samples. In 1933 The Compania Minera La Cibola reported reserves of 147,000 tonnes grading 14.5 grams per tonne (g/t) gold and 590 g/t silver. Ore was milled by stamp mill at the Hacienda de Santa Maria (now La Maquina) about 1.5 kilometres (km) below the La Soledad mine and 1 km below the Refugio mine. Processing before 1890 was probably by gravity and amalgamation and subsequently by static cyanide leaching as evidenced by three large cement leach tanks remaining at La Maquina and several separate tailings retention areas below the La Maquina mill site. As early as the 1960s and through the 1980s Atalo and Francisco de la Rocha worked the San Manuel mine at some point partnering with Señor Miguel Angel Matas, the primary shareholder in the Mexican company that currently owns 50% of the concessions. Señores de la Rocha and Matas installed the aerial tramway to bring ore down from San Manuel and built a 10 tonnes per day (tpd) flotation plant on the Copalquin arroyo with a jaw crusher, ball mill, classifier, and flotation cells. Senor Matas bought the concessions from his partners and placed them into the private Mexican corporation Compania Minera La Dura, since changed to Compania Minera Copalquin S.A. de C.V. (CMC). Total historic production from the district has been estimated as up to 250,000 ounces (oz) of gold and 11 million ounces of silver with 75% of the estimated ounces coming from La Soledad (Wilkins, 1997).

## 1.5 Exploration by Mithril

Three drilling campaigns were carried out by Mithril during the period of 2020 to 2022. The overall number of holes drilled was 148 for a total of 32,713 metres (m).

All drilling on the Property is diamond core drilling using a man portable MP-500 drill powered by three diesel motors. Samples for the drill programs consist of ½ HQ core cut lengthwise with a diamond saw. Intervals are nominally 1 m but may vary between 1.5 m to 0.5 m based on geologic criteria.

Core samples were geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Core was sawn and half core is taken for sample. Samples are prepared using ALS Minerals Prep-31 crushing, splitting, and pulverizing. Field duplicate / second-half sampling is undertaken for 3% of all samples to determine representativity of the sample media submitted. Sample sizes are appropriate to the grain size of the material being sampled.

## 1.6 Mineral Resources

AMC was engaged in August 2021, by Mithril to estimate the Mineral Resource for the El Refugio-La Soledad target area in the Copalquin District and report it according to JORC Code (2012).

The estimated Mineral Resources above a 2 g/t gold equivalent (AuEq) cut-off and outside the areas of previous mining is shown in Table 1.1. Refugio Mineral Resources include Refugio\_main, Refugio\_2 and Refugio\_3 modelled veins whilst Soledad includes Soledad\_main, Soledad\_mid, Leon and Lina modelled veins.

To address the reasonable prospects for eventual economic extraction, the Qualified Person (QP) ensured that all models were of mineable thickness and any classified material was contiguous. A 2 g/t AuEq cut-off was chosen to ensure all stated Mineral Resources were potentially mineable. The break-even cut-off grade of 2.0 g/t AuEq was based on benchmarked costs from mines with similar mining and processing type, size, and location with assumed mining costs of \$95/t.

The QP is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially impact the Mineral Resource estimates. Mexico has a long and stable mining history and Mithril has relevant permits in place. La Soledad concession is valid and in force despite that lack of certificate (see Section 4.2). This concession is 6 hectares (ha) and covers a strip of land located just northeast of the La Soledad part of the Mineral Resource.

**Table 1.1 Mineral Resource above 2 g/t AuEq cut-off at 30 November 2021**

-	-	<b>Tonnes (kt)</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>AuEq (g/t)</b>	<b>Au (koz)</b>	<b>Ag (koz)</b>	<b>AuEq (koz)</b>
Refugio	Indicated	691	5.43	114.2	7.06	121	2,538	157
	Inferred	1,447	4.63	137.1	6.59	215	6,377	307
Soledad	Indicated	0	0.00	0.0	0.00	0	0	0
	Inferred	278	4.12	228.2	7.38	37	2,037	66
<b>Total</b>	<b>Indicated</b>	<b>691</b>	<b>5.43</b>	<b>114.2</b>	<b>7.06</b>	<b>121</b>	<b>2,538</b>	<b>157</b>
	<b>Inferred</b>	<b>1,725</b>	<b>4.55</b>	<b>151.7</b>	<b>6.72</b>	<b>252</b>	<b>8,414</b>	<b>372</b>

**Notes:**

- The Mineral Resources are stated according to the CIM Definition Standards (2014).
- Effective date is 30 November 2021.
- Mineral Resources are considered to have reasonable prospects for eventual economic extraction.
- All figures are rounded to reflect the relative accuracy of the estimate and totals may not add correctly.
- $\text{AuEq g/t} = \text{Au g/t} + (\text{Ag g/t}/70)$  based on assumed prices of Au US\$1,798.34/oz and Ag US\$25.32/oz.
- Areas of previous mining have been removed.
- Metallurgical recoveries of 93% for Au and Ag used.
- A break even cut-off grade of 2.0 g/t AuEq was used based on benchmarked costs from mines with similar mining and processing type, size, and location with assumed mining costs of \$95/t.

## 1.7 Conclusions

This Technical Report provides details of the exploration work to date within the Copalquin District property which includes a maiden Mineral Resource estimate at one of the target areas in the district. This includes preliminary metallurgical test work. Initial drill testing of several target areas across the district, soil sampling programs and geologic mapping have also been completed. The majority of the drilling has focused on El Refugio / Cometa and La Soledad areas with early-stage drilling at Los Reyes, Los Pinos, San Manuel, La Montura, and El Gallo. Figure 1.1 shows the mining concession area and areas of exploration.

Exploration and drilling procedures follow common industry practice. Results of Quality Assurance and Quality Control (QA/QC) programs are deemed acceptable by the QP. The collection of data informing the Mineral Resource is adequate. Despite this, geological risk is always present in a maiden Mineral Resource as additional exploration may not upgrade the Mineral Resource and continuity may be downgraded.

The Mineral Resource is defined by exploration drilling and a 2 g/t AuEq cut-off was chosen to ensure all stated Mineral Resources were potentially mineable. Indicated Mineral Resources comprise 691,000 tonnes grading 5.43 g/t gold and 114.2 g/t silver; and Inferred Mineral Resources comprise 1.725 million tonnes grading 4.55 g/t gold and 151.7 g/t silver. Mr Rodney Webster, MAIG, of AMC takes responsibility for these estimates.

To address the reasonable prospects for eventual economic extraction, the QP ensured that all models were of mineable thickness and any classified material was contiguous.

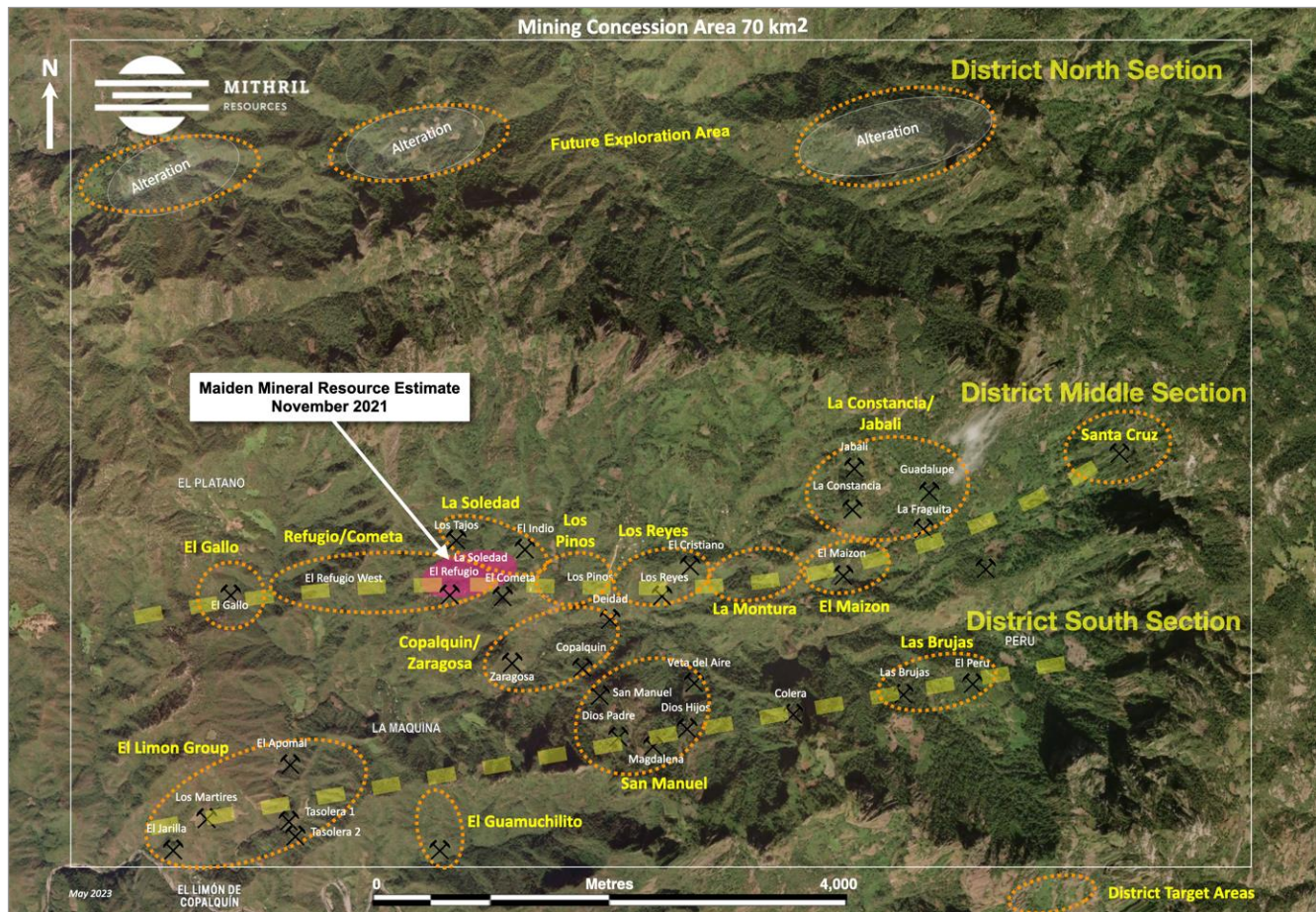
The QP is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially impact the Mineral Resource estimates.

A preliminary metallurgical test program has been completed on drill core from drilling at the El Refugio maiden MRE area. A composite sample was tested to investigate response to flotation followed by cyanidation and gravity followed by flotation.

The QPs do not see any reasonably foreseeable impacts of the above risks and uncertainties to the project's potential economic viability.



Figure 1.1 Areas of exploration within the Mining Concession



Source: Mithril, 2023

The exploration work to date in the district together with the maiden Mineral Resource estimate at the El Refugio target area and the widespread historic mines and workings, supports continued exploration at several target areas in the district mining concession area.

## 1.8 Recommendations

### 1.8.1 Exploration and resource drilling

The following work is recommended to improve the 2021 Mineral Resource estimate at the El Refugio target and to further test the known mineralization immediately along strike:

- Drilling on the eastern (Cometa) portion of the Refugio deposit.
- Drilling on the western Refugio area including down dip of the western most hole and several holes near CDH-140 and CDH-094. Some helicopter support may be required in this area.
- Drilling of two holes at the Los Reyes target area to step off holes CDH-040 and CDH-041 to the south where there is currently no drilling.
- Further follow-up drilling at the Cometa area including some deep drilling to target the central and deep part of Refugio.

### 1.8.2 Development recommendations

Development recommendations include:

- Additional drilling for metallurgical work and geotechnical evaluation for El Refugio.
- More detailed metallurgical test work.
- Update topography using Lidar survey.

### 1.8.3 Budget

The proposed budget for exploration and resource drilling is given in Table 1.2.

Table 1.2 Proposed drilling budget

Item	Unit	Quantity	Cost estimate (US\$)
Core Drilling El Cometa	m	1,050	178,500
Core Drilling Refugio West	m	1,825	310,250
Core Drilling Los Reyes	m	300	51,000
Core Drilling Refugio / Cometa	m	2,005	340,850
Core Drilling Additional	m	500	85,000
Lidar Survey	-	-	50,000
Helicopter	-	-	38,000
Administration and Labour	-	-	180,000
<b>Total</b>	-	-	<b>1,233,600</b>

Source: Mithril, 2023

The proposed budget for metallurgical test work is given in Table 1.3.

Table 1.3 Proposed Metallurgical test work budget

Item	Description	Cost estimate (US\$)
Core drilling	To provide whole core for metallurgy and geotechnical	85,000
Comminution	Unconfined compressive strength, crushing, grinding and abrasion indices	15,000
Flotation & cyanidation	Optimization work	25,000
Variability testing	Testing of different veins	25,000
Composite test work	Testing composite samples from other target areas	20,000
<b>Total</b>	-	<b>170,000</b>

Source: Mithril, 2023

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## Abbreviations and units of measure

Abbreviation / technical term	Description
%	Percentage
°C	Degrees Celsius
µm	micron
3D	Three-dimensional
AAS	Atomic Absorption Spectrometry
Ag	Silver
Ag <sub>2</sub> S	Acanthite
ALS	ALS Global
AMC	AMC Consultants Pty Ltd
ANP	Áreas Naturales Protegidas
ARD	acid rock drainage
ASX	Australian Securities Exchange
Au	Gold
cm	centimetres
CMC	Compania Minera Copalquin S.A. de C.V.
COG	Cut-off grade
CRM	Certified reference material
Drummond	Drummond Gold S.A. de C.V.
E-W	East-west
FeS <sub>2</sub>	Pyrite
g	Gram
g/t	Grams per tonne
GPS	Global positioning system
ha	hectares
ICP	Inductively coupled plasma
ICP-MS	Inductively coupled plasma mass spectrometry
IMMSA	Industrial Minera Mexico, S.A.
kg	kilogram
km	kilometre
kV	kilovolt
kVA	kilovolt-ampere
LGEEPA	Ley General de Equilibrio Ecologico y Proteccion al Ambiente
LVC	Lower volcanic complex
m	Metre; million (\$)
m <sup>3</sup>	cubic metres
m <sup>3</sup> /s	cubic metres per second
Ma	mega annum
MIA	Manifestación de Impacto Ambiental
Mithril	Mithril Resources Limited
mm	millimetre
MMB	Mexican Mining Bureau
N-S	North-south
NaCN	Sodium cyanide

# Copalquin Property Mineral Resource Estimate

Newrange Gold Corp.

123016

Abbreviation / technical term	Description
NE	North-east
Newrange	Newrange Gold Corporation
NI 43-101	National Instrument 43-101
oz	ounces
pH	pH is a measure of hydrogen ion concentration; a measure of the acidity or alkalinity of a solution
PMR	Public Mining Registry
ppm	Parts per million
PROFEPA	Procuraduria Federal de Proteccion al Ambiente
Property	Copalquin Property
QA/QC	Quality Assurance and Quality Control
QP	Qualified Person
REIA	Regulations Environmental Impact Assessment
RTO	Reverse Take Over
SEMARNAT	Secretaría del Medio Ambiente y Recursos Naturales
SGM	Servicio Geologico Mexicano
SGS	SGS de México S.A. de C.V. in Durango, Ontario, México
SID	Scheme Implementation Deed
Sun Minerals)	Sun Minerals Pty Ltd
tpd	Tonnes per day
TSXV	TSX Venture Exchange
US\$	United States of America dollar
UVS	Upper volcanic series
XRF	X-Ray fluorescence

## 2 Introduction

### 2.1 General and terms of reference

This Technical Report on the Copalquin Property (Property) has been prepared by AMC Consultants Pty Ltd (AMC) of Melbourne, Australia for Newrange Gold Corporation (Newrange) in connection with the proposed acquisition (the Acquisition) by Newrange, of Australian Securities Exchange (ASX) listed Mithril Resources Limited (Mithril), pursuant to a Scheme Implementation Deed (SID) entered into between Newrange and Mithril on 25 May 2023.

Under the terms of the SID, Newrange will acquire 100% of the issued share capital of Mithril, resulting in Newrange remaining as the surviving entity. The transaction will be classified as a Reverse Take Over (RTO) under the rules of the TSX Venture Exchange (TSX.V) and the resulting issuer will be a Tier 2 mining issuer.

The Technical Report has been prepared in accordance with the disclosure requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), to support the disclosure to be made by Newrange regarding Mithril's Copalquin Property in the information circular for the meeting of the shareholders of Newrange to be held to approve the Acquisition.

### 2.2 The Issuer

The issuer, Newrange, listed on the TSX.V has entered into a binding agreement for a proposed business combination whereby Newrange Gold will acquire 100% of the issued capital of ASX listed Mithril via an RTO. Mithril has an exclusive option to acquire 100% interest in the Copalquin Gold-Silver District mining concessions located in Durango State, Mexico in which it currently owns 50% interest. Mithril has been exploring the Copalquin District since May 2020, and released a maiden Mineral Resource estimate (JORC compliant) in November 2021, for the first target area in the district.

### 2.3 Summary of Qualified Persons

The names and details of persons who prepared, or who have assisted the Qualified Persons (QPs), in the preparation of this Technical Report are listed in Table 2.1. The QPs meet the requirement of independence as defined in NI 43-101.

Table 2.1 Persons who prepared or contributed to this Technical Report

Qualified Persons responsible for the preparation and signing of this Technical Report						
Qualified Person	Position	Employer	Independent of Mithril	Date of site visit	Professional designation	Sections of report
Rodney Webster	Principal Geologist	AMC Consultants Pty Ltd	Yes	No visit	MAIG	Sections 2-6, 8, 9, 11, 14 -24, 27, parts 1, 25, and 26
Robert Chesher	Technical Manager	AMC Consultants Pty Ltd	Yes	No visit	FAusIMM	Section 13, parts 1, 25, and 26
José Olmedo	Principal Geologist	Self employed	Yes	7-10 August 2021	SME 426799RM	Sections 7, 10, 12, parts 1, 25, and 26
Other experts who have assisted the Qualified Persons						
Expert	Position	Employer	Independent of Mithril	Visited site	Sections of report	
Peter Mokos	Principal Mining Engineer	AMC Consultants Pty Ltd	Yes	No	Section 14.6	

## 2.3.1 Acknowledgments

AMC would like to thank and acknowledge the following people who have contributed to the preparation of this report and the underlying studies under the supervision of the QPs, including the Mithril Resources personnel: John Skeet and Hall Stewart.

## 2.4 Currency of personal inspection

The QP (José Olmedo) carried out his personal inspection (7-10 August 2021) for the maiden Mineral Resource estimate at El Refugio in the Copalquin District, which was released in November 2021. Further drilling and exploration work continued in the Copalquin District up to July 2022 including some drilling at El Refugio. The report QP does not consider the additional drilling at El Refugio to affect a material change since the time of the inspection. Further drilling is recommended at El Refugio followed by a Mineral Resource estimate update for this target in the Copalquin District. This will require a further personal inspection by a QP.

## 2.5 Site visits

An inspection of the Property was completed by José Olmedo from the 7 August to 10 August 2021. All aspects of the Property were examined, specifically drill core, drilling and core processing procedures, drill core and sample storage, Quality Assurance and Quality Control (QA/QC) procedures on site, and database management.

## 2.6 Sources of information

The report is based on a review of technical data and historical reports provided by Mithril. References are listed in Section 26, and the abbreviations, units of measurement, and currencies are listed after the table of contents.

## 2.7 Effective date

This report is effective as of 18 July 2023.

Mithril was provided with a draft of this report to review for factual content.

## 3 Reliance on other experts

The QP has relied, in respect of legal aspects, upon the work of the Expert listed below. To the extent permitted under NI 43-101, the QP disclaims responsibility for the relevant section of the Technical Report.

The following disclosure is made in respect to this Expert:

- Mr Pablo Mendez Alvidrez, Managing Partner, of EC Rubio located at Punto Alto E4, Penthouse Centro Ejectivo No.5500, 31125 Chihuahua, Chihuahua.
- Report relied upon named: "Title Legal Opinion on Copalquin Property", dated 12 July 2023.
- Extent of reliance: full reliance following a review by the QP.
- Portion of Technical Report to which disclaimer applies: Section 4.2.

The following disclosure is also made in respect to this Expert:

Mr Pablo Mendez Alvidrez, Managing Partner, of EC Rubio located at Punto Alto E4, Penthouse Centro Ejectivo No.5500, 31125 Chihuahua, Chihuahua.

Report relied upon named: "Clarification Letter (La Soledad-Validity) 18.07.2023[2]", dated 18 July 2023.

- Extent of reliance: full reliance following a review by the QP.
- Portion of Technical Report to which disclaimer applies: Section 4.2 for La Soledad Concession.

There are no other reports, opinions, or statements of legal or other experts on which the QP has relied.



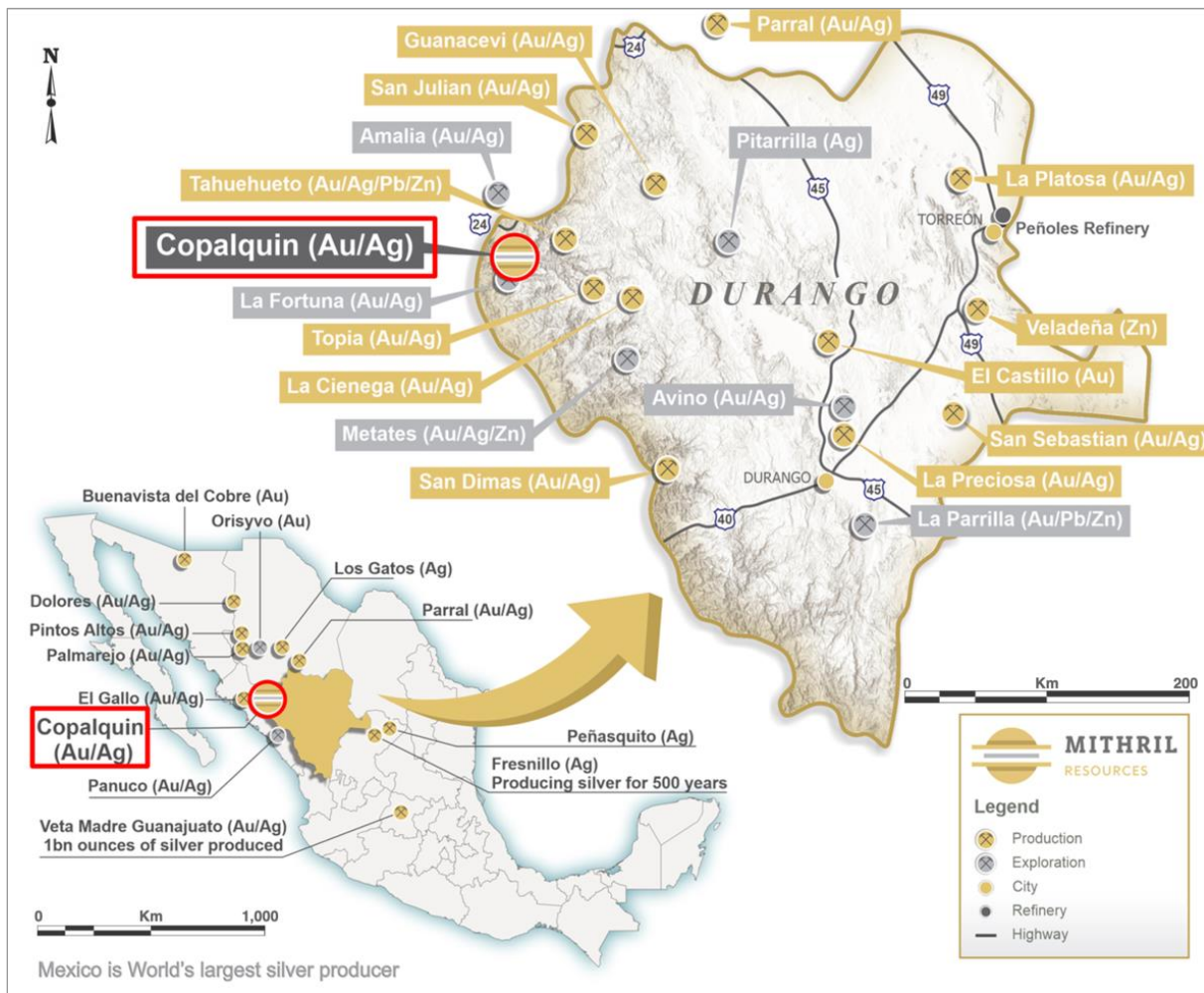
## 4 Property description and location

### 4.1 Property location

The Copalquin Project is the Copalquin Mining District (the Project) located in the municipality of Tamazula, Durango State and the municipality of Badiriguato, Sinaloa State along the western slopes of the Sierra Madre Occidental physiographic province of western Mexico. The Property is centred at 25° 31' 29" north latitude and 107° 04' 42" west longitude on map sheet SGM G13-C23. The Project location is shown in (Figure 4.1).

The grid system used is WGS 84 Zone 13.

Figure 4.1 Location of Copalquin Project



Source: Mithril, 2023

### 4.2 Mineral tenure

The Property comprises six overlapping mining concessions covering a total area of 7,005.3243 hectares (ha) as listed in Table 4.1 and location shown in Figure 4.2. All mining concessions are active and without any legal impediments. Current registered ownership of the concessions is 50% Cia. Minera Copalquin S.A. de C.V. (CMC), a private Mexican company and 50% Drummond Gold S.A. de C.V. (Drummond), 100% owned by Sun Minerals Pty Ltd (Sun Minerals) which is a 100% owned subsidiary of Mithril.

Applications can be made to extend the mining concessions by 50 years. The mining concession La Soledad is showing as expired since it was issued more than 50 years ago. However, it is important to highlight due to diverse modifications to the Mining Law, the validity of La Soledad was extended, which is why the status is active and the semestral mining duties are paid. Until now, the Mining Registry has not issued the official document to verify its exact expiry date.

The above is from a legal opinion by EC Rubio, a Mexican law firm – Lic. Pablo Mendez Alvidrez, Punto Alto E4, Penthouse Centro Ejecutivo No. 5500, 31125, Chihuahua.

The text below is from a legal opinion by RB Abogados, a Mexican law firm – Lic. José Enrique Rodríguez del Bosque, Boulevard Adolfo Ruíz Cortinez No. 3332- 606, Colonia Jardines del Pedregal, Ciudad de México. C.P 0190

The term of existence of the mining concession “La Soledad”, title number 52033 (“La Soledad Concession”) expired on 29 September 2011, in accordance to provisions of the 1961 year Mining Law and its Article Third Transitory, mining concessions issued before year 1961 had a term of existence of 25 years, which term of existence may have been extended by the 1975 year Mining Law and its Article Seventh Transitory for an additional 25-year term (La Soledad Concession was issued in year 1911); therefore, such mining concessions issued prior to year 1961 had a term of existence of 50 years that may have been extended for additional 50 years as provided by the 1992 year Mining Law, however, we did not receive evidence that the term of existence of said mining concession was extended nor requested for extension by its holder.

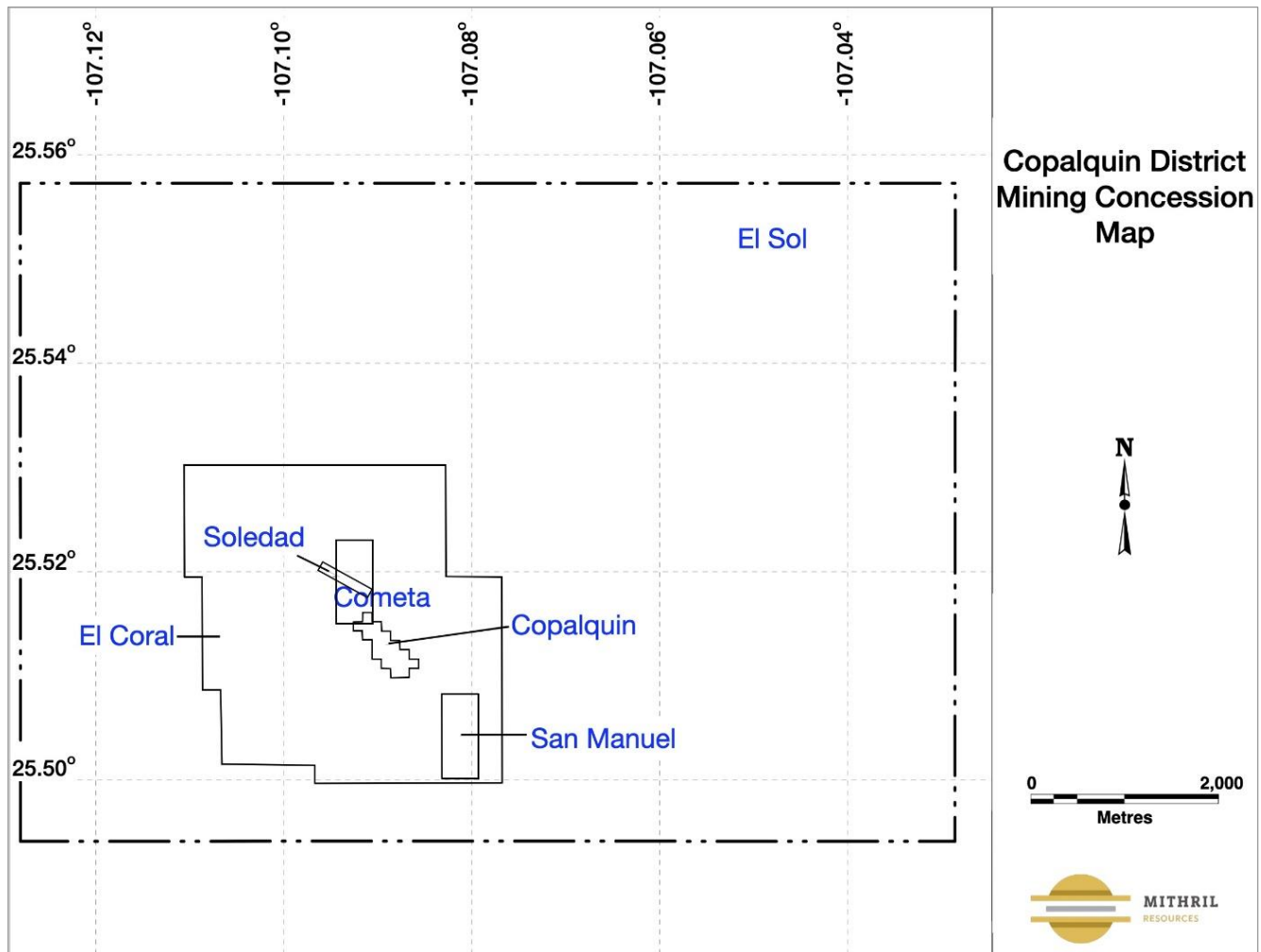
Notwithstanding the foregoing, La Soledad Concession appears as existing and in force at the Book of Mining Concessions of the Public Mining Registry (PMR), which Books contains data of registration of all mining concessions issued by the Mexican Mining Bureau (MMB).

Table 4.1 Mining concessions

Title name	Title number	Issue date	Expiry date	Status	Area (ha)
La Soledad	52033	30 Sep 1961	30 Sep 2036*	Active	6
El Cometa	164869	11 Jul 1979	10 Jul 2029	Active	36
San Manuel	165451	18 Oct 1979	17 Oct 2029	Active	36
Copalquin	178014	2 Jun 1986	1 Jun 2036	Active	26
El Sol	236130	14 Jul 2003	15 Jul 2053	Active	6,000
El Corral	236131	14 Jul 2003	15 Jul 2053	Active	907.3243
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,005.3243</b>

Note: \*See text for explanation for La Soledad.

Figure 4.2 Mining Concession map



Source: Mithril, 2023

## 4.3 Agreements

On 7 August 2017 Australian private company Sun Minerals via its 100% owned Mexican subsidiary Drummond signed a purchase option agreement to acquire 100% interest in the six mining concessions with key points as follows:

- Purchase option agreement between Drummond and Cia. CMC
- Six-year term from 7 August 2017
- Minimum exploration spend – US\$8 million (m)
- Purchase price for 100% interest – US\$10m
- Semestral option payments:
  - On signing US\$50,000
  - Month 6 – US\$75,000
  - Month 12 to 24 – US\$100,000 per semester
  - Month 36 to 72 – US\$150,000 per semester
  - NSR of 2.5% which can be reduced to 1% by payment of US\$4.5m

On 30 August 2019 the agreement was modified as follows:

- Purchase 10% by payment of US\$200,000 and issue of 10 million shares in ASX company Mithril pending a future binding agreement for a business combination between Mithril and Sun Minerals.

Additionally, the 30 August 2019 modification allowed Drummond to increase its interest by completing the previously agreed exploration spend of US\$8m as follows:

- Direct exploration spend on the mining concessions of US\$4m increase interest in the concessions from 10% to 25%.
- Direct exploration spend on the mining concessions of additional US\$4m increase interest in the concessions from 25% to 50%.

On 27 May 2020, Mithril completed its acquisition of Sun Minerals and hence Drummond as the operating entity in Mexico. Drummond commenced its maiden drill program in the Copalquin District in July 2020.

On 14 July 2022, Drummond executed a Purchase Option Agreement modification whereby the agreement term is extended by 3 years to 7 August 2026. Additionally, it was formally ratified that Drummond, having invested US\$8m in direct exploration costs on the Property, had earned its 50 percent interest in the Mining Concessions and notification of this has been submitted to the Mexican Mining Registry.

Drummond is in the process of legally documenting and registering an amendment to its purchase option agreement with CMC to give Drummond the option to extend the Agreement by up to 2 years from 7 August 2026.

## 4.4 Surface rights

The Property does not include any registered ejidos (areas of communal land used for agriculture) or registered communities. However, there are communities within the mining concession area and these communities function as local community seeking opportunities to the benefit of the district communities as a whole.

Drummond works with the community, regardless of their formal registration and all community member land occupiers have legal possession of their fenced lots of land, having occupied for more than 10 years and individual agreements will be required with each occupier for land affected by a future mine development in order for an Authority to Mine to be granted. To date, no exploration work has been completed within fenced land.

At the exploration stage, while there are no formal agreements required, Drummond has completed work programs providing benefit to the district communities focussed on education - providing fortnightly support for 3 district schools, community road upgrade, transport of goods to the district, providing flights for medical programs, community events and employment of 20–25 local men and women.

## 4.5 Permits

Exploration and mining activities in Mexico are regulated by the General Law of Ecological Equilibrium and Environmental Protection (Ley General de Equilibrio Ecológico y Protección al Ambiente [LGEEPA]), and the Regulations Environmental Impact Assessment [REIA]). Laws pertaining to mining and exploration activities are administered by Secretariat of Environment and Natural Resources (Secretaría del Medio Ambiente y Recursos Naturales [SEMARNAT]) and the

Federal Attorney for Environmental Protection (Procuraduria Federal de Protección al Ambiente [PROFEPA]) enforces SEMARNAT laws and policy.

Activities that exceed specified limits require authorization from SEMARNAT and comprise the presentation of an environmental impact assessment (Manifestación de Impacto Ambiental [MIA]). SEMARNAT authorizes activities that fall below the specified threshold under Article 31 of the LGEEPA and require the submission report known as an Informe Preventivo.

Exploration activities that are expected to generate impacts to the physical or social environment that are assessed as potentially of low significance by the regulators are regulated under Norma Oficial Mexicana NOM-120-SEMARNAT-2020 and its subsequent modifications.

The Project is not included within any specially protected, federally designated, ecological zones known as Áreas Naturales Protegidas (ANP).

An Informe Preventivo is in force for the area of exploration within the Copalquin mining concessions according to official notice SG/130.2.1.1/0835/21 dated 10 June 2021, issued by the Ministry of Environmental and Natural Resources to Drummond for a period of 3 years.

## 4.6 Environmental considerations

Mining commenced in the district in 1849 at El Refugio and expanded across the district up until the time of the Mexican revolution in 1910. Mining recommenced in the 1930s for several years and then again in the 1970s for less than 2 years. Modern exploration commenced in 1997 and continued until 2006, which included diamond drilling. Exploration work recommenced in 2020 using a man portable diamond drill rig, quad bike vehicles to move supplies on exploration and community tracks and with some helicopter support.

There are several dozen historic mines and workings across the district and some historic processing equipment and repurposed buildings at Copalquin village area and La Maquina village area, close to the Copalquin riverbed. Historically disturbed areas have revegetated. Due to the very low mineral content of the material historically mined and processed, there is no evidence of acid rock drainage (ARD) observed.

## 4.7 Risks and other factors

The QP is not aware of any other significant factors or risks that may affect access, title, or the right or ability to perform work on the Property.

This finding is based on:

- Payment of mining duties for the concessions for last 5 years correctly completed.
- Submission of the statutory reports for the concessions for mineral production and for expenditure up to date.
- Environmental permit for exploration is current.
- Purchase option agreement and amendments for the concessions executed and registered.
- The land is national land and there are no registered ejidos or communities.

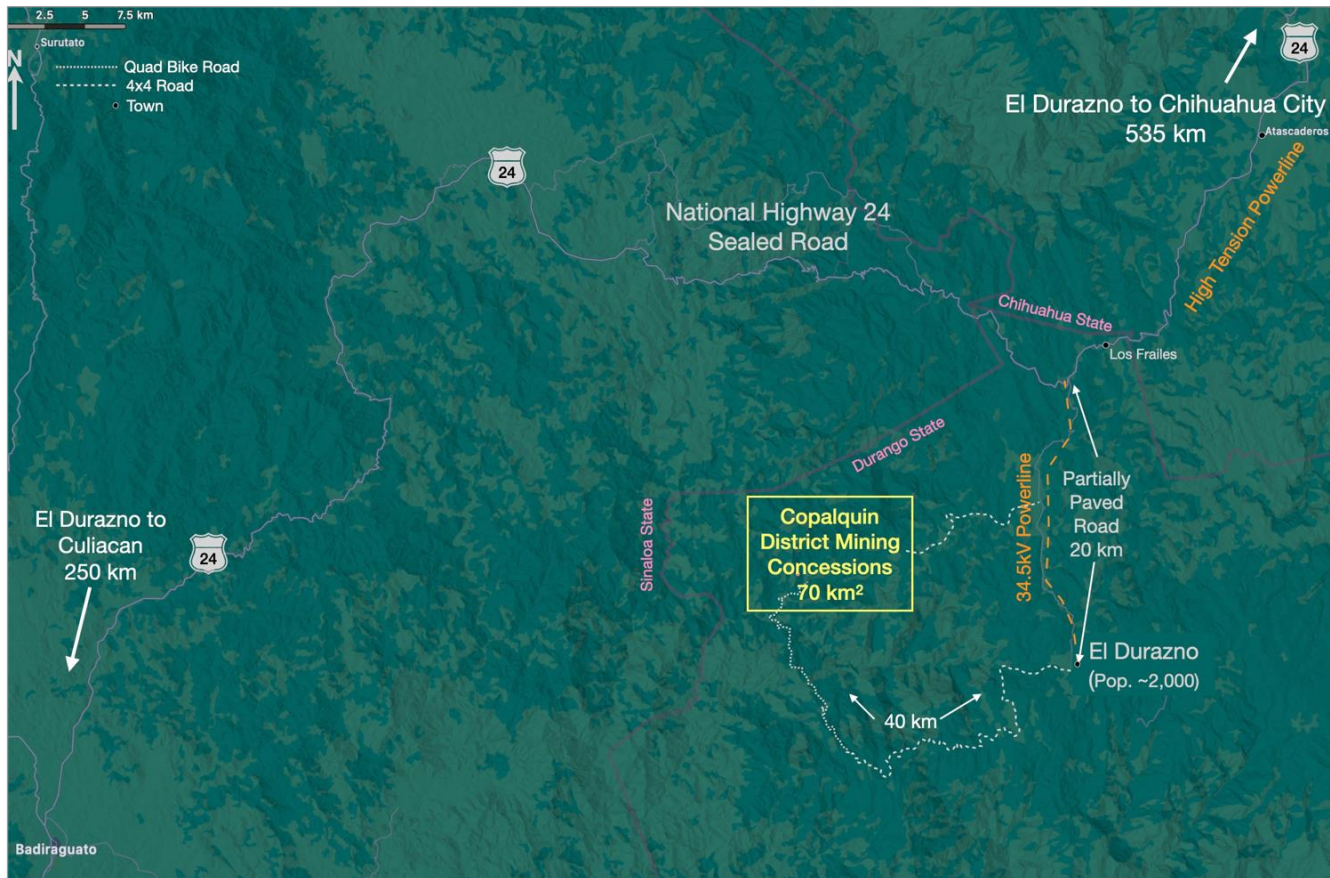


## 5 Accessibility, climate, local resources, infrastructure, and physiography

### 5.1 Access

The Property is accessed from Chihuahua via paved Federal Highway 45 to Los Frailes, then on partially paved road (one-hour drive) to El Durazno with a cross dirt road to the settlement of Guajolote within the eastern side of the concession area. From Guajolote, there is a mule track into the central area of the district (Figure 5.1).

Figure 5.1 Access map for the Copalquin Mining Concessions



Source: Mithril, 2023

A dirt 4 x 4 road runs from El Durazno to El Barco to the south of the mining concession area. A track runs from this road to the village of El Limon near the south-west corner of the mining concession area. From El Limon, quad bike track connects through to villages within the mining concession area including the exploration camp and district airstrip.

The district airstrip is located near the centre of the mining concession area at Los Reyes, and this airstrip is used for daily flights connecting to towns in the region including El Durazno (10 minute flight), Tamazula de Victoria (20 minute flight), and the major city of Culiacan (30 minute flight).

### 5.2 Local infrastructure

The majority of the Property is located in the Tamazula municipality, Durango state. The north-west corner of the concession area is located in Badiraguato municipality, Sinaloa state. The Project area is also used for very small-scale cattle grazing, with limited agricultural use.

On the eastern side of the property there is a 34.5 kilovolt (kV) powerline that runs from the main high-tension powerline along national highway 45, to the township of El Durazno, with a population of approximately 2,000 people, government hospital, police, and government administration building.

Drilling companies and mining contractors are available in the cities of Mazatlán, Durango, Hermosillo, Zacatecas, and other areas of Mexico. Contractors have a strong mining tradition and provide the Project with a local source of knowledgeable labour and contract services.

## 5.3 Climate

Annual rainfall averages around 900 millimetres (mm) per year, falling mostly in the summer months between June and October. Rain events are frequently torrential and of short duration (1 to 4 hours). Hurricanes may occur between August and late September, but their force is greatly lessened by the project's inland location. A second, less intense rainy season occurs some years between December and February. Exploration activities may be carried out year-round with allowances for weather delays during the rainy season.

## 5.4 Topography and elevation

The Copalquin Property is located on the western flank of the Sierra Madre Occidental, a mountain range that comprises the central spine of northern Mexico. The property area is hilly to mountainous with some steep-walled canyons forming in the middle valley that runs east to the south-west of the property. On the eastern side of the Property, the elevation commences at around 2,500 metres (m) above sea level (ASL) with some sheer cliffs, rapidly descending to around 1,800 m ASL where the eastern most historical mine workings are located. From there, towards the west and down into the main valley the elevations typically range from 1,500 m to 1,100 m ASL and down to 800 m ASL in the valley. To the far south-west corner of the Property, the elevation is 600 m. The majority of the main target areas are located at elevations of 1,000 m to 1,200 m.

## 5.5 Vegetation

The Copalquin District vegetation ranges from pine trees at the higher elevation from 1,800 m and higher with a few small stands of pine trees at lower elevations. The district features mostly deciduous trees with one of the most common being oaks and some types of sycamore. There are some cacti such as stenocereus at the mid elevations and agave and prickly pear at higher elevations.

Local land holders graze small numbers of cattle and grow corn and other vegetables on small-scale plots. Avocado trees grow at the lower elevation in the valleys at 800 m and lower.

## 5.6 Local resources

The area is inhabited by subsistence farmers who have limited contact with coastal parts of Sinaloa and infrequently walk out to El Durazno, Durango. The El Limon village within the concessions has about 20 houses in various states of repair and an elementary school. Other settlements within the project area are Los Reyes with 6 houses and an elementary school, La Maquina with 6 houses, San Antonio with 11 houses, El Platano with 16 houses and an elementary school, El Peru with 6 houses and El Duraznal / Los Riscos with 6 houses. The original town of Copalquin has only one inhabited house remaining. A network of ATV tracks extends throughout the concessions from El Limon to the Los Reyes airstrip with tracks to the Copalquin site and the exploration camp.

An exploration camp has been established capable of serving up to 30 people. The camp is made up of 7 dormitories, a kitchen with gas stove, 2 refrigerators, a chest freezer, a dining room, 4 showers, and 4 toilets. There are separate facilities for men and women. Power is provided by a

20 kilovolt-ampere (kVA) generator. Diesel and food are flown in by fixed wing aircraft. Mithril has erected three 30 foot x 50 foot steel frame tent style core sheds with steel core shelves. Each core shed has capacity for approximately 12,500 m of core in core boxes.

The Humaya hydroelectric plant is at the south end of Presa Adolfo Lopez Mateos about 60 kilometres (km) to the south-southwest of Copalquín. There are in addition 4 airstrips throughout the property area at Los Reyes, El Limon, El Platano, and Rancho La Soledad. The airstrip at El Alizal is currently the logistics point for cargoes from Chihuahua.

There is a perennial stream at El Limon that has surface flow of 1 to 2 cubic metres per second ( $\text{m}^3/\text{s}$ ) in the drier part of the year. The Copalquin arroyo supplies water for drilling and for camp use.

Currently local residents fill field support positions, including core technicians, warehouse and inventory control and samplers. Drillers and geologists are recruited outside the area.

As the project progresses towards a mine design, areas for a plant site, dry-stack tailings storage and a limited waste dump are available in the somewhat less steep valleys between La Maquina and El Platano.

## **5.7 Surface rights**

See Section 4.4.

## 6 History

### 6.1 Ownership and work carried out

#### 6.1.1 Pre 1980's

The Copalquin district was probably discovered in the mid-1800s. Evidence of early work remains as numerous small workings and prospects throughout the district and many small tahonas (rock mortars used to grind gold-bearing material) cut into bedrock or boulders along the Copalquin arroyo near Los Reyes and along the El Limon river below El Limon village. Los Reyes is the oldest mine in the district and was mined in the late 1800s. In the early 1880s Major A. Warren acquired ~8,000 acres including seven known mines from the De La Rocha family. In 1883, unable to meet a scheduled property payment, Warren vended the properties into the Refugio Gold and Silver Company of Nashville, Tennessee following receipt of Killebrew's (1883) property examination report (Champion, 1887). Development of the properties seems to have commenced in mid-1885 when Dr Sharpe assumed responsibility for the operation (Champion, *ibid.*). Production at San Manuel, La Soledad, and Refugio mines was probably curtailed by the Mexican Revolution (1910-1920). In the 1930s The Compania Minera La Cibola developed several mines on the recommendation of Mr J.W. Patterson. Patterson mapped all the known workings and collected hundreds of samples. Ore was milled by stamp mill at the Hacienda de Santa Maria (now La Maquina) about 1.5 km south of the La Soledad mine and 1 km south of the Refugio mine. Processing before 1890 was probably by gravity and amalgamation and subsequently by static cyanide leaching as evidenced by three large cement leach tanks remaining at La Maquina and several separate tailings retention areas below the La Maquina mill site. As early as the 1960s and through the 1980s Atalo and Francisco de la Rocha worked the San Manuel mine at some point partnering with Señor Miguel Angel Matas, the primary shareholder in the Mexican company that currently owns the concessions. Señores de la Rocha and Matas installed the aerial tramway to bring ore down from San Manuel and built a 10 tpd flotation plant on the Copalquin arroyo with a jaw crusher, ball mill, classifier and flotation cells. Senor Matas bought the concessions from his partners and placed them into the private Mexican corporation Compania Minera La Dura, since changed to Compania Minera Copalquin. Total historic production from the district has been estimated as up to 250,000 ounces (oz) of gold and 11 million ounces of silver with 75% of the estimated ounces coming from La Soledad (Wilkins, 1997).

#### 6.1.2 IMMSA and others 1980-1995

Several evaluations of the project were conducted in the 1980s and 1990s by Mexican mining / exploration companies. In 1983 extensive work was done by Industrial Minera Mexico S.A. (IMMSA). IMMSA compiled and re-drafted all the maps of the underground workings originally drawn by Patterson in the 1930s. IMMSA collected check samples which yielded good correlation with Patterson's assays. In 1994 and 1995 the project was evaluated by Minas de la Alta Pimeria (Francisco Gold) and by Kennecott. Copies of these three evaluation reports are in the company files. The Patterson report has not been located.

#### 6.1.3 Bell Coast Capital Corp.

The first company to drill the project was the private Canadian company, Bell Coast Capital Corp. (Bell Coast), which optioned the property from Cia. Minera La Dura (now Cia. Minera Copalquin) in 1996. Bell Coast drilled a total of 31 diamond drillholes on the Project in 1997 and 1998. Total metres drilled was 2,759.30 m. Fifteen holes were drilled in an area of 50 m x 30 m around the bonanza intercept discovered at Cometa in hole EC-002 (13.25 m @ 74.89 g/t gold and 706 g/t silver). Additionally, four other holes were drilled at Cometa, three holes were drilled at Refugio, six holes at La Soledad, and three holes at Los Reyes. The project was abandoned after the company was unable to attract finance due to the investment climate soured by the Bre-X scandal.

These holes were not included in the drillhole database provided to AMC.

## 6.1.4 UC Resources

The Copalquin Project was optioned to the Canadian publicly listed company UC Resources in 2004. UC Resources completed soil sampling programs over the Refugio / Cometa / Soledad area and the Los Pinos Ridge integrating soil sample results from Bell Coast into their data. Between 2004 and 2007 UC Resources completed 39 diamond drillholes in two programs. The first program was drilled in November and December 2004 and the second between October 2006 and June 2007. Total metres drilled was 4,163.85 m. Seven holes were drilled from the EC-002 pad producing similar results to the Bell Coast holes including UC-003 (17.77 m @ 45.16 g/t gold and 118.2 g/t silver). The company again pin cushioned a small area in an apparent attempt to produce “news” for the Canadian investment market. During the period of the UC Resources option the concession package was increased to 61,651 ha including the 7,005 ha that make up the current project area. Little work was done outside of the main areas of interest. UC Resources successfully intersected the main mineralized zones at Refugio, Cometa (part of Refugio), and La Soledad. The project was dropped due to internal management issues which resulted in lawsuits that tied up the property from 2007 to, at least, 2015.

The holes drilled by UC Resources were not included in the drillhole database provided to AMC.

## 6.1.5 Sun Minerals 2017-2019

Sun Minerals, an Australian private company optioned the Cia Minera Copalquin concessions that make up the current Copalquin Project in 2017. Sun Minerals resolved the remaining legal issues remnant from the UC Resources option and brought all the claims into good standing. Starting in 2017 Sun Minerals visited 13 of the known mines and collected 37 rock chip samples from them with favorable results. In 2018 and 2019 a district scale mapping program was undertaken that covered the core area including the mines of San Manuel, Los Reyes, Cometa, Refugio, and La Soledad. This mapping confirmed that the low angle normal fault is semi-continuous from Refugio to Cometa and extending east to Los Reyes. Also identified by this mapping are a series of rhyolite domes and dikes that are spatially related to the altered and mineralized zones. Soil sampling programs were carried out over all the main targets and hand constructed drill pads were built.

Following its announcement in November 2019, Sun Minerals was successfully acquired by Australian listed Mithril on 27 May 2020. Drilling commenced at the Copalquin property in July 2020 and the initial 5,000 m program was expanded to the point that over 30,000 m of diamond drilling are now complete. The company published a maiden resource estimate for the first target area in the district, according to the Australian JORC code (2012), in November 2021.

Table 6.1 shows a summary of historical work carried out at the Copalquin Project.



Table 6.1 Summary of historical Work at Copalquin Project

Date(s)	Company	Notes
Pre-1850	Loera, 1995	Many tahonas throughout the area and artesanal mines along Los Reyes ridge suggest a long mining history.
~1880- ~1910	Killebrew, 1883 Champion, 1884 Jones, 1889 Woods, 1889	Refugio Gold and Silver Mining – Development starts in mid-1884. Remains suggest operations continued into early 20 <sup>th</sup> century.
1935	J.W. Patterson, 1935	Evaluated area, including mapping and sampling of workings. Quoted by Wilkins (1997).
1935	ASARCO (concession abstract)	ASARCO held an exploration agreement on La Soledad in 1935. There is no record of work being carried out.
1935-40	Compañía Minera Cíbola (Loera, 1995)	Said to have mined La Soledad. No records of production. No record of concession abstracts.
~1950-60	Atalo y Francisco de la Rocha (Loera, 1995)	Intermittent operation of San Manuel mine including installation of aerial tramway and 10 tpd mill at Copalquín. The mill includes a small jaw crusher, ball mill, classifier, and flotation cells.
1998	Bell Coast PR 1998/08/14	Completed 6 short, angled holes (336 m) on Mina el Cometa.
1998	Bell Coast PR 11/04	Completed Phase 2 drill program (25 holes, 1,899 m) at El Cometa, La Soledad, El Cometa Este, & Refugio.
2004-2005	UC Resources MD&A 06/30	UC, the operator, “has carried out various sampling programmes and ground geophysical work” and constructed a camp.
	PR 2005/01/18	Completed a grid, VLF-EM, limited surface sampling and 24 diamond drillholes (2,098 m). Continues into early 2005
2005-2007	UC Resources	Limited drilling (15 holes, ~1,900 m), “soil” grids, some mapping and limited regional sampling
2017-2019	Sun Minerals, Ltd	Collected underground rock chip samples from 13 mines, did a limited soil sampling program, made a semi-detailed geologic map of the core area of the project

Source: Mithril, 2023

## 6.2 Mineral Resources and production

Other than the JORC figures which have been re-reported and disclosed there are no Mineral Resource and Mineral Reserve figures available.

Some production has been carried out on the Property over time and this is referred to in Section 6.1.

## 7 Geological setting and mineralization

### 7.1 Regional geology

Northwestern Mexico, where the Property is located, lies near the western limit of the Sierra Madre Occidental, a north-west trending volcanic plateau composed of thick accumulations of andesitic to rhyolitic volcanic rocks. The rocks of the Sierra Madre Occidental are generally thought to reflect subduction-related continental arc magmatism that slowly migrated eastward during the early Tertiary in a long period of compressional stress and then retreated westward more quickly, reaching the western margin of the continent by the end of the Oligocene (Sedlock et al., 1993).

Basement rocks in the region do not crop out in the project area, but are made up of Paleozoic metavolcanics, metasediments including slate, schist, quartzite, meta-andesite and phyllite as well as the Jurassic Guanecevi Conglomerate made up of terrigenous sandstones and conglomerates. The basement rocks are part of the Guerrero terrane accreted onto the North American craton in Jurassic times (SGM, 1999). These rocks may be observed on the road between Culiacan, Sinaloa and Tamazula, Durango.

The eastward migration of the volcanic arc is represented in the Sierra Madre Occidental by the Late Cretaceous-Early Tertiary "lower volcanic complex" (LVC) of calc-alkaline composition. Over 2,000 m of predominantly andesitic volcanic rocks, with some interlayered ash flows and associated intrusions, comprise the LVC. Deposition of the LVC rocks corresponds with the development of the Laramide orogeny in this region (Camprubi, 2003). The LVC andesites are the primary host rocks for mineralization throughout the Sierra Madre Occidental.

Intrusive rocks of the Sinaloa Batholith were emplaced over time ranging from Lower Cretaceous to Eocene, 135 Ma to 20 Ma (Henry et al, 2003). The Sinaloa batholith developed in three stages. Early gabbros may have been emplaced ca. 135 Ma. These predate the migration of the arc eastward across northern Mexico. A second period of foliated pre- or syntectonic rocks were emplaced before ca. 90 Ma, apparently while the region was being deformed (during eastward migration of the arc) and are mostly tonalites. The third phase of intrusions are post tectonic rocks which were emplaced between ca. 90 and 45 Ma, with one intrusion at 20 Ma, and after compressional deformation had ceased; they are predominantly granodiorite. Henry et al, 2003 notes that this youngest group of granodiorite intrusions intrudes into the LVC. Intrusions that make up the Sinaloa Batholith are generally older closer to the coast and progressively younger inland. The Servicio Geológico Mexicano (SGM) identifies a series of granodiorite intrusions that are Eocene, post-batholith, corresponding to Henry, 2003 third stage. This affects (crosscut) the Upper Cretaceous Granodiorite and all earlier units (SGM, 1999).

As the tectonic regime changed from compressional stress during the eastward migration of the volcanic arc to extensional stress during the retreat of the volcanic arc the region was affected by the Mid-Cenozoic ignimbrite flareup. Rhyolite ignimbrites, flows and hypabyssal (sub-volcanic) intrusives, with subordinate andesite, dacite, and basalt, formed during Eocene to Miocene caldera eruptions, 40 Ma to 20 Ma. These volcanic rocks form a one-kilometre-thick unit that unconformably overlies the LVC andesitic rocks and constitutes the "upper volcanic supergroup" of the Sierra Madre Occidental (Sedlock et al., 1993). The upper volcanic supergroup is also commonly referred to as the upper volcanic series (UVS). Gold and silver deposits in the Sierra Madre Occidental are commonly hosted in rocks of the lower volcanic series and the mineralizing systems are thought to be related to the Mid-Cenozoic ignimbrite flareup, which deposited the upper volcanic supergroup (Sedlock et al., 1993; Camprubi, 2003).

## 7.2 Local geology

The Copalquin District lies within the Sierra Madre Occidental physiographic province of north-western Mexico. The project is underlain by andesitic volcanics of the Cretaceous-Tertiary LVC. A Tertiary granodiorite to monzonite pluton intrudes the andesite and much of the area is capped by Tertiary (Oligocene to Miocene) rhyolite ignimbrites of the UVS. Mineralization is thought to be contemporaneous with the eruption of the UVS and related sub-volcanic intrusions.

Semi-continuous breccia zones dipping at a low-angle have formed within the andesite volcanics and parallel to the granodiorite contact. These zones include the El Cometa breccia and the Los Reyes breccia. The geometry of these zones is similar to the nearby El Gallo silver deposit of McEwen Mining which is also formed in a series of breccias parallel to the contact between intrusive rocks and LVS andesite. The low-angle breccias are mineralized with gold and silver. A series of moderately dipping normal faults strikes north-west and dips to the north-east including the Refugio, La Lina, El Leon, and Soledad structures which host veins mineralized with gold and silver. North-south striking, steeply dipping faults at San Manuel also host mineralized veins. Both the low-angle breccias and the high-angle faults host extensive zones of mineralized quartz breccia.

It is likely that the low angle zones developed as tectonic breccias during the intrusion of the granodiorite and were later mineralized by hydrothermal activity related to the eruption of the UVS. There are a series of rhyolite domes and dikes that intrude the lower volcanic series and the granodiorite aligned along an east-west trend at least 5,000 m long from El Gallo in the west to San Antonio in the east. These subvolcanic intrusions are spatially adjacent to the mineralized veins and are thought to have been the heat sources that drove the circulating hydrothermal cells. Large areas of argillic alteration occur across the concessions. The alteration forms haloes adjacent to the known structures and large zones where structures have not been identified. Argillic alteration is indicative of widespread penetration of hydrothermal fluids into the surrounding rocks and suggests a long-lived hydrothermal system was active at Copalquin.

The alteration from Refugio to Los Reyes is over 2,000 m long and from 100 to 400 m wide. Similar alteration is observed a further 2,000 m west at El Gallo. It is expected that the widest zones are related to shallow-dipping portions of the Cometa-Los Reyes structures where the structure is nearer the outcrop surface. Similar alteration is present well to the west at El Platano and well to the east at Constanica. It cannot be stressed enough that this strong, widespread argillic alteration forming a large-volume halo well out from the veins is the observable geologic characteristic that identifies Copalquin as a major epithermal center.

## 7.3 Property geology

### 7.3.1 Host rocks and stratigraphy listed from oldest to youngest

#### Cretaceous – Tertiary (Eocene or older)

A thick accumulation of andesite volcanic made up of extrusive flows, autoclastic breccias and, possibly, tuffs. Part of the LVC:

- Tau - The most prevalent unit is an undifferentiated group of grainy, magnetic flows. This unit is sometimes so densely phytic that it appears like a holocrystalline micro-diorite.
- Taf - Fine grained andesite with 5%, tiny plagioclase phenocrysts to 0.5 mm in an aphanitic to finely granular groundmass, moderately magnetic, locally common zones of calcite filled amygdules near tops of flows.
- Tapp - Dacite plagioclase hornblende porphyry - distinctly porphyritic with 15% euhedral plagioclase phenocrysts and 3% hornblende phenocrysts in an aphanitic, light colored groundmass. Hornblende locally varies to biotite. Local quartz phenocrysts, local devitrification spherulites. Unit frequently has characteristic chill margins at both upper and lower contacts indicating that it is likely intrusive.

Tertiary (Eocene to Oligocene) Large stock of holocrystalline rocks intrudes the andesite package. The latest phase of the Sinaloa Batholith:

- Tgd – Granodiorite to monzonite - a felsic, holocrystalline rock that ranges from equigranular to slightly porphyritic with 60% plagioclase, 20% mafic minerals (hornblende, biotite, pyroxene), 15% orthoclase, 5% quartz. In some areas the feldspars are in equal proportion (monzonite), in other areas there is no orthoclase and no quartz (diorite).

Tertiary (Oligocene to Miocene) UVS rhyolite ignimbrites and subvolcanic domes and dikes:

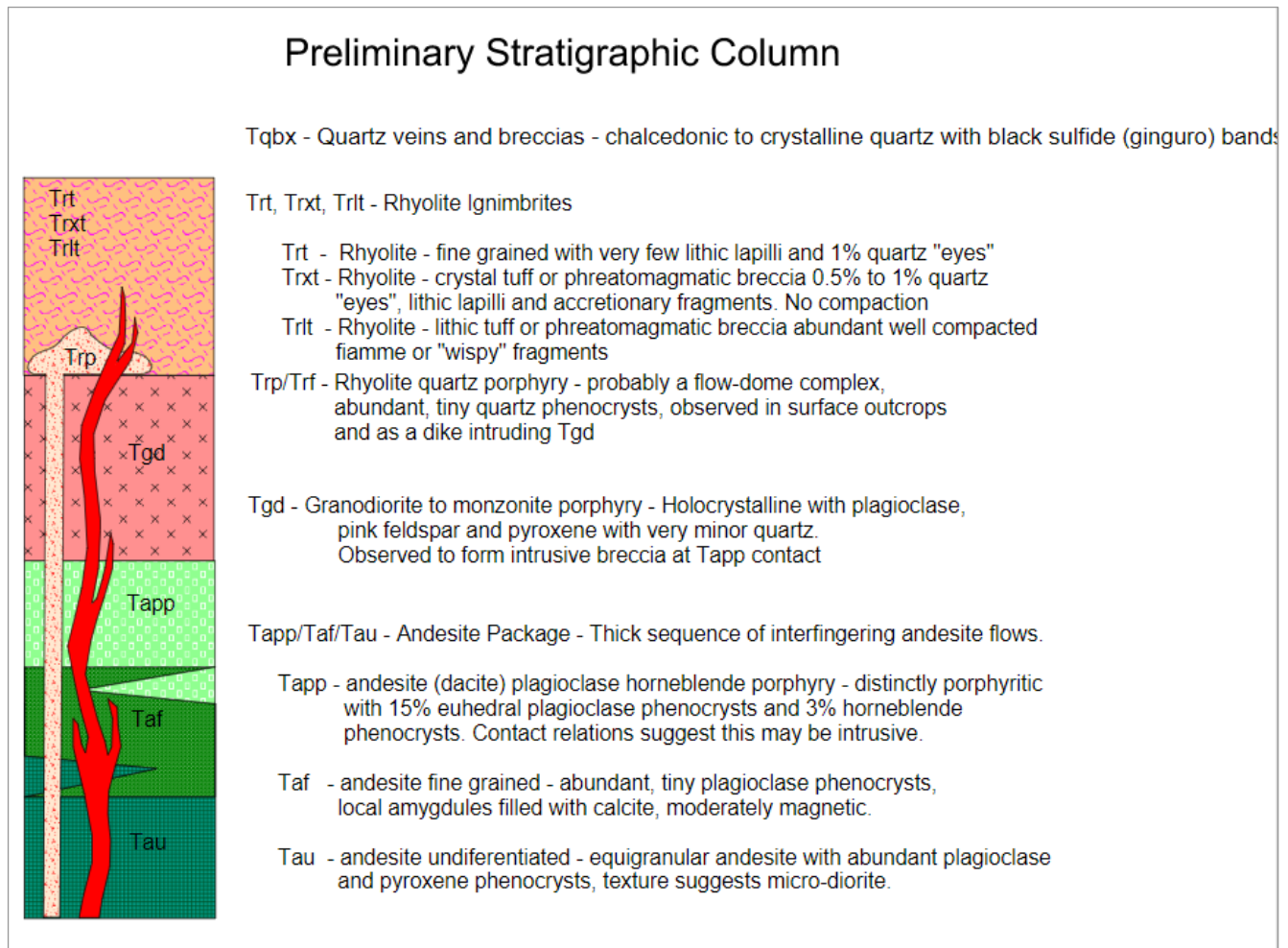
- Trt, Trxt, Trlt – Textural varieties of rhyolite ignimbrite. Trt – rhyolite tuff fine grained, poorly to moderately welded, few lithic lapilli, sparse quartz eyes. Trlt – rhyolite lithic tuff well compacted near the base of cooling units with flattened pumice fiamme up to 20 mm long and 5 mm wide, moderately to densely welded grading upward into lithic tuff with less compaction. Trxt – rhyolite crystal tuff with abundant quartz fragments and feldspar fragments, few lithic lapilli and fiamme. Densely welded.
- Trp / Trf - Rhyolite domes and dikes sparsely quartz phyric fine-grained, light-colored rocks that locally exhibit flow banding and, in some areas, autoclastic brecciation as dome margin intrusive breccias.

Tertiary (Miocene) post mineral mafic dikes related to late bi-modal volcanism:

- Tdi – diabase dikes - aphanitic mafic rocks with no observed phenocrysts, strongly magnetic, local amygdules filled with calcite. The dikes preferentially intrude mineralized structures and cut through mineralization. They are seldom more than 1 m thick.

Figure 7.1 shows the Preliminary Stratigraphic Column.

Figure 7.1 Preliminary Stratigraphic Column

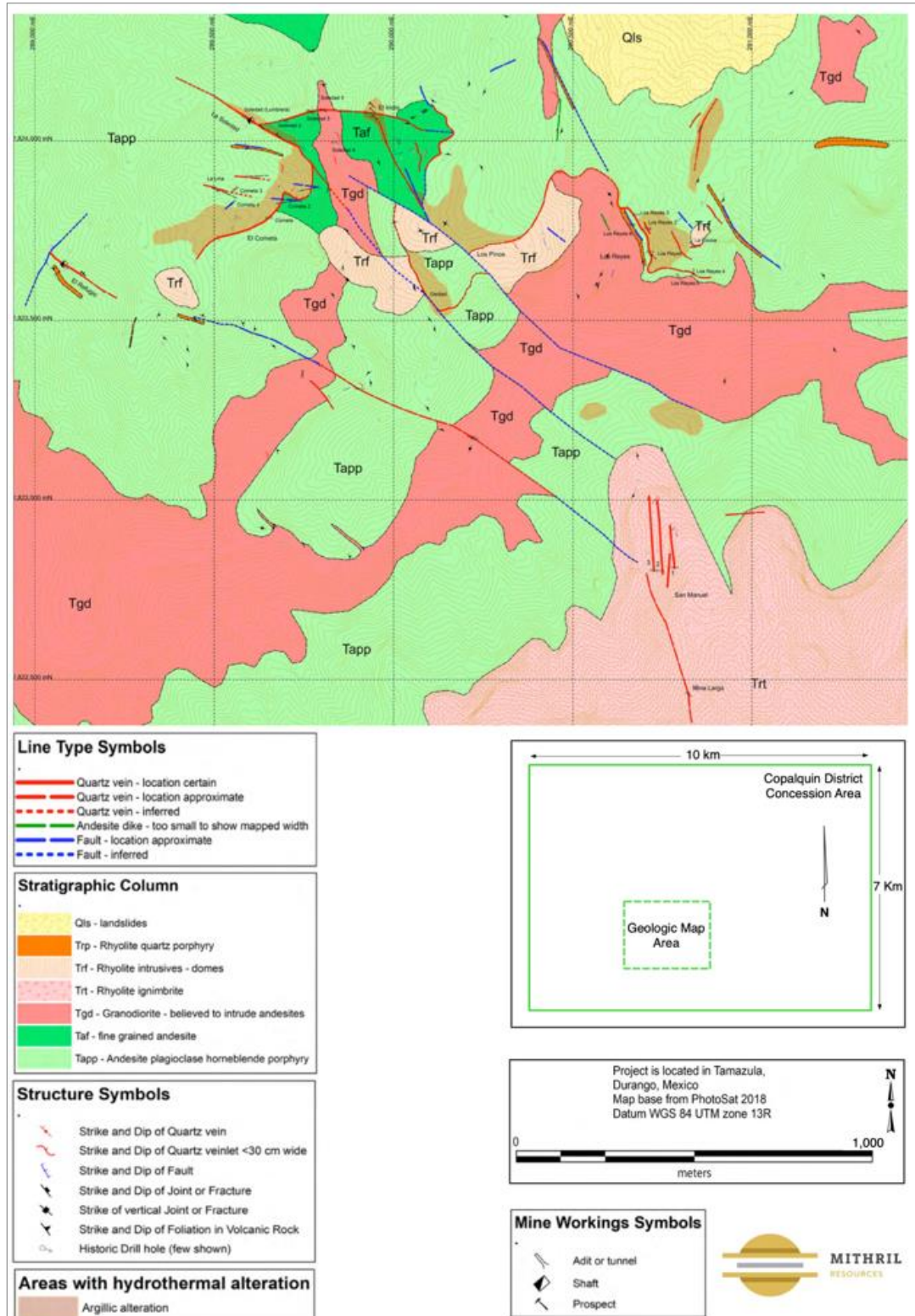


Source: Mithril, 2023



Figure 7.2 shows the geological map of the Central Part of the Copalquin Mining District. The area of this map is shown relative to the concession in the inset map.

Figure 7.2 Geological map of the central part of the Copalquin Mining District



Source: Mithril, 2023

## 7.3.2 Structure

A multi kilometre long E-W striking, north dipping structural zone that roughly parallels the granodiorite / andesite contact appears to have initially been a series of concentric fractures caused by doming as the granodiorite intrusion pushed up through the overlying rocks. The zone has been reactivated as a normal fault with the north side down dropped. The zone is well defined from Refugio to Los Reyes and may extend west as far as El Gallo and east as far as El Maizon. This early structural zone was later invaded by mineralizing fluids that deposited the mineralized quartz veins.

A series of N-S veins that dip steeply to the east at San Manuel cuts UVS ignimbrites. The veins are at least 500 m long from Dios Padre / Mina Larga in the south to San Manuel Level 1 in the north.

Later post mineral faults generally strike N – S and usually dip to the east. These faults divide the district into separate structural blocks. These faults have not been located in the field but are indicated by rock type changes from one ridge to the next and variations in flow foliations and compaction foliations (taken as dips in the volcanic rocks).

The UVS ignimbrites have varying dips around the rim of the Copalquin canyon. Ignimbrites along the north wall strike north and dip moderately (40 degrees) to the west. Ignimbrites along the eastern headwall of the canyon are nearly flat-lying striking north and dipping gently (5 to 10 degrees) to the west. Ignimbrites along the south wall of the canyon in the area of San Manuel strike north to north-east and dip moderately (30 degrees) to the east or south-east.

## 7.3.3 Alteration

Large areas of argillic alteration occur along a 5 km band from El Gallo to El Maizon. The alteration is best developed on the Cometa ridge where the exploration camp is located. Clay alteration forms broad haloes up to 200 m wide at Cometa / Refugio, Los Pinos and Los Reyes. Silicification is uncommon at surface and is observed mostly in the Trp / Trf rhyolite intrusives and in the Trlt rhyolite ignimbrites at San Manuel and El Gallo. In drill core silicification is limited to the breccia zone and does not extend into the hanging wall.

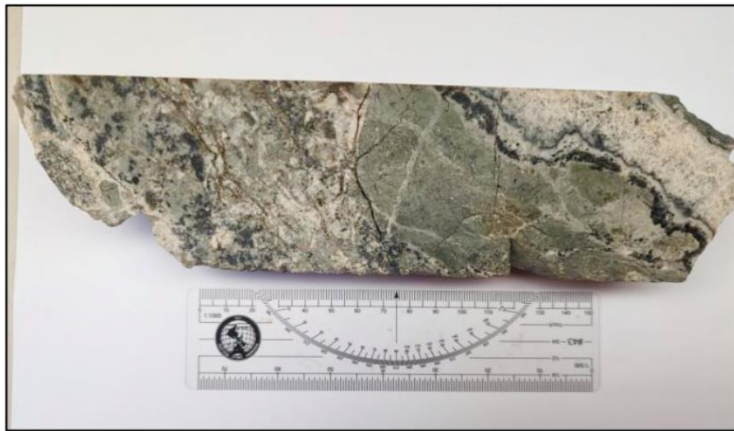
## 7.3.4 Vein mineralogy

Vein textures and mineralogy are consistent with low sulfidation epithermal veins developed from low salinity, near-neutral pH fluids dominated by meteoric water. Pulses of magmatic waters transported gold and silver into the hydrothermal system and the processes of boiling, fluid mixing, and cooling were triggers for deposition of the precious metals. Veins are filled with quartz as both early crystalline quartz and later crustiform bands of alternating chalcedony, finely crystalline quartz, carbonate minerals (ankerite, kutnahorite, rhodocrosite, and calcite) and adularia. Quartz after platy calcite is absent or rare suggesting that boiling occurred in intense, brief pulses that generated broad zones of hydrothermal breccia. Mineralized zones have silver sulfides present as black bands up to 8 mm wide and as disseminated aggregates. Visible gold in flecks up to 2 mm occurs in several drillholes in both the Refugio and Soledad veins. An exceptional occurrence of coarse, visible gold in coherent bands that were later broken into breccia fragments was observed in drillhole CDH-077.

Figure 7.3 shows images of core CDH-001, CDH-040, CDH-077.



Figure 7.3 Images of core CDH-001, CDH-040, CDH-077



CDH-001 La Soledad target from 113m to 114m with 88.4 g/t Au and 6,750 g/t Ag. Banded vein with well developed band of black silver sulfide "ginguro." HQ size core (63mm diameter)



CDH-040 Los Reyes target from 92.55m to 93.16m with 91.5 g/t Au and 319 g/t Ag. Fragments of banded vein in late stage breccia. Silver sulfide present in both fragments and matrix. HQ size core (63mm diameter)



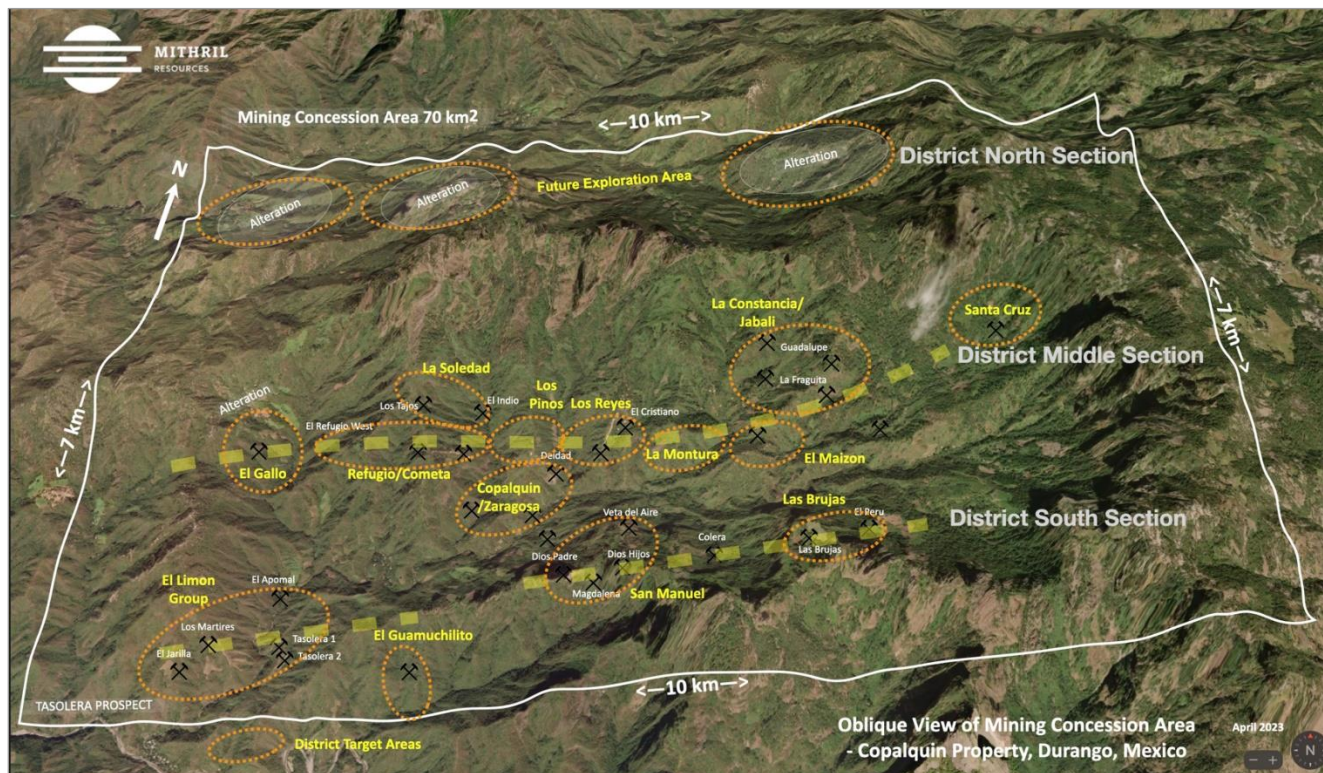
CDH-077 El Refugio target from 471.63m to 472.4m with 814 g/t Au and 6,670 g/t Ag. Late vein with ginguro bands along margins and with fragments of gold cuts through mineralized breccia. NQ size core (47mm diameter)

Source: Mithril, 2023

## 7.4 Significant mineralized zones

All of the identified mineralized zones within the Property are listed in approximate order of mineral potential. The district can only be considered to be about 25% explored and it is very possible that significant new discoveries may be found. Figure 7.4 shows the location of the veins and mining concession boundary.

Figure 7.4 Mining concession boundary and vein locations



### 7.4.1 Refugio / Cometa

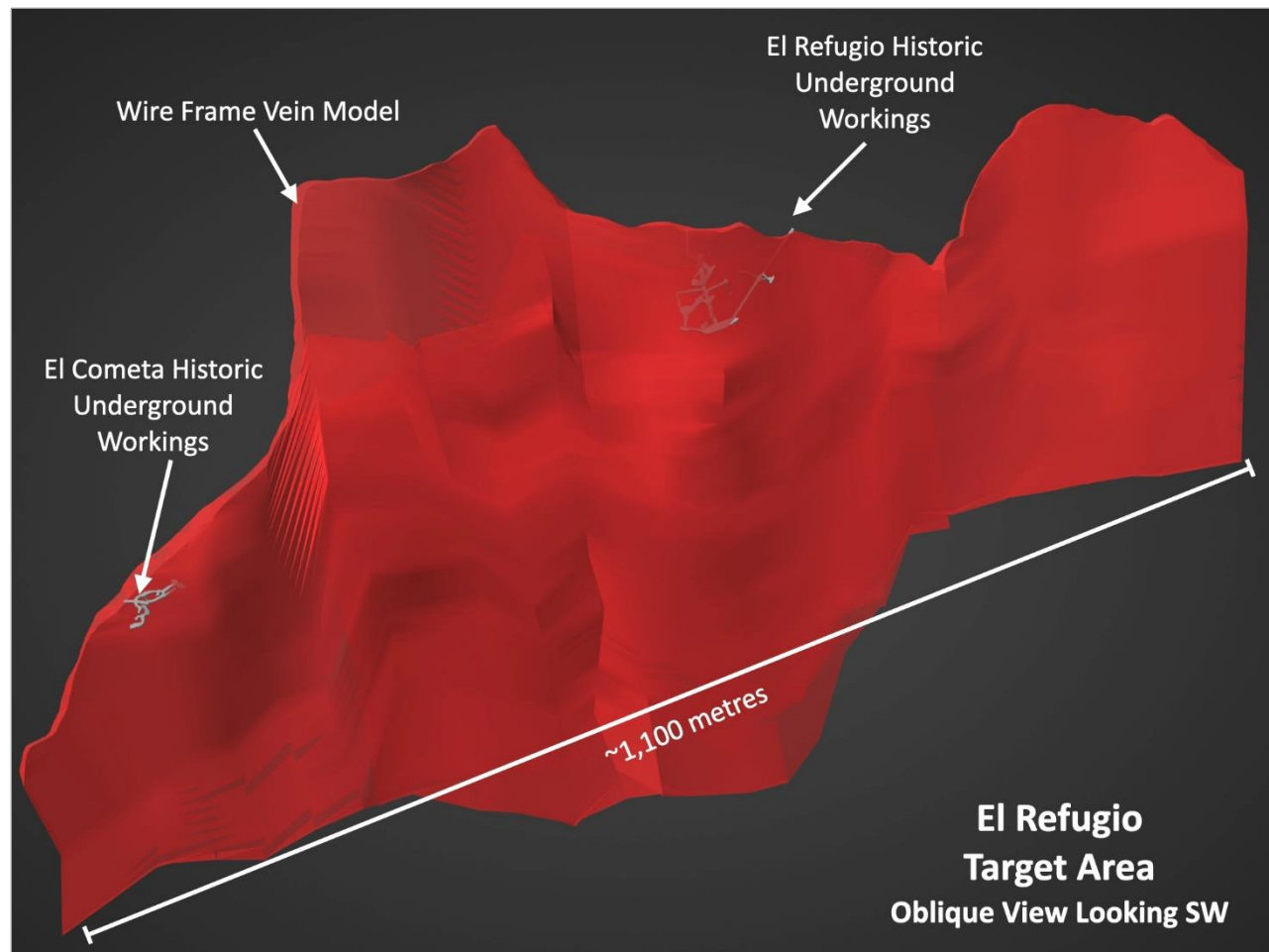
The Refugio / Cometa zone is the most consistently mineralized zone identified in the district. Two historic mines, El Cometa and Refugio lie along the trace of the structure and are separated by 620 m portal to portal. The El Cometa mine is developed on a structure striking 285 degrees and dipping 35 degrees to the NE. The Cometa workings have a total volume of 600 cubic metres (m<sup>3</sup>) representing 1,500 tonnes of total past production. The mine is developed in a zone of hydrothermal breccia with rhyolite and andesite fragments in a matrix of multiple generations of quartz and chalcedony. The limits of the Cometa breccia are not exposed in the workings so it is at least 4 m true width. The surface exposure outside the mine is clay altered andesite with manganese oxide developed as desert varnish on the surface outcrops. This manganese oxide extends westward 250 m along the altered zone most of the way to the Refugio ridge. The El Refugio mine consists of a 110 m drift that accesses a 50 m long and 65 m high area of partially stoped material along a well-developed multi event hydrothermal breccia. The outer (footwall) portion of the breccia has a chloritic rock-flour matrix and does not enter into the stoped area. The apparently mineralized material has a quartz matrix and presence of black sulfide mineral thought to be acanthite. Total volume of the Refugio workings including the access tunnel and stopes is 2,400 m<sup>3</sup> representing 6,100 tonnes of total past production. The stoped zone strikes 265 degrees and dips 40 degrees north. The entire breccia zone in the working is observed to be 15 m wide. This corresponds well with the overall strike and width of the three-dimensional (3D) model of the Refugio / Cometa mineralized body.



The Refugio mineralized body as modelled from 83 diamond drillholes (54 in the resource model) is known to extend beyond the 1,100 m long by 400 m down dip by 8 m average width wireframe model. There are three parallel mineralized zones modeled from the drilling labeled Refugio\_main, Refugio\_2, and Refugio\_3. Refugio\_main hosts the bulk of the mineralization. The Refugio zone is made up of a multi-event hydrothermal breccia with earliest zones dominated by silicified rock fragments in a matrix of silicified rock flour. The early breccia grades inwards from the irregular, poorly defined footwall to a matrix supported quartz breccia with a white milky, crystalline quartz matrix to a zone of later banded vein with bands of black sulfide (ginguro bands) consisting of acanthite and electrum. The ginguro event usually has chalcedonic quartz present, but the black sulfide can occur in either crystalline quartz or chalcedony. The best mineralization event is found consistently along the hangingwall of the entire zone. The first mineralized sample in a mineralized intercept is usually one of the highest grades in the intercept. As the pre-existing fault was affected by multiple hydrothermal events of sealing, heating of constrained fluids well beyond boiling temperature, rupture of the seal and flash boiling the resulting breccias migrated from the margins of the structural zone towards the middle as is typical of vein filling processes. The high grade hangingwall is preserved and was not broken up by later brecciation events. Ultimately there was post mineral brecciation with another white quartz matrix breccia that contains fragments of the main stage ginguro bands.

Figure 7.5 shows an oblique view of Refugio wireframe with Refugio and Cometa historic workings.

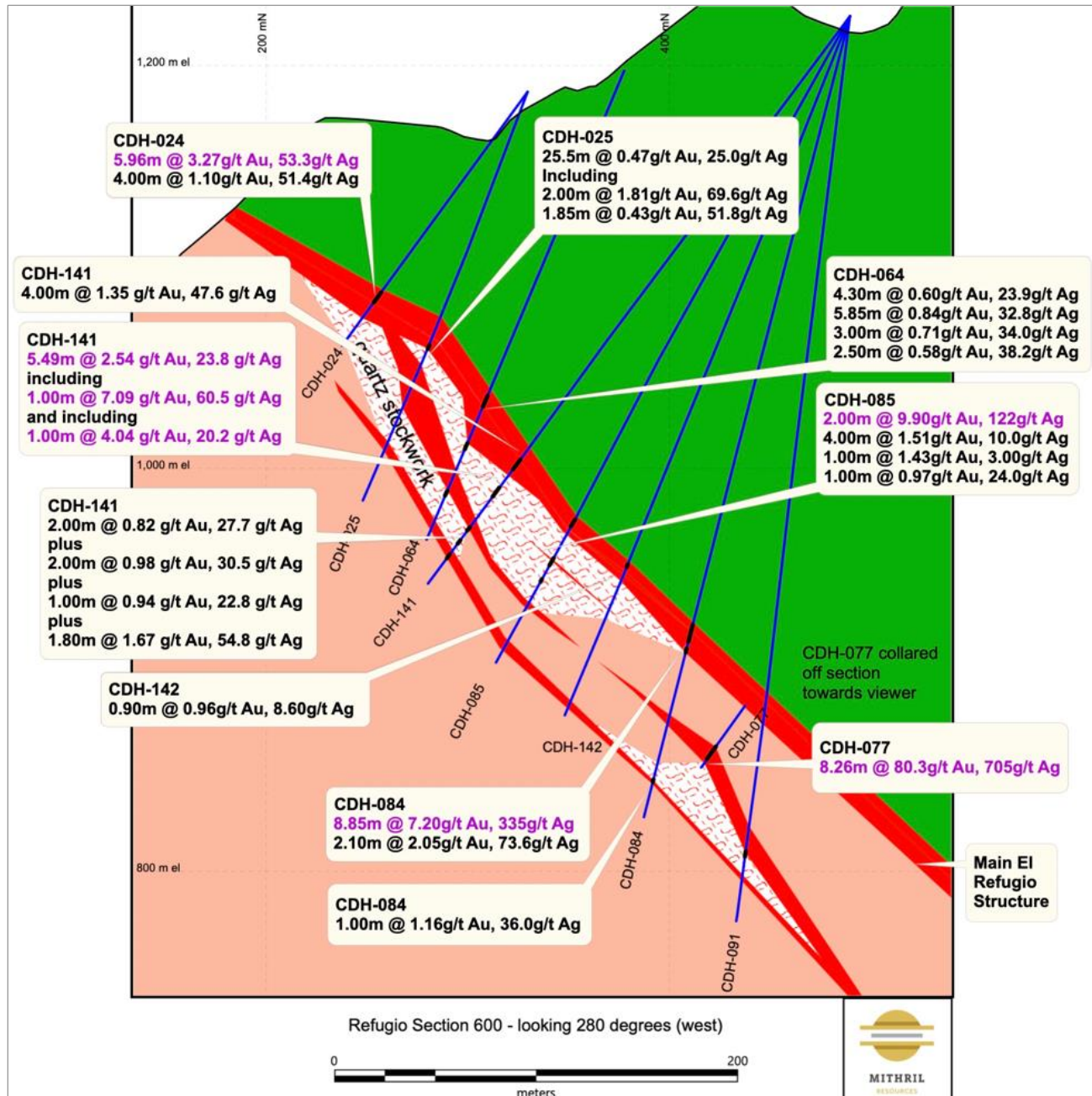
Figure 7.5 Oblique view of Refugio wireframe with Refugio and Cometa historic workings



Source: Mithril, 2023

Figure 7.6 is Refugio Section 600 showing drillholes through the Refugio Mineralized Body. Note that the holes shown in blue attempt to intersect the veins at a 90 degree angle.

Figure 7.6 Refugio Section 600 showing drillholes through the Refugio Mineralized Body



Source: Mithril, 2023

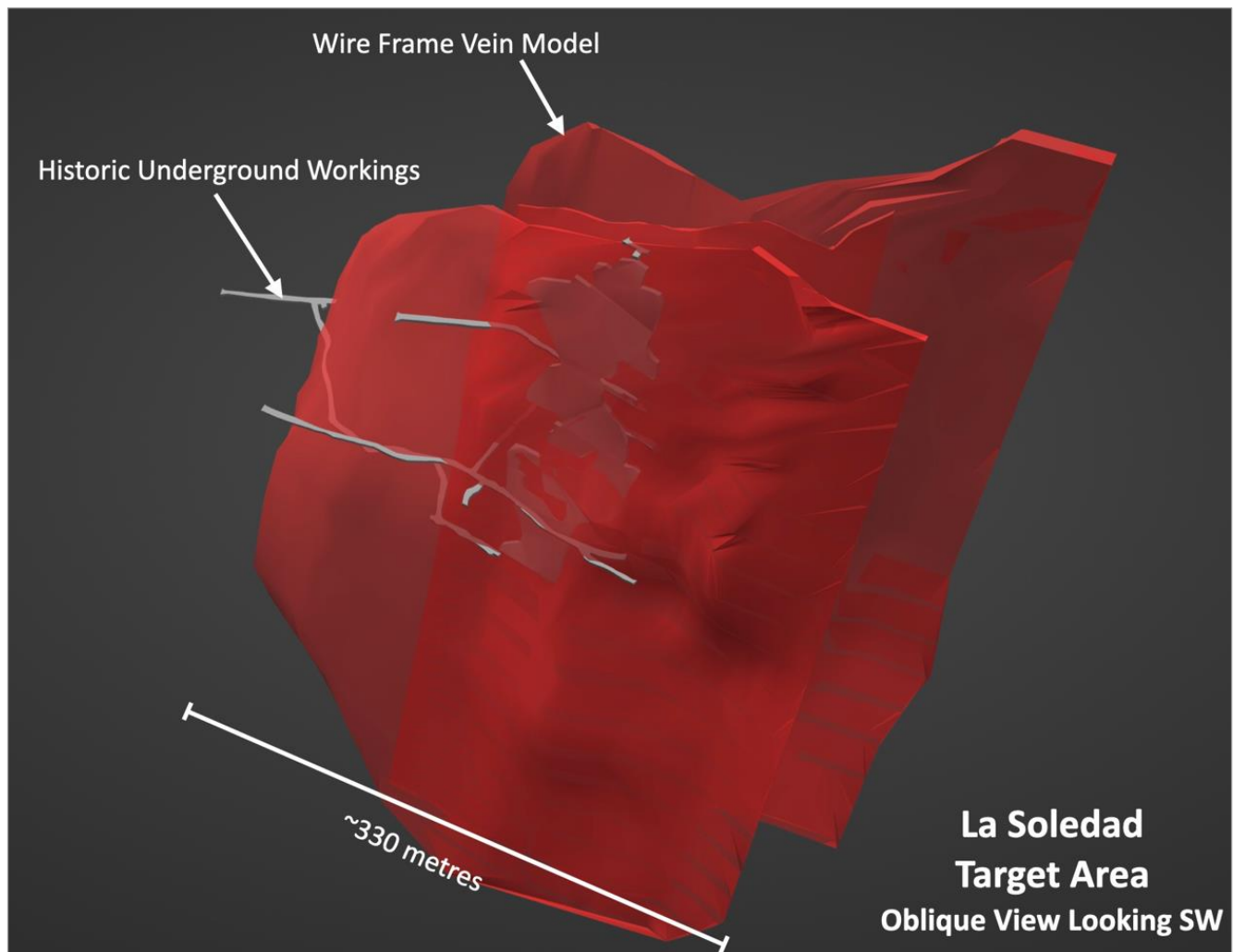
#### 7.4.2 La Soledad

The La Soledad structure crops out as a 2 to 3 m wide quartz vein on the west side of the Soledad arroyo and has been confidently traced for 380 m and has evidence of another 120 m along strike to the north-west. The vein has been drill tested to a depth of 280 m below the outcrop. Clay alteration is less widely developed than at Refugio / Cometa but is still clearly present. The vein is emplaced in the dacite porphyry unit at surface and several drillholes intersect granodiorite marginal

to the vein. The uppermost working, La Lumbrera, on the La Soledad vein is located 280 m NNW from the El Cometa mine. The La Soledad mine has 4 horizontal levels and a significant stope approximately 60 m long x 140 m high by 2.5 m wide. La Soledad is reported as having had the largest historic production in the district. Reports of past production are considered speculative and are obviated by current drill results. The modelled volume of the Soledad stope is 21,500 m<sup>3</sup> representing 55,000 tonnes of total past production. The Soledad vein curves from a 340 degree strike with a 75 degree easterly dip where it is first encountered in Soledad Level 4 to a 300 degree striking 65 to 70 degree NE dipping vein in the section that was stoped. Considering the 300 degree section as a dilatant zone indicates normal, left-lateral movement opened that section of the structure for the mineralizing fluids. Mithril's first hole was directed at the La Soledad target successfully intersecting the Soledad vein at 111 – 114 m and the Leon Vein at 162 to 178 m. The Soledad vein in hole CDH-001 includes two multi millimetre black sulfide bands at the margin and breccia with fragments of black sulfide in the core of the vein. The vein has abundant chlorite in the matrix.

Figure 7.7 is an oblique view of the La Soledad wireframe with historic Soledad Mine workings.

Figure 7.7 Oblique view of the La Soledad wireframe with historic Soledad Mine workings

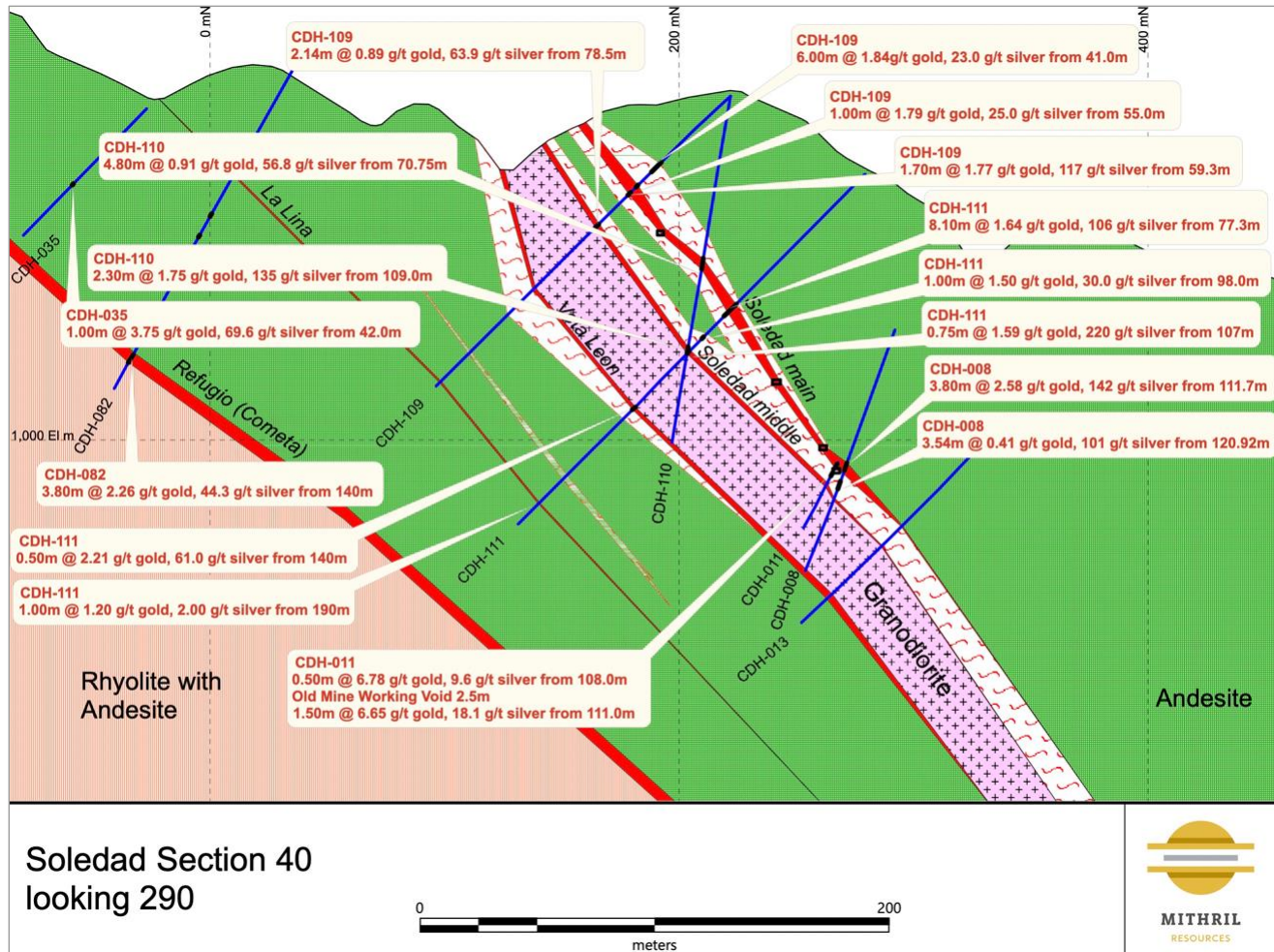


Source: Mithril



Figure 7.8 is Soledad Section 40 showing drillholes through the Soledad vein system. Note that the holes shown in blue attempt to intersect the veins at a 90 degree angle.

Figure 7.8 Soledad Section 40 showing drillholes through the Soledad mineralized body



Source: Mithril, 2023

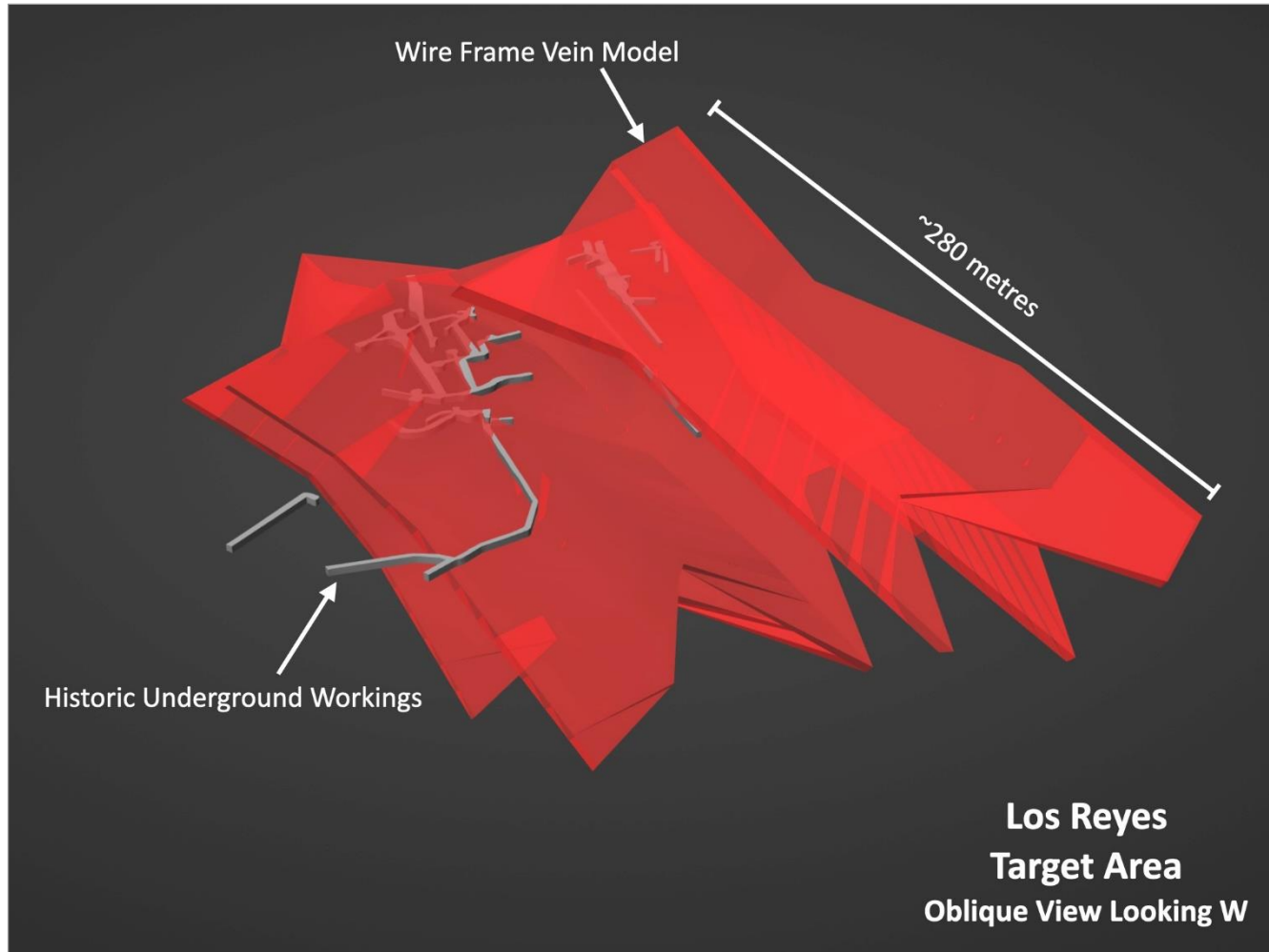
### 7.4.3 Los Reyes

Los Reyes is reported as being the oldest mine in the district (Wilkins, 1997) possibly having been worked as early as the mid-1800s. The mine is located about 1,200 m east of the exploration camp on the same ridge as the airstrip. The Los Reyes mine comprises an exploration adit and four artesanal workings situated due north of San Manuel / Apolonia and passing immediately west of the Los Reyes airstrip. Earlier descriptions (e.g., Wilkins, 1997) reporting "280 m of drifts and cross cuts in which a 60 m long by 30 m wide area has been mined by gopher holes, typical of gambusinos". The main working is observed to be developed on a 340 degree striking 30 degree east dipping series of sheeted veins stacked parallel to one another. Each vein is from 20 to 50 centimetres (cm) wide. The surface trace of the structure is confidently traced over 500 m and appears to continue across the Los Pinos ridge to the west. The 3D model of the 5 separate workings that make up the Los Reyes mine has a volume of 4,200 m<sup>3</sup> representing 10,700 tonnes of past production. This makes the mine the third largest in the district after La Soledad and San Manuel. The Los Reyes ridge is underlain by both the dacite porphyry and undifferentiated andesite intruded by a Trp / Trf flow-banded rhyolite dome and a number of Trp / Trf tabular rhyolite dikes. Clay alteration is widespread.



Figure 7.9 is an oblique view of the Los Reyes wireframe model and historic Los Reyes Mine workings.

Figure 7.9 Oblique view of the Los Reyes wireframe model and historic Los Reyes Mine working



Source: Mithril, 2023

#### 7.4.4 Los Pinos

The Los Pinos ridge is located 600 m east of the exploration camp. The ridge is underlain by both the undifferentiated andesite and the dacite porphyry. There are Trp / Trf rhyolite intrusions on the eastern part of the ridge. Clay alteration is widespread on the Los Pinos ridge although major structure is only apparent in the Los Reyes arroyo which bounds the eastern side of the Los Pinos ridge. There are a number of small mine workings on the ridge including the Deidad, El Indio, and Santo Domingo mines, none of which had more than a few 10's of tonnes of material removed. Just above and north of the Deidad working there is an exposed quartz vein 1.5 to 2 m thick. This can only be traced for about 30 m.

## 7.4.5 San Manuel

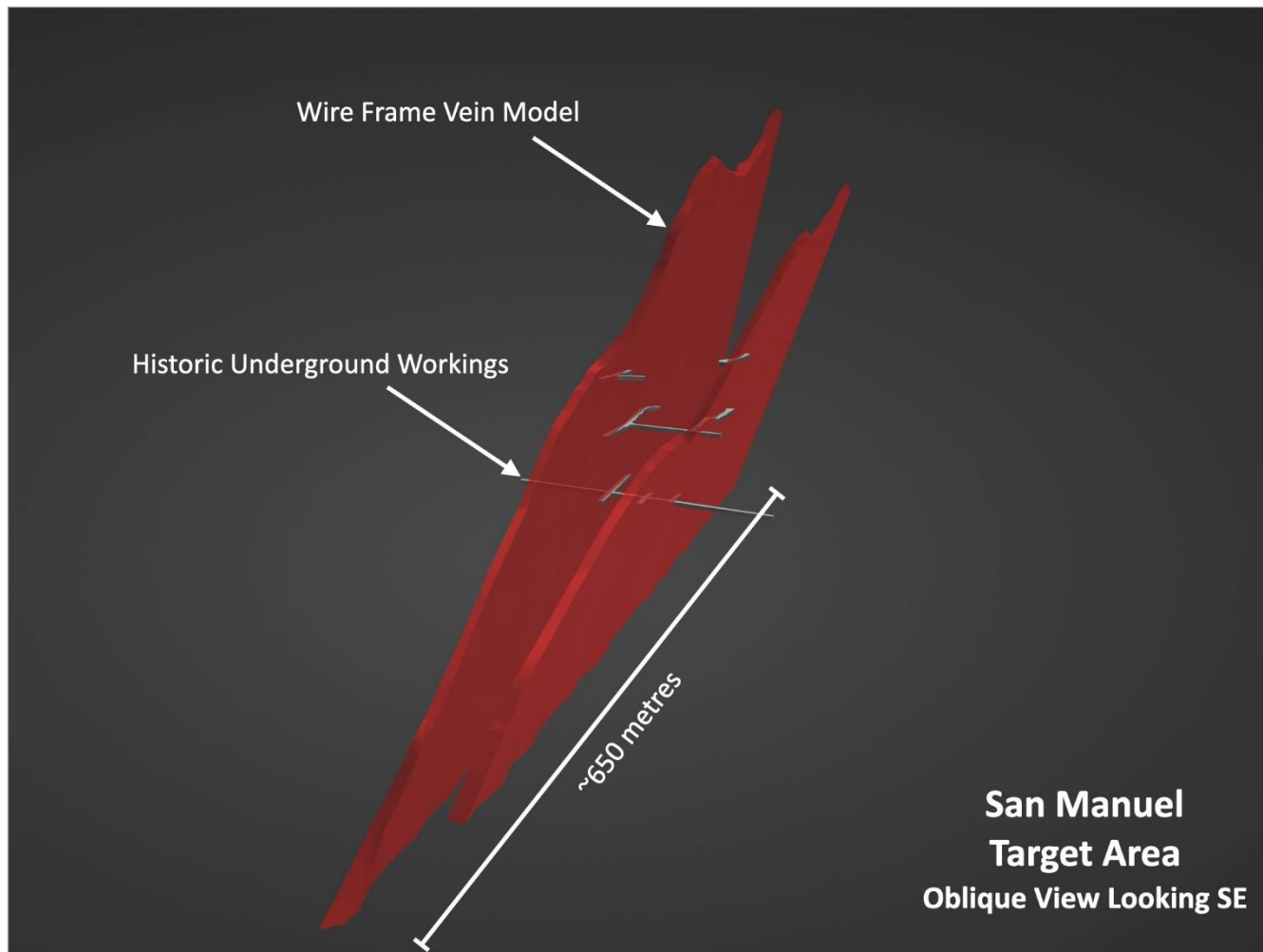
The San Manuel structure extends over 500 m and contains six distinct prospects; San Manuel, Apolonia, Mina Larga, Dios Hijos, and Dios Padres, of which the first two have been mined over a 115 m strike length. Mina del Aire is in the same area, in similar rhyolite host rocks, but strikes nearly E – W. There are 4 mine entrances at San Manuel proper, labeled Level 1 (Apolonia) at 1,240 m, Level 1 north at 1,235 m, Level 2 at 1,185 m and level 3 at 1,170 m. There is a deeper exploration level driven entirely in granodiorite at 1,020 m elevation (Bustamente, 1976). San Manuel appears to have been mined in three phases; pre-1910, CIBOLA and Sr. Francisco de la Rocha T. (1970 -1985), the latter production being estimated to be ~15,000 tonnes based 10 tpd for 100 days per year. San Manuel is the second largest mine in the district behind La Soledad.

San Manuel is located on the south side of the Copalquin arroyo about 1,600 m southeast from the exploration camp below a steep cliff face and is hosted at surface by a welded rhyolite ignimbrite (Trlt). Mithril's second hole at the target, CDH-048, passes through the rhyolite in the hangingwall of the vein and cuts the vein where it is hosted in an undifferentiated andesite (Tau). The hole continues into granodiorite below and to the west of the vein intersection. San Manuel / Apolonia comprises two parallel veins that lie about 30 m apart and have been mined (and are accessible) over 115 m of strike length between ~1,170 and 1,240 m elevations. The veins strike due north and dip at about 60 degrees to the east. Veins are up to 5 m wide on the surface and up to 2.5 m wide in the accessible parts of the workings. Sampling shows up to 900 g/t Ag and 9.4 g/t Au over 1.4 m (CRM, 1976). Mina Larga (40 m open cut) and Dios Hijos (25 m adit) lie 300 m south of San Manuel / Apolonia on the same system. Dios Padre and Magdalena lie about 100 m further to the south.

The San Manuel mine was developed by 2 to 4 m wide, open stopes on three levels. An aerial tramway carried ore from level 2 about 650 m NW to a 10 tpd flotation plant situated on the north bank of the Copalquín arroyo. The plant consisted of a small jaw crusher, a ball mill, classifier and six flotation cells all powered by a diesel generator. It is not clear if or how gold was recovered, although it may have accumulated in the classifier. The plant was cannibalized sometime after Bell Coast operated the project and only the remnants of the ball mill and flotation cells remain.

Figure 7.10 is an oblique view of the San Manuel wireframe and historic San Manuel Mine workings.

Figure 7.10 Oblique view of the San Manuel wireframe and historic San Manuel Mine workings



Source: Mithril, 2023

#### 7.4.6 Copalquin / Zaragosa

The Copalquin Mine is located on the west margin of the Copalquin arroyo just above the site of the San Manuel 10 tpd mill. There are two tunnels driven at 290 degrees on a 0.4 to 0.8 m wide quartz vein that dips steeply to the north. Matrix supported hydrothermal breccia with black sulfide is observed in the vein. The longer of the two tunnels is 30 m in length and has no stopes. Across the ridge to the west in the Soledad arroyo the Zaragosa workings appear to be on the same structure. The Zaragosa workings are completely caved and inaccessible but are shown on Patterson's map to run at 105 degrees directly towards the Copalquin mine 300 m to the east. Both tunnels are developed in granodiorite.

#### 7.4.7 El Gallo

The El Gallo prospect is located 1,850 m west of the exploration camp and 1,000 m west of the western most drillhole in the Refugio mineralized body (CDH-101). The El Gallo target is hosted in rhyolite ignimbrites that are densely silicified. There are two small prospect pits at El Gallo and the prospect is along a silicified ridge with at least two quartz veins that are at least 100 m in strike length. The El Gallo prospect is due west of the Refugio mineralized body and may be on the western extension of the same structure or on a parallel structure possibly in the footwall of Refugio.

## 7.4.8 La Constancia / Jabali

The La Constancia mine is the fourth largest mine in the district with past production less than 5,000 tonnes. The mine consists of three levels connected by internal winzes. Only the upper level is accessible as the lower levels are flooded. The mine is developed on a 0.5 to 1 m wide vein in granodiorite that strikes 335 degrees and dips 45 degrees to the north-east. Five hundred metres along strike to the north the Jabali mine is developed on the same structure. Host rocks at Jabali are rhyolite ignimbrite and possibly volcaniclastic sandstone. The Jabali section of the vein is 0.3 to 0.8 m wide and has amethyst filling open space. Black sulfides are present in the vein. Other workings in the same area include the Guadalupe mine, an open underhand stope 25 m long and 15 to 18 m deep on a 0.4 to 1 m wide quartz vein that strikes 265 degrees and dips 45 degrees to the north and La Fragueta, a prospect on another E-W striking vein.

## 7.4.9 Other showings

### 7.4.9.1 La Montura

The La Montura ridge is located 600 m east of the Los Reyes airstrip and forms a prominent E-W ridge held up by a silicified rhyolite dome. The southern face of the steep ridge hosts a 2 – 3 m wide quartz vein that separates Trp / Trf rhyolite from granodiorite footwall. Matrix support brecciation is widespread and is best observed on the eastern part of the top of the ridge. The breccia matrix is usually a white milky quartz with sharply angular fragments showing jigsaw rotation but little rounding due to transport. To the north of the La Montura ridge is the village of San Antonio built in an area of subdued topography which is a result of significant clay alteration adjacent to the La Montura target.

### 7.4.9.2 El Maizon

Five hundred metres further east from La Montura the same vein is named El Maizon. The vein is 1 to 2 m in thickness, strikes 270 and dips 60 degrees to the north. There is little brecciation developed on the vein and what clay alteration is associated with the vein is weak and constrained to within a few metres of the vein. One caved tunnel was found that runs due west on a 0.8 m wide quartz vein that strikes 275 degrees and dips 55 degrees to the north-east. The vein is observed to be white, milky quartz with no sulfides.

### 7.4.9.3 El Limon Group

A group of mines that has seen very little work by Mithril lies some 2.5 km south-west of the exploration camp. The workings have been visited and several returned significant gold results from chip sampling. The area has been considered a lower priority because the prospects are hosted in granodiorite. Further work will be justified as district exploration progresses. Mines in this group include: El Apomal, Los Martires, La Tasolera, El Jarrial, and Dos de Abril.

### 7.4.9.4 Guamuchilito

Guamuchilito prospect is located outside of the Copalquin canyon 2.5 km due south from the exploration camp. A mine working is reported by the Servicio Geologico Mexicano but, has not been reliably located. What has been found is a 2 m wide quartz vein that crops out in a prospect pit and that can be traced for about 100 m. The vein strikes 350 degrees and dips 80 degrees to the east.

### 7.4.9.5 Santa Cruz

The Santa Cruz prospect is located 5 km east of the exploration camp and is hosted in rhyolite ignimbrite. The prospect includes a 30 m tunnel and a few prospect pits. The vein is up to 1 m wide and strikes 265 degrees and dips 80 degrees to the south.

## 8 Deposit types

The classification of the deposit type is from hand specimen determination of mineralogy and mineral assemblages. Vein textures and mineralogy are consistent with low sulfidation epithermal veins developed from low salinity, near-neutral pH fluids dominated by meteoric water. Pulses of magmatic waters transported gold and silver into the hydrothermal system and the processes of boiling, fluid mixing, and cooling were triggers for deposition of the precious metals. Low sulfidation systems are distinguished from intermediate sulfidation systems mostly by the sulfide minerals observed. At Copalquin sulfide mineralogy consists mostly of pyrite and acanthite and only trace to very minor amounts of chalcopyrite and sphalerite are observed. Where sphalerite is present it is usually as white, barely translucent grains with black rims. In these low sulfidation systems veins are filled with quartz as both early crystalline quartz and later crustiform bands of alternating chalcedony, finely crystalline quartz, carbonate minerals (ankerite, kutnahorite, rhodocrosite, and calcite), and adularia. Quartz after platy calcite is absent or rare suggesting that boiling occurred in intense, brief pulses that generated broad zones of hydrothermal breccia. Mineralized zones have silver sulfides present as black bands up to 8 mm wide and as disseminated aggregates. Visible gold in flecks up to 2 mm occurs in several drillholes in both the Refugio and Soledad veins and in one occurrence at Los Reyes. An exceptional occurrence of coarse, visible gold in coherent bands that were later broken into breccia fragments was observed in drillhole CDH-077.

## 9 Exploration

### 9.1 Reconnaissance and underground sampling

After Sun Minerals (through the subsidiary Drummond), originally acquired the option on the Copalquin district, 13 of the known mines were visited and sampled under the supervision of geologist Ing. Ricardo Rodriguez. The Sun Minerals team collected 36 rock chip samples and one dump sample during the first field evaluation. Seven of the most significant results from this campaign are shown in Table 9.1. Since June 2020, and after the acquisition of Sun Minerals by Mithril Resources, several other historical workings in the district have been sampled and the significant results from this sampling are also provided in Table 9.1.

The assay results for the samples returned anomalous to high values for gold and silver, which assisted in the initial evaluation of the Copalquin District and to evaluate and rank the various exploration target areas where the historical workings are located.

All rock samples were taken by hand under the direct supervision of Mithril Resources and Sun Minerals personnel. The continuous rock chip channel samples were obtained by continuously sampling the rock face over a measured interval and true width as shown in Table 9.1. Samples were marked by the supervising geologist and chipped along a line 5 – 10 cm wide using a chisel and 3-pound sledge hammer and collecting the sample on a clean plastic sheet. This sampling technique may not be as representative as a rock saw channel sample however care was taken to ensure a representative and high-quality sample and to minimize any bias.

Samples 5331 and 5330 from Platano (El Gallo historical workings), are localized rock chip samples and are selective in nature. This type of selective sampling is not representative of the structure observed in the workings. Sample bias is high, and the aim is to provide the geologist with an indication of the possible extent of mineralization in the historical workings to assess and rank for further exploration work.

Table 9.1 Sun Minerals rock chip samples – significant results

Sample	X	Y	Source	Location	Width (m)	Au (ppm)	Ag (ppm)
213156	293070	2824344	Sun Minerals	Guadalupe	0.6	18.65	802
213160	292713	2824302	Sun Minerals	Constancia	1.5	5.55	464
213165	289122	2823653	Sun Minerals	Refugio	1	2.17	100
213170	289638	2823793	Sun Minerals	Cometa	1.6	1.14	42
213172	289517	2823854	Sun Minerals	La Lina	1	5.23	249
213174	289646	2824094	Sun Minerals	Soledad	0.4	4.42	215
213187	290686	2823687	Sun Minerals	Los Reyes	1.2	7.23	507
5335	292670.6	2822552	Mithril	Las Brujas	0.5	49	665
858202	290817.5	2822435	Mithril	Dios Hijos	0.8	10.4	422
5336	292671.5	2822553	Mithril	Las Brujas	0.5	8.41	158
858201	290823.6	2822423	Mithril	Dios Hijos	1	7.93	336
5331	287618	2823686	Mithril	Platano	0	7.81	60
5330	287625	2823695	Mithril	Platano	0	1.82	71
5340	292682.2	2822565	Mithril	Las Brujas	1.69	1.725	39
5342	293078.2	2822665	Mithril	Mina Peru	1.6	1.56	30
5339	292684.8	2822561	Mithril	Las Brujas	0.9	1.475	74
6104	288013.4	2822651	Mithril	El Apomal	0.8	1.28	32

Source: Mithril, 2023



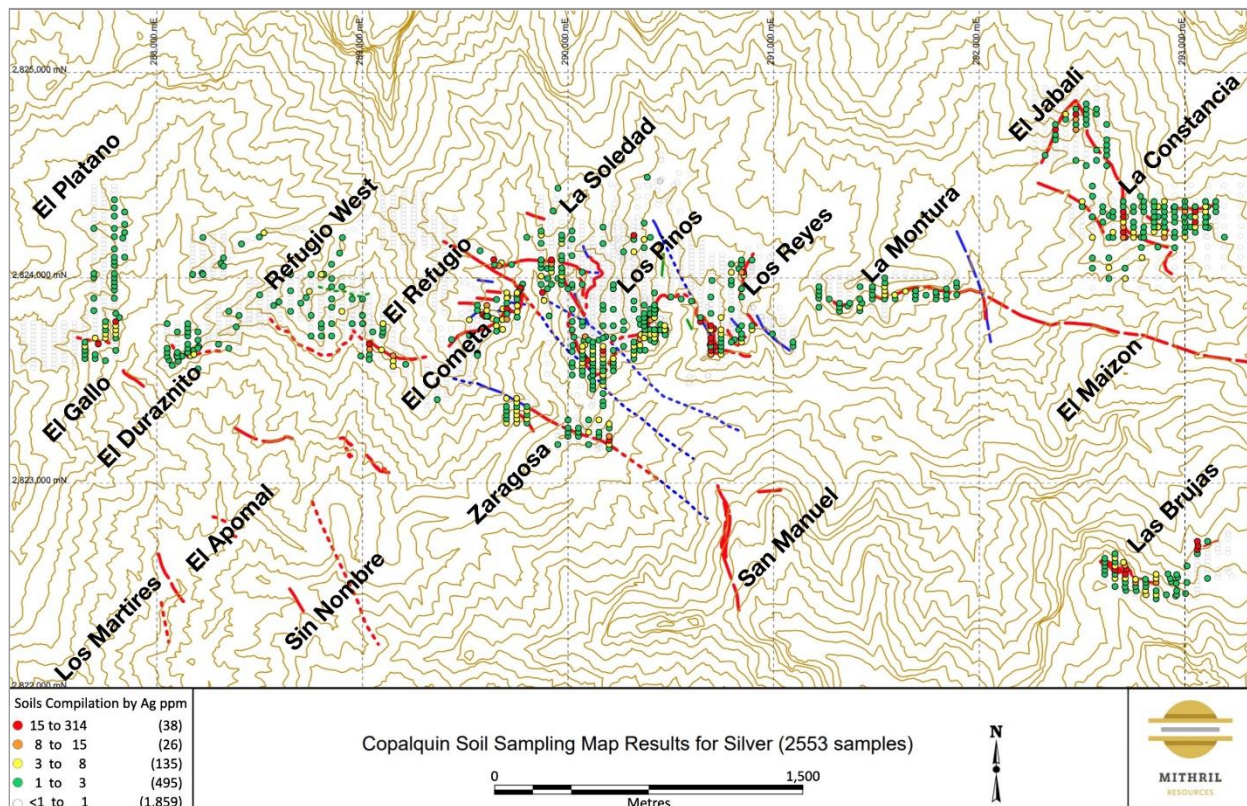
### 9.1.1 Soil sampling programs

Soil sampling is the primary target definition technique used on the Property. Although residual soils are not well developed and there is some downslope transport of material this method reliably identifies areas with gold and silver mineralization even where there are no observed outcropping quartz veins. Soil sampling has been ongoing from Bell Coast to UC Resources to Sun Minerals and continues under Mithril.

Soil sampling has been carried out by locating pre-planned points by handheld global positioning system (GPS) and digging to below the first color-change in the soil (or a maximum of 50 cm). In the arid environment there is a 1 to 10 cm organic horizon and a 10 to 30 cm B horizon above the regolith. Samples are sieved to -80 mesh in the field. Samples are collected on a 20 m x 50 m grid or every 20 m on N-S lines 50 m apart. These samples are considered representative of the medium being sampled and lines are appropriately oriented to the nearly E-W structural trend. A 15 gram portion of sample is split from the soil "pulp" for analysis by X-Ray fluorescence (XRF). Mithril uses an Olympus Vanta 50 kV X-Ray fluorescence analyzer with a lower detection limit for silver of 2 parts per million (ppm). Samples are then sent to ALS Global (ALS) for gold assay by Au-AA23 (Figure 9.1).

Overall, the soil samples are considered representative and of appropriate quality for primary target definition. Within the soil sampling grids and where there are areas of poor development of soils, proximity to historical workings and steep terrain, these factors must be considered in assessing the results. Any of these factors alone or combined may cause sampling bias. In some cases, this has been observed to be the case and is taken into consideration when collecting samples and assessing the results.

Figure 9.1 Soil sampling compilation 2018 - 2023



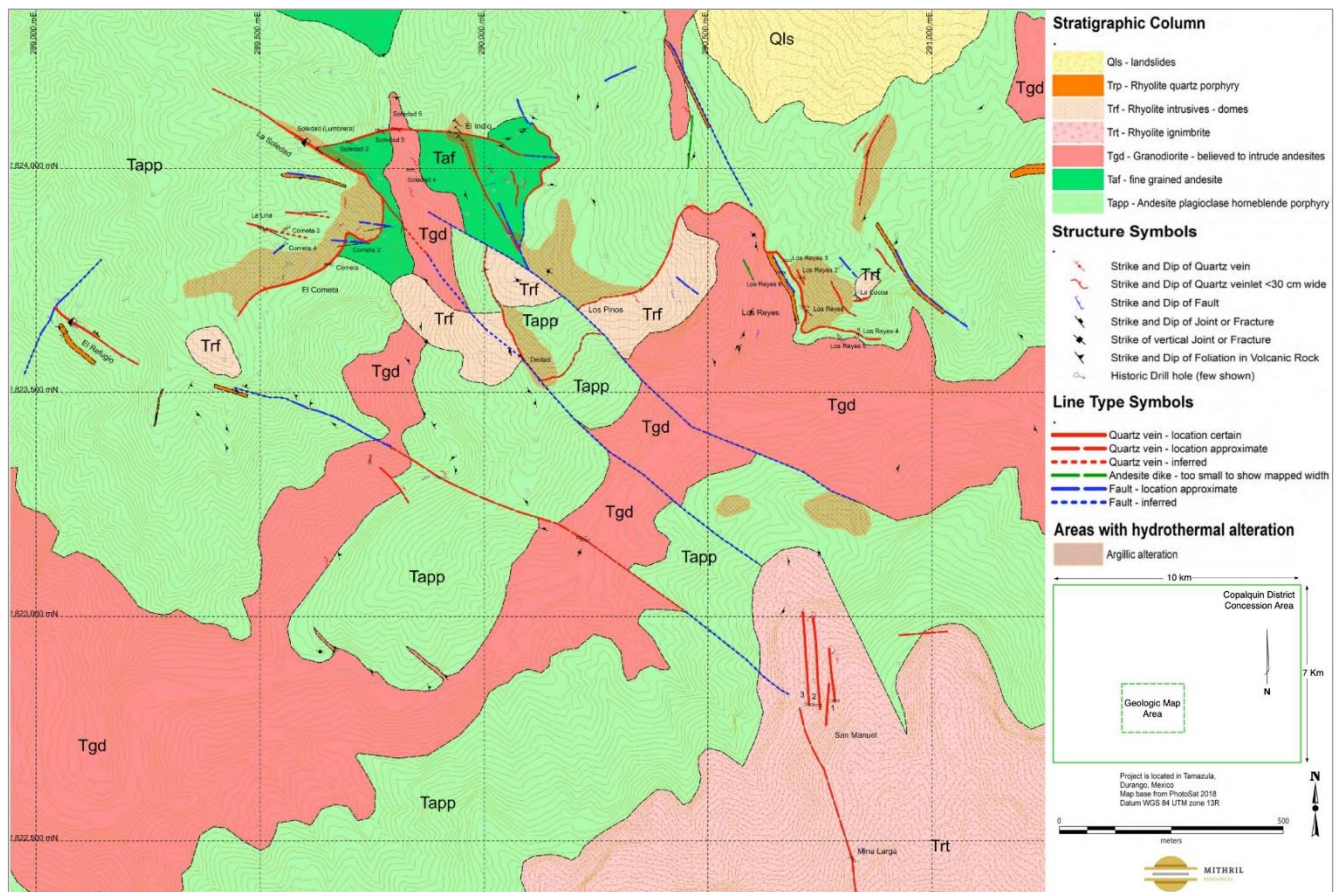
Source: Mithril, 2023

### 9.1.2 Geologic mapping during 2018 – 2019

Sun Minerals purchased topographic coverage and a 50 cm resolution ortho image from PhotoSat in October 2019. Three-layer map sheets were prepared with an ortho-image base, a topography insert and a mylar map sheet. All three layers have the same UTM grid printed on them in order to line up the sheets. On this set of map bases, a program of mapping at 1:2000 scale was carried out over 2.5 km E-W by 2.0 km N-S.

Figure 9.2 shows the geological map of the central part of the Copalquin Mining District. This is the same map as Figure 7.2 and the reader is referred to the legend in that figure. The area of mapping relative to the Property boundary is also shown in Figure 7.2.

Figure 9.2 Geological map of the central part of the Copalquin Mining District



Source: Mithril, 2023

### 9.1.3 Geologic mapping 2022

Mapping at 1:2000 scale was conducted at the El Gallo target and at the La Montura target.

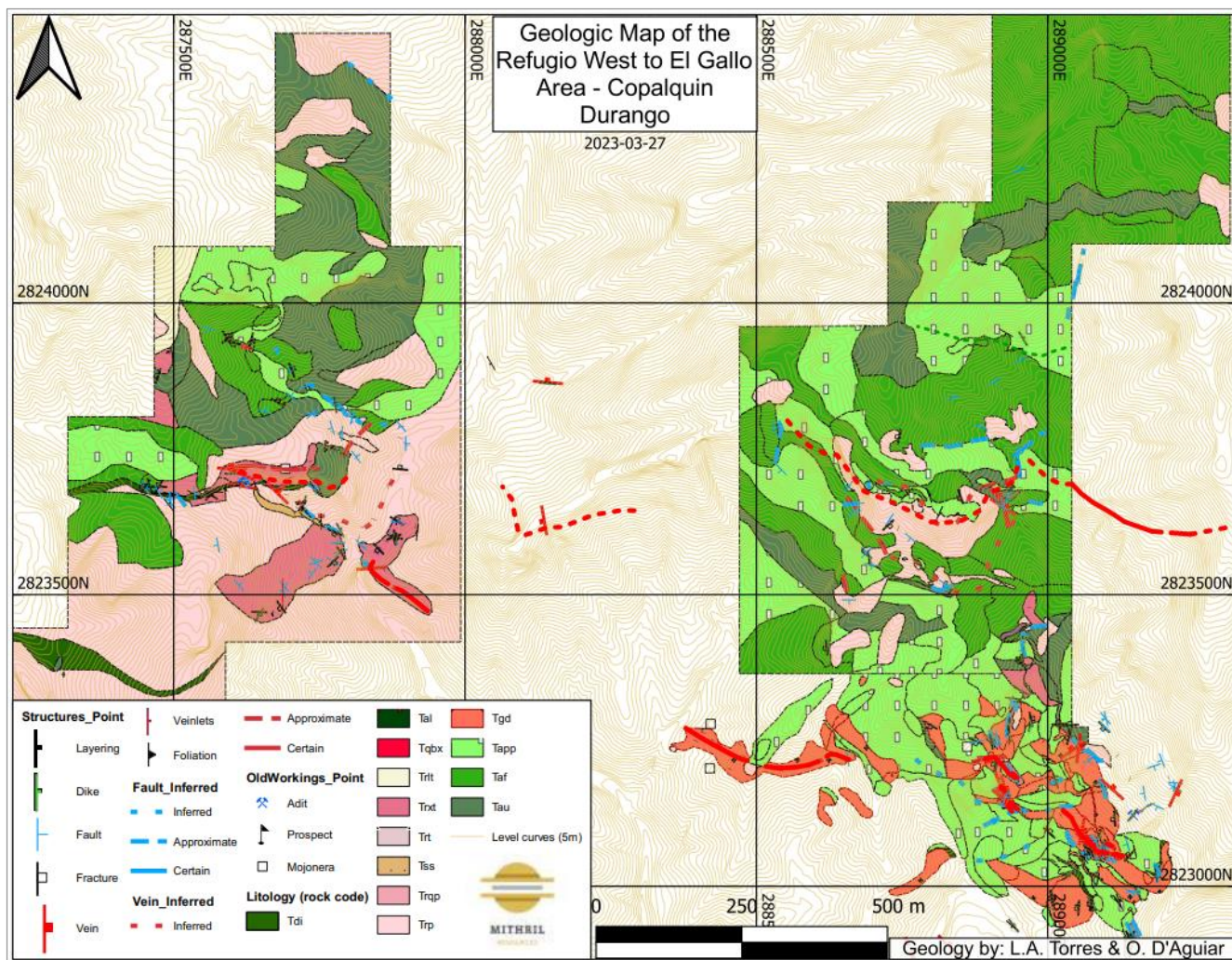
#### 9.1.3.1 Geologic mapping 2023

Mapping continued at El Gallo, Veta Daniela, and Refugio West.

Figure 9.3 shows the geologic map of the El Gallo and Refugio West Areas Copalquin Durango.



Figure 9.3 Geologic map of the El Gallo and Refugio West Areas Copalquin Durango

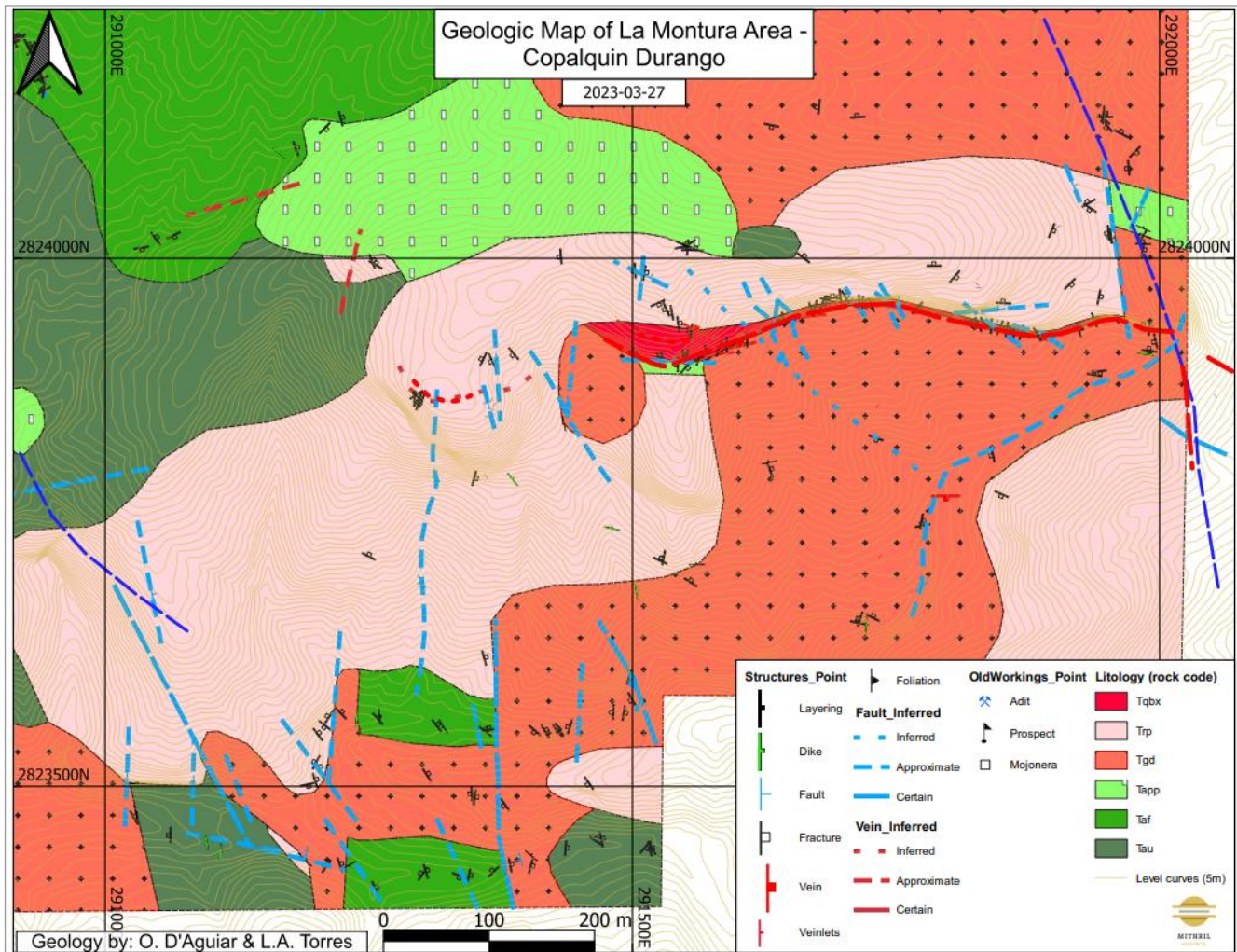


Source: Mithril, 2023



Figure 9.4 shows the geologic map of the La Montura Area Copalquin Durango.

Figure 9.4 Geologic map of the La Montura Area Copalquin Durango



Source: Mithril, 2023

## 10 Drilling

### 10.1 Drilling summary

Three drilling campaigns were carried out during the period of 2020 to 2022. The overall number of holes drilled was 148 for a total of 32,713 m. These were all carried out by Mithril.

Table 10.1 Summary of drill campaigns

Campaign	Holes	Metres
2020	48	7,393.20
2021	46	12,938.00
2021-22	54	12,381.65
<b>Total</b>	<b>148</b>	<b>32,712.85</b>

### 10.2 Type and extent of drilling

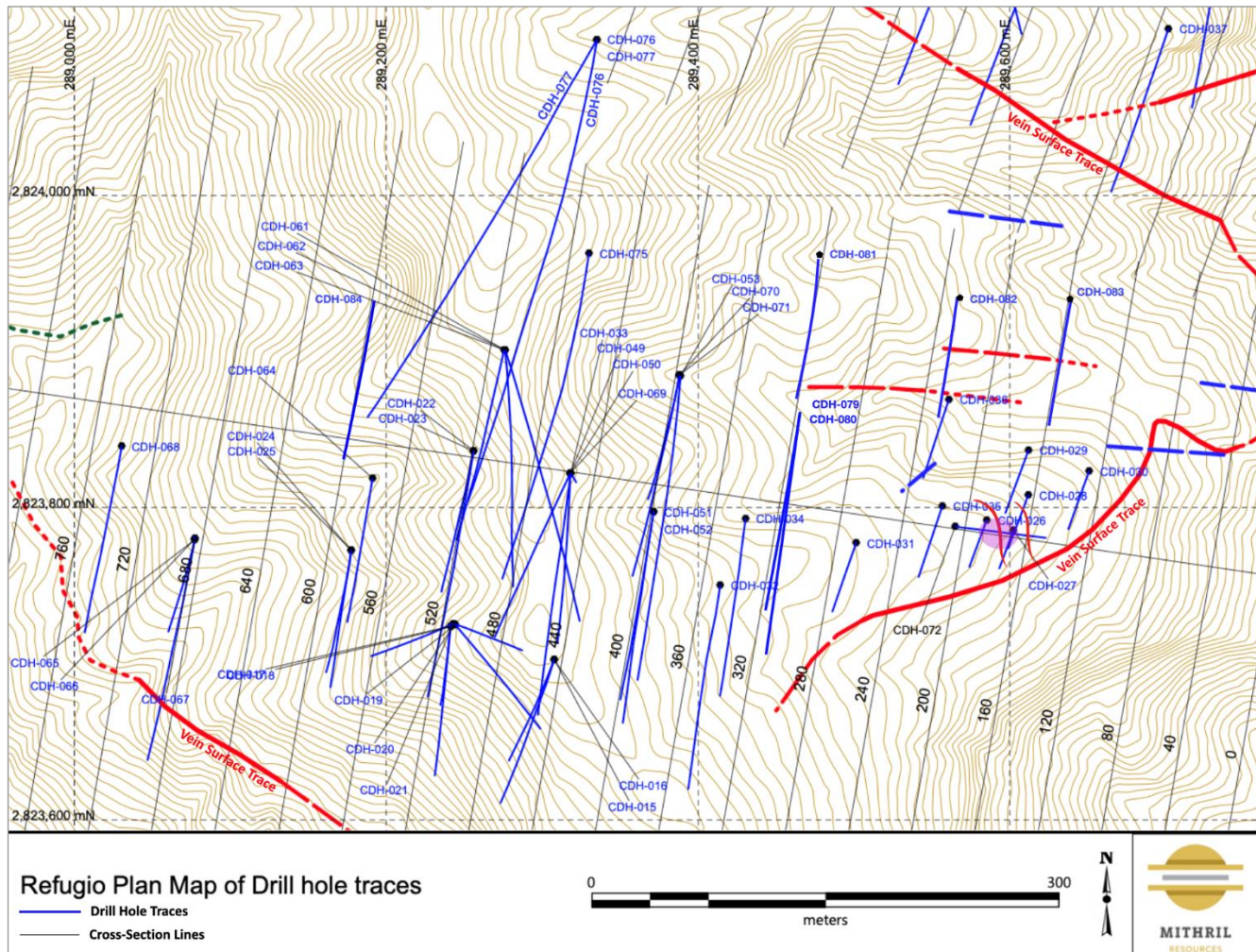
All drilling on the Property is diamond core drilling using a man portable MP-500 drill powered by three diesel motors. The drill is capable of drilling 400 m of HQ (63.5 mm), and 600 m NQ (47.6 mm) core. The drill uses 1.5 m drill rods and a 3 m core barrel. Wooden blocks are placed in the core trays every 3 m and when a cavity (open workings) is encountered. Core recovery is measured based on the location of the blocks. Core recovery is measured based on measured length of core divided by length of drill run. Samples for the drill programs consist of ½ HQ core cut lengthwise with a diamond saw. Intervals are nominally 1 m but may vary between 1.5 m to 0.5 m based on geologic criteria. Cut lines are marked on the core by the geologists to assure that the orientation of sampling achieves unbiased sampling of possible structures. This is reasonably well observed in the core and is appropriate to the deposit type. Deeper portions of holes from CDH-075 onward consist of ½ NQ core. Sample sizes are tracked by core diameter and sample weights. The same side of the core is always sent to sample (left side of saw). Reported intercepts are calculated as either potentially underground mineable (below 120 m below surface) or as potentially open pit mineable (near surface).

Core samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Core logging is both qualitative and quantitative in nature. Photos are taken of each box of core before samples are cut. Core is wetted to improve visibility of features in the photos. All core has been logged and photographed. Core is sawn and half core is taken for sample. Samples are prepared using ALS Minerals Prep-31 crushing, splitting, and pulverizing. This is appropriate for the type of deposit being explored. Visual review to assure that the cut core is ½ of the core is performed to assure representativity of samples. Field duplicate / second-half sampling is undertaken for 3% of all samples to determine representativity of the sample media submitted. Sample sizes are appropriate to the grain size of the material being sampled.



### 10.3 Drill plan

Figure 10.1 Drill plan view at El Refugio showing the drill traces and section lines



Source: Mithril, 2023

The angle of drilling relative to the attitude of the veins is demonstrated in Figure 7.6 and Figure 7.8. The holes shown on those sections demonstrate that the drillholes intersect the veins at a normal or near normal angle.

### 10.4 Core recovery

Measurements for core recoveries are discussed in Section 12.4 with an average core recovery of 92 % noted. Core recovery is considered to be appropriate for Mineral Resource estimation. There is no adverse relationship between recovery and grade identified to date.

Details of the drill handling and sampling are covered in detail in Section 12.



## 10.5 Descriptions of campaigns

### 10.5.1 First drill campaign 2020

A total of forty-eight holes were drilled in the initial drill program in the period of July to December 2020. This program addressed targets at La Soledad, Refugio, Los Pinos, Los Reyes, La Constancia, and San Manuel.

This first drill program successfully confirmed the existence of high-grade gold and silver mineralization at La Soledad, El Refugio, and Los Reyes targets with drill highlights summarized below in Table 10.2.

Table 10.2 Highlight drill intercepts - first drill campaign

Hole_ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
<b>La Soledad</b>					
CDH-001	111.00	114.00	3.00	34.72	3,129.0
CDH-002	91.95	96.50	4.55	5.64	325.7
CDH-002	115.20	115.70	0.50	3.60	330.0
CDH-002	141.20	141.70	0.50	9.57	825.0
CDH-002	188.30	188.85	0.55	1.84	57.8
CDH-008	111.70	115.50	3.80	2.58	142.6
CDH-014	253.80	261.30	7.5	6.76	158.4
<b>El Refugio</b>					
CDH-015	146	149.85	3.85	4.48	119.3
CDH-019	159	162	3	2.06	52.3
CDH-020	169	170.5	1.5	5.08	117.5
	and				
CDH-020	176.85	185.55	8.7	3.07	93.6
CDH-022	227.4	232.45	5.05	1.93	123.7
CDH-024	123.6	129.56	5.96	3.27	53.3
	and				
CDH-024	135.35	139.35	4	1.10	51.4
CDH-027	10.9	22.6	11.7	1.16	70.0
CDH-029	29.6	32.5	2.9	1.93	215.7
CDH-033	206.3	215.65	9.35	7.84	138.1
	Including				
CDH-033	207	211	4	16.44	286.8
<b>Los Reyes</b>					
CDH-040	75.90		0.70	9.30	125.0
	84.82		1.20	2.05	85.0
	91.55		2.22	32.35	185.0
CDH-041	103	106	3.00	2.86	83.8

At the La Soledad target, drillhole CDH-001 confirmed a high-grade vein in close proximity to the estimated location of a historical drillhole. CDH-002 intercepted four separate veins and CDH-014 was the deepest hole, indicating depth potential at the target. This first campaign of holes confirmed La Soledad as a target requiring further modelling for future drilling.

The first drillhole (CDH-015) at the El Refugio target intercepted a broad quartz breccia structure with a vein of high-grade gold and silver mineralization. Further drilling during this campaign continued to intercept this structure along strike with numerous reportable intercepts (greater than 1 g/t gold equivalent with maximum 2 m of internal waste). Drillhole CDH-033 was down dip of CDH-015, with a considerably higher-grade intercept, indicating the requirement for deeper drilling at the El Refugio target in the next campaign.

The first rounds of scout drilling at Constancia and San Manuel, where there are historical workings and no previous drilling, did not intercept significant gold and silver mineralization other than a narrow vein at Constancia. The first holes at Los Pinos, where there is strong surface alteration and good soil geochemistry for gold and silver but no historic workings or drilling, was not successful in locating gold and silver mineralization in core.

The first drillholes at the Los Reyes target intercepted high-grade gold and silver with drillholes CDH-040 with multiple veins and CDH-041.

Initial drilling indicates a likely complex system requiring further drilling.

## **10.5.2 Second drill campaign 2021**

The second drill campaign was resource development drilling focused on the two areas where the best results from the first campaign were obtained. The majority of the drill metres during the second campaign were drilled at the El Refugio target successfully following up the very positive drill results of the first campaign. Of the 46 holes in the second campaign 36 were targeted at Refugio and three at La Soledad. Five more holes were drilled at Los Reyes and two at Los Pinos. After hole CDH-094 the decision to calculate a resource estimate was made. The assays for holes CDH-091, CDH-092, and CDH-093 were not received before the close out date for the Mineral Resource.

Table 10.3 shows the selected drill intercepts at La Soledad and El Refugio targets.

Table 10.3 Highlight drill intercepts - second drill campaign

Hole_ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
<b>La Soledad</b>					
CDH-054	288.25	293.13	4.88	10.36	80.9
<b>El Refugio</b>					
CDH-072	35.2	42	6.8	74.04	840.5
	Including				
CDH-072	37.9	40	2.1	235.14	2,554.3
CDH-077	468.34	476.6	8.26	80.30	705
	Including				
CDH-077	468.34	474.6	6.26	106.00	913
CDH-079	86.6	99	12.4	7.60	332
	Including				
CDH-079	90	94.19	4.19	18.10	810
CDH-080	112.19	118.3	6.11	5.08	197
	Including				
CDH-080	116	118.3	2.3	9.47	399
CDH-084	312.15	321	8.85	7.20	235.3
	Including				
CDH-084	317	319.5	2.5	18.22	582.8
CDH-085	286	288	2	9.90	122.5
	Including				
CDH-085	286	287	1	19.00	209
CDH-086	250.71	263	12.29	4.08	85.2
	Including				
CDH-086	250.71	252.21	1.5	8.98	137
	Including				
CDH-086	258	260	2	15.35	333
CDH-094	144	162.67	18.67	9.64	278.8
	Including				
CDH-094	148.89	158.2	9.3	17.90	482.2

Drillhole CDH-077 was one of the deeper drillholes at the El Refugio target returning a very high-grade intercept and indicating potential mineralization at depth. Drillhole CDH-094 was drilled west and along strike at El Refugio giving indication of strike extension in this direction.

At La Soledad, drillhole CDH-054 followed up the drill intercept from CDH-014, returning a high-grade intercept at this developing, but more complex, target to the north of El Refugio.

With the positive drill results at El Refugio and the adjacent La Soledad target, a maiden Mineral Resource estimate was produced. Details of the Mineral Resource are discussed in Section 14 of this Technical Report.

## 10.5.3 Third drill campaign 2022

The third drill campaign was designed to drill test some other target areas across the district in between programs of drilling at El Refugio and La Soledad targets.

In this campaign efforts were almost evenly divided between the El Refugio and La Soledad targets and the other targets with 30 holes drilled at Refugio and La Soledad and 24 elsewhere on the Property.

The first part of the third drill campaign tested some deeper areas at El Refugio and along strike to the west. The most westerly drillholes intercepted relatively shallow mineralization supporting further drill road extensions and further drill testing west and along strike. The first drillholes approximately 1 km west of El Refugio, at the El Gallo target, successfully intercepted high-grade gold and silver mineralization with drillholes CDH-127 and CDH-128.

Drilling at the south-east area of La Soledad intercepted a complex sheeted vein system (drillholes CDH-109 to 111) up dip where there may be a deeper interaction with the La Soledad and El Refugio structures.

Table 10.4 shows selected drill intercepts from the third drill campaign in 2022.

Table 10.4 Highlight drill intercepts - third drill campaign

Hole_ID	From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)
<b>El Refugio</b>					
CDH-099	28	32.55	4.55	8.29	138.0
	Including				
CDH-099	28	29.7	1.7	20.24	298.0
CDH-137	331.33	337	5.67	4.37	174.0
	Including				
CDH-137	331.33	333	1.67	9.64	398.6
CDH-140	91.77	97.6	5.83	15.73	474.0
	Including				
CDH-140	93.77	95.58	1.81	45.50	1,387.0
CDH-143	185	192	7.00	3.40	227.0
	Including				
CDH-143	189	192	3	6.49	454.0
<b>El Gallo</b>					
CDH-127	21.37	21.91	0.54	4.48	412.0
CDH-127	25.5	26.5	1.00	2.69	179.0
CDH-128	43	44	1.00	1.64	5.00.0
CDH-128	50	53	3.00	1.76	126.0
<b>La Soledad</b>					
CDH-109	41	47	6.00	1.84	23.7
CDH-109	55	56	1.00	1.79	25.0
CDH-109	59.3	61	1.70	1.77	117.0
CDH-109	78.5	80.64	2.14	0.89	63.9
CDH-110	70.75	75.55	4.80	0.91	56.8
CDH-110	109	111.3	2.30	1.75	135.0
CDH-111	77.3	85.4	8.10	1.64	106.0
CDH-111	98	99	1.00	1.50	30.0
CDH-111	107	107.75	0.75	1.59	220.0
CDH-111	140	140.5	0.50	2.21	61.0
CDH-111	190	191	1.00	1.20	2.0
<b>Los Reyes</b>					
CDH-121	106.8	107.4	0.60	1.46	125.0
CDH-122	31	33.68	2.68	0.50	114.0
CDH-122	38.66	39.16	0.50	0.82	53.0
<b>Los Pinos</b>					
CDH-113	78.1	78.7	0.60	9.91	161.0

The last part of this campaign, completed in July 2022, focussed on El Refugio to follow-up the results from the drilling earlier in the year. It successfully targeted further high-grade gold and silver mineralization providing information to develop the next stage of drilling at this target area as a prelude to a Mineral Resource estimate update sometime in the future.

Importantly, the first high-grade intercept in drillhole CDH-113 was produced from a series of scout holes at the Los Pinos target. This target, located between El Refugio and Los Reyes, requires further drilling as this target continues to develop. Follow-up scout holes at the Los Reyes target returned reportable intercepts for gold and silver, again indicating further modelling and drilling at this target area.

Summary of drill campaigns Table 10.5 shows details of the Mithril drilling campaign for a total of 148 holes and 32,712.85 m of drilling.

Table 10.5 Mithril drill campaigns at Copalquin

<b>First drill campaign 2020</b>				
<b>Target area</b>	<b>Hole ID start</b>	<b>Hole ID end</b>	<b>No. holes</b>	<b>Total metres</b>
La Soledad	CDH-001	CDH-014	14	2,306.3
Refugio	CDH-015	CDH-036	22	3,475.5
La Soledad	CDH-037	CDH-038	2	294.4
Los Reyes	CDH-039	CDH-041	3	366
Los Pinos	CDH-042	CDH-043	2	75
La Constancia	CDH-044	CDH-046	3	393
San Manuel	CDH-047	CDH-048	2	483
-	<b>Total</b>	<b>-</b>	<b>48</b>	<b>7,393.2</b>
<b>Second drill campaign 2021</b>				
<b>Target area</b>	<b>Hole ID start</b>	<b>Hole ID end</b>	<b>No. holes</b>	<b>Total metres</b>
Refugio	CDH-049	CDH-053	5	1,281
La Soledad	CDH-054	CDH-055	2	495
Los Reyes	CDH-056	CDH-060	5	888
Refugio	CDH-061	CDH-072	12	3,258
Los Pinos	CDH-073	CDH-074	2	420
Refugio	CDH-075	CDH-077	3	1,353
La Soledad	CDH-078	-	1	327
Refugio	CDH-079	CDH-094	16	4,916
-	<b>Total</b>	<b>-</b>	<b>46</b>	<b>12,938</b>
<b>Third drill campaign 2021 - 2022</b>				
<b>Target area</b>	<b>Hole ID start</b>	<b>Hole ID end</b>	<b>No. holes</b>	<b>Total metres</b>
Refugio	CDH-095	CDH-107	13	3,750.65
La Soledad	CDH-108	CDH-111	4	783
Los Pinos	CDH-112	CDH-119	8	1,332
Los Reyes	CDH-120	CDH-123	4	567
San Manuel	CDH-124	CDH-126	3	525
El Gallo	CDH-127	CDH-129	3	372
La Montura	CDH-130	CDH-135	6	1,260
Refugio	CDH-136	CDH-148	13	3,792
-	<b>Total</b>	<b>-</b>	<b>54</b>	<b>12,381.65</b>

## 10.6 Conclusions

Overall, there is over 5.5 km across the middle section of the Copalquin district where historical mines and workings are located and where high-grade gold and silver mineralization has been intercepted by drilling. Within this 5.5 km, the El Refugio maiden Mineral Resource estimate is located (see Section 14).

Significant intercepts have been encountered at many targets. At this time there are no known drilling, sampling, or recovery factors that could impact the accuracy and reliability of the results.



## 11 Sample preparation, analyses, and security

### 11.1 General

All samples are stored in a secure core storage facility on site until they are shipped off site by small aircraft and delivered directly to an ALS sample preparation laboratory in either Hemosillo, Sonora or Guadalajara, Jalisco. Pulps from sample preparation are sent for analysis to ALS in Vancouver, British Columbia, Canada or Reno, Nevada, USA. ALS is an accredited laboratory.

ALS Global, Bureau Veritas and SGS laboratories are independent of Newrange Gold Corporation and Mithril Resources Limited and were contracted to provide geochemical assays of drill core, rock and soil samples and metallurgical testing. It is the QP's opinion that all samples (drill core, rock, and soil) were adequately prepared, adequate security was provided and adequate analytical procedures were followed. The laboratory accreditations are stated to meet the requirements of ISO/IEC 17025:2017 and ISO 9001:2015.

### 11.2 Soil samples

Soil Samples collected in 2020 and 2021 were analyzed for multi-element geochemistry by XRF. Mithril used a handheld Olympus Vanta 50 kV X-Ray fluorescence analyzer with a lower detection limit for silver of 2 ppm. Samples were then sent to ALS for gold assay by Au-AA23. Samples collected in 2022 and 2023 were analyzed by Au-AA23 and Ag-OG62.

### 11.3 Drill samples

#### 11.3.1 Sample selection

Not all core was submitted for assay. Geologists select the zones to be sampled by visual observation of the drill core starting the sampled zone 10 m above the first apparent mineralized sample. Sample intervals are nominally 1 m. Geologists may adjust this sample length to geologic boundaries. No samples were to be taken less than 0.5 m long or greater than 1.5 m. Cut lines are marked on the core by the geologists to assure that the orientation of sampling achieves unbiased sampling of possible structures. This is reasonably well observed in the core and is appropriate to the deposit type. Core is sawn and half core is taken for sample. Visual review to assure that the cut core is ½ of the core is performed to assure representativity of samples. Field duplicate / second-half sampling is undertaken for 3% of all samples to determine representativity of the sample media submitted.

#### 11.3.2 Assaying

Samples were prepared using ALS Prep-31 for crushing, splitting, and pulverizing. This is appropriate for the type of deposit being explored. Drill samples were analyzed for gold using the ALS method for fire assay AA-25, which has a detection range of 0.01 to 10 ppm using a 30 grams (g) nominal sample weight and instrumental Atomic Absorption Spectrometry (AAS) finish. Holes CDH-001 through CDH-060 and CDH-112 through CDH-144 were also assayed by ME-ICP61 for a suite of 33 elements. ME-ICP61 achieves near-total digestion using a four-acid leach, consisting of HF-HNO<sub>3</sub>-HClO<sub>4</sub>-HCl. The detection limit for silver is 0.5 to 100 ppm. Any samples greater than 100 ppm Ag were re-assayed using ALS method Ag-OG62 which has a detection range of between 1 ppm to 1,500 ppm. Gold values greater than 10 ppm were re-assayed with Au\_GRA21 with a gravimetric finish. Silver values greater than 1,500 ppm were assayed by Ag-GRA21 with a gravimetric finish. Samples with significant amounts of observed visible gold are also assayed by AuSCR21, a screen assay that analyses gold in both the milled pulp and in the residual oversize from pulverization. This method has been employed for holes CDH-075 and CDH-077.

### 11.3.3 Quality Assurance / Quality Control

QA/QC was carried out through the insertion of blanks, laboratory duplicates, and certified reference material (CRM) for gold and silver. Ten percent of drill samples are QA/QC samples consisting of:

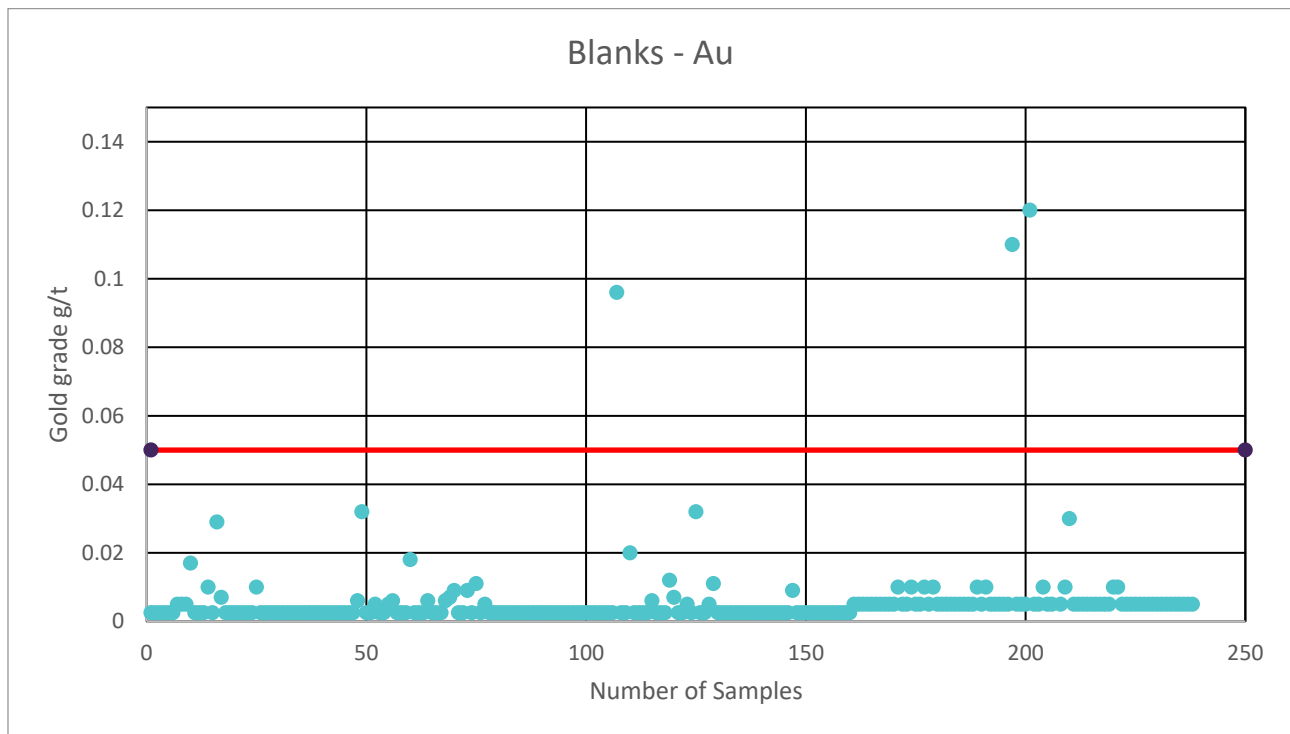
- Four standards are inserted per 100 samples.
- Three blanks are inserted per 100 samples and may be placed after likely mineralized samples.
- Three core duplicates are included per 100 samples.

Standards are included with every 33 samples. Standards must be varied and reflect the full range of values found in mineralized material. Three pairs of duplicates are assayed every 100 samples and a minimum of three and a maximum of five blanks for every 100 samples.

Every 90 days 10% of the mineralized zone analyzed are selected with the pulps being sent to another laboratory (SGS Lakefield or ACME laboratory).

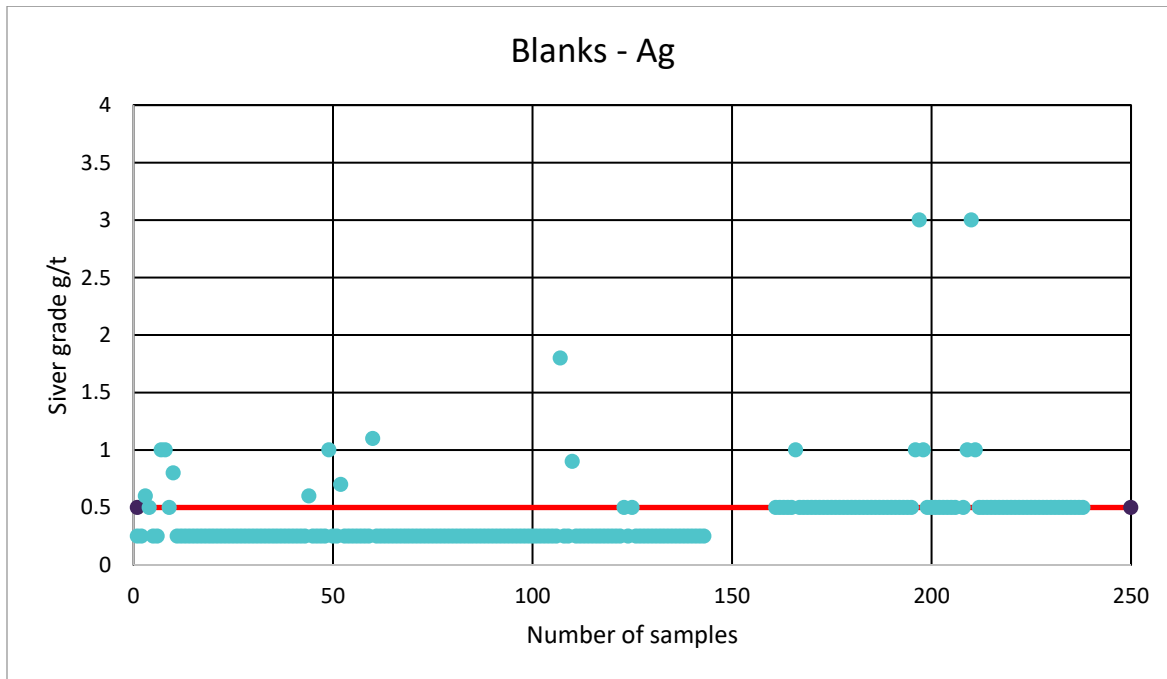
Approximately 240 blanks were included in the samples assayed. Figure 11.1 and Figure 11.2 show the laboratory blank assay values. The red line is the expected value for the blank assay. Both plots show the laboratory cleaning procedure was appropriate.

Figure 11.1 Laboratory blanks for gold



Source: AMC, 2023

Figure 11.2 Laboratory blanks for silver

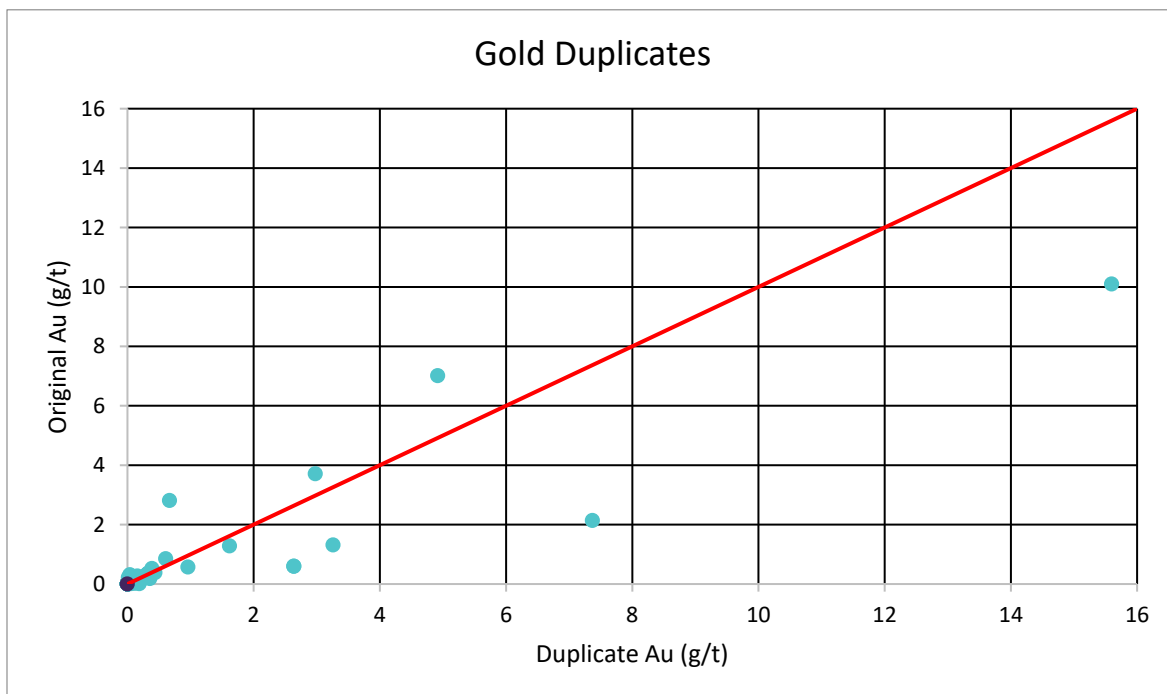


Source: AMC, 2023

The laboratory duplicates were checked against the original assay using scatter plots.

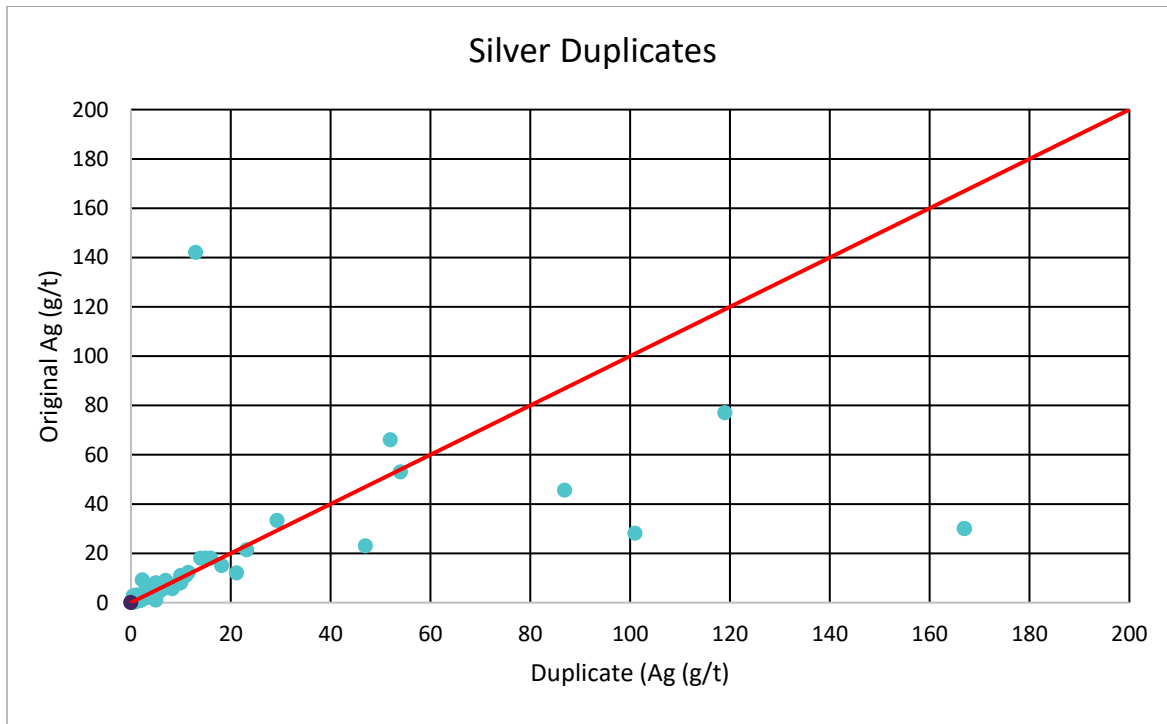
Figure 11.3 and Figure 11.4 show the results of the scatter diagrams. The review of the laboratory duplicates shows some poor results for both gold and silver analysis.

Figure 11.3 Gold laboratory duplicates



Source: AMC, 2023

Figure 11.4 Silver laboratory duplicates



Source: AMC, 2023

A total of 11 CRMs were used to assess the gold and silver grade accuracy of the laboratories. Table 11.1 lists the CRMs used and the stated values. The range in gold and silver CRM grades is considered appropriate.

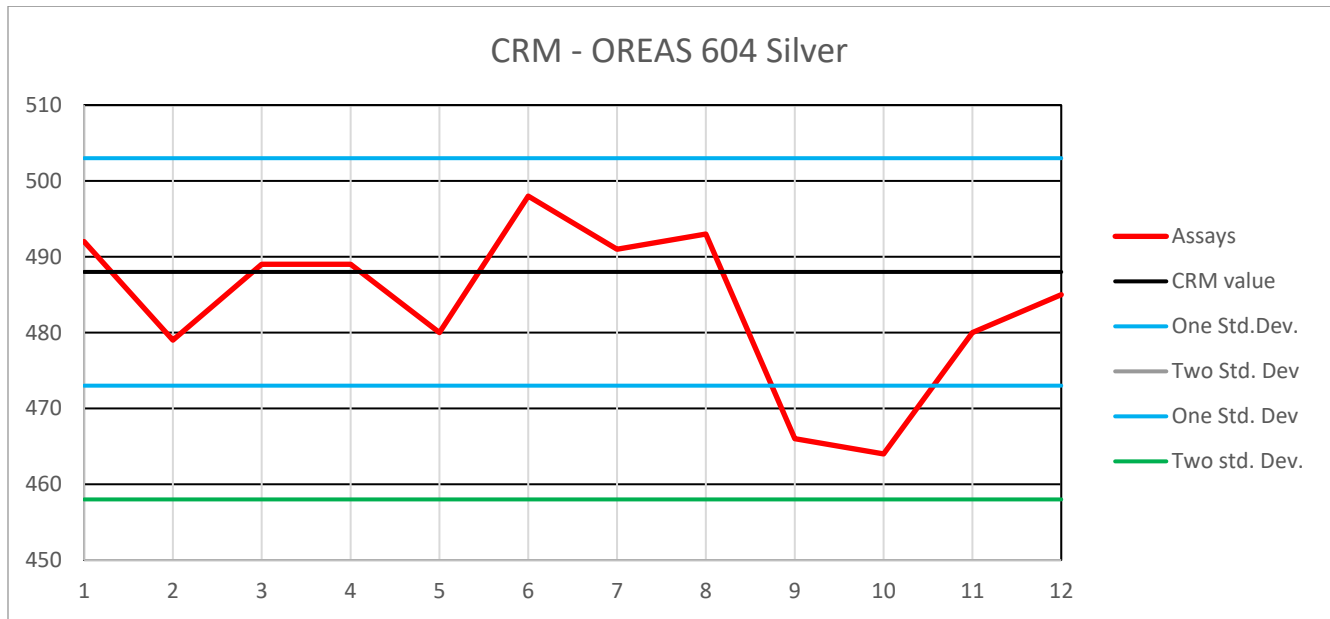
Table 11.1 CRM values

CRM	Au (g/t)	Ag (g/t)
CDN-ME1311	0.839	44.9
CDN-ME1414	0.284	18.2
CDN-ME1803	1.308	46
CDN_ME1808	2.31	39
CDN-ME1901	7.85	371
CDN-ME1902	5.38	356
OREAS215	3.41	-
OREAS217	0.333	-
OREAS217	14.17	-
OREAS602	1.95	115
OREAS604	1.43	480

Figure 11.5 is an example of a CRM plots for and silver.

The plots show a few assays were outside two standard deviations of the CRM stated grades. However, most of the assays were within two standard deviations. Also, for some CRMs the estimated grade was slightly above the expected CRM value.

Figure 11.5 Example of CRM results



Source: AMC, 2023

#### 11.4 Conclusion

Mithril has implemented industry standard practices for sample preparation, security, and analysis given the stage of the Project. This has included common industry QA/QC procedures to monitor the quality of the assay database, including inserting CRM samples into sample batches on a predetermined frequency basis and doing pulp duplicates and blank samples.

Overall, the QP considers the assay database to be acceptable for the purposes intended.



## 12 Data verification

### 12.1 Site visit

A site visit was undertaken from 7 August to 10 August 2021 by José Olmedo, MSc P.Geo.

The objective of the site visit was to review:

- Geological sampling
- Drilling techniques
- Drill sample recovery
- Drill core logging
- Database review
- Sub-sampling techniques
- Assay QA/QC procedures and results

### 12.2 Sampling techniques

Samples for the diamond core drilling consist of 95% of HQ and 5% of NQ core cut in half lengthwise with a diamond saw using a Honda Mantra diamond cutter. Changes from HQ to NQ diameter depend on drilling conditions.

Sample sizes are nominally 1 m but may vary between 0.5 m to 1.5 m based on geological criteria.

Sample weights vary from 3.7 kilograms (kg) to 4.2 kg for HQ cores and 2.1 kg to 2.3 kg for NQ cores. The Mithril Database contains the weight value for each sample.

Sampling intervals are taken 10 m above and 10 m down from visible mineralized structures.

The right side of the core is always sent to sample for analysis at an accredited laboratory analysis, mainly ALS Global or Bureau Veritas. The remaining half is stored in a secure core warehouse.

The 2021 soil sampling was carried out by locating pre-planned points by handheld GPS and digging below the first colour-change and sampling the B horizon 25 cm above the regolith. Samples are sieved to -80 mesh in the field. A 15 g aliquot of sample is split from the soil pulps for analysis by XRF.

### 12.3 Drilling method

Drilling is carried out with a Multipower MP-500 man-portable diamond core rig capable of drilling up to 400 m with HQ diameter. The deepest drillhole is 477 m finished with NQ diameter.

The drilling rig is properly orientated in 5 m X 5 m stable platforms; initial inclination is given using a Starrett Angle Meter Inclinator Model AM-2 36080.

The core is routinely orientated with the first measurement taken at 10 m and then for every 50 m using an EZTrack, Model ET-6813 – V1 0.27 Reflex Software. The Mithril Database includes detailed descriptions of all measurements.

## 12.4 Drill sample recovery

The diamond core is reconstructed within the core box into continuous runs using wooden markups. Depths are checked against drillers blocks and drill-rod counts are routinely carried out by the drillers.

Drill recovery is measured based on the measured length of core divided by the length of drill run.

Measurements for core recoveries are logged and recorded using Geotech Software to calculate Recovery percentages and RQD's. An average of 92% core recovery was noted. All measurements for every drillhole are stored in the Mithril Database.

Recovery in holes CDH-001 to CDH-025 and CDH-032 to CDH-098 was always above 90% in the mineralized zones.

Holes CDH-026 through CDH-031 had some problems with core recovery in highly fractured, clay-rich breccia zones.

Core recovery is appropriate for Mineral Resource estimation. There is no adverse relationship between recovery and grade identified to date.

## 12.5 Logging

The Mithril system of logging core using a very robust software GV Mapper, records lithology, mineralogy, mineralization, alteration. Structure, color, and other primary features of rock samples.

Core logging is both qualitative and quantitative. Photos are taken of each box of the core before samples are cut. Core is wetted to improve the visibility of features in the photos.

All drillholes are logged and photographed in full to the end of the hole.

## 12.6 Sub-sampling and sample preparation

The core is sawn in half and the left half core is taken for sample.

Samples taken from drillholes CDH-001 to CDH-060 and CDH-064 to CDH-098 were sent to ALS for preparation and analysis. ALS sample preparation code Prep-31 is used following industry best practice where all drill samples are crushed to 70% less than 2 mm, riffle split off 250 g, pulverized split to better than 85% passing 75 microns ( $\mu\text{m}$ ). This method is appropriate for the type of deposit being explored. For drillholes CDH-061 to CDH-063 samples were sent to Bureau Veritas using preparation code Prep 70-250 which is the same procedure as ALS Prep-31.

Sawn core is visually reviewed to assure that the core is half of original core to maximize the representativity of samples.

Field duplicate / second-half sampling is undertaken for 3% of all samples to determine the representativity of sample media submitted.

Sample sizes are appropriate to the grain size of the material being sampled.

Both laboratories used are certified.

## 12.7 Assay data and QA/QC

All assay certificates are recorded automatically into the Mithril Database using GV Mapper Software, avoiding any human error for transcripts in digital form.

QA/QC procedures include standards, blanks, and duplicates inserted appropriately into the sample stream. Various grades of standards were bought from CRM suppliers. Systematic protocol for standards is to insert one random standard every 33 samples. In addition, one standard is inserted, two or three samples before visible high-grade mineralized zones.

Blanks are inserted at a minimum of 3 to 5 blanks for every 100 samples. Blanks used are similar in appearance to core samples.

## 12.8 Bulk density

Preliminary bulk densities are estimated within the site warehouse laboratory using ASTM C 914 - 95 Standard Test Method for Bulk Density and Volume of Solid Refractories by Wax Immersion.

## 12.9 Verification of sampling and assaying

Significant drilling intersections were verified in the field by José A. Olmedo from 7 August to 10 August 2021. From direct observations of geological logging, Mr Olmedo's review matched Mithril's logging database.

Mr Olmedo reviewed the grade database against ALS Global Laboratory, a selection of 500 certificates was selected at random from the files provided by Mithril, and these were compared back to the drilling database. He found that all samples reviewed matched the database exactly.

Mithril has drilled one twin hole. Hole CDH-072 and is a twin of historic holes UC-002 and UC-03 and the results were comparable.

## 12.10 Location of data points

Drill collar coordinates for drill-holes CDH-001 through CDH-084 were surveyed by an independent private surveyor Eng. Edgardo Molina, professional ID No. DGRM 1359, using GPS Differential topographical equipment Hi-Target V30 Plus, to horizontal nominal accuracy of +/- 6 mm and vertical +/- 11 mm. Holes CDH-005 and CDH-081 were surveyed by using a handheld Garmin GPS.

Some relevant drillhole collars, as well as old mine workings, were verified by José A. Olmedo in the field using a handheld Garmin GPS Map 62s. All coordinates matched with Mithril GV Mapper database.

High-quality topographic control from Photosat covers the entire drill project area.

## 12.11 Downhole surveys

The core is routinely orientated with the first measurement at 10 m and then for every 50 m using an EZTrack, Model ET-6813 – V1 0.27 Reflex Software.

## 12.12 Sample security

Core boxes are brought by drilling operators to the company's core sampling preparation store.

Samples are bagged in pre-numbered plastic bags; each sample weight is recorded in the database; each bag has a numbered tag inside and are tied off with plastic ties and then bulk bagged in poly-weave bags in batches not to exceed 40 kg. They are then numbered.

Batch bags are tied off with plastic ties and placed in the air services aircraft. They are then taken to Tamazula, Durango, where ALS Global picks up to 3 Mt of samples to be delivered either to ALS Guadalajara or ALS Hermosillo preparation laboratories. Analytical procedures are performed in ALS Vancouver, Canada.

The remaining half cores are stored in original labelled core boxes in well-secured core warehouses at the project site.

## **12.13 Qualified Person's statement of confidence**

The QP considers that data gathered by Mithril is sufficiently accurate for use in Mineral Resource estimation. Data verification has shown an accurate transfer of analytical data into the database.

## 13 Mineral processing and metallurgical testing

### 13.1 Introduction

The Copalquin district contains a typical low-sulfidation epithermal vein system hosted in volcanic rocks.

A Tertiary granodiorite to monzonite pluton intrudes underlying andesite and much of the area is capped by Tertiary (Miocene) rhyolite ignimbrites of the UVS. Mineralization is thought to be contemporaneous with the eruption of the UVS and related sub-volcanic intrusions.

Semi-continuous low-angle breccia zones which host extensive zones of mineralized quartz breccia have formed within the andesite parallel to the granodiorite contact. A series of high angle normal faults strike north-west and dip to the north-east including the El Refugio, La Lina, El Leon, and Soledad structures which host veins mineralized with gold and silver. North-south striking, steeply dipping faults at San Manuel also host mineralized veins. At Copalquin sulfide mineralogy consists mostly of pyrite ( $\text{FeS}_2$ ) and acanthite ( $\text{Ag}_2\text{S}$ ) and only trace to very minor amounts of chalcopyrite, galena and sphalerite are observed.

Drummond, a wholly owned subsidiary of Mithril commissioned a metallurgical study using samples from the El Refugio ore deposit. The study was conducted by SGS de México S.A. de C.V. in Durango, Ontario, México (SGS). Results of the study are contained in a report entitled, "Metallurgical study on an ore deposit called "El Refugio" to evaluate the gold and silver recovery performance through gravimetric concentration, flotation, and leaching processes", Order Boss 2013398, 4 March 2022.

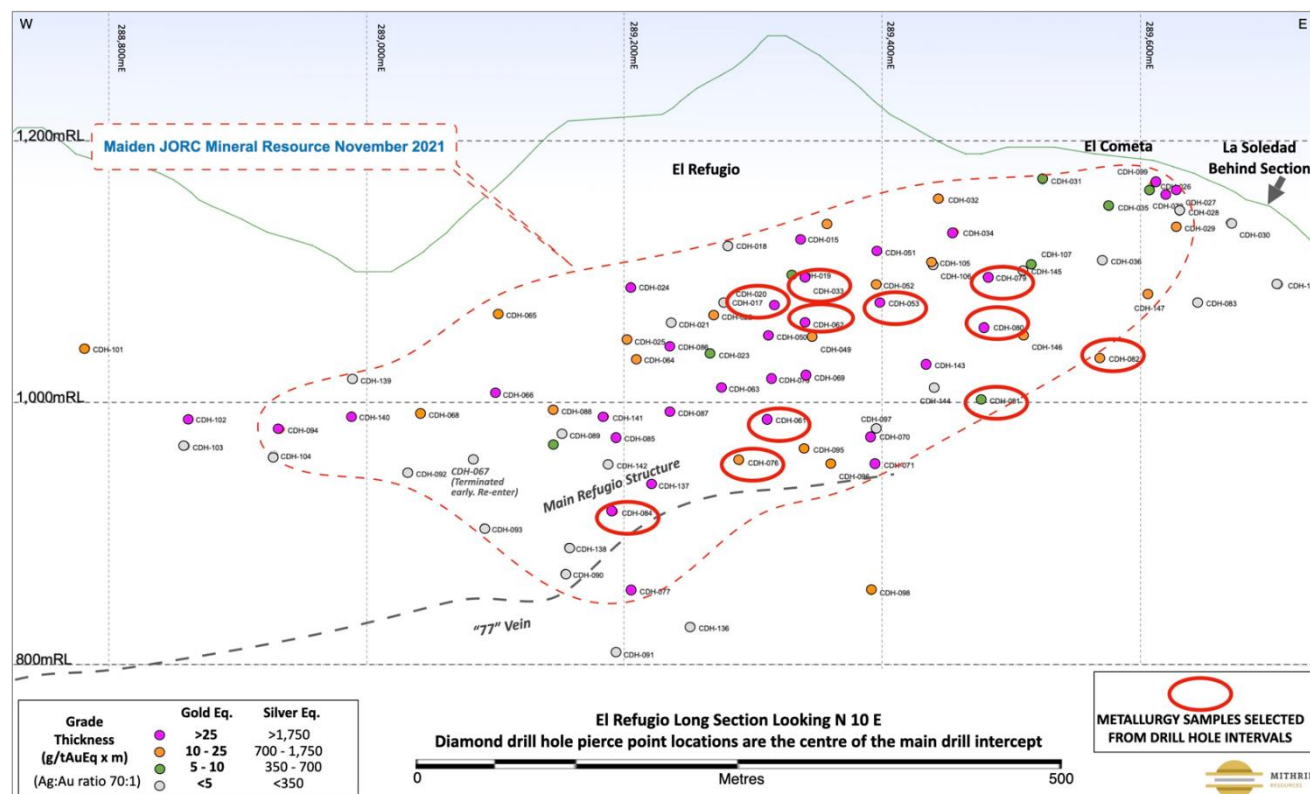
### 13.2 Sampling

A total of 132 drill core samples were selected from 11 drillholes as shown in Figure 13.1. The general approach for selection was to select spatially representative samples including expected mining widths and with gold grades approximately similar to the resource average. Drummond provided the compositing recipe shown in Table 13.1, which is based on expected mining volumes. The El Refugio Composite gold grade was 4.86 g/t Au, which reasonably approximated the average computed grade of the Indicated plus Inferred resources, which was 4.80 g/t Au.

Composites for La Soledad and El Cometa were also assembled and analyzed (see Table 13.1), however, these samples were not used in the metallurgical testing program.



Figure 13.1 El Refugio metallurgical sample drillhole locations



Source: Mithril, 2023

Table 13.1 El Refugio Composite make-up – Drummond recipe

Drillhole No.	Contribution to El Refugio Composite (kg)	Au (g/t)	Ag (g/t)	AuEq (g/t)
CDH-020	3	4.28	119.71	5.99
CDH-033	10	8.95	157.04	11.20
CDH-053	5	2.34	55.15	3.12
CDH-061	5	1.98	121.23	3.71
CDH-062	3	4.54	105.20	6.04
CDH-076	3	2.07	95.78	3.44
CDH-079	7	3.66	87.50	4.91
CDH-080	7	4.95	188.12	7.64
CDH-081	3	1.86	77.49	2.96
CDH-082	3	2.17	43.30	2.79
CDH-084	10	7.08	229.69	10.36
El Refugio Composite	59	4.86	135.64	6.80
La Soledad Composite	-	7.89	288.00	12.00
El Cometa Composite	-	10.37	201.78	13.25

SGS assembled the El Refugio Composite according to the Drummond recipe and fire-assayed two samples to produce assay results shown in Table 13.2. SGS attributed the variability in assays to the presence of substantial coarse gold. A metallurgical analysis was performed. 45.3% of gold and 5.2% of silver were found to be +200 mesh (approximately 75 µm). Metallurgical assays were 6.78 g/t for gold and 132.2 g/t for silver.

Table 13.2 El Refugio Composite head assay – SGS fire assay

Element	Unit	Sample #1	Sample #2	Average
Au	g/t	7.60	4.24	5.92
Ag	g/t	148.00	118.00	133.00

Multi-element scanning by inductively coupled plasma mass spectrometry (ICP-MS) was performed. Iron (2.5%), lead (108 ppm), zinc (202 ppm), and sulphur (1.2%) contents are indicative of the sulphides present with gold and silver in the vein structures. No unusually high concentrations of potentially deleterious elements were detected.

### 13.3 Gravimetric concentration

Use of gravimetric concentration to recover coarse gold and silver particles was evaluated using a laboratory-scale Knelson Concentrator which is commonly used in the metallurgical industry for this determination.

59.0% of gold and 24.4% of silver were recovered to a gravity concentrate assaying 198 g/t Au and 2,279 g/t Ag. These results favor inclusion of a circuit to recover gold and silver particles by gravimetric techniques early in the process flowsheet.

### 13.4 Flotation

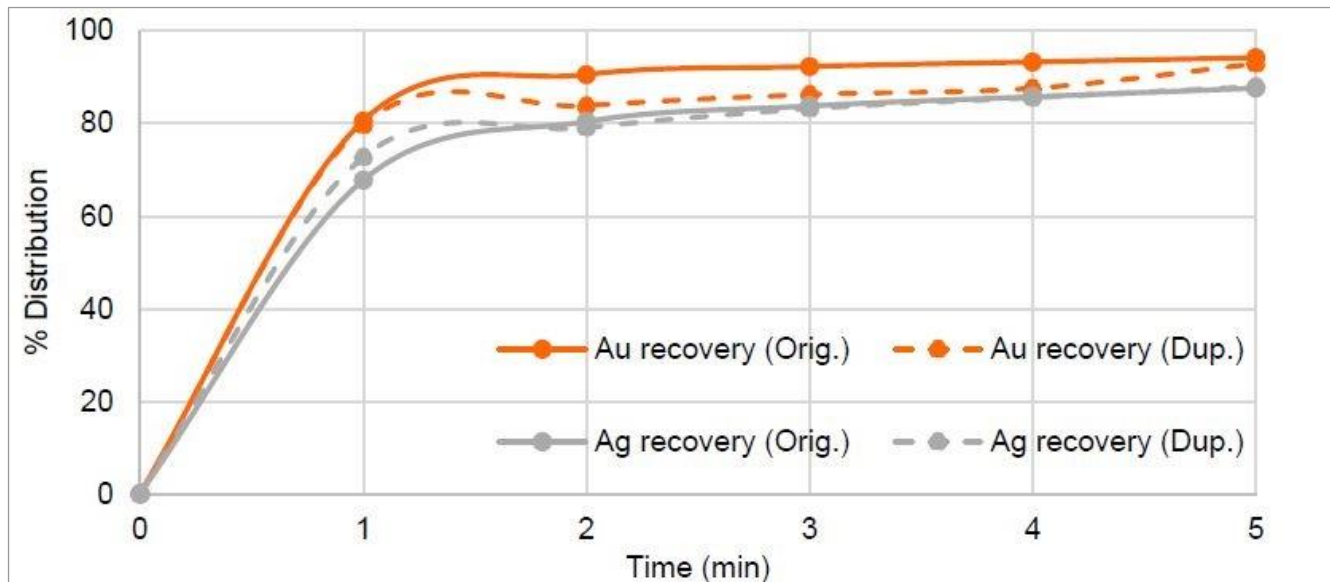
Use of froth flotation to recover gold and silver from ore was evaluated. Parameters for initial bulk flotation testing were obtained from previous testing of similar ore samples from the Sierra Madre trend where the Copalquin district is located. Grind size P<sub>80</sub> of 75 µm, general bulk-sulfide collectors, CuSO<sub>4</sub> as an activator for base-metal sulfides and a working pH of 8.2 were used.

Favorable results for gold and silver recovery were obtained. Kinetics were rapid (see Figure 13.2), with approximately 80% of gold and 68% of silver recovered in the first minute.

Overall recoveries achieved were as follows:

- For gold:
  - 94.2% - for sample #1
  - 92.9% - for sample #2 (duplicate)
- For silver:
  - 87.6% - for sample #1
  - 87.9% - for sample #2 (duplicate)

Figure 13.2 Bulk flotation kinetics – El Refugio Composite



Source: Mithril, 2023

### 13.5 Cyanide leaching

Leaching of flotation concentrate and tailings from the bulk flotation tests using NaCN solution was performed. Informed by previous testing of Copalquin samples (as with bulk flotation), pH of 10.5-11.5 and NaCN concentration of 0.1% for tailings tests and 1.0% for concentrate tests was used. Figure 13.3 and Figure 13.4 show gold and silver leaching extractions for duplicate tests using flotation concentrate and flotation tailings respectively.

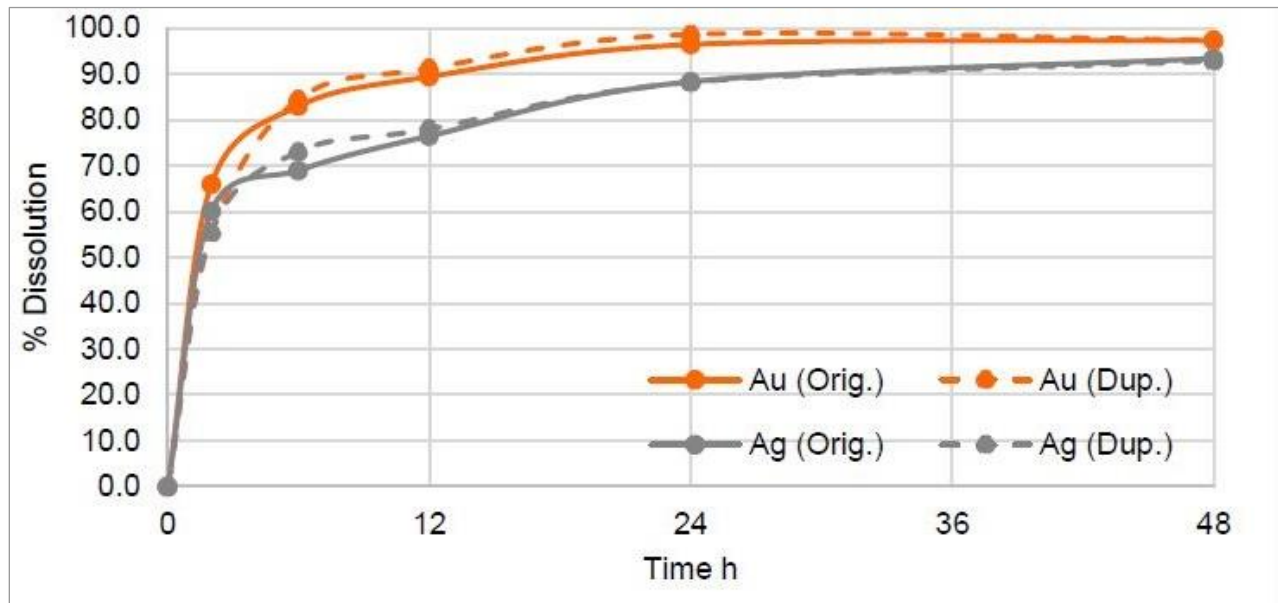
Gold extractions of 97.3% and 93.4% were achieved when leaching flotation concentrate for 48 hours. Gold extractions of 85.8% and 82.9% were achieved when leaching flotation tailings for 48 hours.

Silver extractions of 93.4% and 92.9% were achieved when leaching flotation concentrate for 48 hours. Silver extractions of 76.5% and 75.7% were achieved when leaching flotation tailings for 48 hours.

Consumption rate of NaCN for the tests was 10.35 kg/t and 10.15 kg/t for concentrate leaching and 0.30 kg/t and 0.41 kg/t for tailings leaching. Further test work is recommended to optimize reagent consumptions. The consumption for tailings leaching is typical for this process however the consumption for concentrate is quite high as it is for leaching high-grade concentrate.

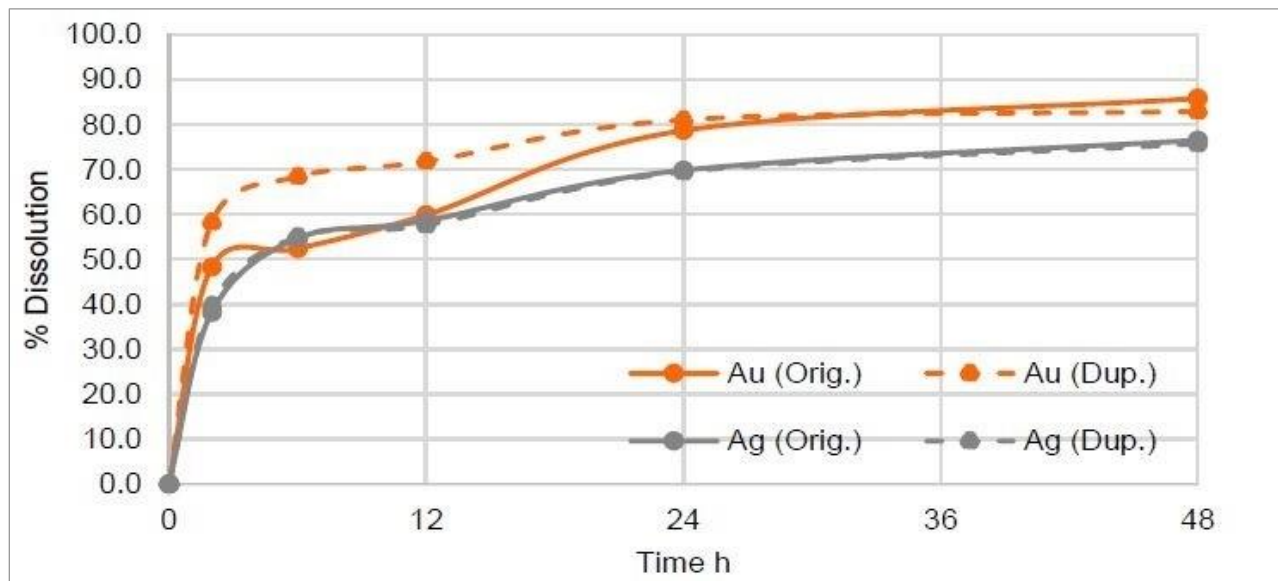
Consumption of CaO (customary reagent for pH control) was 0.26 kg/t and 0.29 kg/t for concentrate leaching and 0.33 g/t for both tailings duplicate tests. These consumption rates are low in the typical, commercial range for this process.

Figure 13.3 CN leaching of flotation concentrate – El Refugio Composite



Source: Mithril, 2023

Figure 13.4 CN leaching of flotation tailings – El Refugio Composite



Source: Mithril, 2023

### 13.6 Gravimetric concentration-flotation-leaching

Tests were conducted using the three recovery techniques sequentially as follows:

- Gravimetric concentration.
- Flotation of gravimetric tailings.
- CN leaching of flotation concentrate and CN leaching of flotation tailings.

Overall recovery of gold using a 24-hour leach was 98.1% and of silver was 89.5%. Overall recovery of gold using a 48-hour leach was 97.6% and of silver was 90.3%.

## 13.7 Conclusions

- The El Refugio Composite metallurgical sample reasonably represented the El Refugio deposit. Gold grade was 4.86 g/t Au, which reasonably approximated the average computed grade of the Indicated plus Inferred resources, which was 4.80 g/t Au.
- No unusually high concentrations of potentially deleterious elements were detected.
- High percentages of gold (98.1%) and silver (89.5%) are able to be extracted using gravimetric concentration, flotation and 24-hour cyanide leaching.
- Gravimetric concentration has reasonable prospects of being able to economically extract gold and silver from El Refugio ore. 59.0% of the gold and 24.4% of the silver were extracted using gravimetric concentration. Gold occurs as metallic, free gold and silver occurs as metallics and as acanthite ( $\text{Ag}_2\text{S}$ ) in veins with sulphide minerals – predominantly pyrite. Gold particle sizing in particular is quite coarse. 45.3% of gold and 5.2% of silver occur as metallic particles larger than 75  $\mu\text{m}$ .
- Flotation could be used to concentrate gold and silver to either produce a concentrate for sale or to produce a separate stream for further treatment. 93.6% average gold recovery and 87.8% average silver recovery were achieved. Gold recovery is high and can be expected to increase further with more testwork to optimize metallurgical parameters, making the prospects of inclusion of flotation in an economically viable treatment flowsheet a possibility.
- Cyanide leaching of flotation tailings achieved 84.4% gold extraction and 76.1% silver extraction in 48 hours of leaching time. Reagent consumptions were 0.36 kg/t for NaCN and 0.33 kg/t for CaO. These parameters are reasonable for CN leaching and can be expected to improve with further testing and optimization.
- Cyanide leaching of flotation concentrate achieved 95.4% extraction for gold and 93.2% for silver in 48 hours of leaching time. NaCN consumption was quite high due to the presence of sulphides in the concentrate. Further testing would be required to evaluate other methods and reagents to improve extractions and reduce reagent costs.
- Leaching kinetics were quite rapid with essentially all gold and silver extracted within 24 hours.
- Overall, there are reasonable prospects of eventual economic extraction of gold and silver from the mineralization from the Copalquin Project, provided that the El Refugio composite sample results represent the metallurgical responses of the entire Project. Drill core included in the composite appears to be drawn from throughout the El Refugio vein and to adequately represent it, however no conclusions regarding variability within the vein can be drawn. No samples were tested from other possible contributors to the Project.
- No comminution testing to determine amenability to crushing and grinding was undertaken. Operating costs and hence economic viability can be significantly affected by ore hardness and grindability.



## 14 Mineral Resource estimates

### 14.1 Introduction

The Mineral Resource estimates for the Copalquin deposit have been prepared by Mr Rodney Webster of AMC who takes responsibility for the estimate, Mithril provided AMC with the drillhole and assay data and wireframes for seven veins which were developed using Surpac software. These are listed in Section 14.3.

The result of the current estimate is summarized in Table 14.1. Mineral Resources are stated at a cut-off grade of 2 g/t AuEq, and the inputs are shown in the notes. The models are depleted for historical mining activities and the chosen cut-off was selected after a benchmarking exercise.

To address the reasonable prospects for eventual economic extraction, the QP ensured that all models were of mineable thickness and any classified material was contiguous. A 2 g/t AuEq cut-off was chosen to ensure all stated Mineral Resources were potentially mineable. The break-even cut-off grade of 2.0 g/t AuEq was based on benchmarked costs from mines with similar mining and processing type, size, and location with assumed mining costs of \$95/t. The QP is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially impact the Mineral Resource estimates. Mexico has a long and stable mining history and Mithril has relevant permits in place. La Soledad concession is valid and in force despite that lack of certificate. This concession is 6 ha and covers a strip of land located just NE of the La Soledad part of the Mineral Resource.

Table 14.1 Mineral Resource above 2 g/t AuEq cut-off at 30 November 2021

-	-	<b>Tonnes (kt)</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>AuEq (g/t)</b>	<b>Au (koz)</b>	<b>Ag (koz)</b>	<b>AuEq (koz)</b>
<b>Total</b>	<b>Indicated</b>	691	5.43	114.2	7.06	121	2,538	157
	<b>Inferred</b>	1,725	4.55	151.7	6.72	252	8,414	372

Notes:

- The Mineral Resources are stated according to the CIM Definition Standards (2014.).
- Effective date is 30 November 2021.
- Mineral Resources are considered to have reasonable prospects for eventual economic extraction.
- All figures are rounded to reflect the relative accuracy of the estimate and totals may not add correctly.
- $\text{AuEq g/t} = \text{Au g/t} + (\text{Ag g/t}/70)$  based on assumed prices of Au US\$1,798.34/oz and Ag US\$25.32/oz.
- Areas of previous mining have been removed.
- Metallurgical recoveries of 93% for Au and Ag used.
- A break-even cut-off grade of 2.0 g/t AuEq was used based on benchmarked costs from mines with similar mining and processing type, size, and location with assumed mining costs of \$95/t.

Source: AMC, 2023

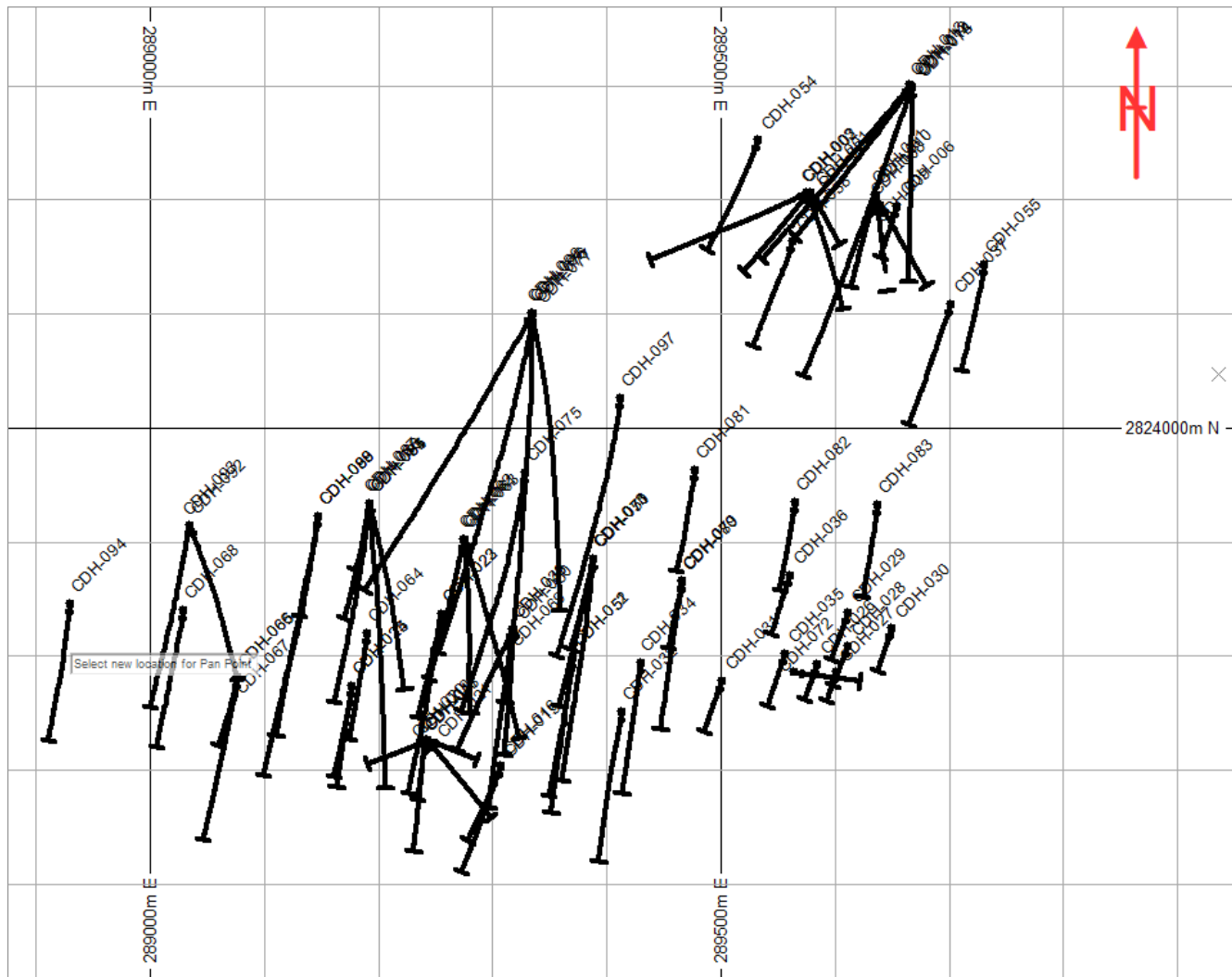
### 14.2 Drillholes data provided

The drillhole data was provided as the following files:

- 2021\_08\_24\_DHDensity.xlsx
- 2021\_11\_08\_DHCollars.xlsx
- 2021-11\_08\_DHSurveys.xlsx
- 2021\_1108\_Copalquin \_DH\_Geology.xlsx
- 2021\_9\_5\_DH Assays\_orig.xls
- 2021\_09\_05\_DHGeotech.xls

A total of 91 holes were used in the Mineral Resource estimate with the location of the holes used shown as a plan in Figure 14.1.

Figure 14.1 Location of drillholes



Source AMC, 2023

### 14.3 Sample statistics

The drillholes were sampled for gold and silver mainly on 1 m intervals. The samples were composited to 1 m for block grade estimation.

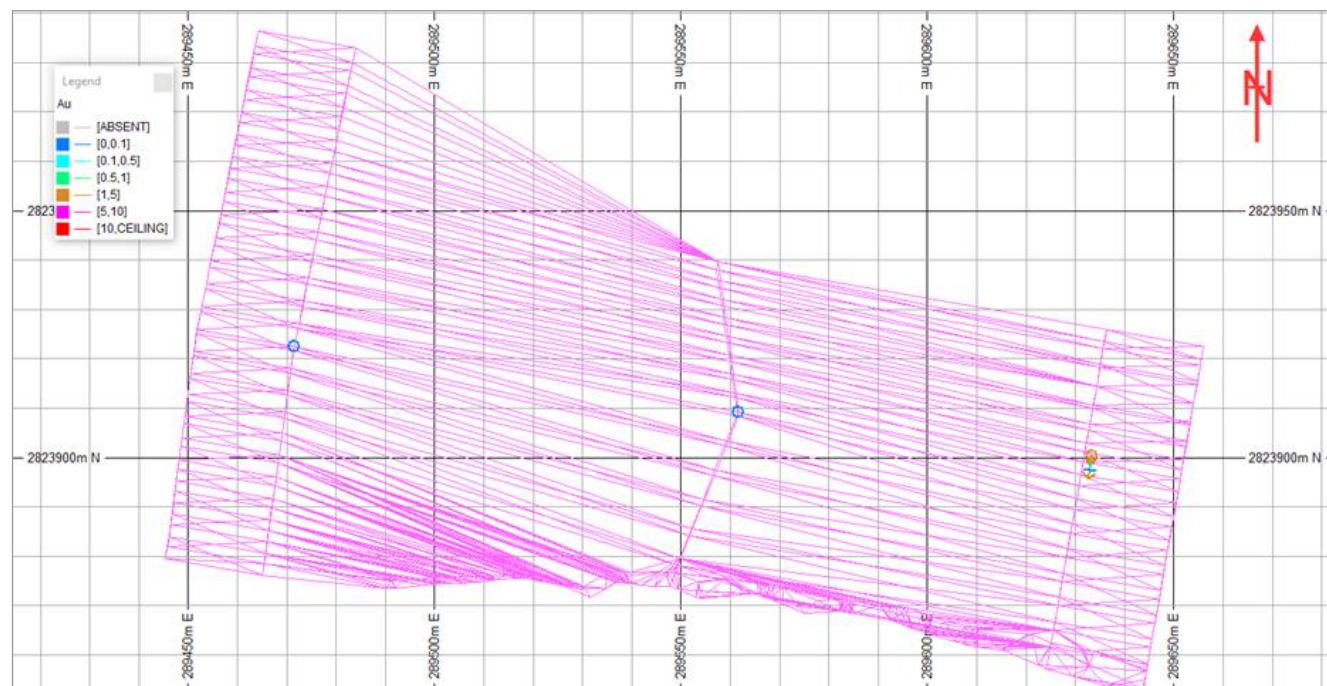
The area was divided into seven veins for Mineral Resource estimation. Mithril provided wireframes for the following veins to be used in the deposit modelling and resource estimation:

- Lina
- Refugio\_2
- Refugio\_3
- Refugio\_main
- Leon
- Soledad\_main
- Soledad\_mid

### 14.3.1 Lina Vein

The location of the Lina wireframe and drillhole samples located within the wireframe are shown in Figure 14.2.

Figure 14.2 Location of Lina Vein and intersected drillholes



Source AMC, 2023

The samples within the Lina Vein were composited to 1 m lengths. Based on log probability plots, no top-capping was applied. Table 14.2 shows the sample statistics for the raw assays and 1 m composited assays.

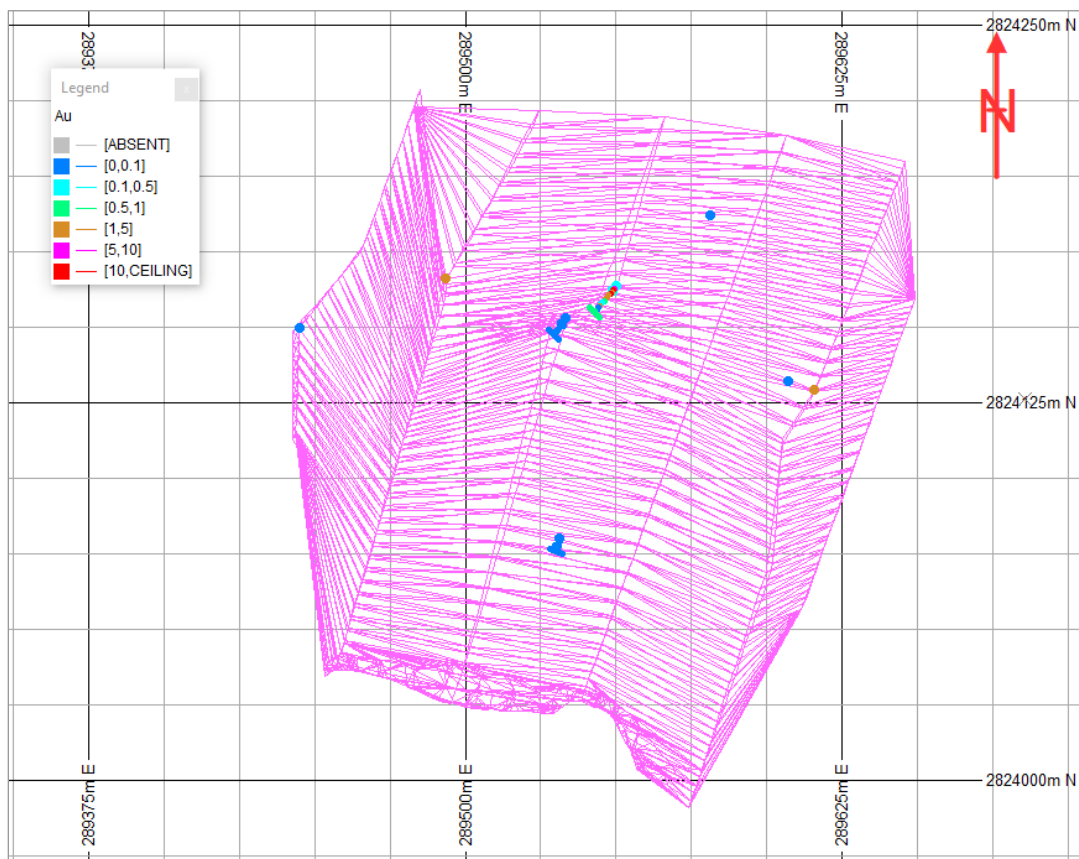
Table 14.2 Lina Vein sample statistics

-	Raw assays			1 m Composites		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	0.723	38.409	0.727	0.542	28.084	0.889
Median	0.825	33	0.5	0.38	15.25	0.95
Std Dev	0.52	32.00	0.398	0.5	29.613	0.196
Variance	0.271	1,024.04	0.158	0.25	876.92	0.039
Std Error	0.157	9.649	0.12	0.167	9.871	0.065
Coeff Var	0.72	0.833	0.547	0.922	1.054	0.221
Minimum	0.03	0.5	0.2	0.03	0.5	0.5
Maximum	1.29	87	1.4	1.29	87	1
No. samples	11	11	11	9	9	9

### 14.3.2 Leon Vein

The location of the Leon wireframe and drillhole samples located within the wireframe are shown in Figure 14.3.

Figure 14.3 Location of Leon Vein and intersected drillholes



Source AMC, 2023

The samples within the Leon Vein were composited to 1 m lengths. Based on log probability plots, top-capping of 20 g/t Au was applied. Table 14.3 shows the sample statistics for the raw assays and 1 m composited, top-capped assays.

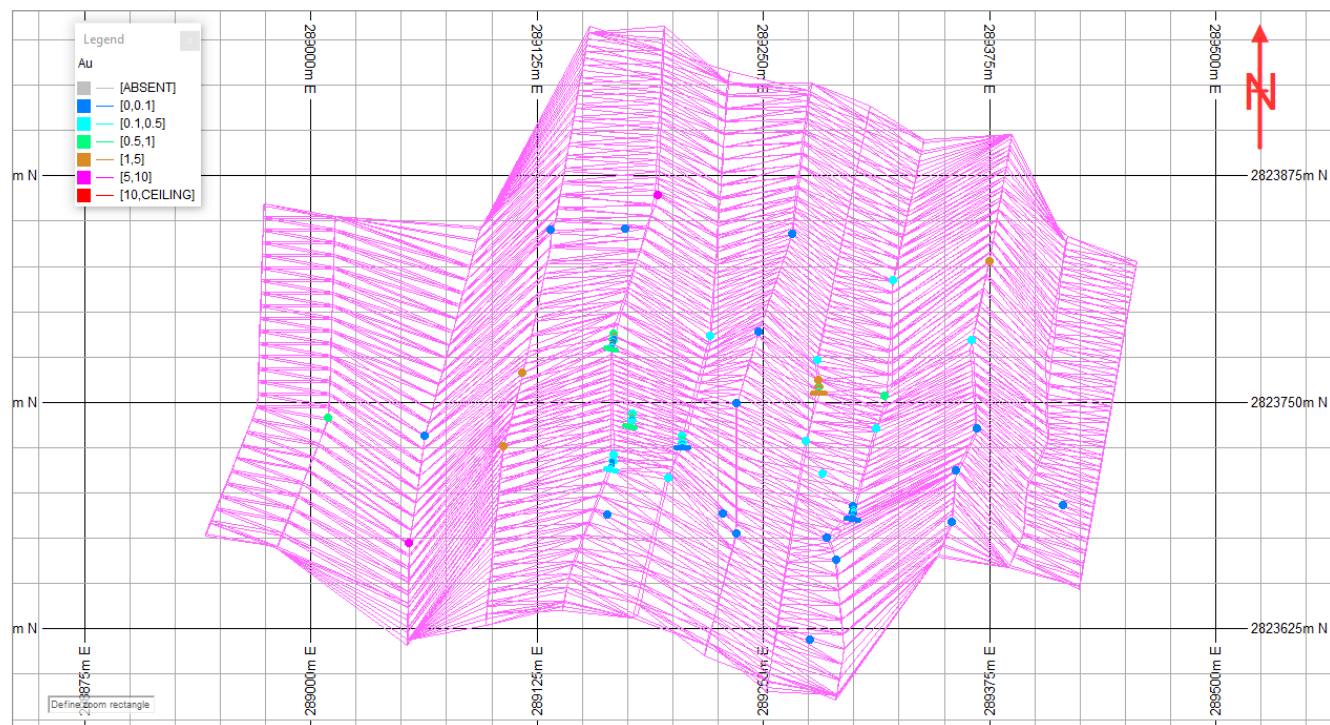
Table 14.3 Leon Vein sample statistics

-	Raw assays			1 m Composited top-capped		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	3.139	61.22	0.603	1.929	39.365	0.976
Median	0.005	1	0.5	0.005	0.84	1
Std Dev	8.048	118.896	0.334	4.334	82.354	0.088
Variance	64.774	14,136	0.111	18.787	6,782.22	0.008
Std Error	0.942	13.916	0.035	0.626	11.887	0.012
Coeff Var	2.564	1.942	0.554	2.247	2.092	0.09
Minimum	0	0	0.01	0	0	0.5
Maximum	57.1	497	1.32	20	343.352	1
No. samples	92	92	92	56	56	56

### 14.3.3 Refugio\_2 Vein

The location of the Refugio\_2 wireframe and drillhole samples located within the wireframe are shown in Figure 14.4.

Figure 14.4 Refugio\_2 Vein location and intersected drillholes



Source AMC, 2023

The samples within the Refugio\_2 Vein were composited to 1 m lengths. Based on log probability plots, top-capping of 20 g/t Au and 600 g/t Ag was applied. Table 14.4 shows the sample statistics for the raw assays and 1 m composited, top-capped assays.

Table 14.4 Refugio\_2 Vein sample statistics

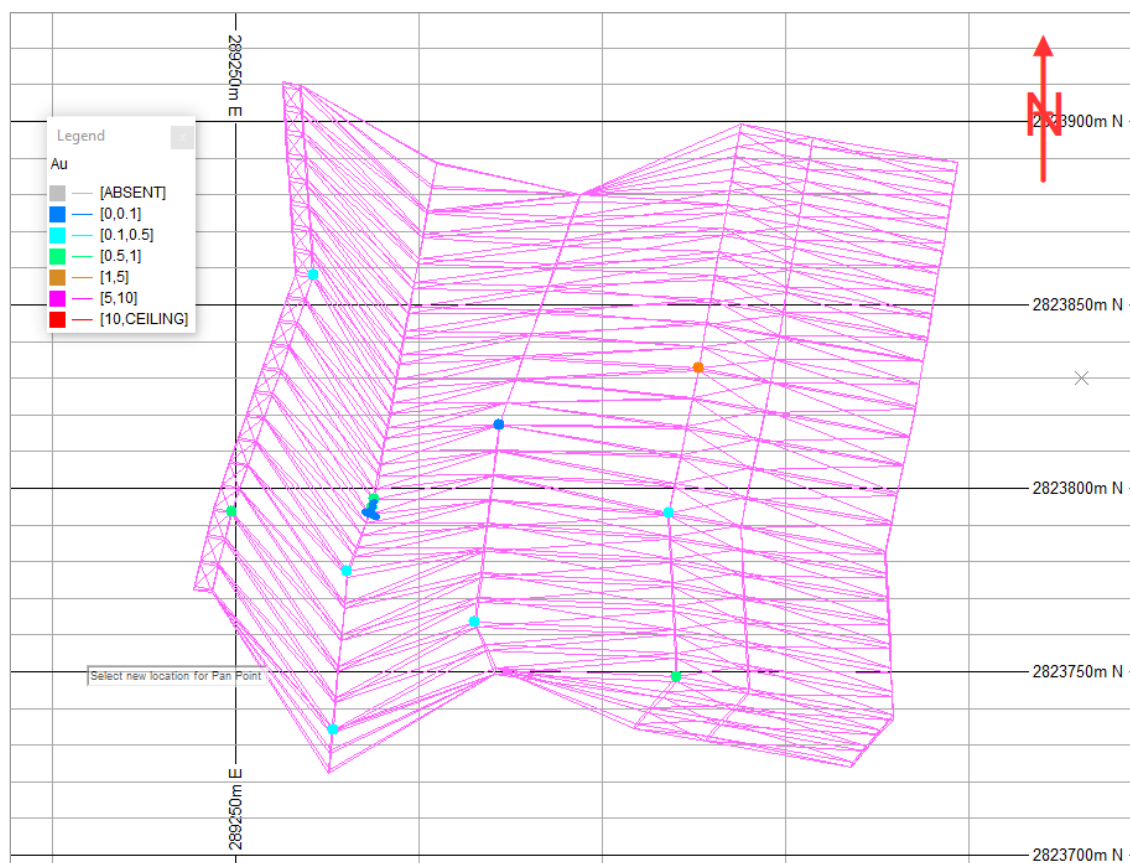
-	Raw assays			1 m Composited and top-capped		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	2.941	41.601	0.767	0.699	23.722	0.987
Median	0.1	4.6	0.9	0.116	5.25	1
Std Dev	43.876	363.197	0.31	2.021	63.39	0.067
Variance	1,925.13	131,912	0.096	4.083	4,018.30	0.004
Std Error	2.366	19.582	0.016	0.123	3.844	0.004
Coeff Var	14.92	8.73	0.404	2.889	2.672	0.067
Minimum	0	0	0.01	0	0	0.5
Maximum	814	6,680	1.5	20	600	1
No. samples	368	368	368	282	282	282



### 14.3.4 Refugio\_3

The location of the Refugio\_3 wireframe and drillhole samples located within the wireframe are shown in Figure 14.5.

Figure 14.5 Refugio\_3 Vein location and intersected drillholes



Source AMC, 2023

The samples within the Refugio\_3 Vein were composited to 1 m lengths. Based on log probability plots, no top-capping was applied. Table 14.5 shows the sample statistics for the raw assays and 1 m composited assays.

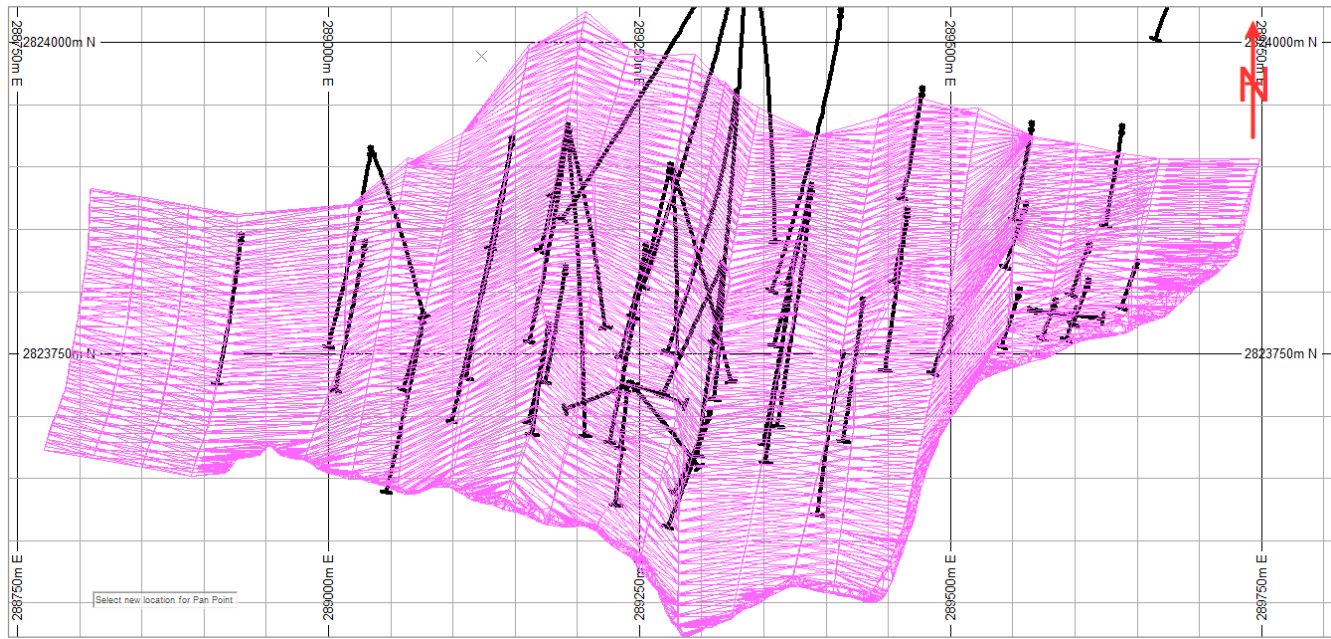
Table 14.5 Refugio\_3 Vein sample statistics

-	Raw assays			1 m Composited		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	2.489	51.213	0.744	0.759	22.704	0.969
Median	0.111	10	0.76	0.159	10	1
Std Dev	7.732	123.828	0.298	1.831	31.203	0.096
Variance	59.777	15,333	0.089	3.353	973.655	0.009
Std Error	1.238	19.828	0.048	0.34	5.794	0.018
Coeff Var	3.107	2.418	0.401	2.412	1.374	0.099
Minimum	0.003	0.5	0.01	0.003	0.5	0.6
Maximum	28.9	471	1.04	7.818	127.9	1
No. samples	39	39	39	29	29	29

### 14.3.5 Refugio\_main

The location of the Refugio\_main wireframe and drillhole samples located within the wireframe are shown in Figure 14.6.

Figure 14.6 Refugio\_main Vein location and intersected drillholes



Source AMC, 2023

The samples within the Refugio\_main Vein were composited to 1 m lengths. Based on log probability plots, top-capping of 200 g/t Au and 2,000 g/t Ag was applied. Table 14.6 shows the sample statistics for the raw assays and 1 m composited assays.

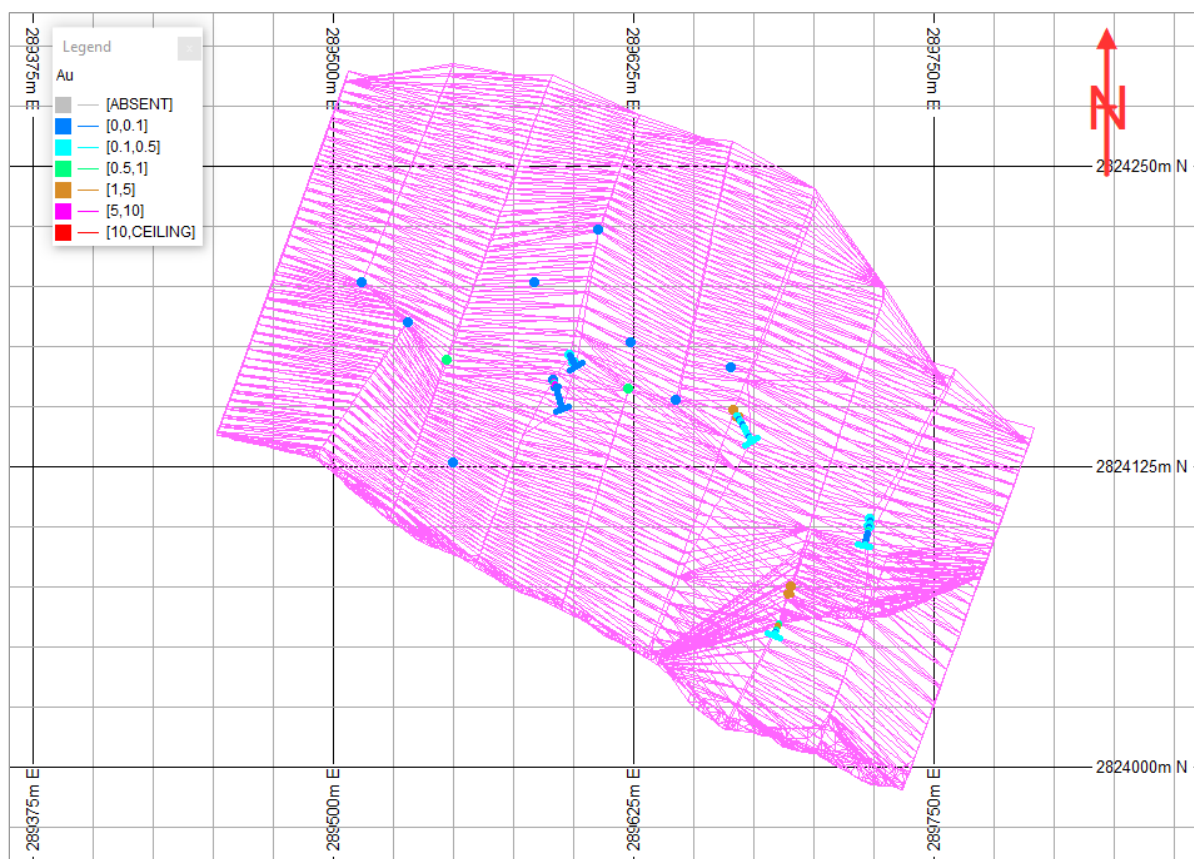
Table 14.6 Refugio\_main Vein sample statistics

-	Raw assays			1 m Composited top-capped		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	3.318	69.896	0.728	3.42	72.48	0.985
Median	0.45	15.9	0.775	0.54	19.30	1
Std Dev	19.88	235.051	0.346	15.18	182.85	0.072
Variance	395.216	55,248	0.12	230.48	37,191	0.005
Std Error	0.768	9.081	0.013	0.691	6.917	0.003
Coeff Var	5.991	3.363	0.476	4.54	2.66	0.073
Minimum	0.003	0.25	0.01	0.003	0.25	0.5
Maximum	287	2,900	3	200	2,000	1
No. samples	673	673	673	520	520	520

### 14.3.6 Soledad\_main

The location of the Soledad\_main wireframe and drillhole samples located within the wireframe are shown in Figure 14.7.

Figure 14.7 Soledad\_main Vein location and intersected drillholes



Source AMC, 2023

The samples within the Soledad\_main Vein were composited to 1 m lengths. Based on log probability plots, top-capping of 30 g/t Au and 3,000 g/t Ag was applied. Table 14.7 show the sample statistics for the raw assays and 1 m composited assays.

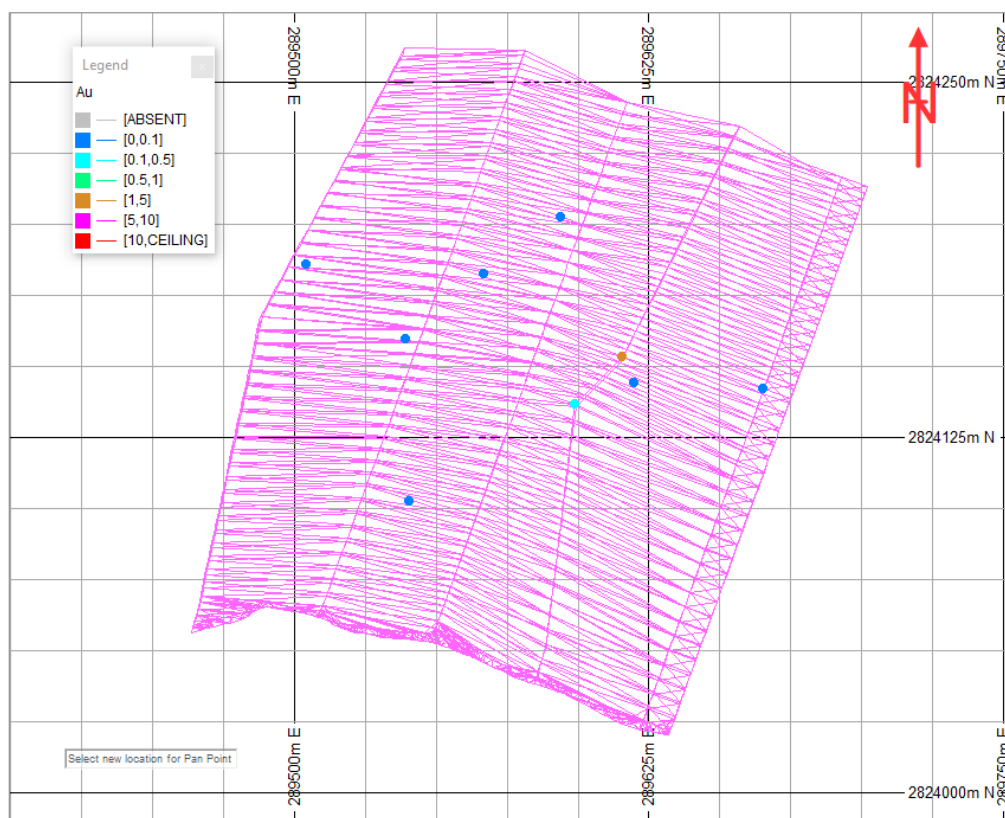
Table 14.7 Soledad\_main Vein sample statistics

-	Raw assays			1 m Composited top-capped		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	1.593	110.246	0.678	0.96	80.868	0.987
Median	0.025	1.3	0.5	0.052	3.3	1
Std Dev	7.943	615.291	0.316	3.458	365.894	0.077
Variance	63.098	378,583	0.1	11.96	133,878	0.006
Std Error	0.676	52.377	0.022	0.331	35.046	0.007
Coeff Var	4.986	5.581	0.466	3.603	4.525	0.078
Minimum	0	0	0	0	0	0.5
Maximum	88.4	6,750	1.54	30	3,000	1
No. samples	202	202	202	136	136	136

### 14.3.7 Soledad\_mid Vein

The location of the Soledad\_mid wireframe and drillhole samples located within the wireframe are shown in Figure 14.8.

Figure 14.8 Soledad\_mid Vein location and intersected drillholes



Source AMC, 2023

The samples within the Soledad\_mid Vein were composited to 1 m lengths. Based on log probability plots, no top-capping was applied. Table 14.8 shows the sample statistics for the raw assays and 1 m composited assays.

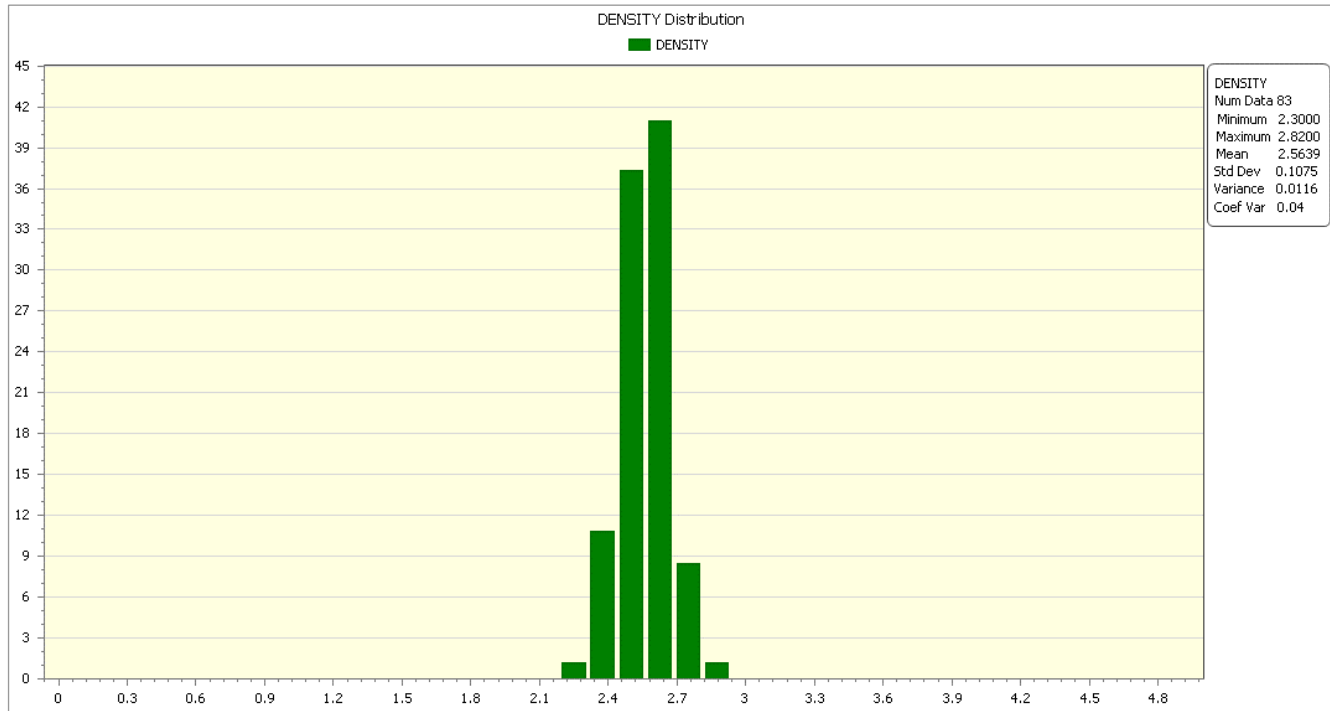
Table 14.8 Soledad\_mid Vein sample statistics

-	Raw assays			1 m Composited		
	Au (g/t)	Ag (g/t)	Length (m)	Au (g/t)	Ag (g/t)	Length (m)
Mean	1.116	48.65	0.593	1.154	61.874	0.932
Median	0.004	0.375	0.5	0.004	0.375	1
Std Dev	2.584	178.704	0.26	2.622	211.463	0.158
Variance	6.679	31,935	0.067	6.874	44,716	0.025
Std Error	0.564	38.996	0.045	0.677	54.6	0.034
Coeff Var	2.315	3.673	0.438	2.273	3.418	0.169
Minimum	0	0	0.04	0	0	0.5
Maximum	9.57	825	1	9.57	825	1
No. samples	33	33	33	21	21	21

## 14.4 Bulk density

A total of 83 samples were tested for bulk density using the Wax Immersion method. Figure 14.9 shows a histogram of the bulk density values ranging from 2.30 t/m<sup>3</sup> to 2.82 t/m<sup>3</sup> with a mean of 2.56 t/m<sup>3</sup>.

Figure 14.9 Bulk density values



Source AMC, 2023

Based on the data provided a constant value of 2.56 t/m<sup>3</sup> was used for the bulk density for Mineral Resource estimation for all mineralization.

## 14.5 Areas of previous mining

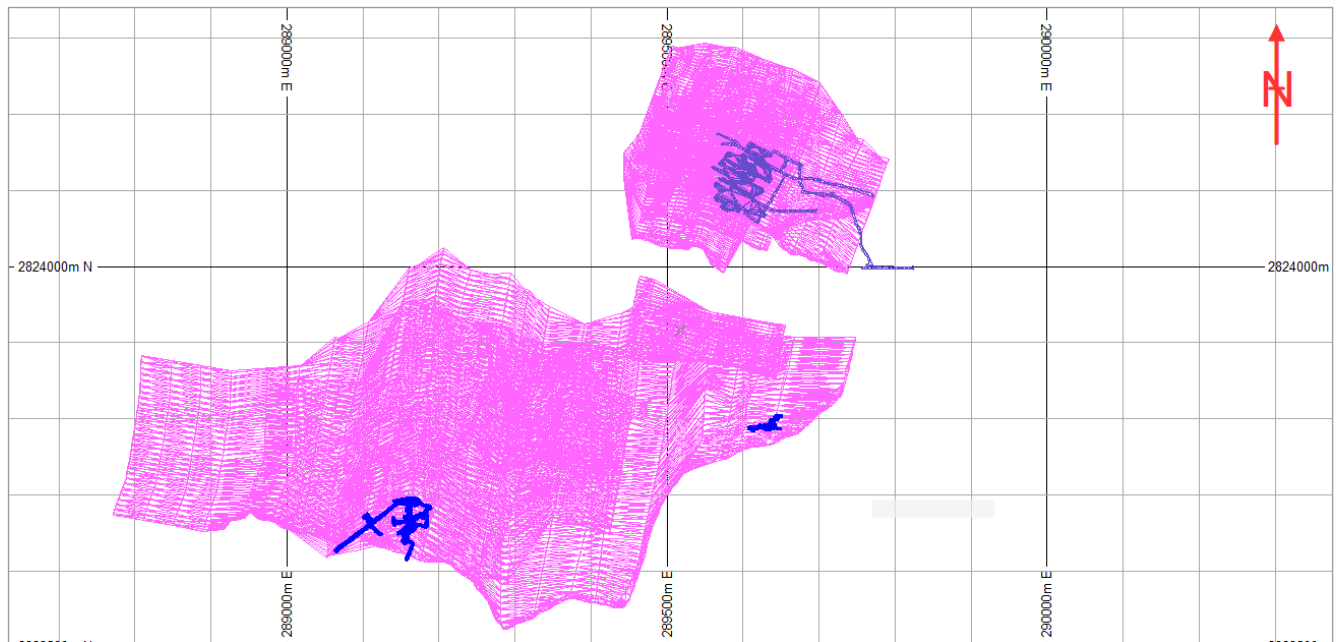
Three wireframes outlining areas of previous mining was provided in three separate files:

- 1 Cometa\_all.dxf
- 2 Refugio\_all.dxf
- 3 Soledad\_all.dxf

Figure 14.10 shows the areas of previous mining and wireframes of mineralization modelled. For resource estimation the areas of previous mining had the gold and silver grades set to zero, bulk density set to zero and labelled as MINED = 1.



Figure 14.10 Location of the areas mined



Note: Pink areas are the modelled wireframes and blue areas are the areas mined.

Source: AMC, 2023

#### 14.5.1 Block model parameters

The block model parameters used to model the deposit are listed in Table 14.9. The block sizes were selected based on the general drillhole spacing.

Table 14.9 Block model parameters

-	East (m)	North (m)	Vertical (m)
Origin	288,846	2,823,596	822
Block size	12	12	4
Number of blocks	81	64	126
Minimum sub-block size	2	2	1

#### 14.5.2 Estimation parameters

Block gold and silver grades were estimated using ordinary kriging with discretization of 5 E x 5 N x 5 RL points. The parameters used are shown in Table 14.10. Due to the limited sample data within each separate wireframe, semi-variogram analysis and search parameters were based on the results for Refugio\_main for Refugio\_main, Refugio\_2 and Refugio\_3. Soledad\_main variogram and search parameters were used for Soledad\_main, Soledad\_mid, Leon and Lina samples.

The search ellipse was increased for the second search pass by a factor of 1.5 and for the third search pass by 3, to ensure all blocks had grades estimated. There was no octant search.

The search ellipse radii and orientation were based on the results of a two-structured spherical variogram analysis (Table 14.10). The variogram parameters used are listed in Table 14.11.

Table 14.10 Estimation parameters

Zone	Search Radii			Rotation			No. Samples		Maximum samples per drillhole
	East (m)	North (m)	Vert. (m)	Z (°)	X (°)	Y (°)	Min.	Max.	
Refugio_main - Gold	100	100	10	-141	-27	-143	3	6	3
Refugio_main - Silver	100	100	10	-140	-27	-143	3	6	3
Soledad_main - Gold	150	70	10	-117	-65	145	3	6	3
Soledad_main - Silver	160	70	10	-117	-65	145	3	6	3

Table 14.11 Variogram parameters

Zone	Orientation			Nugget	Range 1			Sill 1	Range 2			Sill 2
	Z (°)	X (°)	Y (°)		East (m)	North (m)	Vert. (m)		East (m)	North (m)	Vert. (m)	
Refugio_main - Gold	-141	-27	-143	0.1	59	80	2.5	0.5	101	93	3	0.4
Refugio_main - Silver	-141	-27	-143	0.1	97	56	2	0.37	98	99	3	0.53
Soledad_main - Gold	-117	-65	145	0.1	81	58	1.5	0.5	157	73	2.5	0.54
Soledad_main - Silver	-117	-65	145	0.12	61	54	3	0.61	149	68	3.6	0.27

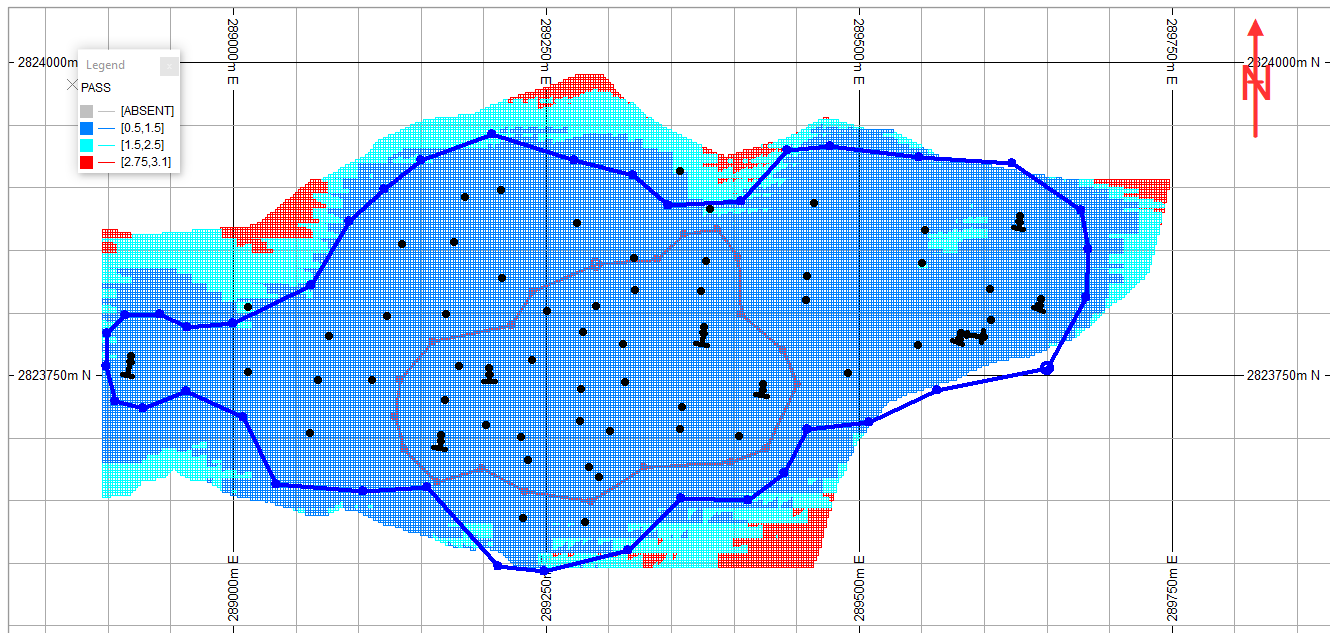
### 14.5.3 Mineral Resource classification

The deposit Mineral Resources was classified as Indicated or Inferred based on:

- Block grades for the Refugio\_main and Refugio\_2 wireframes were classified as Indicated where blocks were estimated on the first pass with drillholes less than 35 m apart.
- Block grades for the Refugio\_main and Refugio\_2 wireframes were classified as Inferred outside the Indicated area where samples were estimated on the first pass.
- Block grades for the other five wireframe were classified as Inferred where samples were estimated on the first pass.

Figure 14.11 is an example of the classification using the Refugio\_main model.

Figure 14.11 Resource classification



## Notes:

- Blocks coloured by pass as shown in the legend.
- Light blue line defines the limit to the Indicated Mineral Resource.
- Dark blue line defines the limit to the Inferred Mineral Resource.
- Black points are the drillholes.

Source: AMC, 2023

## 14.6 Economic considerations

### 14.6.1 Cut-off grade calculation

The cut-off grade used to state the Mineral Resources as of November 2021 is the result of a benchmark exercise based on other similar properties located in Mexico.

For the El Refugio and La Soledad Mineral Resource estimate, dated November 2021, the following assumptions were used to arrive at a cut-off of 2.0 g/t AuEq:

- Total of Mining, Processing, G&A cost = \$95
- Recoveries of 93% used for both Au and Ag
- Gold price \$1,700
- Cut-off estimate is  $((95/1,700 * 31.10348)/0.93) = 1.87$  g/t AuEq
- Cut-off grade used rounded up to 2.0 g/t AuEq

### 14.6.2 Gold equivalent

The gold equivalent formula was calculated as:

$$\text{AuEq g/t} = \text{Au g/t} + (\text{Ag g/t}/70)$$

The ratio is based on a gold price of US\$1,798.34. per ounce, a silver price of US\$25.32 per ounce resulting in a ratio of 71:1, however used 70:1. No allowance has been made for recovery and payable values.

## 14.7 Mineral Resource estimate

The estimated Mineral Resources above a 2 g/t AuEq cut-off and outside the areas of previous mining is shown in Table 14.12. Refugio Mineral Resources include Refugio\_main, Refugio\_2 and Refugio\_3 modelled veins whilst Soledad includes Soledad\_main, Soledad\_mid, Leon and Lina modelled veins.

Table 14.12 Mineral Resource above 2 g/t AuEq cut-off at 30 November 2021

-	-	Tonnes (kt)	Au (g/t)	Ag (g/t)	AuEq (g/t)	Au (koz)	Ag (koz)	AuEq (koz)
Refugio	Indicated	691	5.43	114.2	7.06	121	2,538	157
	Inferred	1,447	4.63	137.1	6.59	215	6,377	307
Soledad	Indicated	0	0.00	0.0	0.00	0	0	0
	Inferred	278	4.12	228.2	7.38	37	2,037	66
<b>Total</b>	<b>Indicated</b>	<b>691</b>	<b>5.43</b>	<b>114.2</b>	<b>7.06</b>	<b>121</b>	<b>2,538</b>	<b>157</b>
	<b>Inferred</b>	<b>1,725</b>	<b>4.55</b>	<b>151.7</b>	<b>6.72</b>	<b>252</b>	<b>8,414</b>	<b>372</b>

Notes:

- The Mineral Resources are stated according to the CIM Definition Standards (2014).
- Effective date is 30 November 2021.
- Mineral Resources are considered to have reasonable prospects for eventual economic extraction.
- All figures are rounded to reflect the relative accuracy of the estimate and totals may not add correctly.
- AuEq=Au+Ag/70 based on assumed prices of Au US\$1,798.34/oz and Ag US\$25.32/oz.
- Areas of previous mining have been removed.
- Metallurgical recoveries of 93% Au and Ag were used.
- A break even cut-off grade of 2.0 g/t AuEq was used based on costs from mines with similar mining and processing type, size, and location with assumed mining costs of \$95/t.

### 14.7.1 Grade tonnage curves

The tonnes, gold and AuEq grades are shown as a grade tonnage plot in Figure 14.12 for Indicated Mineral Resource and Figure 14.13 for Inferred Mineral Resource.

Figure 14.12 Grade – Tonnage curve Indicated

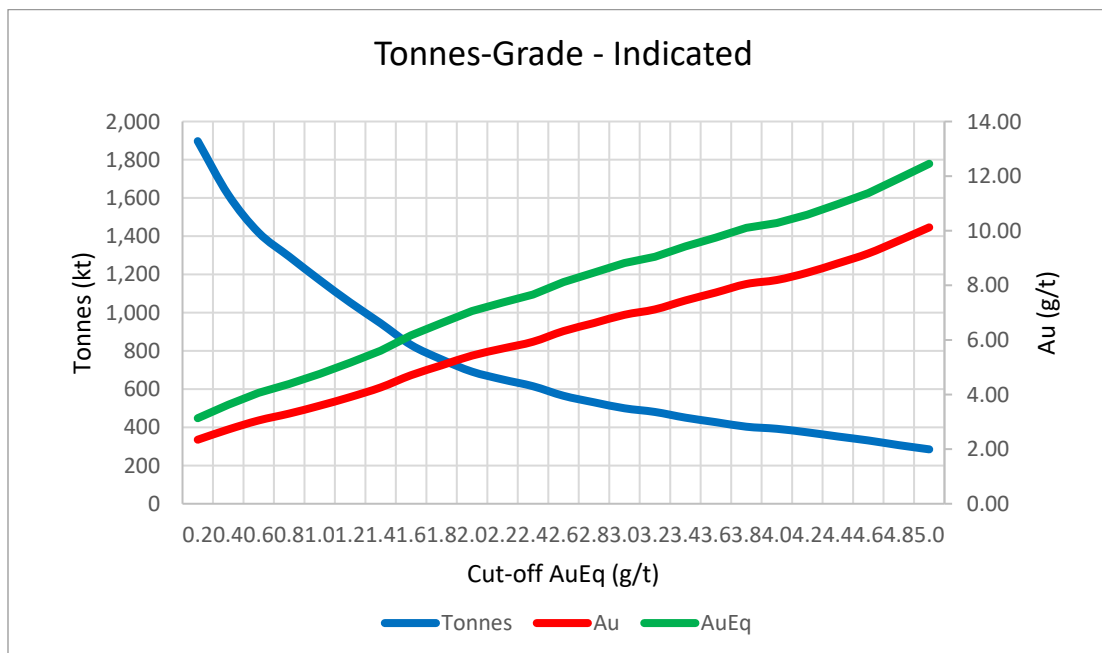
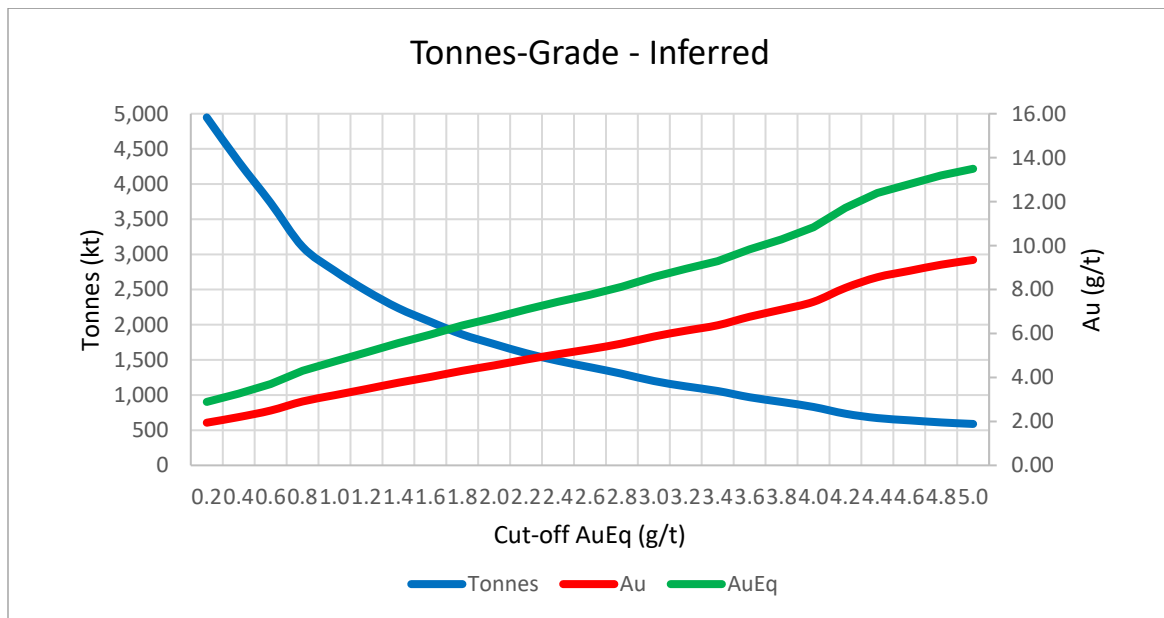


Figure 14.13 Grade – Tonnage curve Inferred

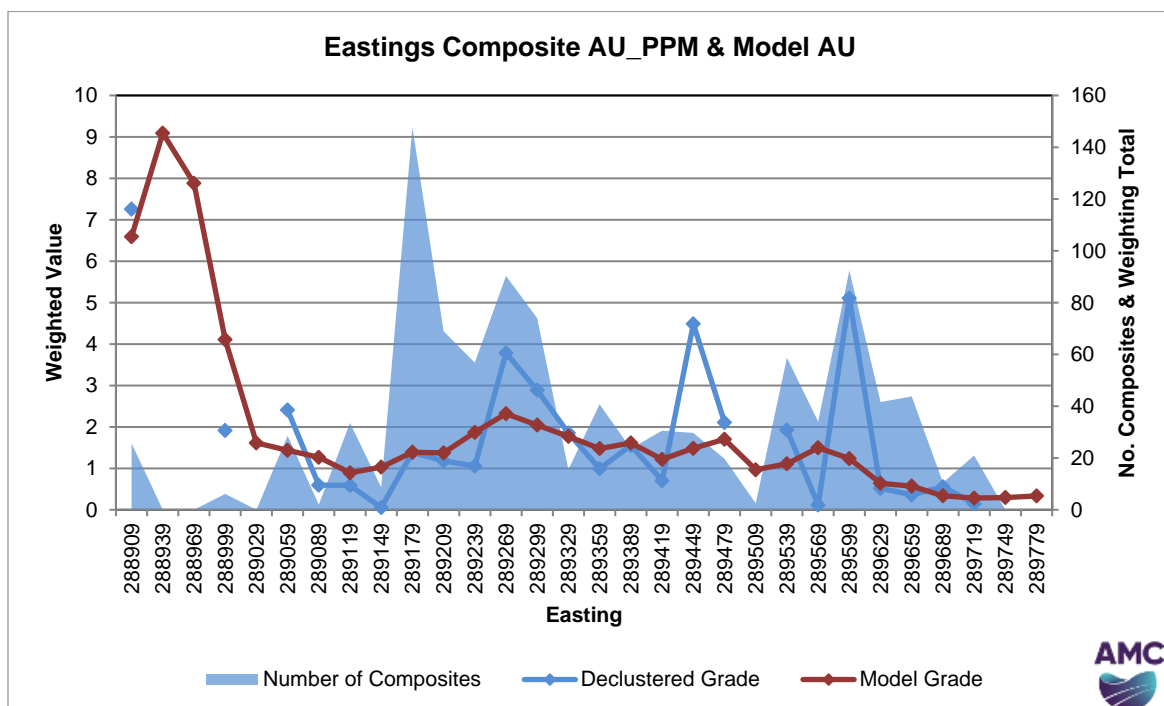


Source: AMC, 2023

### 14.7.2 Model validation

The block model grades were compared to the drillhole sample data along cross sections and long-sections. Good correlation was noted. Swath plots were prepared by the QP for the gold and silver block grades compared to the drillhole sample grades which showed good correlation. Figure 14.14 shows an example of a SWATH plot for gold.

Figure 14.14 Gold - East-West SWATH plot



Source: AMC, 2023



## 15 Mineral Reserve estimates

There are no Mineral Reserves reported so this section is not applicable to this Technical Report.

## 16 Mining methods

This section is not applicable to this Technical Report.

## 17 Recovery methods

This section is not applicable to this Technical Report.

## 18 Project infrastructure

This section is not applicable to this Technical Report.

## 19 Market studies and contracts

This section is not applicable to this Technical Report.

## 20 Environmental studies, permitting, and social or community impact

This section is not applicable to this Technical Report.



## 21 Capital and operating costs

This section is not applicable to this Technical Report.

## 22 Economic analysis

This section is not applicable to this Technical Report.

## 23 Adjacent properties

No adjacent properties are considered relevant to the Property.

## 24 Other relevant data and information

The QP is unaware of any additional information or data that is relevant to the Property that would make the report more understandable and not misleading.

## 25 Interpretation and conclusions

This Technical Report provides details of the exploration work to date within the Property which includes a maiden Mineral Resource estimate at one of the targets. This disclosure includes preliminary metallurgical test work on that target. Initial drill testing of several additional target areas across the Property, soil sampling programs and geologic mapping have also been completed and are described. The majority of the drilling has focussed on El Refugio / Cometa and La Soledad areas with early-stage drilling at Los Reyes, Los Pinos, San Manuel, La Montura, and El Gallo. Figure 25.1 shows the mining concession area and areas of exploration.

Exploration and drilling procedures follow common industry practice. Results of QA/QC programs are deemed acceptable by the QP. The collection of data informing the Mineral Resource is adequate. Despite this, geological risk is always present in a maiden Mineral Resource as additional exploration may not upgrade the Mineral Resource and continuity may be downgraded.

The Mineral Resource is defined by exploration drilling and a 2 g/t AuEq cut-off was chosen to ensure all stated Mineral Resources were potentially mineable. Indicated Mineral Resources comprise 691,000 tonnes grading 5.43 g/t gold and 114.2 g/t silver; and Inferred Mineral Resources comprise 1.725 million tonnes grading 4.55 g/t gold and 151.7 g/t silver. Mr Rodney Webster, MAIG, of AMC Consultants takes responsibility for these estimates.

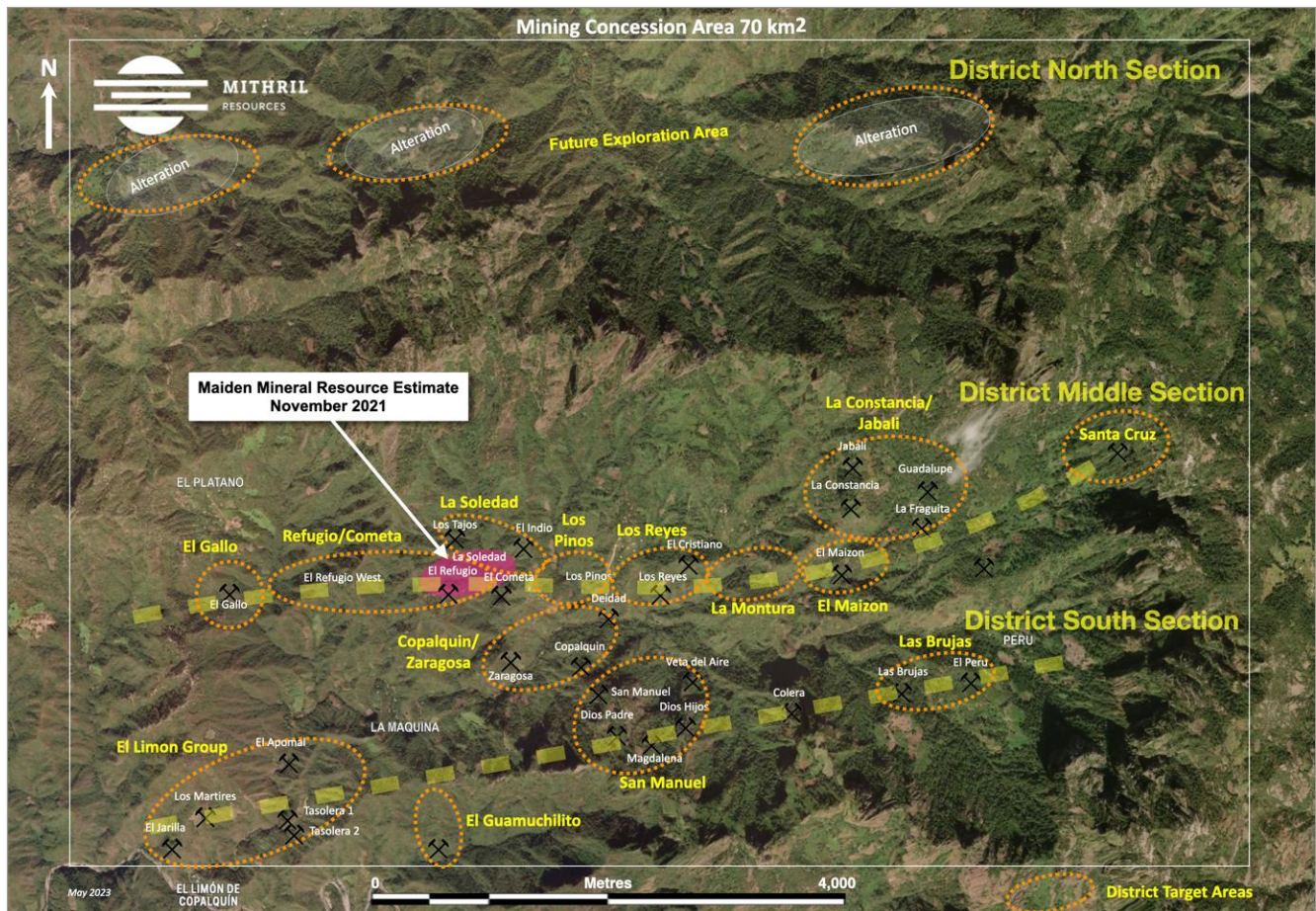
To address the reasonable prospects for eventual economic extraction, the QP ensured that all models were of mineable thickness and any classified material was contiguous.

The QP is not aware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially impact the Mineral Resource estimates. Mexico has a long and stable mining history and Mithril has relevant permits in place. La Soledad concession is valid and in force despite that lack of certificate. This concession is 6 ha and does not overlap the Mineral Resource area.

A preliminary metallurgical test program has been completed on drill core from drilling at the El Refugio area where Mineral Resources have been reported. A composite sample was tested to investigate response to gravity followed by flotation and cyanidation.

The QPs do not see any reasonably foreseeable impacts of the above risks and uncertainties to the project's potential economic viability.

Figure 25.1 Areas of exploration within the Property



Source: Mithril, 2023



## 26 Recommendations

The exploration work to date on the Property together with the maiden Mineral Resource estimate at the El Refugio target area and the widespread historic mines and workings, supports continued exploration at several target areas on the Property.

### 26.1 Exploration and resource drilling

The following work is recommended to improve the 2021 Mineral Resource estimate at the El Refugio target and to further test the known mineralization immediately along strike:

- Drilling on the eastern (Cometa) portion of the Refugio deposit.
- Drilling on the western Refugio area including down dip of the western most hole and several holes near CDH-140 and CDH-094. Some helicopter support may be required in this area.
- Drilling of two holes at the Los Reyes target area to step off holes CDH-040 and CDH-041 to the south where there is currently no drilling.
- Further follow-up drilling at the Cometa area including some deep drilling to target the central and deep part of Refugio.

### 26.2 Development recommendations

Development recommendations include:

- Additional drilling for metallurgical work and geotechnical evaluation for El Refugio.
- More detailed metallurgical test work.
- Update topography using a Lidar survey.

### 26.3 Recommended budget

The proposed exploration budget for resource drilling and support is given in Table 26.1.

Table 26.1 Proposed drilling budget

Item	Unit	Quantity	Cost estimate (US\$)
Core Drilling El Cometa	m	1,050	178,500
Core Drilling Refugio West	m	1,825	310,250
Core Drilling Los Reyes	m	300	51,000
Core Drilling Refugio / Cometa	m	2,005	340,850
Core Drilling Additional	m	500	85,000
Lidar Survey	-	-	50,000
Helicopter	-	-	38,000
Administration and Labour	-	-	180,000
<b>Total</b>	-	-	<b>1,233,600</b>

Source: Mithril, 2023

The proposed budget for metallurgical test work is given in Table 26.2.

Table 26.2 Proposed Metallurgical test work budget

Item	Description	Cost estimate (US\$)
Core drilling	To provide whole core for metallurgy and geotechnical	85,000
Comminution	Unconfined compressive strength, crushing, grinding and abrasion indices	15,000
Flotation & cyanidation	Optimization work	25,000
Variability testing	Testing of different veins	25,000
Composite test work	Testing composite samples from other target areas	20,000
<b>Total</b>	-	<b>170,000</b>

Source: Mithril, 2023

## 27 References

Bustamente, 1976.

Camprubi, A., Ferrari, L., et al 2003, Ages of Epithermal Deposits in Mexico: Regional Significance and Links with the Evolution of Tertiary Volcanism, *Economic Geology* vol. 98, 2003, pp 1,029 - 1,037.

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## 28 QP Certificates

### CERTIFICATE OF AUTHOR

I, Rodney Webster, MAIG, of Melbourne, Australia, do hereby certify that:

- 1 As of the effective date of this report, I was employed as a Principal Geologist with AMC Consultants Pty Ltd with an office at Level 29, 140 William Street, Melbourne, Victoria 3000, Australia. As of 21 July 2023, I am self-employed with an office at 56 McMahon Avenue, Anglesea, Victoria Australia, 3230.
- 2 This certificate applies to the Technical Report titled "Copalquin Property Mineral Resource Estimate", with an effective date of 18 July 2023, (the "Technical Report") prepared for Mithril Resource Ltd and Newrange Gold Corp. ("the Issuer").
- 3 I am a graduate with a Bachelor of Applied Science (Applied Geology) from Royal Melbourne Institute of Technology in 1979. I am a member of the Australian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. I have over 40 years of experience and acted as the Competent/Qualified person for reporting of Mineral Resources under International reporting codes on a large number of projects. I have worked in resource and reserve estimation (using geostatistical and other methods) and carried out reviews, audits, valuations and reconciliations. My experience covers all facets of general geology, but has focused on deposit evaluation, from initial drilling through to deposit definition and Mineral Resource estimation.  
I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 4 I have not visited the Property.
- 5 I am responsible for Sections 2-6, 8, 9, 11, 14-24, and 27 and parts of 1, 25, and 26 of the Technical Report.
- 6 I am independent of the Issuer and related companies applying all of the tests in Section 1.5 of the NI 43-101. As per Exchange Policy requirement (Appendix 3F) the QP is also independent of the Vendor and the Property.
- 7 I have not had prior involvement with the property that is the subject of the Technical Report.
- 8 I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 9 As of the effective date of the Technical Report and the date of this certificate, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: 18 July 2023

Signing Date: 27 July 2023

*Original signed by*

\_\_\_\_\_  
Rodney Webster, MAIG  
Principal Geologist

## CERTIFICATE OF AUTHOR

I, José A. Olmedo, SME CP, of Valle de Mexico, do hereby certify that:

- 1 I am currently an Independent Consultant with an office at Valle de Mexico 26, Loma de Valle Escondida, Atizapan, 52930 Estado de Mexico.
- 2 This certificate applies to the Technical Report titled "Copalquin Property Mineral Resource Estimate with an effective date of 18 July, (the Technical Report) prepared for Mithril Resources Ltd and Newrange Gold Corp. ("the Issuer").
- 3 I have a bachelor's degree in Geological Engineering from Universidad Nacional Autónoma de México with Professional ID #598612; Master of Science Degree in Mineral Exploration (Minex Program) from McGill University, Montreal, Canada, and several diplomas in Business Administration, International Business, and Economic Geology from different national and international institutions. I am certified as Valuator of Mineral Properties for the Imperial College, London, UK, and certified as Financial Analyst and Enterprise Valuator for CFI (Corporate Finance Institute, Vancouver, Canada. I am a Registered Member in good standing of SME (Society for Mining, Metallurgy & Exploration Engineers USA), registration number 426799RM. and an active member of the AIMMGM (Asociación de Ingenieros de Minas, Metalurgistas y Geólogos de México) #15655. I have been actively involved for 44 years with national and international corporations in mineral exploration and economic assessment of mineral properties of different styles of mineralization. This includes porphyry related projects as per the Copalquin Project that is the subject of the Technical Report. My performance is results oriented, with start-up expertise and have proved successful in project management, technical reporting, corporate finances, and strategic planning.  
I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 4 I have carried out a personal inspection of the Property from 7 to 10 August 2021.
- 5 I am responsible for Sections 7, 10, and 12, and parts of 1, 25, and 26 of the Technical Report.
- 6 I am independent of the Issuer and related companies applying all of the tests in Section 1.5 of the NI 43-101. As per Exchange Policy requirement (Appendix 3F) the QP is also independent of the Vendor and the Property.
- 7 I have not had prior involvement with the property that is the subject of the Technical Report.
- 8 I have read NI 43-101 and the section of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101.
- 9 As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the section of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: 18 July 2023

Signing Date: 25 July 2023

*Original signed by*

\_\_\_\_\_  
José A. Olmedo, SME CP 426799RM  
Independent Consultant



## CERTIFICATE OF AUTHOR

I, Robert Chesher, FAusIMM (CP), RPEQ, MTMS, of Brisbane, Australia, do hereby certify that:

- 1 I am currently employed as a Principal Consultant with AMC Consultants Pty Ltd, with an office at Level 15, 100 Creek Street, Brisbane Qld 4000, Australia.
- 2 This certificate applies to the Technical Report titled "Copalquin Property Mineral Resource Estimate", with an effective date of 18 July, (the "Technical Report") prepared for Mithril Resource Ltd. and Newrange Gold Corp. ("the Issuer").
- 3 I am a graduate of University of Queensland in Saint Lucia, Australia (BA Science in Metallurgical in 1977). I am a Fellow in good standing of the Australian Institute of Mining and Metallurgy (AusIMM) and am accredited as a Chartered Professional of the AusIMM in the discipline of Metallurgy (License #311429). I am a Registered Professional Engineer of Queensland (RPEQ #24758). I have practiced my profession continuously since 1977. My expertise is in corporate and technical (metallurgical) consulting, focusing on operational and performance reviews, improvements, and optimization.  
I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 4 I have not visited the Property.
- 5 I am responsible for Section 13, and parts of 1, 25, and 26 of the Technical Report.
- 6 I am independent of the Issuer and related companies applying all of the tests in Section 1.5 of the NI 43-101. As per Exchange Policy requirement (Appendix 3F) the QP is also independent of the Vendor and the Property.
- 7 I have not had prior involvement with the property that is the subject of the Technical Report.
- 8 I have read NI 43-101 and the sections of the Technical Report for which I am responsible has been prepared in compliance with NI 43-101.
- 9 As of the effective date of the Technical Report, to the best of my knowledge, information, and belief, the section of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Effective Date: 18 July 2023

Signing Date: 1 August 2023

*Original signed by*

\_\_\_\_\_  
Robert Chesher, FAusIMM (CP), RPEQ, MTMS  
Principal Consultant  
AMC Consultants Pty Ltd

## Our offices

### Australia

#### Adelaide

Level 1, 12 Pirie Street  
Adelaide SA 5000 Australia

T +61 8 8201 1800  
E [adelaide@amcconsultants.com](mailto:adelaide@amcconsultants.com)

#### Melbourne

Level 29, 140 William Street  
Melbourne Vic 3000 Australia

T +61 3 8601 3300  
E [melbourne@amcconsultants.com](mailto:melbourne@amcconsultants.com)

### Canada

#### Toronto

140 Yonge Street, Suite 200  
Toronto ON M5C 1X6 Canada

T +1 647 953 9730  
E [toronto@amcconsultants.com](mailto:toronto@amcconsultants.com)

### Singapore

#### Singapore

9 Straits View  
#05-07 Marina One (West Tower)  
Singapore 018937

T +65 3157 9130  
E [singapore@amcconsultants.com](mailto:singapore@amcconsultants.com)

#### Brisbane

Level 15, 100 Creek Street  
Brisbane Qld 4000 Australia

T +61 7 3230 9000  
E [brisbane@amcconsultants.com](mailto:brisbane@amcconsultants.com)

#### Perth

Level 1, 1100 Hay Street  
West Perth WA 6005 Australia

T +61 8 6330 1100  
E [perth@amcconsultants.com](mailto:perth@amcconsultants.com)

#### Vancouver

200 Granville Street, Suite 202  
Vancouver BC V6C 1S4 Canada

T +1 604 669 0044  
E [vancouver@amcconsultants.com](mailto:vancouver@amcconsultants.com)

### United Kingdom

#### Maidenhead

Registered in England and Wales  
Company No. 3688365  
Building 3, 1st Floor  
Concorde Park, Concorde Road  
Maidenhead SL6 4BY United Kingdom

T +44 1628 778 256  
E [maidenhead@amcconsultants.com](mailto:maidenhead@amcconsultants.com)

Registered Office:  
The Kinetic Centre  
Theobald Street  
Elstree  
Hertfordshire WD6 4PG United Kingdom