NI 43-101 Technical Report on the

Tres Cerros Au-Ag Project and Mallay Mine Property

Department of Lima, Peru

Report Prepared for:

Excellon Resources Inc.

3400 One First Canadian Place 100 King Street West Toronto, Ontario, M5X 1A4

Report Prepared by Qualified Person:

Steven L. Park M.Sc., C.P.G.

Effective Date: June 24, 2025

Table of Contents

1	SUM	MARY7
	1.1	Introduction7
	1.2	Site Inspection7
	1.3	Project Definition, Location, Access and Infrastructure7
	1.4	Mining Concessions9
	1.5	Agreements and Permits9
	1.6	Transaction, Royalties, and Streams9
	1.7	History11
	1.8	Mallay Mineral Processing Plant11
	1.9	Historical Estimates of Mineral Reserves and Resources, Mallay Mine12
	1.10	Geological Setting and Mineralization13
	1.10.	1 Tres Cerros Project
	1.10.	2 San Sebastian and Teresa Exploration Targets15
	1.11	Deposit Type15
	1.12	Exploration and Drilling16
	1.13	Recommendations16
2	INTR	ODUCTION17
	2.1	Terms of Reference
	2.2	Definition of Project
	2.3	Personal Inspection of the Property18
	2.4	Sources of Information19
3	RELI	ANCE ON OTHER EXPERTS21
4	PROF	PERTY DESCRIPTION AND LOCATION
	4.1	Location21
	4.2	Mining Concessions23
	4.3	Property Ownership, Transaction, Royalties, and Streams25
	4.4	Surface Rights and Exploration Permits27
	4.4.1	Permitting Exploration Programs in Peru27

	4.4.2	Permits	28
	4.4.3	8 Environmental Liabilities	28
5	ACC	ESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOG	RAPHY29
	5.1	Property Access	29
	5.2	Climate and Physiography	30
	5.3	Local Resources	31
	5.4	Infrastructure	32
	5.4.1	General Infrastructure	32
	5.4.2	Mallay Mineral Processing Plant	33
	5.4.3	Tailings and Waste Rock Impoundments	37
6	HIST	ORY	38
	6.1	Early History	38
	6.2	Tres Cerros Au-Ag Project	38
	6.3	Teresa Exploration Target	42
	6.4	San Sebastian Target	43
	6.5	Mallay Mine	45
	6.5.1	Mine Operations by Buenaventura	45
	6.5.2	Historical Estimates of Mineral Reserves and Resources, Mallay Mine	46
7	GEO	LOGICAL SETTING AND MINERALIZATION	50
	7.1	Regional Geology	50
	7.2	Property Geology	52
	7.3	Property Stratigraphy	52
	7.3.1	Sedimentary Rocks	52
	7.3.2	Igneous Rocks	53
	7.4	Tres Cerros Geology	55
	7.4.1	Structure	55
	7.4.2	Alteration and mineralization	55
	7.5	Mallay Mine Geology	59
	7.5.1	Structure	59
	7.5.2	Alteration and Mineralization	60
8	DEP	OSIT TYPE	62
9	EXPL	ORATION	64
	9.1	Introduction	64

9.2	Sam	pling Procedures and Methods64
9.3	Tres	Cerros North Zone66
9.4	Tres	Cerros Central Zone
9.5	Tres	Cerros South Zone
9.6	Con	clusions and Interpretation of Exploration Results73
10	DRILLI	NG74
11	SAMPL	E PREPARATION, ANALYSES AND SECURITY75
12	DATA V	ERIFICATION75
13	MINER	AL PROCESSING AND METALLUGICAL TESTING
14	MINER	AL RESOURCE ESTIMATE
15	MINER	AL RESERVE ESTIMATES
16	MININ	G METHODS
17	RECOV	PRY METHODS
18	PROJE	CT INFRASTRUCTURE
19	MARKE	T STUDIES AND CONTRACTS
20	ENVIR	ONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT78
21	CAPITA	L AND OPERATING COSTS
22	ECON	DMIC ANALYSIS
23	ADJAC	ENT PROPERTIES
24	OTHER	RELEVANT DATA AND INFORMATION80
25	INTERF	PRETATION AND CONCLUSIONS
25.1	Tres	Cerros Project
25	5.1.1	Geochemical Signatures81
25	5.1.2	Geophysical Anomalies83
25	5.1.3	Styles of Mineralization85
25.2	Mall	ay Mine85
25.3	San	Sebastian Target
25.4	Tere	sa Target87
26	RECON	1MENDATIONS
26.1	Tres	Cerros Project and Mallay Mine
26	6.1.1	Phase 1A – Tres Cerros
26	6.1.2	Phase 1B – Mallay Mine
26	6.1.3	Phase 2 – Mallay Mine

26.2	San Sebastian and Teresa	.89
27 I	REFERENCES	.90
CERTIFI	CATE of QUALIFIED PERSON	.91
DATE AN	ID SIGNATURE OF AUTHOR	.92

APPENDIX A - Geochemical maps, Tres Cerros Project

List of Figures

Figure 1.1	Location of Tres Cerros Project, Mallay Property8
Figure 1.2	Gold geochemistry and geochemical signatures of each target area, Tres Cerros
	Project14
Figure 4.1	Location and access to Tres Cerros Project, Department of Lima22
Figure 4.2	Mallay mining concessions and locations of Tres Cerros Project, Mallay Mine and
	plant23
Figure 5.1	Access to Tres Cerros Project from Lima
Figure 5.2	Average temperatures at Mallay Project, 2011-201630
Figure 5.3	Average monthly precipitation, Mallay Property31
Figure 5.4	Schematic flow diagram, Mallay Plant34
Figure 6.1	Location of exploration targets outside of the Mallay Mine area39
Figure 6.2	Gold geochemical footprint (>100 ppb Au), BVN sampling program, 2016 - 2018, Tres
	Cerros40
Figure 6.3	Chargeability at 220 m depth overlain by geology and Au geochemistry (2018), Tres
	Cerros (map datum: PSAD56)41
Figure 6.4	Drill hole map, Teresa target (map datum: PSAD56)43
Figure 6.5	Proposed drill holes targeting San Sebastian mantos (map datum: PSAD56)44
Figure 6.6	Sample map by BVN in San Sebastian zone with rock chip assay table showing multi-
	gram values in Au, multi-ounce values in Ag. Drill hole SS-04-16 tested this zone
	and did not return significant values45
Figure 7.1	Regional geology, mining concessions, historical and currently operating mines51
Figure 7.2	Stratigraphic column, Mallay Property53
Figure 7.3	Property geology and exploration targets in relation to the Mallay Mine. Cross section
	A-A' shown in Figure 7.454
Figure 7.4	Cross section A-A', Mallay Property54
Figure 7.5	Rose diagram based on field observations of the orientation of mineralized veins
	hosted in fractured host rock (quartz arenite, volcanics) and Au values from surface
	sampling. (Source: C. Clark)55
Figure 7.6	Geology of Tres Cerros Project area (BVN, 2016. Map datum: PSAD56)57
Figure 7.7	Geochemical signatures of target zones and Au anomaly distribution, Tres Cerros58
Figure 7.8	Schematic cross section through Tres Cerros (BVN, 2018)59
Figure 7.9	Mallay Project vein map; North and South zones are located in the Isguiz anticline61
Figure 8.1	Model of Cordilleran polymetallic deposits applied to Colquijirca District, Peru63

Figure 9.1 Plot of samples collected from the Tres Cerros Project area, current database. BVN -	
Buenaventura, SP – S. Park, author, CRC – Excellon/MCRC (map datum: WGS84)6	5
Figure 9.2 Gold geochemical sampling map, North Zone, BVN and Excellon combined samples6	67
Figure 9.3 Silver geochemical sampling map, North Zone, BVN and Excellon combined	
samples6	8
Figure 9.4 Gold geochemical sampling map, Central Zone, BVN and Excellon combined	
samples6	9
Figure 9.5 Silver geochemical sampling map, Central Zone, BVN and Excellon combined	
samples	0
Figure 9.6 Gold geochemical sampling map, South Zone, BVN and Excellon combined samples7	2
Figure 9.7 Silver geochemical sampling map, South Zone, BVN and Excellon combined	
samples7	3
Figure 12.1 Plot of Au assays from duplicate sample pairs, Tres Cerros, 20207	7
Figure 23.1 Adjacent mining concessions to the Tres Cerros Project, Mallay Property8	0
Figure 25.1 Geochemical signature of each zone, Tres Cerros Project8	2
Figure 25.2 Footprint of Au anomaly from surface geochemical sampling (>0.100 ppm Au)8	3
Figure 25.3 Chargeability (220 m), geology and Au geochemistry (2018), Tres Cerros. (See	
Figure 25.1 for the revised location of the southern extent of the Contact Fault.)8	4

List of Tables

Table 1.1	Summary of resource inventory, Mallay Mine, Isguiz Zone, Dec. 2018	12
Table 1.2	Low-grade resources, Mallay Mine, Dec. 2018. (Cut-off grade = 7.61 oz/t AgEq)	12
Table 1.3	Summary of resource inventory, Pierina Zone, October 2017	12
Table 2.1	Common technical abbreviations and geological time chart	20
Table 4.1	List of mining and mineral processing plant concessions, Mallay Property	24
Table 5.1	Access to Tres Cerros Project, Mallay Property	30
Table 5.2	Comparison of surface water flow, August 2016 and May 2017 from control points	
	distributed throughout the Mallay Property (modified from AMPHOS, 2017)	32
Table 6.1	Mallay Mine production tonnage and Historical Mineral Resources*, 2012–2019	
	(BVN, 2020)	46
Table 6.2	Total metal production, Mallay Mine, 2012-2018 (BVN, 2020)	46
Table 6.3	Summary of resource inventory*, Mallay Mine, Isguiz Zone, Dec. 2018	47
Table 6.4	Prices used for 2018 AgEq estimation	48
Table 6.5	Reserves and resources* above and below Level 4090 m	48
Table 6.6	Low-grade resources*, Mallay Mine, Dec. 2018	48
Table 6.7	Summary of resource inventory*, Pierina Zone, October 2017	49
Table 12.	1 Assay results from verification samples, Tres Cerros and San Sebastian, 2020	76
Table 12.	2 Duplicate pairs, Tres Cerros verification sampling, 2020	76
Table 25.	1 Geological attributes and consequences, Mallay Mine	86
Table 25.	2 Summary of resource inventory*, Mallay Mine, Isguiz Zone, Dec. 2018	86

1 SUMMARY

1.1 Introduction

The issuer of this report, Excellon Resources Inc. ("Excellon"), contracted the author to prepare an independent technical report on the Tres Cerros Project (the "Project"), part of the issuer's Mallay Property (the "Property"), in compliance with disclosure and reporting requirements set forth in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101"), in connection with an acquisition transaction between Excellon and Adar Mining Corp. ("Adar") and between Excellon and Premier Silver Corp. ("Premier") and 1267104 B.C. Ltd. ("126") as described in Sections 1.6 and 4.3, below. The basis for the report is a property visit to the Tres Cerros exploration target in November 2020 and again in December 2024, including an overview of the geological and mining database provided by the previous owners of the property, Compañía de Minas Buenaventura S.A.A ("BVN").

The purpose of this report is to:

- assess the merits of the Tres Cerros Au-Ag exploration target and recommend further exploration programs as warranted by the results of the recently completed surface geochemical sampling program,
- comment on the polymetallic vein system and infrastructure of the Mallay Mine,
- present other exploration opportunities that Excellon should consider on the Property.

The Project is not considered an "advanced property" as defined by NI 43-101 because historical estimated mineral resources stated herein are not treated by the Issuer as current mineral resources or mineral reserves, and as such, are not supported by a preliminary economic assessment, a pre-feasibility study, nor a feasibility study. Therefore, Items 15 – 22 of the standard Form 43-101F1 Technical Report are not included in this report.

1.2 Site Inspection

The author visited the Mallay Property on November 20 and 21, 2020 and again in December 2024. The author oversaw a surface geochemical sampling program on the Tres Cerros Project during the 2024 site visit, described below in Item 9.0. During the author's 2020 visit he collected 9 rock chip samples for purposes of verification, two from an exposure of the San Sebastian manto and 7 samples from the Tres Cerros Project area.

1.3 Project Definition, Location, Access and Infrastructure

The Project is located in the District and Province of Oyón, Department of Lima, Peru, approximately 150 kilometers north of the city of Lima (Figure 1.1). The Project consists of 24 titled mining concessions and a mineral beneficiation concession for operation of the Mallay processing plant originally constructed to serve the Mallay Mine.



Figure 1.1 Location of Tres Cerros Project, Mallay Property

The Property is accessible from Lima following the Pan American highway north out of Lima, then on a secondary highway through the towns of Sayan and Churin. Total travel time by road from Lima is approximately 4.5 hours.

The Property is located in the western range of the *Cordillera de los Andes* in the drainage basin of the Río Huaura at elevations ranging between 4,700 and 4,900 meters (m.a.s.l.). The Property

features steep topography around the Mallay Mine site. Tres Cerros sits at a higher elevation (+4,800 m) than the Mallay Mine site on a small altiplano of relatively flat terrain.

The Mallay Property is situated in an active mining district with a long history of production from the Uchucchacua, Iscaycruz and Raura mines. Basic food supplies, fuel and lodging can be found in the towns of Oyon, Churin and Sayan.

Local communities have electric power 24 hours a day from secondary transmission lines connecting to the Cheves hydroelectric plant outside of Churin. The Mallay Mine receives electrical power from a 33Kv transmission line shared with the Raura Mine.

The Mallay mine, processing plant and mine camp are currently under a program of care and maintenance performed by a skeleton work force.

1.4 Mining Concessions

The Property consists of 24 titled mining concessions covering 9,691.7 hectares. Also included is a beneficiary plant concession of 122.07 hectares which accommodates the Mallay mineral processing plant located within the mining concession block.

1.5 Agreements and Permits

The surface area of Tres Cerros Project is shared by three entities: two communities, Andajes and Mallay, and a private landowner, *Predio Colpa*. Excellon, through its wholly-owned subsidiary Minera CRC S.A.C., has a long-term (30 years) agreement in place with the Mallay community and an agreement for easement on the *Predio Colpa* surface.

The surface areas of the San Sebastian and Teresa targets are within the Mallay Mine UEA and have been under an EIA permit first granted to BVN in 2011 for initiation of mining activities. EIA permits are renewable every 5 years after the most recent modification. The current permit was renewed in July 2022 and will be in force through July 2027.

The Mallay mineral processing plant initially received authorization to process ore at a rate of 400 tpd in March 2012. Authorization for a rate of 600 tpd was granted in April 2014.

Excellon will have to apply for a new water permit prior to initiating any drill programs at Tres Cerros.

1.6 Transaction, Royalties, and Streams

Minera CRC S.A.C. ("MCRC"), previously a wholly owned subsidiary of Premier, purchased the assets comprising the Property from BVN on October 16, 2020 by:

a) replacing the existing *Carta de Fianza*¹ in the sum of US\$5,130,000,

¹ *Carta de fianza* is a bond provided to the Ministry of Mines to guarantee completion of mine closure protocols pertaining to the Mallay Mine Site

- making an initial cash payment of US\$2,000,000 on closing the transaction and agreeing to make two equal, staged payments of US\$4,000,000 due on or before December 31, 2021 and December 31, 2022, respectively, for a total cash payment of US\$10 million, and
- c) agreeing to pay a 2% NSR to BVN on any future production of ore produced within the Property but maintaining an option to re-purchase the NSR in its entirety from BVN for US\$2,000,000 at any time prior to the 4th anniversary of the acquisition transaction (since extended to November 2026).

Premier had difficulty securing sufficient capital to make the first staged payment of US\$4,000,000 to BVN, even though BVN granted Premier a 90-day extension. Adar, a company registered in the British Virgin Islands, stepped in and purchased all BVN's right and title to the Premier debt in May 2022.

After protracted and unsuccessful discussions regarding debt repayment from Premier, Adar entered into a purchase agreement with Excellon on October 31, 2024, which purchase agreement was amended and restated on three occasions (the third amended and restated purchase agreement dated April 29, 2025 between Adar and Excellon, the "Purchase Agreement") with respect to the acquisition of all of the issued and outstanding shares of MCRC.

On February 6, 2025, Premier and 126 filed a notice of intention to make a proposal pursuant to section 50.4 of the *Bankruptcy and Insolvency Act* (Canada) (the "Insolvency Proceedings"), and Alvarez & Marsal Canada Inc. was appointed as proposal trustee.

On March 10, 2025, Adar, as purchaser, and Premier and 126, as vendors, entered into an agreement of purchase and sale (the "Adar/Premier Purchase Agreement") with respect to the acquisition of all of the issued and outstanding shares of MCRC. On March 14, 2025, the Adar/Premier Purchase Agreement was approved by the Supreme Court of British Columbia pursuant to an approval and vesting order granted in connection with the Insolvency Proceedings.

The acquisition by Excellon of all of the issued and outstanding shares of MCRC was completed on June 23, 2025 pursuant to the Purchase Agreement and the Adar/Premier Purchase Agreement. Pursuant to the Purchase Agreement, Excellon acquired all of Adar's interest in the Adar/Premier Purchase Agreement and all of the indebtedness, liabilities and obligations owing by Premier or 126 to Adar (the "Adar Debt") in consideration for: (i) an aggregate amount of US\$1,565,000 in upfront cash payments, which Excellon paid to Adar in four separate tranches; (ii) an aggregate amount of US\$650,000 in cash bridge payments (the "Bridge Payments"), which were payable to Adar or MCRC in three separate tranches; (iii) the issuance by Excellon of 16,151,711 common shares in the capital of Excellon ("Excellon Shares"), which Excellon Shares were issued to various arm's length parties at the direction of Adar; and (iv) the entering into of the Transaction Documents (as defined below). The Bridge Payments will become repayable by Adar to Excellon by way of set-off against deliveries required to be made by Excellon pursuant to the Stream Agreement (as defined below).

Under the Adar/Premier Purchase Agreement, Excellon, as the assignee of Adar, acquired from Premier and 126 all of the issued and outstanding shares of MCRC in consideration for: (i) US\$10 in cash payable to 126; (ii) the cancellation and release of all of the Adar Debt; (iii) the entering into of a stream revenue sharing agreement between Adar and Premier; and (iv) the issuance of 1,713,062 Excellon Shares by Excellon to Premier.

Pursuant to the Purchase Agreement, Excellon entered into the following agreements (collectively, the "Transaction Documents"): (i) a back in rights agreement with Adar and M4G LLC, providing for the sale of up to a 49% interest in the Tres Cerros Exploration Property at a back-in option exercise price of 1.5x attributable historical expenditures incurred following completion of the acquisition multiplied by its pro rata share; (ii) royalty agreements with MCRC and Adar, providing for a 1.0% net smelter returns royalty (the "Adar NSR") and an existing 2% royalty purchase option; and (iii) a stream agreement (the "Stream Agreement") with MCRC and Adar, providing for a 5%-8% zinc and lead metals stream. Excellon may repurchase 0.5% of the Adar NSR for US\$1.5 million.

1.7 History

Shallow mine workings of Spanish colonial age were first recognized by modern miners in 1908 when the Sindicato Minero Río Pallanga began exploring the Mallay area and started producing from the Fortuna Mine, a mineralized area 5 km southwest of the current Mallay Mine.

Pan American Silver evaluated the Fortuna Mine and surrounding area in 1999. They identified four mineralized structures in the Isguiz zone, but after limited work abandoned the project due to disappointing drill results (unattributed document, BVN database).

Buenaventura acquired the Mallay Property in 2003 and commenced exploration work through geologic mapping and surface sampling followed in 2004 by a program of diamond drilling. A positive evaluation of the Isguiz vein system led BVN to begin construction of the Mallay Mine in 2008. Production began in April 2012 at an initial rate of 400 tpd using a cut-and-fill mining method.

As Buenaventura deepened the mine below Level 4090 m in the Isguiz zone, new mine workings encountered a strong underground flow of water cutting off access to deeper mineral resources and leading to a halt in production in 2018. The mine and plant are currently under care and maintenance for a monthly cost of approximately US\$250,000.

Production totaled 7.7 million ounces of silver and 96,000t Pb+Zn from just over 1 million tonnes of ore during the seven years that Buenaventura operated the Mallay Mine.

1.8 Mallay Mineral Processing Plant

The Mallay mineral processing plant is an important asset of the Mallay Property since the company is examining a number of options including providing mineral processing services to other mining operations in the region.

The plant consists of the following units of operation: primary crusher, secondary crusher, ball milling, sequential flotation circuits with re-grind ball mills producing Pb-Ag-(Au) and Zn-Ag

concentrates, filtration, and transport of concentrates. Flotation tailing is thickened in a conventional thickener then pumped to a tailings storage facility (TSF).

The Mallay plant was constructed in 2010-2011 for a reported cost of \$115 M. Operations began in March 2012 by treating polymetallic ore (Ag-Pb-Zn-Au) from the Mallay Mine complex with authorization to operate at a capacity of 400 tpd and expanded to 600 tpd in 2014. In addition to mineral from the Mallay Mine, BVN also received ore for processing from its nearby Uchucchacua mine and from third-party mines in the district.

1.9 Historical Estimates of Mineral Reserves and Resources, Mallay Mine

Buenaventura summarized mineral resources in the Mallay Mine marked to the end of 2018 based on cut-off grades calculated from metal prices in 2018 and BVN's cost structure.

Category		Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)
Deserves	Proven	102,399	1.23	0.22	6.05	3.29	6.76	19.02
Reserves	Probable	31,491	1.11	0.18	8.21	4.89	6.69	23.06
Total Reserves		133,889	1.21	0.21	6.56	3.67	6.74	19.97
Popourooo*	Indicated	6,762	1.56	0.00	7.37	2.23	3.42	14.59
nesources"	Inferred	251,805	4.51	0.21	6.68	4.02	4.90	18.02

Table 1.1 Summary of resource inventory, Mallay Mine, Isguiz Zone, Dec. 2018

Table 1.2 Low-grade resources,	Mallay Mine, Dec. 2018.	(Cut-off grade = 7.61 oz/t AgEq)	,
	1 luttuy 1 lillo, D00. 2010.		

Category	Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)
Low-grade resources	116,976	0.98	0.14	3.80	1.88	3.19	11.08

 Table 1.3 Summary of resource inventory, Pierina Zone, October 2017

Category		Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)*
Posonios	Proven	7,699	1.01	3.38	10.22	3.38	1.79	24.88
neserves	Probable	3,445	1.05	3.06	10.16	3.82	1.77	24.60
Total Reserves		11,144	1.02	3.28	10.21	3.52	1.79	24.81
Resources	(Inferred)	25,578	1.43	2.52	9.3	7.19	3.20	28.76

*Silver equivalent ounces are calculated here by the author using 2018 prices with no allowance for recovery rates.

Cautionary Note: The historical mineral resource estimates presented in Tables 1.1 – 1.3 are considered historical in nature. A Qualified Person has not done sufficient work to classify these historical estimates as current mineral resources or mineral reserves. The issuer is not

treating these historical estimates as current mineral resources or mineral reserves and these historical estimates should not be relied on.

1.10 Geological Setting and Mineralization

The property lies along the Miocene metallogenic belt of central and northern Peru which extends more than 900 km along the Cordillera Occidental hosting numerous mines and mineral occurrences. Base- and precious-metal mineralization was closely associated with the eruption of calc-alkalic volcanic rocks and emplacement of coeval dikes and stocks.

The most notable mines in the region include Antamina (Cu-Zn) and Pierina (Au-Ag) to the north of the Property in the Department of Ancash. In the more immediate area are the mines Uchucchacua (Ag-Pb-Zn), Raura (Ag-Pb-Zn) and Iscaycruz (Zn-Ag) that share the same styles of mineralization and sedimentary sequence of host rocks as the Property.

The Property area is underlain by a thick sequence of Late Cretaceous clastic and carbonate sediments that have been tightly folded in alignment with the regional Andean trend with fold axes trending north-northwest. Volcanic rocks of Late Tertiary age cap these sediments with relatively flat-lying flows along a pronounced angular unconformity.

Intrusive rocks are not exposed at high elevations on the property in the Tres Cerros zone but are indicated in the Mallay Mine by the presence of skarn mineralization. A stock of tonalite – granodiorite 3 km in diameter is exposed south of the Fortuna Mine. Sills of andesite to dacite composition hosted in the sedimentary package occur east of the Mallay Mine in the San Sebastian Zone.

1.10.1 Tres Cerros Project

Surface sampling and mapping by BVN outlined a mineralized corridor measuring 2,400 x 200 m with stockwork veining to crackle brecciation in quartz arenites containing abundant iron oxides (goethite, limonite, hematite) and strong silicification with very fine, disseminated sulfides, and drusy to chalcedonic quartz. These sediments are in fault contact with the local volcanic sequence along a structure trending N-S that defines the western limit of the strongly altered corridor (Figure 1.2).

From the initial sampling program of 364 rock chips, 19% of the samples reported greater than 1.0 g/t Au, 22% with greater than 1.0 oz/t Ag. Values of As, Bi, Sb and Sn were strongly anomalous. Nearly all strong Au-Ag values reported from quartz arenite. These assays results have been verified by rock chip samples collected by the author during his site inspection.

A plot of geochemical values from the Tres Cerros surface sampling reveals zonation along the length of the fault contact and an interesting Cu-Zn zone 1.5 km west of the fault contact in the volcanic zone. The geochemical zones along the contact fault are typical of epithermal mineralization with abundant As, Bi, Hg, and Sb.

The mineralized area in Tres Cerros is located along a fault contact between tightly folded quartz arenite (Chimu Fm.) locally overlain by flat-lying Calipuy volcanic rocks. Isolated blocks of sediment

have been mapped on the volcanic side of this fault in a complex structural zone. The structural pattern through the sediments in Tres Cerros is remarkably similar to that of the Mallay Mine vein pattern where N-S primary faults intersect with conjugate WNW-trending tension faults.

An IP geophysical survey outlined coinciding strong chargeability and resistivity anomalies at the southern end of the target area that may be interpreted as indicating a zone of disseminated sulfides in silicified host rock.



Figure 1.2 Gold geochemistry and geochemical signatures of each target area, Tres Cerros Project

1.10.2 San Sebastian and Teresa Exploration Targets

The San Sebastian Target is located 2 km east of the Mallay Mine and is divided into two zones, Central and North. Both zones are underlain by carbonate sediments intruded by sills of dacitic composition. Polymetallic mineralization is hosted in low-angle veins, or mantos, varying from 0.15 to 1.50 meters in width. Manto structures trend N-S with up to 400 dips to the NW hosting abundant iron oxide with galena and sphalerite. Dacite sills also exhibit disseminated sulfides – pyrite, pyrrhotite and arsenopyrite. Buenaventura collected 56 rock chip samples from the San Sebastian manto/vein that reportedly gave high values of 4.2 g/t Au, 12 oz/t Ag, 14% Pb and 3% Zn.

Two DDH holes completed in 2016 intercepted narrow veins with low metal values. The best intercept came from a drill depth of 221 m in a vein 0.15 m in width yielding 0.29 oz/t Ag, 0.08 % Pb and 0.02 % Zn.

The Teresa Target is located 3.5 km southwest of the Mallay Mine and consists of three mineralized corridors named Teresa, Alicia and Maylin in close proximity to the historical Fortuna mine. Surface sampling and mapping in the Teresa Corridor reported an area of 100 x 320 meters where narrow replacement veins are exposed trending N-S hosted in Carhuaz and Farrat sandstone, siltstone, and carbonate sediments. These veins contain massive pyrite, arsenopyrite, sphalerite and galena in skarn alteration. Sample assays returned 2.01 to 18.71 oz/t Ag, 2.04 to 11.06% Pb, 1.36 to 7.87% Zn in vein widths from 0.20 to 0.75m.

Three DDH drill holes (total of 1,124 meters) were completed in 2015 and 2016 to test the mineralized corridors in the Teresa Target. Hole TR-15-01 returned significant mineralization from what was interpreted as intersection with the Teresa Vein: 0.30 m (true width?) @ 5.47 oz/t Ag, 5.40 % Pb and 7.86 % Zn. The other two holes did not intercept significant mineralization.

1.11 Deposit Type

Mineralogical, structural and geochemical features of the Mallay Mine and surrounding exploration targets, such as Tres Cerros, fit with the 'Cordilleran polymetallic deposit' type as described by Sawkins (1972), Einaudi (1982) and Bendezú et al (2008).

In Peru, Cordilleran polymetallic deposits are found only in the high Andes between 3,500 and 5,000 m above sea level. Examples from northern and central Peru display a broad variety of mineral associations which form a continuum between the following two end-member styles (Bendezú, 2009):

- Strongly zoned deposits consisting of cores dominated by enargite, pyrite, quartz ± (tennantite, wolframite, chalcopyrite, covellite, chalcocite, alunite, dickite, kaolinite) and external parts by sphalerite, galena ± (sericite, kaolinite, dickite, hematite, Mn-Fe carbonates). Examples include most of Smelter-Colquijirca, parts of Cerro de Pasco, Hualgayoc, Quiruvilca, Yauricocha, Morococha, San Cristobal, Huarón, and Julcani.
- Weakly zoned deposits consisting of internal zones with (pyrrhotite), pyrite, quartz ± (chalcopyrite, arsenopyrite, tetrahedrite, carbonates, sericite, chlorite, quartz) and external

zones with Fe-rich sphalerite, galena, pyrrhotite ± (MnFe carbonates, sericite, chlorite, quartz). Examples include Huanzalá, Ucchuchacua, Iscaycruz, and parts of Cerro de Pasco and Morococha.

Mineral occurrences on the Mallay property most closely match the second style of weakly zoned deposits.

1.12 Exploration and Drilling

Excellon completed a surface rock chip sampling program over the Tres Cerros area in December 2024. Most of the 84 samples collected during this program came from the quartz arenite outcrops east of the prominent N-S fault.

Excellon has not conducted any drilling programs on the Property.

1.13 Recommendations

Evaluation of the Tres Cerros Project and Mallay Mine should be advanced through two initial phases, independent of each other, that may be undertaken concurrently, listed below as Phases 1A and 1B. These two phases would advance the understanding of the style and potential of mineralization in the Tres Cerros Project and verify the historical mineral resources in the Mallay Mine as estimated by BVN in 2018.

Phase 1A - Tres Cerros

The author recommends that further exploration of the Tres Cerros Project be undertaken to:

- Confirm the potential for an open-pittable, economic gold/silver deposit by way of an intensive program of trenching and pitting across both exposed and scree-covered areas to determine the continuity and distribution of the high-grade mineralization recognized to date.
- Re-interpret and expand (if necessary) the existing geophysical and geochemical surveys with the objective of determining drill targets for a future drill program that would test both near-surface mineralization and presumed auriferous-argentiferous sulfide mineralization indicated by the deep IP chargeability anomaly.
- Investigate the strongly anomalous Zn-Cu results obtained in the December 2024 sampling campaign from the La Estancia exploration target in the western sector of Tres Cerros.

Estimated cost: US\$250,000

A drill program on the Tres Cerros Project will be warranted as a successive phase to Phase 1A if the trenching work establishes continuity and wide distribution of high-grade mineralization coincident with re-interpreted geophysical targets.

Phase 1B – Mallay Mine

The historical estimate of mineral resources as stated by BVN in 2018 suggests that considerable value remains in the Mallay Mine. As such, the author recommends that Excellon undertakes the following work program as a preliminary step toward validating the historical resource estimate.

- Check sampling and logging of drill core stored in the Mallay Mine core library to confirm the validity of the resource database,
- Complete a QA/QC program which will include selected underground survey checks where accessible
- Revise the mine block modelling using the verified mineral resource estimate established by the drill core review and by applying current and expected metal prices.

Estimated cost: US\$100,000

If these steps validate BVN's 2018 historical mineral resource estimate, then the work program should proceed to Phase 2 as described below.

Phase 2 – Mallay Mine

The author recommends that Excellon undertakes the following work program toward upgrading BVN's historical mineral resource estimate to current status.

- Re-open and stabilize the mine which has now been closed for 6 years.
- If necessary, re-drill selected holes to confirm data veracity (including metallurgical recovery of fresh ore).

Estimated cost range: US\$1,000,000 to US\$1,400,000

San Sebastian and Teresa

The San Sebastian and Teresa targets warrant further exploration efforts based on prospective surface sampling results. Both zones have local zones of strong mineralization that cannot be easily traced on surface. Trenching in the San Sebastian zone may be required to expose mantos and veins that reportedly gave high values of Au, Ag, Pb, and Zn associated with skarn alteration.

Estimated cost: US\$100,000

2 INTRODUCTION

2.1 Terms of Reference

Excellon Resources Inc. ("Excellon") contracted the author to prepare an independent technical report on the Tres Cerros Project in connection with an acquisition transaction between Excellon and

Adar Mining Corp. ("Adar") and between Excellon and Premier Silver Corp ("Premier") and 1267104 B.C. Ltd. ("126") pursuant to which Excellon acquired all of the issued and outstanding shares of Minera CRC S.A.C. ("MCRC").

This technical report provides comments on the Mallay Property ("Property") in compliance with disclosure and reporting requirements set forth in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101"), Companion Policy 43-101 CP to NI 43-101, and Form 43-101F1 of NI 43-101, dated June 2011.

The purpose of this report is to assess the merits of the Mallay Property that includes the polymetallic veins of the Mallay Mine and the primary exploration target, Tres Cerros (Au-Ag). Results of a recent geochemical sampling campaign at Tres Cerros are presented that support the positive results from exploration campaigns by Buenaventura ("BVN"), the previous operator of the Property. Historical resources in the Mallay Mine and a description of the mineral processing plant are also presented as an indication of the merits of the Mallay Property as a whole.

The author of this report is Steven L. Park, an independent consulting geologist with over 20 years of experience in exploration and mining in Peru and over 30 years of mineral exploration experience in various geological environments throughout the Americas. The author is a Qualified Person as defined by NI 43-101 by virtue of his qualifications, experience and professional registration as Certified Professional Geologist with the American Institute of Professional Geologists (AIPG member #10849).

2.2 Definition of Project

The Project is located in the District and Province of Oyón, Department of Lima, Peru, approximately 150 kilometers north of the city of Lima. The Project consists of 23 titled mining concessions covering 10,562.4 hectares forming a contiguous block. Also included is a mineral beneficiation concession covering 122.07 hectares for operation of the Mallay processing plant serving the Mallay Mine.

The Project is not considered an "advanced property" as defined by NI 43-101 because historical estimated mineral resources stated herein are not treated by the Issuer as current mineral resources or mineral reserves, and as such, are not supported by a preliminary economic assessment, a pre-feasibility study nor a feasibility study. Therefore, Items 15 – 22 of the standard Form 43-101F1 Technical Report are not included in this report.

2.3 Personal Inspection of the Property

The author visited the Tres Cerros Project on December 2 - 7, 2024, accompanied by MCRC personnel at the time. The purpose of the visit was to oversee a surface sampling campaign undertaken by Excellon.

The author had previously visited the Tres Cerros Project and Mallay Mine on November 20 and 21, 2020. During that visit, the author reviewed the San Sebastian zone to the east of the principal mine

workings, then walked the length of the Tres Cerros Project area. The author collected a combined total of 9 rock chip samples, two from an exposure of the San Sebastian manto and 7 samples from the Tres Cerros zone.

2.4 Sources of Information

Excellon provided the author with a comprehensive data base delivered to them by BVN that includes exploration data from the Tres Cerros Project (surface geochemistry, geophysical surveys, geological mapping) and exploratory drilling data from the San Sebastian and Teresa zones. The primary focus of the database is the Mallay Mine containing technical information on all aspects of underground mining, mineral processing plant operations and layout information. Included are underground drilling results, level plans and sections of the Mallay Mine that provided Buenaventura a basis for resource calculations. Environmental and community relations sections are also included. This author was not able to verify the Mallay Mine data since access to the mine's underground workings is currently precluded largely for safety and security reasons.

Abbreviations and definitions used in the report are listed in Table 2.1. All measurements in this report are in metric units. All monetary amounts are stated as dollars of the United States of America (US\$). All maps are presented in the UTM coordinate system using WGS84, Zone 18, map datum unless otherwise noted. Terms in Spanish are printed in italics.

Arsenic Atomic absorption Atomic absorption Atom	Item	Abbreviation			Geological Time	Chart	
Arsenic As Atomic absorption AA Azimuth Bacoption AA Azimuth Azimuth Az (*N) Breccia Centimeter(s) CRM Centimeter(s) CRM Cubic centimeters mm ³ Cubic entimeters mm ³ Cibab Positioning System GPS Gold Au Feet ft ft Clobab Positioning System GPS Gold Au Feet ft Clobal Positioning System GPS Gold Au High Sufficient Inpact Study ft Heters above sea level ms.s.t. Million years ago Ma Ational Intrument 43-101 Nid32-101 Metsrabove sea level ms.s.t. Million years ago Autional Intrumeters by Aution Autional Metsrabove sea level ms.s.t. Million years ago Autional Intrumeters by Autional Metsrabove sea level ms.s.t. Million years ago Autional Intrumeters by Autiona							
Admite absorption AA Azimuth Az(N) Breccia Canadian dollar Centimeter(s) Centimeter(s) Cubic meter Cubic contineter Cubic contineter Cubic contineter Cubic meter Cubic meter Codd Codd Codd Codd Codd Codd Codd Cubic meter Codd	Arsenic	As					
Admituin Breccia Breccia Candida dollar Candida defenee Matrial Cubic centimeters Cubic centimeters Cubic centimeters Cubic centimeters Cubic centimeters Cubic centimeters Degree Cellsus Degree Cellsus Perdee Fahrenheit Diamond drill-hole Environmental Impact Study Feet Gold A Golda Positioning System Golda Candu Grams per metric toone Graater fahr High Sulfidation Induced coupled plasma Indexnet(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Kilometer(s) Lead Lead Lead Lead Meters above sea level Million years ago Matorial Impact Study Environmental Impact Study Environmental Mater Studies Million years ago Matorial Million Percentage Pervivan Sol Pervivan Sol Suceided Anoinma Cerrada Suceided Anoinma Cerrada Socieded Anoinma Cerrada	Atomic absorption						
DecUda DA Canadian dollar CC Centimeter(s) cm Cubic centimeter m ³ Cubic centimeter m ³ Cubic centimeter m ³ Cubic centimeter m ³ Cubic meter m ³ Declaración di maoto Ambiental DIA Degree Celsius °C Degree Celsius °C Declaración di maoto Ambiental DDH Degree Celsius °C Gold DDH Evit ft Gold Au Grams per metric tonne gpt Milion torganization for Standardization HS Indecate coupled plasma ICP Indecate coupled plasma ICP Interrational Ciganization for Standardization Kg Kliometer(s) kg Less than <	Azimuth	AZ (°N)	Eon	Era	Period	Epoch	m.y.
Cartinatruitan Unitan Certified Reference Material Certified Reference Material Cubic certifimeter Cubic meter Cubic meter Cub	Breccia Conodion dollor	BX				Holocene	
Cartified Reference Material CRM constrained (y) and the second of the s	Centimeter(s)	C\$ cm			Quaternary		-
Cubic certimeter Cubic meter Cubic meter Cubic meter Cubic meter Cubic meter Cubic meter Cubic meters Declaración de Impacto Ambiental Degree Celsius Degree Celsius Colta Pastioning System Golda Postioning System Golda Postioning System Grant High Suffation International Organization for Standardization Induced coupled plasma Induced coupled plasma Induced coupled plasma Induced coupled plasma Induced coupled plasma Induced coupled plasma Induced coupled plasma International Organization for Standardization Kilogram(s) Kilogram(s) Kilogram(s) Kilogram(s) Meter(s) Meter(s) Meter(s) Million Toryo sonces Million Toryo Sonce Solo Percentage % Percutang Percontage % Pervational S. America Datum 1956 PsAD56 Sociedad Anonima Cerrada Sociedad Minera de Responsabilidad Limitada Sociedad Minera de Responsabilidad Limitada Sociedad Minera de Responsabilidad Limitada	Certified Reference Material	CRM				Pleistocene	15
Cubic meters m ³ m ³ Neogene Miccene 23 Degree Calsius 0 Oligocene 0 0 0 23 Degree Calsius °C 0 Oligocene 0 23 Degree Calsius °C 0 0 0 0 0 Degree Calsius °C 0 0 0 0 0 0 Degree Calsius °C DDH °C Paleogene Eccene 65 Perter Calsius Cald Au 0 0 0 0 0 Great Presention B Cald Au 0 <td< td=""><td>Cubic centimeter</td><td>cm³</td><td></td><td></td><td></td><td>Pliocene</td><td>Τ'</td></td<>	Cubic centimeter	cm ³				Pliocene	Τ'
Cubic millimeters mm ^a Dia Dia Oligocene 23 Degree Cisius °C °C Paleogene Eccene Oligocene 25 Degree Cisius °C °F Oligocene Fact Paleogene Eccene 65 Diamond drill-hole DDH EiA Triassic Paleocene 65 Global Positioning System GPS Au Jurassic 7 Grant(s) g g Triassic 250 Granter(s) ha High Sulfidation HS Mississippian Induced coupled plasma ICP Mississippian Devonian Silurian Induced coupled plasma ICP Mississippian Devonian Silurian Lead Pb I Mississippian Devonian Silurian Lead N National Instrument 43-101 NIA3-101 NIA3-101 Archean Million vars ago Ma Ma Silurian 540 Ounces (Troy) Oz Silurian Archean Million vars ago Ma Silurian Archean Million vars films pan Silurian Archean Million vars films pan Ma Silurian	Cubic meter	m ³		oic	Neogene		-
Declaración de impacto Ambiental DIA "C Oligocene Diacone Degree Fahrenheit "C "Fet DDH Paleogene Eccene Diamond drill-hole DDH Triascic "C Goldal Fositioning System GPS Au g Goldal Gramsper metric tonne gpt Triascic - Grams per metric tonne gpt Triascic - Grams per metric tonne gpt - Permian Hectare(s) ha HS - Induced coupled plasma ICCP Devonian - International Organization for Standardization ISO Silurian - Kilometer(s) kg Silurian - - Less than - - - - Liter(s) n m - - Million royo onces Moz - - - Million royo onces Moz - - - Million royo onces (Troy) oz - - - Ounces (Troy) oz - - - - Percusional S. America Datum 1956 PSD56 - - - Provisional S. America Da	Cubic millimeters	mm ³		2 2	Ĵ	Miocene	23
Degree Celsius *** Degree Catisus *** Degree Fahrenheit DDH Environmental Impact Study EIA Feet DDH Gold Au Gram(s) g Gram(s) g Grams(s) g Mitigh Sufficition Induced coupled plasma Induced coupled plasma ICP International Organization for Standardization ISO Kilogram(s) km Lees than <	Declaración de Impacto Ambiental	DIA		Ū.		Oligocene	23
Degree Fahrenheit op Ecocene Diamond drill-hole DDH DH Paleogene Ecocene Environmental Impact Study EIA ft DU Paleogene es Global Positioning System GPS Au g Jurassic es Gold Au g Triassic es es Greams per metric tonne gg pt Triassic es es Greams per metric tonne gg pt Permian es Induced coupled plasma ICP Nissisippian Missisippian Interrational Organization for Standardization km Silurian es Lead Pb I Silurian es Lead Pb mm Silurian es Million tones Mt Ordovician es Million vars ago Ma NK3-101 Nik3-101 National Instrument 43-101 Nik3-101 Nik3-101 es National Instrument 43-101 Silvian es es Provisional S. America Datum 1956 PSAD56 es Pus or million ppm ex gualty Assurace/Quality Control Quality Assurace/Quality Control QA/QU Ag	Degree Celsius	°C					-
Diamond drill-hole DDH Environmental Impact Study EIA freet ft Global Positioning System GPS Gold Au Grams () Grater than S Hectare(s) ha High Suffdation for Standardization ISO Kilogram(s) Kg Kilometer(s) km Lead Lead Coupled plasma ICP International Organization for Standardization ISO Kilogram(s) Kg Kilometer(s) km Meter(s) km Meter(s) km Million tonnes Mt Million tonnes Mt Million tonnes Mt Million years ago Ma National Instrument 43-101 NI43-101 NI Kt Smatter Returns Royatty MSR Ounces (Troy) oz Patens per million Pppm Percentage % Peruvian Sol System Coupling Datu 1956 Pata per million System Same Quality Assurace/Quality Control System Same Sociedad Anonima Cerrada Sociedad Anonima Cerrada Siluer Metares Datu 1956 Puso ro minus ± Quality Assurace/Quality Control GA/CC Sociedad Anonima Cerrada Sociedad Anonima Cerrada Sociedad Anonima Cerrada Sociedad Anonima Cerrada Sociedad Anonima Cerrada Sonare centmeter(s) Suare Centmet	Degree Fahrenheit	°F			Paleogene	Eocene	
Environmental Impact Study Fet Global Positioning System Global Positioning System Gold Grams per metric tonne Grams per metric tonne Kligometer(s) Least than Lead Least than Lead Least than Least than Least than Liter(s) Million tonnes Million	Diamond drill-hole	DDH	<u>.</u>			Paleocene	
Feet ft GDbal Positioning System GPS Au Jurassic Jurassic Gold Au GPS Au Friassic Friassic Zoo Grams per metric tonne gpt gpt Permian Zoo Zoo Greater than ha High Suffication HS Mississippian Mississippian Induced coupled plasma ICP International Organization for Standardization ISO Mississippian Kilogram(s) km Pb Silurian Devonian Silurian Lead Pb Cambrian Silurian Silurian Less than <	Environmental Impact Study	EIA	0				65
Global Positioning System GPS Aut Aut Gram(s) g Grams per metric tonne gpt Greater than ha High Sulfidation HS Induced coupled plasma ICP International Organization for Standardization ISO Kilometer(s) km Lead Pb Lead Pb Lead nm Meters above sea level m.a.s.l. Million tonnes Mt Million tory ounces Moz Million roy Devonian Autonal Instrument 43-101 NI43-101 Net Smelter Returns Royalty NSR Quality Assurance/Quality Control G/A/QC Semi-detailed Environmental Impact Study	Feet	ft	6	jç.	Cretaceous		
Gold Au g Gram(s) g Triassic Grams per metric tonne g Permian Grater than > Hectare(s) ha High Sulfidation HS Induced coupled plasma ICP International Organization for Standardization Kg Kilometer(s) km Lead Pb Lead Pb Lead na.s.l. Million Troy ounces Moz Million Sol Silurian Ounces (Troy) oz Part per million ppm Percentage % Perusion Sol S/ Provisional S. America Datum 1956 PSAD56 Pus or minus ± Quality Assurance/Quality Control QA/QC Senicedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sourere contimeter(s) ma²	Global Positioning System	GPS	- L	žo	Jurassic		
Grams per metric tonne gpt - Inassic -250 Greater than -> - Permian - Hectare(s) ha - - - High Sulfdation ICP ICP - - - International Organization for Standardization ISO - - - - Kilometer(s) km - - - - - Lead Pb - - - - - - Utter(s) t m - - - - - Meters above sea level m.a.s.l. mm - - - - - Million tones Mt - - - - - - - Million years ago Ma - - - - - - - Million years ago Ma National Instrument 43-101 NI43-101 NI43-101 -	Gold	Au	ĬĔ	les	—		
Graater Han > Hectare(s) ha High Suffidation HS Induced coupled plasma ICP International Organization for Standardization ISO Kilogram(s) kg Kilometer(s) km Lead Pb Less than <	Gram(s)	g	La	~	Triassic		250
Under trian - Hectare(s) ha High Sulfidation HS Induced coupled plasma ICP International Organization for Standardization ISO Kilogram(s) kg Kilometer(s) km Lead Pb Less than - Liter(s) m Meters above sea level m.a.s.l. Million tornes Mt Million torpo unces Moz Million years time span my. Million strument 43-101 Nik3-101 Net for sold S/ National Instrument 43-101 Nik3-101 Net Smelter Returns Royalty NSR Ounces (Troy) oz Parts per million ppm Perovian Sol S/ Peruvian Sol s/ Peruvian Sol s/ Peruvian Sol s/ Peruvian Sol s/ Pus or minus ± Quality Assurance/Quality Control QA/QC Seni-detailed Environmental Impact Study SMRL Stilver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada <td< td=""><td>Grams per metric tonne</td><td>gpt</td><td></td><td></td><td>Permian</td><td></td><td></td></td<>	Grams per metric tonne	gpt			Permian		
High Sulfidation Hia High Sulfidation HS Induced coupled plasma ICP International Organization for Standardization ISO Kilogram(s) kg Kilometer(s) km Lead Pb Less than <		bo			~		
Induced coupled plasma International Organization for Standardization Kilogram(s) Kilogram(s) Kilogram(s) Kilometer(s) Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Lead Meter(s) Meter(s) Millimeter(s) Millimeter(s) Million nones Million nones Million onnes Million years' time span Million years' tim	High Sulfidation	на ЦS			Pennsylvanian		
International Organization for Standardization kilogram(s) kilogram(s) kilogram(s) kilogram(s) kilogram(s) kilogram(s) kilometer(s) Lead Lead Lead Leas than Lead Less than Lead Less than Less than Less above sea level Miltion tones Miltion tones Miltion tones Miltion vears ago Miltion years ago Miltion years ago Maintonal Instrument 43-101 Net Smelter Returns Royalty Ounces (Troy) Percontage Provisional S. America Datum 1956 Prosisonal S. America Datum 1956 Prosonal S. America Datum 1956 Prosonal S. America Datum 1956 Provisional S. America Datum 1956 Provisional S. America Datum 1956 Provisional S. America Datum 1956 Pus or minus standardization Silver Ag Sociedad Anónima Cerrada Suare centimeter(s) Suare centimeter(s) Suare centimeter(s) Mathematical control Suare centimeter(s) Mathematical control Mathematical control Suare centimeter(s) Mathematical control Suare centimeter(s) Mathematical control Mathematical control Mathematica	Induced coupled plasma	ICP		i,	Mississippian		
Kilogram(s) kg Kilogram(s) kg Kilometer(s) km Lead Pb Less than <	International Organization for Standardization	ISO) Ö			
Kilometer(s) km Lead Pb Less than <	Kilogram(s)	kg		ale	Devonian		
Lead Pb Less than <	Kilometer(s)	km		<u></u>	Silurian		
Less than <	Lead	Pb			Ordovician		
Liter(s) t Meter(s) m Meters above sea level m.a.s.l. Millimeter(s) mm Million tonnes Mt Million years' time span Mt Million years' time span m.y. Million lanstrument 43-101 Nil43-101 Net Smelter Returns Royalty NSR Ounces (Troy) oz Parts per million ppm Percentage % Provisional S. America Datum 1956 PSAD56 Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study ElAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.A.C.	Less than	<					
Meter(s) m Meters above sea level m.a.s.l. Millimeter(s) mm Million tonnes Mt Million tonnes Mt Million years' time span My Million years ago Ma National Instrument 43-101 NI43-101 Net Smelter Returns Royalty Oz Parts per million ppm Percentage % Provisional S. America Datum 1956 PSAD56 Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study EIAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Anónima Cerrada S.M.C. Sociedad Anónima Cerrada S.M.C.	Liter(s)	l			Cambrian		
Million tonses Million troy ounces Million troy ounces Million troy ounces Million troy ounces Moz Million years' time span m.y. Million years' time span m.y. Million years ago Ma Ni43-101 Net Smelter Returns Royalty NSR Ounces (Troy) oz Parts per million ppm Percuvian Sol S/ Provisional S. America Datum 1956 PSAD56 Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study ElAsd Silver Ag Sociedad Minera de Responsabilidad Limitada SMRL Sociedad Minera de Responsabilidad Limitada SMRL	Meter(S)	m			Proterozoic		1 340
Initial def(s) Million tonnes Million troy ounces Moz Million Years' time span Moz Million years' time span m.y. Million years ago Ma National Instrument 43-101 NI43-101 Net Smetter Returns Royalty NSR Ounces (Troy) oz Parts per million ppm Percentage % Peruvian Sol S/ Provisional S. America Datum 1956 PSAD56 Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study ElAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Souare centimeter(s) cm²	Meters above sea level Millimeter(s)	mm	_		11000102010	·	2500
Million Tony ouncesMozMillion years' time spanm.y.Million years agoMaNational Instrument 43-101NI43-101Net Smelter Returns RoyaltyNSROunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyElAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Million tonnes	Mt	Prec	cambria	an Archean		
Initial networkInitialMillion years' time spanm.y.Million years' time spanm.y.National Instrument 43-101NI43-101Net Smelter Returns RoyaltyNSROunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Million Troy ounces	Moz					
Million years agoMaMillion years agoMaNational Instrument 43-101NI43-101Net Smelter Returns RoyaltyNSROunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Million years' time span	m v					
National Instrument 43-101NI43-101Net Smelter Returns RoyaltyNSROunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Million years ago	Ma					
Net Smelter Returns RoyaltyNSROunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	National Instrument 43-101	NI43-101					
Notice StrongNoticeOunces (Troy)ozParts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Net Smelter Beturns Boyalty	NSR					
Parts per millionppmPercentage%Peruvian SolS/Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Ounces (Trov)	07					
Percentage % Peruvian Sol S/ Provisional S. America Datum 1956 PSAD56 Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study EIAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Parts per million	npm					
Peruvian Sol Provisional S. America Datum 1956 Plus or minus Quality Assurance/Quality Control Semi-detailed Environmental Impact Study Silver Sociedad Anónima Cerrada Sociedad Minera de Responsabilidad Limitada Square centimeter(s) Science Control Science Science Control Science Scie	Percentage	%					
Provisional S. America Datum 1956PSAD56Plus or minus±Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Peruvian Sol	S/					
Plus or minus ± Quality Assurance/Quality Control QA/QC Semi-detailed Environmental Impact Study EIAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Provisional S. America Datum 1956	PSAD56					
Quality Assurance/Quality ControlQA/QCSemi-detailed Environmental Impact StudyEIAsdSilverAgSociedad Anónima CerradaS.A.C.Sociedad Minera de Responsabilidad LimitadaSMRLSquare centimeter(s)cm²	Plus or minus	±					
Semi-detailed Environmental Impact Study EIAsd Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Quality Assurance/Quality Control	QA/QC					
Silver Ag Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Semi-detailed Environmental Impact Study	EIAsd					
Sociedad Anónima Cerrada S.A.C. Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Silver	Ag					
Sociedad Minera de Responsabilidad Limitada SMRL Square centimeter(s) cm ²	Sociedad Anónima Cerrada	S.A.C.					
Square centimeter(s) cm ²	Sociedad Minera de Responsabilidad Limitada	SMRL					
	Square centimeter(s)	cm ²					
Square kilometer(s) km ²	Square kilometer(s)	km ²					
Square meter(s) m ²	Square meter(s)	m ²					
Square millimeter(s) mm ²	Square millimeter(s)	mm ^					
	Ion (snort, 2000 lbs)	1					
Tonne (metric, 1,000 kg of 2,204.6 lbs) T	Tonne (metric, 1,000 kg or 2,204.6 lbs)	T tod					
Traviournes (21.1025 grame)	Trow ourses (21, 1025, grosses)	ipa					
Lipited States' dollar(a)	Introy ourrice (31, 1035 grams)	UZ					
Universal Transverse Mercator	Universal Transverse Mercetor	03\$ LITM					
World Geodetic System 1984 WGS84	World Geodetic System 1984	WG.584					

3 RELIANCE ON OTHER EXPERTS

The author has relied on information from a legal review performed by Martinot Abogados of Lima, Peru, regarding verification of titles to the concessions comprising the Property, concession fees and penalties payable, the status of mining and exploration permits, and the status of agreements with local communities and land holders regarding surface rights and easement. This review was requested by MCRC prior to entering a transaction with BVN to acquire the Mallay Property. The document referred to is titled "Unidad Minera Mallay, Reporte Due Diligence Legal" dated September 25, 2020. Reliance on Martinot Abogados is limited to sections 4.2 and 4.3 of this report.

The author expresses no legal opinion as to the title or ownership status of the Property other than to report the finding of Martinot Abogados and to make a cursory review of publicly available information regarding concession titles, maps and payments due.

The author expresses his confidence in the MCRC information provided to him since no extraordinary results or claims are made therein.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Tres Cerros Project is located in the District and Province of Oyón, Department of Lima, in a western range of the *Cordillera de los Andes* in the drainage basin of the Río Huaura at elevations ranging between 4,700 and 4,900 meters (m.a.s.l.). The Property lies 150 km north of the city of Lima by geographical distance and 260 km by road (Figure 4.1).

UTM coordinates for the central point on the Property are: 290,600 mE; 8,820,100 mN (WGS 1984, Zone 18L); by geographic coordinates: 10.668° S; 76.914° W.

The Property falls within the Oyón quadrangle (22-j) of the 1:100,000 scale series of topographic and geologic maps published by the *Instituto Geológico Minero y Metalúrigo* (INGEMMET), the technical organization of the Peru Ministry of Energy and Mines.



Figure 4.1 Location and access to Tres Cerros Project, Department of Lima

4.2 Mining Concessions

The Property consists of 24 titled mining concessions covering 9,691.7 hectares forming a contiguous block (Figure 4.2, Table 4.1). Also included is a beneficiary plant concession of 122.07 hectares to accommodate the Mallay mineral processing plant located within the mining concession block.



Figure 4.2 Mallay mining concessions and locations of Tres Cerros Project, Mallay Mine and plant

File Code	Concession Name	District	Province	Nominal Area (Has.)	Effective Area (Has.)	Status	UEA*
010105794	TRES CERROS	OYON	OYON	100.0	100.0	Titled	MALLAY
010360394	TRES CERROS II	OYON	OYON	300.0	300.0	Titled	MALLAY
010343695	CHANCA 13	OYON	OYON	600.0	590.4	Titled	MALLAY
010343995	CHANCA 11	OYON	OYON	600.0	599.7	Titled	MALLAY
010183902	TEODORO N°3	OYON	OYON	100.0	78.1	Titled	
010196902	TRES CERROS 3	OYON	OYON	600.0	600.0	Titled	MALLAY
010197002	TRES CERROS 5	OYON	OYON	300.0	300.0	Titled	MALLAY
010197102	TRES CERROS 4	OYON	OYON	700.0	635.5	Titled	MALLAY
010035903	FANTASIA 3	OYON	OYON	400.0	399.5	Titled	MALLAY
010036003	FANTASIA 2	OYON	OYON	400.0	400.0	Titled	MALLAY
010346903	TRES CERROS 6	OYON	OYON	27.0	27.0	Titled	MALLAY
010029604	TRES CERROS 8	OYON	OYON	1000.0	1,000.0	Titled	MALLAY
010029704	TRES CERROS 9	OYON	OYON	900.0	900.0	Titled	MALLAY
010029804	TRES CERROS 7	OYON	OYON	900.0	900.0	Titled	MALLAY
010190404	TRES CERROS 10	OYON	OYON	200.0	199.6	Titled	MALLAY
010069612	TRES CERROS 12	OYON	OYON	500.0	432.6	Titled	
010179612	TRES CERROS 13	ANDAJES	OYON	400.0	400.0	Titled	
010170716	TRES CERROS 2016-14	GORGOR	CAJATAMBO	600.0	600.0	Titled	
010170816	TRES CERROS 2016-15	GORGOR	CAJATAMBO	100.0	100.0	Titled	
010195516	MALLAY 01	GORGOR	CAJATAMBO	900.0	368.5	Titled	
010324716	TRES CERROS 2017 -1	GORGOR	CAJATAMBO	500.0	293.3	Titled	
010127217	TRES CERROS 2017	GORGOR	CAJATAMBO	600.0	222.5	Titled	
010319818	TRES CERROS 2018	GORGOR	CAJATAMBO	100.0	51.0	Titled	
010159122	TRES CERROS 31	GORGOR	CAJATAMBO	500.0	194.0	Titled	
	Total		11,327.0	9,691.7			
File Code	Concession Name	District	Province	Area (Has.)			
P0000110	MALLAY	OYON	OYON	122.07			

Table 4.1 List of mining and mineral processing plant concessions, Mallay Property

*UEA: Economic administrative unit

The author has relied on the legal expertise of Martinot Abogados, Lima, Peru, to verify that titles to the concessions comprising the Property are currently in good standing. Annual concession fees have been paid through fiscal year 2023. As such, annual concession fees for fiscal year 2024 must be paid by June 30, 2025, to maintain the titles in good standing of all the Mallay Property mining concessions. The author has independently verified this information through publicly available information on the web site of the *Instituto Geológico Minero y Metalúrgico* (INGEMMET).

Annual concession fees are fixed at US\$3.00 per hectare per year as established by the Peruvian Ministry of Energy and Mines (MEM). Mining concessions that have been in existence longer than 11

years are subject to penalties if the titleholder has not declared a certain amount of mineral production or exploration work that can be credited to the 11th year of existence of the concession.

BVN created an 'economic administrative unit' (UEA) consisting of 14 mining concessions covering the Mallay Mine such that mineral production from any one of these 14 concessions within the UEA is accredited to the UEA as a whole. The same principal applies to permits – only one mining permit is required to cover the entire UEA instead of on a per concession basis. Since BVN did not produce from the Mallay Mine in 2019, penalties are payable for the year 2020 forward.

Penalties per hectare are currently set at 2% of a Tributary Tax Unit (UIT). For the year 2024 the UIT was fixed at S/5,350 or US\$1,445 (at S/3.7 exchange rate) so that the concession penalty is roughly US\$29.00 per hectare subject to variation in exchange rates.

Titleholders are allowed to defer one year of fee and penalty payments, but once two years have passed without payment, the concessions are declared invalid, and the ground is declared open for claiming by any entity other than the previous titleholder.

4.3 Property Ownership, Transaction, Royalties, and Streams

MCRC (then a wholly owned subsidiary of Premier) purchased the assets comprising the Property from BVN on October 16, 2020 by:

- a) replacing the existing *Carta de Fianza*² in the sum of US\$5,130,000
- b) making an initial cash payment of US\$2,000,000 on closing the transaction and agreeing to make two equal, staged payments of US\$4,000,000 due on or before December 31, 2021 and December 31, 2022, respectively, for a total cash payment of US\$10 million, and
- c) agreeing to pay a 2% NSR to BVN on any future production of ore produced within the Property but maintaining an option to re-purchase the NSR in its entirety from BVN for US\$2,000,000 at any time prior to the 4th anniversary of the acquisition transaction (since extended to November 2026).

Despite being granted a 90-day extension by BVN, Premier was unable to make the US\$4,000,000 payment (originally due on 31st December, 2021), and Adar, a company registered in the British Virgin Islands, stepped in and purchased all of BVN's right and title to the Premier debt on or around end May 2022.

After protracted and unsuccessful discussions regarding debt repayment from Premier, Adar entered into a purchase agreement with Excellon on October 31, 2024, which purchase agreement was amended and restated on three occasions (the third amended and restated purchase agreement

² *Carta de fianza* is a bond provided to the Ministry of Mines to guarantee completion of mine closure protocols pertaining to the Mallay Mine

dated April 29, 2025 between Adar and Excellon, the "Purchase Agreement") with respect to the acquisition of all of the issued and outstanding shares of MCRC.

On February 6, 2025, Premier and 126 filed a notice of intention to make a proposal pursuant to section 50.4 of the *Bankruptcy and Insolvency Act* (Canada) (the "Insolvency Proceedings"), and Alvarez & Marsal Canada Inc. was appointed as proposal trustee.

On March 10, 2025, Adar, as purchaser, and Premier and 126, as vendors, entered into an agreement of purchase and sale (the "Adar/Premier Purchase Agreement") with respect to the acquisition of all of the issued and outstanding shares of MCRC. On March 14, 2025, the Adar/Premier Purchase Agreement was approved by the Supreme Court of British Columbia pursuant to an approval and vesting order granted in connection with the Insolvency Proceedings.

The acquisition by Excellon of all of the issued and outstanding shares of MCRC was completed on June 23, 2025 pursuant to the Purchase Agreement and the Adar/Premier Purchase Agreement. Pursuant to the Purchase Agreement, Excellon acquired all of Adar's interest in the Adar/Premier Purchase Agreement and all of the indebtedness, liabilities and obligations owing by Premier or 126 to Adar (the "Adar Debt") in consideration for: (i) an aggregate amount of US\$1,565,000 in upfront cash payments, which Excellon paid to Adar in four separate tranches; (ii) an aggregate amount of US\$650,000 in cash bridge payments (the "Bridge Payments"), which were payable to Adar or MCRC in three separate tranches; (iii) the issuance by Excellon of 16,151,711 common shares in the capital of Excellon ("Excellon Shares"), which Excellon Shares were issued to various arm's length parties at the direction of Adar; and (iv) the entering into of the Transaction Documents (as defined below). The Bridge Payments will become repayable by Adar to Excellon by way of set-off against deliveries required to be made by Excellon pursuant to the Stream Agreement (as defined below).

Under the Adar/Premier Purchase Agreement, Excellon, as the assignee of Adar, acquired from Premier and 126 all of the issued and outstanding shares of MCRC in consideration for: (i) US\$10 in cash payable to 126; (ii) the cancellation and release of all of the Adar Debt; (iii) the entering into of a stream revenue sharing agreement between Adar and Premier; and (iv) the issuance of 1,713,062 Excellon Shares by Excellon to Premier.

Pursuant to the Purchase Agreement, Excellon entered into the following agreements (collectively, the "Transaction Documents"): (i) a back in rights agreement with Adar and M4G LLC, providing for the sale of up to a 49% interest in the Tres Cerros Exploration Property at a back-in option exercise price of 1.5x attributable historical expenditures incurred following completion of the acquisition multiplied by its pro rata share; (ii) royalty agreements with MCRC and Adar, providing for a 1.0% net smelter returns royalty (the "Adar NSR") and an existing 2% royalty purchase option; and (iii) a stream agreement (the "Stream Agreement") with MCRC and Adar, providing for a 5%-8% zinc and lead metals stream. Excellon may repurchase 0.5% of the Adar NSR for US\$1.5 million.

4.4 Surface Rights and Exploration Permits

4.4.1 Permitting Exploration Programs in Peru

Exploration work in Peru involving ground disturbance requires a permit issued by the Ministry of Mines and an agreement with the surface owner – generally a community or private owner. Preliminary exploration work that does not disturb the surface such as geologic mapping, surface rock chip and soil sampling, and most geophysical surveys do not require formal permitting but do necessitate an agreement with any surface owners for access.

There are two levels of exploration permits in Peru: Category 1 - *Declaración de Impacto Ambiental* (DIA) and Category II - *Estudio de Impacto Ambiental semidetallada* (EIAsd)

DIA: allows for a drill program of less than 40 drill platforms, less than 10 hectares of ground disturbance including road building, and less than 50 linear meters of underground workings. A drill pad may be used for multiple drill-holes if detailed in the declaration. DIA permits are granted on a per concession basis. If work on a Property will cover multiple concessions, then each concession requires a separate permit.

EIAsd: allows for a drill program of more than 40 drill platforms or with more than 10 hectares of disturbance. This permit is granted by the General Bureau for Environmental Affairs for Mining (DGAAM) at the Ministry of Energy and Mines (the "Ministry"). A review process includes requests for comments from the Water Authority, local governments, communities and Ministry of Culture.

Plans submitted for drill programs for either permit category must specify drill pad locations with 50metre accuracy. Drill sites can be modified so long as the modified platform locations are within the work area specified in the original permit.

Once either of these two permits is granted, the exploration company needs an *Autorización de Inicio de Actividades* which requires:

- a legal agreement with the registered owner of the land,
- a CIRA (Archeological certificate) granted by the regional cultural authority certifying that the work area is free of archeological or cultural items of significance, and
- a water permit from the regional water board.

The Ministry will then ask the Ministry of Culture for comments which may require additional community outreach programs, particularly in a region where quechua is spoken. Archeological monitoring during ground disturbance is also a requirement.

FTA (Ficha Técnica Ambiental)

In 2017, the Ministry of Mines created an additional permitting category (*La Resolución Ministerial* N° 276-2017-MINAM) that would allow large and medium sized companies an expedited path to a permit for an exploration drilling program with a maximum of 20 drill platforms in which platform and road access construction would create an area of disturbance of less than 10 Ha. (Included in areas considered disturbed are traces of the proposed drill holes projected vertically to the surface.) The area of drilling must not be closer than 50 meters to sensitive natural areas such as lakes, rivers,

wetlands or springs; nor closer than 100 meters to primary forests or buffer zones around protected natural areas.

The FTA is designed to be approved within 15 days of submittal to the Ministry of Mines but requires more environmental studies than a DIA and requires that a Plan of Environmental Control, designed and presented by the company, be carried out during the exploration program. As with permits in all categories, the FTA requires the exploration company to present a work plan to the local community in a live presentation (*Taller Participativo*) and to receive approval for the work plan from the community authorities.

The FTA remains in force for a period of five years.

The final step in permitting requires the exploration company to request an Initiation of Activities permit from the MINEM. Since all other requisite permits have been awarded at this point, approval is a formality and generally is granted within 5 days of after submittal of the request.

4.4.2 Permits

The surface area of Tres Cerros Project is shared by three entities: two communities, Andajes and Mallay, and a private landowner, Predio Colpa. An agreement for easement on the Predio Colpa surface is in place for a period of 2 years starting when Excellon receives authorization from MEM to begin exploration activities. Both Mallay and Predio Colpa agreements are transferable.

The surface area of the San Sebastian and Teresa targets is within the Mallay Mine UEA and have been under an EIA permit first granted to BVN in 2011 for initiation of mining activities. EIA permits are renewable every 5 years after the most recent modification. The current permit was renewed in July 2022 and will be in force through July 2027.

The Mallay plant initially received authorization to process ore at a rate of 400 tpd in March 2012. Authorization for a rate of 600 tpd was granted in April 2014.

A water permit was issued to BVN in 2011 for use of surficial water for mine and plant use. This permit has since lapsed but is not of consequence to the Property since water permits are not transferable. Excellon will have to apply for a new water permit prior to initiating any drill programs at Tres Cerros.

4.4.3 Environmental Liabilities

The Mallay Mine is currently under a program of mine closure following protocols of mining law in Peru. The Property has not incurred any environmental liabilities.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Property Access

The Property is accessible by road from Lima following the Pan American highway north out of Lima, then on a secondary highway through the towns of Sayan and Churin (Figure 5.1).



Figure 5.1 Access to Tres Cerros Project from Lima

Route	Road surface	Distance, Km	Time, hrs
Lima – Huacho	Pan American Hwy	135	2.0
Huacho – Churin – Mallay turnoff	Paved secondary*	115	2.0
Mallay turnoff – Mallay Mine	Gravel road	12	0.5
TOTAL		262	4.5

Table 5.1 Access to Tres Cerros Project, Mallay Property

*Numerous sections under repair

5.2 Climate and Physiography

The Property is located in the western range of the *Cordillera de los Andes* in the drainage basin of the Río Huaura at elevations ranging between 4,700 and 4,900 meters (m.a.s.l.). The Property features steep topography around the Mallay Mine site. Tres Cerros sits at a higher elevation (+4,800 m) on a small altiplano of relatively flat terrain.



Figure 5.2 Average temperatures at Mallay Project, 2011-2016

The climate is generally sunny and dry from April to December with an average annual day time temperature of 13oC, depending on elevation. Night-time low temperatures may dip below freezing. during the dry season at higher elevations. The heaviest precipitation falls during the months from January to March when temperatures are warmer. Electrical storms are common in the afternoons producing 'corn snow' (small-grained hail) at higher elevations.

Average precipitation is 645 mm/year depending on elevation.



Figure 5.3 Average monthly precipitation, Mallay Property

Vegetation is sparse across the Property consisting predominantly of the short grass ichu. No trees grow at this elevation.

Fauna reported found on the Property are condor, vicuna, vizcacha, fox and puma. Domesticated animals kept in the area by local residents include cattle, sheep and llama.

5.3 Local Resources

The Mallay Mine is located in an active mining district with a long history of production from the Uchucchacua, Iscaycruz and Raura mines. Mining is important in the region with career-miners and engineers living in the area. Local manual labor is available from several small towns nearby such as Oyon, Churin and Sayan. Most Peruvian mine workers travel long distances for work – many may reside in Lima or come from as far away as Arequipa.

Basic food supplies, fuel and lodging can be found in the towns of Oyon, Churin and Sayan.

Flowing water is found in all major drainages on the Property throughout most of the year except in the driest months of June through August. Several small alpine lakes are found in the flat terrain of Tres Cerros. Quebrada Mayo Punco is the principal drainage through the Property with flow rates during the dry season that vary between 400 - 500 L/s (Table 5.2).

Table 5.2 Comparison of surface water flow, August 2016 and May 2017 from control pointsdistributed throughout the Mallay Property (modified from AMPHOS, 2017)

Map Datum WGS84			Flow	Flow	Field Physiochemical Parameters				
Station ID	East (m)	North (m)	Elev. (m)	(L/s) Aug-16	(L/s) May-17	pН	CE µS/cm	T ℃	TDS ppm
MLL-01	295754	8820211	4502	10.98	50.05	8.38	153.00	10.80	97.00
MLL-02	293643	8818897	4455	9.40	43.80	8.53	167.00	10.40	84.00
MLL-03	293694	8819055	4462	0.5	-	7.94	77.8	4.60	77.35
MLL-04	294326	8818586	4359	8.55	1	8.53	219.2	8.40	198.90
MLL-05	294359	8818889	4417	3.75	11.85	8.50	74.00	9.40	37.00
MLL-06	295258	8818190	4260	16.70	160.20	8.80	164.00	10.00	81.00
MLL-07	295304	8818486	4262	8.19	65.48	8.83	199.00	10.80	99.00
AS-08	295404	8818147	4206	19.45	285.51	8.04	188.00	9.50	94.00
EM-04	296163	8816900	4059	21.60	191.19	8.48	465.00	9.30	233.00
AS-07	296177	8816632	4029	55.55	457.80	8.32	267.00	11.30	134.00
AS-09	296904	8814485	4025	-	555.75	8.34	267.00	10.70	134.00
CRF-01	293406	8814933	4259	0.92	8.11	8.43	140.50	3.70	143.00
CRF-02	293586	8814694	4109	2.78	13.65	8.31	157.10	6.40	149.50
PRF-01	293460	8813739	3854	19	-	8.33	187.4	8.2	170.3
PRF-02	293797	8813640	3753	0.06	-	-	-	-	104

5.4 Infrastructure

5.4.1 General Infrastructure

Roads on the Property were constructed for exploration and mining access by previous operators over the last 30 years. BVN expanded and improved access to support an actively producing mine and plant. All are one-lane gravel roads wide enough for 30 t dump trucks to haul concentrate from the plant to the coast. A small steel arch bridge crosses a steep quebrada near the village of Mallay. Side drainages along the road are present but lack maintenance.

Local communities have electric power 24 hours a day from secondary transmission lines connecting to the Cheves hydroelectric plant outside of Churin. The Cheves plant was completed in 2015 with an installed capacity of 168 MW and annual production of 837 GWh.

The Mallay Mine receives electrical power from a 33 Kv transmission line. Use and maintenance of this line is shared through an agreement with Compañia Minera Raura S.A., operators of the nearby Raura Mine.

The Mallay Mine camp is currently fully operational while a skeleton work force maintains the mine and plant and continues environmental monitoring. The camp was designed to house 1,200 mine and plant workers in an area covering 3,500 square meters with space for offices, dormitories, cafeteria, and recreation.

Cellular service is available at the Mallay Mine camp and throughout the Property except in the bottoms of most ravines.

5.4.2 Mallay Mineral Processing Plant

The Mallay mineral processing plant was constructed in 2010-2011 for a reported cost of \$115M. It began operation in March 2012 by treating polymetallic ore (Ag-Pb-Zn-Au) from the Mallay Mine complex with authorization to operate at a capacity of 400 tpd. An expansion of the authorized capacity to 600 tpd was received in April 2014. During the most recent year of full mine production in 2016, the Mallay Mine sent 205,000t to the plant for processing that averaged a rate of 575 tpd and produced Ag-Pb and Zn-Ag concentrates.

In 2017, BVN began receiving ore for processing at the Mallay plant from other mines in the district. Over a three-month period in 2017, Buenaventura's Uchucchacua Mine sent 16,240t for processing at the Mallay plant that yielded 221,000 oz Ag. In addition to mineral from the Mallay Mine, BVN began receiving ore for processing from its nearby Uchucchacua mine and from third-party mines in the district such as the Chanca Mine which sent a total of 16,400t over the first 9 months of 2017 for recovery of 130,000 oz Ag.

The following description of the Mallay plant is presented in detail since it is an important asset of the Mallay Property. Excellon is evaluating its plans for the plant, which may include providing mineral processing services to other mines in the region.

This description is taken from "*Memoria Descriptiva, Planta Concentradora Mallay*" by Ing. J.A. Ayala Lopez, Minera Buenaventura, dated May 2016, and has been verified by the author of this technical report during his tour of the Mallay Plant as part of the site inspection prior to preparing this report. The author was accompanied by Ing. Eduardo Arenas, a professional mining engineer with extensive metallurgical experience and an expert in operations of mineral processing plants. Ing. Arenas confirmed that the following description of the plant adequately lists the equipment observed in the plant and outlines the mineral treatment process that follows from a processing plant equipped in this manner.

The plant consists of the following units of operation: primary crusher, secondary crusher, ball milling, sequential flotation circuits with re-grind ball mills producing Pb-Ag-(Au) and Zn-Ag concentrate filtration and transport of concentrates. Flotation tailing is thickened in a conventional thickener then pumped to the tailings storage facility (TSF).

5.4.2.1 Crushing

Run of mine ore is loaded into a hopper by front end loaders or dump trucks for transportation to the primary crusher by conveyor belt, $42^{\circ} \times 9.4$ meters, that feeds the primary jaw crusher ($32^{\circ} \times 20^{\circ}$, reduction ratio = 3.9), that reduced the material to less than 3". This material is loaded onto a conveyor belt ($24^{\circ} \times 21.1$ meters) equipped with an electromagnet to extract magnetic trash from the feed. This material is loaded into an intermediate hopper of 500 mt capacity.



Figure 5.4 Schematic flow diagram, Mallay Plant

From the intermediate hopper, material is transferred by conveyor belt (36" x 8.0 meters) to another conveyor belt (24" x 37.4 meters) which delivered the material to a 6' x 16', double-deck screen with auto-cleaning wire mesh with 8mm aperture in the top level and 6mm aperture in the bottom level. Oversize material is taken by conveyor belt (24" x 27.9 meters with electromagnet) to a secondary cone crusher with reduction ratio of 2.9 to be reduced to < 10 mm, then returned to the vibrating screen.

The – 6 mm screened product is stored in a hopper of 1,000 t capacity.

5.4.2.2 Classification

Fine material from the 1,000 mt hopper is transported by 3 different conveyor belts past an electronic balance to control tonnage and an automatic sampler for head grade sampling before discharging into the 8' x 10' ball mill. The ball mill feed water contains 3% lime to control pH and depress Fe minerals, and 10% zinc sulfates to depress zinc minerals.

The milling product is fed to a SK-80 flash cell which produces a flash concentrate which is sent directly to the final lead concentrate thickener after sampling. The SK-80 tailing is pumped in closed circuit by one of two Warman 6" x 4" centrifugal pumps that work in closed circuit with a nest of two hydrocyclones (one in operation, one in stand-by) where the material is classified – coarse material from the hydrocyclone (underflow) is returned to the ball mill, closing the circuit with a circulating load of approximately 300%. The fines passing the hydrocyclones (overflow) (P80 = 105 um) are sent by gravity to the Pb-Ag flotation circuit.

5.4.2.3 Lead-silver Flotation

The cyclone overflow is sent to a vibrating wet screen (3' x 6') fitted with polyurethane panels with a #30 mesh. The oversize from this screen is trash and/or coarse particles that are rejected as residues. The undersize pulp is sampled automatically to determine grade, then is fed by gravity to a

4' x 6' pre-rougher flotation cell. The pre-rougher froth is pumped vertically to a bank of Denver cleaner cells, which produce a concentrate which is sent to the concentrate thickener. The tailing from the pre-rougher cell falls by gravity to the 5' x 5' Pb-Ag conditioner cell where it is joined by the tailing from first scavenger cell bank. This pulp is then pumped to a 20 m3 Pb-Ag rougher tank cell. Froth from this rougher tank cell passes to the Pb-Ag cleaner circuit, while the tailing goes to the Pb-Ag scavenger circuit.

The Scavengers consist of two banks of 4 OK 3R cells and the concentrate from the first scavenger cell goes directly to the final cleaner. The concentrate from Scavengers 2, 3 and 4 goes to Cleaner feed. The tailing from the Cleaners goes back to Scavenger feed.

The Pb-Ag cleaner circuit consist of three stages: Cleaner 1 (4 cells), Cleaner 2 (3 cells), and Cleaner 3 (1 cell). All cells are Denver Sub A-24. The Pb-Ag rougher froth is fed to a series of cleaner cells, with the product from Cleaner 3 going to the final Pb-Ag concentrate thickener. The tailings from the first two Cleaner stages are recirculated counter-current, i.e. tailing from C3 back to C2 feed; tailing from C2 back to C1 feed. Control of pH is maintained in all stages.

The tailing from the 20 m3 Pb-Ag rougher tank cell is fed to a bank of 4 OK-3R cells for scavenger flotation. The froth from these cells plus the tailing from Cleaner 1 are pumped back to the Pb-Ag rougher tank cell and the tailing from the scavenger section is sent as feed to the zinc flotation circuit.

5.4.2.4 Zinc Flotation

Tailing from the Pb-Ag circuit is pumped by a Warman 6"x4" centrifugal pump to a nest of two 10" diameter hydrocyclones from whence the fines (overflow) passes first to #1 Zn Conditioner tank (6.5' x 6.5') where it combines with the overflow from the regrind mills (see below), and then to #2 Zn Conditioner where the pulp is treated with reagents (copper sulfate, xanthate and lime).

The coarse reject (underflow) from the D-10 cyclones is sent to a 5' x 6' regrind ball mill (there are 2; one acting as a spare) which discharges into a closed circuit with a nest of 6" diameter cyclones fed by a Warman 3'X2" centrifugal pump. The fines from these D-6 hydrocyclones are sent to #1 Zn Conditioning tank and the underflow returns to the regrind mill. The regrind overflow sizing is 78% passing 200#.

The conditioned slurry from 32 Zn Conditioner Tank is fed by gravity into #1 Zn Rougher tank cell from which the tailing feeds #2 Zn Rougher tank cell. Froth from both Rougher cells goes to the Zn cleaner circuit and the tailing from the second cell goes to the Zn scavengers, which comprise two banks of 4 OK 3R cells.

The Zn-Ag cleaner circuit consists of 3 stages: Cleaner 1 (4 cells), Cleaner 2 (4 cells) are all Denver Sub A-24, and Cleaner 3 which is a column cell, 1.5m x 9m. Zinc rougher froth is fed to Cleaner 1, froth from Cleaner 1 is fed to Cleaner 2, and froth from Cleaner 2 is fed to Cleaner 3. Froth from Cleaner 3 (column cell) forms the final Zn-Ag concentrate. Tailing from Cleaner 3 are fed back to Cleaner 2, tailing from Cleaner 2 were fed to Cleaner 1 and tailing from Cleaner 1 were pumped back to the head of the zinc circuit. The pH is controlled in all zinc cleaner stages.

Tailing from #2 Zn Rougher cell is fed to a bank 4 OK-3R Scavenger cells for scavenger flotation. The tailing from these cells feeds a second set of 4 OK-3R scavenger cells, the tailing from which is

pumped to the tailing thickener. Froth from the first set of scavengers is taken back to the head of the Zinc circuit, while froth from the final scavengers is recycled to Scavenger 1 feed.

5.4.2.5 Thickening of Pb-Ag Concentrate

The Pb-Ag concentrate flows by gravity to the 20' Pb-Ag thickener where it is thickened to approximately 2,100 g/l which is an appropriate density for the filter press. This thickened concentrate is pumped by one of two 11/2" X 1" Warman centrifugal pumps (one in operation, one in stand-by) to the Pb holding tank (13'x 15') to be stored prior to the filtration stage.

5.4.2.6 Thickening of Zn Concentrate

The Zn concentrate flows by gravity to the 20' Zn thickener where it is thickened to around 2,000g/l which is the appropriate density for filtration. The thickened concentrate is pumped by one of two 11/2" X 1" Warman centrifugal pumps (one in operation, one in stand-by) to the Zn holding tank (13'x 15') to be stored prior to the filtration stage.

5.4.2.7 Filtration of Pb-Ag Concentrate

Concentrate is fed by one of two 5"X 4" Warman centrifugal pumps (one in operation, one in standby) from the holding tank to an Andritz Filter Press (1,500 x 1,500 mm) with 31 plates. The filtered concentrate falls into a pile below the filter press. The filter operation is done automatically with the help of a PLC. Average moisture content of the Pb-Ag concentrate is 7.0%, an optimum level for handling, transport and marketing.

5.4.2.8 Filtration of Zn Concentrate

Concentrate is fed by one of two 5"X 4" Warman centrifugal pumps (one in operation, one in standby) from the holding tank to an Andritz Filter Press (1,500 x 1,500 mm) with 21 plates. The filtered concentrate falls into a pile below the filter press. The filter operation is done automatically with the help of a PLC. Average moisture content of the Zn concentrate is 7.5%, an optimum level for handling, transport and marketing.

5.4.2.9 Transport of Concentrates

While Buenaventura operated the Mallay Plant, both Pb-Ag and Zn concentrates were deposited in piles below the filter press where they were homogenized and sampled prior to loading into trucks using front end loaders. Each truck carried 34t of concentrate to port of Callao, Lima.

5.4.2.10 Transport and Storage of Tailings

Tailings from the flotation circuits were sent by one of two 3" X 2" Warman centrifugal pumps (one in operation, one in stand-by) to a screening box where coarse oversize is separated, with the fines flowing by gravity to a 50' tailing thickener located at a lower part of the plant site in order to thicken the tailing to an average density of 1,400 g/l, after which it is pumped to a 40' x 40' holding tank. From there the tailing is pumped to the tailing pond, which is situated at an elevation of 4,545 m.a.s.l, some 350 m above the plant. The tailing is pumped through 1,950 m of 6" steel piping lined with 1" polyurethane. There are two centrifugal pumps, one is on standby.

5.4.2.11 Mine Water Treatment Plant

Mine water is currently flowing out of the Mallay Mine at Level 4090 rates between 50 and 200 L/s depending on the season. This flow is currently directed through an acid water treatment plant
located within 100 m of the Level 4090 adit. The effluent water is treated with lime (calcium hydroxide) and flocculants to precipitate out metal ions, then the water's pH is lowered by addition of CO2 before passing through settling ponds. The resulting treated water is released into the Quebrada Mayopunco. Precipitates are then pumped to the Tailings Storage Facility (TSF).

5.4.3 Tailings and Waste Rock Impoundments

The Mallay tailings are stored in a Tailings Storage Facility ("TSF") and waste from mining operations is stored in an impoundment located in parallel ravines 1.5 km from the plant at an elevation of 4,570 m, approximately 350 m vertical elevation above the plant.

Tailings are stored in a natural depression, augmented by a homogenous rock-fill retaining wall built from mine waste rock and sealed with compacted sandy clay and gravel. The base of the TSF is covered with geomembrane and geo-textile. Effective tailings capacity is 538,500 m3. As of September 2017, the TSF contained 469,100 m3 (727,200t).

The waste impoundment has an engineered capacity for 1.4M m3 and is currently filled to less than 40% capacity with 540,000 m3 of waste rock.

In March 2017 Buenaventura began studies to increase the size of the TSF to accommodate plant production programmed to continue at 600 tpd for the following two years. However, these plans were not carried out since mine production fell 50% in 2018 followed by a halt in production in 2019.

6 **HISTORY**

6.1 Early History

Shallow mine workings of Spanish colonial age were first recognized by modern miners in 1908 when the *Sindicato Minero Río Pallanga* began exploring the Mallay area and later built a road reaching the town of Mallay and the Fortuna Mine – a mineralized area 5 km southwest of the current Mallay Mine. Río Pallanga later abandoned the area for not being able to mine profitably with grades of 5.2 oz/t Ag, 4.3% Pb and 2.0% Zn from the Fortuna Mine3.

In March 1997, a private company called Empresa Minera Mallay acquired the Fortuna Mine and reportedly processed approximately 84,000t grading 5.1 oz/t Ag, 5.1 % Pb and 5.2 % Zn through a plant on site owned by the *Universidad Nacional de Ingeniería* (UNI) with a capacity of 120 tpd. However, in August 1998 Minera Mallay halted production from Fortuna.

Pan American Silver evaluated the Fortuna Mine and surrounding area in 1999. They identified four mineralized structures in the Isguiz area which, after building significant road access, they tested with three drill holes. Reportedly only one of the holes intersected mineralization leading Pan American to abandon the project (unattributed document, BVN database).

Buenaventura acquired the Mallay Property in 2003 and commenced exploration work through geologic mapping and surface sampling followed in 2004 by a program of diamond drilling. A positive evaluation of the Isguiz vein system led BVN to begin construction of the Mallay Mine in 2008. Production began in April 2012 at an initial rate of 400 tpd using a cut-and-fill mining method.

As BVN deepened the mine below Level 4090 m in the Isguiz zone, new mine workings encountered a strong underground flow of water cutting off access to deeper mineral resources and leading to a halt in production in 2018. The mine and plant are currently under care and maintenance for a monthly cost of approximately US\$250,000.

Production totaled 7.7 million ounces of silver and 96,000t Pb+Zn from just over 1 million tonnes of ore during the seven years that BVN operated the Mallay Mine.

6.2 Tres Cerros Au-Ag Project

BVN conducted brownfield exploration on several mineralized targets outside of the immediate Mallay Mine (Isguiz) vein system. The most prospective of these is Tres Cerros where preliminary surface geochemical sampling returned strong values in Au-Ag in a fault contact zone over a strike length of more than 2 kilometers.

³ The early history of the Mallay Mine presented here is sourced by documents produced by Minera Buenaventura but not attributed by author.



Figure 6.1 Location of exploration targets outside of the Mallay Mine area

In April 2016, BVN began their first exploration campaign in the Tres Cerros zone located 5 km west of the Mallay Mine following prospective sampling results from earlier visits. Geologic mapping at a scale of 1:5,000 over an area covering 636 hectares identified a mineralized corridor measuring 2,400 x 200 m with stockwork veining to crackle brecciation in quartz arenites containing abundant iron oxides (goethite, limonite, hematite) and strong silicification with very fine, disseminated sulfides, and drusy to chalcedonic quartz. These sediments are in fault contact with the local volcanic sequence along the Contact Fault, a major fault structure trending N-S that defines the western limit of the strongly altered corridor.

BVN's surface geochemical sampling program began in August 2016 and continued until January 2018 resulting in the collection of 358 rock chip samples from the Tres Cerros area and 65 samples from the La Estancia target located 1 km west of the central zone of Tres Cerros. Of the 358 samples taken from Tres Cerros, 54% returned values greater than 100 ppb Au and/or greater than 1.0 oz/t Ag. Nearly all samples reporting strong Au-Ag values were taken from quartz arenite. These assay results were verified by rock chip samples collected by the author during his 2020 site inspection. Figure 6.2 illustrates the pattern formed by the 100 ppb Au geochemical contour using the BVN 2016-2018 sampling results.

A geophysical survey was completed across the zone of interest in 2016 consisting of 26 line-km of IP (resistivity and chargeability) and 50 line-km of ground magnetometry. Coincident strong chargeability and resistivity anomalies at the southern end of the target area were interpreted by Buenaventura as indicating a zone of disseminated sulfides (pyrite) in silicified host rock. The geophysical anomalies coupled with the prospective Au-Ag geochemistry encouraged Buenaventura to program a drilling campaign to test this target, but this plan fell victim to the decision by Buenaventura to halt production in the Mallay Mine and place the entire Property on care and maintenance in 2018.

Plots of surface rock chip/channel samples along the length of the volcanic/sedimentary contact show that all anomalous values of Au-Ag are found in the sedimentary rocks or at contacts between sedimentary and volcanic units.

A plot of geochemical values from the Tres Cerros surface sampling reveals zonation along the length of the fault contact and an interesting Cu-Zn zone (La Estancia) 1.5 km west of the fault contact. The geochemical zones along the Contact Fault are typical of epithermal mineralization with abundant As, Bi, Hg, and Sb.



Figure 6.2 Gold geochemical footprint (>100 ppb Au), BVN sampling program, 2016 - 2018, Tres Cerros



Figure 6.3 Chargeability at 220 m depth overlain by geology and Au geochemistry (2018), Tres Cerros (map datum: PSAD56)

6.3 Teresa Exploration Target

The Teresa Target is located 3.5 km southwest of the Mallay Mine and consists of three mineralized corridors named Teresa, Alicia and Maylin in close proximity to the historical Fortuna Mine (geologic maps in the BVN database do not make clear the relationship between the Teresa veins and those of the Fortuna Mine). Surface sampling and mapping by BVN in the Teresa Corridor reported an area of 100 x 320 meters where narrow replacement veins are exposed trending N-S hosted in Carhuaz and Farrat sandstone, siltstone, and carbonate sediments. These veins contain massive pyrite, arsenopyrite, sphalerite and galena in skarn alteration. Sample assays returned 2.01 to 18.71 oz/t Ag, 2.04 to 11.06% Pb, 1.36 to 7.87% Zn in vein widths from 0.20 to 0.75m.

The Alicia corridor extends for 60 meters in length containing narrow replacement veins trending N15°E with massive pyrite, arsenopyrite, sphalerite and galena hosted in siltstone and carbonate host rocks exhibiting skarn alteration as chloritic hornfels with pyrite.

The Maylin corridor extends to 50 meters in length, also trending N-S, with similar mineralization and alteration as Teresa and Alicia. Surface sampling reported 4.95 to 7.72 oz/t Ag, 1.70 to 5.63% Pb, and 5.71 to 6.92 % Zn.

Three DDH drill holes (total of 1,124 meters) were completed in 2015 and 2016 to test the mineralized corridors in the Teresa Target. (Only graphical descriptions of these drill holes are available in the database.) These holes appear to be drilled at shallow angles to allow for nearly perpendicular intercepts of the target veins dipping 60-70° (Figure 6.4). Hole TR-15-01 returned significant mineralization from what was interpreted as intersection with the Teresa Vein: 0.30 m (true width?) @ 5.47 oz/t Ag, 5.40 % Pb and 7.86 % Zn. The other two holes did not intercept significant mineralization.



Figure 6.4 Drill hole map, Teresa target (map datum: PSAD56)

6.4 San Sebastian Target

The San Sebastian Target is located 2 km east of the Mallay Mine and is divided into two zones, Central and North. Both zones are underlain by carbonate sediments intruded by sills of dacitic composition. Polymetallic mineralization is hosted in low-angle veins, or mantos, varying from 0.15 to 1.50 meters in width. Local sectors of the mantos have been mapped with moderately steep dips. Surface sampling (109 samples) from the Central zone returned low Ag, Pb, Zn values, so the focus of exploration was on the North zone where shallow prospect pits had been dug by previous explorers. Manto structures here trend N-S with up to 40° dips to the NW hosting abundant iron oxide

with galena and sphalerite. Dacite sills also exhibit disseminated sulfides – pyrite, pyrrhotite and arsenopyrite. BVN collected 56 rock chip samples from the San Sebastian manto/vein that reportedly gave high values of 4.2 g/t Au, 12 oz/t Ag, 14% Pb and 3% Zn (Figure 6.5) in skarn alteration with veins containing gangue minerals of diopside, actinolite, epidote, chlorite. Assay certificates corresponding to these samples are not available in the BVN database.

Two DDH holes completed in 2016 intercepted narrow veins with low metal values. One of the drill holes, SS-04-16, targeted the structure returning the high assays shown in Figure 6.6. However, this hole did not intercept significant mineralization. The best intercept came from a drill depth of 221 m in a vein 0.15m in width yielding 0.29 oz/t Ag, 0.08 % Pb and 0.02 % Zn.

(A digital database for the surface sampling and drill assays at San Sebastian is not available.)



Figure 6.5 Proposed drill holes targeting San Sebastian mantos (map datum: PSAD56)



Figure 6.6 Sample map by BVN in San Sebastian zone with rock chip assay table showing multigram values in Au, multi-ounce values in Ag. Drill hole SS-04-16 tested this zone and did not return significant values.

6.5 Mallay Mine

6.5.1 Mine Operations by Buenaventura

Towards the end of 2003, BVN took control of the Mallay Property and commenced exploration work through geologic mapping and surface sampling followed in 2004 by a program of diamond drilling. Mine construction began in 2008 based on an initial mineral resource of 269,000t derived from 11,500 m of drilling and 5,500 m of underground sampling completed during the period 2004 to 2007. Production began in April 2012 at an initial rate of 450 tpd using diesel-powered generators as energy source. BVN used cut-and-fill method for approximately 80% of mine workings and bench-and-fill for the remaining areas. At levels below 4090m where exploratory drilling demonstrated wider vein widths, BVN had planned on significantly increasing the use of bench-and-fill to lower mining costs.

As BVN deepened the mine below Level 4090 in the Isguiz zone, new mine workings encountered a strong underground flow of water of more than 300 L/s (AMPHOS21, 2017) that flooded the mine to an interior stationary water level at 4,064m in June 2017 cutting off access to deeper resources in Clavos 2, 3, and 6. This water issue led to a marked reduction in production through 2018 and was a principal factor in halting production in 2019. In addition, all exploration work was halted without fully evaluating mineral resources in the 300 m vertical reach between Level 4090 and Level 3790.

During the seven years that Buenaventura operated the Mallay Mine, production totaled 7.7 million ounces of silver and 96,000t Pb+Zn from just over 1 million tonnes of ore. Tables 6.1 and 6.2 summarize production and Historical Resources for the period of mine operation, 2012 - 2018.

The mine and plant are currently under care and maintenance for a monthly cost of approximately US\$250,000.

Table 6.1 Mallay Mine production tonnage and Historical Mineral Resources*, 2012–2019 (BVN, 2020)

Year	Reserves (t)*	Resources (t)*	Potential (t)*	Production (t)
2012	261,374	162,967	1,179,352	103,571
2013	123,377	81,740	505,779	167,567
2014	121,838	104,640	450,098	148,058
2015	86,446	116,932	334,048	158,124
2016	162,125	217,791	416,433	204,035
2017	192,890	258,567	279,284	170,519
2018	133,889	258,567	324,140	92,450
2019	133,889	258,567	324,140	0
Total				1,044,324

Table 6.2 Total metal production, Mallay Mine, 2012-2018 (BVN, 2020)

Year	Silver (K oz)	Zinc (t)	Lead (t)
2012	683	6,711	4,952
2013	1,280	8,973	6,979
2014	1,220	10,030	7,525
2015	1,284	9,173	7,193
2016	1,627	10,463	7,383
2017	1,109	7,102	4,061
2018	514	4,151	1,768
Total	7,717	56,603	39,861

6.5.2 Historical Estimates of Mineral Reserves and Resources, Mallay Mine

At the time of the author's site visits, firstly in 2020 and subsequently in 2024, the Mallay mine was inaccessible and so was unable to be inspected. As such, commenting on the mine is outside the scope of this report. However, when the mine was closed at the end of 2018, BVN summarized the mineral resources remaining in the Mallay Mine, marked to the end of 2018 based on cut-off grades calculated from metal prices and BVN's cost structure in 2018.

The source of the following historical resource estimate is a technical report entitled *"Revisión y validación de las reservas e inventario de minerales al diciembre 2018 de la Compañía de Minas Buenaventura S.A.A"*, prepared by J. Valdivia Chavez (CIP) using mineral resource categories as described in NI 43-101 Disclosure of Mineral Resources, Sections 1.2 and 1.3. The author of this current report has reviewed this report and is satisfied that the resource estimation by J. Valdivia Chavez is valid. 'Measured Resources' in the Valdivia report are derived from channel sampling on 2-meter intervals along veins exposed in underground workings in the Mallay Mine and are what BVN had previously considered as Proven Reserves. 'Indicated Resources' are derived from underground sampling on continuation of mineralized veins where sample intervals are greater than 2 meters and includes assay data from drill core. 'Inferred Resources' are derived from drill hole data.

Buenaventura gave a summary of mineral resources in the Mallay Mine marked to the end of 2018 in a Power Point presentation dated June 2020, recreated in the table below. These resource estimates were based on BVN's cost structure and metal prices in 2018 used to calculate a reserve cut-off grade of 15.56 ounces per tonne silver equivalent, sub-grade material with a cutoff grade of 12.71 oz/t Ag Eq, and low grade with a cut-off grade of 7.61 oz/t Ag Eq.

Silver equivalent ounces are listed as given in the Buenaventura table accompanied by the metal prices used for the equivalent ounce calculation. No allowance was made for metallurgical recoveries in the resource calculation.

The most recent mineral resource estimate was prepared internally by BVN in 2018. The estimate was based on diamond drilling, underground channel sampling, and block modeling using ordinary kriging within wireframed zones. The estimate used a NSR cut-off of US\$95/t and considered Ag, Pb, and Zn grades and recoveries consistent with historical production at Mallay. The estimate was not classified in accordance with CIM definitions and is therefore not considered current.

Note: A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves and the historical estimate should not be relied upon.

Category		Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)
Reserves	Proven	102,399	1.23	0.22	6.05	3.29	6.76	19.02
	Probable	31,491	1.11	0.18	8.21	4.89	6.69	23.06
Total Reserves		133,889	1.21	0.21	6.56	3.67	6.74	19.97
Resources*	Indicated	6,762	1.56	0.00	7.37	2.23	3.42	14.59
	Inferred	251,805	4.51	0.21	6.68	4.02	4.90	18.02

Table 6.3 Summary of resource inventory*, Mallay Mine, Isguiz Zone, Dec.	2018
--	------

*These are Historical Resources quoted in accordance with item 2.4 of NI 43-101

**Standard practice does not allow the addition of Inferred Resources to Indicated or to Measured Resources.

Table 6.4 Prices used for 2018 AgEq estimation

Metal	US\$/unit	Price
Ag	ΟZ	18
Au	oz	1,300
Pb	t	2,250
Zn	t	2,600

Level 4090 m is a significant marker in the mine where resource definition drilling and advances have shown that below 4090 m average vein widths are more than double the average widths of veins above 4090 m with no loss of AgEq grade. Reserves and resources are split out by this level in the table below.

Table 6.5 Reserves and resources* above and below Level 4090 m

Zone	Category	Tonnes	Diluted Width (m)	AgEq (oz/t)*
Above 4000 m	Reserves	111,771	1.02	19.41
AD0VE 4090 III	Resources	30,860	1.03	22.78
Below 4090 m	Reserves	22,118	4.90	22.80
	Resources	227,707	4.89	17.38

*These are Historical Resources quoted in accordance with item 2.4 of NI 43-101

Buenaventura also stated resources of low-grade material defined as having a silver equivalent ounce cut-off grade of greater than 7.61 oz/t AgEq.

Table 6.6 Low-grade resources*, Mallay Mine, Dec. 2018

Category	Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)*
Low-grade	116,976	0.98	0.14	3.80	1.88	3.19	11.08
resources							

*These are Historical Resources quoted in accordance with item 2.4 of NI 43-101

Resource estimates from the Pierina Zone (Table 6.7) are given separately since these veins carry relatively higher gold and lower zinc values than veins in the Isguiz Zone. The most recent resource statement by Buenaventura for the Pierina Zone was given in a Power Point presentation dated October 2017. Resource category was not stated; it is assumed to be Inferred.

Category		Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)**
Reserves	Proven	7,699	1.01	3.38	10.22	3.38	1.79	24.88
	Probable	3,445	1.05	3.06	10.16	3.82	1.77	24.60
Total Reserves		11,144	1.02	3.28	10.21	3.52	1.79	24.81
Resources	Inferred	25,578	1.43	2.52	9.30	7.19	3.20	28.76

Table 6.7	Summary of	resource inventory*,	Pierina Zone,	October 2017
-----------	------------	----------------------	---------------	--------------

*These are Historical Resources quoted in accordance with item 2.4 of NI 43-101

**Silver equivalent ounces are calculated here by the author using 2018 prices with no allowance for rates of metallurgical recovery.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Peruvian segment of the Andean Cordillera is the type-example of Andean type subduction where oceanic crust of the Nazca plate is moving beneath the continental crust of the South American plate. This plate interaction has produced up to 70 km of crustal thickening along its western margin resulting in surface uplift of thousands of meters.

The Andean Cordillera records three major geodynamic cycles through geologic time, the last of which includes a first phase of subduction during Late Triassic to late Cretaceous time. During this phase, the Cordilleran belt was the site of major shelf sedimentation, bordered on the west by island arc volcanism or a marginal volcanic rift.

In the Late Cretaceous the Andean-type of subduction began by marine withdrawal and the emergence of the Cordillera. This phase is characterized by multiple cycles of compression and extension from Late Cretaceous through early Pleistocene and the presence of a magmatic arc along the continental margin producing intense plutonic and volcanic activity that led to the formation of metallic mineral deposits along the length of the Andean Cordillera.

The property lies along the Miocene metallogenic belt of central and northern Peru which extends more than 900 km along the Cordillera Occidental and contains numerous hydrothermal mineral deposits of Miocene age (Noble and McKee, 1997). Most of these deposits are hosted by shelf carbonates and other sedimentary rocks of Mesozoic age and by volcanic and intrusive rocks of Tertiary age. Base- and precious-metal mineralization was closely associated with the eruption of calc-alkalic volcanic rocks and emplacement of coeval dikes and stocks.

The most notable mines in the region include Antamina (Cu-Zn) and Pierina (Au-Ag) to the north of the Property in the Department of Ancash. In the more immediate area around the Property are the mines Uchucchacua (Ag-Pb-Zn), Raura (Ag-Pb-Zn) and Iscaycruz (Zn-Ag) that share the same styles of mineralization and sedimentary sequence of host rocks as the Property. Invicta (Au-base metal) is located 35 km southwest of the Property in volcanic rocks near contact with the Coastal Batholith (Figure 7.1).



Figure 7.1 Regional geology, mining concessions, historical and currently operating mines

7.2 Property Geology

The Property area is underlain by a thick sequence of Late Cretaceous clastic and carbonate sediments that have been tightly folded in alignment with the regional Andean trend with fold axes trending north-northwest. Volcanic rocks of Late Tertiary age cap these sediments with relatively flat-lying flows along a pronounced angular unconformity.

Intrusive rocks are not exposed at high elevations on the property in the Tres Cerros zone but are indicated in the Mallay Mine by the presence of skarn mineralization. A stock of tonalite – granodiorite 3 km in diameter is exposed south of the Fortuna Mine area outside of the Mallay concession block. Sills of andesite to dacite composition hosted in the sedimentary package have been mapped to the east of the Mallay Mine in the San Sebastian Zone.

7.3 Property Stratigraphy

7.3.1 Sedimentary Rocks

The sedimentary sequence exposed on the Property spans the Cretaceous period from the Early Cretaceous Gollyarisquizga Group to Late Cretaceous carbonate sediments, listed below in order of youngest to oldest.

Jumasha Formation – Gray to blue-gray, massively bedded limestone, commonly with vertical fluting on weathered surfaces. 1,000 – 1,400 m thickness. Only the lower unit of Jumasha is exposed on the Property.

Pariatambo Formation – Thin-bedded, platy limestone at the base to nodular limestone toward the top. 60 – 90 m thickness.

Chulec Formation – Gray to black limestone, thin to medium bedded with intercalations of argillic to bituminous limestone and gray-brown marl. 100 – 150 m thickness.

Pariahuanca Formation – Bluish-gray, massive, bedded limestone with minor thin ferruginous beds. 90 – 120 m thickness.

Farrat Formation (Gollyarisquizga Group) – White to gray, medium-bedded quartz sandstone, interbedded with thin beds of shale. (Very similar to the Chimu Fm quartz arenite; Farrat Fm is much thinner unit with no carbonaceous units). 70 – 90 m thickness.

Carhuaz Formation (Gollyarisquizga Group) – Siltstone interbedded with thin beds of gray-green sandstone, gray shale and limestone. 200 – 400 m thickness.

Chimu (Gollyarisquizga Group) - Medium to massive beds of a white, clean, quartz arenite with medium to coarse, rounded quartz grains. The basal unit is characterized by dark gray siltstone with intercalated coal seams. (Mapped as Farrat Fm. by BVN in Tres Cerros project area.)



Figure 7.2 Stratigraphic column, Mallay Property

7.3.2 Igneous Rocks

Calipuy Volcanic Group – volcanic flows of lava and volcaniclastics, volcano-sedimentary units, including minor lacustrine sediments. Lower Calipuy: predominantly andesite; Upper Calipuy: andesite, dacite, minor rhyolite.

Granodiorite – medium-grained intrusive (stock?) exposed near the Fortuna Mine. Light gray to white, quartz, plagioclase, minor orthoclase, biotite, and hornblende.

Sub-volcanic intrusions – Sills of dacite to andesite composition are emplaced in Jumasha limestone in the San Sebastian Zone. At Tres Cerros, BVN mapped a dome complex (dacite?) and a 'high-energy' volcanic breccia suggestive of a diatreme.



Figure 7.3 Property geology and exploration targets in relation to the Mallay Mine. Cross section A-A' shown in Figure 7.4.



Figure 7.4 Cross section A-A', Mallay Property

7.4 Tres Cerros Geology

7.4.1 Structure

The mineralized area in Tres Cerros is located along a fault contact between tightly folded quartz arenite (mapped by BVN as Farrat Fm, however, is more characteristic of Chimu Fm.) locally overlain by flat-lying Calipuy volcanic rocks (Figure 7.6). Isolated blocks of sediment have been mapped on the volcanic side of this fault in a complex structural zone.

The structural pattern through the sediments in Tres Cerros is remarkably similar to that of the Mallay Mine vein pattern where N-S primary faults (as bedding-plane slip?) intersect with conjugate WNW-trending tension faults.

The fault contact between sediments and volcanic rocks is suggested as running parallel to the rim of a large caldera. Volcanic rocks west of the fault contact mapped as breccia may be outflow of volcanic flow breccias from the caldera, although the structural pattern shown in the mapped area is not as expected along a rim zone of a caldera.



Figure 7.5 Rose diagram based on field observations of the orientation of mineralized veins hosted in fractured host rock (quartz arenite, volcanics) and Au values from surface sampling. (Source: C. Clark)

7.4.2 Alteration and mineralization

Surface sampling and geologic mapping in the Tres Cerros zone shows that gold and silver mineralization is hosted almost exclusively in the quartz arenite (sandstone) along the primary,

northerly trending contact fault ("Contact Fault") between sedimentary and volcanic rocks. Volcanic rocks are rarely mineralized even in contact with fragmented, mineralized sandstone blocks found on the volcanic side of the contact.

Mineralization is associated with epithermal, high-sulfidation alteration with reported assemblages of advanced argillic alteration minerals (alunite, dickite, quartz) and the presence of vuggy silica texture presumably found only in volcanic rocks. Quartz arenite is relatively non-reactive to alteration as it is composed mostly of quartz grains, so any alteration in sandstone is difficult to identify in the field. Buenaventura reported minor alunite in stockwork veining in the sandstone.

Figure 7.6 illustrates the close spatial relationship of rock chip samples with anomalous Au values to the N-S contact fault and the lack of anomalous Au values in samples from volcanic rocks. An IP geophysical survey outlined coinciding, strong chargeability and resistivity anomalies at the southern end of the target area that may be interpreted as indicating a zone of disseminated sulfides in silicified host rock.

A zone of strong Zn values is located to the west of the fault/contact zone closer to the center of the hypothesized caldera. Since zinc is found outboard from high-temperature Au-Ag-Cu zones proximal to the heat source of hydrothermal fluids, the proximity of this zinc occurrence to the center of the caldera suggests that the zinc mineralization came much later than the caldera formation and is related to a hydrothermal system located well outside of the caldera.

Figure 7.7 illustrates the contact fault between folded sediments and volcanic breccia. The form of the volcanic breccia in cross section and its association with a sub-volcanic dome suggests that this volcanic breccia represents a diatreme. Also suggested in this figure is a magmatic heat source below the mineralized sediments, possibly the heat source for the diatreme.

Figure 7.8 is a cross section through the Tres Cerros Project interpreted by BVN showing the juxtaposition of volcanics against sedimentary units along the Contact Fault. The sediments are interpreted by the author to be Chimu Formation quartz arenite.



Figure 7.6 Geology of Tres Cerros Project area (BVN, 2016. Map datum: PSAD56)



Figure 7.7 Geochemical signatures of target zones and Au anomaly distribution, Tres Cerros



Figure 7.8 Schematic cross section through Tres Cerros (BVN, 2018)

7.5 Mallay Mine Geology

7.5.1 Structure

The structural grain through the Property follows the Andean trend as shown by the northwesterly trend of fold axes and general strike direction of bedding. Sediments are tightly folded into nearly isoclinal folds and show plunges to the north. Reverse faults were developed along bedding planes that strike northerly, e.g., Isguiz, Pierina and San Sebastian veins. Tension faults host mineralized veins that are at high angle to bedding faults, trending 270° – 290°, and cutting through the sedimentary section in the Isguiz anticline. Lithology contrast controls vein width – veins are wider in Farrat sandstone and narrower with splits in the Carhuaz siltstone and carbonate sediments in core of the anticline. Ore shoots (*clavos*) along the Isguiz bedding-plane fault formed at intersections with the WNW-trending conjugate tension structures forming vertical bodies of massive sulfide. Mineralization is also found in bedding plane faults at the contact between the Farrat sandstone and Pariahuanca limestone, mostly as replacement-style mineralization.

The principal ore shoots measure up to 8 meters in width and 30 meters in length (horizontal dimension), averaging 0.94m in width above level 4090 m and 2.05 m below level 4090 m. Lengths of the principal ore shoots range from 15 to 30 meters. Mine workings along the WNW veins not in contact with Veta Isguiz produce from ore shoots ranging between 0.5 and 1.0 meters in width, and 15 - 25 meters in length.

7.5.2 Alteration and Mineralization

The principal ore shoots along the Isguiz structure have been filled with massive sulfide: pyrrhotite, sphalerite (marmatite), galena, chalcopyrite, pyrite, and marcasite with minor arsenopyrite and tetrahedrite. The sulfides are accompanied by orthoclase, diopside, siderite and minor actinolite; late, very fine veinlets of carbonate and siderite cut these minerals. Petrographic studies suggest a paragenetic sequence of pyrrhotite – marcasite – sphalerite – chalcopyrite I – chalcopyrite II – galena. Alteration of wall rock in Isguiz is subtle in clastic wall rocks and better developed along contact with the carbonate sediments featuring calc-silicate alteration minerals, commonly diopside and actinolite.

In the Rosa Vein, parallel to Isguiz on the opposite limb of the anticline, lead-antimony sulfosalts (boulangerite-geocronite) are found with the same mineral assemblage as Isguiz. The E-W system of veins, e.g., Maria Vein, features a suite of sulfides similar to that of Isguiz: pyrite – arsenopyrite – sphalerite – galena – chalcopyrite – tetrahedrite.

The Pierina Vein, hosted in the Jumasha limestone, shows a different suite of minerals that includes electrum and tellurides of Au-Ag. Ore and gangue minerals are pyrite, pyrargyrite, galena, arsenopyrite, sphalerite (low and high Fe), pyrrhotite, marcasite, native silver, tetrahedrite, and bournonite. Tellurides of Au-Ag were found as inclusions measuring 6 μ m to 200 μ m in galena, calcite and pyrite. Fluid inclusion studies indicate two mineralizing events: a high-temperature pulse at 300° – 350°C followed by a cooler pulse at 200° to 300 °C. Observed fluid salinity was <10% equivalent weight NaCl.

Alteration in the Pierina zone is characteristic of skarn with veins containing gangue minerals of diopside, actinolite, epidote, chlorite. The massive limestone wall rock is commonly marbleized. Further east of the Pierina zone other E-W orientated veins (Nicole, Elizabeth, Margarita, etc.), also hosted in the Jumasha limestone, exhibit a similar style of mineralization including notably high gold grades (up to 5 g/t Au). These veins are located within a brecciated skarn that has been mapped at surface and warrants further examination.



Figure 7.9 Mallay Project vein map; North and South zones are located in the Isguiz anticline.

8 DEPOSIT TYPE

Mineralogical, structural and geochemical features of the Mallay Mine and surrounding exploration targets, such as Tres Cerros, fit with the 'Cordilleran polymetallic deposit' type as described by Sawkins (1972), Einaudi (1982) and Bendezú et al (2008).

Main features of Cordilleran polymetallic deposits are:

- same geologic environment as most porphyry Cu and high-sulfidation epithermal Au–Ag deposits;
- late deposition in the evolution of the porphyry system
- deposition mostly under epithermal conditions at shallow levels beneath the paleo-surface;
- Cu–Zn–Pb– (Ag–Au–Bi) metal suites, very rich in sulfides;
- well-developed zoning of ore and alteration minerals; may present core zones of highsulfidation with advanced argillic alteration assemblages;
- early pyrite-quartz stages with low-sulfidation assemblages containing pyrrhotite-(arsenopyrite) zoned outward to Zn-Pb;
- occurrence as open-space fillings (veins, breccia bodies) in silicate host rocks and as replacement in carbonate rocks
- notably higher Ag/Au ratios than high-sulfidation epithermal Au–(Ag) mineralization.

In Peru, Cordilleran polymetallic deposits are found only in the high Andes between 3,500 and 5,000 m above sea level. Examples from northern and central Peru display a broad variety of mineral associations which form a continuum between the following two end-member styles (Bendezú, 2009):

- Strongly zoned deposits consisting of cores dominated by enargite, pyrite, quartz ± (tennantite, wolframite, chalcopyrite, covellite, chalcocite, alunite, dickite, kaolinite) and external parts by sphalerite, galena ± (sericite, kaolinite, dickite, hematite, Mn-Fe carbonates). Examples include most of Smelter-Colquijirca, parts of Cerro de Pasco, Hualgayoc, Quiruvilca, Yauricocha, Morococha, San Cristobal, Huarón, and Julcani.
- Weakly zoned deposits consisting of internal zones with (pyrrhotite), pyrite, quartz ± (chalcopyrite, arsenopyrite, tetrahedrite, carbonates, sericite, chlorite, quartz) and external zones with Fe-rich sphalerite, galena, pyrrhotite ± (MnFe carbonates, sericite, chlorite, quartz). Examples include Huanzalá, Ucchuchacua, Iscaycruz, and parts of Cerro de Pasco and Morococha.

Mineral occurrences on the Mallay property most closely match the second style of weakly zoned deposits.

Cordilleran polymetallic deposits have been historically an important source of Cu and Zn–Pb–Ag in the North American Cordillera. In Peru, Cordilleran polymetallic deposits represent the main source of zinc-lead and a significant source of silver.

Some polymetallic deposits have been found to be closely linked to a diatreme–dome complex. The Marcapunta diatreme–dome complex exposed in the center of the Colquijirca district (Figure 8.1)

consists of multiple dome-lava intrusions of mainly dacitic composition (Sillitoe 2000; Bendezú et al. 2003; Sarmiento 2004).



Figure 8.1 Model of Cordilleran polymetallic deposits applied to Colquijirca District, Peru

Geophysical surveys are a particularly effective exploration method for discovery of Cordilleran polymetallic deposits. Induced polarization (IP) surveys can detect sulfide mineralization and silicic alteration at depth with chargeability and resistivity measurements, respectively. Ground magnetic surveys are useful for delineating structural patterns within the deposit as well as defining alteration zonation around an underlying copper porphyry deposit.

9 EXPLORATION

9.1 Introduction

Excellon conducted a geochemical surface sampling program across the Tres Cerros project in December 2024 led by the author of this report. A total of 84 rock chip samples were collected from surface outcrops in the North, Central and South zones of the project area primarily focused along the Contact Fault, a prominent northerly-trending fault that juxtaposes Cretaceous sediments (quartzite with intercalated siltstone to mudstone) against Tertiary volcanics.

The objective of the 2024 sampling program was to build on the results of the BVN 2016-2018 sampling program by collecting in-fill samples along same structures and along parallel structures that had not been sampled. This plan led to 85% of the 2024 samples being collected in the quartz arenite sediments to the east of the Contact Fault.

The results of Excellon's 2024 sampling program generally confirm the findings of the previous BVN sampling program. Sulfide mineralization is primarily associated with structures that are oriented east-west with a secondary population of mineralized structures oriented to the northwest. North-south structures, such as the Contact Fault and fold axes in the sedimentary package, are less commonly mineralized. Each of the three mineralized zones associated with the Contact Fault exhibit variations on the general orientations of structural domains.

Mineralization occurs in quartz-sulfide veining filling fractures in the host quartz arenite. Black patches of amorphous sulfides are relatively rare in outcrop since most sulfide is oxidized to Fe-oxide minerals (hematite, goethite, limonite) in boxwork gossans. High metal values reported from this set of samples come from sampled vein segments having remnant sulfide in the quartz veining. Most sulfide minerals in quartz veining (e.g., galena, chalcopyrite, sphalerite) sampled in outcrop have been oxidized leading to a depleted metal values reported in surface sample assays.

Geochemical maps in the following sections present assay results of 11 elements analyzed (Au, Ag, As, Ba, Bi, Cu, Hg, Mo, Pb, Sb, Zn) from the 514 samples collected from both sampling campaigns of Excellon (2024) and BVN (2016-2018) and verification samples the author collected in 2020.

9.2 Sampling Procedures and Methods

Rock chip samples were collected using hammer and chisel to form sample channels across structures or sample panels on outcrop with stockwork veining where no dominant structural orientation could be determined. Lengths and widths of all channels and panels were measured and noted along with vein width, mineralogy, structural orientation, and wall rock alteration. Approximately 2 kg of sample material was collected at each site, bagged and tagged in sealed plastic bags.

These samples are of sufficient quality to be representative of the mineralization observed in the Tres Cerros project area. A bias may be noted in the few samples of quartz veining that contained remnant sulfides in contrast to samples of quartz veining where all sulfides had been oxidized. Field notes describe the oxidation condition of all sampled veins to mitigate this potential bias.



Figure 9.1 Plot of samples collected from the Tres Cerros Project area, current database. BVN -Buenaventura, SP – S. Park, author, CRC – Excellon/MCRC (map datum: WGS84)

9.3 Tres Cerros North Zone

Two quartz-sulfide veins in the North Zone yielded extremely high Au and Ag values. A sample taken by the author during his 2020 property visit along an easterly trending structure through quartz arenite returned over 14 g/t Au and >3,000 g/t Ag on a vein with 0.4m width. Follow-up sampling in 2024 confirmed the Au-Ag mineralization on this vein with values of >2.0 g/t Au and >1,000 g/t Ag. Several other sub-parallel structures were sampled within this same 150m x 150m area that returned anomalous Au-Ag values. These structures are also anomalous in Pb, Sb, and As with a few high values of Mo.

A quartz-sulfide vein trending ESE located 200m south of the previously described high-grade zone also returned a high value of gold, 9.313 g/t Au, accompanied by high values of Ag, Pb, and Sb with anomalously low values of Zn.

A major NW-trending fault that offsets the Contact Fault hosts anomalous Au values along a 150m strike length including samples taken within a band 25m either side of the fault. High Au-Ag values are also accompanied by high values of Ag, Pb, and Sb with anomalously low values of Zn. Interestingly, a sample taken 200m SE along the same structure returned 77 ppm Mo with no accompanying anomalous values.

Anomalous gold values >0.100 g/t Au occur well to the east of the Contact Fault indicating a large footprint of the gold anomaly. Several samples by BVN were taken in the eastern sector of the North Zone that returned up to 2.0 g/t Au.

Sample 150626 from quartz veining associated with the Contact Fault in argillically altered volcanics (intrusive?) returned 0.14 g/t Au, 315 g/t Ag, >1% Pb, and >1% Sb. A sample taken by BVN located 80m due west of sample 150626 also returned high Au-Ag: 0.631g/t Au and 684 g/t Ag. These two samples may represent an east-west structure on the volcanic side of the Contact Fault.



Figure 9.2 Gold geochemical sampling map, North Zone, BVN and Excellon combined samples



Figure 9.3 Silver geochemical sampling map, North Zone, BVN and Excellon combined samples

9.4 Tres Cerros Central Zone

Geochemical data confirm field observations that the dominant structural orientation through the Central Zone is NNW (340° – 350°), sub-parallel to both the Contact Fault and fold axes of the sedimentary pile. Secondary conjugate structures associated with moderate mineralization trend WNW across the width of the zone. Narrow quartz-sulfide veins fill these structures carrying sulfides

that are nearly all oxidized in surface outcrops. Anomalous gold values range up to 2 g/t Au with no extremely high values reported. The highest silver values are also found along N-S structures.

The geochemical signature of the Central Zone is defined by Au-Ag-As-Ba with moderate values of Cu and a small Mo anomaly in the northern sector of the zone.



Figure 9.4 Gold geochemical sampling map, Central Zone, BVN and Excellon combined samples



Figure 9.5 Silver geochemical sampling map, Central Zone, BVN and Excellon combined samples

9.5 Tres Cerros South Zone

Structures found throughout the South Zone follow two dominant orientations, NNE and NNW, although fold axes and bedding strike directions of the sedimentary pile remain largely N-S. Field mapping by BVN shows that the southern extension of the Contact Vein deviates to the SSW-NNE and is associated with secondary NNW faults offsetting the Contact Fault in an increasingly complex structural area further south.

Sampling through the South Zone revealed strong geochemical anomalies (Au-Ag-As-Bi-W) along the primary NNE structure in the zone that trends parallel to the Contact Fault. A different set of geochemical anomalies (As-Hg-Pb+Au+Ag) is found along an NNW conjugate structure that branches off the primary NNE structure suggesting that distinctly separate mineralizing events occurred in this zone. Several samples have been collected at the intersection of these two structures revealing strongly anomalous values of Au (2.44 to 4.98 g/t Au) and Ag (177 g/t Ag) accompanied by anomalous values of Cu, Pb, As, and Bi.

A small area on the volcanic side of the Contact Fault in the northwest corner of the South Zone map area shows very high values of arsenic (>10000 ppm As) along an E-W structure including moderately anomalous values of Ag (30 ppm), Pb, Ba, Bi, and Sb



Figure 9.6 Gold geochemical sampling map, South Zone, BVN and Excellon combined samples


Figure 9.7 Silver geochemical sampling map, South Zone, BVN and Excellon combined samples

9.6 Conclusions and Interpretation of Exploration Results

Geochemical data and field observations derived from the BVN and Excellon sampling campaigns define a large area of anomalous precious metal values with moderate values of copper accompanied by anomalies in 'pathfinder' elements As, Ba, Bi, Hg, Sb, and W. This geochemical

footprint outlines an area on the eastern side of the Contact Fault hosted in predominantly E-W and NW-trending fracture systems through quartz arenite of the Chimu Formation. A few of these mineralized structures cross the Contact Fault as WNW- or NW-trending conjugate structures that offset the Contact Fault.

Sulfide mineralization occurs in epithermal quartz veining, commonly with a breccia texture, hosted in fault and tension fracture structures throughout the sedimentary section. Vein widths are generally narrow, 10 to 20 cm, but several outcrops host veins of 40 to 60 cm widths but with limited strike length (<30m). Sulfides in outcrop are mostly oxidized to a boxwork gossan; high metal values from sampling came from sampling segments of quartz vein having a remnant of sulfide mineralization. Most sulfide minerals in quartz veining (e.g., galena, chalcopyrite, sphalerite) sampled in outcrops have been oxidized leading to depleted metal values reported in surface sample assays.

The three target zones along the Contact Fault have similar geochemical signatures characteristic of epithermal Au-Ag mineralization with pathfinder elements as noted above, but with noticeable differences among them. For instance, the North Zone is stronger in Ag and Sb than the other zones. The Central Zone has anomalously low values of Pb and Hg compared to the other zones. The South Zone is much stronger in As, Bi, Cu, and W than in the other zones, but these high values are found along only two structures through the sediments and in a small area of the volcanic section. The North and Central zones host small points of Mo anomalies while Mo is at much lower levels in the South. Relatively high levels of Pb and Hg in the North and South zones bracket the low levels of Pb-Hg in the Central Zone.

Low zinc values in all three zones along the Contact Fault define a negative Zn anomaly. However, in the La Estancia Zone located 1 km west of the Contact Fault, zinc and copper mineralization occurs in thin carbonate units of the Chulec(?) Formation.

The geochemical signature of the three zones along the Contact Fault and the occurrence of strong Zn-(Cu) mineralization distal to the three target zones suggest that the Tres Cerros area is located over the center of a hydrothermal system typical of porphyry copper deposits. The South Zone in particular appears to be located over the center of a potential porphyry system given the large geophysical chargeability anomaly (described in Section 6.2) and a high-temperature geochemical signature of Au-Ag-Cu-W.

Considering a larger scale, the Ag-Pb-Zn vein system of the Mallay Mine 6 km to the east may represent a distal polymetallic vein system related to the same hydrothermal center.

10 DRILLING

No drilling has been completed by Excellon on the Property.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

The author helped pack the samples collected during the December 2024 sampling campaign in sacks at the mine site and accompanied the samples to Lima for delivery to Certimin Laboratories, thereby assuring their secure delivery.

Sample preparation in the laboratory consisted of the following steps: each sample was weighed, dried for 8 hours at 100°C, passed through primary and secondary crushers to -10 mesh, then split and pulverized 250g to 95% less than minus 140 mesh. Silver was analyzed by ICP following aqua regia digestion; values >100 ppm Ag were re-run by atomic absorption after aqua regia digestion; and values >1,000 ppm Ag were determined by fire assay and gravimetric finish. Gold was analyzed by fire-assay of a 30g sample pulp, finishing with aqua regia digestion and atomic absorption (AA) with a 5 ppb detection limit. The additional 34 elements were analyzed by ICP methods following aqua regia digestion.

Overlimit analyses were required for 6 of the verification samples. Gold >10 ppm was analyzed by gravimetric analysis and fire assay; silver >100 ppm Ag and zinc >1.0% were analyzed by atomic absorption after 4 acid digestion.

Quality control of the channel sample analysis in the Certimin laboratory was managed by Certimin's own QA/QC protocols for geochemical assays. All quality control check analyses by Certimin returned results well within margins of error.

In the author's opinion, the preparation and analytical procedures carried out by Certimin Laboratories were more than adequate to produce a reliable assay result for the batch of samples submitted from the Tres Cerros project.

12 DATA VERIFICATION

During the author's site inspection at the Tres Cerros/Mallay Property on November 20 and 21, 2020, he collected two (2) samples from the San Sebastian manto and seven (7) samples in the Tres Cerros zone. The samples from the San Sebastian manto were taken from a prospect pit with no markings of previous sampling. Six of the seven samples from Tres Cerros were collected as duplicate samples of BVN samples that could be re-located and identified by sample number painted on outcrop at the sample site.

The author transported the verification samples to Lima and personally delivered them to Certimin Laboratories facility in Lima, Peru (ISO 14001, OHSAS 18001) for analysis. Certimin S.A. is completely independent from Excellon.

Sample results from the author's verification samples collected in 2020 from Tres Cerros and Sebastian project areas are presented in Table 12.1. Both samples from San Sebastian returned high values of Ag-Pb-Zn and low-grade values of Au from a structure measuring 0.20 m width.

Sites for verification samples from Tres Cerros were chosen to be duplicates of previous samples taken by BVN that returned strong values of Au. The check samples confirmed the Au anomaly with all but one sample returning >0.5 g/t Au and one sample yielding >10.0 g/t Au.

SP Sample	PS	AD56		Au	Ag	Cu	Мо	Pb	Zn	As	Bi	Sb
ID	East	North	Zone	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
247251	298924	8819104	San Seb.	0.515	125	326	3151	>1.000	1.060	>10000	<5	270
247252	298922	8819100	San Seb.	2.034	109	292	114	>1.000	1.360	>10000	<5	244
247253	290365	8819826	Tres Cerros	0.631	684	331	1	0.659	0.043	2304	<5	465
247254	290534	8819859	Tres Cerros	0.270	252	100	5	>1.000	0.004	2484	<5	>10000
247255	290494	8820117	Tres Cerros	14.790	3,774	528	30	0.643	0.017	>10000	140	5743
247256	290508	8819355	Tres Cerros	3.846	180	167	1	0.032	0.006	6264	36	84
247257	290544	8819297	Tres Cerros	0.500	17	143	2	0.023	0.003	1967	206	272
247258	290512	8819199	Tres Cerros	1.953	28	400	77	0.195	0.002	2228	29	389
247259	290603	8819053	Tres Cerros	2.518	14	135	2	0.433	0.003	2538	13	59

Table 12.1 Assay results from verification samples, Tres Cerros and San Sebastian, 2020

Figure 12.1 presents a comparison of Au assay values from sample pairs of original and duplicate samples. Given the small number of samples, it is not surprising to have a wide dispersion due to the erratic nature of gold mineralization. Two sample pairs plot as extreme outliers on opposite sides of the 1:1 trend line, one pair with a high value in the original sample that was not matched by the duplicate and one pair with a high value (> 10.0 g/t Au) in the duplicate that did not match the original sample. Gold assay values from the remaining pairs fall within a range of reasonable margin of error. The results of this limited check sampling exercise suggest that there were no systematic biases in the BVN surface sampling at Tres Cerros.

SP Sa	mple		BV Sample		
ID	ID Au_ppm		ID	Au_ppm	
247254	0.270		1987	7.690	
247255	14.790		2000	1.448	
247256	3.846		2054	2.218	
247257	0.500		2053	1.126	
247258	1.953		8138	2.752	
247259	2.518		2059	3.990	

Table 12.2 Duplicate pairs, Tres Cerros verification sampling, 2020



Figure 12.1 Plot of Au assays from duplicate sample pairs, Tres Cerros, 2020

In the author's opinion, the results from the December 2024 sampling campaign and from his 2020 verification samples more than adequately verify the reliability of the Tres Cerros geochemical database.

13 MINERAL PROCESSING AND METALLUGICAL TESTING

Excellon is in an early phase of exploration at the Property and has not undertaken any metallurgical testing of mineralized material from the Property, nor has Excellon considered methods of mineral processing.

14 MINERAL RESOURCE ESTIMATE

Excellon has no data on which to base an estimate of resources.

Items 15 through 22 are not applicable to this property as it is not considered an "advanced property" under NI 43-101 guidelines.

15 MINERAL RESERVE ESTIMATES

16 MINING METHODS

17 RECOVERY METHODS

18 PROJECT INFRASTRUCTURE

19 MARKET STUDIES AND CONTRACTS

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

- **21 CAPITAL AND OPERATING COSTS**
- **22 ECONOMIC ANALYSIS**

23 ADJACENT PROPERTIES

The Mallay concession block is located in a mining district with several operating and past-producing mines and numerous mineral occurrences (Figure 23.1). Most of the district has been covered by mining concessions, especially near known mineral occurrences and along trend of prospective host rock, locally the Cretaceous tightly folded carbonate sediments that host the nearby Ucchuchacua, Raura and Iscaycruz mines.

The Mallay property concession block shares its eastern boundary with the 'accumulation' concession block (48,300 Has.) of the Iscaycruz Mine previously operated by *Empresa Minera Los Quenuales S.A.* (Glencore subsidiary). The Iscaycruz mine site is 13 km east-southeast of the nearest mining concession of the Mallay property. Iscaycruz produces primarily zinc with silver credits (various public sources).

The western boundary of the Mallay property is contiguous with a large block of mining concessions held by Pan American Silver covering peripheral areas around several small mines, none of which are currently producing. The Condorsenga Mine (Ag-Pb-Zn) located 6 km west of the nearest boundary of the Mallay property operated recently on a limited basis (from personal visit in 2014).

Buenaventura operates the Uchucchacua Mine (Ag-Pn-Zn) located 14 km east of the Mallay Property on a large concession block. The nearest boundary of the Uchucchacua concessions to the Mallay concessions is 10 km away.

The author has been unable to verify the information in this section and the information is not necessarily indicative of the mineralization on the property that is the subject of this report.

Note: None of the adjacent properties described above show any indications of continuity of mineralization with the Tres Cerros Project, Mallay Mine nor with any other exploration targets on the Mallay concession block.



Figure 23.1 Adjacent mining concessions to the Tres Cerros Project, Mallay Property

24 OTHER RELEVANT DATA AND INFORMATION

No other data or information is necessary to add to the information presented above.

25 INTERPRETATION AND CONCLUSIONS

25.1 Tres Cerros Project

The Au-Ag mineralized area in Tres Cerros is located along a fault contact between steeply dipping quartz arenite of the Chimu Formation locally overlain by flat-lying Calipuy volcanic rocks. Strike length of the Au-Ag anomaly is 2,400 m and includes three zones of mineralization aligned along the eastern (sedimentary) side of the Contact Fault. Geochemical data and field observations derived from the BVN and Excellon sampling campaigns define a large area of anomalous precious metal values (Figure 25.1) with moderate values of copper accompanied by anomalies in 'pathfinder' elements (As, Ba, Bi, Hg, Sb, W). This geochemical footprint outlines an area on the eastern side of the Contact Fault hosted in predominantly E-W and NW-trending fracture systems through quartz

arenite. A few of these mineralized structures cross the Contact Fault into the volcanic section as WNW- or NW-trending conjugate structures offsetting the Contact Fault.

Sulfide mineralization occurs in epithermal, brecciated quartz veining hosted in brecciated fault structures throughout the sedimentary section. On a macro scale, the dominance of NW-trending structures is evident in the previous mapping by BVN and the resulting pattern of sampling such as the NW lines of samples in the volcanics in the South Zone and the prominent division of each zone by NW-trending faults across the Contact Fault. Interestingly, the most intensely sampled (mineralized) centers of each zone – North, Central, and South – are equally spaced 1 km apart in a macro example of structural periodicity.

On a micro scale, E-W-trending fractures dominate in the quartz arenite sediments commonly hosting quartz-sulfide veining, but rarely are these fractures found to have developed into faults or mineralized structures that would warrant pursuing individually. Vein widths are generally narrow, 10 to 20 cm, but several outcrops host veins of 40 to 60 cm widths but of strike lengths less than 30m. Sulfides in outcrop are mostly oxidized to a boxwork gossan; high metal values from sampling came from sampling segments of quartz vein having a remnant of sulfide mineralization.

25.1.1 Geochemical Signatures

The three target zones along the Contact Fault have similar geochemical signatures characteristic of epithermal Au-Ag mineralization with pathfinder elements as noted above, but with noticeable differences among them. For instance, the North Zone is stronger in Ag and Sb than the other zones. The Central Zone has anomalously low values of Pb and Hg compared to the other two zones. The South Zone is much stronger in As, Bi, Cu, and W than in the other zones, but these high values are found along only two structures through the sediments and in a small area of the volcanic section. The North and Central zones host small points of Mo anomalies while no Mo anomalies are found in the South. Relatively high levels of Pb and Hg in the North and South zones bracket the low levels of Pb-Hg in the Central Zone.

Low zinc values in all three zones along the Contact Fault define a negative Zn anomaly. However, in the La Estancia Zone located 1 km west of the Contact Fault, strong zinc (and copper) mineralization occurs in thin carbonate units of the Chulec(?) Formation.

The geochemical signatures (Au-Ag-As) shared by the three zones along the Contact Fault and the occurrence of strong Zn-(Cu) mineralization distal to these zones suggest that the Tres Cerros area is located over the center of a hydrothermal system typical of porphyry copper deposits. The South Zone in particular appears to be close to the center of a potential porphyry system given the large geophysical chargeability anomaly (Figure 25.3) and a high-temperature geochemical signature of Au-Ag-Cu-W.

Considering a larger scale, the Ag-Pb-Zn vein system of the Mallay Mine 6 km to the east may represent a distal polymetallic metal occurrence related to the same hydrothermal center.



Figure 25.1 Geochemical signature of each zone, Tres Cerros Project.



Figure 25.2 Footprint of Au anomaly from surface geochemical sampling (>0.100 ppm Au)

25.1.2 Geophysical Anomalies

The geophysical survey indicates that the Contact Fault in the South Zone is structurally complex, creating favorable permeability for mineralizing fluids carrying sulfides with Au-Ag. A strong chargeability anomaly was recorded measuring 800 meters in length and located along the southern segment of the contact fault in a position along trace of the fault suggesting the presence of sulfides at depth (Figure 25.3). This chargeability anomaly coincides with a resistivity low anomaly which may also represent sulfides at depth. (A caveat regarding the chargeability is that structurally complex zones may produce abundant clay leading to a high chargeability response.)



Figure 25.3 Chargeability (220 m), geology and Au geochemistry (2018), Tres Cerros. (See Figure 25.1 for the revised location of the southern extent of the Contact Fault.)

The northern limit of the chargeability anomaly coincides with a mapped NW-trending structure that offsets the Contact Fault. The southern end of the anomaly marks the intersection of the two major mineralized structures in the South Zone.

25.1.3 Styles of Mineralization

The results of the surface sampling, field observations, and the geophysical survey present two possibilities as to the target style of mineralization most likely to be encountered: 1) quartz-sulfide veining throughout fractured sedimentary wall rock forming a bulk minable target and 2) a porphyry Cu deposit at depth. Both styles of mineralization should be pursued during the continued exploration of the Tres Cerros Project.

25.2 Mallay Mine

The Mallay Mine vein system can be described by the Cordilleran polymetallic model. Principal ore shoots along the Isguiz structure have been filled with massive sulfide: pyrrhotite, sphalerite (marmatite), galena, chalcopyrite, pyrite, and marcasite with minor arsenopyrite and tetrahedrite. An assemblage of calc-silicate wall rock alteration minerals indicates a skarn environment.

Veins are controlled by shears along bedding planes and on tension structures resulting from stress related to tectonic movement responsible for tightly folded sediments. Veins hosted on beddingplane structures follow the strike direction of the host sediments, e.g., Isguiz and Pierina veins, and the San Sebastian manto. Tension faults show greater widths at depth beginning at Level 4090 m. Lithology contrast is important: veins are better developed (wider) in Farrat sandstone than in the core of the anticline occupied by Carhuaz Fm fine-grained clastic and carbonate sediments. Ore shoots along the Isguiz bedding-plane fault formed at intersections with the WNW-trending conjugate tension structures forming vertical bodies of massive sulfide. Mineralization is also found in bedding plane faults at the contact between the Farrat sandstone and Pariahuanca limestone.

Mineral potential for the Mallay Mine is clearly at depth where resource definition drilling has demonstrated that average vein width (4.89 m) is more than twice as wide as above 4090 m without a significant change in grade (AgEq). Wider veins will allow more use of bench-and-fill mining method than cut-and-fill, significantly reducing mining costs.

Other mines in the district – Uchucchacua, Iscaycruz, Raura – can also be characterized as Cordilleran polymetallic deposits and serve as examples for depth of mineralization. Uchucchacua reportedly has been mined to a depth of 600 meters, although some repetition by faulting may have extended the productive horizon. The 4090 m level in the Isguiz Zone, Mallay Mine, represents a level roughly 400 m below the current surface. Definition drilling by BVN continued to encounter grade at Level 3850 m and below in two of the principal ore shoots.

Attribute	Consequence
Ag-Pb-Zn veins hosted in folded	Vein widths vary as function of mechanical properties of
sedimentary sequence	each sediment type. Sandstone maintains greater vein
	widths than siltstone-marl units.
Mesothermal temperature range of	Skarn mineralization formed where fluid-conducting
mineralizing fluids	structures cut carbonate units.
	Vertical range of mineralization may be >600 meters
Shear structures formed on	Isguiz fault/vein located in bedding-plane fault between
bedding planes between rock types	Farrat sandstone and Pariahaunca siltstone forming major
	vein structure due to continuous nature of bedding plane
	contact.
Tension structures formed at high	These veins widen at depth from current surface in
angles to bedding planes (also	sandstone, not as well-developed in other rock types
reverse movement?)	
Richest ore shoots are located at	Generally, structural intersections can be highly irregular
high-angle structural intersections	with varying widths and grades of mineralization found
of Isguiz bedding-plane fault with	along trace of the intersection. A periodicity in grades
tension structures	and/or widths may be noted given exposure of a long
	enough length of the intersection.
Farrat sandstone allowed for best	Longitudinal sections on the principal WNW-striking
vein formation in tension fractures;	tension veins (Mary, Maria, Maricruz, Maribel) illustrate
Farrat Fm is tightly folded in the	mine workings developed in the flanks of the anticline in
Isguiz anticline.	the Farrat sandstone, and not as well-developed in the
	core of the anticline with Carhuaz Fm siltstone and marl.

	Table 25.1	Geological attributes and con	sequences, Mallav Mine
--	------------	-------------------------------	------------------------

As of the end of 2018, Mallay had defined reserves of 133,889t at 19.97 oz/t AgEq and over 250,000t at 18 oz/t AgEq in mineral resources.

Table 25.2 Summary of resource inventory*, Mallay Mine, Isguiz Zone, Dec. 2018

Category		Tonnes	Dil.Wd. (m)	Au (g/t)	Ag (oz/t)	% Pb	% Zn	AgEq (oz/t)
Reserves	Proven	102,399	1.23	0.22	6.05	3.29	6.76	19.02
	Probable	31,491	1.11	0.18	8.21	4.89	6.69	23.06
Total Reserves		133,889	1.21	0.21	6.56	3.67	6.74	19.97
Resources**	Indicated	6,762	1.56	0.00	7.37	2.23	3.42	14.59
	Inferred	251,805	4.51	0.21	6.68	4.02	4.90	18.02

*These are Historical Resources quoted in accordance with item 2.4 of NI 43-101

**Standard practice does not allow the addition of Inferred Resources to Indicated or Measured Resources.

The 2018 historical resource estimate supports Excellon's view that the Mallay Mine retains significant mineral potential. However, this estimate is not current under NI 43-101, and further work is required to verify, validate, and upgrade the estimate to meet current disclosure standards. As such, no economic analysis or production forecast is included in this report.

Note: A Qualified Person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. The issuer is not treating the historical estimate as current mineral resources or mineral reserves; the historical estimate should not be relied upon.

25.3 San Sebastian Target

Between the Pierina zone (East) and the San Sebastian target (West) are several E-W orientated veins (Nicole, Elizabeth, Margarita, etc.) hosted in the Jumasha limestone that exhibit a similar style of mineralization to the Pierina zone including notably high gold grades (up to 5 g/t Au). These veins are hosted in marbleized limestone containing gangue minerals of diopside, actinolite, epidote, chlorite. These veins are located within a brecciated skarn that has been mapped at surface and warrants further examination.

However, outcropping vein structures in the San Sebastian target are rare requiring that previous explorers had to rely on sampling from prospect pits dug on steep slopes leading to a poor understanding of the structural pattern of these veins other than the observation that these are low-angle structures. High-angle structures have also been mapped leading to doubt about orientation of drill holes.

Sampling efforts revealed a small zone with very strong mineralization similar to the Pierina zone with high values in Au, base-metals, and Mo, but the two drill holes designed to test this zone returned negative results. This was the same zone the author sampled during the 2020 site inspection that returned high values of 2 g/t Au, 125 g/t Ag, 0.3% Mo, >1% Pb and >1% Zn.

25.4 Teresa Target

Drill-testing vein structures in the Teresa target met with negative results. The drill holes were oriented at low angles (approximately -30°) over long distances in an attempt for near-perpendicular intersections with the high-angle targeted veins. Only one of the three holes intersected significant mineralization. The zone may be more structurally complex than can be appreciated from surface observation.

Available map data does not make clear the spatial relationship between the Teresa veins and the vein system of the Fortuna Mine.

26 RECOMMENDATIONS

26.1 Tres Cerros Project and Mallay Mine

Evaluation of the Tres Cerros Project and Mallay Mine should be advanced through two initial phases, independent of each other, that may be undertaken concurrently, listed below as Phases 1A and 1B. These two phases would advance the understanding of the style and potential of mineralization in the Tres Cerros Project and verify the historical mineral resources in the Mallay Mine as estimated by BVN in 2018.

26.1.1 Phase 1A – Tres Cerros

The author recommends that further exploration of the Tres Cerros Project be undertaken to:

- Confirm the potential for an open-pittable, economic gold/silver deposit by way of an intensive program of trenching and pitting across both exposed and scree-covered areas to determine the continuity and distribution of the high-grade mineralization recognized to date.
- Re-interpret and expand (if necessary) the existing geophysical and geochemical surveys with the objective of determining targets for a future drill program that would test both near-surface mineralization and presumed auriferous-argentiferous sulfide mineralization indicated by the deep IP chargeability anomaly.
- Investigate the strongly anomalous Zn-Cu results obtained in the December 2024 sampling campaign from the La Estancia exploration target in the western sector of Tres Cerros.

Estimated cost: US\$250,000

A drill program on the Tres Cerros Project will be warranted as a successive phase to Phase 1A if the trenching work establishes continuity and wide distribution of high-grade mineralization coincident with re-interpreted geophysical targets.

26.1.2 Phase 1B – Mallay Mine

The historical estimate of mineral resources as stated in 2018 suggests that considerable value remains in the Mallay Mine. As such, the author recommends that Excellon undertakes the following work program as a preliminary step toward validating the historical resource estimate.

- Check sampling and logging of drill core stored in the Mallay Mine core library to confirm the validity of the resource database,
- Complete a QA/QC program which will include selected underground survey checks where accessible
- Revise the mine block modelling using the verified mineral resource estimate established by the drill core review and by applying current and expected metal prices.

Estimated cost: US\$100,000

If these steps validate BVN's 2018 historical mineral resource estimate, then the work program should proceed to Phase 2 as described below.

26.1.3 Phase 2 – Mallay Mine

The author recommends that Excellon undertakes the following work program toward upgrading BVN's historical mineral resource estimate to current status:

- Re-open and stabilize the mine which has now been closed for 6 years.
- If necessary, re-drill selected holes to confirm data veracity (including metallurgical recovery of fresh ore).

Estimated cost range: US\$1,000,000 to US\$1,400,000

26.2 San Sebastian and Teresa

The San Sebastian and Teresa targets warrant further exploration efforts based on prospective surface sampling results. Both zones have local zones of strong mineralization that cannot be easily traced on surface. Trenching in the San Sebastian zone may be required to expose mantos and veins that reportedly gave high values of Au, Ag, Pb, and Zn associated with skarn alteration.

27 REFERENCES

- AMPHOS21 Consulting Peru S.A.C., 2017, *Actualización del estudio hidrogeológico para la profundización de la UEA Mallay, Reporte Final*; prepared for Compañía de Minas Buenaventura S.A.A.
- Bendezú, R. and Fontboté, L. 2009, Cordilleran epithermal Cu-Zn-Pb-(Au-Ag) mineralization in the Colquijirca District, Central Peru: Deposit-scale mineralogical patterns: Economic Geology, v. 104, pp. 905–944.
- Bendezú, R., Page, L., Spikings, R., Pecskay, Z., and Fontboté, L., 2008, New 40Ar/39Ar alunite ages from the Colquijirca district, Peru: Evidence of a long period of magmatic SO2 degassing during formation of epithermal Au-Ag and Cordilleran polymetallic ores: Mineralium Deposita, v. 43, pp. 777–789.
- Einaudi, M.T., 1982, Description of skarns associated with porphyry copper plutons, southwestern North America, in: Titley, S.R. (ed), Advances in geology of the porphyry copper deposits, southwestern North America: University of Arizona Press, Tucson, pp. 139–184.
- Sawkins, F.J., 1972, Sulfide ore deposits in relation to plate tectonics: Jour. Geology, v80, pp. 377–396.

CERTIFICATE of QUALIFIED PERSON

I, Steven L. Park, do hereby certify as follows:

- 1. I am a consulting geologist residing at 19505 Sedgefield Terrace, Boca Raton, Florida, 33498, USA.
- 2. I am a graduate of Mackay School of Mines at the University of Nevada-Reno, 1983, with a M.Sc. in Economic Geology. I have since practiced as a professional geologist for more than thirty years in the Americas including over 20 years of continuous exploration experience in Peru. My experience includes managing mineral exploration programs across a variety of mineral deposit types, evaluating mining projects, and producing mineral resource estimates. I am a member in good standing with the American Institute of Professional Geologists (member #10849) and a Certified Professional Geologist.
- 3. I have read the definition of "qualified person" as defined by National Instrument 43-101 and certify that by reason of my education, past relevant work experience, and professional affiliation, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 4. I am responsible for all items in the technical report entitled "NI 43-101 Technical Report on the Tres Cerros Au-Ag Project and Mallay Mine Property, Department of Lima, Perú" ("Technical Report") with an effective date of June 24, 2025.
- 5. I visited the Mallay Mine Property, subject of this Technical Report, on December 2 7, 2024.
- 6. I am independent of Excellon Resources Inc. as defined by applying the tests set out in Section 1.5 of the Instrument. I am not, nor have been, an officer, director, or employee of any corporate entity that is any part of the subject Mallay Mine Property. For greater clarity, I do not hold, nor do I expect to receive any securities or any other interest in any corporate entity, private or public, with interests in the Mallay Mine Property or to receive any other consideration besides fair remuneration for the preparation of this report. I have not earned the majority of my income during the preceding three years from any corporate entity, private or public, with interests in the Mallay Mine Property.
- 7. I have read National Instrument 43-101, Form 43-101F1, and confirm that this Technical Report for which I am responsible has been prepared in compliance with that Instrument.
- 8. I certify that, to the best of my knowledge and belief, as of the Effective Date, this Technical Report for which I am responsible contains all the scientific and technical information that is required to be disclosed so that this technical report is not misleading.

Dated this 24th day of June 2025

(signed and sealed) "Steven L. Park"

Steven L. Park M.Sc., C.P.G.

Certified Professional Geologist Number 10849 (AIPG)

DATE AND SIGNATURE OF AUTHOR

This report titled "NI 43-101 Technical Report on the Tres Cerros Au-Ag Project and Mallay Mine Property, Department of Lima, Peru", with effective date of June 24, 2025, was prepared on behalf of Excellon Resources Inc. by Steven L. Park and signed:

(signed and sealed) "Steven L. Park"

Steven L. Park

M.Sc., C.P.G.

June 24, 2025