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# Technical Report

## **Santa Ana Property Mineral Resource Estimate** Outcrop Silver and Gold Corporation

### **Tolima Department, Colombia**

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

#### Qualified Persons:

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AMC Project 0723022

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## 1 Summary

### 1.1 Introduction

AMC Mining Consultants (Canada) Ltd. (AMC) has prepared this technical report on the Santa Ana silver and gold project at the request of Outcrop Silver & Gold Corporation ("Outcrop" TSX.V:OCG, OTC.QX:OCGSF, DB.MRG1) a Canadian company based in Vancouver, British Columbia. This report is intended to present the initial resource estimate and a technical summary for the Santa Ana Project. It has been prepared in accordance with the disclosure requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), to disclose relevant information about the property.

This Technical Report is required to be filed pursuant to NI 43-101 in connection with the initial resource statement announced for the Santa Ana Project by Outcrop.

The issuer, is Outcrop ("Outcrop" TSX.V:OCG, OTC.QX:OCGSF, DB.MRG1).

### 1.2 Property description and ownership

The Santa Ana Project is located in the Municipality of Falán, Tolima Department, Colombia. The property is approximately 15 kilometres (km) south-east of the town of Mariquita, and 190 km north-east of Bogota. The latitude and longitude of the Santa Ana Project are approximately 3°10'40" N and 76°15'44" W, respectively, and is located on Sheet number 300 IV-C and 321 II-A from Instituto Geográfico Agustín Codazzi (IGAC). Outcrop has 100% ownership of the Santa Ana Project concessions. The Project is subject to non-overlapping 2% net smelter return (NSR) royalties payable to the original vendors. Outcrop has the right to purchase 1% of the royalties at any time.

José Olmedo, SME CP, conducted a site visit of the property in May 2023.

### 1.3 Geology and mineralization

The Project area is located in the Cajamarca-Valdivia (CA-VA) Terrane which consists of highly deformed gneisses and schists, which are overlain by younger supra-crustal rocks and later intruded by plutons of various ages (e.g., the Cenozoic age El Hatillo Stock west of the property). The CA-VA terrane finishes to the north-west by the Palestina fault and to the east by the Otú-Pericos fault (OP).

The Santa Ana Project is underlain by a series of dark grey to green-grey graphitic and pyritic schists, which comprise part of the Cajamarca Formation, and display a strong northerly trending foliation. In the northern part of the property, the late Pliocene Mesa formation comprising conglomerates and sandstones, unconformably overlies the Cajamarca Formation.

There have been few geological studies on the Cajamarca Formation. Observations suggest it is part of a more regional rifted terrain that was subsequently accreted and subjected to multi-phase deformation, in a process like that within a fold-thrust sequences.

Surface and underground observations on and around Santa Ana indicate the Cajamarca Formation has been folded by at least two deformational episodes.

The regional geology has been affected by the Romeral Fault System (RFS) and its interaction with the eastern portion of the OP. Lineament analysis indicates two major strike-slip events bounded by the primary RFS: a secondary north-east-trending fault set modified by a tertiary north-northeast-striking set, with the latter aligned and potentially controlled by the more northerly trending OP and Mulatos regional faults.

Later extensional events in part produced by the northerly development of the RFS and OP resulted in west-northwest-east-southeast-striking faults with a consistent sinistral north-west rotational component. These faults generally dip moderately to steeply north-east.

Primary structural features typically trend north-south and are characterized by steeply dipping planar faults and shear zones which host mineralized quartz-rich veining. Examples of veining parallel to low order fold-hinges and along planar limb dislocations are observed. Much of the district is cut by late north-trending oblique strike-slip faults that offset veining.

The earlier regional folding, with sigma one likely approximately northwest-southeast, principal stress orientation was near perpendicular, which resulted in the development of regional-scale lateral, deep-rooted faults, with strike-slip displacement. Two major events can be observed, with the second characterized by a more east-west sigma one.

The Cajamarca Formation is characterized by near-isoclinal upright to vertical folding within thrust, steeply to near vertically dipping sedimentary rocks; however, detailed mapping has yet to precisely define and characterize the regional thrust episode. Fold-thrust examples on the property are represented by progressive simple shear, producing a thrust sheet package with associated north-east facing folds, and a fold axis perpendicular to the overall easterly thrust direction and stretching lineations. The sequence exhibits shallow north-plunges within lower-middle order folding, and parallel, semi-brittle to brittle, steeply east-dipping fracture systems commonly dividing vein geometries (palimpsest features), with ingress and precipitation of metal-rich fluids therein.

Vein geometries and their sulphide compositions and associations suggest the Falán veining to be part of a mid-depth zone of a once more extensive epithermal system emplaced within and modifying an orogenic, acidic hydrothermal vein system. It is postulated that the earliest veining was quartz-rich, partially deformed, and consisted of multiple fluid phases which produced banding textures but more typically minor brecciation and sealing. The main sulphide phase is pyrite with trace amounts of pyrrhotite, representing an acidic hydrothermally related orogenic veining.

A later stage epithermal system appears to also be of low-temperature and was buffered by the same host. The presence of a low Fe sphalerite, pyrite, galena mineral assemblage suggests a low-sulphidation epithermal system. One general model proposed for the Falán region suggests that Mesozoic-Tertiary orogenic vein emplacement occurred along regional scale faults, with the host acting as a strong chemical buffer and physical barrier, producing distinct planar quartz-rich veins and associated silver-gold mineralization.

## 1.4 Exploration

Outcrop has conducted mapping, prospecting, trenching and soil geochemical surveys along the 18 km corridor between The Alaska vein in the north to the Frias historical mine in the Southwest. A total of 3,944 channel samples (including 526 underground samples) and 5,728 soil samples have been taken during these exploration activities, including 145 trenches for 5.4 km of cumulative length.

The regional exploration program at Santa Ana has defined at least nine additional target areas which are not included in the current resource, such as Aguilar, Guadual, Topacio, Los Mangos, Cavandia, La Ye, Frias, Las Lajas and Espiritu Santo.

## 1.5 Drilling and Quality Assurance / Quality Control

Outcrop has drilled 334 diamond drillholes on the Santa Ana Project since the acquisition in 2019 for a total of 58,824 m. Drilling by Outcrop has focused on seven epithermal veins: Paraiso,

El Dorado, La Porfia, Santa Ana, Las Maras, La Isabela, and Los Naranjos. Drilling has been successful in intersecting high-grade silver-gold veins at each target.

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

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

## **1.6 Mineral processing and metallurgical testing**

Samples for metallurgical testing were drawn from two of the seven vein areas (Paraiso and La Porfia) which comprise the Santa Ana deposit as currently explored. The Paraiso domain contains approximately 15% of the Indicated Resource while the La Porfia domain contains approximately 10%. While the composites created reasonably represent their respective domains, they do not represent the remainder of the Santa Ana deposit. More domain-by-domain sampling and testing will be required to establish variability within the deposit.

Mineralogical studies and flotation testing indicate that gold and silver largely exist as either free particles or in association with sulphide minerals that are readily recoverable by froth flotation. Future testing could establish that a high-grade gravity concentrate could also be economically produced.

Flotation testing using a typical sulphide flotation circuit arrangement established that a bulk lead / zinc concentrate containing 10,000 g/t Ag to 12,000 g/t Ag and 129 g/t Au to 172 g/t Au could be produced. Silver recoveries of 93.4% and 94.7% were achieved. Gold recoveries of 96.9% and 97.8% were achieved. Pb (91.7%, 94.1%) and Zn (68.9%, 96.4%) recoveries achieved were also encouraging for a first testing program (Table 13.5, Table 13.6). Concentrate of this tenor is generally acceptable for downstream processing, depending on the concentrations of other constituents. Further testing could determine whether separate lead and zinc concentrates attracting more favourable financial terms could be produced.

Both flotation tests were conducted on PAR-2 which is a high-grade sample from a single vein domain. As recoveries and concentrate grades can be affected by the grade of feed material, testing of samples from other domains will be required to reliably predict metallurgical performance throughout the Project life.

Overall, metallurgical testing established that there are reasonable prospects of eventual economic extraction of silver, gold, lead and zinc from the deposit.

## **1.7 Mineral Resources**

The Mineral Resource estimate for the veins of the Santa Ana deposit have been prepared by Mr Rodney Webster, MAIG, of AMC Consultants Pty Ltd, who takes responsibility for the estimate. Outcrop provided the drillhole and assay data and wireframes for 22 veins which were developed using Leapfrog Geo software. These wireframes were validated, and the estimation carried out using Datamine software by the QP. Of the 22 wireframes, 15 had sufficient data support and were estimated individually. Some veins were combined for reporting purposes, resulting in tonnes and grades for seven vein areas which are tabulated in Table 1.1.

A total of 400 combined drillholes and channel samples from trenches and underground workings were included in the files provided. The drillholes and channel samples were sampled for gold, silver, zinc, and lead on various sample lengths and all four elements were estimated. Only those of current

economic significance were reported. The data for each vein was treated separately and top-capping reviewed for each vein.

A total of 678 samples were tested for bulk density using the wax immersion method. Bulk density values were applied by vein as an average, and where no samples from that vein the mean of 2.63 t/m<sup>3</sup> was applied.

The 2D accumulation method was selected as the most appropriate method for these narrow veins and was used to estimate the block grades. Block size chosen was 10 mE x 10 mZ x with sub-blocks 2 mE x 2 mZ for the 12 larger veins. For the three smaller veins, block sizes of 5 mE x 5 mZ with sub-blocks 1 mE x 1 mZ was chosen. The third dimension in these blocks was horizontal or vertical vein thickness and each of the 15 veins had its own origin.

Some minor historical mining has been carried out, but details are unknown. No allowance for any depletion by mining has been made.

The search ellipse radii and orientation were based on the results of a two-structured spherical variogram analysis. The search radii were increased by 1.5 times and then 3 times if a block was not estimated, to ensure all blocks in a vein were estimated. The Mineral Resources were classified as Indicated or Inferred with indicated blocks generally within 40 m of drillhole samples and estimated within the first pass; inferred blocks were within 40 to 80 m of drillholes samples.

Mineral Resources are stated at a cut-off grade of 158 g/t AgEq.

# Santa Ana Property Mineral Resource Estimate

Outcrop Silver and Gold Corporation

0723022

Table 1.1 Santa Ana Mineral Resources on 26 April 2023

Category	Vein area	Tonnage (kt)	Average grades			Metal content		
			Ag (g/t)	Au (g/t)	AgEq (g/t)	Ag (koz)	Au (koz)	AgEq (koz)
Indicated	El Dorado	318	436	1.9	579	4,448	19.4	5,915
	Las Maras	261	666	1.4	767	5,584	11.3	6,430
	Santa Ana	202	289	0.7	344	1,876	4.7	2,233
	Paraiso	186	515	6.1	969	3,077	36.5	5,793
	Los Naranjos	126	363	1.1	443	1,467	4.4	1,788
	La Porfia	119	265	3.1	495	1,010	12.0	1,887
	La Isabela	15	213	1.0	287	104	0.5	140
<b>Total Indicated</b>		<b>1,226</b>	<b>446</b>	<b>2.3</b>	<b>614</b>	<b>17,567</b>	<b>88.8</b>	<b>24,187</b>
Inferred	El Dorado	180	382	1.9	523	2,211	11.1	3,025
	Las Maras	27	423	0.8	482	373	0.7	424
	Santa Ana	390	244	0.6	291	3,061	7.5	3,651
	Paraiso	172	312	2.1	471	1,723	11.6	2,600
	Los Naranjos	78	274	0.8	337	688	2.0	846
	La Porfia	102	471	5.3	866	1,536	17.3	2,827
	La Isabela	18	149	1.0	226	86	0.6	130
<b>Total Inferred</b>		<b>966</b>	<b>312</b>	<b>1.6</b>	<b>435</b>	<b>9,677</b>	<b>50.9</b>	<b>13,504</b>

Notes:

- The effective date of this Mineral Resource Estimate (MRE) is 26 April 2023.
- Rod Webster, MAIG, of AMC has conducted the MRE and is an independent QP.
- Mineral Resources are stated according to the CIM Definition Standards (2014).
- Mineral Resources were reported within potentially mineable shapes, assuming an underground mining method with a minimum mining width of 1.0 m.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- The estimate is reported for an underground mining scenario using a Silver Equivalent (AgEq) cut-off grade. The cut-off grade of 158 g/t AgEq.
- Inputs were: silver price of US\$25.0/oz, gold price of US\$1,800.0/oz; mining cost of US\$69.0/t, processing cost of US\$32.0/t and G&A costs of US\$13.0/t and metallurgical recoveries of 93% for Ag and 96% for Au.
- The AgEq was calculated using the prices (P), recoveries (R) and grades of each element using the following formula:  $AgEq\ g/t = Ag\ g/t + (((AuP * AuR) / (AgP * AgR)) * Au\ g/t)$ . No sales or marketing costs were considered.
- Bulk density values were interpolated for each of the mineralized veins with the global average at reporting AgEq cut-off for the entire Santa Ana deposit is 2.7 t/m<sup>3</sup>.
- 2D Accumulation method using Ordinary Kriging (OK) into blocks generally 10 m in size across and vertically down the vein. The block size along the dip direction covered the whole vein.
- Any discrepancies in the totals are due to rounding effects.

Source: AMC, 2023.

This is the initial Mineral Resource estimate for the Santa Ana Property.

The QP is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing, or other relevant issues that could materially affect the Mineral Resource estimate other than those disclosed in this report.

## 1.8 Conclusions and recommendations

The exploration work carried out to date on the property with the initial Mineral Resource estimate supports continued exploration along several veins on the property.

## 1.8.1 Exploration and resource drilling recommendations

The following work is recommended to improve the Mineral Resource estimate and further test the known mineralization:

- Combine mapping, geophysics, structural, grade distribution and shoot morphology data to create a practical predictive model in order to make exploration drilling more focused and efficient.
- Systematically combine ground IP / Resistivity, airborne geophysics, Lidar, and surface sampling to generate more obscure targets not reflected in high-grade sampling at surface.
- Drill all currently known mineralized shoots to depths of a minimum of 350 m.
- Advance, refine and prioritize the drilling of eleven exploration targets characterized by high-grade intercepts sampled at surface. These targets are Alaska, Lajas, Guadual, Espirtu Santo, Jimenez, Aguilar, Topacio, Frias, La Ye, Cavandia, and Los Mangos.
- Increase productivity by incorporating a second and later third drill rig. Generally, one rig should be a fast moving "discovery" rig quickly by targeting high grades with a small number of holes. A second rig should focus on delineating mineralization by following up on drilling by the first rig. A third rig should be used to drill identified mineralized shoots to depths 350 m.
- At this stage of the project there should be a mandate for upgrading inferred to indicated resource categories. Drilling inferred resources should be an imperative part of the drilling strategy and should aim to hit short- and medium-term milestones including 50 MSEO and 100 MSEO (million silver equivalent ounces).
- A comprehensive geological mapping program over the complete Santa Ana Project should be completed. Future exploration should include structural and geologic mapping and defining overall geometry of the green schists and black schists of the Cajamarca formation. The black schists appear to have better precious metal affinity. Such work could also aid in the targeting possible fold-thrust and hinge-related mineralization and provide a geologic context for discoveries.
- The very significant alluvial gold and silver in the Falan region indicates the related Eocene-Miocene volcanism hosted considerable precious metals, with an unknown amount lost due to erosion. Combined with variations in topography through folding and faulting, future targets should include: a) deposits buried below the Eocene cover; and b) down-faulted blocks of Cajamarca.
- Systematic trench and soil sampling on tighter spacing should be employed to continue to help identify and define additional targets. These can be confirmed by outcrop, subcrop, and trench sampling.
- Allocate by priority to target existing inferred classified resources along strike and down dip based on approximately 8,000 m of diamond drilling between June and December 2023.

## 1.8.2 Metallurgical recommendations

Additional metallurgical studies will be required by the preparation of two composites:

- The first sample will comprise samples from the Las Maras and El Dorado veins that represent around the 40% of the total resource in terms of silver equivalent ounces. A full flotation set of tests is planned.
- The second sample will consist of a global composite that represents the general gold and silver grades from the entire Santa Ana deposit's Mineral Resource. This sample will be tested for conventional flotation and for Cyanide leaching aiming to generate doré bars.

The estimated budget for these metallurgical tests is based on the quotations prepared by SGS Colombia during the executing of the first metallurgical program are approximately \$40,000.

### 1.8.3 Recommended budget

A total budget of C\$3,000,000 is recommended to execute an exploration and metallurgy program for the remainder of the 2023. The work program and budget are shown in Table 1.2.

Table 1.2 Proposed budget

<b>Activity</b>	<b>Budget</b>
All costs associated with Colombia and the Santa Ana Project.	C\$500,000
Geological mapping, surface sampling, and trenching including assay costs.	C\$460,000
Metallurgy	C\$40,000
Diamond drilling including all direct and indirect costs.	C\$2,000,000
<b>Total</b>	<b>C\$3,000,000</b>

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## Abbreviations and units of measure

Abbreviation / Technical term	Description
%	Percentage
±	Plus-minus sign
°C	Degrees Celsius
Ag	Silver
AgEq	Silver equivalent
AMC	AMC Mining Consultants (Canada) Ltd.
ANLA	Autoridad Nacional de Licencias Ambientales
ANM	National Mining Agency
As	Arsenic
Au	Gold
AusIMM	Australasian Institute of Mining and Metallurgy
Baroyeca	Baroyeca Gold and Silver Inc.
C\$	Canadian dollar
CA-VA	Cajamarca-Valdivia
CAR	Corporaciones Autónomas Regionales / Regional Autonomous Corporations
Cd	Cadmium
Cedar	Cedar Capital Corporation
CO <sub>2</sub>	Carbon dioxide
Condor	Condor Precious Metals Inc.
CORTOLIMA	Corporación Autónoma Regional del Tolima
CPMET	Chartered Professional – Metallurgy
CRM	Certified Reference Material
Cu	Copper
ESE	East-southeast
FAusIMM	Fellow of the Australasian Institute of Mining and Metallurgy
g	gram
g/t	grams per tonne
GPS	Global positioning system
ha	Hectares
ICP-MS	Inductively coupled plasma mass spectrometry
IGAC	Instituto Geográfico Agustín Codazzi
kg	Kilogram
kg/t	Kilograms per tonne
km	Kilometre
m	Metre
m <sup>3</sup>	Cubic metre
MAIG	Member of the Australian Institute of Geoscientists
Mariquita	San Sebastian de Mariquita
masl	Metres above sea level
MRE	Mineral Resource Estimate
Miranda	Miranda Gold Corp.
mm	Millimetre
MMI	Mobile metal ion
Mn	Manganese

# Santa Ana Property Mineral Resource Estimate

Outcrop Silver and Gold Corporation

0723022

<b>Abbreviation / Technical term</b>	<b>Description</b>
NI 43-101	National Instrument 43-101
NE	North-east
NNE	North-northeast
NW	North-west
NSR	Net smelter return
OP	Otú-Pericos
Outcrop	Outcrop Silver and Gold Corporation
oz	Ounce
Pb	Lead
PIN	Personal identification number
ppm	Parts per million
QA/QC	Quality Assurance and Quality Control
QP	Qualified Person
Report	Technical Report
RFS	Romeral Fault System
RQD	Rock quality designation
S1	Early stage
S2	Second stage
S3	Quartz stage
Sb	Antimony
SCC	Standards Council of Canada
SE	Southeast
SGC	Colombian Geological Service
SME	Society for Mining, Metallurgy & Exploration
Sr	Strontium
t/m <sup>3</sup>	Tonne per cubic metre
TSX.V	TSX Venture Exchange
UPME	Energy Planning Unit
USGS	United States Geological Survey
US\$	United States dollar
VAT	Value added tax
vol.	Volume
W	Tungsten
WNW	West-northwest
Zn	Zinc

## 2 Introduction

### 2.1 General and terms of reference

AMC Mining Consultants (Canada) Ltd. (AMC) has prepared this technical report on the Santa Ana silver and gold project at the request of Outcrop Silver & Gold Corporation ("Outcrop" TSX.V: OCG, OTC.QX:OCGSF, DB.MRG1) a Canadian company based in Vancouver, British Columbia. This report is intended to present the initial resource estimate and a technical summary for the Santa Ana Project. It has been prepared in accordance with the disclosure requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), to disclose relevant information about the property.

This Technical Report is required to be filed pursuant to NI 43-101 in connection with the initial resource statement announced for the Santa Ana Project by Outcrop.

### 2.2 The Issuer

Outcrop has a 100% ownership of the Santa Ana Project concessions (Table 4.1). The Project is subject to non-overlapping 2% net smelter return (NSR) royalties payable to the original vendors. Outcrop has the right to purchase 1% of the royalties at any time.

### 2.3 Summary of Qualified Persons

The names and details of persons who prepared, or who have assisted the Qualified Person (QP), 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 Person responsible for the preparation and signing of this Technical Report						
Qualified Person	Position	Employer	Independent of Outcrop	Date of site visit	Professional designation	Sections of report
Rodney Webster	Principal Geologist	AMC Consultants Pty Ltd	Yes	No visit	MAIG	Sections 2-6, and 8, 9, 11, 14 -24, 27, parts 1, 25 and 26
Robert Chesher	Technical Manager	AMC Consultants Pty Ltd	Yes	No visit	FAusIMM (CPMET)	Section 13, parts 1, 25, 26
José Olmedo	Principal Geologist	Self employed	Yes	24 to 26 May 2023	SME 426799RM	Sections 7, 10, 12, parts 1, 25, 26

Note: For other sections where QPs are indicated as having part responsibility, that responsibility reflects their individual area of expertise, whether geological, or metallurgical.

### 2.4 Site visits

An inspection of the property was completed by José Olmedo, SME CP, during May 2023. Given the current early development stage of the Santa Ana project, it was decided that a single site visit was sufficient.

### 2.5 Sources of information

The report is based on a review of technical data and historical reports provided by Outcrop. References are listed in Section 27, and the abbreviations, units of measurement, and currencies are listed after the table of contents.

### 2.6 Effective date

This report is effective as of 8 June 2023.

## 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:

- Expert: Anglela Maria Salazar, Partner, Lloreda Camacho & Co., as advised in a letter of 9 May 2023 to Canaccord Genuity Corp. titled "Legal Opinion in respect of the mining rights in Colombia of Miranda Gold Colombia II Ltd. (Colombian Branch) and Mineralas Santa Ana Colombia S.A.S".
- Report, opinion, or statement relied upon: information on mineral tenure and status, title issues, royalty obligations, etc.
- Extent of reliance: full reliance following a review by the QP.
- Portion of Technical Report to which disclaimer applies: Sections 4.2, and 4.9.

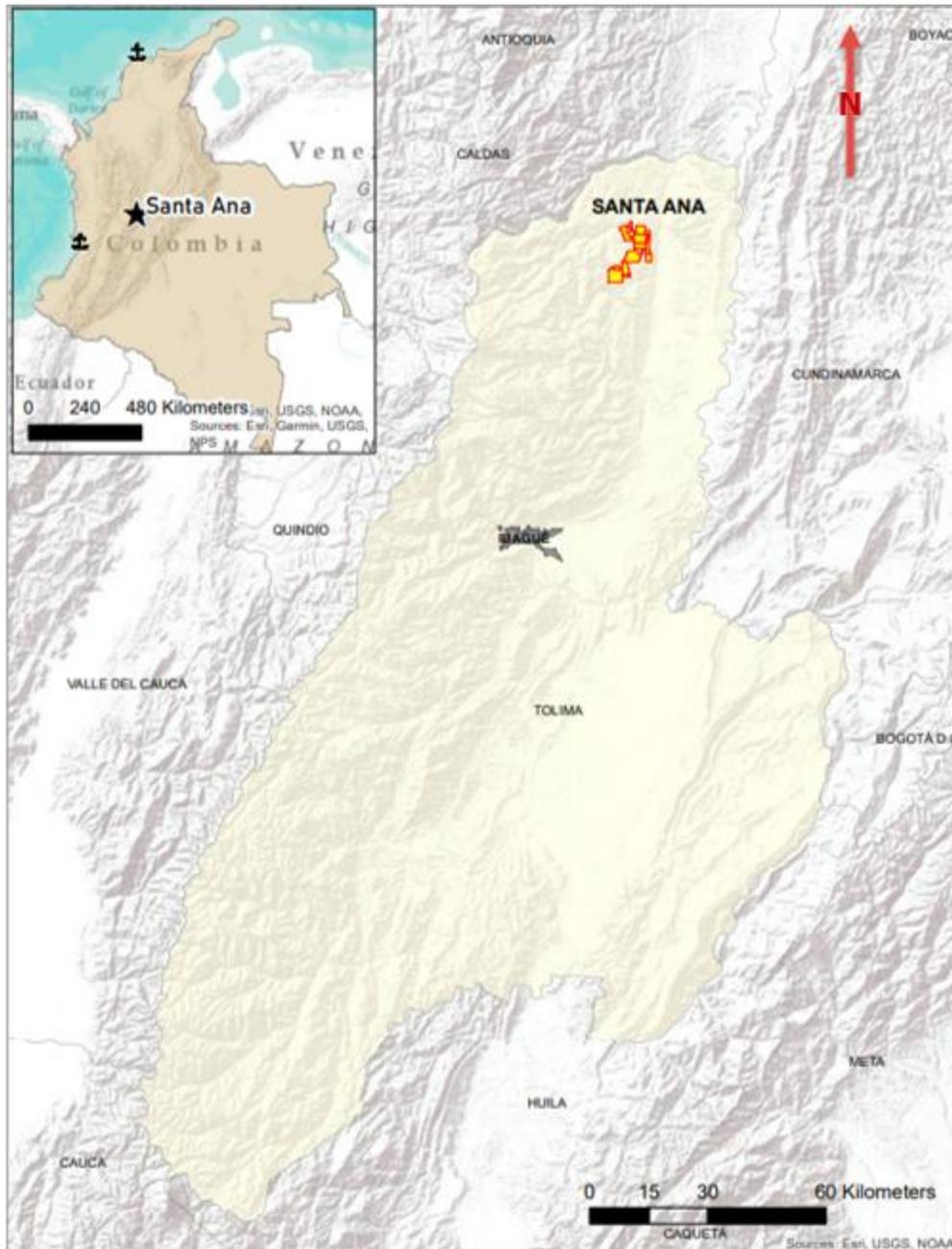
There are no other reports, opinions, or statements of legal or other experts on which the QP has relied.

## 4 Property description and location

### 4.1 Property location

The Santa Ana Project is located in the Municipality of Falán in the Tolima Department of Colombia. The property is approximately 15 kilometres (km) south-east of the town of Mariquita, and 190 km north-west of Bogota, Colombia's capital. The latitude and longitude of the Santa Ana Project are approximately 3°10'40" N and 76°15' 4" W, respectively, and it is located on Sheet number 300 IV-C and 321 II-A from Instituto Geográfico Agustín Codazzi (IGAC). Figure 4.1 shows the location of the Santa Ana Project within Tolima and Colombia.

Figure 4.1 Location of Santa Ana Project



Source: Outcrop, 2023.

## 4.2 Mineral tenure

Outcrop has a 100% ownership of the Santa Ana Project concessions (Table 4.1). Outcrop's wholly owned subsidiary, Malew Overseas, owns a 100% interest in Mineralas Santa Ana, which in turn owns a 100% interest in the Santa Ana Project.

HFL-151 is subject to a 2% net smelter return (NSR) royalty payable to Condor Precious Metals (Condor). Outcrop has a pre-emptive right to the royalty and the right to purchase 1% at any time for C\$500,000.

RFO-15171 and RIT-16201 are subject to a 2% NSR royalty payable to Cedar. Outcrop has the right to purchase 1% at any time for C\$5,000,000.

PG7-08002, QAE-08001, QAJ-08001, QB4-08001, QBB-08001, QGS-08001, QLV-08191, RC2-08051, RD5-08031, UGT-08421, and RAP-08001 are subject to a 2% NSR Royalty payable to Activos Mineros. Outcrop has the right to purchase 1% at any time for US\$500,000.

All other concessions and applications were staked by Outcrop and have no royalty associated with them.

The Project will be subject to state royalty payments should the Project proceed to production. Royalties payable to the state are 4% of gross value at the mine gate for gold and silver (Law 141 of 1994; modified by Law 756 of 2002). For the purposes of royalties, the gold and silver prices are set by the government and are typically 80% of the average of the London Afternoon Fix price for the previous month.

Table 4.1 summarizes the mineral concessions. Figure 4.2 is a map showing the locations of the individual mineral concessions.

Table 4.1 Summary of mineral concessions

Project	Ownership / owner	Type of claim	Number	Serial numbers	Area (ha)	Date of registration
Santa Ana	Minerales Santa Ana Colombia S.A.S	Titles	3	HFL-151	942	24 Sep 2020
				QLV-08191	511	17 Nov 2021
				RC2-08051	1,057	18 Nov 2021
	Activos Mineros	Titles	3	RAP-08001	445	17 Nov 2021
				QAE-08001	1,171*	3 Dec 2021
				QB4-08001	719	8 Dec 2021
	Miranda Gold Colombia II Ltd Sucursal Colombia	Titles	4	500464	911	3 Dec 2021
				501724	107	17 Nov 2021
				501725	50	17 Nov 2021
				501737	76	18 Nov 2021
	Minera Vetas	Titles	1	RFO-15171	486	24 Dec 2021
<b>Subtotal titles</b>			<b>11</b>		<b>6,475</b>	

Note: Expiry date details are discussed in Section 4.4. Hectares rounded for simplicity.

\*Legal letter stated 1,113 ha but Colombia online states 1171 ha. The QP has relied on Colombia claims online for this number.

Source: Outcrop, 2023.



- Ruling C-035 of 2016, issued by the Constitutional Court of Colombia, which provides that, prior to the granting of mining titles, a consultation must be held with the mayor's office of each municipality, regarding the implementation of mining activities in its territory; likewise, a public hearing must be held in which the mining project has to be socialized with the community so to allow them participation in the mining title application process.
- Resolution No. 40008 of 2021, issued by the Ministry of Mines and Energy, by means of which guidelines are established for the development of the activity of supervision of mining exploration and exploitation projects.
- Law 2250 of 2022, which establishes a legal framework for mining legalization and formalization and establishes special environmental regulations.

In Colombia, mining activities are regulated by different authorities, among which the following stand out:

- The Ministry of Mines and Energy, as director of all Mining Policy (Article 1 of Decree 381 of 2012).
- The Energy Planning Unit (UPME), in charge of mining planning (Decree 2119 of 29 December 1992).
- The National Mining Agency (ANM), designated as the mining authority and administrator of mining resources at the national level (articles 3 and 4 of Decree 4134 of 2011).
- The Secretary of Mines of the Government of Antioquia has a delegation to administer mining resources in the Department of Antioquia, in accordance with Article 320 of Law 685 of 2001 and Resolution 0210 of 15 April 2015, issued by the National Mining Agency.
- The Colombian Geological Service (SGC), entity in charge of investigating Colombia's national geological potential (Decree Law 4131 of 2011).

The main environmental authorities in Colombia include the Ministry of the Environment and Sustainable Development. This state organization is responsible for formulating environmental and renewable natural resources policies, defining regulations focused on the recovery, conservation, management, and use of natural resources, and oversight of all activities that may have an environmental impact. Some activities associated with environmental control and permits have been delegated to the Autoridad Nacional de Licencias Ambientales (ANLA) and at the regional level they are mostly executed by the Corporaciones Autónomas Regionales (CARs).

These environmental authorities have the following functions: (i) prevent and / or suspend any activity that they deem contrary to environmental regulations; (ii) reserve and define areas excluded from mining activities (i.e., forest reserves and the Páramo ecosystem); and (iii) approve and control the different environmental instruments. Environmental instruments are documents which allow permission to the government to supervise activities that have the potential to impact the environment. These documents must be adopted by the concession holder as they define the detailed measures and activities to be implemented for the mitigation, compensation, and prevention of any adverse environmental effects to a project. They also include any follow-up controls, monitoring, contingency, and abandonment of activities.

## 4.4 Mining concession agreements

All Mineral Resources belong to the State and may be explored and exploited through concession contracts it grants. According to Law 685 of 2001, there is only one type of concession contract, which is granted for a term of 30 years and may be extended for an additional 30 years, and is divided into exploration, construction-assembly, and exploitation stages:

- **Exploration**, with a term of three years, extendable for up to eight years for a total of eleven exploratory years if necessary. This stage consists of four phases:
  - Surface Geological Exploration
  - Subsurface Geological Exploration
  - Evaluation and Geological Modelling
  - Program of Works
- **Construction and Assembly**, with a term of three years, extendable for an additional one year. In this stage, the infrastructure works necessary to start the exploitation stage of the deposits are developed, including the construction of offices, camps, preparation of mining fronts, service facilities, equipment and fixed machinery for the collection, stockpiling, transportation, and processing of minerals, among other works according to the requirements of the mining project.
- **Exploitation** includes the concession's remaining time, discounting the exploration and construction-assembly stages with their corresponding extensions up to 30 years. The concession may be extended for an additional 30 years upon request of the title holder, which must be evaluated and approved by the Mining Authority.

## 4.5 Mining title application procedure

The mining title application procedure in Colombia is composed of different phases, which must be developed and fulfilled by those interested in being granted a Mining Concession Contract:

- 1 Initiation of the Procedure / Filing of the Proposal: Filing is regulated by articles 270 and 271 of the Mining Code (Law 685 of 2001) and complemented by article 1 of Law 926 of 2004. For this, a PIN must be purchased with a value of one (1) minimum Colombian monthly salary plus VAT, which enables the selection of an area of interest. Once selected, every legal document requested for the proposal must be filed.
- 2 Technical Evaluation: The technical evaluation process involves a study of the requested area to verify its viability and ensure non-overlapping areas are excluded from mining. The ANM conducts a prior environmental control and evaluates the geological information presented. They also technically classify the project and define the competent environmental authority and feasibility of a mining concession contract in the area selected.
- 3 Economic Evaluation: By virtue of Resolution No. 352 of 4 July 2018, all proponents of mining concession contracts must comply with certain financial indicators that shall indicate an economical support to the proposal.
- 4 Legal Evaluation: The legal capacity of the proponents is evaluated by ensuring their compliance with all general requirements for state contracts and specific requirements for mining contracts. Full compliance with the requirements established in Article 271 of Law 685 of 2001 and in Decree 1073 of 2015 issued by the Ministry of Mines and Energy, and Resolution 143 of 2017 issued by the ANM must be verified.
- 5 Evaluation by the Mining Contracting Coordination: In the event that the requirements are not met but can be corrected, a one-time requirement is issued. If the requirements are not met, the proposal will be declared withdrawn. If some requirements cannot be corrected, the proposal will be rejected. The application procedure may only continue if all technical, legal, and economic requirements of the proposal are met.

- 6 Verification of other requirements: Minimum labour and environmental suitability requirements are verified.
- 7 Coordination with territorial entities: While completing phase six, the ANM completes all coordination procedures with the municipal mayors' offices, ensuring they list information about the projects and mining cycle. Opposition to the proposal is evaluated at this stage in accordance with Article 273 of the Mining Code.
- 8 Hearing and Participation of Third Parties: The phase includes announcing the date of the hearing and diffusion mechanisms is fulfilled. This process allows for the participation of communities and interested parties who can provide documents and submit objections and observations on legal and environmental matters.
- 9 Conclusion of the Mining Concession Contract: After analysis of all considerations gathered in the hearing and concluding the alignment process between national and territorial authorities regarding the mining project, the concession contract is signed by means of a special administrative act.
- 10 Registration in the National Mining Registry: After signing a Mining Concession Contract, it is registered in the National Mining Registry by the Mining Authority, which provides proof of authenticity and publicity of the state acts and contracts related to issued mining titles.

## 4.6 Financial compensations

With the granting of a mining concession contract, the mining holder is obliged to pay the following economic compensations (Table 4.2) to the Colombian State:

- **Surface fee:** The surface fee is charged annually by the National Mining Agency as the mining authority and mining concession contractor. It is calculated on the total area of the concession during exploration, assembly, and construction. The cost also varies depending on the liquidation period (between one and 11 years) and the extension and classification of the mining project (Small - between 0 and 150 ha, Medium - between 151 and 5,000 ha, and Large Mining - between 5,001 and 10,000 ha).
- **Royalties:** Royalties a form of economic compensation that must be paid by any person - natural or legal - that exploits Mineral Resources owned by the nation, under the prerogative granted by any type of mining title. Payment must be made within ten working days following the end of each calendar trimester.

Table 4.2 Financial compensations

Phase	Valid	Surface tax	Plan of work required?	Environmental requirements	Environmental mining insurance policy?	Royalty	Reports and other filings
Exploration	3 + (4 x 2) years	Yes	Yes	Environmental Management Plan and renewable resources permits if needed (i.e., Superficial Water Concession)	Yes. 5% of planned investment cost estimate.	No	Basic Mining Formats (FBM)
Construction	3 + 1 years	Yes	Yes	Requires environmental license (issued upon approval of Environmental Impact Assessment).	Yes. 5% of planned investment as per Plan de Trabajo y Obras (PTO)	No, unless anticipated exploitation happens	FBM. Royalty Declaration (in case of anticipated exploitation)
Exploitation	30 years subtracting the years under exploration and construction + 30 years	No (Exception made on areas kept by the concessionaire to undertake exploration activities during a 2-year period)	Yes	Requires environmental license (issued upon approval of Environmental Impact Assessment).	Yes. 4% of the results of multiplying the estimated annual production of the mineral of the concession by the price at the mine gate. Price as determined by the government annually.	Yes. Based on regulations at the time of commencement	FBM. Royalty Declaration

**Mining Environmental Insurance:** Such insurance must comply with obligations and economic considerations associated with execution of a mining concession contract, and the eventual payment of fines and any declaration of expiration to the contract, if such circumstances arise during its term. The contract renewal and coverage period are annual, and the insured value is determined in accordance with Article 280 of the Mining Code in force (Law 685 of 2001) pursuant to the following rules:

- **For the Exploration Stage:** It shall be equivalent to 5% of the annual value of the total investment amount in exploration for the respective year. This value is reflected in the investment estimate section declared by means of the Minimum Exploration Program, also known as "Form A".
- **For the Construction and Assembly Stage:** It shall be equivalent to 5% of the annual investment declared for such a concept.
- **For the Exploitation Stage:** It shall be equivalent to 10% of the result of multiplying the estimated annual production volume of the mineral object of the concession by the price of the mineral fixed annually by the National Government.

To start the construction and assembly phase, the mining title owner must submit a Works Program within 30 days of the expiration of the exploration stage. The Works Program is a technical document that describes, among other things, the area of operation, characteristics of the reserves to be exploited, location of the mining facilities and works, mining exploitation plan, scale and duration of the expected production, the physical and chemical characteristics of the minerals to be exploited, and a plan for closing the exploitation and abandonment of the infrastructure. During the construction and assembly stage, the concessionaire may make any necessary modifications and additions upon presentation to and approval of the environmental and mining authorities. In

addition, during this phase, the concessionaire may, with prior authorization, begin early exploitation and make use of provisional equipment and civil works.

## 4.7 Environmental requirements

An Environmental Impact Study must be submitted to the competent Environmental Authority at the end of the Exploration Phase to execute the Construction and Assembly stage and the subsequent Exploitation. The approval of the Environmental Impact Study results in an Environmental License, which contains the global environmental permits that enable all interventions.

Exploration activities require individual permits as needed, such as surface water concessions, water discharge, waste management, among others.

Within the concession area for the development of the Santa Ana Project, altered ecosystem conditions were found, due to artisanal and informal mining activities such as:

- Surface disturbance and degradation, including deforestation.
- Waste rock and tailings from previous colonial mining operations.
- Soil and water contamination from past mining operations.

Considering these activities and pursuant to Colombian mining and environmental laws, the mining title holders are responsible for any environmental remediation and any other environmental liability based on actions or omissions occurring from and after the entry into force and effect of the concession contract.

The mining owner is not responsible for any remediation or liability based on actions or omissions occurring prior to the entry into force and effect of the concession contract.

The execution of activities under the exploration, construction, and assembly stages, as well as the exploitation phase, require the approval by an environmental permit or instrument required. So far, prospecting activities are not subject to environmental permits, without prejudice to any permit or concession required for the exploitation of natural resources.

The Environmental Impact Study shall contain the elements, information, data, and recommendations required to describe and characterize the physical, social, and economic environment of the site or region of the exploitation works, the impact of said works with its corresponding evaluation, plans for prevention, mitigation, correction and compensation of said impacts, specific measures to be applied for the abandonment and closure of the mining operations and its management plan, and the necessary investment and follow-up required with respect to these activities. The study must also be shown to the community prior to its presentation. Once the environmental license has been granted, the mining title holder may begin construction and assembly activities, and subsequent exploitation.

The Mining Code enshrined in Law 685 of 2001 and the National Development Plan 2018-2022 define areas that may be excluded from mining activities (e.g., regional parks and "paramo" ecosystems). For an area to be excluded from mining, its spatial geographic limit must have been determined by the corresponding environmental authority and be based on technical, social, and environmental studies, which support the incompatibility of mining activities, or in the specific case of "paramo" ecosystems, which prove the existence of such ecosystems.

The use of surface or ground water requires the prior approval of the Regional Autonomous Corporations (CAR). For the Santa Ana Project, the corresponding CAR is the Corporación Autónoma Regional del Tolima (CORTOLIMA). Water discharge requires permission from the same authority.

Both water concessions and discharge permits require payment of fees to the Corporación Autónoma Regional.

## 4.8 Surface rights

It is important to note that a mining concession contract grants rights over the subsoil, but not over the ground. This means that surface rights are not considered part of the mining titles or rights and are not governed by mining laws, although the mining regime provides for the expropriation of real estate and the imposition of easements in it. Surface rights must be acquired directly by the holders of such mining rights, but it is possible to request judicial authorities to facilitate its expropriation and / or grant the necessary easements for a mining operation.

The Santa Ana Project does not have any surface rights in the Project area. In Colombia, it is not required to have any surface property to access the subsoil. The Mining Law provides access to land and the possibility of expropriation of surface rights, as mining activity is of Public Interest. Access to target areas for exploration must be requested from local landowners prior to completing any exploration activity.

The acquisition of land in Colombia is subject to the regulations of the Colombian Civil Code, including the mandatory execution of a public deed on the bought property, and its subsequent registration before the Public Deeds Registry Office. Forms of acquisition include but are not limited to acquisition agreements, inheritance rights, foreclosures, or by way of prescriptive rights. Registration with the Public Deeds Registry Office is required to consolidate any ownership of real estate by the mining title holder.

Easement rights may be requested once the concession contract is signed. Effective expropriation will require prior approval of the Works Program by the mining authority for it to be executed. The most common forms of easement acquisition are acquisition agreements with registered owner(s), assignment agreements covering the hereditary rights of the current landowners, and agreements related to material possession rights where informality in land ownership exist.

## 4.9 Permits

The Santa Ana Project comprises the titles and mining applications shown in Table 4.3. All relevant permits have been obtained.

# Santa Ana Property Mineral Resource Estimate

Outcrop Silver and Gold Corporation

0723022

Table 4.3 Titles and mining applications

Project	Ownership / owner	Type of claim	No. of claims	Serial number	Area (ha)
Santa Ana	Minerales Santa Ana Colombia S.A.S	Titles	3	HFL-151	942.1201
				QLV-08191	511.408
				RC2-08051	1,057.24
	Minera Vetas	Title	1	RFO-15171	485.6618
		Applications	1	RIT-16201	226.9025
	Activos Mineros de Colombia S.A.S	Titles	3	QAE-08001	1,171.41
				QB4-08001	718.7729
				RAP-08001	445.1974
		Applications	12	PG7-08002	900.3349
				QGS-08001	223.2405
				UGT-08421	2,096.20
				QBB-08001	985.0038
				QAJ-08001	1,323.44
				RD5-08031	1,211.96
				503063	1,937.19
503065				317.6894	
503066				1,146.87	
503661	966.4032				
503662	69.9048				
503660	1,330.77				
	Titles	4	500464	911.215	
			501724	106.7142	
			501725	49.056	
			501737	76.0368	
Miranda Gold Colombia II Ltd Colombia Branch	Applications	11	500467	417.01	
			500468	1,567.26	
			500498	312.783	
			500633	45.3842	
			500700	2,009.28	
			500701	1,964.07	
			501721	358.137	
			501728	797.225	
501733	220.781				
501735	666.095				
501756	133.6997				
<b>Total Santa Ana hectares</b>			<b>35</b>		<b>27,633.8829</b>

The location of the Santa Ana Project is shown in Figure 4.3.



## 4.10 Commercial mineral property agreements

Outcrop has a 100% ownership of the Santa Ana Project concessions (Table 4.1). Outcrop, formerly Miranda Gold Corp. (Miranda), purchased HFL-151 pursuant to an agreement with Cedar Capital Corporation (Cedar) in exchange for 24,000,000 common shares in Outcrop. Outcrop's wholly owned subsidiary, Malew Overseas, owns a 100% interest in Mineralas Santa Ana, which in turn owns a 100% interest in the Santa Ana Project. HFL-151 is subject to a 2% net smelter return (NSR) royalty payable to Condor Precious Metals (Condor). Outcrop has a pre-emptive right to the royalty and the right to purchase 1% at any time for C\$500,000.

RFO-15171 and RIT-16201 are subject to a 2% NSR royalty payable to Cedar. Outcrop has the right to purchase 1% at any time for C\$5,000,000.

PG7-08002, QAE-08001, QAJ-08001, QB4-08001, QBB-08001, QGS-08001, QLV-08191, RC2-08051, RD5-08031, UGT-08421, and RAP-08001 are subject to a 2% NSR Royalty payable to Activos Mineros. Outcrop has the right to purchase 1% at any time for US\$500,000.

All other concessions and applications were staked by Outcrop and have no royalty associated with them.

## 4.11 Risks and other factors

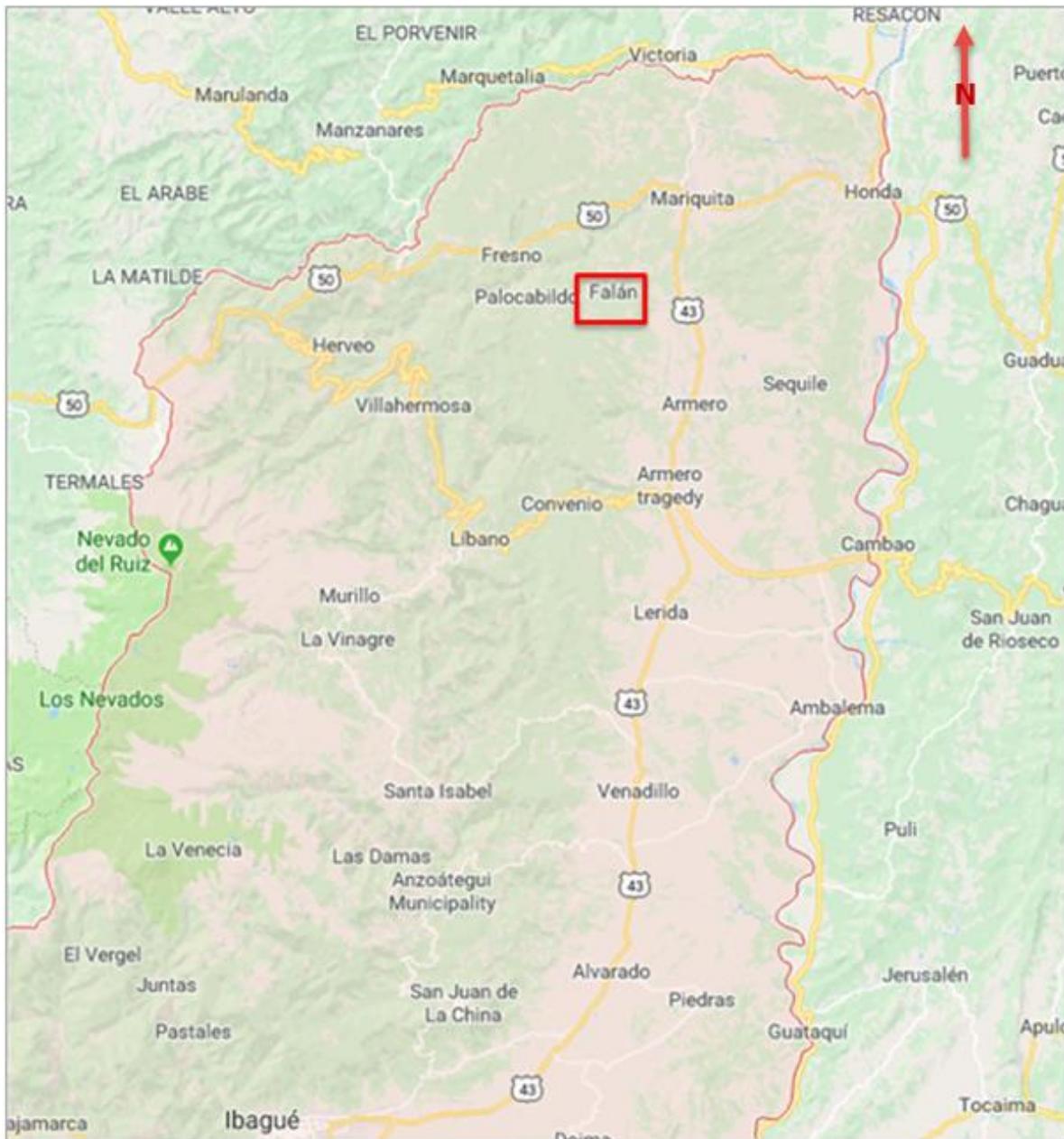
The QP is not aware of any other significant factors or risks that may affect access, title, or the right or ability to perform work on the property.

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

### 5.1 Access

The Project is located in the Municipality of Falán, Tolima Department, Colombia. It is approximately 15 km south-west of the town of Mariquita and approximately 190 km north-west of Bogota. Internationally, the Project can be accessed by flying into Colombia through either Medellin or Bogota, and then catching an internal flight to Ibagué. From Ibagué, it is a direct drive along Highway 43, north-east, to the turnoff to Falán and the town of Palocabildo (Figure 5.1). The main road through Falán is paved and several dirt roads cross-cut portions of the property.

Figure 5.1 Access to Santa Ana Property



Note: Red line represents the Tolima Department Boundary.  
Source: Outcrop, 2023.

## 5.2 Local infrastructure

The local community of Falán is well connected to the rest of Colombia, but the local power grid would be insufficient to power any future mining operations. Either an upgrade to the local power grid would need to occur or Outcrop would need to use alternative power sources such as diesel generators or renewables.

Construction of mine infrastructure would need to consider the local topography central location for any potential mine facilities given the various mineralized zones and their location to one another.

## 5.3 Climate

The region has a sub-tropical rainforest climate under the Köppen climate classification, with slightly lower temperatures at increasing elevation. Average annual temperature highs reach close to 28°Celsius (C) and lows of 14°C. Average monthly precipitation exceeds 70 mm with March, April, October, and November being the wettest months. The Santa Ana project is at between 4 and 5 degrees north latitude. All exploration activities can be conducted year-round.

## 5.4 Local resources

Mariquita is a regional government centre with a population of approximately 35,000 people and has both a small municipal and military airport. There are other population centres nearby, including Honda to the north-east on the Magdalena River with a population of 26,000 inhabitants, and Ibagué, the regional capital and seventh largest city in Colombia, located to the south with a population of nearly 500,000 people. Personnel and industrial equipment can be sourced from Ibagué, although most mine construction equipment would likely be sourced from either Bogota or Medellin.

There is a local workforce that, with appropriate training, would be suitable for the manual labour required at any potential operation. With Colombia's extensive mining history, there are experienced miners and other tradespeople available in the country. If an insufficient number of suitable Colombians are available for the more skilled professional positions, suitable mining professionals from other Latin American countries could potentially be hired.

## 5.5 Physiography

The Project lies within the Cordillera Central and is characterized by moderately to steeply incised relief, cut by several tributary creeks (i.e., quebradas). Most of the rivers and creeks drain into the Magdalena River to the east. The property elevation ranges from 700 to 1,100 metres above sea level (masl).

Over 90% of the rainforest has been cleared for slash and burn agriculture and replaced by dairy and cattle farming in the lowlands near Mariquita and southwards, and mixed crop agriculture, consisting primarily of corn, banana and coffee, yucca, and plantain, with more recent introductions of guanabana and yellow pitaya at higher elevations.

## 5.6 Surface rights

outcrop, through its subsidiaries, does not have any surface rights in the Project area. In Colombia, it is not required to have any surface property to access the subsoil. The Mining Law provides access to land and the possibility of expropriation of surface rights, as mining activity is considered to be of Public Interest. Access to target areas for exploration must be requested from local landowners prior to completing any exploration activity.

See further details in Section 4.8.

## 6 History

### 6.1 Past history in the region

Historically, the region is famous for precious metal extraction by the indigenous peoples. They extracted native gold from unconsolidated Recent-Quaternary sediments, alluvial sediments, and underground mining. More formal mining began following the Spanish Conquest, with extraction of gold and silver around the town of Falán. During Spanish control, silver grades were reported to be some of the highest in Latin America. Spanish mining was superseded by British, commonly Cornish migrants, who worked their way through Central then Southern America. British engineer Robert Stevenson, son of George Stevenson, worked briefly in the Falán area in the well-preserved old mine workings within and around the town. His reports, which included accompanying old plans and sections, reveal extensive underground work in and around Falán by the Spanish and Indigenous people.

On a more regional basis, the following is a summary of part of a compilation of abstracts from the Spanish Archives during the Colonial Period between the XV and XVIII Centuries:

*The town of San Sebastian de Mariquita (Mariquita) was founded in the year 1551 by Captain Francisco Núñez Pedroso, as the capital city of the Falán and Palocabildo Provinces. Fernando Silvero claimed to be the first discoverer of gold and silver mines in Mariquita and Falán, circa 1585, these comprising four veins in the San Juan Bautista hill. In the same year, Captain Diego de Ospina, Matias de Saucedo and Pedro Henriquez mined rich veins in the area. The average smelter return for silver ore during those days was "4 marcos per quintal" (equal to approximately >17 kg/t Ag), according to official reports of Hacienda Santa Fe (year 1585), with reported widths exceeding 1½ varas (4 ½ feet). Subsequent exploration discovered more veins in the Santa Ana (today Falán) and Frias regions, adding 14 new mines to the district, all of them producing over 1 marco of silver per quintal (approximately 4.3 kg/t Ag).*

*D. Antonio González, President of the New Kingdom, describes in a summary of the gold and silver mines discovered in the Mariquita and Falán areas as follows: "these mines exploit three main veins striking north-south and a fourth striking northeast, with strike lengths over 8 km (1 1/2 castillian leguas)." The mines around Mariquita and in surrounding districts operated with few interruptions from 1585 until they were abandoned in 1727 and it was said that the period of greatest prosperity was between 1585 and 1620 when they yielded 40 marks or 320 oz per ton.*

*In 1785, the Spanish Viceroy placed the mines under management of D. Juan José D'Elhúyar but in 1795, the King of Spain suspended all mining operations in the area due to the financial and material losses from mineral processing. This was in part relating to the suppression of the Amerindian workforce and the increase of labour costs.*

*In 1824, a lease was granted for the Santa Ana and La Manta to Herring, Graham and Powles from London, UK and they built a smelting-works at a considerable cost before returning to use the Freiberg amalgamation process. From 1824 to 1874 they were leased by several English companies. The Santa Ana and La Manta leases expired in 1874, and the mines were bought back by the Colombian Government. During this period, the mine workings reached depths of 100 m (50 brazas) below the Morales creek level (just south of Falán). In total, the depth of the Santa Ana mine was approximately 238 m or 780 feet where, according to various sources, the ore became poor.*

In the early 1900s, the only mine of importance in the mineralized silver belt was Frias at Guayabal. It had been reopened in 1871 by an English company which, after handpicking and concentrating, averaged 435 ounces (oz) silver and 15 ¾% lead per ton. The ore was shipped to England for metal extraction.

A gold-silver rush started in the area in the 1930's with focus on areas around past producing mines, resulting in re-emergence of four mining districts: Ibagué, Anzoategui, Santa Isabel, and Líbano. There is no known official documentation regarding the property history from the 1930's to 2010.

As noted in the 1950 United States Geological Survey (USGS) bulletin "Mineral Resources of Colombia" silver was being recovered primarily as a by-product of gold mining but acknowledged that during the colonial period the silver veins of both the La Plata and Mariquita districts were famous.

Old mines in the Falán area include: La Platilla, La Obdulia, El Dorado, Pueblo Viejo, and Jimenez mines. Several publications between 1880 and 1920 showed interest in these silver mines with most of the discussions related specifically to the Santa Ana and Frias mines. However, while the mines are discussed, there is very little in the way of production records available except as general statements.

In 2010, Porifiro Castro Escobar and Hernando Sanchez Alvarado applied for and were granted concession JGF08181, the Santa Ana Project.

In 2011, Porifiro Castro Escobar assigned his rights and obligations to Bryan Steven Castro Izquierdo.

In 2012, Condor acquired the Santa Ana Project (through its subsidiaries Malew Overseas SA and Lost City SAS).

In 2016, Red Eagle Exploration Limited (Red Eagle), through its subsidiary Cedar, acquired Malew Overseas from Condor.

In 2019, Outcrop acquired Malew Overseas from Cedar.

In 2020, Outcrop acquired an additional 16 claims from Mineros Activos expanding the Santa Ana Project area to approximately 28,000 ha (including applications).

## **6.2 Condor exploration program 2012 to 2014**

Lost City SAS, a 100% subsidiary of Condor, signed an Assignment Agreement dated 31 March 2012 to acquire 100% of the Mining Title JGF-08181 (i.e., Contrato de Concesión) from Bryan Steven Castro Izquierdo and Hernando Sánchez Alvarado, the beneficial holders of the Santa Ana JGF-08181 Project.

Before 2012, there are no known official records of work on the property other than informal artisanal placer mining on the Morales Creek and its tributary creeks prior to Condor's involvement on the property. Results of Condor work on the property are reflected in a NI 43-101 Technical Report dated 2013 co-authored by Doublewood Consulting Inc. and Antediluvial Consulting Inc. (Sarjeant and Hughes) and includes rock sampling and diamond drilling. The work performed in that period consisted mainly of sampling the Santa Ana colonial mine tunnels followed by drilling, the latter completed in August and September 2012.

Condor conducted intermittent exploration including prospecting and rock chip geochemistry, followed by a Phase I diamond drill program in 2012. The main exploration target was one of the the former colonial Santa Ana silver mines where there are numerous tunnels with exposed veins. Work thereafter consisted of prospecting to extend and better characterize known veins and sample these and discoveries made during this campaign.

The tunnels were partially surveyed using chain and compass and sample locations were mapped. There are three main tunnels, named from west to east: Castillo tunnel (above the mill building), Guadua (main tunnel) and the Guano tunnel, separated by approximately 15 m from each other. They have a roughly north-south (N10E) strike direction and, at that time, only the Guano tunnel could be followed to the very end, a distance of about 250 m. The other two tunnels either collapsed or flooded. Guano, a tunnel later re-named Roberto Tovar, was subsequently cleaned out by local workers and sampled by Condor.

Several other unnamed tunnels were found in proximity to the main three main tunnels, but they appear limited in extent or are collapsed and inaccessible.

Chip samples from vein material collected in the Guadua tunnel at Santa Ana returned grades up to 11.2 g/t Au and 2,820 g/t Ag (Sarjeant and Hughes, 2013), with several other samples returning high silver grades. An area sampled in the Castillo tunnel above the mill building returned values up to 929 g/t Ag and 241 g/t Au in the hangingwall. Shallow dipping, cross-cutting veins exposed in the Guano tunnel returned grades up to 7.76 g/t Au and 248 g/t Ag, and 3.47 g/t Au and 196 g/t Ag. Other sub-vertical-dipping, silver-bearing veins exposed in the Guano tunnel returned silver grades up to 600 and 443 g/t Ag.

In 2013, Condor conducted exploration consisting of mapping, prospecting, and rock chip geochemistry on the property to demonstrate continuity of known vein and mineral occurrences and better constrain the geochemistry of the vein system(s).

## 6.3 Red Eagle exploration program 2018

Red Eagle's 2018 exploration program included geological mapping, channel / rock chip sampling, and an orientation soil geochemical survey. The results of Red Eagle's program confirmed and expanded on the previous work completed by Condor. Red Eagle discovered a parallel mineralized shear zone to the east of the main Santa Ana mines area. The results of the mobile metal ion (MMI) soil program shows that geochemically anomalous soil samples are associated with these mineralized zones. Refer to Figure 10.1 for the location of the areas listed below.

### 6.3.1 El Dorado

Red Eagle's rock chip and channel sampling generally confirmed Condor's results, with some samples showing higher grades than those obtained by Condor. The results are shown in Table 6.1.

Table 6.1 2018 Rock geochemical results, El Dorado

Sample	Northing	Easting	Length (m)	Vein width (m)	Au (g/t)	Ag (g/t)	Cu (ppm)
A2926	1,059,028	903,366	0.5	-	3.05	80.2	8
A3733	1,059,050.50	903,369.50	0.6	-	3.2	1,234.30	147
A3734	1,059,028	903368	0.3	0.3	0.68	203	45
A3736	1,059,026	903,367.50	0.3	0.3	0.37	67.8	36
A3740	1,059,062	903,441	0.4	0.4	5.01	1,150.80	75
A2923	1,059,034	903,372	1.2	0.8	0.87	99.3	39
A2924	1,059,034	903,372	0.9	-	7.36	604.8	151
A3732	1,059,051	903,369	0.45	0.45	3.63	1,872.10	318
A2927	1,059,041	803,370	1	0.3	0.88	30.9	22
A2928	1,059,075	903,402	0.7	0.45	0.48	36	15
A2929	1,059,898	903,269	0.7	0.18	0.04	0	5

Note: Coordinates are in the Magna Sirgas, Bogota Zone coordinate system.  
Source: Outcrop, 2023.

**6.3.2 La Porfia (El Dorado South)**

A single rock chip sample across a 0.7 m wide vein had 35.2 g/t Au and 189 g/t Ag.

**6.3.3 La Pollera**

Red Eagle’s rock chip / channel sampling confirmed Condor’s rock sampling. The sample results are shown in Table 6.2.

Table 6.2 Red Eagles rock chip samples

Sample	Northing	Easting	Length (m)	Vein width (m)	Au (g/t)	Ag (g/t)	Cu (ppm)
A2857	1,057,559	903,015	2	-	0.26	27.9	13
A2859	1,057,202	902,984	0.3	-	0.02	2.10	1867
A2936	1,056,980	903,073	0.4	-	0.27	18.9	82
A2943	1,056,978	902,952	Grab	-	1	34.7	51
A2944	1,056,971	902,939	Grab	-	0.03	0.10	33
A2947	1,056,962	902,944	Grab	-	0.11	4.3	11
A2941	1,056,984	903,013	0.3	0.18	1.25	204.8	59

**6.3.4 Santa Ana mines east**

Prospecting to the east of the known mine workings in the Santa Ana mines area resulted in the discovery of a 35 cm-wide shear zone containing quartz and jarosite. The rock geochemical results are shown in Table 6.3.

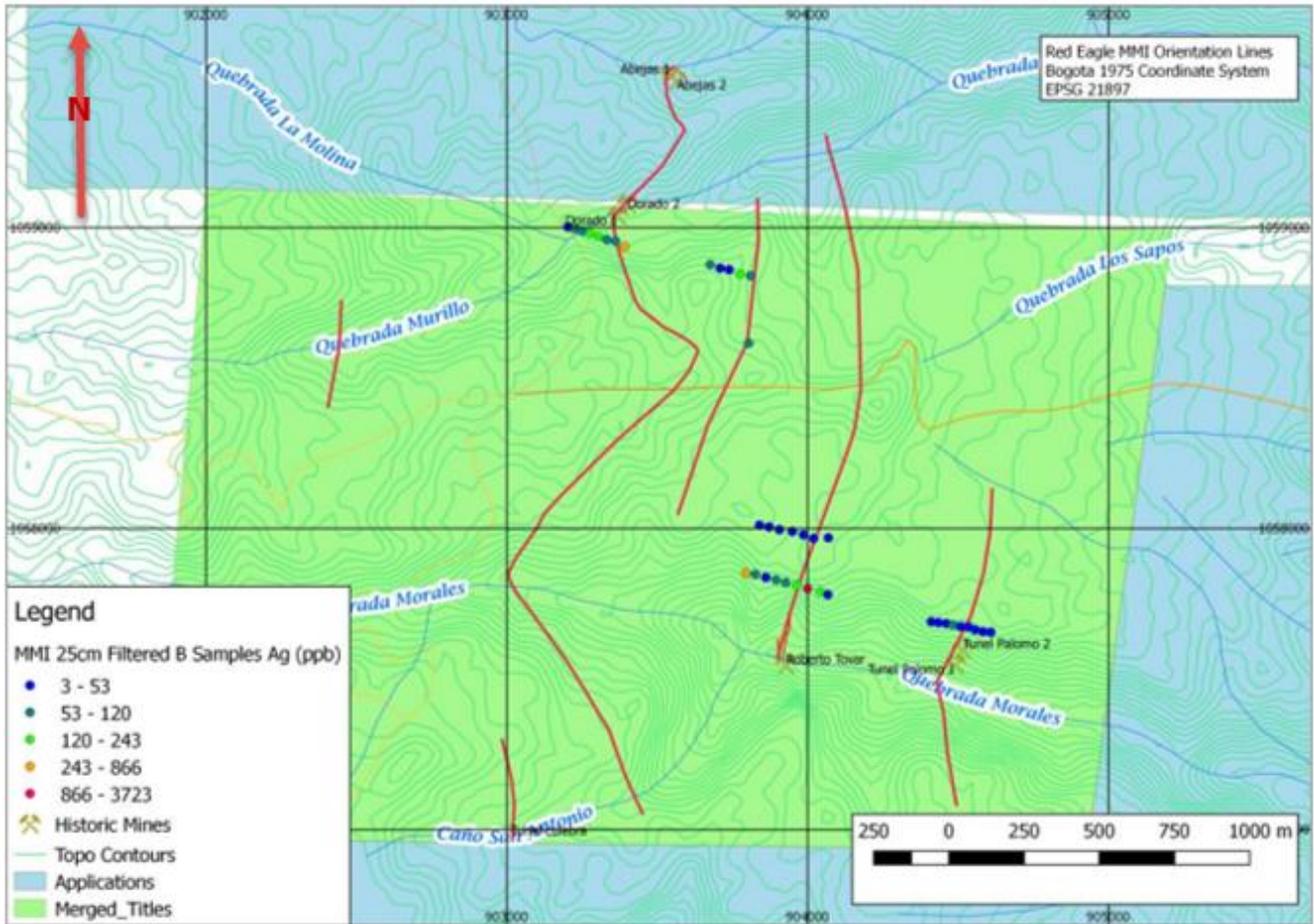
Table 6.3 Shear Zone chip samples

Sample	Northing	Easting	Length (m)	Width (m)	Au (g/t)	Ag (g/t)	Cu (ppm)
A3720	1,057,557	904,490	0.6	0.03	5.26	77.1	12884
A3722	1,057,584	904,512	0.3	0.05	1.64	160.1	84
A3724	1,057,586	904,512	0.35	0.35	2.07	563.1	37

**6.3.5 MMI soil geochemical survey**

Red Eagle completed an orientation MMI soil geochemical survey. The survey consisted of six profile lines in proximity to known mineralized zones with a sample spacing of 25 to 30 m along the lines. Samples were collected from various depths ranging from 0.4 to 0.01 m within shallow sample pits. The results of the MMI survey indicate there are anomalous soil samples associated with the mineralized zones on the property. Ag, Au, As, Cd, Cu, Hg, Mo, and Pb anomalies are most closely associated with the mineralized zones (Figure 6.1).

Figure 6.1 MMI sample lines



Source: Outcrop, 2023.

### 6.3.6 Underground sampling

In January 2018, Red Eagle cleaned out the Robert Tovar tunnel and subsequently mapped it and took channel samples of the mineralized veining. Mapped was carried out on a continuous 150 m long fractured and shear zone within the Cajamarca Formation. The tunnel was previously examined by Sanabria in 2012 and 2013 and is at least 250 m long. Within this zone REM mapped and sampled discontinuous exposures of mineralization and quartz veining. The host is tightly to isoclinally folded, with north-east strike, and overall steep westerly dips. The fault / shear zone generally dips steeply West, with sub-parallelism to the schist’s foliation.

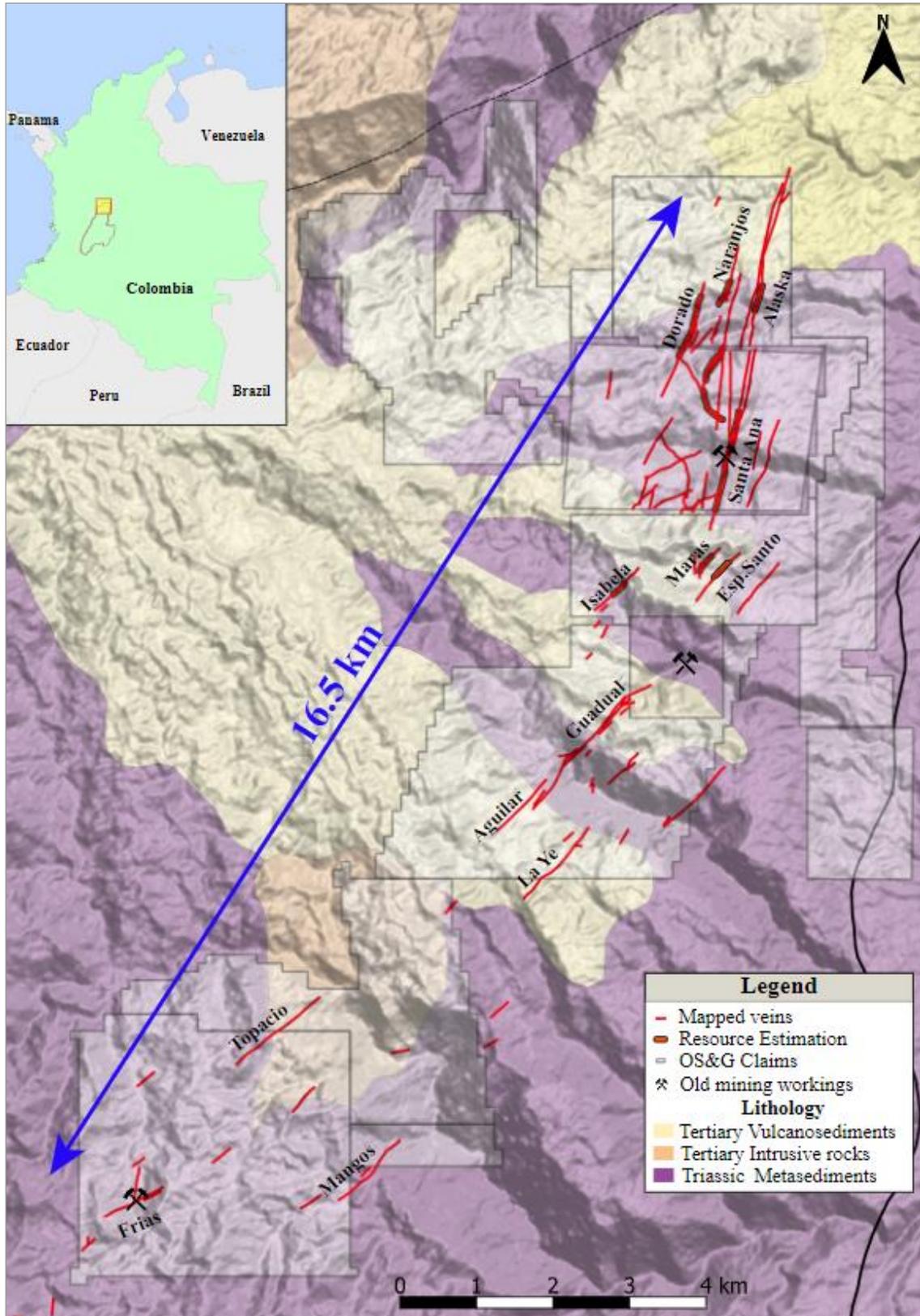
## 7 Geological setting and mineralization

### 7.1 Regional and local geology

#### 7.1.1 Regional geology

The Andes Mountains are a 7,000 km-long continuous mountain chain along the western margin of South America. In Colombia, the Andes mountains are in the western portion of the country and comprise three north-south trending ranges: the Western, Central, and Eastern Cordillera. From west to east, the Western Cordillera (Occidental) and Central Cordillera are separated by the Cauca-Patia Depression, the Central and Eastern Cordillera (Oriental) are separated by the Magdalena Depression, and the Precambrian Guiana Shield under and east of the Cordillera Oriental. The 'depressions' are expressed as two intermontane fluvial valleys. Western and central Colombia forms part of the North Andean Block, extending from Venezuela to the north, through Colombia, into Ecuador. This block is one of three major lithospheric plates in the region, the others being the Pacific, or Nazca, and Caribbean Plates (Figure 7.1).

Figure 7.1 Regional geological map



Source: Outcrop 2023

## 7.1.2 Local geology

The deposit is located in the CA-VA terrane which consists of highly deformed gneisses and weakly metamorphosed schists, and quartzose schists that are overlain by more recent supra-crustal rocks and later intruded by plutons of various ages (e.g., the Cenozoic age El Hatillo Stock west of the property; Cedié et al., 2003). The CA-VA terrane (mauve in Figure 7.1) is bound to the north-west by the Palestina fault and to the east by the OP.

The rocks of the Santa Ana Project are underlain by a series of dark grey to green-grey graphitic and pyritic schists forming part of the Cajamarca Formation and exhibiting a strong north-trending foliation. In the upper parts of the property, conglomerated and sandstones of the late Pliocene Mesa formation unconformably overlie the Cajamarca Formation.

## 7.2 Property geology

The dominant rock types in the project area include:

### Chicamocha Gneisses

The Chicamocha Gneisses are the oldest rocks seen in the surrounding area; however, no outcrop has been found on the property. Government geology maps indicate the eastern boundary and area east of the regional north-south-trending Mulatos fault, is underlain by these Gneisses that are preserved as a north-south trending 'band'. The rocks comprise deformed migmatites, quartz feldspar gneisses, granulites and marbles (Gomez-Tapias et al, 2007), and are interpreted to represent Grenvillian age basement. The accreted Cajamarca Formation comprises various metamorphic rocks forming the core of the Central Cordillera. This formation is widely exposed in most of the eastern part of the Central Cordillera. It includes a broad number of lithologies, all of them affected by low to medium grade regional metamorphism (i.e., greenschist to amphibolitic facies).

### Cajamarca Formation (Pzec)

Most of the property is underlain by the Cajamarca Formation (i.e., schists), comprising various metamorphic rocks that form the core of the Central Cordillera. This formation is also exposed in most of the eastern part of the Central Cordillera. It groups a broad number of different rocks, all of them affected by low to medium grade regional metamorphism (i.e., greenschist to amphibolitic facies). The Cajamarca Formation underlies much of the area west of the Mulatos Fault. The most commonly and widespread rock type within the Cajamarca Formation is a quartz-chlorite schist (including quartz-chlorite-albite-epidote, quartz-albite-actinolite, quartz-(feldspar)-sericite, graphitic quartzite and biotitic quartzite). There are also minor occurrences of marbles, amphibolitic schists, and amphibolites within the Cajamarca formation. Feininger et al. (1972) suggest that the quartzitic units occupy the upper members of the stratigraphic sequence.

### El Hatillo Stock (Pgh)

Barrero and Vesga (1976) described elongated intrusions exposed in the eastern side of the Central Cordillera, east of the town of Fresno, and near the municipality of Santa Isabel. The outcrop is located along the Mariquita-Fresno Road and is described as equigranular, coarse-grained biotitic quartz-diorite, varying locally to diorite and hornblende gabbro. It has been dated at  $53 \pm 1,8$  Ma, corresponding to Palaeocene – Eocene. The spatial relationship between the Santa Isabel and El Hatillo stocks and vein (gold) mineralization is well known, with some areas currently being developed and in production as small mining operations (Sarjeant & Hughes, 2013). The stock is exposed to the south-west of the property and contains minor sub-vertical and sub-horizontal quartz-rich veining.

## Mesa Formation (Ngm)

A relatively thick sequence of Paleogene to Quaternary sediments that blankets the eastern area of the title, Porta (1965) described the Mesa Formation as a Pliocene sedimentary unit (brown unit in Figure 7-1) as partially overlying the Hatillo Stock (purple unit in Figure 7-1). He proposed three sub-units or members within it: Las Palmas, Bernal and Lumbí, with a total thickness of 431 m. According to Porta's description, the lower Las Palmas member is comprised of gravel and sand bars, with dacitic and andesitic clasts (65%), metamorphic, plutonic and chert clasts (35%) and minor tuffaceous sandstone and kaolinitic (clay) units. The Bernal member contains volcanic clasts (70%) and pumice rich gravel boulders. The Lumbí (upper) member consists of tuffaceous sandstones and minor kaolinitic (clay) units (Sarjeant & Hughes, 2013). There are poorly documented historical reports of gold extraction from some of these sediments by indigenous people.

Easternmost areas of the property are partially underlain by Neogene volcanoclastic sediments, and other locations are covered with a variably thick, less than one metre to tens of metres thick veneer of Quaternary age clastic material.

### 7.2.1 Structure

There are few geological studies on the Cajamarca Formation. It is considered a part of a more regional rifted terrain having been subsequently accreted and subjected to multi-phase deformation like that within fold-thrust sequences. The El Gran Porvenir mine, just north-west of Libano, displays some of these characteristics. Shallow-dipping mineralization is observed within heavily veined structures that are in some cases clearly ramped and have normal and minor reverse displacements.

Surface and underground observations around Santa Ana indicate the Cajamarca Formation have been folded by at least two deformational episodes and a later third fold-thrust episode modified by two regional brittle events.

The region has been affected by the Romeral Fault System (RFS) and its interaction with the easterly Otú-Pericos (OP) fault. Lineament analysis indicates two major strike-slip events bounded by the primary RFS, a secondary north-east-striking fault set modified by a tertiary NNE-striking set, with the latter aligned and possibly controlled by the more northerly trending OP and Mulatos regional faults.

Later extensional events in part produced by the northerly development of the RFS and OP fault resulted in WNW-ESE faulting with a clear sinistral (NW) rotational component. These faults generally dip moderately to steeply NE. Such activity has resulted in block-faulting within primary rift-like fault settings.

Primary structural features are typically north-south trending and are characterized by steeply dipping planar faults and shear zones that host mineralized quartz-rich veining. There are some examples of veining parallel to low order fold hinges and along planar limb dislocations. A later, moderately dipping mineralized vein set is less common, and represents either a thrusting event(s) or re-activated (reverse) faulting during extensional episodes. Much of the geology is cut by late, north-trending, oblique strike-slip faults that offset veining.

The earlier regional folding, with sigma one likely approximately NW-SE and is thought to have had a near perpendicular principal stress orientation, resulting in the development of regional-scale lateral, deep-rooted faults, with significant strike-slip displacement.

The Cajamarca Formation is characterized by close to tight to near-isoclinal, upright to vertical folding within thrust, steeply to near vertically dipping sedimentary rocks. Detailed mapping has

not yet defined and characterized the regional thrust episode. Examples of fold-thrust processes on the property are represented by progressive simple shear, producing a thrust sheet package and associated north-east-facing folds, with the fold axis perpendicular to the overall easterly thrust direction and the stretching lineation. The sequence plunges shallowly to the north within the lower-middle order folding, and parallel, semi-brittle to brittle, steeply east-dipping fracture systems commonly dividing vein geometries (e.g., palimpsest features), with ingress and precipitation of metal-rich fluids therein.

Vein geometry and associated sulphide compositions and associations suggest the Falán veining to represent a mid-depth portion of a once more extensive epithermal system that was emplaced within and modifying by an orogenic, acidic hydrothermal vein system. It is thought that the earliest veining was quartz-rich, partially deformed, and of multiple fluid phases expressed as bands, but more often as brecciation and sealing. The main sulphide phase is pyrite with trace amounts of pyrrhotite. The veins are interpreted to represent acidic hydrothermal fluids related to orogenic veining that was buffered by phyllite, shale, and siltstones of the host Cajamarca Formation.

A second stage epithermal system also appears to be low-temperature and buffered by the same host. The presence of low Fe sphalerite, pyrite, and galena mineral assemblages suggest a low-sulphidation epithermal system. A general model proposed for the Falán region involves emplacement of Mesozoic-Tertiary orogenic veins along regional scale faults, with the host acting as a strong chemical buffer and physical barrier, producing distinct planar quartz-rich veins and associated silver-gold mineralization.

Explosive volcanism during the Miocene or Palaeocene was likely emplaced along one of the regional faults, with magmatic fluids accumulating along previous anisotropies. Subsequent cooling resulted in a low vapour phase and deposition of multi-stage silver- and base metal-rich fluids. The silver-rich assemblage indicates a relatively deep, low-sulphidation (or possibly intermediate-sulphidation depths). This assemblage often shows either lacks the development of a more gold-rich assemblage above it due to poor buffering (Ph / Eh), limited magmatic – meteoric vapour mixing, or simply loss of strata through erosion of what might well have been a strongly mineralized, recent (Miocene-Palaeocene) volcanic cover sequence.

## 7.2.2 Hydrothermal alteration

In general, hydrothermal alteration within the Cajamarca schists is weak and generally confined to areas with high vein density. Narrow sporadic zones of sericite alteration (between 0.2 and 3 m wide) and weak silicification haloes around the veins are noted within the schist host rocks. The most common minerals present in the alteration zones, based on visual inspection, are quartz, pyrite, adularia, and illite, which constitute the following main alteration types: quartz-adularia (+ pyrite ± illite), quartz-illite (+ pyrite), and propylitic (chlorite + calcite ± illite). Quartz-adularia alteration is restricted to vein margins. Quartz is present as a replacement of the groundmass and as irregular veinlets, whereas adularia is almost completely restricted to the veins / veinlets. Pyrite is disseminated within quartz in the veinlets and precipitates in the host rock as euhedral crystals.

## 7.2.3 Vein mineralogy

The Santa Ana Project covers at least six mapped and interpreted vein zones that, taken together, constitute over six km of total strike, based on outcrop exposure and underground workings. Each zone contains a package of several parallel veins. The geometry of significant silver-gold mineralized veins appears planar, and they show evidence that they were locally remobilized, banded with sulphides, and display several silica-rich fluid phases. Those mapped to date strike north-south but local east-west striking veins are also observed. These too, are mineralized. The district is 2.5 km wide, extends from east of the town of Falán, west towards La Rica, and has numerous north-south and east-west-striking veins. These veins are distributed within the north to north-northeast-

trending regional Palestina fault zone in second and third order faults. Generally, veins in the district are hosted by sub-parallel, oblique-slip normal faults and extension fractures.

The La Porfia vein is interpreted as a high-grade mineralized shoot with dimensions of 300 m by 250 m that includes multiple parallel veins. The veins show crustiform to colloform epithermal textures with secondary silica- flooding.

The Paraiso vein mineralized shoot extends for 300 m along strike and up to 310 m down-dip and remains open towards the north. The Paraiso vein hosts the Megapozo shoot, secondary parallel veins and vein segments in a stacked sequence. The intercept width of the veins is variable with a range of 0.38 to 2.72 m and an average estimated true width of 0.91 m. Veins are commonly banded with quartz druse and local hydrothermal breccia. Drill core shows sulphides in veins vary from 1% to 15% occurring in character as massive, disseminated, and in bands. The quartz veins typically have alteration selvages of clay, silica, and sulphide.

The Santa Ana vein comprises two individual shoots separated by approximately 160 m. Both shoots are similar in form and geometry. They are 200 to 250 m wide, dip approximately 200 m down-dip and are subvertical. The Roberto Tovar and San Juan veins comprise at least three vein packages within a 20 m to 25 m wide interval. True width varies from 0.8 m to 1.8 m on average. The Roberto Tovar and San Juan shoots are both open at depth open to the south and north respectively. An additional shoot called San Antonio has been drilled and defined around 300 m south from Roberto Tovar and shows similar geometry and disposition.

The El Dorado target area hosts a high angle vein with associated splays and stringers. High-grade shoots recognized to date are called El Dorado and Las Abejas, both remain open at depth and show a plunging preference to the south.

The Los Naranjos vein can be traced for more than 400 m on surface and has been drilled along strike for 350 m and 320 m down dip. It has an average true width of 0.75 m and 2.29 g/t Au and 803 g/t Ag. Drilling in Los Naranjos totals 7,141 m in thirty-four holes that defined two narrow high-grade shoots.

La Isabela vein This vein can be traced for 600 m and has been drilled for 550 m along strike and 120 m down dip. Drilling has identified two narrow, gently dipping parallel veins (Figure 10.8) that show an average true width of 0.46 m and 2.82 g/t Au and 449 g/t Ag.

Gold-silver mineralization is located within the north to north-east trending fault sets. Elsewhere, including south towards the town of Libano, mineralization appears to be further modified by late (i.e., Mesozoic, Cretaceous to Miocene age) brittle faulting. The mineralized veins area usually hosted by north-east striking, steeply north-dipping normal and reverse faults that likely represent re-activated faulting. The disparity is probably related to the decrease in strain partitioning intensity to the north, and the regional oblique indentation of the Nazca plate causing rotational block faulting. The more northerly mineralization may retain evidence of the inferred early phase of orogenic mineralization; to the south shows evidence remobilization of mineralization. It should be emphasised that both areas have a significant epithermal overprint.

Most of the faults that host mineralization strike between 020° and 040° and dip moderately to steeply west in title HFL-151. Further south, the strike between 030° and 060° and dip moderately to steeply north-west. These faults host some of the richest veins in the district, including Mina Vieja, Pollera-Sewer-El Dorado-La Platilla, La Porfia-La Manta on title JGF-08181. Within well-defined shear and fold geometries, strike-slip controlled mineralized veins are parallel to reactivated lower-middle order faulting, often spatially and possibly genetically associated with steeply dipping fold axial planes. Vein textures include crustiform banding, breccias, and cockade

textures, suggesting that vein opening and filling was episodic, and that there were several episodes of fault movement related to brecciation and mineralization.

Some researchers consider mineralization to be associated with the emplacement of the Ibagué Batholith and hosted along north-east trending pre- and syn-mineralization secondary faults related to the Bolivar rifting. The Ibagué Batholith can be hosted in an anastomosing system of secondary and tertiary set veins and is dependent on the competency of the host rock. Precious metal deposits are hosted in Palaeozoic- and Proterozoic-age meta-sedimentary rocks, with additional mineralization in Miocene-recent sedimentary and volcanic rocks, alluvial and eluvial deposits. There are several Mesozoic-Eocene age intrusions in the area that may have provided metals during the development of the epithermal system that hosts Falán, Tolima, and Porvenir mineralization, including the Cretaceous Hatillo diorite, granodiorites and Palaeocene intrusions of roughly similar mineralogy. Their emplacement appears to be partially controlled by the regional re-activated strike slip Palestina and Jetudo faults, and by structures trending north-south and parallel to the major, well-documented Honda, Mulatos, Cambao, and Agrado thrusts to the east.

Barrero and Vesga (1976) described elongate intrusions exposed in the eastern side of the Central Cordillera, east of the town of Fresno and in the Santa Isabel municipality. The El Hatillo stock is exposed along the Mariquita-Fresno Road and is described as an equigranular, coarse-grained, biotitic quartz-diorite, or locally diorite and hornblendic gabbro. It has been dated at  $53 \pm 1.8$  Ma, corresponding to the Paleocene – Eocene. The spatial relationship between the Santa Isabel and El Hatillo stocks and vein (gold) mineralization is well known, with some areas currently being developed or in production as small mining operations. The eastern margin of the stock is exposed several kilometres to the south-west of the property, and in the centre-core along the Mariquita-Fresno Road, where it has intruded thrust and folded Cajamarca sedimentary rocks.

### 7.3 Significant mineralized zones

The veins are interpreted to be a composite of early polymetallic gold-silver orogenic thrust-fold related and later epithermal open-space veins in highly deformed Palaeozoic schist, quartzite, and gneiss of the Cajamarca Formation.

There are at least four stages of quartz-rich veining, two of which are penecontemporaneous with a later phase of regional scale deformation, and one which is more planar and post-dating one major fold episode. This latter set appears relatively small, thinner, and with negligible sulphides.

A paragenetic sequence has been identified from field observations within a major mining corridor that comprises (from north to south) the Santa Ana, El Cristo, Jimenez, El Socorro, Tavera, Patiburri, Lagunilla, El Gran Porvenir, Oasis, Santa Isabel, and Las Animas mines, in addition to other vein occurrences. Several stages of mineral precipitation have been recognized: an early (S1), second (S2), and quartz (S3) stage. Second stage mineralization is characterized by an early silica-rich phase followed by sulphidization, represented by granular or banded pyrite, sphalerite, and galena.

Veins display complex textures characteristic of replacement and episodic, open-space precipitation (e.g., crustiform banding, symmetric banding, vugs, breccias, and cockade, and comb textures.)

In general, the more complex banded veins have higher gold-silver grades. Associated small-scale breccias consist of angular clasts of the host rock and vein clasts up to 10 cm in diameter cemented by vein material that may exhibit cockade texture. Symmetrical crustiform banding is the most abundant texture, with early deposition near the wall rocks and later deposition in the vein cores. Principal gangue minerals include quartz with variable amounts of adularia, sericite (illite), and trace carbonates. Ore minerals include sphalerite, galena, chalcopyrite, and tetrahedrite (freibergite), with sub-ordinate silver-bearing sulphosalts (argentite, pyrargyrite), native silver, and native gold (electrum).

Silver ore minerals tend to form thin sulphide-free bands accompanied by minor pyrite. The quartz stage (S3) is an exception, which hosts coarse-grained sphalerite and galena. The order of sulphide mineral precipitation in veins appears to be the same throughout the district, with early sphalerite and some pyrite, followed by galena. Chalcopyrite and silver sulphosalts are among the last ore minerals to precipitate. Chalcopyrite replaced sphalerite, and local pyrite encloses galena and sphalerite, indicating that it also precipitated after base metal sulphides. The youngest sulphides are typically coarser-grained.

Drill core was analyzed for trace element chemistry by Inductively coupled plasma mass spectrometry (ICP-MS). Results showed a positive correlation between Ag and Sb, As, Mn, and Cd. It should be noted that anomalous manganese is still very low compared to other low- and intermediate-sulphidation deposits, both volcanic and sedimentary-hosted. Nearly all these elements outline a much broader alteration halo.

Gold grades are not necessarily indicative of the highest silver values but typically have a positive correlation. There is no correlation between bismuth and silver or gold concentrations. There is a negative correlation between silver and copper concentrations. Zinc and lead concentrations are variable, suggesting re-mobilization of base metals or a late base metal-rich fluid phase. It is thought that the available copper within silver-rich domains was precipitated as tetrahedrite and / or tennantite.

Local domains of highly anomalous tungsten and tin may be spatially associated with higher silver concentrations. Tungsten was identified in drill core and at El Gran Porvenir mine in late or possibly remobilized coarse-grained tungsten mineralization. Mercury and fluorine were not analyzed.

The greatest silver and gold concentrations are interpreted to be sometimes hosted in re-activated or juvenile quartz-rich epithermal veins within fractures originally produced by the earlier orogenic event that, one responsible for the present accretionary, fold-thrust terrane. Veining appears brecciated and is locally banded with minor chalcedony and possibly adularia. Pyrite concentrations can be significant and are typically banded or patchy, semi-massive, and may be accompanied by appreciable quantities of silver, sphalerite, and galena. Sulphosalts formed at early- to mid-stages of vein development.

It is unclear how many stages of silver, lead, and gold-rich fluid phases were present, despite evidence of brecciation and silicification of silica-rich veins and wall rocks.

The local epithermal veins appear to be a hybrid orogenic and epithermal phenomenon, localized along the same structures. A late stage, post-epithermal quartz vein set hosts minor pyrite, and like the epithermal set, hosts elevated concentrations of gold. The compositional and geometric similarity between these two sets can obscure the relative ages of each, though some cross-cutting relationships are preserved within or proximal to, the larger, richer epithermal vein sets.

The early orogenic phase quartz veining exhibits strong similarities to mid- and upper-level lode gold deposits. The geometries are typically planar, reef-type or en echelon array veining, with variable wall rock alteration. One interpretation of the system is that the lower crustal gold deposits represent a root system expressed by an upper crustal epithermal deposit; however, a complete model for the integrated hydrothermal system is yet to be established.

Sulphide mineralization is typically pyrite with lesser pyrrhotite and chalcopyrite. Sphalerite and galena have been observed. Silver-bearing minerals are less well defined, but are argentite, argentiferous galena, tetrahedrite (based on elevated antimony and copper within higher silver values), and possibly tennantite (copper-arsenic association).

Overall, sulphosalt content is quite low compared to known epithermal and other low-sulphidation deposits in the literature. Pyrargyrite, proustite, jamesonite contents are unknown. Veins are silica-rich with weak calcite content. Some quartz appears to be chalcedonic. Adularia content is variable. Chlorite is the dominant mafic mineral, though most appears related to regional metamorphism of the host Cajamarca sedimentary rocks. Similarly, sericite concentrations are low, but this is likely a function of erosion level. Barite, whilst uncommon in low-sulphidation epithermal systems, appears to be very weak.

The orogenic veins may have an intrusive affinity as shown by associated tungsten-bearing minerals. Veins are both high and low-angle and comprise pyrite, sphalerite, galena, silver-bearing minerals and native silver in quartz, quartz-carbonate, and quartz-adularia gangue. There appear to be multiple overprinting mineralization events over a very long period during rapid terrain uplift. The colonial mines reported average mine widths of 1.5 m which generally conforms to observations in mine workings and modern drill intercepts. The veins range from 0.20 to 4.0 m in width.

## 8 Deposit types

The polymetallic silver-gold veins at Santa Ana are interpreted to be a composite of early polymetallic gold-silver orogenic thrust-folding and later epithermal open-space veins in highly deformed Palaeozoic schist, quartzite, and gneiss of the Cajamarca Formation. Veins are commonly associated with the margins of small intrusive bodies. The orogenic veins may have an intrusive affinity based on the presence of associated tungsten minerals. The veins and mineralization as described would broadly conform to the classifications proposed by Simmons et al. (2005) and Corbett, G.J. (2002a). Early, hydrothermal-orogenic veining appears to have been overprinted by this epithermal system.

Elements showing anomalous concentrations that are associated with precious metal mineralization include As, Cd, Mn, Sb, Sr, W, and Zn. The deposit type has open-space veining, commonly with stockwork or layered sulphide mineralization, and relatively minor disseminated and replacement-style sulphides. Textures observed include banding and cavity / open space filling. Mineralogical is characterized by free gold and minor amounts of sphalerite (Zn), galena (Pb), and chalcopyrite (Cu) in quartz-rich gangue. Silver and gold are associated with pyrite, sphalerite, galena and to a lesser extent, chalcopyrite. They can have economic vertical extents up to more than one kilometre.

The characteristics of veining and mineralization are like those at, Creede, Colorado (Cox and Singer, 1992), Guanajuato, Mexico (Gross, 2006), and Cailloma, Orcopampa, and Arcata districts, Peru (Ericksen and Cunningham, 1993).

Gold-silver mineralization in the district appears remobilized by a two-stage orogenic-epithermal event. Examples of silver-rich orogenic mineralization include the Tieluping Silver-Lead deposit, Henan Province, China (Chen et al, 2004) and the Lachlan Orogen, Cobar-type deposits, near Broken Hill, New South Wales, Australia). A summary of the latter area is provided on the AusIMM website.

Distal, intrusion-related Ag-Pb-Zn deposits may be associated with proximal orogenic gold deposits. An analogous system is the Snip Gold Mine, BC, where outlying precious-base metal veining is associated with the Red Bluff Porphyry. Several of the orogenic hydrothermal gold deposits of the Pataz Province, Peru, are silver rich with quite low Au:Ag ratios (e.g., near to slightly more than 1:1; refer to Haeblerlin et al., 2004). Mineralized fractures and veins are spatially related to Carboniferous pluton emplacement. Other mining camps include the Ag-Pb-Sb-Au district, Nevada,

An intrusion-related source for the metals cannot be ruled out but has not yet been proven. Orogenic gold deposits often have high base metal, silver and occasionally tin contents and are emplaced at relatively shallow depths and, in the case of South America, are associated with Andean-type intrusions (see Groves et al., 2000).

The area was then overprinted by a low-sulphidation epithermal system characterized by quartz-(adularia)-(sericite) veining with silver-gold (including sulphosalt) mineralization, with sphalerite, tungsten, and galena, hosted in chloritic, locally graphitic schist of the Cajamarca Formation. Mineralization is likely Cretaceous-Jurassic in age and formed at shallow levels (<5 km) from acidic low CO<sub>2</sub> fluids. The setting is classified as Arc Low-Sulphidation within the accreted terrane of the mainly Cajamarca sequence.

Santa Ana compares favourably with other Andean Palaeozoic gold deposits, including Ordovician to Carboniferous age, quartz veins, structurally hosted gold deposits within turbidites, granites and gneisses in three major Au+/-Sb+/-W metallogenic belts, extending from northern Peru to central Argentina along the Eastern Cordillera, south to Argentina. Examples include: in Peru, the Pataz-

Marañon batholith-hosted gold deposits; Bolivian sediment-hosted Sb-(Au) mineralization; Au-Ag-W veins within the Argentinean Sierra Pampeanas. One could also include the Antioquia region, Colombia, forming a portion of the mid-Cauca Belt.

There are numerous examples of similar mineralization within an orogenic / Cordilleran setting:

- Jerusalem - high grade gold-silver mine.
- Ecuador – Apacheta.
- Peru - André-Mayer et al., 2001), the Caylloma Mine Arequipa Province, also, (Echavarria et al., 2006, Chapman & Acosta, 2012).
- Ecuadorean Portovelo-Zaruma-Ayapamba área.
- El Oro Province - which displays remarkable similarities with the Colombian stratigraphy and tectonics, and with the addition of more extensive Tertiary-Miocene volcanic activity, (e.g., D. Bain, 2006).

## 9 Exploration

### 9.1 Introduction

Information on pre-2013 work was reported by Sarjeant and Hughes (2013). Condor continued exploration until 2014. Red Eagle completed a surface exploration program in 2018 and Outcrop has carried out exploration programs continuously from 2019. Section 6 has further details on exploration conducted by previous owners. Exploration conducted by Outcrop is below.

### 9.2 Procedures, representation and bias

The sampling procedures for channel, rock and soil samples are discussed in Section 11. The sample quality was reviewed during the site visit and has been deemed acceptable. To avoid bias in channel samples, large samples (5 kg) are taken. Soil samples are taken on traverse lines perpendicular to veins on 20 m spacings. Rock chip samples are taken where outcrop is available and when mineralized float is evident. The QP considers these sampling to be representative of the mineralized areas.

No other factors would have resulted in sample biases.

### 9.3 Outcrop exploration

Outcrop has conducted mapping, prospecting, trenching and soil geochemical surveys along the 18 km corridor between The Alaska vein in the North to the Frias historical mine in the Southwest (Figure 9.1). A total of 3,944 channel samples (including 526 underground samples) and 5,728 soil samples have been taken during these exploration activities, including 145 trenches for 5.4 km of cumulative length.

The regional exploration program at Santa Ana has defined at least nine additional target areas such as Aguilar, Guadual, Topacio, Los Mangos, Cavandia, La Ye, Frias, Las Lajas and Espiritu Santo. Some targets include underground mapping and channel sampling where old mine workings were available.

The Aguila vein, discovered through Reconnaissance mapping and sampling, identified the new Aguilar vein, located 3,000 metres south of the Espiritu Santo target. Aguilar can be traced for 1,000 metres and is locally 3.5 metres wide in outcrop. Locally multiple parallel vein segments are observed. Mapping suggests higher grade mineralization occurs at flexures within the dominant northeast trend of the veins. These flexures are interpreted to represent structural intersections between northerly trending faults and northwest trending lineaments that may focus drill testing. The Aguilar Vein may represent part of a 3.8 kilometre vein zone, continuous with the Espiritu Santo and Mina Cristo target areas to the north. El Guadual target represents a direct continuation of the Aguilar vein in the direction of Espiritu Santo.

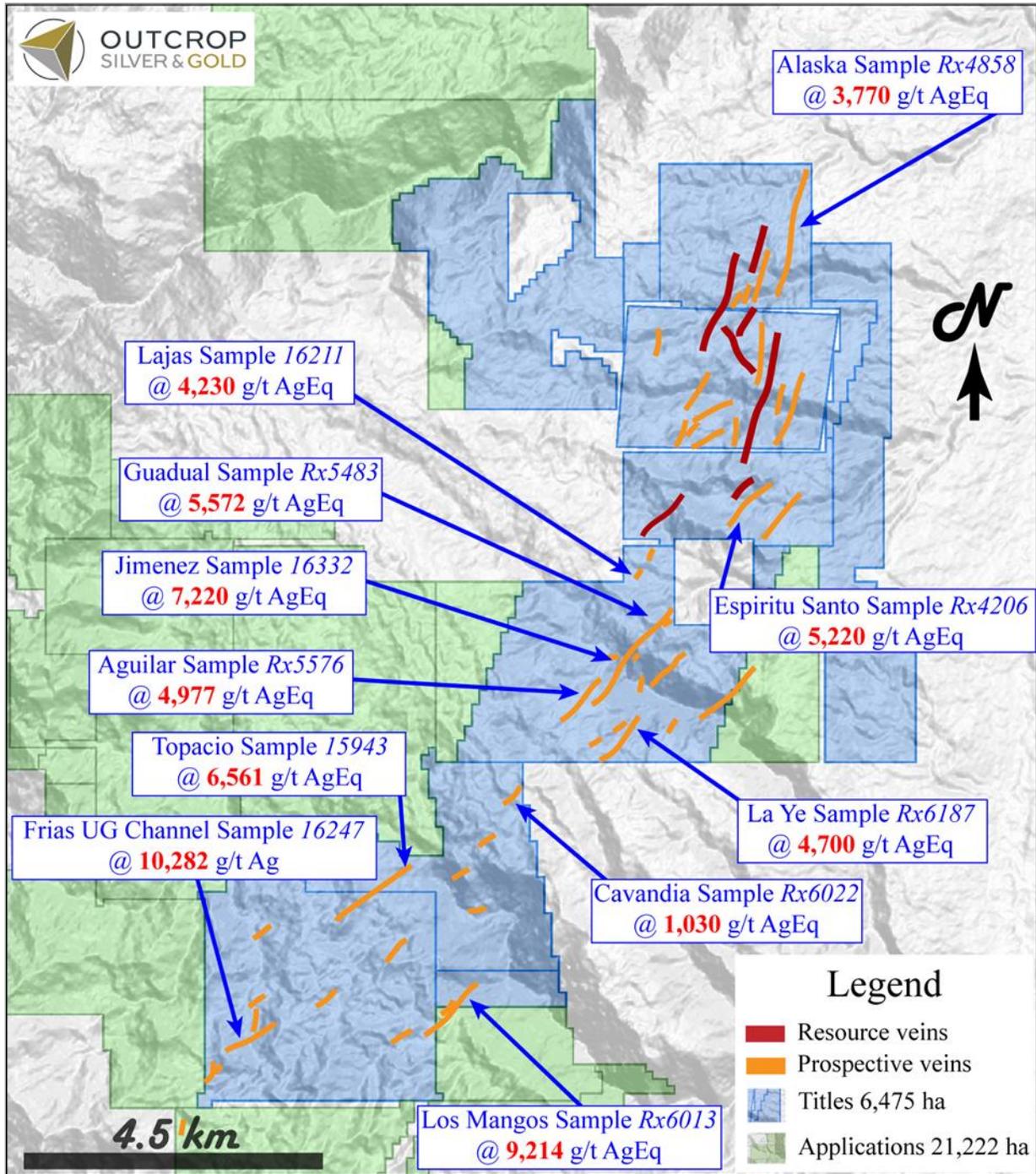
Los Mangos was discovered through mapping and rock sampling while evaluating geophysical anomalies. It is characterized by a series of parallel to sub-parallel veins oriented 220 to 240°, generally dipping 60 to 80° to the North. The main Los Mangos vein can be up to 1.20 m wide and wider when adjacent shears and veinlets along vein margins are included. The host rock varies from schists to granodioritic dikes, with the latter probably related to mineral deposition. The recognition of dikes associated with high-grade veins provides an exploration vector. Intrusive dikes can be detected with modeled airborne magnetic survey data as a proxy for potentially associated veins to generate target areas by remote sensing. These remote sensing vectors will aid regional-scale target generation. Targets can be identified by geophysics and then evaluated on the ground by priority. Los Mangos has a continuity of 650 metres indicated by vein outcrop, historical mines, vein float mapping, and sampling. Vein material from historical mine dumps shows assays of 27.71 grams gold per tonne and 9,738 grams silver per tonne. Samples from insitu quartz veins

from 20 historical workings returned up to 4,545 grams silver per tonne and 1,053 grams silver per tonne.

La Ye was generated through regional-scale soil geochemical surveys, follow-up geological mapping, and outcrop sampling. La Ye is comprised of a primary quartz vein oriented 225° and dipping 55° to the north. The La Ye vein is up to 1.0 m wide, hosted by altered schists. High silver and gold grades appear closely related to crystalline quartz-bearing galena and pyrite. La Ye shows continuity for 150 metres in outcrop and greater continuity of up to 1.5 kilometres through float mapping, sampling, and interpreting geochemical and geophysical surveys. Vein float, including - near insitu boulders, showed up to 13.21 and 11.39 grams of gold per tonne. Outcropping shear zones and sheared material in float show up to 4,043 and 2,141 silver grams per tonne, respectively.

Topacio is inferred to be an extension of the veins hosting the historical Frias Mine. Topacio was identified through prospecting along regional trends inferred from lineament and geophysical modelling. Where well exposed, Topacio is characterized by a sub-parallel narrow veins system oriented 210 to 240°, dipping 60 to 80° to the North. Packaged veins range between 0.2 to 0.5 metres in thickness. Mapping confirms a local strike length of 400 metres, but broader prospecting indicates that Topacio extends up to 1,300 metres.

Figure 9.1 Prospective and Mineral Resource Veins



## 10 Drilling

### 10.1 Introduction

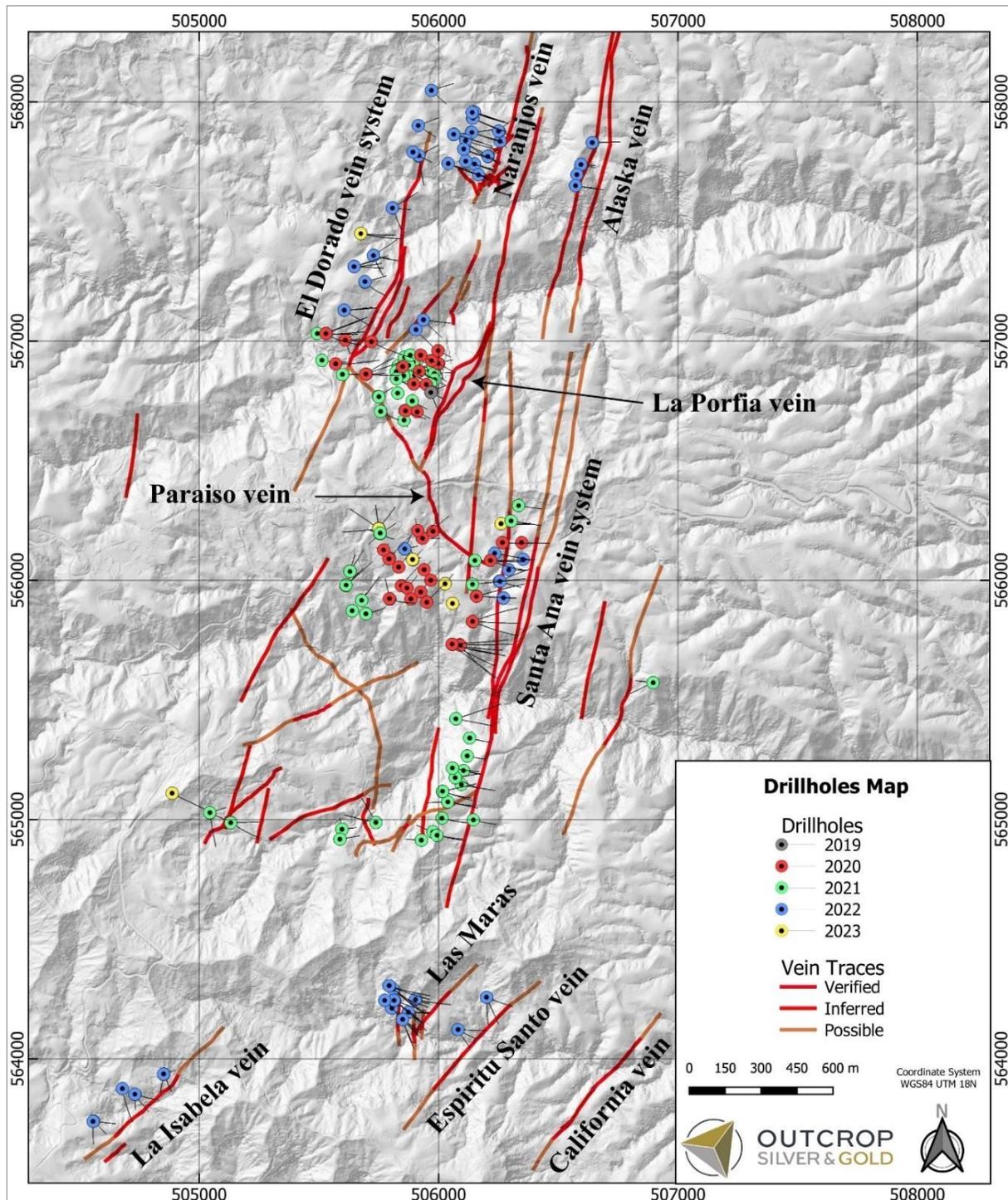
Outcrop has drilled 334 diamond drillholes on the Santa Ana Project since the acquisition in 2019 for a total of 58,824 m (Table 10.1). Drilling by Outcrop has focused on seven epithermal veins: Paraiso, El Dorado, La Porfia, Santa Ana, Las Maras, La Isabela, and Los Naranjos. Drilling has been successful in intersecting high-grade silver-gold veins at each target. Each vein system has dimensions of larger than 250 m in surface trace and over 300 m down-dip for sub-vertical veins. All sub-vertical veins are open at depth and most of them are still open along strike. Each vein target is described in detail below. For additional information, refer to section 12. Drilling per year is listed in Table 10.1 and location of holes is shown in Figure 10.1.

Table 10.1 Outcrop drilling campaign

<b>Vein</b>	<b>Holes</b>	<b>Metres</b>
El Dorado	41	8,953
Las Maras	29	7,099
Santa Ana	56	11,719
Paraiso	54	8,088
Los Naranjos	34	7,141
La Porfia	78	9,563
La Isabela	12	1,629
Others	30	4,632
<b>Total</b>	<b>334</b>	<b>58,824</b>

Source: Outcrop, 2023.

Figure 10.1 Plan of drillhole locations by year 2019 to 2023



Source: Outcrop, 2023.

## 10.2 Type and extent of drilling

The following is a description of each of the 2019 to 2023 targeted veins.

### 10.2.1 La Porfia vein

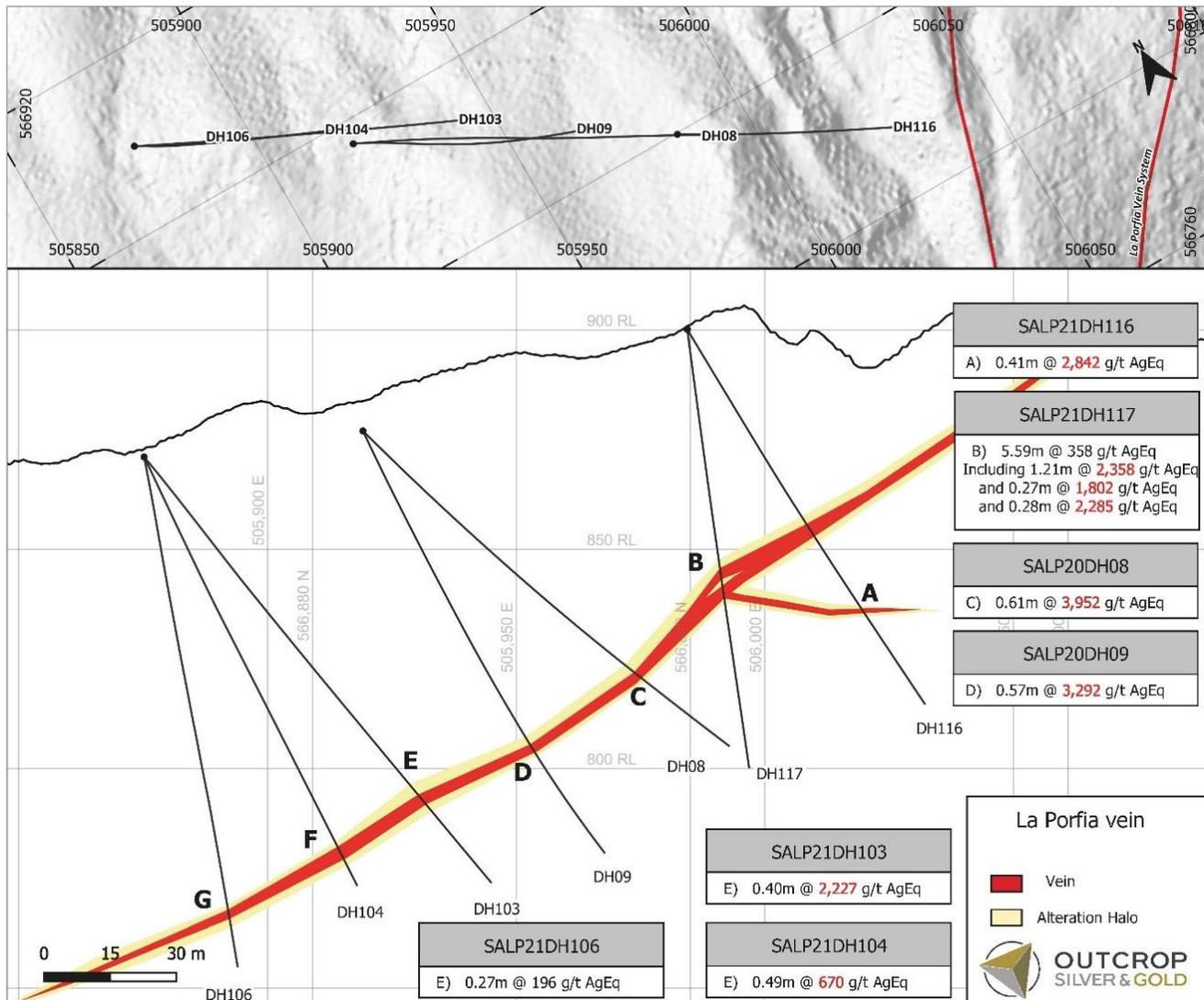
The drilling in the La Porfia vein area was designed to build a predictive high-grade shoot and vein model for exploration drilling in other targets.

Total drilling consists of 9,563 m in 78 holes. Drilling defined a high-grade shoot with dimensions of 300 m by 250 m that includes multiple parallel veins. The veins show crustiform to colloform epithermal textures with secondary silica- flooding.

Initial drilling defined predominantly the strike extent of veins with nine holes having an average downhole intercept length of 0.52 m at an average depth of 55 m.

Follow-up drilling defined the down-dip extent of the veins with seven holes having an average downhole intercept length of 0.40 m at an average below surface depth of 71 m and a down dip extent of over 200 m (Figure 10.2). The second phase suggests the down-dip limits of the high-grade shoot in La Porfia veins of the La Ivana target are sufficiently defined at this stage of exploration drilling - although high-grade mineralization is still open to the north, north-west and locally the south-west. It is inferred that the shoot within the plane of the vein is controlled by the intersection of the north-trending La Porfia vein with the north-west trending El Paraiso vein.

Figure 10.2 Cross-sections of drilling at La Porfia

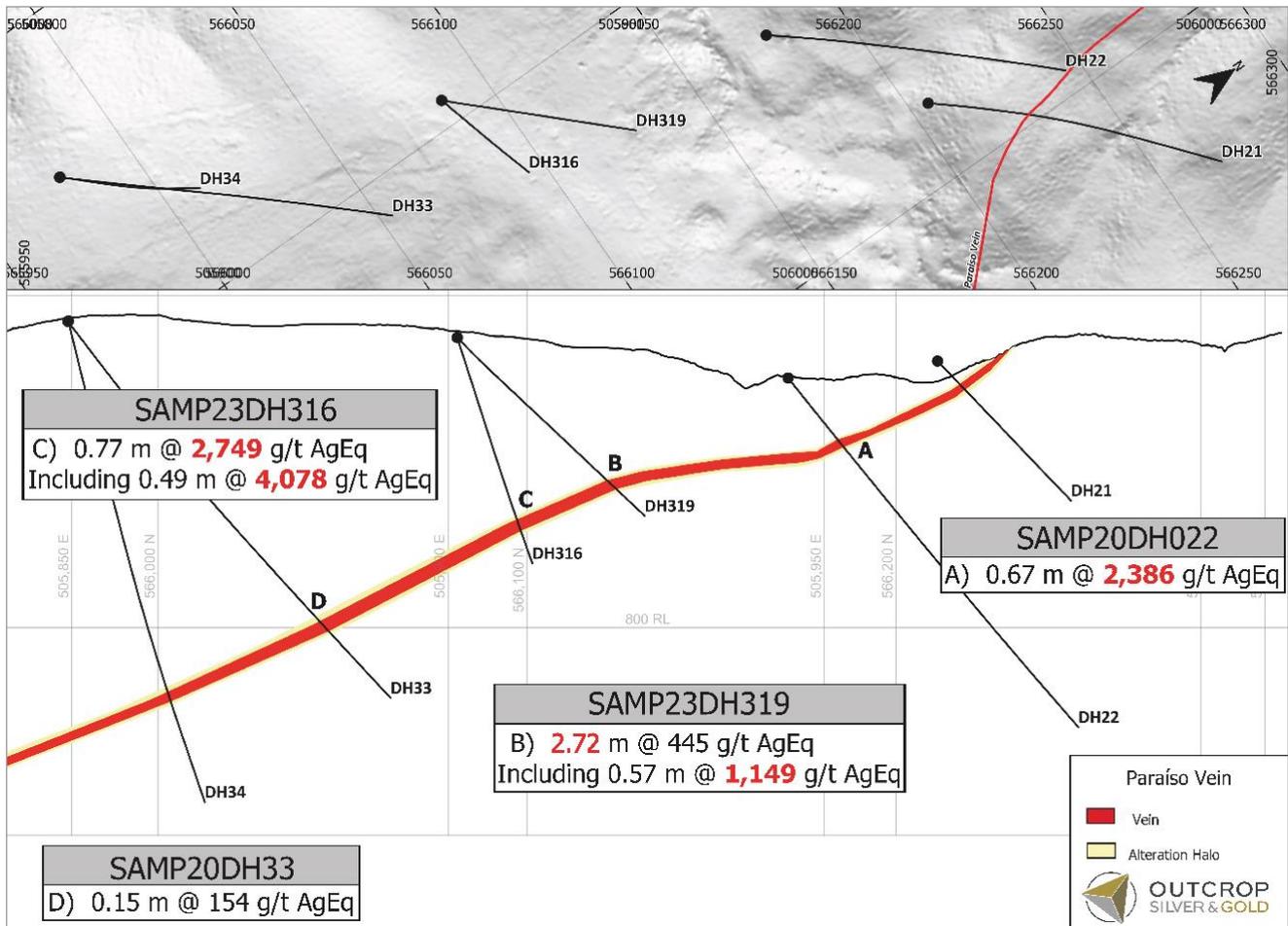


Source: Outcrop, 2023.

### 10.2.2 Paraiso vein

Outcrop has drilled a total of 8,088 m in 54 holes. Drilling has intercepted the Megapozo shoot for 300 m along strike and up to 310 m down-dip and it remains open towards the north. Paraiso vein hosts the Megapozo shoot, secondary parallel veins, and vein segments in a stacked sequence (Figure 10.3). The intercept width of the veins is variable with a range of 0.38 to 2.72 m and an average estimated true width of 0.91 m. Veins are commonly banded with quartz druse and local hydrothermal breccia. Drill core shows sulphides in veins vary from 1% to 15% occurring in character as massive, disseminated, and in bands. The quartz veins typically have alteration selvages of clay, silica, and sulphide.

Figure 10.3 Cross-sections of drilling at Paraiso

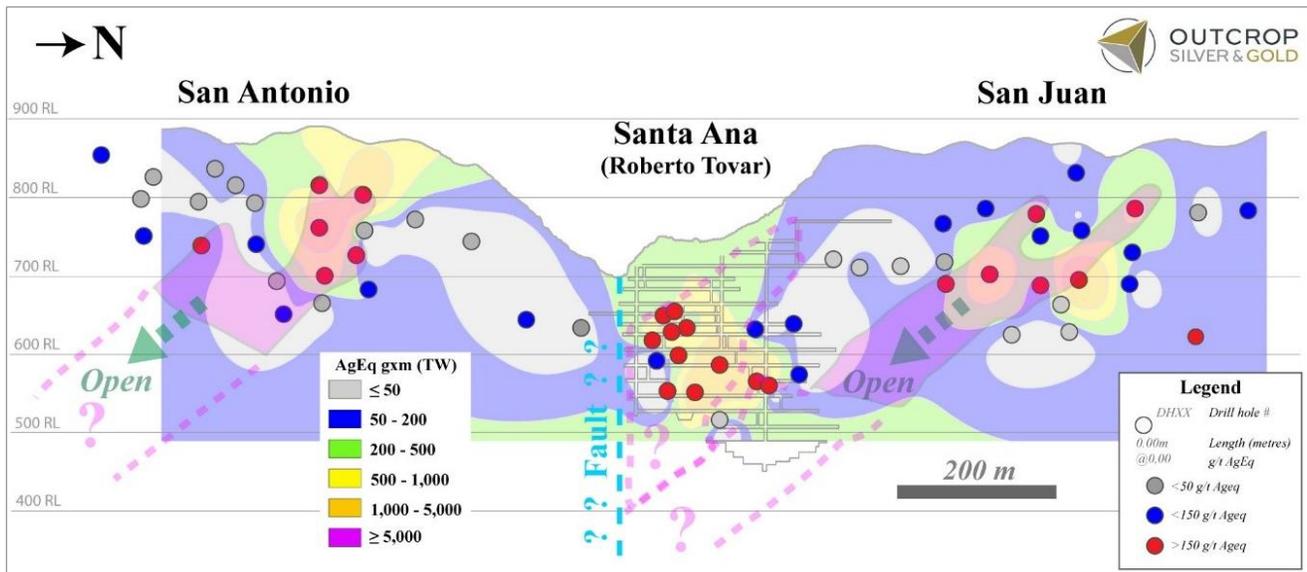


Source: Outcrop, 2023.

### 10.2.3 Santa Ana vein

Drilling the Santa Ana vein system consisted of 56 holes with a total of 11,719 m. Drilling in the Roberto Tovar area has defined two individual shoots separated by approximately 160 m. Both shoots are similar in form and geometry. They are 200 to 250 m wide, dip approximately 200 m down-dip and are subvertical. The Roberto Tovar and San Juan veins are comprised of three or more vein packages within a 20 m to 25 m wide interval. True width varies from 0.8 m to 1.8 m on average. The Roberto Tovar and San Juan shoots are both open at depth open to the south and north respectively (Figure 10.4). An additional shoot called San Antonio has been drilled and defined around 300 m south from Roberto Tovar and shows similar geometry and disposition (Figure 10.4).

Figure 10.4 Santa Ana long-section

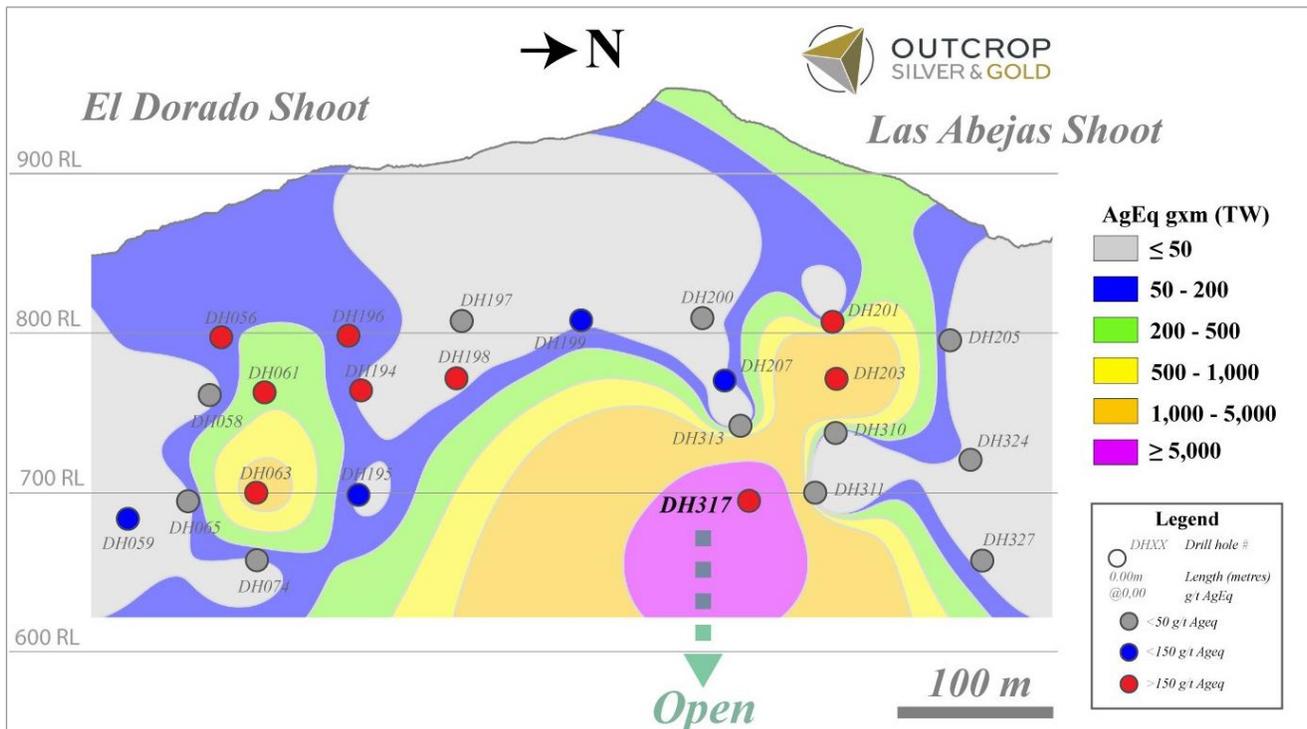


Source: Outcrop, 2023.

10.2.4 El Dorado target area

The El Dorado vein area has been drilled along an 800 m strike and 250 m depth for a total of 8,953 m in 41 holes. It is high angle vein with associated splays and stringers. High-grade shoots recognized to date are called El Dorado and Las Abejas, both remain open at depth and show a plunging preference to the south Figure 10.5).

Figure 10.5 El Dorado vein long-section

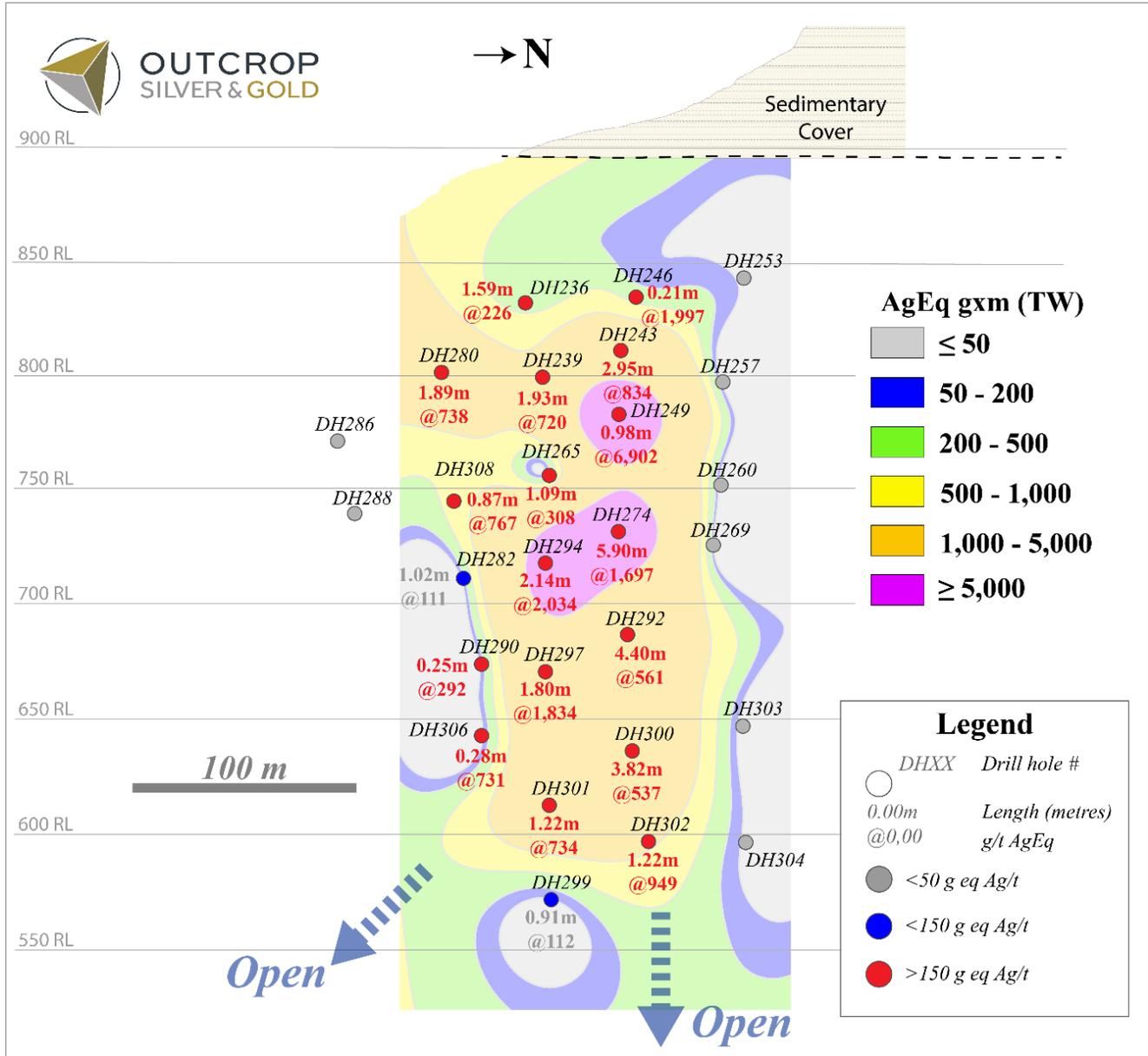


Source: Outcrop, 2023.

**10.2.5 Las Maras veins**

The Maras veins drilling totalled 7,079 m in 29 holes (Figure 10.6).

Figure 10.6 Longitudinal section showing El Dorado and Las Abejas ore shoots

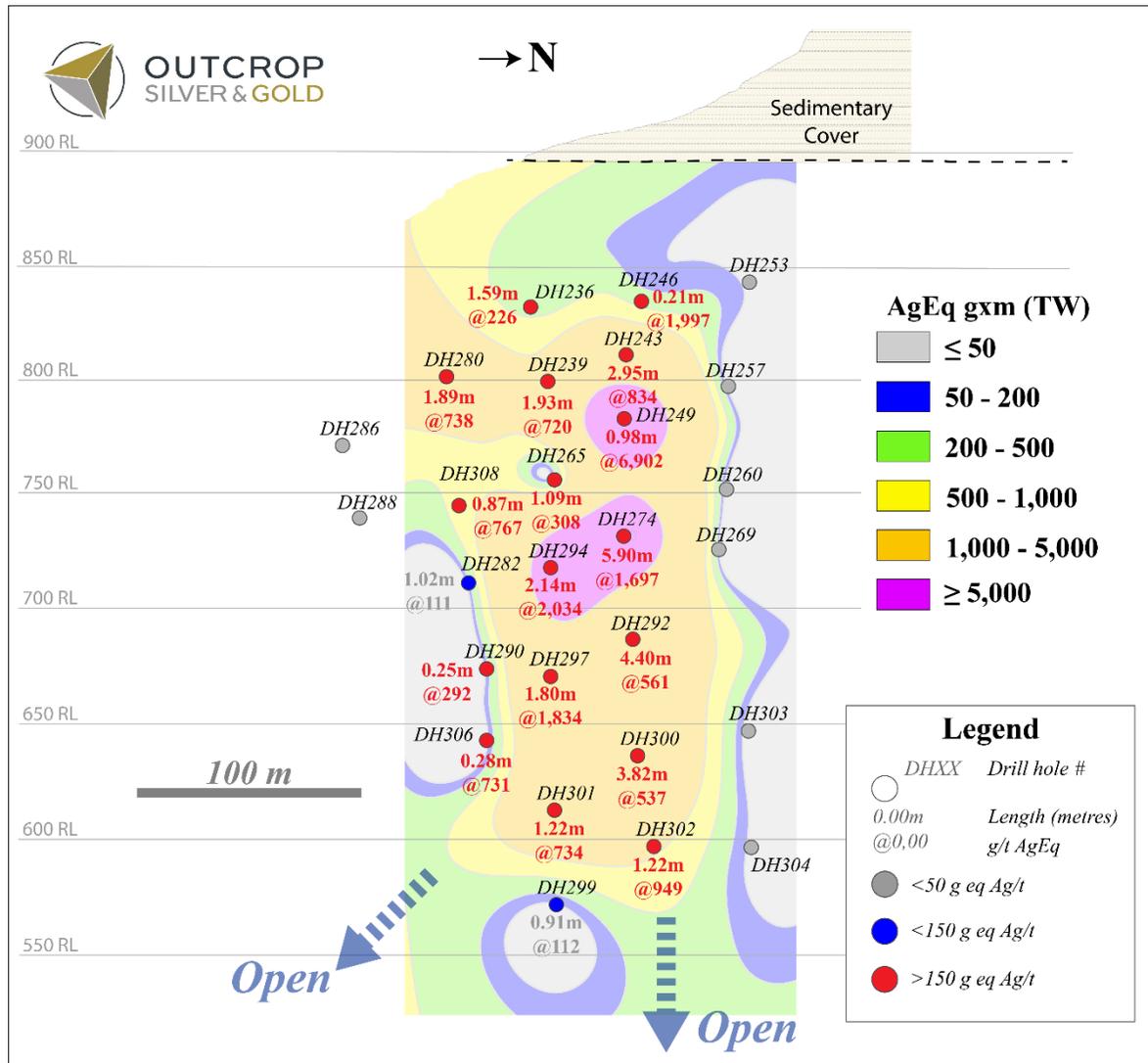


Source: Outcrop, 2023.

**10.2.6 Los Naranjos vein**

The Los Naranjos vein can be traced for more than 400 m on surface and has been drilled along strike for 350 m and 320 m down dip (Figure 10.7). It has an average true width of 0.75 m and 2.29 g/t Au and 803 g/t Ag. Drilling in Los Naranjos totals 7,141 m in thirty-four holes that defined two narrow high-grade shoots.

Figure 10.7 Longitudinal section of the Las Naranjos vein

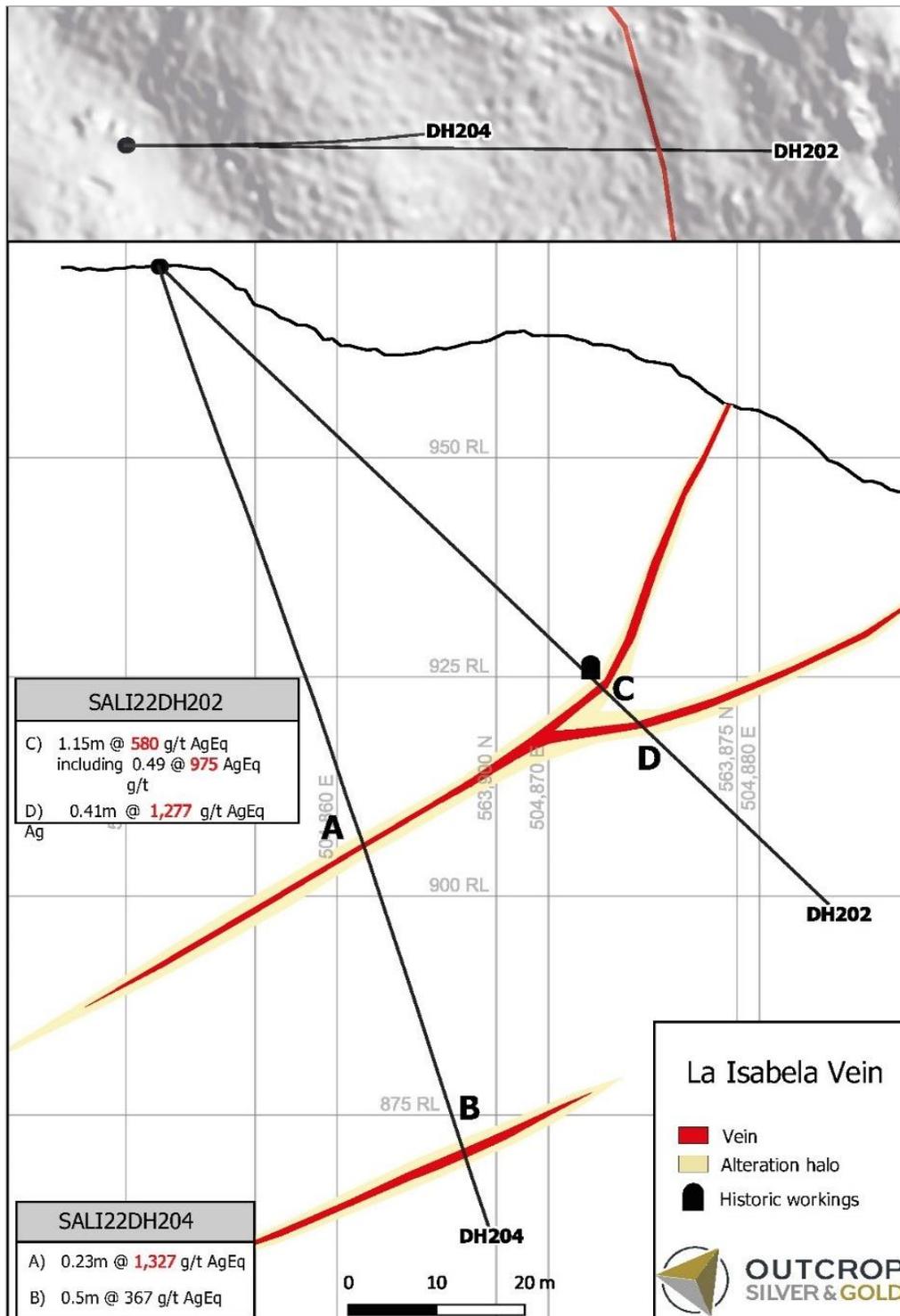


Source: Outcrop, 2023.

### 10.2.7 La Isabela vein

The La Isabela vein drilling consists of twelve holes and 1,629 m. This vein can be traced for 600 m and has been drilled for 550 m along strike and 120 m down dip. Drilling has identified two narrow gently dipping parallel veins (Figure 10.8) that show an average true width of 0.46 m and 2.82 g/t Au and 449 g/t Ag.

Figure 10.8 Cross-section of the La Isabela vein



Source: Outcrop, 2023.

### 10.3 Conclusion

In the QP’s opinion there are no drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results.

## 11 Sample preparation, analyses, and security

### 11.1 General

Core boxes are transported by authorized personnel or drilling operators to the company's core sampling preparation core warehouse.

Samples are bagged in pre-numbered plastic bags. Two bags are used per sample to prevent possible contamination. Each sample weight is recorded in the database and each bag has a numbered tag inside and is tied off. Samples are then bulk bagged with poly-weave in batches that are not to exceed 25 kg. They are then numbered.

Batch bags are sewn with plastic cord and placed in the sample warehouse for the Security Manager. They are then taken to Medellín by using Outcrop's vehicles always driven by authorized personnel or by delivering certified companies in sealed vehicle compartments, where to be delivered either to ALS Chemex or Actlabs preparation laboratories. Analytical procedures are performed in ALS Chemex Cajamarca, Perú, and Actlabs in Zacatecas, Mexico.

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

Rock-chip, channel, and soil (between 3 to 6 m depth) samples were analyzed by ALS Chemex geochemical analytical services.

### 11.2 Sub-sampling and sample preparation

All core samples collected from drillholes DH-070 to DH-0334 were sent to Actlabs Colombia, S.A.S., a certified geochemical laboratory accredited by the Standards Council of Canada (SCC File Number 15308). Actlabs prepare the core and trench samples according to CODE RX1 by crushed samples passing through 2 mm, riffle split (250 g) and pulverize (mid steel) to 95% passing 105 µm. Both laboratories are certified.

Analytical methods used by Actlabs include:

- Code AR-ICP multielement -Aqua Regia analysis
- Code 1A2 Au – Fire assay with atomic absorption finish
- AA finish
- Code 8 Ag – Fire assay Gravimetric finish

#### 11.2.1 Quality Assurance / Quality Control

The QA/QC procedures include certified reference materials (i.e., standards, blanks, and duplicates) inserted into the sample stream. Various grades of standards were bought from Oreas Certified Materials for mining and exploration. Local barren rhyolite is used for blanks.

The size of each batch is dependent on the size and weight each sample but range from 10 to 25 samples per batch.

Systematic protocol is to insert control samples as follows:

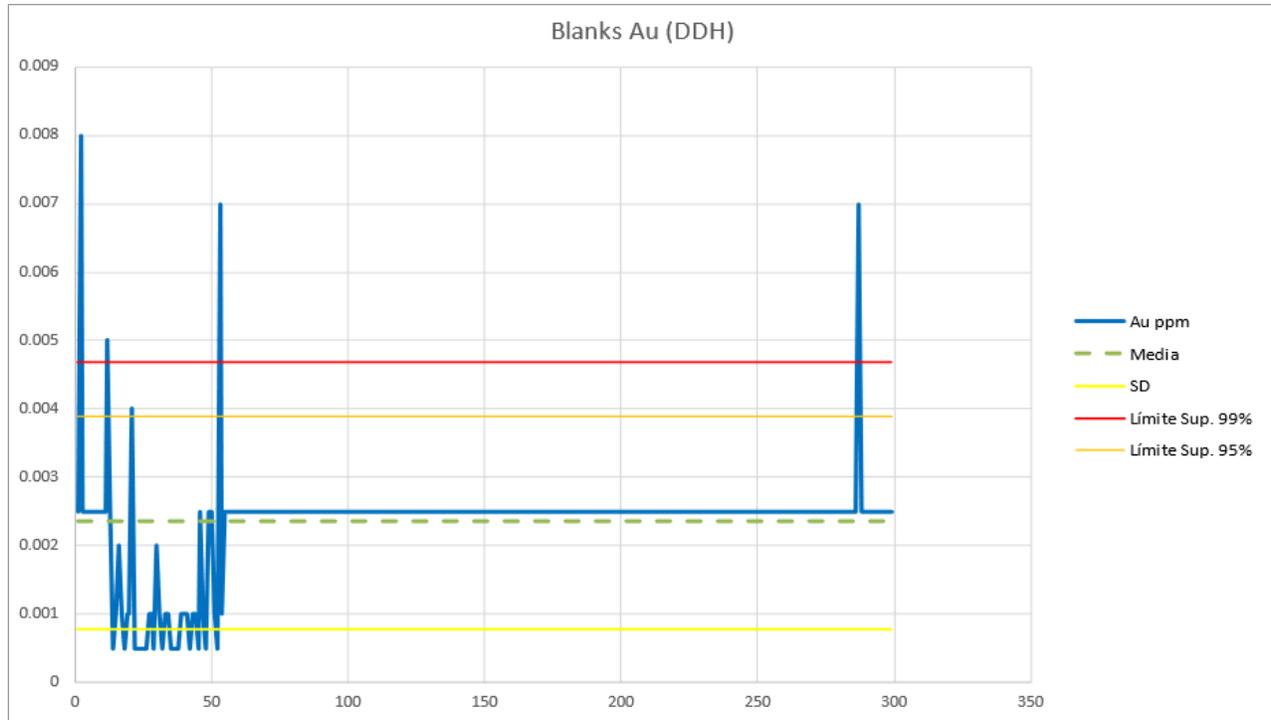
- Blank after the first 5 samples
- Lab reject duplicate after the blank
- Standard after reject duplicate
- Coarse field duplicate after standard

- Lab pulp duplicate after standard

A total of 1,178 QA/QC samples have been included with 5,170 core samples.

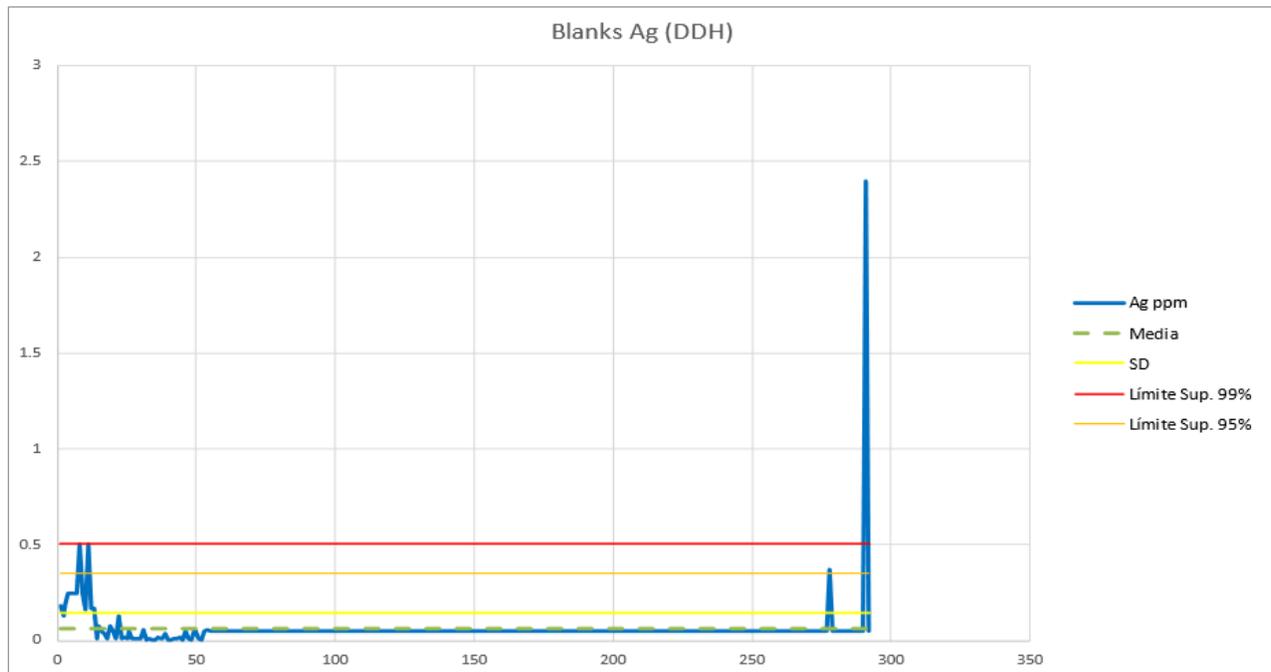
A total of 300 blanks were included in the samples assayed. Figure 11.1 and Figure 11.2 show the laboratory blank assay values. The red line is the expected value for the blank assay. Both plots show the laboratory cleaning procedure was appropriate.

Figure 11.1 Laboratory blanks for gold



Notes: X axis is the date on which each certificate was received from the lab. Y axis is gold in ppm.  
Source: Outcrop, 2023.

Figure 11.2 Laboratory blanks for silver



Notes: X axis is the date on which each certificate was received from the lab. Y axis is gold in ppm.  
Source: Outcrop, 2023.

A total of 15 different CRMs were used to assess laboratory accuracy during analysis for gold and silver. Table 11.1 lists the CRMs used and their certified Au and Ag concentrations. The range in Au and Ag CRM grades is considered appropriate.

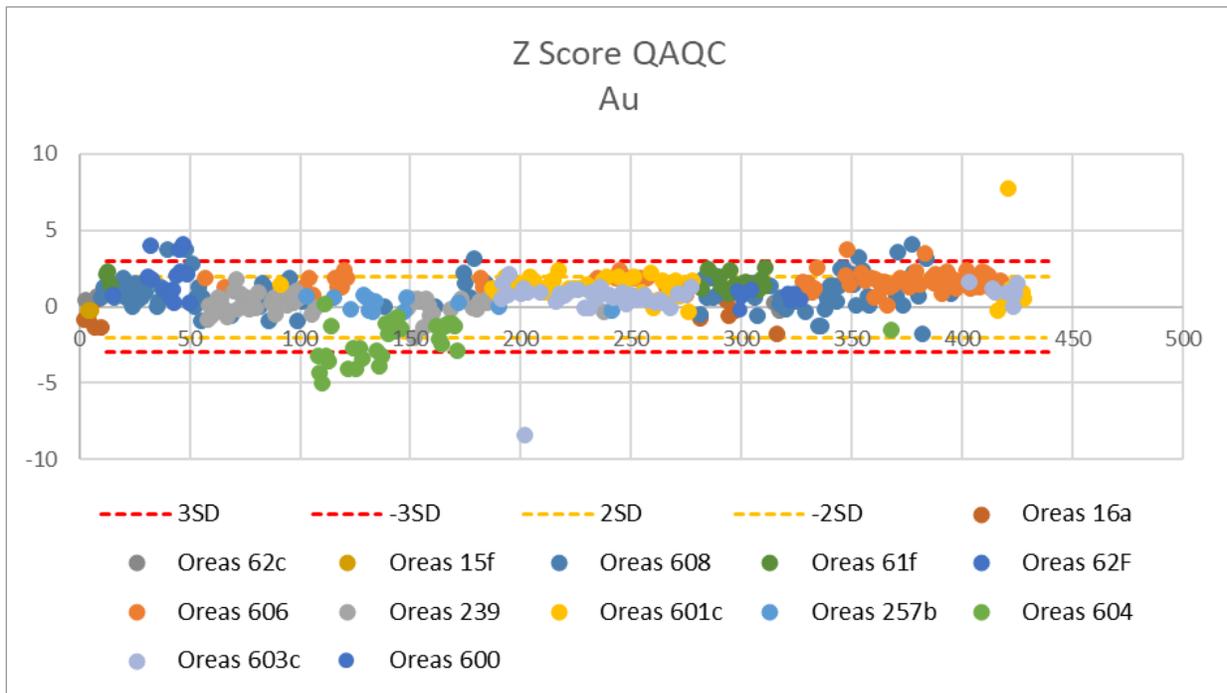
Figure 11.3 and Figure 11.4 show that the CRM assay values were generally within three standard deviations of the CRM value.

Table 11.1 CRMs used during Outcrop’s drilling programs

CRM	CRM value (Au)	Stand. Dev. (Au)	CRM value (Ag)	Stand. Dev. (Ag)
Oreas 15F	0.334	0.016		
Oreas 16a	1.81	0.06		
Oreas 239	3.41	0.162	0.244	0.013
Oreas 257b	14.17	0.447	2.36	0.189
Oreas 600	0.192	0.011	24.3	0.9
Oreas 600b	0.2	0.008	25.1	1.67
Oreas 601c	0.993	0.04	50.4	1.39
Oreas 603c	5.01	0.224	296	6
Oreas 604	1.43	0.056	492	15.2
Oreas 606	0.315	0.019	1.03	0.056
Oreas 608	1.17	0.032	14.6	0.62
Oreas 61f	4.53	0.137	3.61	0.171
Oreas 620	0.666	0.024	38.4	1.31
Oreas 62c	8.79	0.21	8.76	0.49
Oreas 62F	9.59	0.332	5.42	0.32

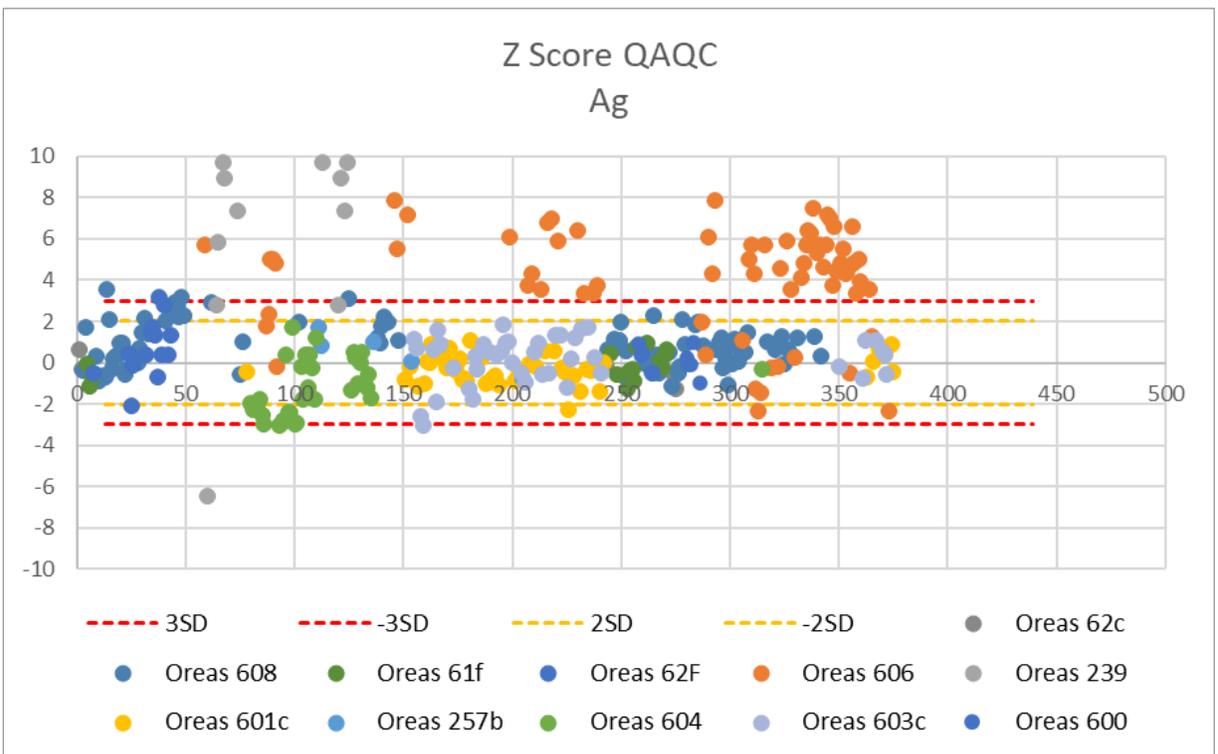
Source: Outcrop, 2023.

Figure 11.3 CRM results for gold



Notes: X axis is the date on which each certificate was received from the lab. Y axis Z Score for Au.  
Source: Outcrop, 2023.

Figure 11.4 CRM results for silver



Notes: X axis is the date on which each certificate was received from the lab. Y axis Z Score for Au.  
Source: Outcrop, 2023.

## 11.2.2 Conclusion

Outcrop has implemented industry standard practices for sample preparation, security, and analysis. This has included common industry QA/QC procedures to monitor the quality of the assay database, including inserting CRM samples and duplicates into sample batches on a predetermined frequency basis and blank samples. Outcrop reviews the QAQC on a batch by batch basis, quarterly and at the end of each drilling campaign.

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 24 May to 26 May 2023 by José Olmedo, MSc., SME CP.

The objective of the site visit was to review:

- Geological sampling
- Drilling techniques
- Drill sample recovery
- Drill core logging
- Sub-sampling techniques
- Database review
- Quality assurance and quality control
- Bulk density determinations
- Verification of sampling and assaying
- Collar locations
- Downhole surveying
- Sample security

### 12.2 Sampling techniques

Outcrop implements a comprehensive quality assurance and quality control protocol during rock-chip, channel, diamond core, and laboratory analysis. The processes must be auditable and mechanized.

More than 7,000 samples were collected including rock-chip, soil, and drill-core samples. All the witnesses, rejects and pulps, including original samples are stored in five warehouses. One secure warehouse is used only for drill-core samples.

Diamond core drilling samples consist of 95% NTW (64.2 mm core diameter) and 5% HTW (81.5 mm core diameter). The core is cut in half lengthwise with a diamond saw using a CIMAR Brick Cutter Model. Changes from HTW to NTW diameter core depends on the drilling conditions; however, all mineralized intersections were drilled using the larger NTW size diameter.

Sample lengths are nominally 1 m but may vary between 0.3 to 1.2 m based on geology.

Sample weights vary from 2.0 to 2.5 kg for NTW cores and 2.1 to 2.3 kg for HTW core. The drillhole database contains the weight value for each sample.

Sample intervals are selected based on geological criteria from visible mineralized structures. The intervals are marked in the wooden boxes and geologists decide the orientation of core split to obtain symmetrical mineralized samples.

The right side of the core is always sent for analysis at an accredited laboratory. For DH001 to DH056, samples were mainly sent to ALS Chemex in Medellin, Colombia, for preparation, and subsequently sent to Perú for analysis. Actlabs in Medellin, Colombia, was used for holes DH-057 to DH-334 for sample preparation, and then to Zacatecas, Mexico, for analyses.

The surface sampling procedures used during the exploration programs were reviewed during the QP's field visit.

## 12.3 Drilling method

At the time of QP's site visit, two drilling campaigns had completed by Outcrop with a total of 334 drillholes and total drilled length of 58,824 m.

In the first drilling campaign from December 2019 to February 2020, twelve drillholes (i.e., DH-001 to DH-012) were drilled by Major Drilling Group International, Inc. They used a man-portable Hydracore 2000 drilling rig, capable of drilling up to 300 m with HQ diameter.

The second drilling campaign from May 2020 through March 2023 was carried out by Kluane Drilling, Ltd. They drilled 321 holes (i.e., DH-013 to DH-334) using Quantum's man-portable KD-600 drilling rigs. These drill rigs are capable of drilling up to 500 m with mainly NTW diameter size. The average drillhole's depth is 250 m with DH-304 being the deepest at 407.21 m. The drill rig is properly orientated in 7 X 7 m stable platforms with the initial inclination based on using a Starrett Angle Meter Inclinator Model AM-2 36080.

Core orientations measurements are collected with the first measurement taken at 3 m and then for every 3 m using Stockholm Precision Tools, Mag Cruiser with Reflex Software. The drillhole database includes detailed descriptions of all measurements.

## 12.4 Drill sample recovery

The diamond core is reconstructed at drilling site within the core box into continuous runs using plastic 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 at the drilling site using database software to calculate recovery percentages and RQD values. All data are recorded in the company database.

General core recovery percentage is above 85% with intercepts in the mineralized zones above 95%.

There is no adverse relationship between recovery and grade identified to date.

## 12.5 Logging

The core logging procedure used the customized geological database software Geo Info Tools ([www.GeoInfoSol.com](http://www.GeoInfoSol.com)). It records lithology, mineralogy, mineralization, alteration, structure, color, photos, lab analytical results, topographic drillhole locations, and other primary features of rock samples.

The core logging process is both qualitative and quantitative. Photos are taken of each box of the core before samples are cut. Core is wet 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 Assay data and QA/QC

All assay certificates are recorded automatically into the database to avoid any human error for transcripts.

## 12.7 Bulk density

Bulk density analysis is based on ASTM D6473-15 "Standard Test Method for Specific Gravity and Absorption of Rock for Erosion Control".

## 12.8 Verification of sampling and assaying

Significant drilling intersections were verified in the field by José Olmedo from 22 to 25 May 2023. From direct observations of geological logging, Mr Olmedo's review matched Outcrop's logging database.

Mr Olmedo reviewed the grade database against ALS Global Laboratory and Actlabs for a selection of 600 certificates selected at random from the files provided. These were compared back to the drilling database. All samples reviewed matched the database.

## 12.9 Location of data points

All drill collar coordinates and elevations were surveyed using Total Station Topography.

Some drillhole collars were verified by José A. Olmedo in the field using a handheld Garmin global positioning system (GPS) Map 62s. All coordinates matched with Outcrop database within less than 3 m difference.

## 12.10 Downhole surveys

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

## 12.11 QP's statement of confidence

The QP considers that data gathered by Outcrop 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

Mineralization from the property consists of polymetallic silver-gold veins in highly deformed Palaeozoic schist, quartzite and gneiss of the Cajamarca Formation. The deposit type can have open-space veining, commonly with stockwork or layered sulphide mineralization and relatively minor disseminated and replacement sulphides. Typically observed textures are veining, banding, and cavity / open space filling. Mineralogically they are characterized by free gold and small amounts of sphalerite (Zn), galena (Pb), and chalcopyrite (Cu) in a quartz-rich gangue. Silver and gold are associated with sulphides including pyrite, sphalerite, galena and to a lesser extent, chalcopyrite.

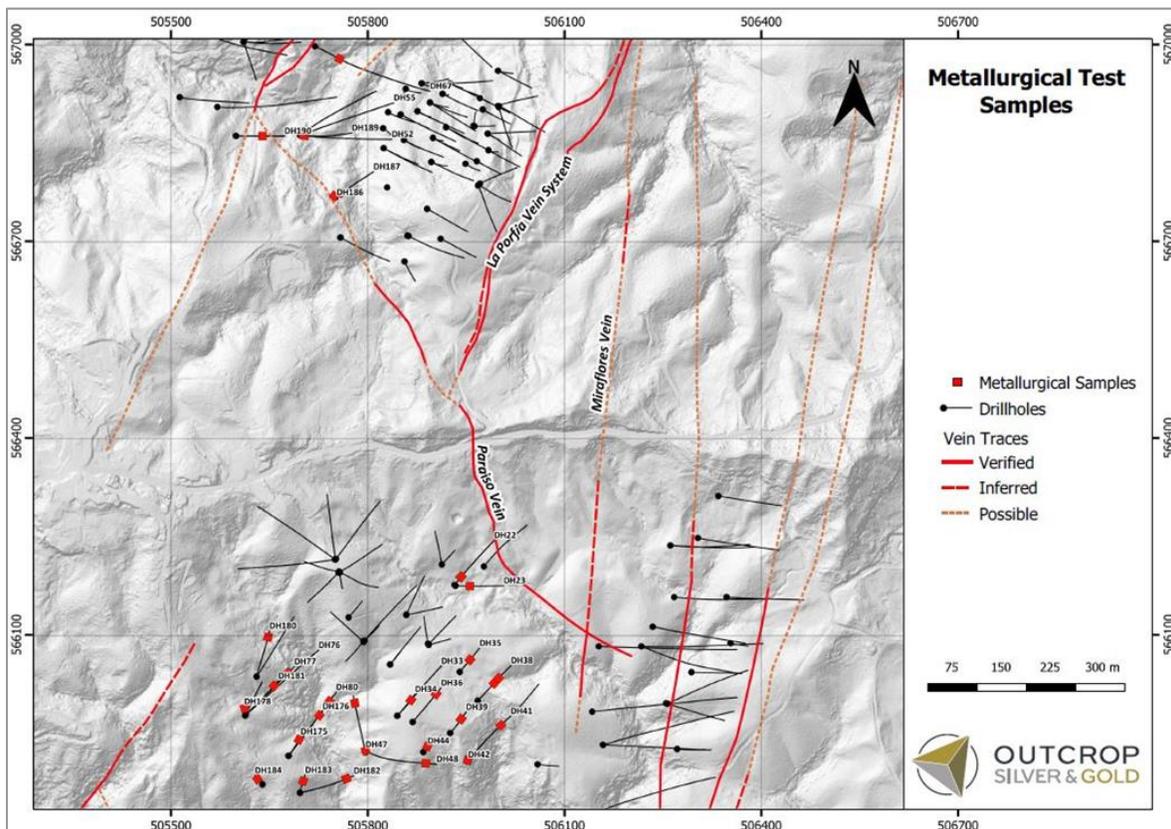
#### 13.2 Sampling

Four composite samples were assembled for metallurgical testing as follows:

- PAR-1
- PAR-2
- POR-1
- POR-2

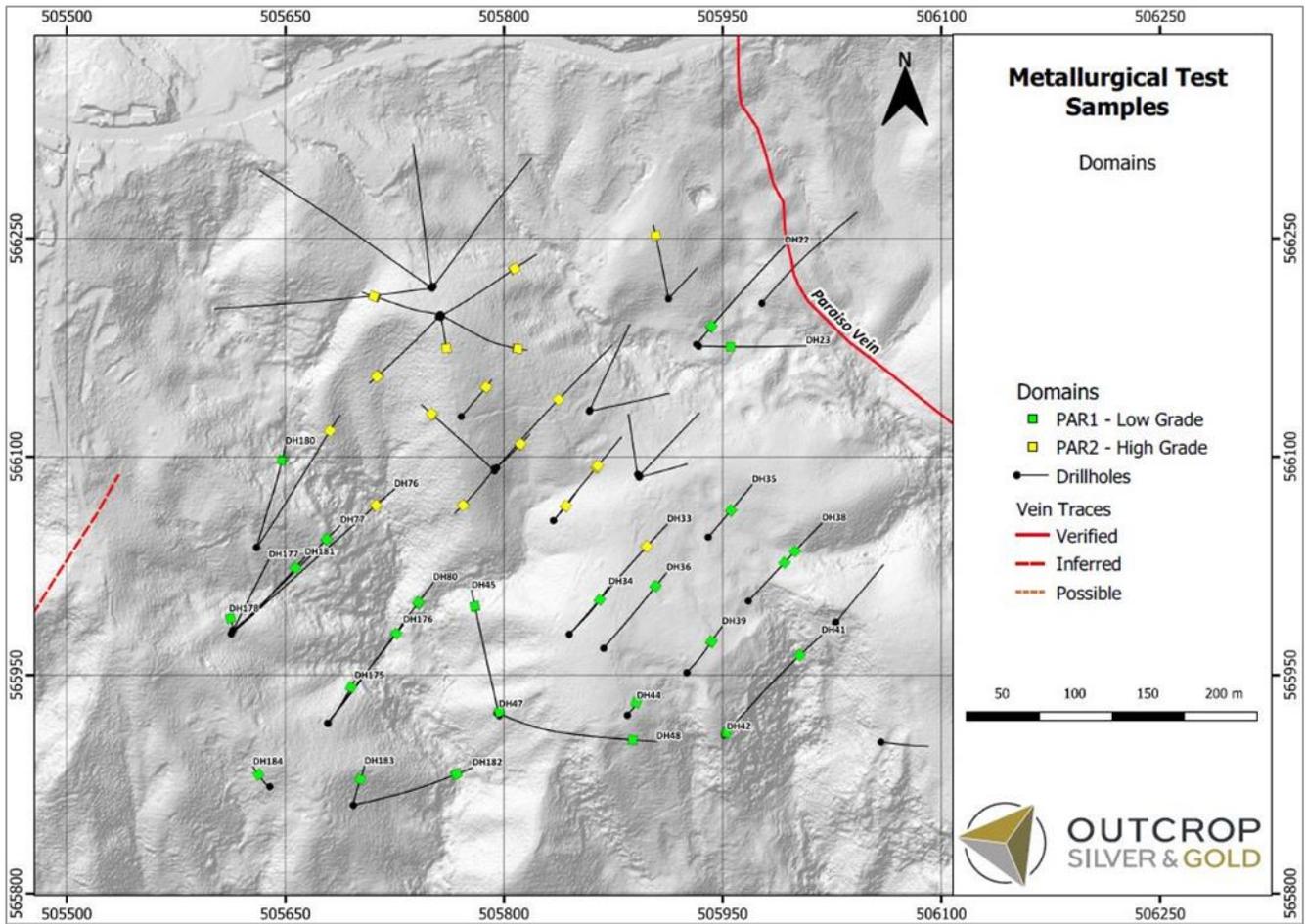
The samples were composited from drillholes in the Paraiso (PAR-1, PAR-2) and La Porfia (POR-1, POR-2) vein domains. Locations of the holes are shown in Figure 13.1. The location of the samples downhole classified as high and low grade are shown in Figure 13.2 for Paraiso and in Figure 13.3 for La Porfia. The number of drillholes and drill core segments selected are shown in Table 13.1.

Figure 13.1 Metallurgical sample drillhole locations



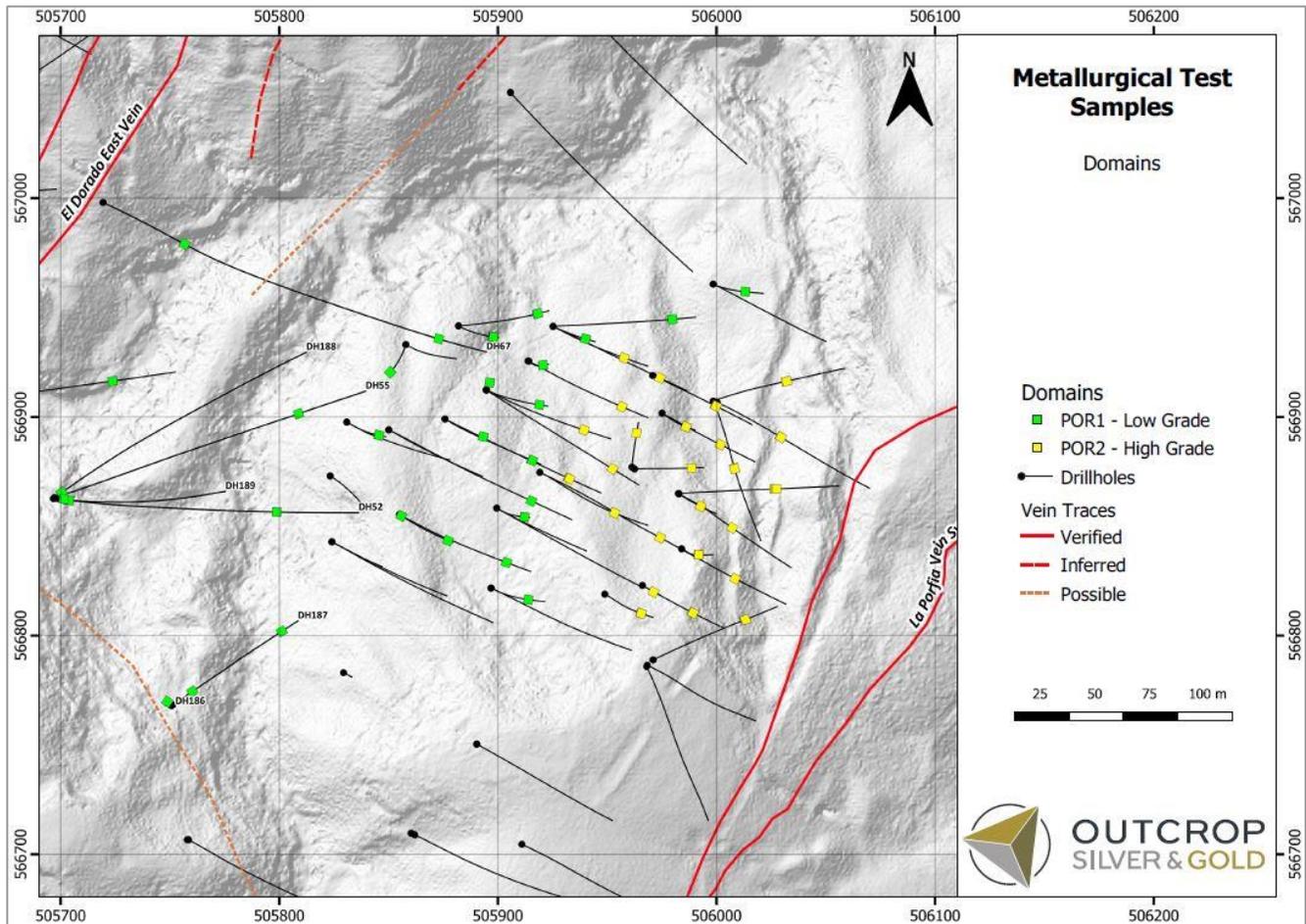
Source: Outcrop 2023

Figure 13.2 Paraiso domain metallurgical drillholes (high and low grade)



Source: Outcrop 2023

Figure 13.3 La Porfia domain metallurgical drillholes (high and low grade)



Source: Outcrop 2023

Head assays for the metallurgical samples were determined by SGS Colombia (SGS) as part of the OL292080 testing program and are shown in Table 13.1.

The AgEq values for the low-grade sample (204 g/t) and high-grade sample (1,007 g/t) span the average AgEq values for the Paraiso Indicated Resource of 969 g/t.

The AgEq values for the low-grade sample (213 g/t) and high-grade sample (904 g/t) span the average AgEq value for the La Porfia Indicated Resource of 495 g/t.

Both suites of samples are considered to be a fair representation of material from these veins, noting that these veins make up approximately 25% of the Mineral Resource.

Table 13.1 Metallurgical sample head assays

Sample No.	PAR-1	PAR-2	POR-1	POR-2
Description	Paraiso low grade	Paraiso high grade	La Porfia low grade	La Porfia high grade
Drillholes sampled	26	14	22	23
Intervals selected	41	41	33	34
Au (g/t)	1.48	6.14	1.19	7.36
Ag (g/t)	89	539	118	313
Pb (%)	0.06	0.36	0.11	0.32
Zn (%)	0.08	0.47	0.20	0.53
AgEq (g/t)	204	1,007	213	904
Cu (%)	0.03	0.03	0.02	0.03
S (%)	1.6	3.8	3.3	3.5

Source: Outcrop 2023

### 13.3 Mineralogy

Four samples (PAR-1, PAR-2, POR-1, POR-2) from Santa Ana were sent to SGS for mineralogical examination.

Sulphur (S) department (Table 13.2) was calculated from mineral particle studies. More than 90 % of S was present as pyrite (FeS<sub>2</sub>) while other significant sulphides present were sphalerite (Zn,Fe)S at 2.51% to 6.21%, galena (PbS) at 0.19% to 1.77% and chalcopyrite (CuFeS<sub>2</sub>) at 0.30% to 2.22%.

Table 13.2 Sulphur department

Full List	PAR-1	PAR-2	POR-1	POR-2
Pyrite	95.04	91.25	95.50	90.62
Galena	0.19	1.77	0.37	1.39
Sphalerite	2.51	6.21	3.37	6.82
Freibergite	0.00	0.06	0.42	0.02
Chalcopyrite	2.22	0.30	0.31	1.12
Others	0.05	0.42	0.02	0.03
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: SGS Colombia report: 292086 – T0410

The association of silver-bearing minerals (electrum (Ag-Au), argentite (Ag<sub>2</sub>S), acanthite (Ag<sub>2</sub>S), freibergite ((Ag,Cu,Fe)<sub>12</sub>(Sb,As)<sub>4</sub>S<sub>13</sub>), and tetrahedrite ((Cu,Fe,Zn,Ag)<sub>12</sub>Sb<sub>4</sub>S<sub>13</sub>) with other major minerals was determined and is shown in Table 13.3. Silver-bearing mineral grains are predominantly free (40.29% to 48.73%) or associated with pyrite (42.21% to 48.01%) with P<sub>80</sub> (80% passing grain size) grain size ranging from 4.51 µm to 23.12 µm.

Table 13.3 Silver mineral department

<b>Mineral associations (Electrum, Argentite / Acanthite, Freibergite, Tetrahedrite (Ag))</b>				
<b>Mass % of phase [%]</b>				
<b>Modal Full Images / Sample</b>	<b>PAR-1</b>	<b>PAR-2</b>	<b>POR-1</b>	<b>POR-2</b>
Pyrite	42.21	46.28	48.01	44.84
Galena	0.29	3.33	2.07	2.64
Sphalerite	0.00	2.15	0.99	0.42
Chalcopyrite	1.62	3.58	0.46	5.87
Quartz	1.69	2.76	0.14	0.78
Chlorite	4.02	0.00	0.15	0.01
Others	1.45	1.61	0.50	0.12
Free surface	48.73	40.29	47.68	45.32
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: SGS Colombia report – 292086 – T0410A

Table 13.4 shows the department of gold to four categories – free gold, gold associated with calcite, dolomite, hematite, galena and pyrrhotite ( $Fe(1-x)S$  where  $x=0$  to  $0.2$ , gold associated with primary sulphides such as pyrite and arsenopyrite ( $FeAsS$ ) and silicate-encapsulated gold. Values of 87.4% to 94.1% is classified as free gold and 0.5% to 2.2% is classified as being silicate-encapsulated which could prove to be refractory under normal processing methods such as flotation and cyanide leaching.

Table 13.4 Gold department – diagnostic leach tests

<b>ID-Sample</b>	<b>p80 (um)</b>	<b>1<sup>st</sup> Cyanide Leaching Au, (%)</b>	<b>Acid leaching H<sub>2</sub>SO<sub>4</sub> / 2<sup>nd</sup> Cyanide Leaching Au, (%)</b>	<b>Acid Leaching HNO<sub>3</sub> / 3<sup>rd</sup> Cyanide Leaching Au, (%)</b>	<b>Residual Au, (%)</b>
PAR-1	75	94.1	3.4	0.5	2.0
PAR-2	75	87.4	7.9	4.1	0.5
POR-1	75	87.5	4.4	5.9	2.2
POR-2	75	92.3	4.1	3.2	0.5
Gold State		Free Gold	Gold associated to pyrrhotite, calcite, hematite, galena, dolomite	Primary sulphide – associated Gold (pyrite, arsenopyrite)	Silicates – encapsulated Gold

Source: SGS report – OL292086 - 18072022

### 13.4 Flotation testing

SGS conducted early-stage flotation trials to confirm the viability of froth flotation as a means of recovering silver and gold.

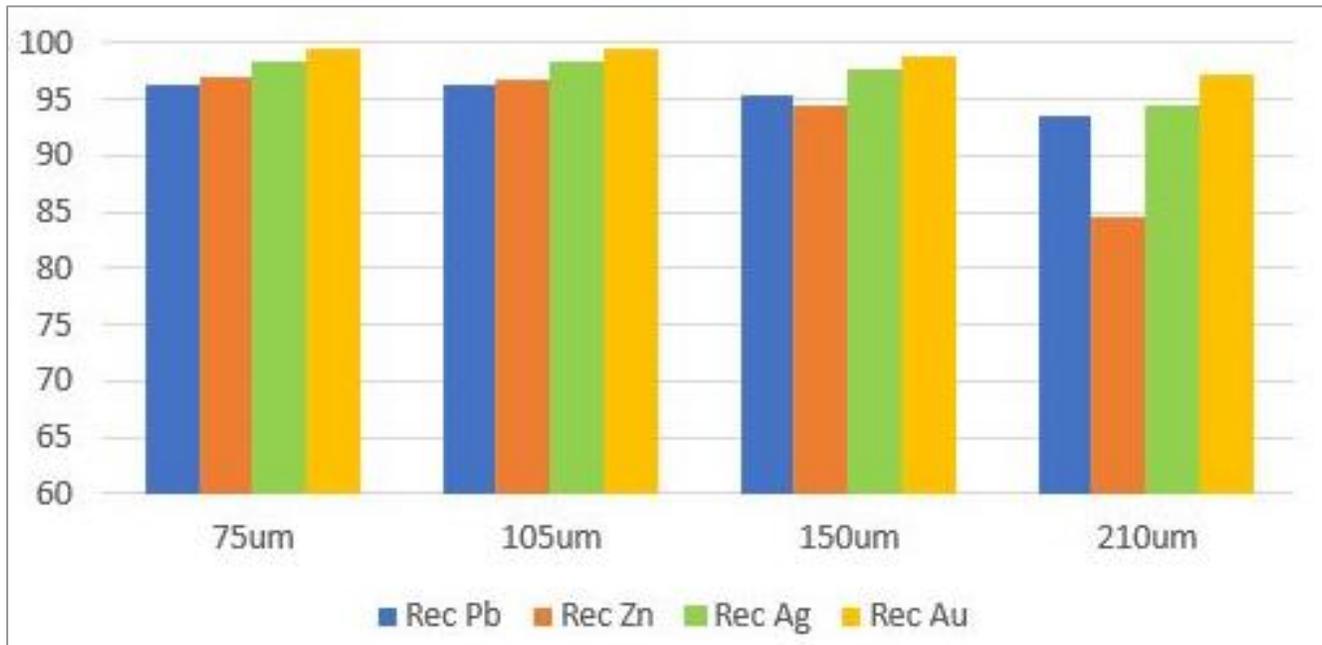
Initial tests in September 2022 established basic flotation parameters for the program, including primary grind size. Sample PAR-2 was used for all tests. Four sizes were evaluated in the production of lead (Pb) rougher concentrate and zinc (Zn) rougher concentrate. Figure 13.4 shows the cumulative recovery of Pb, Zn, Ag and Au at four P<sub>80</sub> sizes as follows:

- 75 µm
- 105 µm
- 150 µm
- 210 µm.

The QP notes the following:

- Flotation is able to recover more than 94% of Ag and more than 96% of Au at all sizes evaluated.
- Recoveries improve significantly at sizes finer than 150 µm.
- Recoveries are largely similar at 105 µm and 75 µm.

Figure 13.4 Rougher flotation trial - Cumulative flotation recoveries



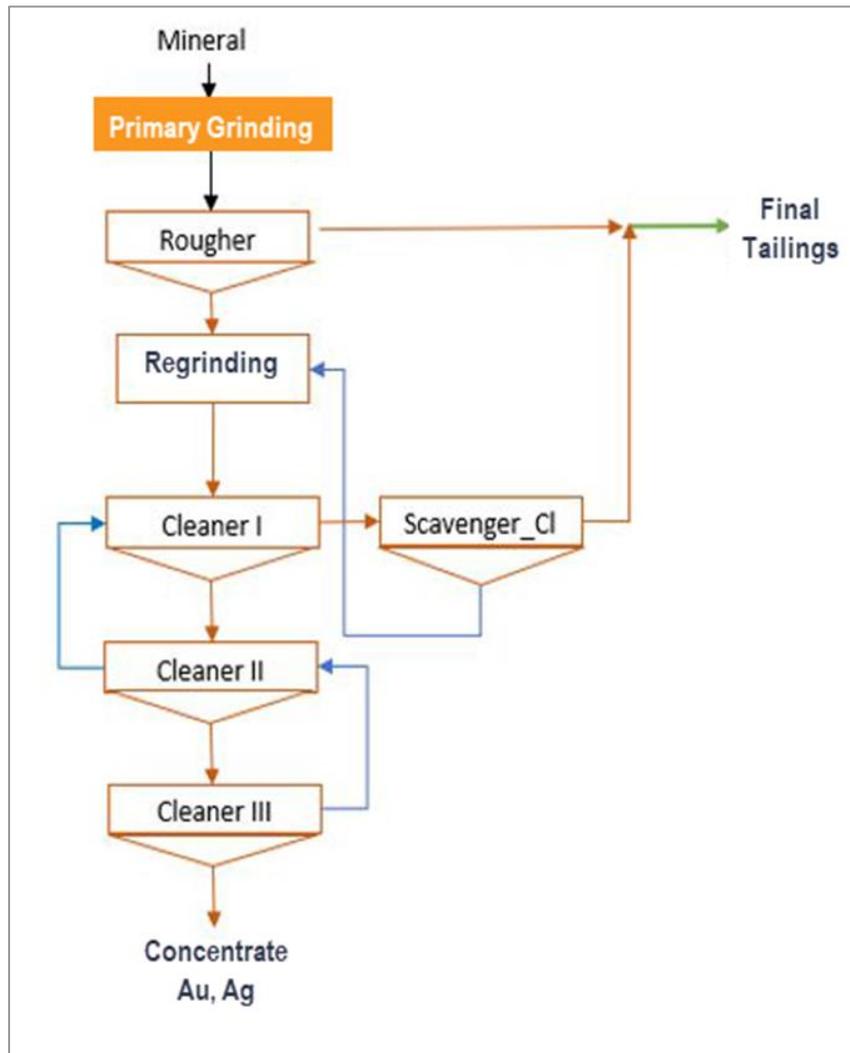
Source: SGS report OL292086\_121022, Sep 2022

Using parameters established during the September 2022 program, two full circuit tests were run using the circuit arrangement shown in Figure 13.5. This circuit is a typical bulk-sulphide flotation arrangement as follows:

- Primary grinding
- Rougher flotation
- Regrinding of rougher concentrate
- Three-stage cleaning of rougher concentrate
- Scavenger cleaning of cleaner-1 tailings with concentrate return to regrinding and tailings to final tailings discard
- Return of cleaner-2 tailings to cleaner-1 feed
- Return of cleaner-3 tailings to cleaner-2 feed
- Cleaner-3 concentrate to final product

The PAR-2 (Paraiso high-grade) sample was used for both these tests. A primary grind P<sub>80</sub> of 105 µm and a regrind P<sub>80</sub> of 45 µm was utilized.

Figure 13.5 SGS flotation test circuit



Further testwork was carried out in 2023 with the TCA-1 test being conducted in March 2023. Calculated overall recoveries and grades of the cleaner-3 concentrate are shown in Table 13.5. Gold recovery of 96.9% and silver recovery of 93.4% were achieved. Lead recovery was 91.7% and zinc recovery of 68.9%.

Silver and gold grades in the cleaner-3 concentrate were 12,133 g/t and 172 g/t respectively.

Table 13.5 TCA-1 flotation test results

Parameter	Recovery (%)	Concentrate grade
Au	96.9	172 g/t
Ag	93.4	12,133 g/t
Pb	91.7	8.16%
Zn	68.9	7.37%
Cu	68.1	0.35%
S	81.7	46.39%

A duplicate test (TCC-1) was conducted in April 2023, achieving comparable results as shown in Table 13.6.

Table 13.6 TCC-1 flotation test results

Parameter	Recovery (%)	Concentrate grade
Au	97.8	129 g/t
Ag	94.7	9,712 g/t
Pb	94.1	6.96%
Zn	96.4	6.24%
Cu	88.4	0.34%
S	78.0	46.20%

### 13.5 Deleterious elements

The impact of deleterious elements is unknown.

### 13.6 Conclusions

Samples for metallurgical testing were drawn from two of the seven vein areas (Paraiso and La Porfia) which comprise the Santa Ana deposit as currently explored. The Paraiso domain contains approximately 15% of the Indicated Resource while the La Porfia domain contains approximately 10%. While the composites created reasonably represent their respective domains, they do not represent the remainder of the Santa Ana deposit. More domain-by-domain sampling and testing will be required to establish variability within the deposit.

Mineralogical studies and flotation testing indicate that gold and silver largely exist as either free particles or in association with sulphide minerals that are readily recoverable by froth flotation. Future testing could establish that a high-grade gravity concentrate could also be economically produced.

Flotation testing using a typical sulphide flotation circuit arrangement established that a bulk lead / zinc concentrate containing 10,000 g/t Ag to 12,000 g/t Ag and 129 g/t Au to 172 g/t Au could be produced. Silver recoveries of 93.4% and 94.7% were achieved. Gold recoveries of 96.9% and 97.8% were achieved. Pb (91.7%, 94.1%) and Zn (68.9%, 96.4%) recoveries achieved were also encouraging for a first testing program (Table 13.5, Table 13.6). Concentrate of this tenor is generally acceptable for downstream processing, depending on the concentrations of other constituents. Further testing could determine whether separate lead and zinc concentrates attracting more favourable financial terms could be produced.

Both flotation tests were conducted on PAR-2 which is a high-grade sample from a single vein domain. As recoveries and concentrate grades can be affected by the grade of feed ore, testing of samples from other domains will be required to reliably predict metallurgical performance throughout the Project life.

Overall, metallurgical testing established that there are reasonable prospects of eventual economic extraction of silver, gold, lead and zinc from the deposit.

## 14 Mineral Resource estimates

### 14.1 Introduction

The Mineral Resource estimate for the veins of the Santa Ana deposit have been prepared by Mr Rodney Webster, MAIG, of AMC Consultants Pty Ltd who takes responsibility for the estimate, Outcrop provided the drillhole and assay data and wireframes for 22 veins which were developed using Leapfrog Geo software and supplied by Outcrop as DXF files. After validation by the QP, the estimation was carried out using Datamine software. Of the 22 wireframes, 15 had sufficient drillhole data support and were estimated individually. For reporting purposes some veins were combined, resulting in tonnes and grades for seven vein areas being reported. The result of the current estimate is summarized in Table 14.1. Mineral Resources are stated at a cut-off grade of 158 g/t AgEq, and the inputs are shown in the notes. There is no depletion for historical mining activities and the chosen cut-off was selected after a benchmarking exercise.

Table 14.1 Santa Ana Mineral Resources on 26 April 2023

Category	Tonnage (kt)	Grade			Metal content		
		Ag (g/t)	Au (g/t)	AgEq (g/t)	Ag (koz)	Au (koz)	AgEq (koz)
<b>Indicated</b>	1,226	446	2.3	614	17,567	88.8	24,187
<b>Inferred</b>	966	312	1.6	435	9,677	50.9	13,504

Notes:

- The effective date of this Mineral Resource Estimate (MRE) is 26 April 2023.
- Rod Webster, MAIG, of AMC has conducted the MRE and is an independent QP.
- Mineral Resources are stated according to the CIM Definition Standards (2014).
- Mineral Resources were reported within potentially mineable shapes, assuming an underground mining method with a minimum mining width of 1.0 m.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- The estimate is reported for an underground mining scenario using a silver equivalent (AgEq) cut-off grade. The cut-off grade of 158 g/t AgEq.
- Inputs were: silver price of US\$25.0/oz, gold price of US\$1,800.0/oz; mining cost of US\$69.0/t, processing cost of US\$32.0/t and G&A costs of US\$13.0/t and metallurgical recoveries of 93% for Ag and 96% for Au.
- The AgEq was calculated using the prices (P), recoveries (R) and grades of each element using the following formula:  $AgEq\ g/t = Ag\ g/t + (((AuP * AuR) / (AgP * AgR)) * Au\ g/t)$ . No sales or marketing costs were considered.
- Bulk density values were interpolated for each of the mineralized veins with the global average at reporting AgEq cut-off for the entire Santa Ana deposit is 2.7 t/m<sup>3</sup>.
- A 2D Accumulation method employed using Ordinary Kriging (OK) into blocks generally 10 m in size across and vertically down the vein. The block size along the dip direction covered the whole vein.
- Any discrepancies in the totals are due to rounding effects.

Source: AMC, 2023.

The QP is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing, or other relevant issues that could materially affect the Mineral Resource estimate other than those disclosed in this Report.

### 14.2 Drillhole data provided

The drillhole data and other relevant information provided was as follows:

- Drillhole collars, downhole surveys, assays, lithologies, and bulk density values.
- Assay sample Quality Assurance and Quality Control (QA/QC) data.
- AutoCAD software wireframes for 22 veins as .dxf files:
- Topographic surface as a dxf file.

Based on the drilling available within the wireframes provided, the QP prepared estimates for the 15 veins listed in Table 14.2.

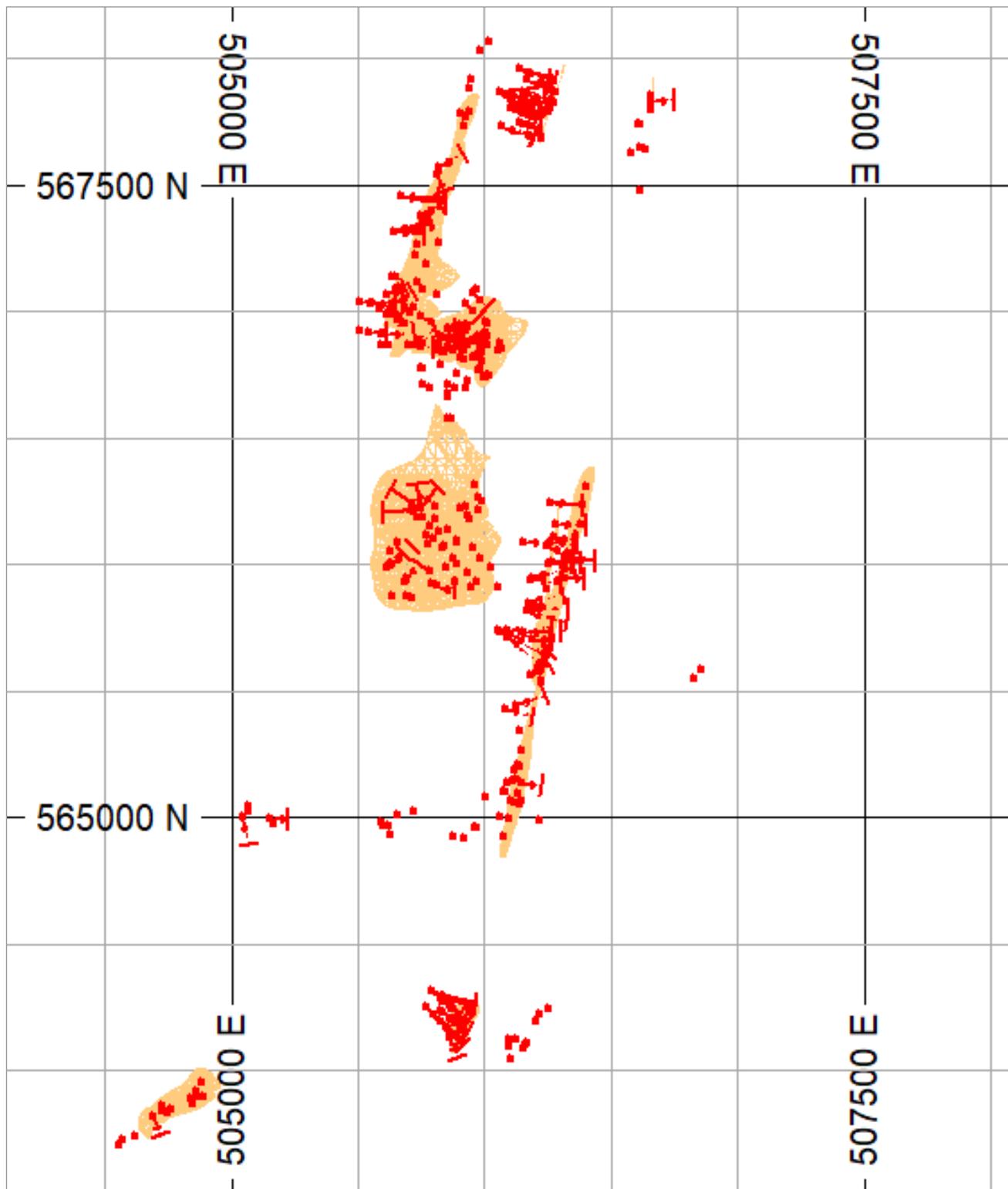
Table 14.2 Vein wireframes used in the estimation

<b>Vein Wireframe</b>	<b>Vein name used for reporting</b>
Gm-alaska-alk	Alaska
Gm-dorado-parn	El Dorado
Gm-marfaultblock2-mar	Las Maras
Gm-dorado-dred	El Dorado
Gm-santaana-rsv	Santa Ana
Gm-santaana-san	Santa Ana
Gm-santaana-del	Santa Ana
Gm-naranjos-nar	Los Naranjos
Gm-megapozo-par	Paraiso
Gm-marasfaultblock1-mar	Las Maras
Gm-marasfaultblock1-lpn	Las Maras
Gm-laporfia-phw	La Porfia
Gm-laisabela-laid	La Isabela
gm-dorado-drd	El Dorado
Gm-laporfia-por	La Porfia

Source: AMC, 2023.

A total of 304 drillholes were included in the estimate. The location of the holes and vein wireframes provided that were used in the Mineral Resource estimation are shown in Figure 14.1.

Figure 14.1 Location of holes and vein wireframes

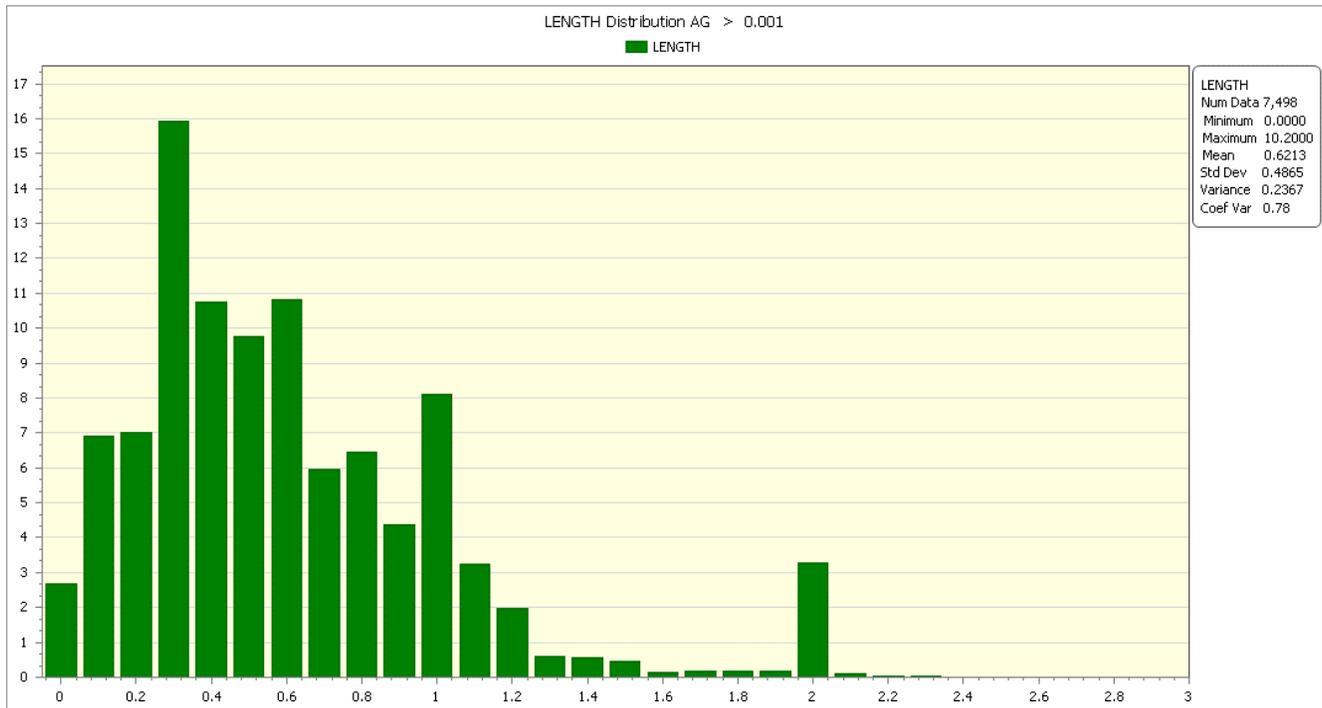


Notes:  
Red lines are the drillholes and orange areas are the vein wireframes.  
Plan orientated north and grid squares are 100m.  
Source: AMC, 2023.

**14.3 Sample lengths**

The drillholes were sampled for gold, silver, zinc, and lead on various sample lengths. Figure 14.2 is a histogram showing the samples lengths. As the 2D accumulation estimation method was used composites were variable thickness according to the vein thickness, hence no composite length was selected.

Figure 14.2 Assay sample lengths



Source: AMC, 2003.

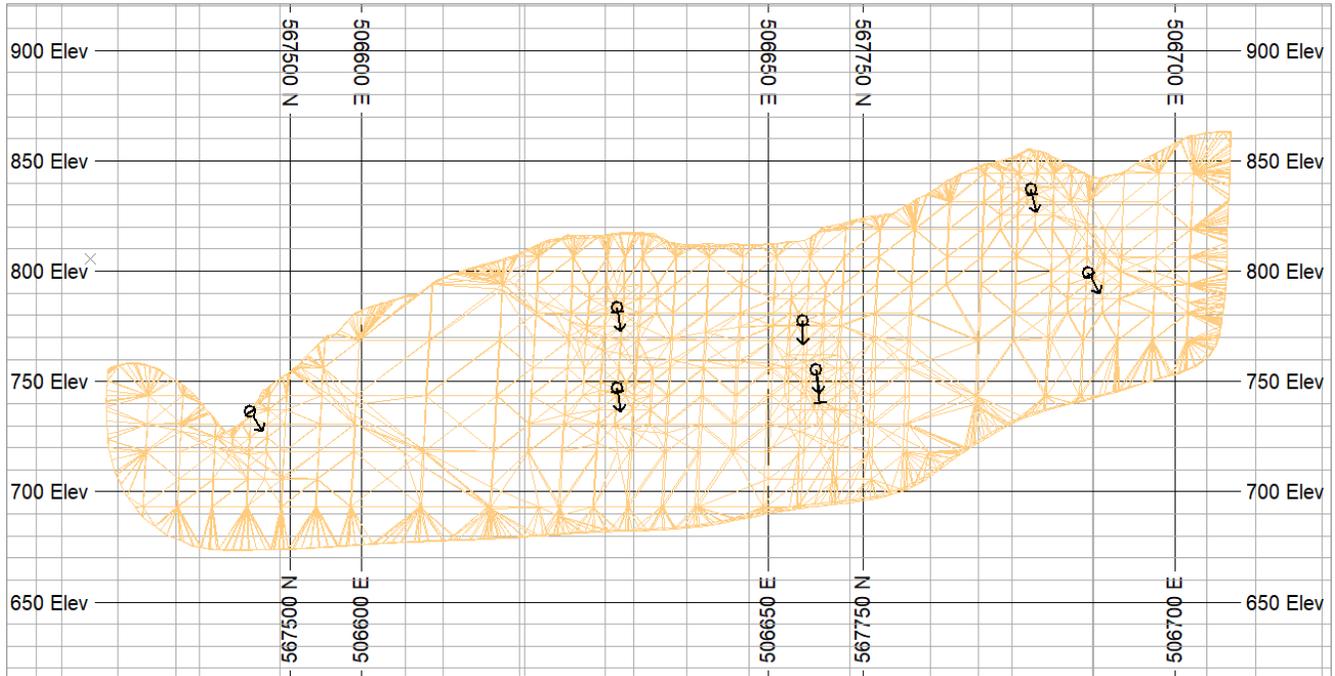
**14.4 Vein details and sample statistics**

The drillholes were sampled for gold, silver, zinc, and lead on various sample lengths a shown in Figure 14.2. Each vein was treated separately, and this section addresses the vein wireframes, holes intersecting the vein, top-capping and statistics for each of the 15 veins modelled.

**14.4.1 Alaska-alk vein**

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

Figure 14.3 Location of Alaska-alk and intersected drillholes



Notes:

Wireframe coloured orange and drillholes black.

Long section orientated across grid and scale shown by vertical intervals, (10 m).

Source: AMC, 2023.

The samples within The Alaska-alk vein were composited to total vein thickness. Based on log probability plots top-capping of 2,000 ppm Zn, 1,000 ppm Pb and 150 g/t Ag was applied. Table 14.3 shows the sample statistics for the raw assays and the composited assays.

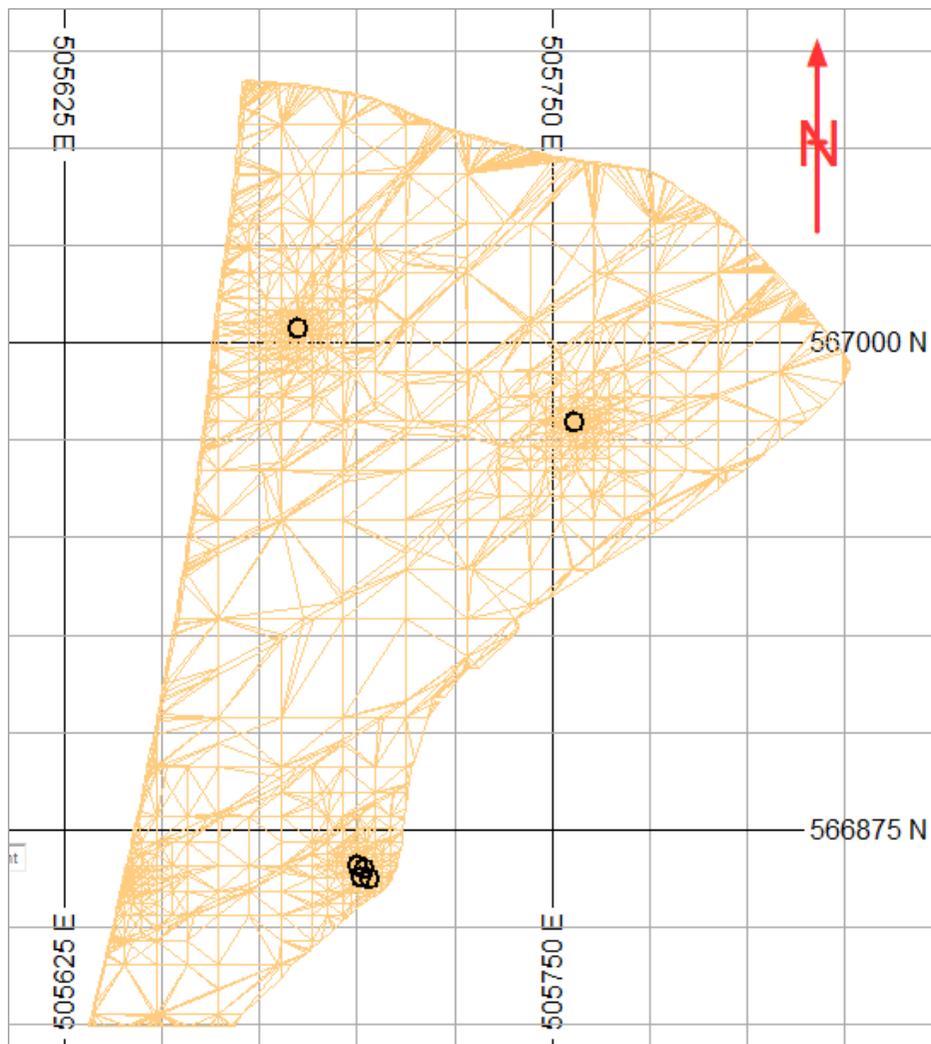
Table 14.3 Alaska-alk Vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.33	132.61	851.63	789.46	2.54	0.30	32.63	111.03	291.61	2.24
Median	0.24	19.79	35.12	157.54	2.63	0.22	8.73	27.72	170.05	0.80
Std Dev	0.33	480.15	2,716	2,352	0.29	0.16	29.34	101.0	228.95	2.84
Variance	0.11	230,542	7,381,464	5,536,452	0.08	0.03	860.56	10,201	52,417	8.05
Minimum	0.01	1.21	6.24	22.05	1.55	0.15	3.55	19.21	26.83	0.32
Maximum	1.64	2,260	11,900	11,150	2.77	0.64	81.65	235.33	699.85	8.50
<b>Total data</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>

#### 14.4.2 Dorado-paran

The location of the Dorado-paran wireframe and drillhole samples located within the wireframe are shown in Figure 14.4.

Figure 14.4 Location of Dorado-parn and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 25m.  
 Source: AMC, 2023.

The samples within Dorado-parn were composited to the vein width. Based on log probability plots, no top-capping of was applied. Table 14.4 shows the sample statistics for the raw assays and composited assays.

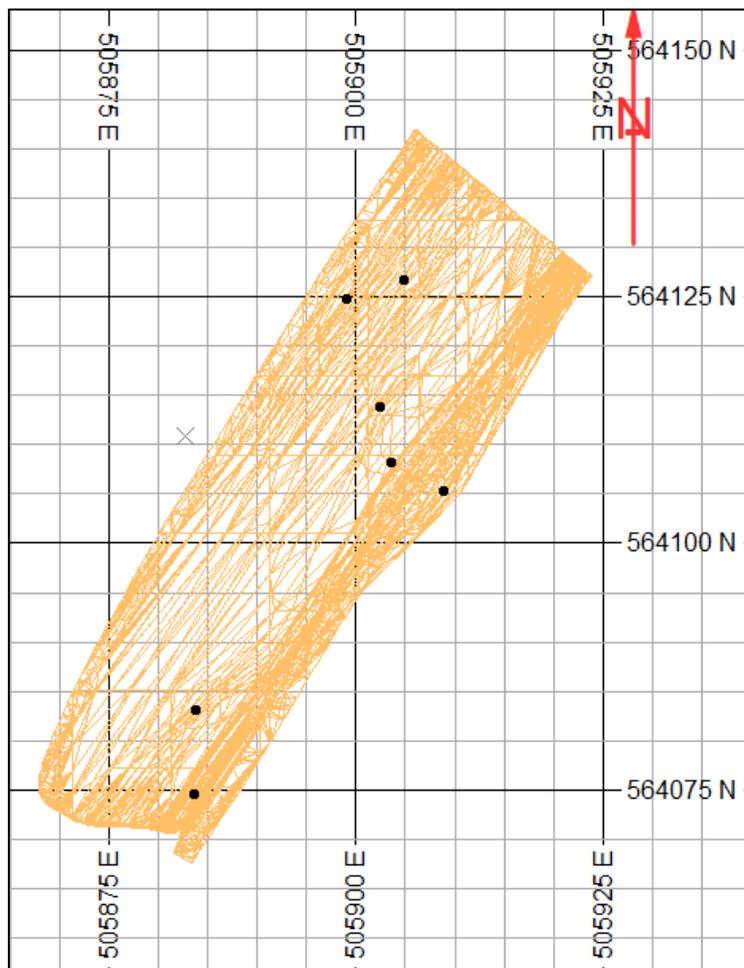
Table 14.4 Dorado-parn sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Truethk (m)
Mean	3.89	45.61	504.91	317.41	-	4.80	70.12	673.49	407.68	0.64
Median	0.26	7.83	11.90	88.38	-	0.26	4.48	10.13	89.92	0.34
Std Dev	5.93	103.16	634.83	353.07	-	6.36	131.19	652.71	392.22	0.40
Variance	35.15	10,641	403,003	124,655	-	40.48	17,211	426,034	153,840	0.16
Minimum	0.008	0.93	0.50	21.72	-	0.04	3.62	6.53	58.78	0.32
Maximum	17.15	336.70	1,626	1,070	-	17.15	336.70	1,627	1,070	1.32
<b>Total data</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>-</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>

**14.4.3 Marfaultblock2-mar**

The location of the Marfaultblock2-mar wireframe and drillhole samples located within the wireframe are shown in Figure 14.5.

Figure 14.5 Marfaultblock2-mar vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 5 m.  
 Source: AMC, 2023.

The samples within the Marfaultblock2-mar wireframe were composited to vein width. Based on log probability plots no top-capping was applied. Table 14.5 shows the sample statistics for the raw assays and composited assays.

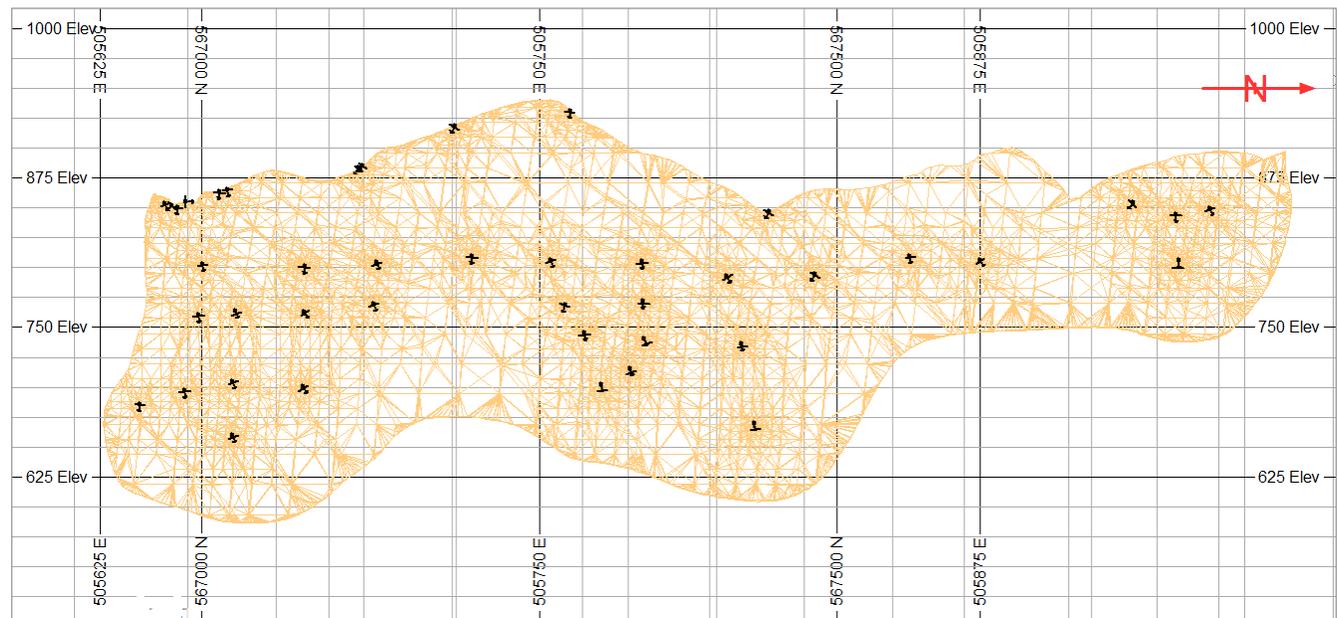
Table 14.5 Marfaultblock2-mar vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.91	212.4	1,366	1,479	2.72	0.61	147.30	799.72	1,001	1.19
Median	0.34	33.02	245.52	299.85	2.73	0.15	28.13	157.85	249.83	0.81
Std Dev	1.42	366	2,331.82	2,409.45	0.08	0.76	218.78	849.60	975.92	0.42
Variance	2.00	133,656	5,437,402	5,805,463	0.006	0.58	47,863	721,815	952,422	0.17
Minimum	0.003	0.26	2.32	63.15	2.51	0.02	0.55	14.24	143.11	0.68
Maximum	4.25	1,190	8,350	9,683	2.84	2.12	614.34	1,969.86	2,542	1.73
<b>Total data</b>	<b>35</b>	<b>35</b>	<b>35</b>	<b>35</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>

14.4.4 Dorado-drd

The location of the Dorado-drd wireframe and drillhole samples located within the wireframe are shown in Figure 14.6.

Figure 14.6 Dorado-drd vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (25m).  
 Source: AMC, 2023.

The samples within the Dorado-drd vein were composited to vein width lengths. Based on log probability plots top-capping of 20 g/t Au, 4,000 g/t Ag, 20,000 ppm Pb and 30,000 ppm Zn was applied. Table 14.6 shows the sample statistics for the raw assays and composited assays.

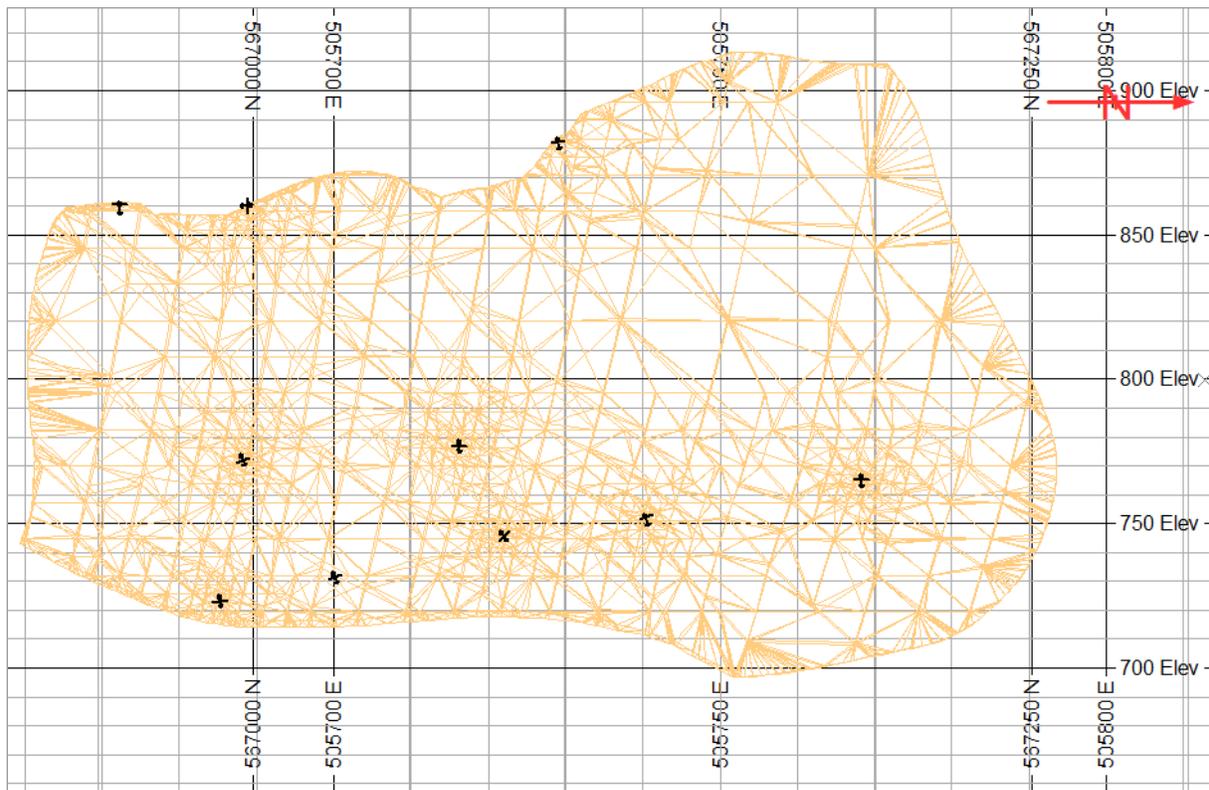
Table 14.6 Dorado-drd vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	2.32	407.40	2,276	2,212	2.71	1.27	186.12	1,210	1,153	3.30
Median	0.18	7.76	60.80	168.71	2.63	0.40	9.13	107.10	181.25	2.38
Std Dev	9.39	1,537	8,696	7,665	0.37	2.87	537.56	3,108	2,715	2.58
Variance	88.18	2,364,407	75,612,025	58,759,069	0.13	8.22	288,971	9,661,265	7,372,346	6.68
Minimum	0.003	0.05	0.10	15.10	2.33	0.03	0.37	2.84	16.00	0.64
Maximum	71.21	11,088	64,100	55,300	4.37	16.08	2,719	15,182	12,914	11.69
<b>Total data</b>	<b>177</b>	<b>177</b>	<b>177</b>	<b>177</b>	<b>34</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>42</b>

**14.4.5 Dorado-dred**

The location of the Dorado-dred wireframe and drillhole samples located within the wireframe are shown in Figure 14.7.

Figure 14.7 Dorado-dred vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (10m).  
 Source: AMC, 2023.

The samples within the Dorado-dred vein were composited to vein width. Based on log probability plots, top-capping of 20 g/t Au and 7,000 g/t Ag, 20,000 ppm Pb and 30,000 ppm Zn was applied. Table 14.7 shows the sample statistics for the raw assays and composited assays.

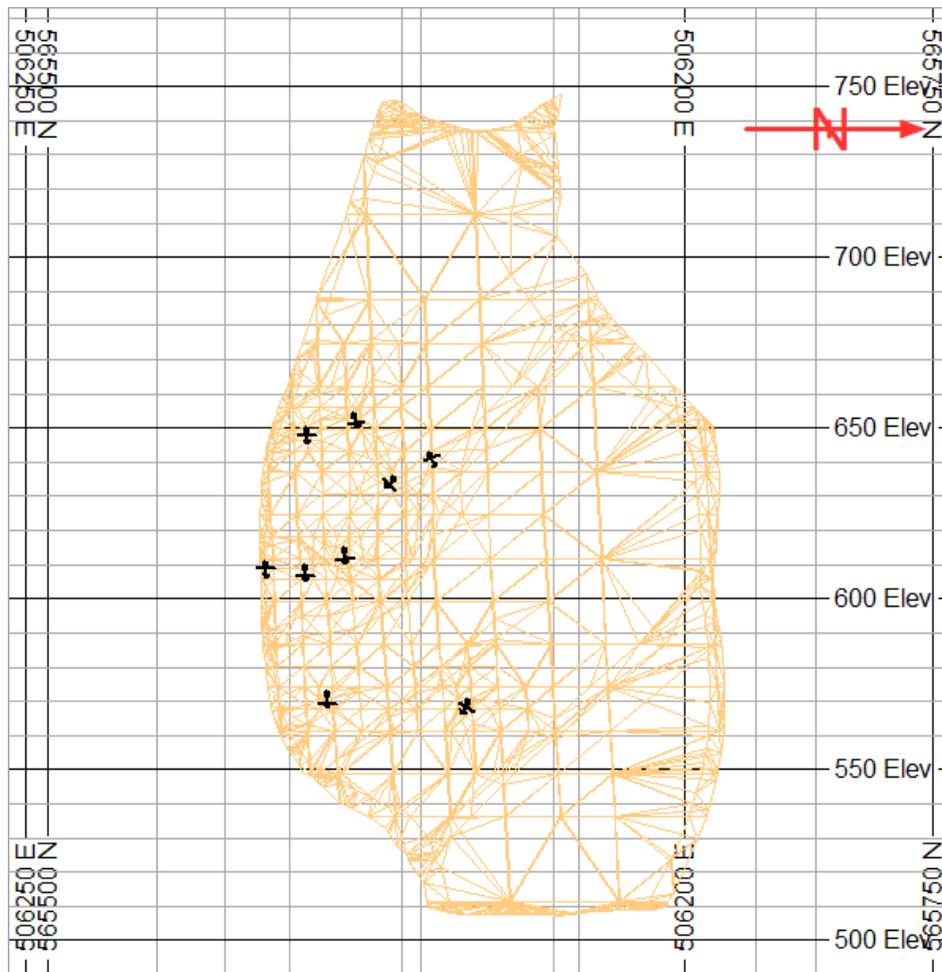
Table 14.7 Dorado-dred vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.81	50.63	249.19	167.48		0.83	21.24	233.54	154.27	0.95
Median	0.09	3.79	15.84	97.00		0.08	3.72	16.63	93.85	0.71
Std Dev	1.31	144.55	487.31	217.37		1.44	33.72	381.11	111.12	0.65
Variance	1.71	20,895	237,466	47,250		2.07	1,137	145,299	12,355	0.42
Minimum	0.001	0.06	2.50	22.00		0.003	0.14	3.28	22.00	0.21
Maximum	4.68	695.36	2,027	939		4.68	100.00	1,242	316.40	2.12
<b>Total data</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>23</b>	<b>0</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

14.4.6 Santaana-rsv

The location of the Santaana-rsv wireframe and drillhole samples located within the wireframe are shown in Figure 14.8.

Figure 14.8 Santaana-rsv vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (10m).  
 Source: AMC, 2023.

The samples within the Santaana-rsv vein were composited to the vein width. Four holes (CP1205, CP1207, and CP1208) had a total of four samples with no assay values. These samples were set to zero. Due to hole CP1208 not having any assays it was not included in the block grade estimation. Table 14.8 show the sample statistics for the raw assays and composited assays.

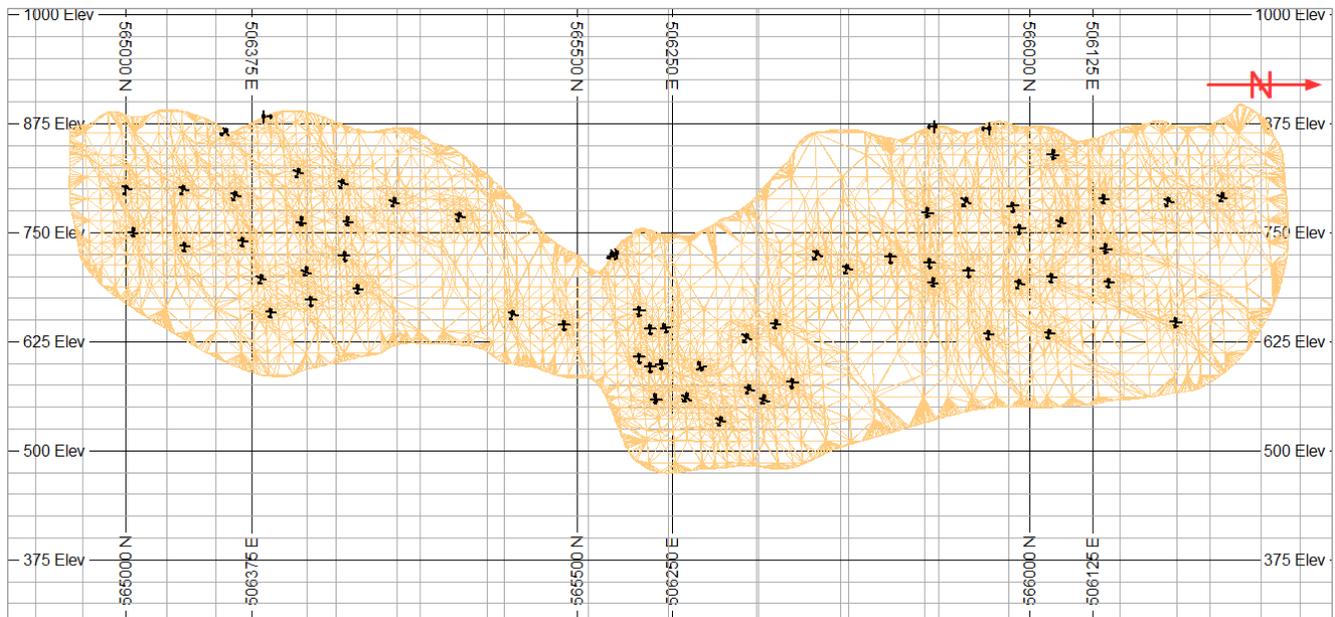
Table 14.8 Santaana-rsv Vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.22	35.95	207.96	333.18		0.25	39.63	252.40	327.90	1.15
Median	0.10	12.75	27.80	184.00		0.10	10.60	38.83	217.00	1.19
Std Dev	0.41	76.05	772.60	409.74		0.32	54.60	509.34	233.13	0.37
Variance	0.17	5,783	596,915.36	167,886		0.10	2,981	259,427	54,350	0.14
Minimum	0.005	0.47	4.10	50.00		0.005	0.50	5.12	63.33	0.52
Maximum	2.22	397	4,130	1,940		0.95	157.13	1,495	829	1.66
<b>Total data</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>

14.4.7 Santaana-san Vein

The location of the Santaana-san wireframe and drillhole samples located within the wireframe are shown in Figure 14.9.

Figure 14.9 Sanataana-san vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (25m).  
 Source: AMC, 2023.

The samples within the Santaana-san vein were composited to vein width. Based on log probability plots, no top-capping was applied. Table 14.9 shows the sample statistics for the raw assays and composited assays.

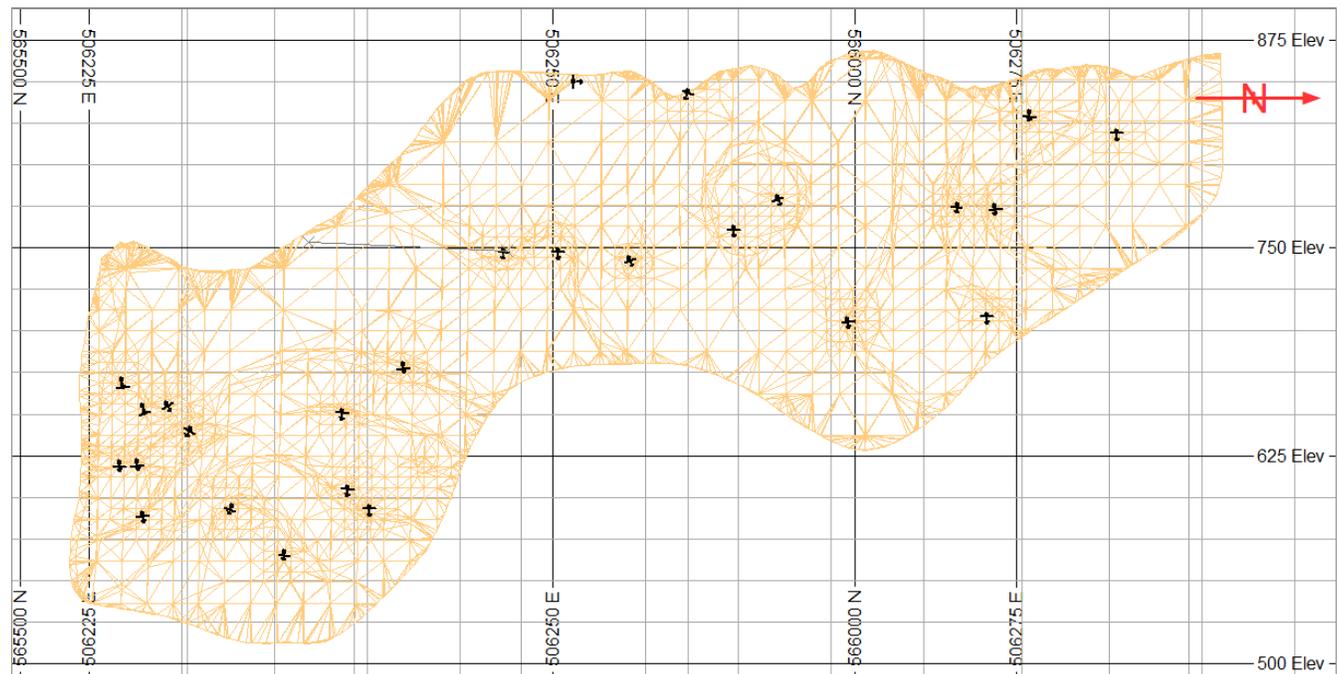
Table 14.9 Santaana-san vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.56	172.72	667.66	764.68	2.62	0.43	133.08	438.91	661.59	1.61
Median	0.25	28.47	43.01	196.56	2.60	0.29	33.80	70.20	219.08	1.50
Std Dev	1.46	558.26	2,209	1,743	0.10	0.48	229.68	731	883.65	0.67
Variance	2.14	311,658	4,880,295	3,040,818	0.01	0.23	52,751	534,350	780,827	0.45
Minimum	0.001	0.01	0.50	8.53	2.42	0.001	0.01	2.40	11.00	0.50
Maximum	15.40	5,621	18,750	11,560	2.81	2.45	1,074	3,152	4,595	3.885
<b>Total data</b>	<b>260</b>	<b>260</b>	<b>260</b>	<b>260</b>	<b>21</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>

**14.4.8 Santaana-del**

The location of the Santaana-del wireframe and drillhole samples located within the wireframe are shown in Figure 14.10.

Figure 14.10 Santaana-del vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (25m).  
 Source: AMC, 2023.

The samples within the Santaana-del vein were composited to vein width. Based on log probability plots, 1,000 ppm Pb and 500 g/t Ag top-capping was applied. Table 14.10 shows the sample statistics for the raw assays and composited assays. Holes CP1201, CP1203, and CP1207 had samples without any assays and these intervals were set to zero grades.

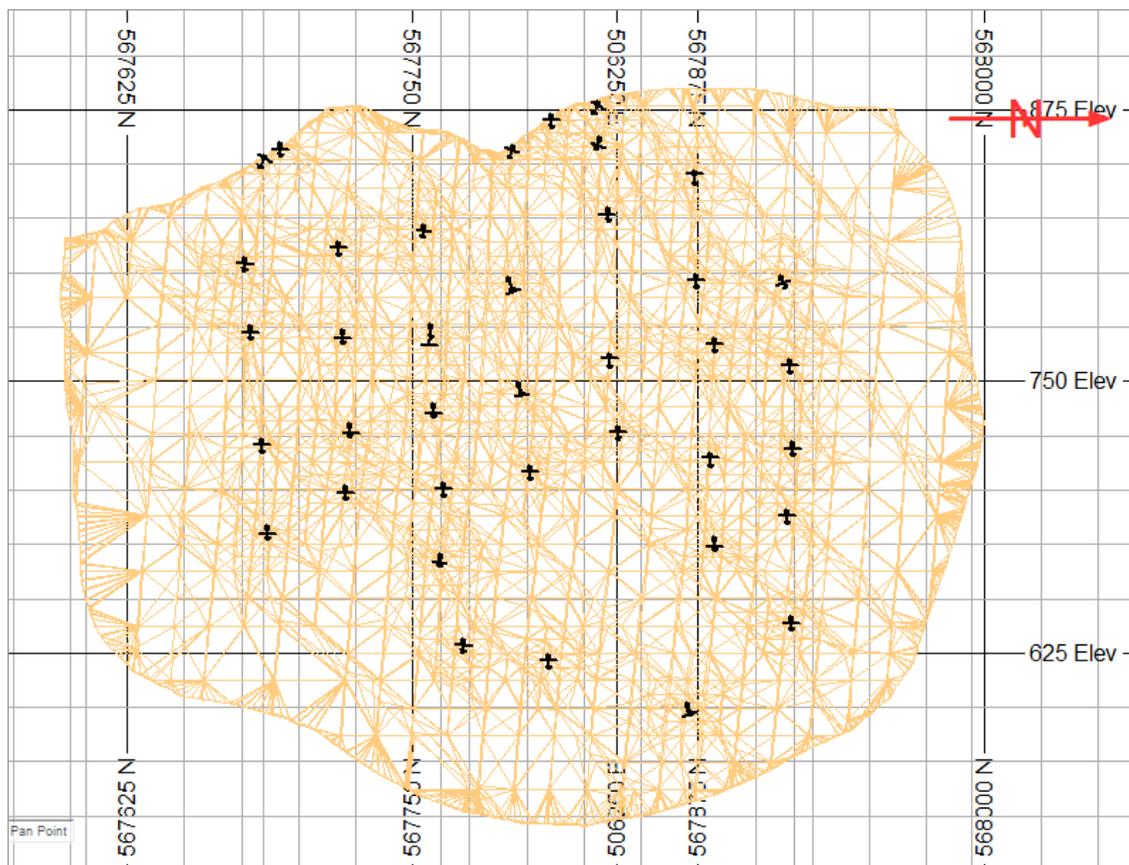
Table 14.10 Santaana-del vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Horthk (m)
Mean	0.30	73.27	309	562		0.26	44.01	127.87	441.16	1.35
Median	0.08	5.17	24.80	186		0.09	3.66	18.18	173.60	1.19
Std Dev	0.69	257	1,087	1,632		0.55	101.97	229.82	942.40	0.73
Variance	0.48	66,035	1,181,186	2,664,303		0.30	10,396	52,816	888,121	0.53
Minimum	0.001	0.05	2.14	28.00		0.001	0.05	5.14	63.00	0.29
Maximum	4.46	1,800	8,490	11,600		2.70	500	1,000	4,907	3.29
<b>Total data</b>	<b>74</b>	<b>74</b>	<b>74</b>	<b>74</b>	<b>0</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>

14.4.9 Naranjos-nar

The location of the Naranjos-nar wireframe and drillhole samples located within the wireframe are shown in Figure 14.11.

Figure 14.11 Naranjos-nar vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Long section orientated across grid and scale shown by vertical intervals, (25m).  
 Source: AMC, 2023.

The samples within the Naranjos-nar vein were composited to vein width. Based on log probability plots, 4,000 ppm Zn top-capping was applied. Table 14.11 shows the sample statistics for the raw assays and composited assays.

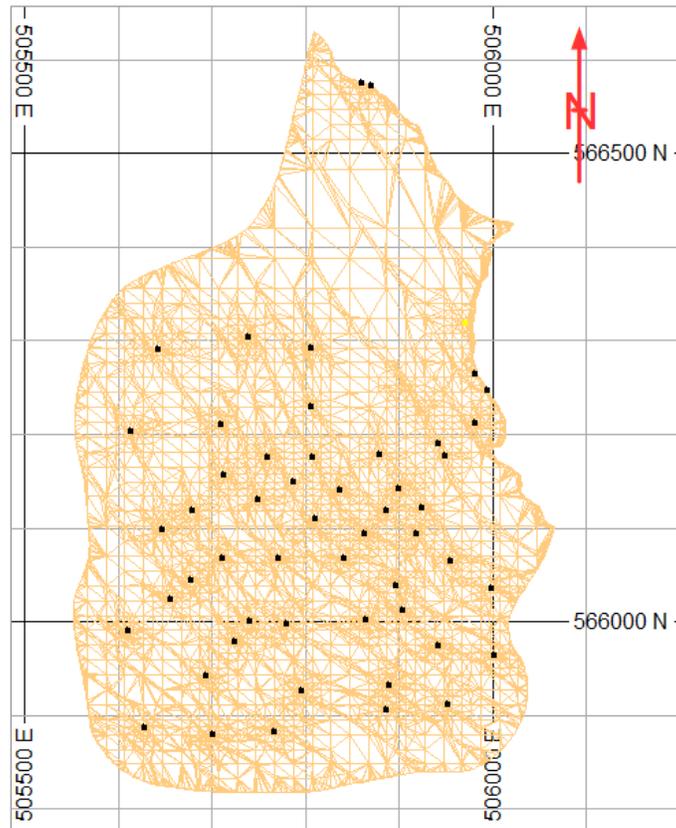
Table 14.11 Naranjos-nar vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	0.93	280	1,002	951	2.65	0.85	214	701	632	1.710
Median	0.19	10.99	51.39	166	2.63	0.28	36.58	135	214	1.432
Std Dev	2.60	993	3,464	2,712	0.16	1.31	353	1,130	949	0.959
Variance	6.77	985,856	11,998,310	7,353,710	0.03	1.73	124,934	1,275,846	900,281	0.919
Minimum	0.003	0.05	1.00	6.90	2.21	0.01	0.48	8.82	15.03	0.257
Maximum	19.96	8,122	28,230	18,950	3.21	4.96	1,377	4,502	4,000	4.154
<b>Total data</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>60</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>38</b>

### 14.4.10 Megapozo-par

The location of the Megapozo-par wireframe and drillhole samples located within the wireframe are shown in Figure 14.12.

Figure 14.12 Megapozo-par vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 100m.  
 Source: AMC, 2023.

The samples within the Megapozo-par vein were composited to vein width. Based on log probability plots a top-capping of 2,000 g/t Ag was applied. Table 14.12 shows the sample statistics for the raw assays and composited assays. It must be noted that five samples within the wireframe did not have assay values and were set to zero grades for the block estimation. These samples were located in drillholes DH315, DH319, and DH320.

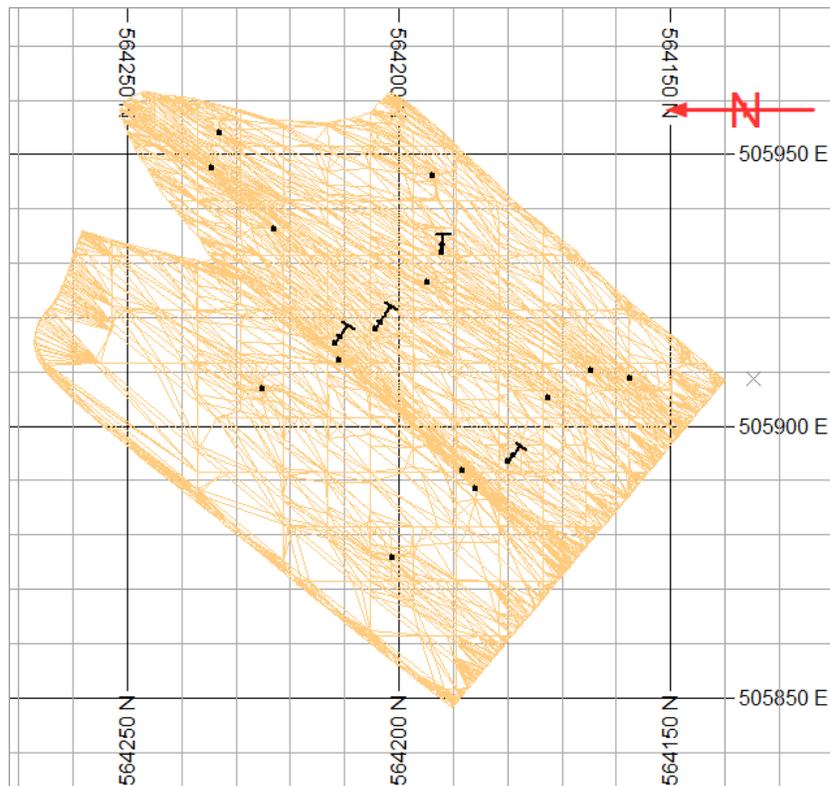
Table 14.12 Megapozo-par vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	3.44	316	2,047	2,594	2.62	2.64	232.34	1,604	2,143	1.21
Median	0.07	9.52	56.20	250	2.59	0.12	8.75	148	408	1.16
Std Dev	10.52	849	4,589	5,297	0.22	6.91	538	3,181	4,012	0.52
Variance	110	721,430	21,056,120	28,055,268	0.05	47.73	289,826	10,116,441	16,095,958	0.27
Minimum	0.001	0.05	0.10	6.00	2.11	0.001	0.14	1.55	6.00	0.30
Maximum	69.60	5,550	25,300	31,500	3.12	38.38	3,067	13,953	17,800.	3.30
<b>Total data</b>	<b>157</b>	<b>157</b>	<b>157</b>	<b>157</b>	<b>38</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>

**14.4.11 Marasfaultblock1-mar**

The location of the Marasfaultblock1-mar wireframe and drillhole samples located within the wireframe are shown in Figure 14.13.

Figure 14.13 Marasfaultblock1-mar vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated east and grid squares are 10m.  
 Source: AMC, 2023.

The samples within the Marasfaultblock1-mar vein were composited to vein width. Based on log probability plots a top-capping of 2,000 g/t Ag was applied. Table 14.13 shows the sample statistics for the raw assays and composited assays.

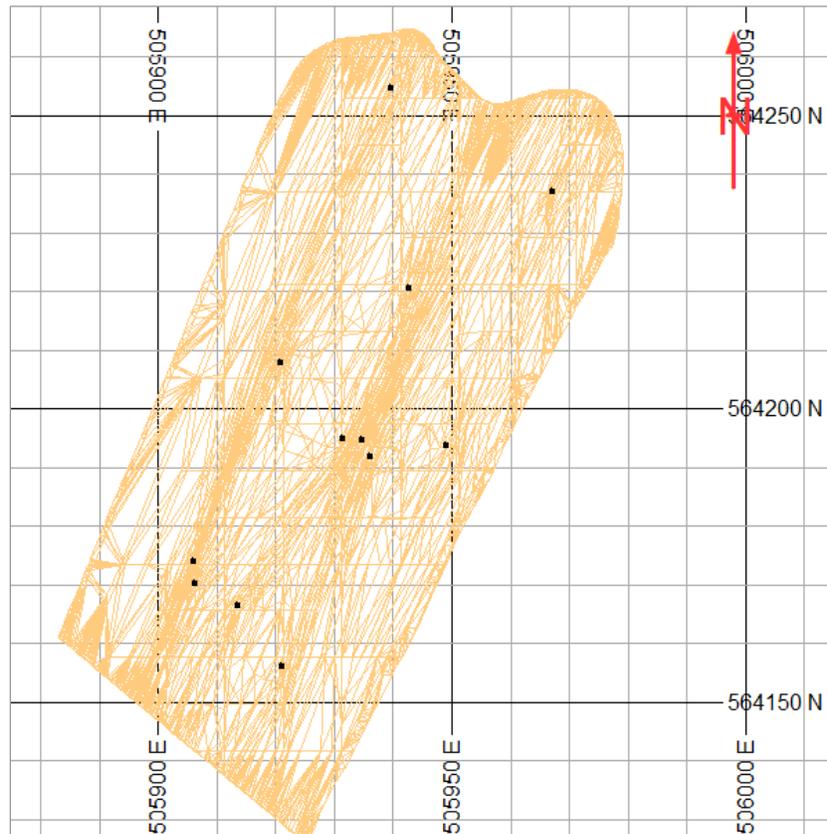
Table 14.13 Marasfaultblock1-mar vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	2.27	1,139	4,813	4,907	2.69	1.15	562	2,460	2,563	2.56
Median	0.27	58.05	297	529	2.64	0.70	348	1,486	1,611	1.95
Std Dev	5.64	2,461	10,504	11,362	0.33	1.17	585	2,712	2,839	1.76
Variance	31.83	6,058,579	110,332,081	129,093,925	0.11	1.37	342,696	7,352,842	8,058,863	3.09
Minimum	0.003	0.57	0.000	8.54	2.14	0.07	6.613	16.79	70.63	0.83
Maximum	30.49	13,529	47,180	58,710	4.06	3.77	2,000	9,078	11,214	6.80
<b>Total data</b>	<b>173</b>	<b>173</b>	<b>173</b>	<b>173</b>	<b>60</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>

**14.4.12 Marasfaultblock1-lpn**

The location of the Marasfaultblock1-lpn wireframe and drillhole samples located within the wireframe are shown in Figure 14.14.

Figure 14.14 Marasfaultblock1-lpn vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 10m.  
 Source: AMC, 2023.

The samples within the Marasfaultblock1-lpn vein were composited to vein width. Based on log probability plots a top-capping of 1,000 ppm Zn and 200 ppm Pb was applied. Table 14.14 shows the sample statistics for the raw assays and composited assays.

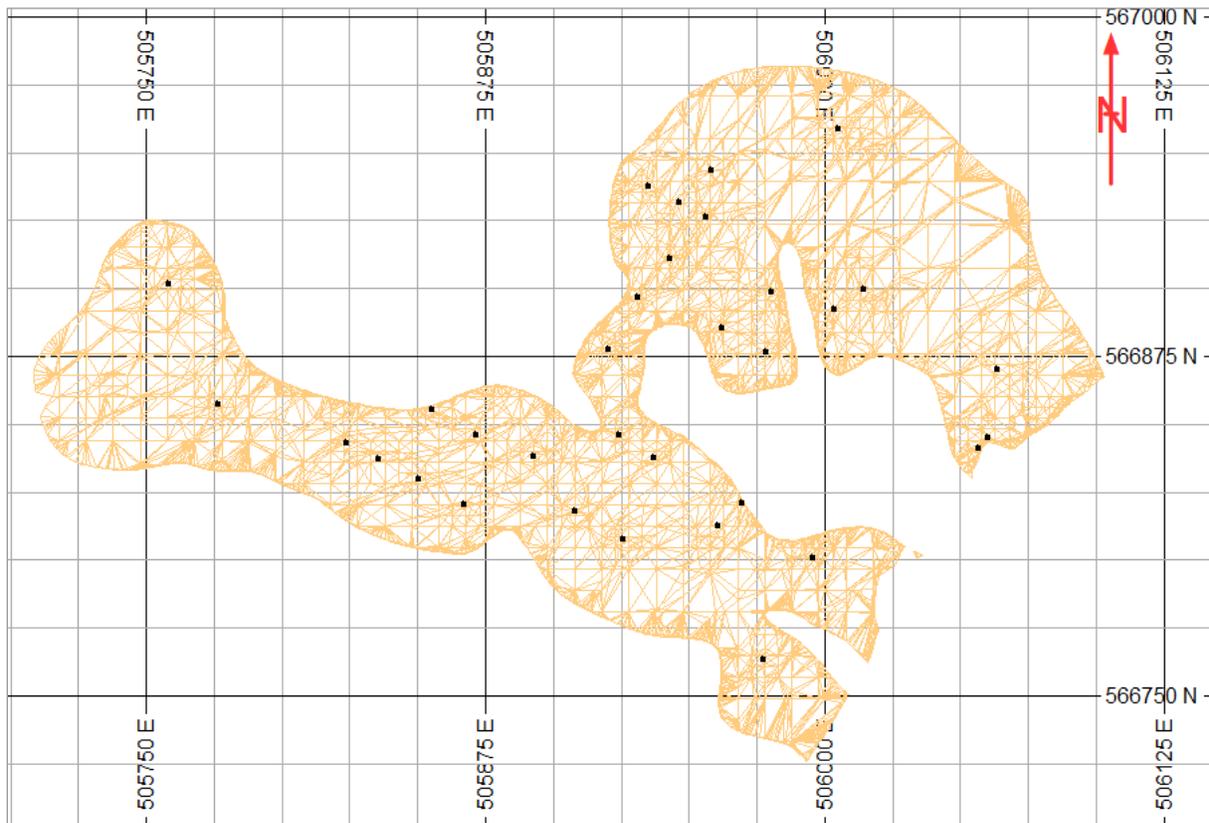
Table 14.14 Marasfaultblock1-lpn vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	0.40	117.0	544.0	880	2.66	0.19	40.19	63.22	278.1	1.304
Median	0.11	8.97	27.38	188	2.61	0.12	12.97	40.76	128.71	1.12
Std Dev	0.91	380	1,599	2,131	0.16	0.17	57.88	67.36	271.51	0.41
Variance	0.83	144,415	2,556,223	4,543,082	0.03	0.03	3,350	4,537	73,716	0.17
Minimum	0.003	0.10	1.00	34.37	2.39	0.009	0.87	9.56	69.71	0.44
Maximum	4.50	1,851	7,300	8,600	2.83	0.55	188.20	200	1,000	1.92
<b>Total data</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>6</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>

14.4.13 Laporfia-phw

The location of the Laporfia-phw wireframe and drillhole samples located within the wireframe are shown in Figure 14.15.

Figure 14.15 Laporfia-phw vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 25m.  
 Source: AMC, 2023.

The samples within the Marasfaultblock1-lpn vein were composited to vein width. Based on log probability plots a top-capping of 1,000 ppm Zn and 200 ppm Pb was applied. Table 14.15 shows the sample statistics for the raw assays and composited assays.

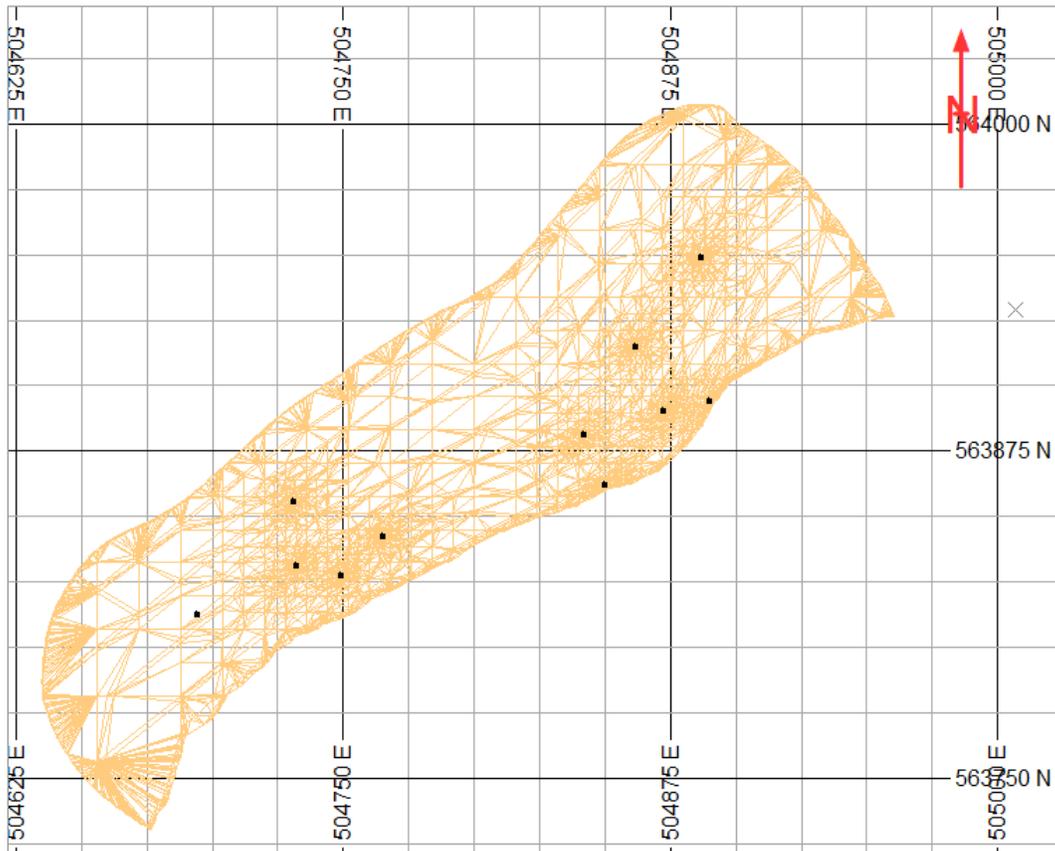
Table 14.15 Marasfaultblock1-lpn vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	0.40	117.0	544.0	880	2.66	0.19	40.19	63.22	278.1	1.304
Median	0.11	8.97	27.38	188	2.61	0.12	12.97	40.76	128.71	1.12
Std Dev	0.91	380	1,599	2,131	0.16	0.17	57.88	67.36	271.51	0.41
Variance	0.83	144,415	2,556,223	4,543,082	0.03	0.03	3,350	4,537	73,716	0.17
Minimum	0.003	0.10	1.00	34.37	2.39	0.009	0.87	9.56	69.71	0.44
Maximum	4.50	1,851	7,300	8,600	2.83	0.55	188.20	200	1,000	1.92
<b>Total data</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>6</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>

**14.4.14 Laisabela-laid**

The location of the Laisabela-laid wireframe and drillhole samples located within the wireframe are shown in Figure 14.16.

Figure 14.16 Laisabela-laid vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and grid squares are 25m.  
 Source: AMC, 2023.

The samples within the Laisabela-laid vein were composited to vein width. Based on log probability plots a top-capping of 700 ppm Zn was applied. Table 14.16 shows the sample statistics for the raw assays and composited assays.

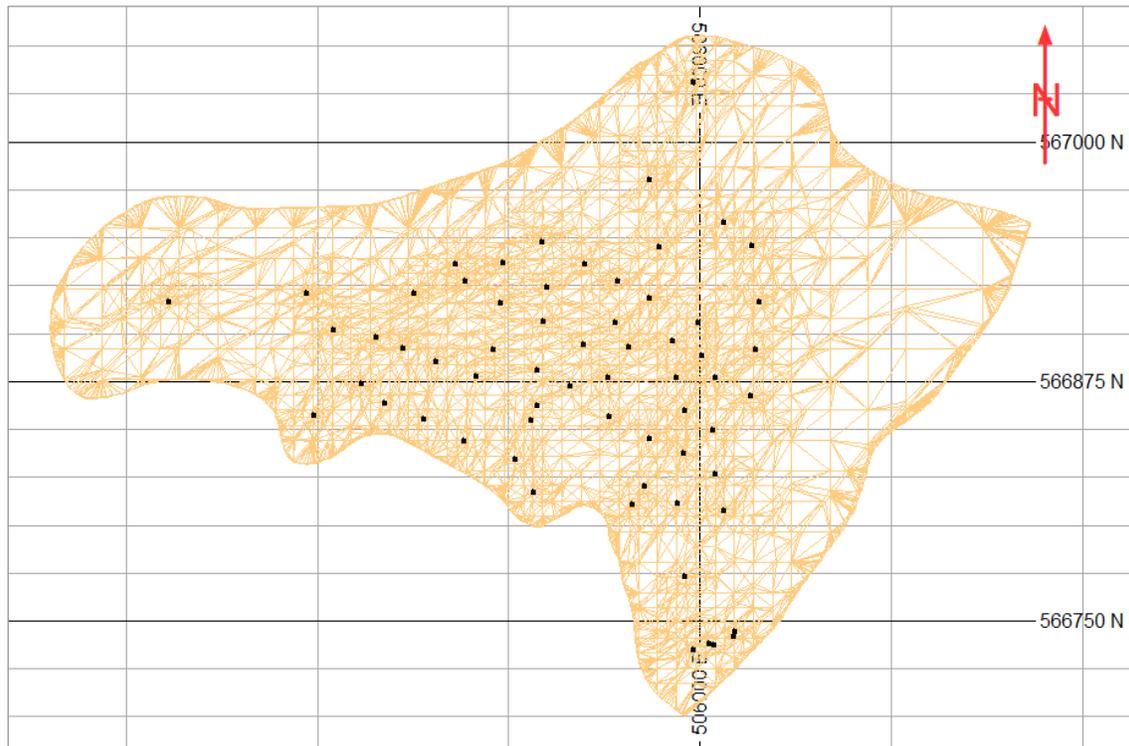
Table 14.16 Lasiabela-laid vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	1.79	257.88	715.83	576.59	2.38	1.05	156.33	478.48	198.73	1.27
Median	0.02	2.24	14.52	100.00	2.31	0.02	9.21	10.04	96.95	1.18
Std Dev	4.18	607.10	1,688	1,436	0.26	1.94	332.91	922.96	210.73	0.35
Variance	17.45	368,563	2,851,586	2,063,711	0.07	3.77	110,825	851,855	44,407	0.12
Minimum	0.003	0.39	0.10	28.11	2.15	0.008	0.90	2.97	28.11	0.67
Maximum	13.73	2,090	6,000	5,208	3.25	5.94	1,046	3,006	700	1.74
<b>Total data</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>47</b>	<b>14</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>11</b>

14.4.15 Laporfia-por

The location of the Laporfia-por wireframe and drillhole samples located within the wireframe are shown in Figure 14.17.

Figure 14.17 Laporfia-por vein location and intersected drillholes



Notes:  
 Wireframe coloured orange and drillholes black.  
 Plan orientated north and scale shown by northings.  
 Source: AMC, 2023.

The samples within the Laporfia-por vein were composited to vein width. Based on log probability plots no top-capping was applied. Table 14.17 shows the sample statistics for the raw assays and composited assays.

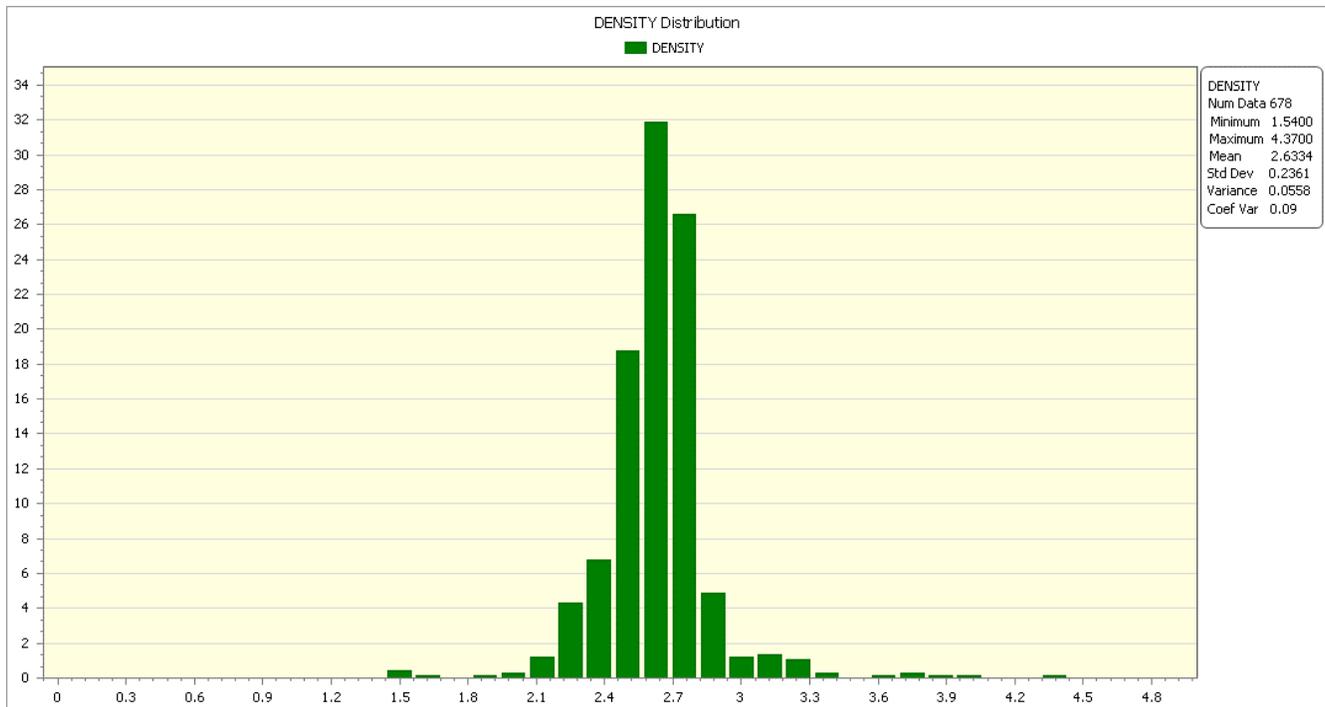
Table 14.17 Laporfia-por vein sample statistics

	Raw samples					Composited samples				
	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Density (t/m <sup>3</sup> )	Au (g/t)	Ag (g/t)	Pb (ppm)	Zn (ppm)	Verthk (m)
Mean	3.02	271.2	2,218	3,035	2.68	1.97	147.13	1,208.48	1,728.13	2.44
Median	0.12	4.52	29.62	127.61	2.61	0.53	20.16	399.02	661.39	2.43
Std Dev	7.13	793.4	4,931	7,978	0.31	3.64	284.23	1,927.64	2,956.08	0.913
Variance	50.88	628,481	24,317,256	63,648,711	0.10	13.25	80,785	3,715,797	8,738,390	0.83
Minimum	0.001	0.05	0.10	15.96	2.24	0.005	0.48	3.40	46.93	0.38
Maximum	36.20	5,763	23,596	69,535	3.75	15.69	1,814	7,439	17,136	4.72
<b>Total data</b>	<b>199</b>	<b>199</b>	<b>199</b>	<b>199</b>	<b>42</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>	<b>63</b>

**14.5 Bulk density**

A total of 678 samples were tested for bulk density using the wax immersion method. Figure 14.18 shows a histogram of the bulk density values ranging from 1.54 t/m<sup>3</sup> to 4.37 t/m<sup>3</sup> with a mean of 2.63 t/m<sup>3</sup>.

Figure 14.18 Bulk density values



Source: AMC, 2023.

Based on the data provided the mean bulk densities located in each vein (refer to tables above) were used. If no bulk density samples were located within a vein the constant value of 2.63 t/m<sup>3</sup> was used.

## 14.6 Areas of previous mining

Some minor historic mining has been carried out, but details are unknown. No allowance for any depletion by mining has been made.

## 14.7 Cut-off grade used

The cut-off grade of 158 g/t AgEq was calculated to state the Mineral Resources based on the following inputs:

- Silver price – US\$25/oz
- Gold price – US\$1,800/oz
- Mining cost – US\$69/t
- Milling cost – US\$32/t
- G&A - US\$13/t
- Metallurgical recoveries of 93% Ag, 96% Au

The formula to calculate AgEq used the prices (P), recoveries (R), and grades of each element in the following formula:  $\text{AgEq g/t} = \text{Ag g/t} + \left( \frac{(\text{AuP} \cdot \text{AuR})}{(\text{AgP} \cdot \text{AgR})} \cdot \text{Au g/t} \right)$ . No sales or marketing costs were considered.

## 14.8 Estimation method

The 2D accumulation method was used to estimate the block grades for silver, gold, zinc, lead, and vein thickness. This was selected as being an appropriate method for these narrow veins. The word horizontal and vertical are used interchangeably as they mean the same but apply to either sub vertical or sub horizontal veins in different cases.

The process for each vein consisted of:

- Selecting drillhole assay samples contained within the vein wireframes provided.
- Compositing each drillhole within the vein to its total width and calculate the assay grades over this length.
- Calculating the true horizontal thickness of the vein based on its dip and dip direction.
- Multiply the composited sample grades by the true horizontal or vertical thickness.
- Prepare semi-variogram analysis on the composited sample grades multiplied by the horizontal or vertical true vein thickness, as applicable.
- Estimate the 'true horizontal thickness by assay' grades and true horizontal thickness using ordinary kriging into blocks generally 10 m in size across and along the vein. The block size along the dip direction covered the whole vein. Same process applies for sub vertical veins.
- Calculate the block grades by dividing the estimated true horizontal thickness x assay grade by the estimated true horizontal thickness.
- Select the estimated block grades and add them to blocks contained within the wireframe.
- Calculate the block true east-west (or vertical) thickness based on the estimated vein horizontal or vertical thickness and the vein dip and dip direction.

## 14.9 Block Model parameters

Block grades for 12 veins were estimated into blocks 10 mE x 10 mZ in size with sub-blocks 2 mE x 2 mZ to accurately honour the vein shape. Veins laporfia-por, laporfia-phw and santanana-rsv had small blocks 5 mE x 5 mZ with sub-blocks 1 mE x 1 mZ. Each of the 15 veins had its own origin and large block size across the vein.

**14.10 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 14.18. 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. The search details for the main parameters being Ag\*Thick, Au\*Thick, and Thick are shown in Table 14.18, Table 14.19 and Table 14.20. Where the term "Thick" is an abbreviation of vein thickness. The search radii were increased by 1.5 and then 3, if a block was not estimated.

Table 14.18 Estimation parameters for Ag\*Thick

Zone	Search radii			Rotation			No. samples	
	East (m)	North (m)	Vert. (m)	Z (°)	X (°)	Y (°)	Min.	Max.
alaska-alk	110	80	80	180	-70	90	2	5
dorado-parn	64	46	64	-160	0	90	2	5
marfaultblock2-mar	136	56	56	180	0	90	2	5
dorado-dred	119	70	70	-180	-80	90	2	5
santaana-rsv	140	30	30	180	20	90	2	5
santaana-san	210	80	80	180	-70	90	2	5
santaana-del	230	85	85	180	-65	90	2	5
naranjos-nar	180	90	90	0	-40	-90	2	5
megapozo-par	70	150	70	-150	0	90	2	5
marafaultblock1-mar	98	82	82	180	5	90	2	5
marafaultblock1-lpn	136	56	56	180	0	90	2	5
laporfia-phw	100	168	100	-155	0	90	2	5
laisabela-laid	120	60	60	-180	-75	90	2	5
dorado-drd	227	60	60	0	-90	-90	2	5
laporfia-por	64	46	64	-160	0	90	2	5

Table 14.19 Estimation parameters Au\*Thick

Zone	Search radii			Rotation			No. samples	
	East (m)	North (m)	Vert. (m)	Z (°)	X (°)	Y (°)	Min.	Max.
alaska-alk	200	80	80	180	-10	90	2	5
dorado-parn	60	80	60	-115	0	90	2	5
marfaultblock2-mar	146	60	60	-180	0	90	2	5
dorado-dred	160	86	86	0	-45	-90	2	5
santaana-rsv	94	36	36	180	15	90	2	5
santaana-san	200	80	80	180	-10	90	2	5
santaana-del	230	190	190	180	-60	90	2	5
naranjos-nar	170	90	90	0	-40	-90	2	5
megapozo-par	80	55	80	-175	0	90	2	5
marasfaultblock1-mar	96	88	88	180	10	-90	2	5
marasfaultblock1-lpn	146	60	80	180	0	90	2	5
laporfia-phw	114	180	114	-150	0	90	2	5
laisabela-laid	132	60	60	-180	-75	90	2	5
dorado-drd	212	70	70	0	-90	-90	2	5
laporfia-por	60	80	60	-115	0	90	2	5

Table 14.20 Estimation parameters Thick

Zone	Search radii			Rotation			No. samples	
	East (m)	North (m)	Vert. (m)	Z (°)	X (°)	Y (°)	Min.	Max.
alaska-alk	100	90	90	0	-80	-90	2	5
dorado-parn	61	73	61	-150	0	90	2	5
marfaultblock2-mar	148	60	60	180	0	90	2	5
dorado-dred	100	80	80	180	-70	90	2	5
santaana-rsv	168	36	36	180	10	90	2	5
santaana-san	100	90	90	0	-80	-90	2	5
santaana-del	260	70	70	180	-70	90	2	5
naranjos-nar	160	53	53	180	0	90	2	5
megapozo-par	75	40	75	-170	0	90	2	5
marasfaultblock1-mar	152	92	92	180	10	90	2	5
marasfaultblock1-lpn	148	60	60	180	0	90	2	5
laporfia-phw	92	190	92	-110	0	90	2	5
laisabela-laid	200	100	100	180	-60	90	2	5
dorado-drd	407	74	74	-180	-75	90	2	5
laporfia-por	61	73	61	-150	0	90	2	5

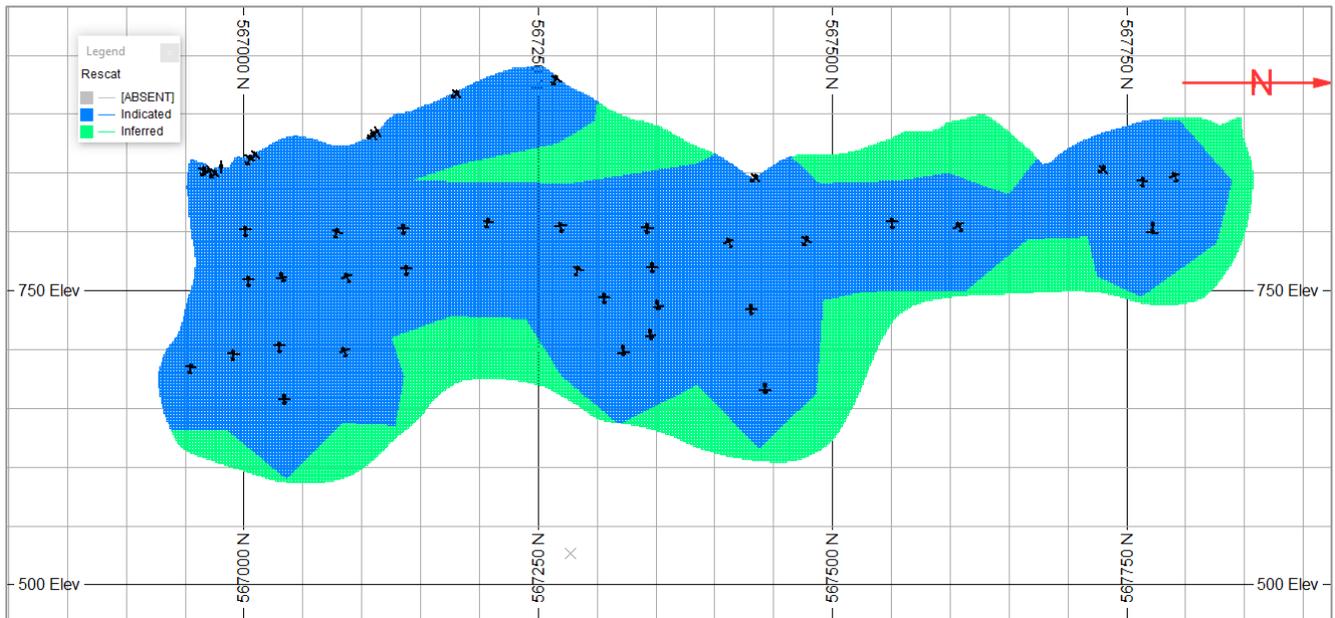
### 14.11 Mineral Resource classification

The Mineral Resources were classified as Indicated or Inferred based on the following:

- Indicated blocks were generally within 40 m of drillhole samples and estimated within the first pass.
- Inferred blocks were within 40 m to 80 m from drillholes samples.

Figure 14.19 is an example of the resource classification (rescat). The example used is the Dorado-drd vein.

Figure 14.19 Mineral Resource Classification for Dorado-drd



Notes:  
 Blocks coloured by Rescat as per the legend.  
 Light blue blocks define the Indicated Mineral Resource.  
 Green blocks define the Inferred Mineral Resource.  
 Black points are the drillhole pierce points.  
 Long section looking west, and scale shown by grid squares of 50m.  
 Source: AMC, 2023.

**14.12 Mineral Resource estimate**

The estimated Mineral Resources above a 158 g/t AgEq cut-off is shown in and Table 14.21.

# Santa Ana Property Mineral Resource Estimate

Outcrop Silver and Gold Corporation

0723022

Table 14.21 Santa Ana Mineral Resource as of 26 April 2023

Category	Vein area	Tonnage (kt)	Average grades			Metal content		
			Ag (g/t)	Au (g/t)	AgEq (g/t)	Ag (koz)	Au (koz)	AgEq (koz)
Indicated	El Dorado	318	436	1.9	579	4,448	19.4	5,915
	Las Maras	261	666	1.4	767	5,584	11.3	6,430
	Santa Ana	202	289	0.7	344	1,876	4.7	2,233
	Paraiso	186	515	6.1	969	3,077	36.5	5,793
	Los Naranjos	126	363	1.1	443	1,467	4.4	1,788
	La Porfia	119	265	3.1	495	1,010	12.0	1,887
	La Isabela	15	213	1.0	287	104	0.5	140
<b>Total Indicated</b>		<b>1,226</b>	<b>446</b>	<b>2.3</b>	<b>614</b>	<b>17,567</b>	<b>88.8</b>	<b>24,187</b>
Inferred	El Dorado	180	382	1.9	523	2,211	11.1	3,025
	Las Maras	27	423	0.8	482	373	0.7	424
	Santa Ana	390	244	0.6	291	3,061	7.5	3,651
	Paraiso	172	312	2.1	471	1,723	11.6	2,600
	Los Naranjos	78	274	0.8	337	688	2.0	846
	La Porfia	102	471	5.3	866	1,536	17.3	2,827
	La Isabela	18	149	1.0	226	86	0.6	130
<b>Total Inferred</b>		<b>966</b>	<b>312</b>	<b>1.6</b>	<b>435</b>	<b>9,677</b>	<b>50.9</b>	<b>13,504</b>

Notes:

- The effective date of this Mineral Resource Estimate (MRE) is 26 April 2023.
- Rod Webster, MAIG, of AMC has conducted the MRE and is an independent QP.
- Mineral Resources are stated according to the CIM Definition Standards (2014).
- Mineral Resources were reported within potentially mineable shapes, assuming an underground mining method with a minimum mining width of 1.0 m.
- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability.
- The estimate is reported for an underground mining scenario using a Silver Equivalent (AgEq) cut-off grade. The cut-off grade of 158 g/t AgEq.
- Inputs were: silver price of US\$25.0/oz, gold price of US\$1,800.0/oz; mining cost of US\$69.0/t, processing cost of US\$32.0/t and G&A costs of US\$13.0/t and metallurgical recoveries of 93% for Ag and 96% for Au.
- The AgEq was calculated using the prices (P), recoveries (R) and grades of each element using the following formula:  $AgEq\ g/t = Ag\ g/t + (((Au^P * AuR) / (Ag^P * AgR)) * Au\ g/t)$ . No sales or marketing costs were considered.
- Bulk density values were interpolated for each of the mineralized veins with the global average at reporting AgEq cut-off for the entire Santa Ana deposit is 2.7 t/m<sup>3</sup>.
- 2D Accumulation method using Ordinary Kriging (OK) into blocks generally 10 m in size across and vertically down the vein. The block size along the dip direction covered the whole vein.
- Any discrepancies in the totals are due to rounding effects.

Source: AMC, 2023.

This is the initial Mineral Resource estimate for the Santa Ana Property.

## 15 Mineral Reserve estimates

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

The most significant regional adjacent property is the El Gran Porvenir underground mine, located adjacent to the Santa Ana Project, 5 km south-west of the Santa Ana mines. Similar to the Santa Ana Project, the El Gran Porvenir hosts Au-Ag epithermal veins up to 6 m in width. Gneiss and can be traced up to 2 km by aligned artisanal mine workings. Veins are shallow to moderately dipping, hosted in gneiss, and banded with galena, pyrite, and scheelite mineralization.

The adjacent early stage Atocha project is a 2,585 ha silver and gold project located in the Falán Municipality of Colombia. Press releases indicate that its drilling programs have intersected similar veins to those located on the Santa Ana Project.

There are no other significant mineral properties in the area that impact the Santa Ana Project.

The QP has been unable to verify the information above and that information is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

## 24 Other relevant data and information

The QPs are 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

### 25.1 General and geology

The Santa Ana Property covers a significant part of the Mariquita District where mining records date to at least 1585. Historically, the region is famous for producing native silver and gold from unconsolidated sediments and underground mines. Following the Spanish Conquest, more formal mining commenced, with extraction of gold and more importantly, silver, specifically around the town of Falan to the North.

Mineralization on the property occurs in quartz veins that contain variable amounts of carbonates containing sphalerite, galena, pyrite and silver sulfosalts conform the mineral deposits of Santa Ana. The veins dip either at low or high angle and have predominant strikes of NNE-SSW, NE-SW and NW-SE. Known structures can run for more than 2 km and host high-grade silver-gold shoots with some credits of lead and zinc. The host lithology is competent green or black schists of the Cajamarca Formation.

Outcrop has drilled 334 diamond drillholes on the Santa Ana Project since the acquisition in 2019 for a total of 58,824 m. Drilling by Outcrop has focused on seven epithermal veins: Paraiso, El Dorado, La Porfia, Santa Ana, Las Maras, La Isabela, and Los Naranjos. Drilling has been successful in intersecting high-grade silver-gold veins at each target.

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

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

The Santa Ana deposit is defined by exploration drilling and has an underground Mineral Resource using a 158 g/t AgEq cut-off of Indicated Mineral Resources of 1,226 kt grading 446 g/t silver and 2.3 g/t gold; and an Inferred Mineral Resource of 966 kt grading 312 g/t silver and 1.6 g/t gold. Mr Rodney Webster, MAIG, of AMC Consultants Pty Ltd. takes responsibility for these estimates.

### 25.2 Metallurgy and processing

Samples for metallurgical testing were drawn from two (Paraiso and La Porfia) of the seven vein areas which comprise the Santa Ana deposit as currently explored. These suites of samples are considered to be a fair representation of material from these veins, noting that these veins make up approximately 25% of the Mineral Resource.

More domain-by-domain sampling and testing will be required to establish variability within the deposit.

Mineralogical studies and flotation testing indicate that gold and silver largely exist as either free particles or in association with sulphide minerals that are readily recoverable by froth flotation. Future testing could establish that a high-grade gravity concentrate could also be economically produced.

Flotation testing using a typical sulphide flotation circuit arrangement established that a bulk lead / zinc concentrate could be obtained. While concentrate of this tenor is generally acceptable for downstream processing, depending on the concentrations of other constituents, further testing could determine whether separate lead and zinc concentrates attracting more favourable financial terms could be produced.

Both flotation tests were conducted on a high-grade sample from a single vein domain. As recoveries and concentrate grades can be affected by the grade of feed material, testing of samples from other domains will be required to reliably predict metallurgical performance throughout the project.

## 25.3 Risks

- Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is a degree of uncertainty attributable to the estimation of Mineral Resources. Until resources are actually mined and processed, the quantity of mineralization and grades must be considered as estimates only.
- While attractive metallurgical recoveries have been obtained from flotation testwork, material representing only 25% of the Mineral Resource has been investigated. Further work will be required to evaluate the material which could underpin a project. Variability testwork will also be required to see the grade recovery effect.

## 26 Recommendations

The exploration work carried out to date on the property with the initial Mineral Resource estimate supports continue exploration along several veins on the property.

### 26.1 Exploration and resource drilling

The following work is recommended to improve the Mineral Resource estimate and further test known mineralization:

- Combine mapping, geophysics, structural, grade distribution and shoot morphology data to create a practical predictive model in order to make exploration drilling more focused and efficient.
- Systematically combine ground IP / Resistivity, airborne geophysics, Lidar, and surface sampling to generate more obscure targets not reflected in high-grade sampling at surface.
- Drill all currently known mineralized shoots to depths of to a minimum of 350 m.
- Advance, refine and prioritize the drilling of eleven exploration targets characterized by high-grade intercepts sampled at surface. These targets are Alaska, Lajas, Guadual, Espirtu Santo, Jimenez, Aguilar, Topacio, Frias, La Ye, Cavandia, and Los Mangos.
- Increase productivity by incorporating a second and later third drill rig. Generally, one rig should be a fast moving "discovery" rig quickly by targeting high grades with a small number of holes. A second rig should focus on delineating mineralization by following up on drilling by the first rig. A third rig should be used to drill identified mineralized shoots to depths 350 m.
- At this stage of the project there should be a mandate for upgrading inferred to indicated resource categories. Drilling inferred resources should be an imperative part of the drilling strategy and should aim to hit short- and medium-term milestones including 50 MSEO and 100 MSEO (million silver equivalent ounces).
- A comprehensive geological mapping program over the complete Santa Ana Project should be completed. Future exploration should include structural and geologic mapping and defining overall geometry of the green schists and black schists of the Cajamarca formation. The black schists appear to have better precious metal affinity. Such work could also aid in the targeting possible fold-thrust and hinge-related mineralization and provide a geologic context for discoveries.
- The very significant alluvial gold and silver in the Falan region indicates the related Eocene-Miocene volcanism hosted considerable precious metals, with an unknown amount lost due to erosion. Combined with variations in topography through folding and faulting, future targets should include: a) deposits buried below the Eocene cover; and b) down-faulted blocks of Cajamarca.
- Systematic trench and soil sampling on tighter spacing should be employed to continue to help identify and define additional targets. These can be confirmed by outcrop, subcrop, and trench sampling.
- Allocate by priority to target existing inferred classified resources along strike and down dip based on approximately 8,000 m of diamond drilling between June and December 2023.

### 26.2 Metallurgy

Additional metallurgical studies will be required by the preparation of two composites:

The first sample will comprise samples from the Las Maras and El Dorado veins that represent around the 40% of the total resource in terms of silver equivalent ounces. A full flotation set of tests is planned.

The second sample will consist of a global composite that represents the general gold and silver grades from the entire Santa Ana deposit's Mineral Resource. This sample will be tested for conventional flotation and for Cyanide leaching aiming to generate doré bars.

The estimated budget for these metallurgical tests is based on the quotations prepared by SGS Colombia during the executing of the first metallurgical program are approximately \$40,000.

### 26.3 Recommended budget

A total budget of C\$3,000,000 is recommended to execute an exploration and metallurgy program for the remainder of the 2023. The work program and budget are shown in Table 26.1.

Table 26.1 Proposed budget

Activity	Budget
All costs associated with Colombia and the Santa Ana Project.	C\$500,000
Geological mapping, surface sampling, and trenching including assay costs.	C\$460,000
Metallurgy	C\$40,000
Diamond drilling including all direct and indirect costs.	C\$2,000,000
<b>Total</b>	<b>C\$3,000,000</b>

## 27 References

- Acosta, J., Francisco, V., Osorio, J., Lonergan, L., & Mora, H. 2007, Strike-slip deformation within the Colombian Andes. In: Ries, A.C., Butler, R.W.H., & Graham, R.H. (eds.) 2007. Deformation of the Continental Crust: The legacy of Mike Coward. Geol. Soc. London, Special Publications, 272, pp 303-319.
- André-Mayer A.-S., Leroy, J., Bailly, L., Chauvet, A., Marcoux, E., Grancea, L., Llosa, F., & Rosas, J. 2001, Boiling and vertical mineralisation zoning: a case study from the Apacheta low-sulfidation epithermal gold-silver deposit, southern Peru. *Mineralium Deposita* (2002) 37: pp 452-464.
- Bain, D. 2006, Report on Exploration Potential Muluncay Epithermal Gold Project, Portovelo-Zaruma-Ayapamba Area, Province of El Oro, Ecuador. For Minera Del Pacifico, S.A.
- Barrero, Dario L. & Vesga, O.C.J. 1976, Geología del caudrangulo K-9 Amero y J-9 La Dorada. Instituto de Investigacion e Informacion geocientifica, Menero-Ambiental Y Nuclear (INGEOMINAS) map scales 1:100,000.
- Cediel, F., Shaw, R.P., & Cáceres, C. 2003, Tectonic Assembly of the Northern Andean Block. In: Bartolini, C., Buffler, R. T. & Blickwede, J., eds, *The Circum-Gulf of Mexico and the Caribbean: Hydrocarbon habitats, basin formation, and plate tectonics*. American Association of Petroleum Geologists Memoir 79, pp 815-848.
- Chapman, E., & Acosta, E.V. 2012, Fortuna Silver Mines Inc: Caylloma Property, Caylloma District, Peru. Technical Report, 7 May 2012, for Fortuna Silver Mines.
- Chen, Y.J., Pirajno, F., & Sui, Y.H. 2004, Isotope geochemistry of the Tieluping silver-lead deposit, Henan Province, China: a case study of orogenic silver-dominated deposits and related tectonic setting. *Mineralium Deposita* 39, pp 560-575.
- Corbett, G.J. 2002a, Epithermal Gold for Explorationists: AIG News No 67, 8p.
- Corbett, G.J. 2002b, Structural controls to Porphyry Cu-Au and Epithermal Au-Ag deposits in Applied Structural Geology for Mineral Exploration, Australian Institute of Geoscientists Bulletin 36, pp 32-35.
- Cox, D.P. & Singer, D.A. 1992, Mineral deposit models, in USGS bulletin 1693, pp 145-149.
- Echevarria, L., Nelson, E., Humphrey, J., Chavez, J., Escobedo, L., & Iriondo, A. 2006, Geologic Evolution of the Caylloma Epithermal Vein District, Southern Peru. *Economic Geology*, v.
- Ericksen, G.E. & Cunningham, C.G. 1993, Epithermal precious metal deposits hosted by the Neogene and Quaternary Volcanic Complex in the Central Andes. In *Mineral Deposit Modelling*, Geological Association of Canada, special paper 40, pp 419-431.
- Feininger, T., Barrero, D., & Castro, N. 1972, Geología de parte de los departamentos de Antioquia y Caldas (sub-zona II-B). *Boletín geológico*, Volumen 20, No. 2.
- Ford, A., Hagemann, S.G., Fogliata, A.S., Miller, J.M., Mol, A., & Doyle, P.J. 2015, Porphyry, epithermal, and orogenic gold prospectivity of Argentina. *Ore Geology Reviews*, 71 May, pp 655-672.

- Gomez-Tapias, J., Nivia-Guevara, A., Montes-Ramirez, N., Jiménez-Mejía, D., Tejada-Avella, M., Sepúlveda-Ospina, M. 2007, Mapa Geológico de Colombia. Ingeominas.
- Gross, W.H. 2006, New ore discovery and source of silver-gold veins, Guanajuato, Mexico. *Economic Geology*, Nov. 1975, Vol. 70, No. 7. pp 1,175-1,189.
- Groves, D.J., Goldfarb, R.J., Knox-Robinson, C.M., & Ojala, J. 2000, Late-kinematic timing of orogenic gold deposits and significance for computer-based exploration techniques with emphasis on the Yilgarn Block, Western Australia. *Ore Geology Reviews* 17, pp 1-38.
- Haeberlin, Y., Moritz, R., Fontbote, L., & Cosca, M. 2004, Carboniferous Orogenic Gold Deposits at Pataz, Eastern Andean Cordillera, Peru: Geological and Structural Framework, Paragenesis, Alteration, and  $^{40}\text{Ar}/^{39}\text{Ar}$  Geochronology. *Econ. Geol.*, Vol. 99, pp 73-112.
- Mitchell, A.H.G. 2007, Conference Presentation by Ivanhoe Minerals. Source: <http://rwg-tag.bravehost.com/Conferences/geocon/ppt/0830-0845%20Mitchell.pdf>.
- Sanabria, R. 2014, Exploration Report on the Santa Ana Project, for Condor Precious Metals. Jan. 2014.
- Sarjeant, P. & Hughes, T.N.J. 2013, NI 43-101 Technical Report on the Santa Ana Project, for Condor Precious Metals. April 2013.
- Simmons, Stuart F., White, Noel C., & John, David A. 2005, Geological characteristics of epithermal precious and base metal deposits. In Jeffrey W. Hedenquist, John F. H. Thompson, Richard J. Goldfarb and Jeremy P. Richards (Ed.), *Economic Geology One Hundredth Anniversary Volume: 1905-2005* (pp 485-522) Littleton, CO, U.S.A.: Society of Economic Geologists.
- United States Geological Survey (USGS) 1950, "Mineral Resources of Colombia" bulletin.
- Relevant literature**
- Cediel, F. & Cáceres, C. 2000, Geological Map of Colombia. Bogotá, Colombia, Geotec Ltda., 3rd edition. 7 thematic maps at 1:1,000,000 scale.
- Cortés, M. & Angelier, J. 2005, Current states of stress in the northern Andes as indicated by focal mechanisms of earthquakes, *Tectonophysics*, 403, pp 29–58.
- Ego, F., Sébrier, M., & Yepes, H. 1995, Is the Cauca-Patia and Romeral fault system left- or right-lateral?: *Geophysical Research Letters*, v. 22, pp 33–36.
- Ego, F., Sebrier, M., Lavenu, A., Yepes, & Eguez, A. 1996, Quaternary state of stress in the Northern Andes and the restraining bend model for the Ecuadorian Andes: *Tectonophysics*, 259, pp 101–116.
- Frey Muller, J.T., Kellogg, J.N., & Vega, V. 1993, Plate motions in the north Andean region, *J. Geophys. Res.*, 98(B12), 21, pp 853–821, 863, doi:10.1029/93JB00520.
- Galindez, M.J.A. 2013, *Petrologia, Geoquímica Isotópica e Metalogenia dos depósitos de ouro el silencio e la Gran Còlombia*, Distrito Mineiro Segovia-Remedios, Colômbia. Dissertação de Mestrado n°313, University of Brasilia, Inst. of Geosciences.

González-García, J., Hauser, J., Annetts, D., Franco, J., Vallejo, E., & Regenauer-Lieb, K. 2015, Nevado Del Ruiz Volcano (Colombia): A 3D Model Combining Geological and Geophysical Information. In Proceedings World Geothermal Congress 2015 Melbourne, Australia, 19-25 April 2015.

Grupo Empresarial Ramba SAS 2020, Mina de Oro en el Tolima, Colombia. Internal Presentation Provided by Ramba.

Gutscher, M.A., Malavieille, J., Lallemand, S., & Collot, J. Y. 1999, Tectonic segmentation of the northern Andean margin: Impact of the Carnegie Ridge collision, *Earth Planet. Sci. Lett.*, 168, pp 255-270.

Haeberlin, Y., Moritz, R., & Fontbote, L. 2002, Palaeozoic orogenic gold deposits in the eastern Central Andes and its foreland, South America. *Ore Geology Reviews* 22, pp 41-59.

Hughes, T.N.J. 2019, NI 43-101 Technical Report on the Santa Ana Project, for Outcrop, October 2019.

Ingeominas 1987, Recursos minerales de Colombia, Publicaciones Geológicas Especiales del Ingeominas.

Ingeominas 2001, Mapa de Recursos Minerales de Colombia. Minerales Metalicos, Preciosos y Energeticos, Plancha 5-01, Escala 1:1.500.000.

Ingeominas 2007, Mapa Geológico de Colombia. Primera Edicion. Escala 1:1.000.000.

Kellogg, J., Godley, V.M., Ropain, C., & Bermudez, A. 1983, Gravity anomalies and tectonic evolution of northwestern South America. *Caribbean Geological Conference 10th*, pp 18–31. Cartagena, Colombia.

Kennan, L. & Pindell, J. 2009, Dextral shear, terrane accretion and basin formation in the Northern Andes: best explained by interaction with a Pacific-derived Caribbean Plate. In: James, K., Lorente, M. A. & Pindell, J. (eds) *The geology and evolution of the region between North and South America*, Geological Society of London, Special Publication.

Leach, T.M. & Corbett, G.J. 2008, Fluid mixing as a mechanism for bonanza grade epithermal gold formation: Terry leach Symposium, *Australian Institute of Geoscientists, Bulletin* 48, pp 83-92.

Mora-Bohórquez, J.A., Ibanez-Mejia, M., Oncken, O., de Freitas, M., Velez, V., Mesa, A., & Serna, L. 2017, Structure and age of the Lower Magdalena Valley basin basement, northern Colombia: New reflection-seismic and U-Pb-Hf insights into the termination of the central Andes against the Caribbean basin. *Jour. of South American Earth Sciences* 74 (2017) pp 1-26.

Restrepo, V. 1884, Estudio sobre las minas de oro y plata de Colombia. Subsequent editions 1885, 1888, 1937, and 1952.

Shaw, R.P. 2000, Gold mineralisation in the northern Andes, magmatic setting vs. metallogeny. XI International Mining Congress, Bogotá, Colombia, October 2000 Technical Abstracts.

Pennington, W.D. 1981, Subduction of the eastern Panama Basin and seismotectonics of northwestern South America, *J. Geophys. Res.*, 86, 10,753–10,770, doi:10.1029/JB086iB11p10753.

Ramos, A.V. 2009, The Grenville age basement of the andes laboratorio de tectonica andian FCEN Journal of South American Earth Sciences Volume 21, Issue 4, September 2006, pp 319-321 Tectonic evolution of the Colombian Andes.

Restrepo, J.J., & Toussaint, J.F. 1988, Terranes and continental accretion in the Colombian Andes, Episodes, 11, pp 189–193.

Restrepo, J., Ordoñez, O., Armstrong, R., & Pimentel, M. 2011, Triassic metamorphism in the northern part of the Tahamí Terrane of the central cordillera of Colombia. J. S. Am. Earth Sci. 32, 497e507.

Sillitoe, R.H. 2010, Porphyry Copper Systems. Economic Geology, vol. 105, pp 3-41.

Sillitoe, R.H., Jaramillo, L., Damon, P.E., Shafiqullah, M., & Escovar, R. 1982, Setting, Characteristics, and Age of the Andean Porphyry Copper Belt in Colombia. Economic Geology, vol. 77, pp 1,837-1,850.

Suter, F., Sartori, M., Neuwerth, R., & Gorin, G.E., 2008, Structural imprints at the front of the Chocó-Panamá indenter: Field data from the North Cauca Valley Basin, Central Colombia. Tectonophysics 460 (2008) pp 134-157.

Taboada, A., Rivera, L.A., Fuenzalida, A., Cisternas, A., Philip, H., Bijwaard, H., Olaya, J., & Rivera, C. 2000, Geodynamics of the northern Andes: Subductions and intracontinental deformation (Colombia), Tectonics, 19, pp 787–813, doi:10.1029/2000TC900004.

Toussaint, J.F. & Restrepo, J.J. 1988, Terranes and Continental Accretion in the Colombian Andes. Episodes. V11, N3, pp 189-193.

Trenkamp, R., Kellogg, J.N., Freymueller, J.T., & Mora, H. 2002, Wide plate margin deformation, southern Central America and northwestern South America, CASA GPS observations, J. South Am. Earth Sci., 15(2), pp 157–171.

Van der Hilst, R.D., & Mann, P. 1994, Tectonic implications of tomographic images of subducted lithosphere beneath northwestern South America, Geology, 22, pp 451–454.

Villagómez, D., Spikings, R., Magna, T., Kammer, A., Winkler, W., & Beltrán, A. 2011, Geochronology, geochemistry and tectonic evolution of the western and central cordilleras of Colombia. Lithos 125, pp 875-896.

## 28 QP Certificates

### **CERTIFICATE OF AUTHOR**

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

- 1 I am currently employed as a Principal Geologist with AMC Consultants Pty Ltd with an office at Level 29, 140 William Street, Melbourne, Victoria 3000, Australia.
- 2 This certificate applies to the Technical Report titled "Santa Ana Property Mineral Resource Estimate", with an effective date of 8 June 2023, (the "Technical Report") prepared for Outcrop Silver and Gold Corporation ("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.
- 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: 8 June 2023

Signing Date: 8 June 2023

*Original signed and sealed by*

Rodney Webster, MAIG  
Principal Geologist  
AMC Consultants Pty Ltd

## CERTIFICATE OF AUTHOR

I, Robert Chesher, FAusIMM (CPMET), 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 "Santa Ana Property Mineral Resource Estimate", with an effective date of 8 June 2023, (the "Technical Report") prepared for Outcrop Silver and Gold Corporation ("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.
- 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: 8 June 2023

Signing Date: 8 June 2023

*Original signed and sealed by*

Robert Chesher, FAusIMM (CPMET)

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I, José A. Olmedo, SME, 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 "Santa Ana Property Mineral Resource Estimate", with an effective date of 8 June 2023, (the Technical Report) prepared for Outcrop Silver and Gold Corporation ("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 AIMMG (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 24 to 26 May 2023.
- 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.
- 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: 8 June 2023

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*Original signed and sealed by*

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