

INDEPENDENT TECHNICAL REPORT ESPERANZA GOLD PROJECT, MORELOS STATE, MEXICO

NI 43-101 TECHNICAL REPORT



View to west from Cerro Jumil showing drill pads
Esperanza Gold-Silver Project, Mexico

Prepared for
Zacatecas Silver Corp.

By

Juan-Manuel Morales-Ramirez, P. Geo

7th March 2022

EXECUTIVE SUMMARY

Introduction

- Mr Juan-Manuel Morales-Ramirez BSc, MSc, P. Geo. (“Morales-Ramirez” or “The Author”) was requested by Zacatecas Silver Corp. (the “Company”) to produce a National Instrument 43-101 (“NI43-101”) compliant Technical Report (the “Report”) for the Esperanza Gold Project (the “Property”) in Mexico.
- The Report will be used in connection with the Company’s “Fundamental Acquisition” submission to the TSX Venture Exchange pursuant to Policy 5.3. Morales-Ramirez also understands that the report may be used to assist with raising capital in the public markets.
- The Author visited the Property on the 7th and 8th of December 2021. Field and site observations were complimented by a comprehensive review of available data and literature — comprising an extensive project data-room supplied by Alamos Gold Inc. (“Alamos”), NI43-101 compliant technical reports filed on SEDAR, and publicly available peer-reviewed scientific papers.

Property Description and Location

- The Esperanza Property is located 80 km south of Mexico City and 12 km from Cuernavaca in the State of Morelos — it consists of 8 mining concessions comprising 14,338 hectares. The Property is centred on latitude 18° 46’ N and longitude 99° 16’ W.
- The Company entered into a share purchase agreement dated February 28, 2022 (the “Definitive Agreement”) with Mina de Oro Nacional, S. A. de C. V. Under the terms of the Agreement — Zacatecas Silver has agreed to acquire all of the issued and outstanding shares of Esperanza Silver de Mexico, S. A. de C. V. (“Esperanza Mexico”), which holds title to the Esperanza Gold Project (the “Transaction”).
- In consideration of Esperanza Mexico, Zacatecas Silver has agreed to pay Minas de Oro USD 5,000,000 and issue a total of 12,140,000 common shares of Zacatecas Silver at a price of \$1.05 per share for a deemed value of USD 10,000,000 (the “Consideration Shares”) on closing of the Transaction. Upon satisfaction of these payments — Zacatecas Silver will be transferred 100% ownership of Esperanza Mexico
- The Share Purchase Agreement further provides that Zacatecas Silver will incur USD 7,500,000 to develop the Esperanza Gold Project over the next three years — and make certain contingency payments (the “Contingent Payments”) upon key milestones being accomplished in developing the Esperanza Gold Project. Namely:
 - (a) Pay USD 5,000,000 sixty (60) days after approval of an Environmental Impact Assessment Report by the applicable governmental authorities,
 - (b) Pay USD 14,000,000 within 60 days of the earlier of (i) completion of a feasibility study on the Esperanza Gold Project or (ii) Zacatecas Silver announcing its decision to construct a mine on the Esperanza Gold Project,
 - (c) Pay USD 20,000,000 180 days after commencement of commercial production on the Esperanza Gold Project.
- On closing of the Transaction, the parties will also enter into a stream agreement whereby Alamos may purchase up to 20% of any silver produced from the Esperanza Gold Project with a transfer price of 20% payable to Zacatecas Silver. The silver stream is limited to 500,000 ounces of silver.

Esperanza Gold Deposit, Mexico

- There is a 3% Net Smelter Royalty payable to Recursos Cruz Del Sur S. A. de C. V. on the Esperanza Concession and other mining concessions within a certain area of interest.
- There has been no prior mining at the Property. To the best of the Authors knowledge — there are no mining or exploration-related environmental liabilities.
- The community of San Agustin Tetlama owns the surface rights to areas that will be affected by mining and mine development — either as individual or group landowners. There are no residences within the area affected by proposed mine development.
- On October 17, 2012, the community of San Agustin Tetlama signed a Temporal Occupancy Agreement with Esperanza Mexico for a period of 15 years with the option to extend the agreement for the same period, several times, by agreement of both parties. The Agreement gives Esperanza Mexico access to enter and carry out the exploration and exploitation on the total surface of the community, for an annual fee of \$1,200,000 Mexican pesos and additional payment for the exploitation activities of \$1,600,000 Mexican pesos commencing on the third anniversary (even although the company exploiting the Esperanza deposit).

Accessibility, Climate, Infrastructure and Physiography

- The Property is located 80 km south of Mexico City and 12 km from Cuernavaca — both capable of providing a skilled workforce and infrastructure for exploration and development. All project areas are easily accessed by unpaved roads off paved public highways.
- Climate allows year-round operation. Topography is moderately rugged. It comprises a broadly northwest to southeast trending corridor of hills which host the Esperanza Deposit. Elevations vary from 1100 to 1450 metres above sea level.
- A significant percentage of the Project is covered by small trees and locally dense “scrubby” vegetation — especially on steeper slopes. Small areas of flatter ground used for cultivation of crops such as peanuts, tomatoes and corn would be suitable for leach pads and mine infrastructure in the event mine development proceeds.
- Morales-Ramirez is of the opinion that there is sufficient space within the concession for mining operations, tailings storage and waste disposal, and processing facilities

History

- During the 1970’s several adits were developed as drifts along narrow high-grade silver-bearing quartz veins hosted within the intrusive. Exploration pits and shafts were also developed in the skarn along the western contact of the intrusive.
- Recursos Cruz Del Sur S. A. de C. V. (“RCS”) acquired an exploration concession over the area in 1994. Geological mapping and rock chip sampling was completed in 1994. RCS optioned the property to Teck in 1995 — Tech conducted limited surface sampling and drilled four diamond drill holes. Teck returned the property to RCS in 1998.
- Esperanza Resources (“ESM”) signed an agreement on 25th October 2003 with RCS — whereby ESM could acquire a 100% ownership interest subject to a 3% Net Smelter Royalty.
- ESM drilled the Property between 2005 and 2012 — for a total of 42,142 metres of reverse circulation drilling (245 holes) and 26,770 m of diamond core drilling (140 holes). ESM completed two mineral resource estimates and several bench-scale and bulk-scale (30 tonne) metallurgical tests.
- There have been two Preliminary Economic Assessment reports completed for the Esperanza Project. The first PEA was

completed by Vector Engineering (2009). Golder and Associates completed the second (Golder, 2011) as an update of the work by Vector (2009). The PEA by Golder (*op. cit.*) was based on the assumption that skarn-hosted oxide gold mineralization was amenable to conventional open pit bulk mining, two stage crushing, and recovery of gold and silver on conventional heap leach pads irrigated with a dilute cyanide solution.

- In 2013 Alamos acquired ESM for US\$ 66 M in cash and warrants valued at US\$ 22 M (the latter at a 38% premium to ESM's 30 day VWAP) — thus securing the Esperanza Project. Alamos completed two mineral resource estimates — an independent estimate by Kirkham (2014) and an internal estimate by Jutras (2015). Morales-Ramirez is of the opinion that the Jutras mineral resource estimate best reflects mineralization at Esperanza.

Classification	Tonnes	Au (g/t)	Ag (g/t)	Au Eq. (oz)	Au (oz)	Ag (oz)	Au Eq. (oz)
Measured							
Indicated							
Measured + Indicated	34,352,000	0.98	8.09		1,083,366	8,936,201	
Inferred	718,000	0.80	15.04		18,375	347,192	

Alamos (year end 2014) internal mineral resource estimate (Jutras, 2015). The resource was constrained within a resource pit optimized using the following parameters: US\$ 1400 gold and US\$ 22.0 silver, gold recoveries varying from 60.4% at 0.20 g/t Au to 71.9% at 1.60 g/t Au, silver recoveries of 25%, a pit slope angle of 38° to 45°, and estimated costs of \$2.40/t (mining), \$4.20/t (processing) and \$0.64/t (G&A). Based on 0.4 g/t Au cut-off.

Morales-Ramirez has not done sufficient work to classify the Jutras (2015) historical mineral resource estimate as current mineral resources or mineral reserves — the Author is not treating the historical estimate as current mineral resources or mineral reserves.

- In 2018 Alamos shifted focus to developing an engagement strategy at all levels of community and government — resulting in significant initial support for the project. Alamos reopened the community relations office in Tetlama. During the field visit Morales-Ramirez noted significant “goodwill” between the community of Tetlama and Alamos.
- Alamos completed water well drilling in 2019 in order to maintain water concessions. A geotechnical drilling program was ongoing at the time of the Authors site visit — designed to address geotechnical short-comings in the MIA application of ESM.

Geological Setting and Mineralization

- Esperanza is located in the Guerrero Gold Belt of southern Mexico — host to several multi-million ounce gold skarn deposits associated with a 55 km long northwest trending belt of Tertiary felsic intrusive bodies hosted in a carbonate bearing, Mesozoic to Tertiary, sedimentary-volcanic sequence.
- The Esperanza project geology comprises a host sequence of grey to dark grey, fine-grained, thin to medium bedded limestone with chert bands, belonging to the Xochicalco Formation. The limestone is intruded by a northeast oriented, ovoid, medium to coarse grained, feldspar phyric granodiorite stock with an areal extent of 900 m by 500 m.
- The Esperanza gold-silver deposit is an oxidised skarn located in the south-central part of the concession area. In addition to the La Esperanza Deposit — there are at least nine other early stage exploration target areas with mineralization observed at surface.
- Gold and silver mineralization at Esperanza is spatially associated with exoskarn alteration at the contact between granodiorite and limestone. The skarns comprise a prograde and retrograde mineral assemblage. Gold mineralization is associ-

ated with retrograde alteration including sulphide mineral development and to a lesser extent formation of late jasperoid. Sulphide minerals comprise pyrite, pyrrhotite, sphalerite, chalcopyrite and arsenopyrite.

- Skarn mineralization has been strongly oxidised to hematite and sulphide minerals are only rarely observed. The entire known deposit has been oxidised.

Deposit Type

- Esperanza is an exoskarn deposit hosted by a carbonate-bearing sedimentary sequence, intruded by a granodiorite stock. Mineralization is hosted by the sedimentary strata and abuts the intrusive body, comprising of a typical skarn assemblage of prograde garnet, pyroxene, wollastonite and vesuvianite and a retrograde, overprinting assemblage of tremolite-actinolite, clays, epidote, chlorite and silica.
- Gold mineralization is thought to have formed during retrograde alteration and appears to have some spatial association with silica alteration. The skarn has subsequently been oxidised which may have caused supergene enrichment of gold.

Exploration

- To date there has been no exploration by the Company on the Property. Exploration by Teck, Recursos Cruz Del Sur S. A. de C. V., Esperanza Resources and Alamos, is discussed in Section 5 of this Report

Drilling

- To date there has been no drilling by the Company on the Property. Historic drilling by Golden Minerals is discussed in Section 5 of this Report.

Sample Preparation, Analysis and Security

- RCS, Teck and ESM implemented quality assurance and quality control procedures during sampling and drilling that followed industry-recognized standards of best practice at the time. Sample type included soil, rock-chip, channel, and drill core and RC chip samples.
- Samples collected by ESM were placed in individually labelled polythene bags, a water-proof sample number was placed inside, and bags were sealed with a single-use clip-lock tie. Appropriate chain of custody was maintained.
- Diamond drill core handling, core mark-up, logging and sampling, and RC chip logging and sampling, followed industry recognized standards of best practice. Core and RC recovery was reported as good. Morales-Ramirez is of the opinion that diamond and RC drilling, and subsequent sampling protocol, produced samples that are representative of the style of mineralization and without bias.
- All samples were prepared by ALS-Chemex Guadalajara. Samples were logged into the system and assigned a bar-code number. Samples were then crushed to a nominal 70% passing <2 mm. Crushed samples were passed through a single stage riffle splitter and pulverized to 85 % passing <75 microns.
- ESM implemented an extensive QA/QC protocol that followed industry recognized standards of best practice. This included the insertion of field blanks and certified reference materials into the samples stream — demonstrating that sample preparation was free from cross-contamination and that laboratory accuracy was good. ESM assayed field and pulp duplicates which demonstrated good field and sub-sampling precision. Over 500 pulp rejects were also assayed at independent laboratories. Approximately 90% of the pulps have a relative difference of less than 15% between the primary and secondary analyses — verifying the original assay results of ALS Chemex.

Data Verification

- Morales-Ramirez visited the property on the 7th and 8th of December 2021. The site visit included a overview of the property from the vantage point of Cerro Jumil hill, and visits to historical drill collars and outcrops, the core storage facility and the office at Tetlama. Meetings were held with the community liaison team at Tetlama.
- The author checked property boundaries and is satisfied that the boundaries coincide with the geographic field area covered in this report. There is sufficient areas within the mining concessions to accommodate mine development — such as mine offices, workshops, crushing/ processing facilities, and heap leach pads and waste dumps — in the event the project moves forward.
- Morales-Ramirez visited the Tetlama Community Liaison Office and met with Alamos community liaison staff, independent environmental consultants, and traditional land-owners. The Author is satisfied that a community engagement program is in place and that the local communities are engaging in a very positive manner.
- The historical diamond drilling and RC drilling programs — and the resultant geological, drilling and assay database — were reviewed in detail. The diamond drill core and RC chip sample security, sample preparation and assay protocol, underpinned by a QA/QC protocol implemented by ESM, followed industry recognised standards of best practice.
- The Author reviewed the exploration and drilling database. The database was well organized and appropriate for the stage of exploration and use in resource estimation. A small number of ALS Chemex assay certificates were crosschecked against the assay database. The database accurately reflected the assay certificates.
- Methodology of specific gravity measurement followed industry-recognized standards of best practice. Samples were taken every two metres from diamond drill core and Morales-Ramirez is satisfied that specific gravity assigned to the various rock-types are consistent with expected values from similar deposits worldwide.
- In order to fully verify the integrity of historical drilling, sampling and assay protocol, and historical drill database, for inclusion into a current resource estimation — the Author recommends that select diamond and RC drill holes are re-logged and re-sampled. Half cut diamond core, RC chips, and crush and pulp rejects, representing approximately 10% of the historical assay database, should be re-assayed.

Mineral Resource Estimates

- There are no current resource estimates for the Property. Historical resource estimates are discussed in Section 5 of this report.

Adjacent Properties

- There are no mining concessions or mineral exploration adjacent to the project. Mineral exploration targets proximal to the Esperanza Property are all located within Property concessions.

Other Relevant Data and Information

- The Author notes that previous operators have pursued support of the state authorities in connection with a future Environmental Impact Assessment Report (MIA) for the Esperanza Gold Project. Alamos Gold Inc. carried out significant social and community engagement related to the Esperanza Gold Project. Zacatecas Silver Corp. plans to continue such social and community engagement prior to the submitting of a MIA.
- The author is not aware of any other information or data that may be relevant to this report — other than that already disclosed in this report.

Interpretation and Conclusions

- The Esperanza Deposit is a near surface oxidized gold skarn that was extensively drill tested (144 diamond hole for 27,592 m and 245 RC holes for 42,124 m) by ESM. The deposit has been the subject of four mineral resource estimates and two preliminary economic assessments.
- The Author conducted detailed review of diamond and drilling methodology; chain of custody; drill hole/RC chip logging and sampling protocol; sample preparation and assay protocol; and QA/QC protocol. The work by ESM conformed to industry recognized standards of best practice — diamond and RC drilling assays appear to be representative of the type and style of mineralization. There was no evidence of contamination during sample preparation; certified reference material inserted into the sample stream demonstrates that the assay results of ALS Chemex are accurate; and the use of field and pulp blanks show good field precision and appropriate sampling and sub-sampling protocol.
- In order to complete a new PEA study a current mineral resource estimate will be required. Whilst there is no certainty that a current resource estimate will be defined, the Author recommends that approximately 10% of the historical assay database is verified by re-sampling of remaining half-cut core, RC chips, and crush and pulp rejects. Historical core, RC chips, and crush and pulp duplicates are stored in a very well maintained and secure facility close to site, and there are no impediments to verification re-sampling.
- The author has identified the following risk that may have a negative impact on future development of the Esperanza Gold Project:
 - # While the Company will continue to work close with all stakeholders, there is a risk that opposition could delay the exploration and development of the Esperanza Gold Project. Continued dialogue with stakeholders will mitigate this risk.
 - # Although significant exploration success has occurred on the Esperanza deposit, the results of the exploration program on key targets may be unsatisfactory to the Company.
 - # In order to develop the Esperanza Gold Project, the Company will require significant financing, of which there is no assurance.
 - # There is significant competition in the exploration and development of mineral properties — there is no assurance that the Company will successfully retain personnel with suitable experience to conduct its future programs efficiently and effectively.

Recommendations

- An exploration and development budget of USD 5,500,000 is proposed — divided into Phase I (USD 1,250,000) and Phase II (USD 4,250,000).
- **Phase I**

In order to complete a PEA study, a current mineral resource estimate will be required. Whilst there is no certainty that a current resource estimate will be defined, the Author recommends that approximately 10% of the historical assay database is verified by re-sampling remaining half-cut core, RC chips, and crush and pulp rejects. The core and sample reject facility is very well organized and this sampling can commence at any time.
- Samples should also be collected for bench-scale metallurgy to determine whether the recovery of gold and silver can be further optimized. Understanding gold and silver deportment through detailed petrological study is also fundamentally important.

- The near-deposit and concession-wide exploration potential is robust and Morales-Ramirez recommends that field mapping and reconnaissance geochemical sampling are conducted during phase I.
- **Phase II**
A total of 5000 m of drilling (USD 1,500,000) should also be allocated to step out drilling around the boundary of the historical resource estimate — with a view to potentially upgrading deposit size prior to completing a PEA of the Esperanza Deposit. The high grade feeder zone at the western flank of the intrusion is an obvious target. USD 1,500,000 is allocated to a PEA study.
- Phase II should also include 2500 m of reconnaissance drilling (USD 750,000) of near-deposit and concession wide targets identified during Phase I.
- **Phases I and II**
It is essential that the community engagement strategy that is already well designed and supported at community level — is expanded as surface exploration and drilling activities are re-commenced. These activities will generate employment which is important at community level. A total of USD 750,000 is allocated to community engagement and social initiatives during both work phases.

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1 INTRODUCTION AND TERMS OF REFERENCE

Mr Juan-Manuel Morales-Ramirez BSc, MSc, P. Geo. (“Morales-Ramirez” or “The Author”) was requested by Zacatecas Silver Corp. (the “Company”) to produce a National Instrument 43-101 (“NI43-101”) compliant Technical Report (the “Report”) for the Esperanza Gold Project (the “Property”) in Mexico. The Property is in Morelos State (Figure 1).

The Report is being prepared in respect to the proposed acquisition of Esperanza Silver de Mexico SA de CV (“Esperanza Mexico”), being the owner of the Property, by the Company pursuant to the terms of a share purchase agreement dated February 28, 2021 between the Company and Minas de Oro Nacional, S. A. de C. V., which terms are outlined in Section 3 of this report. The acquisition of the Property constitutes a “Fundamental Acquisition” pursuant to Policy 5.3 of the rules of the TSX Venture Exchange.

1.1 Scope of Work

Morales-Ramirez was asked by the Company to produce a NI43-101 technical report of the Property. The Author understands that the report will be used in connection with the Company’s “Fundamental Acquisition” submission to the TSX Venture Exchange pursuant to Policy 5.3. Morales-Ramirez also understands that the report may be used to assist with raising capital in the public markets.

1.2 Qualified Persons

This report was written by Morales-Ramirez. The Author visited the Property between the 7th and 8th of December 2021. Field and site observations were complemented by a comprehensive review of available literature.

Mr Morales-Ramirez is an independent exploration consultant with over 40 years of experience focused in Mexico. This includes specialist experience in intermediate and low sulphidation epithermal gold-silver-base metal systems as typical of the deposits in the Zacatecas region. Mr Morales holds a bachelor’s degree in Geology from the National Polytechnic Institute, Mexico, and a master’s degree in Geology from the University of Sonora, Mexico. He is a Certified Professional Geologist (CPG-11234) and member of the American Institute of Professional Geologists (AIPG). The Author is a Qualified Person for the purposes of National Instrument 43-101, the scope of this report, style of mineralization and stage of project.

1.3 Sources of Information

The information in this Report is based on several sources including: field observations by Morales-Ramirez; historical data and information provided by Alamos in an extensive data room; and publicly available reports listed in Section 18 (References).

Site Visits: Morales-Ramirez visited the property between the 7th and 8th of December 2021. During the site visits Morales-Ramirez visited a number of concession boundaries in the field to ensure that the Esperanza Gold Deposit and areas designated for mine infrastructure, and leach pads and waste dumps, are located within current concessions.

Historical Information and Data: Alamos provided access to an extensive database that included details of concession permits, royalty agreements, the entire historical exploration database, details of historical metallurgical studies, the mineral resource estimation database and files, and internal economic studies.



Figure 1: Location of the Esperanza Project (red dot), Morelos State (blue outline), Mexico.

2 RELIANCE ON OTHER EXPERTS

The Author relied wholly on information provided by the Company with respect to Section 3.1 (Legal Title), Section 3.2 (Mineral Tenure), Section 3.3 (Royalties and Holding Costs), Section 3.4 (Environmental Liabilities), Section 3.5 (Permitting) and Section 3.6 (Social Licence).

This information was provided in a “Legal Title Report” provided by Enrique R del Bosque of RB Abogados Law Firm of address Insurgentes Sur 1787 piso 6, Colonia Guadalupe Inn, Mexico D.F. C.P 01020, Mexico. The opinion letter was addressed to Zacatecas Silver Corp. dated February 7, 2022.

3 PROPERTY DESCRIPTION AND LOCATION

3.1 Property Location

The Esperanza Property is located 80 km south of Mexico City and 12 km from Cuernavaca in the State of Morelos (Figure 2). The Esperanza Property consists of 8 mining concessions comprising 14,338 hectares. The Property is centred on latitude 18°46' N and longitude 99°16' W (Figure 3).

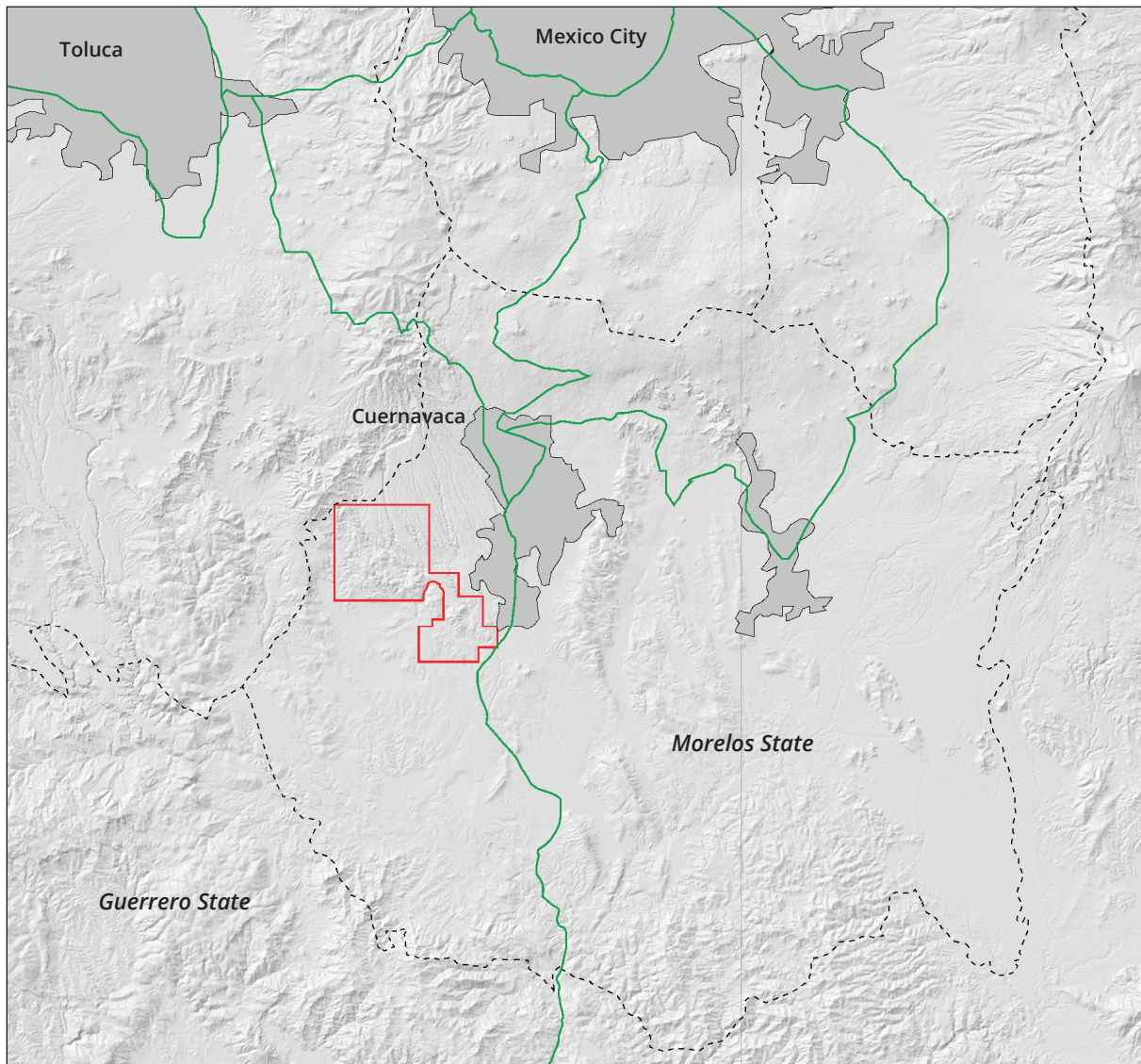


Figure 2: Project location map on shaded elevation digital terrain model (DTM) taken from 30 m Shuttle Radar Topography Mission (SRTM) data — showing the State of Morelos (dotted black outline), the major cities of Cuernavaca, Toluca and Mexico City, relevant Nation Highways (green) and the concession boundaries (red).

3.2 Verification of Licence Title Status

The author has relied upon the legal opinion of Enrique R del Bosque of RB Abogados Law Firm with address Insurgentes Sur 1787 piso 6, Colonia Guadalupe Inn, Mexico D.F. C.P 01020, Mexico (“Lawyers”) for verification of title status (see Section 3 — Reliance on Other Experts). The result of the legal title opinion conforms with the title information as shown in Table 1.

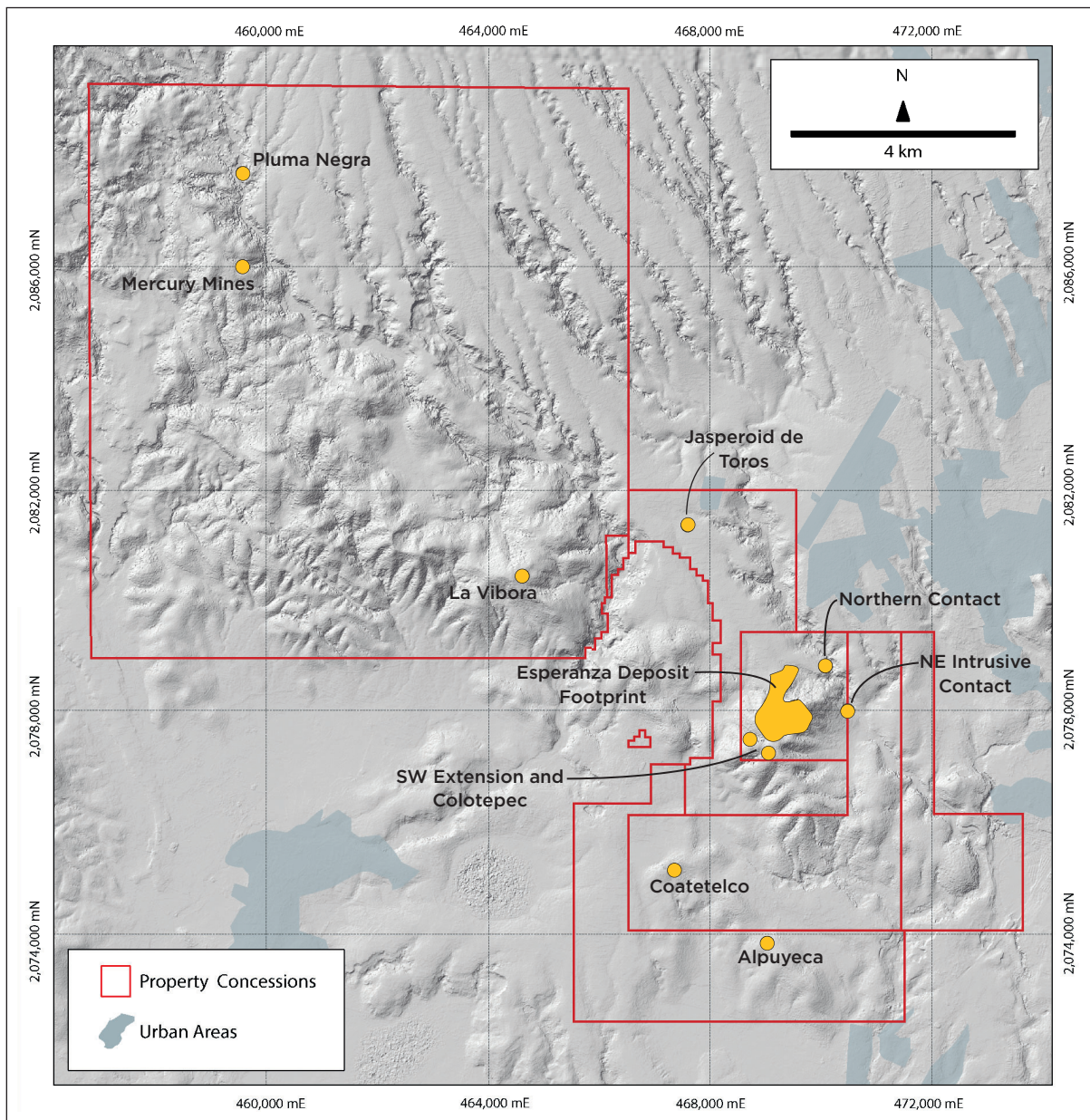


Figure 3: Esperanza Property concession map showing the Esperanza Deposit, known exploration targets, and urban areas. The base map is a shaded relief digital terrain model generated from ca. 2020 3 m SPOT data.

3.3 Grant of Concession

Article 27 of the Mexican constitution establishes that the Federal Republic owns all minerals found on Mexican Territory. In accordance with the Mining Law (in force since 1992, amended 2014), mining concessions are granted for a period of 50 years from the inscription date — subject to the payment of taxes and completion of nominal work requirements.

Concession details and expiry dates are shown in Table 1. Current mining law states that mining concessions can be renewed for an additional 50 years.

Concession	Title No.	Area (Hectares)	Title	Expiry
Esperanza	215624	437	05/03/2002	04/03/2052
Reduccion Esperanza II	245883	942	14/12/2017	29/09/2053
Esperanza III	228265	1,359	20/10/2006	19/10/2056
Reduccion Esperanza IV	245962	1,236	15/04/2008	14/04/2058
Reduccion Esperanza V Fraccion 1	245885	27.9	14/12/2017	14/05/2059
Reduccion Esperanza V Fraccion 2	245886	8	14/12/2017	14/05/2059
Reduccion Esperanza VI	245932	9,688.9	19/12/2017	10/08/2059
Esperanza VII	234784	639	14/08/2009	13/08/2059

Table 1: List of Mining Concessions.

The Ministry (Secretariat) of Mining is the Federal Mexican Government ministry charged with controlling all mining matters. An entity must apply for and be granted a mining concession in order to acquire the rights to mine minerals in Mexico. A Mexican individual may acquire mining concessions in their own name — foreign entities are required to apply through a Mexican mining corporation. In either case they are permitted to acquire up to 100% of the Mexican mining company that they form to hold mining concessions.

A mining concession applicant must identify the specific minerals that will be mined, including the exact location. These mining rights cannot hinder or restrict the rights of use and ownership that a person has on the surface of the location.

3.4 Taxes and Fees

Semi-annual taxes are paid in January and July of each year following the submittal of semi-annual work reports. Taxes are calculated based on the age of the concession within its grant period, the concession size and the annual adjusted quote published by the Official Gazette of the Federation in accordance with Articles 59 and 60 of the Mexican Mining Law (2014). The quote is adjusted annually for inflation. The fees in each of January and July are \$2,707,846 Mexican Pesos.

3.5 Purchase Agreement

Zacatecas Silver Corp. entered into a share purchase agreement dated February 28, 2022 (the “Definitive Agreement”) with Mina de Oro Nacional, S. A. de C. V. The terms of the Purchase Agreement are outlined:

Under the terms of the Definitive Agreement, Zacatecas Silver has agreed to acquire all of the issued and outstanding shares of Esperanza Silver de Mexico, S. A. de C. V. (“Esperanza Mexico”), which holds title to the Esperanza Gold Project (the “Transaction”). In consideration of Esperanza Mexico, Zacatecas has agreed to pay Minas de Oro USD5,000,000 and issue a total of issue a total of 12,140,000 common shares of Zacatecas Silver at a price of \$1.05 per share for a deemed value of USD10,000,000 (the “Consideration Shares”) on closing of the Transaction. Upon satisfaction of these payments, Zacatecas Silver will be transferred 100% ownership of Esperanza Mexico.

The Consideration Shares will be subject to the following voluntary restrictions on resale: (i) 33% will be restricted for a period of six months from closing of the Transaction, (ii) an additional 33% will be restricted for a period of twelve months from closing of the Transaction, and (iii) 34% will be restricted for a period of eighteen months from closing of the Transaction.

The Share Purchase Agreement further provides that Zacatecas Silver will make certain contingency payments (the “Contingent Payments”) upon key milestones being accomplished in developing the Esperanza Gold Project.

- (a) Pay USD 5,000,000 sixty (60) days after approval of an Environmental Impact Assessment Report by the applicable governmental authorities (the “EIA Payment”)
- (b) Pay USD 14,000,000 within 60 days of the earlier of (i) completion of a feasibility study on the Esperanza Gold Project or (ii) Zacatecas Silver announcing its decision to construct a mine on the Esperanza Gold Project (the “FS Payment”)
- (c) Pay USD 20,000,000 180 days after commencement of commercial production on the Esperanza Gold Project (the “Production Payment”).

Zacatecas Silver may, at its sole election, satisfy the Contingent Payments by issuing shares at a price equal to the 10 day VWAP prior to the issuance of such shares — provided that such share issuance does not cause Alamos to exceed 19.99% of the issued and outstanding shares of Zacatecas Silver.

Zacatecas Silver has also agreed to incur USD 7,500,000 to develop the Esperanza Gold Project over the next three years (the “Expenditure Commitment”). If Zacatecas Silver fails to meet the Expenditure Commitment, an amount equal to the shortfall will be added to the next Contingent Payment.

On closing of the Transaction, the parties will also enter into a stream agreement whereby Alamos may purchase up to 20% of any silver produced from the Esperanza Gold Project with a transfer price of 20% payable to Zacatecas Silver. The silver stream is limited to 500,000 ounces of silver.

In recognition of Alamos being a significant shareholder of Zacatecas Silver, Alamos and Zacatecas Silver will enter into an investor rights agreement that will provide, among other things, a board position to Zacatecas Silver and a right of first refusal to maintain its share position on any future financings.

3.6 Property Royalties, Back-in Rights and Encumbrances

There is a 3% Net Smelter Royalty payable to Recursos Cruz Del Sur S. A. de C. V. on the Esperanza Concession and other mining concessions within a certain area of interest.

3.7 State Royalties and Taxes

Upon commercial production, governmental royalties payable under articles 268 and 270 of the Federal Duties Law (Ley Federal de Derechos) are: (i) a mining duty payable on a yearly basis of a 7.5 per cent of the income of the sale of the mineral extracted from a mining concession minus the authorized deductions, and (ii) a mining duty payable on a yearly basis of a 0.5 per cent of the income from the sale of gold, silver or platinum minerals.

3.8 Environmental Liabilities

There are three historic municipal landfill sites within the concessions — previously used by the city of Cuernavaca and surrounding communities. Two sites have been reclaimed, capped and closed. The other site is currently inactive. Consultores Ambientales Asociados (“CAA”) (Kirkham 2014) noted several environmental problems regarding contamination from these landfill areas, including oil seepage. Local municipalities are responsible for reclamation and subsequent environmental remediation of the landfill

There has been no prior mining at the Property. To the best of the Authors knowledge — there are no mining or exploration-related environmental liabilities.

3.9 Permitting

Exploration activities that impact the environment are regulated by the Secretaria del Medio Ambiente y Recursos Naturales (SEMARNAT) under the Ley General de Equilibrio Ecológico y Protección Ambiente (LGEEPA). Permitting requirements are determined by climatic zone, the degree of planned surface disturbance and whether other overriding restrictions such as protected areas exist. For exploration activities such as mapping, geochemical sampling, geophysics, with negligible surface or vegetation disturbance, no permitting is required.

SEMARNAT regulation NOM120 (2011) establishes the scope and reporting requirements for exploration activities that require surface disturbance — such as trenching and building of access roads. Under this regulation an “Informe Preventivo” must be submitted to SEMARNAT. The report describes the proposed surface disturbance and work to be completed, specific risks to the environment, plan to mitigate impact, and plans for reclamation following the completion of work.

If the surface disturbance is more than the limits outlined by, or is in an area not covered by NOM120, further environmental studies must be completed and a “Manifestación de Impacto Ambiental” (MIA) must be submitted to SEMARNAT. This is an environmental impact statement that must be reviewed and approved by SEMARNAT. Permitting for mine construction and operation is subject to the preparation and submission of a MIA.

If the mining activity also requires the permanent physical disturbance of the surface such as the construction of mine infrastructure — then an application must be made for a “Cambio de Uso de Suelo Forestal e Impacto Ambiental” (change of land usage).

Esperanza completed a Preliminary Economic Assessment (“PEA”) with respect to the Esperanza Gold Project in September 2011. In June 2013 Esperanza received notification from SEMARNAT that the initial environmental permit application (known as the MIA) was not approved. Kirkam (2014) notes “details of inadequacies are available on the SEMARNAT website at www.semarnat.gob.mx using reference number 17MO2012M0005”.

Esperanza Mexico is the titleholder of the water concession number 04MOR101097/18FMDA12 located in San Agustín Tetlama, Municipality of Temixco, State of Morelos (geographic coordinates L.N. 18° 49’ 37.9” and L.W. 99° 17’ 38.9”), with an annual volume of 660,374.00 m³ for industrial uses.

Alamos commenced geotechnical drilling in 2020 to address cited inadequacies in the MIA. Zacatecas will need to complete this work and resubmit an the Environmental Impact Assessment (“EIA”) report that adequately addresses the deficiencies.

3.10 Social License and Surface Rights

The following condensed interpretation and translation of the Mexican Mining Law on Surface Rights was extracted from the International Comparative Legal Guides website: <https://iclg.com/practice-areas/mining-laws-and-regulations/mexico>.

Mining concession holders may use lands where mining concessions are located. Use of the lands may be through ownership or possession of lands (e.g., Lease Agreements/Temporary Occupation Agreements/Expropriation through an Administrative Proceeding, and others). The Mexican Constitution recognises the following surface rights:

- (i) Bienes Comunales (social land granted to indigenous communities)
- (ii) Ejidos (social land granted to individuals or communities)
- (iii) National Land
- (iv) Zonas Federales (Federal areas, beaches and river causes)
- (v) Private Property.

A private commercial mining company may acquire property types mentioned in points (i), (ii) and (v) above — the consideration payable usually agreed between the parties.

In accordance with Mexican Mining Law — mining activities should be approved ahead of any other use or exploitation of the land where the mining concessions are located. The Mexican Mining Law and its Regulations provide rules under which a mining concession holder may require the expropriation or the temporary occupation of the land when it does not reach an agreement with the landowner. In the case of expropriation, the consideration is payable based on an appraisal made by an Agency of the Mexican Government. Morales-Ramirez notes:

- The community of San Agustin Tetlama owns the surface rights to areas that will be affected by mining and mine development — either as individual or group landowners. There are no residences within the area affected by proposed mine development. On October 17, 2012, the community of San Agustin Tetlama signed a Temporal Occupancy Agreement with Esperanza Mexico for a period of 15 years with the option to extend the agreement for the same period, several times, by agreement of both parties. The Agreement gives Esperanza Mexico access to enter and carry out the exploration and exploitation on the total surface of the community, for an annual fee of \$1'200,000 Mexican pesos and additional payment for the exploitation activities of \$1'600,000 Mexican pesos since the third anniversary, even though the company does not carry out such activities.
- In addition, Esperanza Mexico entered into Temporal Occupancy Agreements with a number of possessors (“comunero”) with a plot of land (“parcela”) inside the surface area contracted.
- All exploration has been conducted in an area with moderate to rugged terrain with small trees and locally dense vegetation. Consultores Ambientales Asociados (CAA) compiled environmental impact data that is being used to change the land use status to mining.
- The United Nations (UN) conducted a site inventory of possible archaeological artefacts in the 1960s and identified ruins on the top of Esperanza. The Instituto Nacional de Antropología e Historia (INAH) has currently applied road construction restrictions to this small area. These restrictions do not affect exploration work in the concession area because the mining concessions are located east of the Xochicalco archaeological site.

3.11 Other Factors and Risks

Beyond the information provided in Sections 3.1 to 3.10 of this report, the Morales-Ramirez is unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the Esperanza Property.

4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 Accessibility

The Esperanza Property is located 80 km south of Mexico City and 12 km from Cuernavaca (Figure 2). The property is accessed by the paved Morelos Highway 95 to a point seven km north of Alpuyeca — thereafter a dirt road turns off to the landfill and then continues 2.75 km onto the property. The road is passable year round by two-wheel-drive vehicles.

4.2 Climate

Cuernavaca has a tropical savannah climate (as defined by the Köppen climate classification) with a maximum average high temperature of 25°C — March to May are the hottest months with average high temperatures of 28.8°C and 30.1°C. (Servicio Meteorológico Nacional, 2016). The daily mean temperature throughout the year ranges from 18.7°C (January) to 23.5°C (May). Average low temperatures range from 12.2°C (January) to 17.3°C (May) From a climatic perspective it is possible to operate year-round

Rainfall is seasonal. June to September are the wettest months with average of 16 to 18 rainy days with an average of 5 to 6 mm of rainfall a day — December to February are the driest with less than two rainy days a month. Absolute humidity ranges from ca. 6.5 to 7.8 g/m³ in December through March and between 10.4 to 11.7 g/m³ June to September. This equates to a relative humidity of 40 to 50% in the driest months — rising to 65 to 75% in the wettest months.

4.3 Physiography

The Property is located close to the southern edge of the Trans-Mexican Volcanic Belt — an approximately 1000 km long, broadly east-west trending, active continental arc, that is between 90 to 230 km wide. The Mexican Plateau lies to the north and bounded by the Sierra Madre Occidental to the west and Sierra Madre Oriental to the east.

Topography at the Property is moderately rugged. It comprises a broadly northwest to southeast trending corridor of hills which host the Esperanza Deposit — separated by relatively flat narrow valleys (Figures 4 to 7). Elevations range from 1100 to 1450 m.

4.4 Vegetation and Land Use

A significant percentage of the Project is covered by small trees and locally dense “scrubby” vegetation — especially on steeper slopes. Small areas of flatter ground are used for cultivation of peanuts, tomatoes, corn, and agave. Local grassy areas are also used for grazing cattle and horses — goats also graze the steeper vegetated slopes. There are no residences on the concessions in the area that may impact project work or mine development.

4.5 Infrastructure and Local Resources

The Project is located within 80 km of Mexico City — the Capital of Mexico with population ca. 22 million. Travel time by road between Mexico City and Cuernavaca is approximately 1.5 hours on the paved “autopista” 95D. Cuernavaca (12 km from the Project) is a city with a population of over 1 million. Mexico City and Cuernavaca are capable of meeting all logistic, labour and equipment needs. The Community of Tetlama — who own the surface rights at the Esperanza gold-silver project — has limited services but can provide labour.

There is no infrastructure on the property, other than single vehicle, dirt access roads and roads to drill pads. Morales-Ramirez is of the opinion that there is sufficient space within the concession for mining operations, tailings storage and waste disposal, and processing facilities.

Mexico is a mining-focused country with a highly skilled and mobile workforce. Morales-Ramirez is of the opinion that any development at the Property could be serviced with relevant skilled personnel and equipment.



Figure 4: View to the west-southwest from Cerro Jumil showing historical drill pads. The low scrubby vegetation is typical and covers slopes throughout the area.

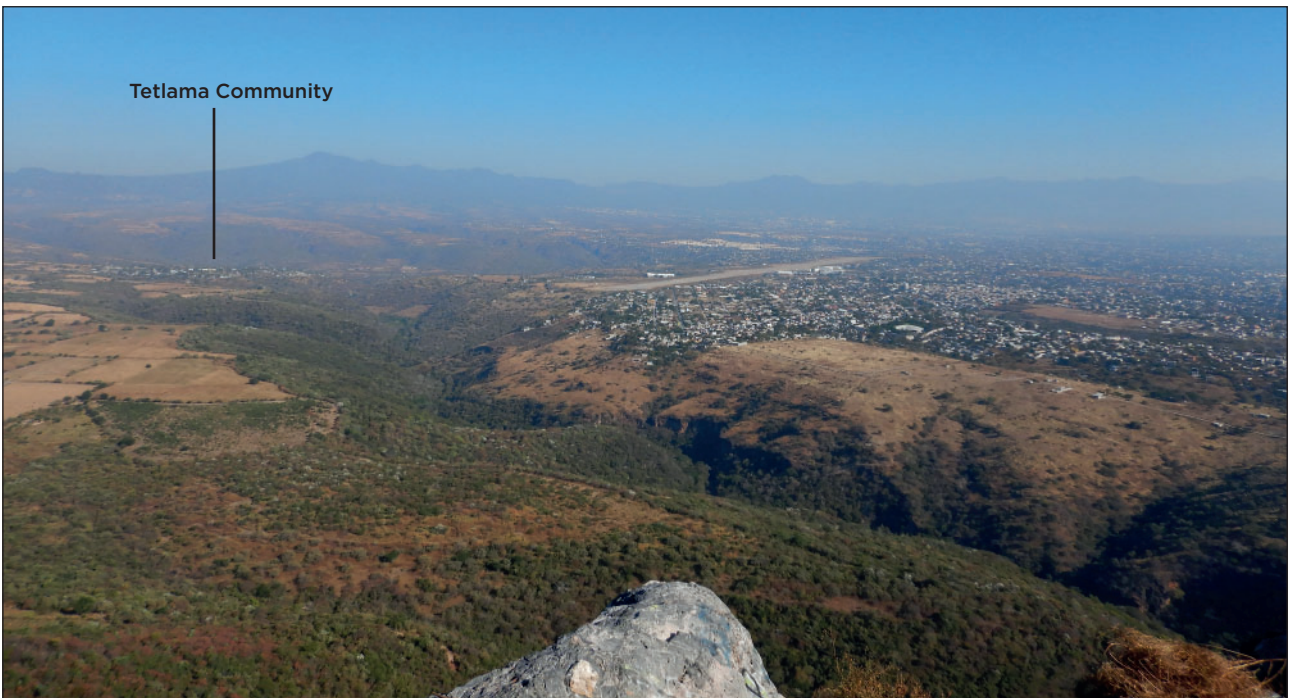


Figure 5: View to the northeast from Cerro Jumil showing flat area at left — the proposed site for leach pads. Note also the community of Tetlama, a small airport used for pilot training in light aircraft, and Villa de las Flores urban area.



Figure 6: View to the north-northwest from Cerro Jumil showing a flat area of fields — the planned location of the heap leach pads. Note the community of Tetlama.



Figure 7: View to the northwest from the Xochicalco archaeological site with visitor centre in the foreground. The distance is approximately 3 km.

5 HISTORY

5.1 Pre-Alamos Exploration History

The earliest exploration history of the Esperanza Project is poorly constrained with respect to detailed time-line and activity — but likely commenced in the 1970's. Morales-Ramirez notes:

- During the 1970's several adits were developed as drifts along narrow high-grade silver-bearing quartz veins hosted within the intrusive. Exploration pits and shafts were also developed in the skarn along the western contact of the intrusive. There are no records of production — but operations were small scale and production was likely insignificant.
- Recursos Cruz Del Sur S. A. de C. V. ("RCS") acquired an exploration concession over the area in 1994. Geological mapping and rock chip sampling was completed in 1994. RCS optioned the property to Teck in 1995.
- Teck commenced exploration in 1996 — comprised of surface geological mapping, rock-chip sampling, trench sampling, airborne magnetic and radiometric surveys, and a limited induced polarization survey. Helicopter-based magnetic and gamma-ray radiometric surveys were completed by Terraquest Ltd with a nominal 100 m terrain clearance and 100 m line spacing.

Teck also contracted and completed a gradient time domain induced polarization and resistivity survey completed by Quantec in 1997 that covered the southern intrusive contact zone with five lines spaced 150 m apart. Readings were taken at 25 m intervals. Transmitter dipole spacing was 850 m to 1700 m with later detail at 200 m to 1300 m. Results were plotted on plan maps and stacked gradient cross sections. The work is considered reliable and indicates several geophysical anomalies.

- Teck completed four diamond drill holes (822 m) in 1998 which targeted geophysical anomalies. Teck returned the property to RCS in 1998.
- Prior to the expiry date of the exploration concession in 2000, RCS applied for an exploitation concession that was granted on March 5, 2002. Since that time the mining laws have changed and all concessions are now considered "mining concessions" with an expiry date of 50 years.
- In 2002 RCS engaged Geo Asociados S. A. de C. V. to complete a 20 km of gradient time-domain IP and resistivity survey — focused on depths of between 200 to 300 m. The survey extended the previous Quantec survey to the north and south.
- Esperanza Resources ("ESM") signed an agreement on 25th October 2003 with RCS — whereby ESM could acquire a 100% ownership interest subject to a 3% Net Smelter Royalty ("NSR"). ESM completed additional geological mapping and sampling programs in 2004 through to April 2006, which defined the West Zone and Southwest zone gold skarn targets. ESM completed diamond core and RC drilling directed at evaluating the western and eastern contacts of the intrusive where skarn development and gold mineralization occurs. ESM completed the acquisition of 100% the Property in 2006.
- Mapping and surface geochemical sampling provided an effective vector to mineralization. ESM conducted an extensive rock-chip sampling and costean (285) sampling program — if samples by Teck are included then over 1300 rock-chip and costean samples have been taken. ESM also collected a total of 84 soil samples — taken at 25 m intervals along four lines 500 m lines spaced 100 m apart.

- ESM released a PEA in 2011 (see section 5.6 below) which highlighted an after-tax NPV5% of US\$ 122M at a production of >100 Koz Au per annum.

5.2 Acquisition and Activity by Alamos

- In 2013 Alamos acquired ESM for US\$ 66 M in cash and warrants valued at US\$ 22 M (the latter at a 38% premium to ESM's 30 day VWAP) — thus securing the Esperanza Project.
- In 2014 Alamos obtained water concessions for the project. Alamos also commenced internal engineering studies towards a 2016 internal scoping study.
- An updated mineral resource estimate was released Kirkham (2014). This was followed by an updated internal mineral resource estimate (Jutras 2015).
- Alamos (2016) released an internal scoping study (at preliminary feasibility level) which highlighted an after-tax NPV5% of US\$ 122M.
- In 2018 Alamos shifted focus to developing an engagement strategy at all levels of community and government — resulting in significant initial support for the project. Alamos reopened the community relations office in Tetlama. This was visited by Morales-Ramirez during his site visit who noted significant “goodwill” between the community of Tetlama and Alamos.
- Alamos completed water well drilling in 2019 in order to maintain water concessions. A geotechnical drilling program was ongoing at the time of the Authors site visit — designed to address geotechnical shortcomings in the environmental permit application of ESM (Section 3.9 of the Report).

5.3 Historical Drilling

- Teck drilled four diamond core holes (822 m) which intercepted weakly anomalous gold mineralization with moderate silver grade.
- ESM drilled the Property between 2005 and 2012 — for a total of 42,142 metres of reverse circulation drilling (245 holes) and 26,770 m of diamond core drilling (140 holes). ESM's completed drilling in phases — Phases 1 and 2 comprised exploration drilling; Phase 3 was infill drilling for estimation of a maiden resource; Phase 4 comprised additional exploration drilling; and Phase 5 was infill drilling in support of an updated mineral resource estimate. Phase 5 included geotechnical and metallurgical investigations.

Company	Phase	No. Holes Diamond	Total Metres	No. Holes RC	Total Metres
Teck		4	822		
ESM	Phase 1	8	1,168		
	Phase 2	23	3,672		
	Phase 3	33	6,987	106	19,464
	Phase 4			74	9,469
	Phase 5	76	14,943	65	13,191
		144	27,592	245	42,124

Table 2: Summary of historical drilling by Teck and ESM.

- Teck and ESM collared in HQ diameter core and reduced to NQ or NQ2 diameter core in poor ground conditions or where required to meet target depth. ESM used 4.5 to 5.5 inch diameter reverse circulation drill holes between 2007 and 2010. All collars were closed with a cement block labelled with the hole name, inclination and azimuth. Drilling technique is discussed in Section 9.0 (Drilling).

5.4 Historical Mineral Resource Estimates

There are no mineral resource estimates by the Company. Four historical resource estimates are outlined below for historical completeness and project context. The historical mineral resource estimate by Jutras (2015) — albeit an internal Alamos resource — is considered most relevant and is discussed in most detail.

5.4.1 2011 Mineral Resource Estimate

A 2011 mineral resource estimate (Bond *et al.*, 2011) formed the basis of the 2011 Preliminary Economic Assessment. The 2011 mineral resource estimate delineated three mineralized zones — the Southeast (SEZ), Las Calabazas (LCZ), and West Zones (WZ) — with 935,000 Au Eq. ounces in the Measured and Indicated categories and 252,000 gold equivalent ounces in the Inferred category. A 0.3 g/t Au-Eq. cut-off was used.

Classification	Tonnes	Au (g/t)	Ag (g/t)	Au Eq. (oz)	Au (oz)	Ag (oz)	Au Eq. (oz)
Measured	10,111,000	0.87	0.9	0.88	282,000	296,000	285,000
Indicated	24,295,000	0.81	2.1	0.83	630,000	1,655,000	649,000
Measured + Indicated	34,406,000	0.83	1.8	0.85	913,000	1,951,000	935,000
Inferred	8,596,000	0.83	6.9	0.91	230,000	1,904,000	252,000

Table 3: Boyd *et al.* (2011) resource estimate based on 0.3 g/t Au Eq. cut-off. Au Eq. was based on silver to gold ratio of 56:1 and an Au:Ag recovery ratio of 0.62 as used. A specific gravity of 2.5 g/cm³ was assigned to SEZ, LCZ and WZ high grade, 2.64 g/cm³ to SEZ, LCZ and WZ low grade, 2.4 g/cm³ to SEZ, LCZ and WZ quartz porphyry, 2.68 g/cm³ for internal waste, and 2.6 g/cm³ to lithologies outside of defined zones.

Morales-Ramirez has not done sufficient work to classify the 2011 historical mineral resource estimate of Bond et al. as current mineral resources or mineral reserves — neither is the Author is not treating the historical estimate as current mineral resources or mineral reserves.

5.4.2 2012 Mineral Resource Estimate

A 2012 mineral resource estimate was completed by DTM Geosciences and Riaan Herman Consulting (DTM and RHC., 2012). At a 0.3 g/t Au Eq. cut-off — a gold-silver resource of 1,625,509 Au Eq. ounces (measured and indicated) and 197,318 Au Eq. ounces (inferred category) was estimated. The resource comprised the SEZ, LCZ and WZ zones. Gold is hosted in all three zones — silver is concentrated in WZ and LCZ.

Classification	Tonnes	Au (g/t)	Ag (g/t)	Au Eq. (oz)	Au (oz)	Ag (oz)	Au Eq. (oz)
Measured	30,359,337	0.97	9.63	1.06	946,793	9,399,605	1,034,640
Indicated	19,976,179	0.82	10.3	0.92	526,644	6,615,165	590,869
Measured + Indicated	50,335,516	0.91	9.90	1.00	1,473,437	16,014,769	1,625,509
Inferred	7,970,472	0.66	10.90	0.77	169,129	2,793,197	197,318

Table 4: Boyd *et al.* (2011) resource estimate based on 0.3 g/t Au Eq. cut-off, a gold price of US\$ 1200 per ounce and silver price of US\$ 22.5 per ounce, and gold and silver recoveries of 68% and 35% respectively.

The mineral resource estimate was based on 362 drill holes totalling 64,809 m — comprising 121 diamond core holes (22,822 m) and 241 reverse circulation holes (41,987 m) in 241 circulation holes. The database included 3615 specific gravity (“SG”) measurements — an SG of 2.50 was applied to high grade SEZ, LCZ & WZ material, 2.64 was applied to low grade SEZ, LCZ & WZ, 2.40 was applied to SEZ, LCZ & WZ quartz porphyry; and 2.64 was applied to units outside of defined zones (such as limestone).

Ordinary Kriging was used for the interpolation of gold and silver grades into the block model domains. Interpolation inputs included the 2 metre composite database (constrained inside each of the geologically modelled domains), the variogram models and the search ellipsoid configurations. Separate ordinary kriging estimations were generated for each of the geological domains. These envelopes were used as hard boundaries with only composites coded within the envelopes used to estimate the corresponding blocks. The resulting gold grade block model is not “smoothed” across the grade boundaries — as a result the high and low grade gold domains closely honor the surrounding composites used for estimation.

Validation of interpolated grades was performed through statistical validation, kriging efficiency, slope regression, visual validation, and spatial validation using trend analysis.

The gold equivalent value was calculated from the gold and silver block model grades using a gold price of US\$1200/oz, a silver price of US\$22.50/oz, and recoveries of 68% for gold 35% for silver 35%.

Morales-Ramirez has not done sufficient work to classify the DTM (2012) historical mineral resource estimate as current mineral resources or mineral reserves — neither is the Author is not treating the historical estimate as current mineral resources or mineral reserves.

5.4.3 2014 Kirkham Mineral Resource Estimate

Kirkham Geosystems Ltd (Kirkham, 2014) cites a measured and indicated resource estimate of 75.638 Mt @ 0.637 g/t Au and 4.688 g/t Ag for 1.507 Moz Au and 16.546 Moz Ag. The inferred resource estimate comprises 6.746 Mt @ 0.737 g/t Au and 4.8 g/t Ag for 135 Koz Au and 1.722 Moz Ag. A cut-off grade of 0.2 g/t Au was used.

Classification	Tonnes	Au (g/t)	Ag (g/t)	Au Eq. (oz)	Au (oz)	Ag (oz)	Au Eq. (oz)
Measured	7,620,000	0.567	4.6		158,000	1,151,000	
Indicated	68,018,000	0.645	4.7		1,349,000	15,395,000	
Measured + Indicated	75,638,000	0.637	4.69		1,507,000	16,546,000	
Inferred	6,746,999	0.737	4.8		135,000	1,722,000	

Table 5: Kirkham (2014) resource estimate based on 0.2 g/t Au cut-off, US\$ 1600 gold and US\$ 24.0 silver, and gold and silver recoveries of 65% and 25% respectively. A specific gravity of 2.64 g/cm³ was assigned to the ore zones and to the other material — the quartz porphyry was assigned a specific gravity value of 2.40 g/cm³.

The mineral resource estimate was based on 388 drill holes totalling 64,809 m and a 0.2 g/t Au cut-off. The resource was modelled using a 1.5 m composite length — deemed optimal to minimize grade smoothing and to reduces the influence of very high-grade but narrow samples. The influence of composites above 15 g/t Au and 200 g/t Ag was limited to a 25 m radius — whereby these assays did not influence the estimation of a block outside of this radius.

Specific gravity values were coded into the block model by zone using the same values and assumptions as the 2011 Preliminary Economic Assessment (Bond et al, 2011) and the 2012 DMT Resource Estimate (Hermann

et al, 2012). A specific gravity of 2.64 g/cm³ was assigned to the ore zones and to the other material. The Quartz Porphyry was assigned a specific gravity value of 2.40 g/cm³.

The chosen block size was 10 x 10 x 5 m to roughly reflect the available drill hole spacing and to adequately define the deposit. The block model grades were estimated using ordinary kriging. Estimates were validated using the Discrete Gaussian Correction model. During grade estimation, search orientations were designed to follow the general trend of the mineralization in each of the zone domains.

Morales-Ramirez has not done sufficient work to classify the Kirkham (2014) historical mineral resource estimate as current mineral resources or mineral reserves — neither is the Author is not treating the historical estimate as current mineral resources or mineral reserves.

5.4.4 Alamos Mineral Resource Estimate

Alamos provided a 2014 year-end mineral resource update for the Esperanza Project (Jutras, 2015). The modelling by Jutras (2015) was designed to build on the Kirkham model — with specific emphasis on creating a realistic representation of the mineral resource through better modelling of a true 3-D geologic model and an unfolding technique for grade estimation (Figures 8 and 9).

Classification	Tonnes	Au (g/t)	Ag (g/t)	Au Eq. (oz)	Au (oz)	Ag (oz)	Au Eq. (oz)
Measured							
Indicated							
Measured + Indicated	34,352,000	0.98	8.09		1,083,366	8,936,201	
Inferred	718,000	0.80	15.04		18,375	347,192	

Table 6: Alamos (year end 2014) internal mineral resource estimate (Jutras 2015). The resource was constrained within a resource pit optimized using the following parameters: US\$ 1400 gold and US\$ 22.0 silver, gold recoveries varying from 60.4% at 0.20 g/t Au to 71.9% at 1.60 g/t Au, silver recoveries of 25%, a pit slope angle of 38° to 45°, and estimated costs of \$2.40/t (mining), \$4.20/t (processing) and \$0.64/t (G&A). Based on 0.4 g/t Au cut-off.

The resource was based on 388 holes — as for the Kirkham (2014) update. The average spacing of the drill hole data is 31.7 m with a median of 23.9 m. The orientation of holes is mainly to the northwest and southeast with dips varying from -40° to -90.

Original samples were composited to regular 1.5 m length intervals based on their most common sampling length. High-grade outliers were statistically examined with probability plots and plots from a cutting statistics utility — whereby thresholds limits were established for all metals of interest for mineralized and un-mineralized units. Composited grades greater than these thresholds were reduced to the threshold values established for each metal of each unit.

A new variographic analysis was carried out on the gold and silver assays to model their spatial continuity. Relative pairwise variograms were utilized for this exercise. Down-hole variograms were helpful in determining the nugget effect while omni-directional variograms helped in determining the sill. A set of directional variograms were then performed to establish the best direction of continuity. Another set of variograms were performed to assess grade continuity in the plane of the best direction and perpendicular to it. The final directions of continuity were modelled with a spherical model

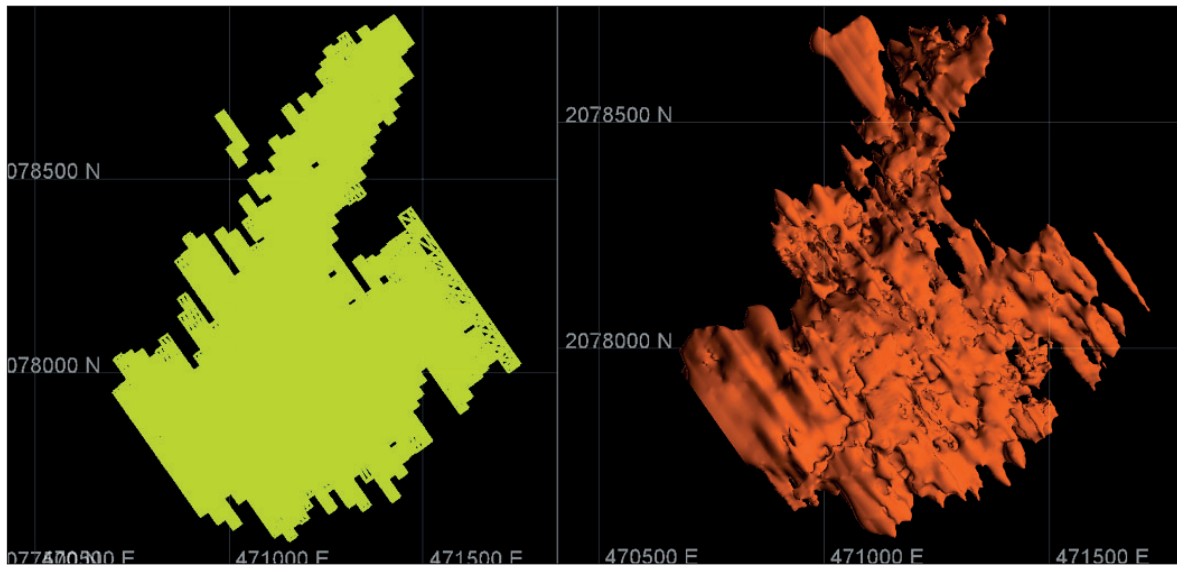


Figure 8: Geological model of skarn (Kirkham, 2014 at left) and Alamos (Jutras, 2015 at right). The Alamos version is a much better representation of skarn mineralization. Taken from Jutras (2015).

The estimation of grades was performed with the ordinary kriging method on capped composites. An added step in the estimation strategy was the utilization of the dynamic anisotropy technique in Vulcan’s unfolding options. This approach assigns azimuth, dip, and plunge angles to each block being estimated — angle values are derived by an upper and lower surface that is built to reflect the specific antiform shape of the orebody (Figure 9). During estimation, the search ellipsoid is oriented on a block by block basis according to these angles — allowing for a more realistic outcome of the estimated grade’s spatial distribution as it follows the folded shape of the deposit. In contrast, a standard approach (without the unfolding) could not generate a spatial distribution of grade estimates along each flank of the fold as well as in the hinge area.

Morales-Ramirez has not done sufficient work to classify the Jutras (2015) historical mineral resource estimate as current mineral resources or mineral reserves — the Author is not treating the historical estimate as current mineral resources or mineral reserves.

5.5 Historical Mineral Processing and Metallurgical Testing

There has been no mineral processing or metallurgical testing by the Company. A variety of studies have been completed by various metallurgical consultancies since 2005.

- The Esperanza Deposit is an extensively oxidized gold-silver mineralized skarn — as such metallurgy focused on cyanide heap-leach scenarios.
- Test-work has included extensive cyanide bottle roll tests designed to study the effects of time, pH, pulp density, grind size and reagent concentration — with respect to optimizing the potential and parameters of gold and silver recovery by heap leaching. Results demonstrate that there are no unusual factors — such as mineralogical make-up of the ore — that might preclude using heap leach as the processing option.
- Column leach tests conducted by SGS Mineral Services (2008) were completed on crushed ore to determine precious metal recoveries for the plant design.

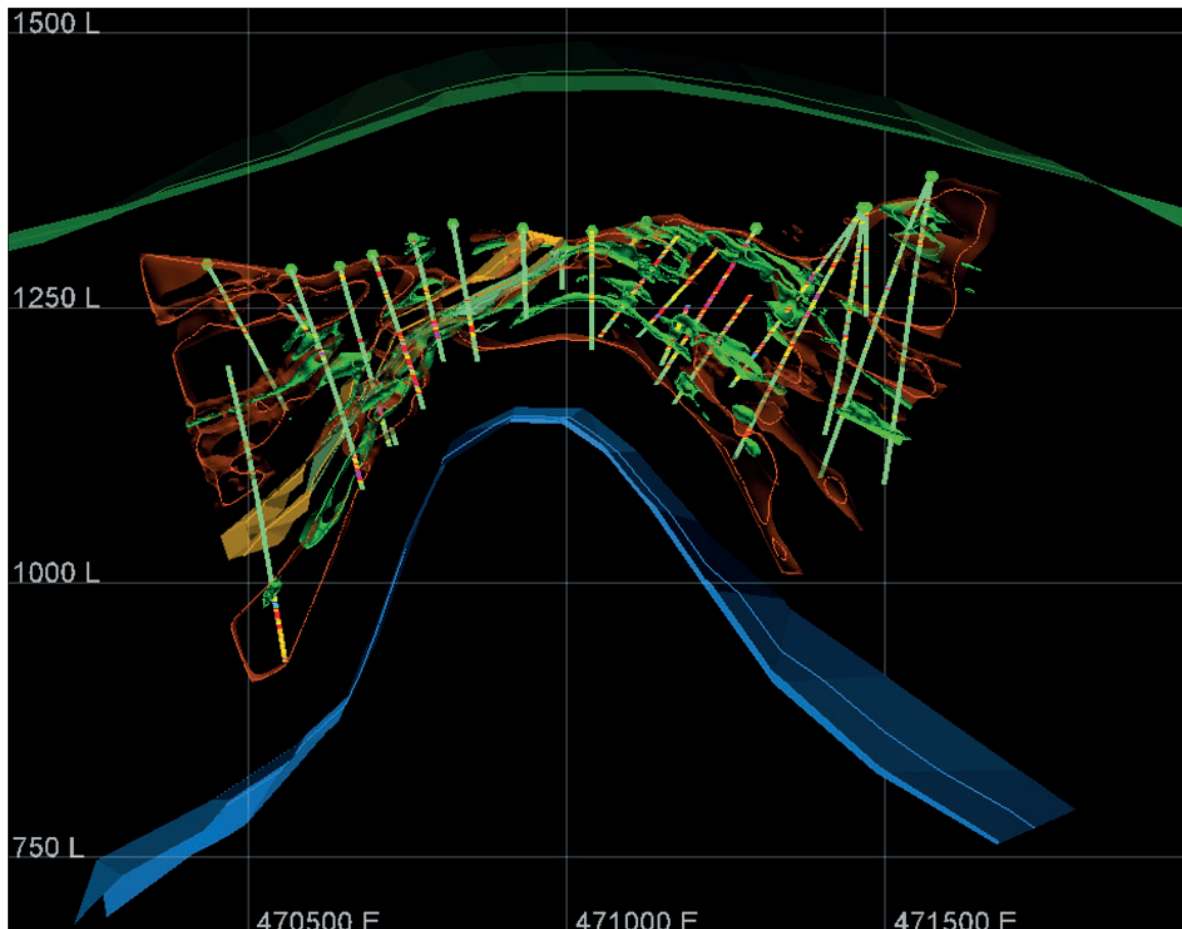


Figure 9: Sectional view (from Jutras, 2015) of the unfolding process with upper (dark green) and lower (blue) anisotropy surfaces shown.

- An approximately 18 tonne run-of-mine (“ROM”) bulk metallurgical sample was collected during May 2010 — taken from the Southeast and Las Calabazas zones from road outcrop exposures. Samples were chosen to be representative of typical gold skarn mineralization as noted in drill hole samples. The bulk sample was transported by truck direct from the Esperanza Project to McClelland Laboratories located in Sparks Nevada.
- Gravity concentration test-work using Wilfley table concentration was performed — but indicated that mineralization is not amenable to gravity recovery.

Historical mineral processing and metallurgical test-work at Esperanza supports a metallurgical flowpath whereby oxide gold-silver mineralization at Esperanza is amenable to heap leaching with dilute cyanide solutions — with recovery of gold and silver from leaching solutions by activated carbon absorption in columns.

5.5.1 SGS Metallurgical Testing 2005 and 2006

Preliminary bottle roll testing was completed on one composite sample from the West Zone and two from the Southeast Zone by SGS Lakefield (“SGS”), Ontario, Canada. This work is presented in the 2009 report titled “Cerro Jumil Project, Mexico Preliminary Economic Assessment NI 43-101 Technical Report”.

5.5.2 *CAMP Metallurgical Testing*

The Centre for Advanced Mineral and Metallurgical Processing (“CAMP”) completed additional testing on Esperanza core samples from the West Zone (WZ), Las Calabazas Zone (LCZ) and the southeast Zone (SEZ) — totalling 200 kg of ore material. Tests included Automated Mineral Liberation Analysis, XRD, ICP elemental scans, fire assay, sulfur and carbon speciation, and specific gold and silver deportment. A Bond Work Index, the Relative Abrasion Index of the sample and bulk density measurements of WZ and LCZ core samples were also determined.

Comprehensive bottle roll testing of the bulk sample with variables such as time, pH, pulp density, grind size, reagent concentration was guided by “Stat Ease Design of Experimentation software” to optimize the potential and parameters for heap leaching. Gravity concentration of the sample with Wilfley table concentration was performed.

Results demonstrated that there were no unusual situations in the mineralogical make-up of the ore that might preclude using heap leach as a processing. Gravity concentration — especially when applied to fines from crushing — was promising and should be further confirmed and optimized.

5.5.3 *Lyntek Metallurgical Testing*

Lyntek (2009) utilized the test results from the SGS (2206 and 2008) and CAMP (2009) work to estimate recoveries, reagent use, and design a process flow sheet. This was followed in 2010 and 2011 with metallurgical testing of “a run of mine” (“ROM”) metallurgical sample taken from road out crop exposures in Southeast and Las Calabazas zones”.

The bulk sample was deemed representative of typical gold skarn mineralization — as noted in drill hole sample assay results. It was collected from several road cuts over 150 m of vertical relief and 500 m of strike extent — with averaged grade of 0.91 g/t Au. Approximately 30 tonnes was transported to McClelland Laboratories in Reno (Nevada - USA) where a test program based around large column leach tests was performed. Material from the 15 (two tonne) bulk bags was blended to make a composite sample. Test included:

- *Bottle Roll Tests*

Sub samples were taken for size fraction determination and bottle roll leach tests — with head grade of 0.8 g/t gold and 4 g/t silver. Bottle roll leach tests were conducted on material that had been crushed to 80% passing 10 mesh (1.7 mm) — a 96-hour gold recovery of 82.2% and silver recovery of 44.4% was achieved. Leaching curves showed that extraction was complete in 48 hours. Hydrated lime (Ca(OH)₂) consumption was 4.1 kg/t of ore and cyanide consumption was 0.16 kg/t.

- *Column Leach Tests*

Three column tests were conducted — one at nominal ROM (-300 mm) feed size, one at a nominal 50 mm crush size, and one with a nominal 20 mm crush size. Lime was added at a rate of 4 kg/t.

- # 20 mm Crush

This test reported 68% recovery in 18 days and 72% recovery after 36 days. Silver recovery reached 33% in 17 days and after that no additional silver was recovered. Ultimate recovery after 73 days was 74% gold and 33% silver. Cyanide consumption was 1 kg/tonne.

- # 50 mm Crush

The column leach test on the -50 mm crushed ore was run for a total of 217 days. Gold recovery reached 70% after 50 days and 72% after 77 days. Thereafter 3 “rest and rinse cycles” — after 160 days 76% of gold had been recovered. Silver recovery reached 25% in 39 days — thereafter there was no additional leaching. There were no problems with pH control noted in this test. Cyanide consumption was indicated to be approximately 0.8 kg/t of materialized material.

ROM material

The column leach test on the ROM ore was run for a total of 212 days with leaching completed in 155 days — at which time gold recovery was 65%. Silver recovery reached a level of 25% in 91 days and did not increase further. Cyanide consumption was 0.4 kg/t of mineralized material.

The tests by Lynetek indicate a bottle roll recovery 82% — 7% better than achieved in the crushed ore column leach tests. This indicates very good leaching performance in the column tests with extractions of approximately 90% of the leachable gold. The three column leaches shows a gold extraction advantage from crushing the ore.

5.6 Historical Preliminary Economic Assessment

There have been two Preliminary Economic Assessment (“PEA”) reports completed on the Esperanza Project. The first PEA was completed by Vector Engineering (2009). Golder and Associated completed the second (Golder, 2011) as an update of the work by Vector (2009) — which included an additional 9469 m of drilling; an updated Resource Estimate (16 September 2010); additional metallurgical testing of an approximately 18 tonnes surface bulk sample; process facility, leach pad and pond designs; and a preliminary mine plan with associated CAPEX and OPEX cost estimates. The Golder (2011) PEA is based on the mineral resource estimate of Bond *et. al.* (2011) (Section 5.3 above).

The major findings of the 2011 PEA by Golder are summarized below for historical completeness and context. The preliminary economic assessment is preliminary in nature, and includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that the preliminary economic assessment will be realized”. Morales-Ramirez does not consider the PEA current and it should not be relied upon.

- ***Metallurgy and Heap Leach Analysis***

Given that gold mineralization at Esperanza is of an oxidized skarn type — metallurgical evaluation tested two potential flow-paths: 1) ROM ore to the leach pad, and 2) crushed ore to leach pad. Initial evaluation suggests that the additional capital cost of crushing and handling would be offset by increased gold recovery. Processing the pregnant solution is identical in both processes.

- ***Mining and Processing***

The basic process recommended is heap leaching with dilute cyanide solutions to dissolve the precious metals— followed by activated carbon adsorption in columns for primary recovery of the gold and silver from the leaching solutions. The heap leach pad will be constructed in two phases designed to ultimately hold 42 million tons of heap leach ore with the potential for future expansion.

Previous studies considered four mining/processing options — two studies considered contracted mining versus company-owned mining operations. The company-owned mining cases produced the best economics and this flow-path assumed in the PEA.

- ***Capital Costs***

Total capital costs (including working capital) for the “crushed-ore option” is estimated at US\$ 134.2 M. Total capital costs (including working capital) for the ROM option is estimated at US\$ 120.2 M.

- ***Operating Costs***

Total operating costs for the six-year mining and operation life for the “crushed-ore option” is estimated at US\$ 332.1 M. For the same period the total operating costs for the ROM Option is estimated at US\$ 279.1 M. On a cash cost per ounce basis (net of silver credits), the costs are US\$ 499 per ounce for the “crushed-ore option” and US\$ 477 per ounce for the ROM Option.

- ***NPV and IRR***

Preliminary economics are shown in Table 7. Closure costs were estimated at US\$ 2M based on other similarly-sized operations. Base case assumptions used US\$ 1150 gold per ounce and US\$ 21 per ounce silver — with gold recoveries of 75% and silver recoveries of 25%. Golder (2012) note that the project is most sensitive to changes in gold price and recovery and least sensitive to changes in capital expenditure costs.

Case	After-Tax Cash Flow (US\$ Million)	After-Tax NPV 5% Discount (US\$ Million)	Internal Rate of Return (IRR) (%)	Payback Period (Years)
Crush Option	185.8	122.0	26	3.6
ROM Option	161.8	106.5	27	3.5

Table 7: Summary of NPV and IRR (Golder, 2012).

6 GEOLOGICAL SETTING AND MINERALIZATION

6.1 Regional Geology

Esperanza is located in the Guerrero Gold Belt of southern Mexico, which is host to several gold skarn deposits associated with a 55 km long northwest trending belt of Tertiary felsic intrusive bodies hosted in a carbonate bearing, Mesozoic to Tertiary sedimentary-volcanic sequence (the Guerrero Platform) (Neff *et al.*, 2018). The platform unconformably overlies a basement of Phanerozoic phyllite and schist.

The Guerrero Platform comprises shallow marine sedimentary deposits of limestone and sandstone, overlain by interbedded andesitic to rhyolitic volcanic flows and continental sedimentary units, intruded by Eocene-Pliocene granodiorite and monzonite stocks (Bond *et al.*, 2011). The Guerrero Platform sedimentary and volcanic rocks are gently folded by northeast vergent late Cretaceous-Early Tertiary compression and are offset by post-compressional normal faulting. Late Quaternary colluvial cover is abundant across the region.

6.2 Property Geology

The Esperanza project comprises a host sequence of grey to dark grey, fine-grained, thin to medium bedded limestone with chert bands, belonging to the Xochicalco Formation. The limestone is intruded by a northeast oriented, ovoid granodiorite stock with an areal extent of 900 m by 500 m. The granodiorite is medium to coarse grained and feldspar phyrlic.

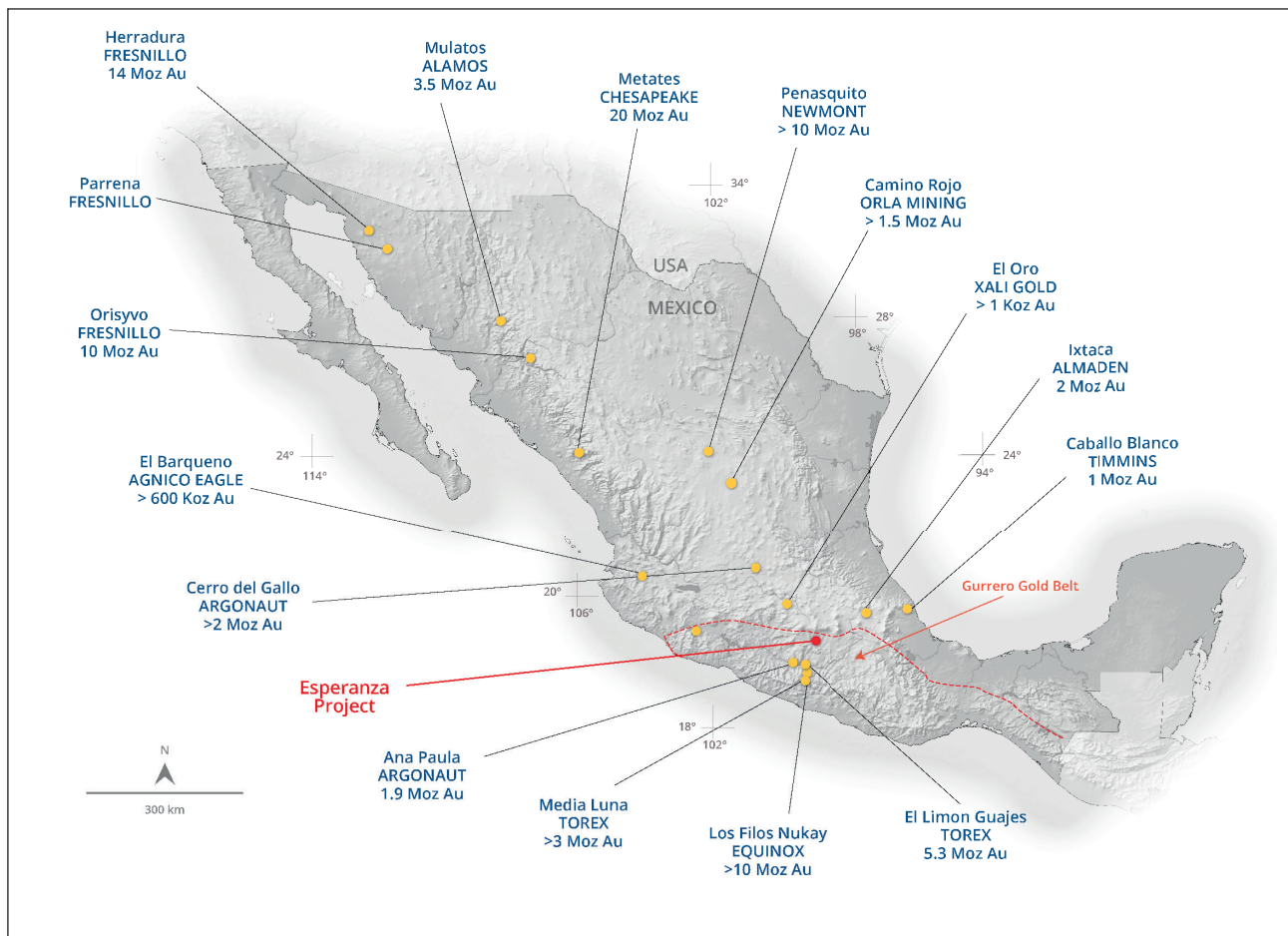


Figure 10: Map of Mexico showing the Esperanza Deposit, the Guerrero Gold Belt, and major gold deposits of Mexico.

Late quartz porphyry and andesite porphyry dykes cross cut both the limestone and the granodiorite, exploiting fault zones with northwest and northeast orientations. All units are unconformably overlain by volcanic, volcanoclastic and sedimentary rocks of the Cuernavaca Formation.

A contact metamorphic aureole is well developed around the granodiorite body within the limestone, with a generalised zonation from outer grey, medium-grained, granoblastic limestone to fine-grained, white, locally brecciated marble. A contact (exoskarn) calc-silicate alteration of pyroxene-garnet-wollastonite-actinolite-epidote is observed in the limestone.

The granodiorite displays a strong clay alteration (argillic and phyllic assemblages) near the wall rock contact which transitions sharply into fresh granodiorite away from the wall rock contact.

Jasperoid occurs irregularly at surface along the intrusive contact associated with skarn alteration, within fault and vein zones, and as narrow lenses within the limestone and marble. Jasperoid zones up to 30 m thick occur at surface but reduce to <5 m thick in drill intercepts.

6.3 Mineralization

The Esperanza gold-silver deposit is an oxidised skarn located in the south-central part of the concession area. In addition to the La Esperanza Deposit, there are at least nine other early stage exploration target areas with mineralization observed at surface.

6.3.1 La Esperanza Deposit

Gold and silver mineralization at Esperanza is spatially associated with exoskarn alteration at the contact between granodiorite and limestone. Exoskarn alteration occurs mainly at the northwestern and southeastern edges of the granodiorite intrusion, over a total strike length of >1 km, and displays a general northeast-southwest strike. The skarn zones are metres to >100 m thick, and have been drilled to >200 m down dip.

The skarns comprise a prograde and retrograde mineral assemblage. Gold mineralization is associated with retrograde alteration including sulphide mineral development and to a lesser extent formation of late jasperoid. Sulphide minerals comprise pyrite, pyrrhotite, sphalerite, chalcopyrite and arsenopyrite.

Skarn mineralization has been strongly oxidised to hematite and sulphide minerals are only rarely observed. The entire known deposit has been oxidised.

6.3.2 Priority Exploration Targets

Three zones of skarn mineralization within 1 km of the La Esperanza deposit have been identified by previous operators. These are termed the Northern Contact, NE Intrusive Contact and Colotopec prospects. The Northern and NE Contact target areas are located at the northwestern end of the same causative intrusion at La Esperanza. Gold anomalous skarn mineralization has been sampled at surface at the NE Contact prospect with jasperoid float observed over a 100 m strike length.

The Northern Contact target is concealed beneath Cuernavaca Formation cover units, and is inferred to overly 700 metres strike length of prospective contact zone between the granodiorite and limestone. Two holes located between 100 m and 200 m southwest of the Northern Contact intercepted between 12 m and 15 m of skarn mineralization, averaging 150 g/t silver (Kirkham, 2014). There has been no drilling of the target area.

Colotopec is located on the southeastern margin of the granitoid intrusion and is characterised by a 500 m by 50 m zone of marble cross cut by quartz-iron oxide veinlets. Similar zones have been observed in drill core elsewhere at La Esperanza located above mineralised skarn.

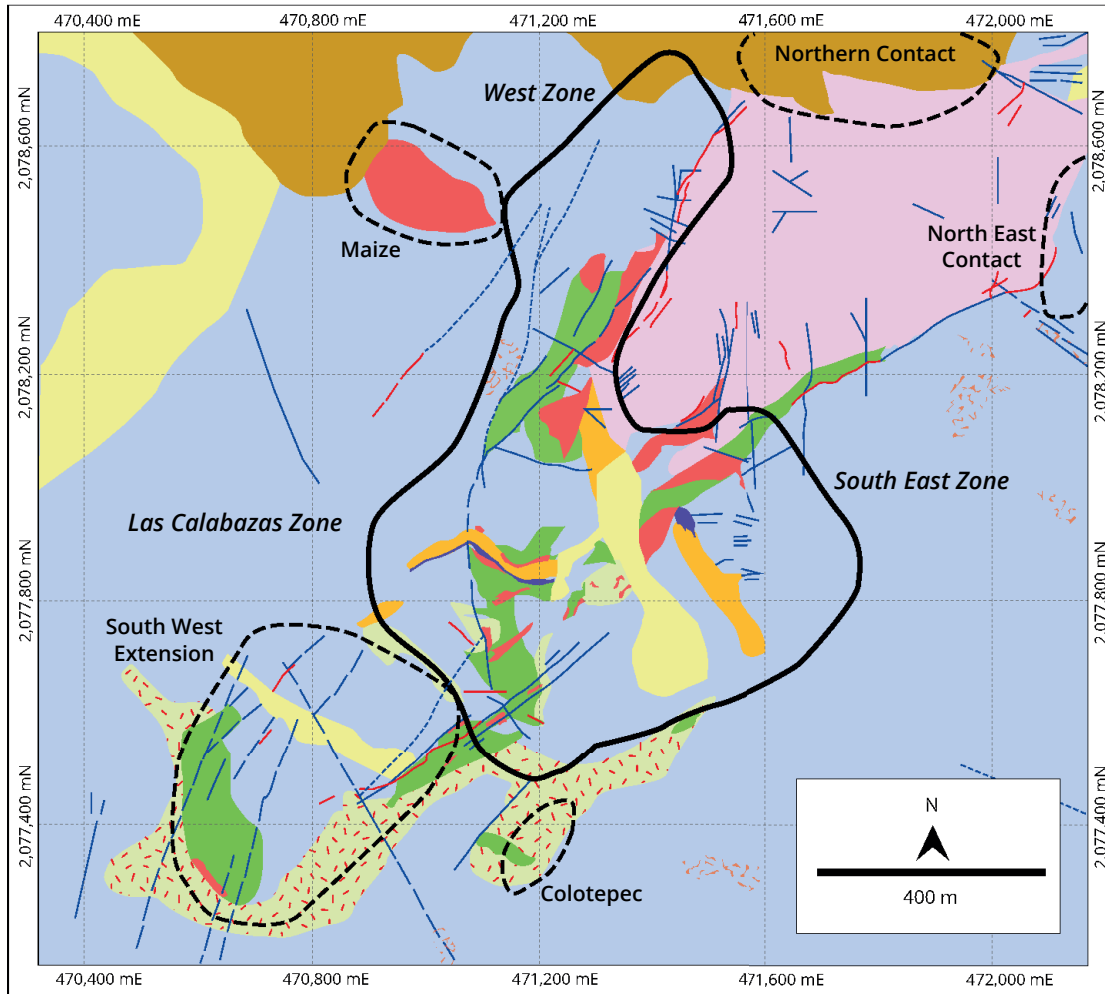


Figure 11: Geological map of the Esperanza deposit and areas immediately surrounding. The Esperanza Deposit footprint is shown as a solid black polygon — dashed polygons are high priority exploration targets. Italicized names refer to areas of the Esperanza deposit.

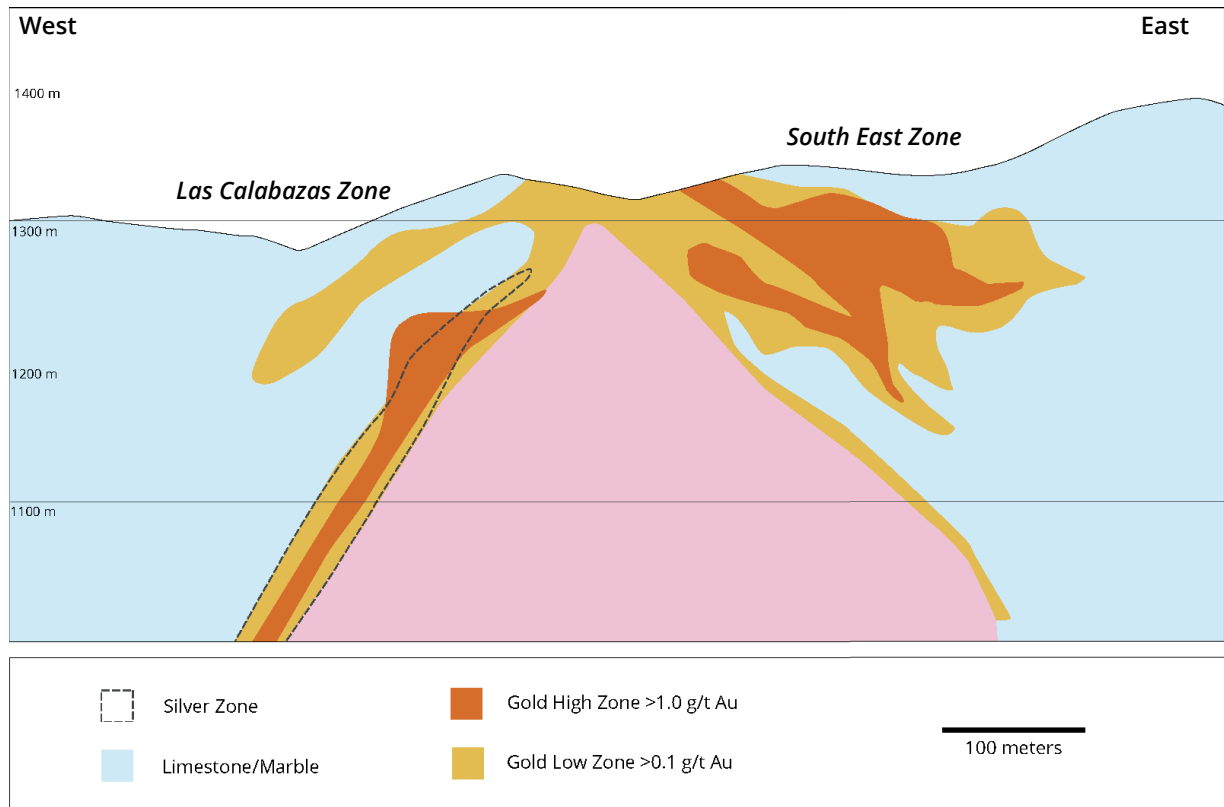


Figure 12: Cross section through the Esperanza Deposit wraps around the intrusion. Note the high grade gold mineralization is close to surface. The silver-rich, gold mineralized zone on the west flank of the deposit, is a robust exploration target at depth.

Coatetelco

Coatetelco is located 3.5 km southwest and along strike from La Esperanza, and comprises a 1400 m by 500 m zone of jasperoid and brecciated limestone float and rare outcrop. The jasperoid occurs as fracture fill and replacement of limestone. There is a coincident arsenic-antimony soil anomaly with weak (14 ppb) gold associated with the jasperoid zone.

Alpuyeca

Alpuyeca is located 5 km south of La Esperanza and comprises a 500 m by 600 m zone of sporadic jasperoid veins and fracture fill hosted in weakly altered limestone. Reconnaissance rock chip sampling returned maximum values of 7350 ppm arsenic, 256 ppm antimony, 24 ppb gold and 2.5 ppm silver.

Jasperoid de Tores

Jasperoid de Toros is located 3 km north-northwest of La Esperanza and comprises a 20 m by 30 m zone of jasperoid fracture fill hosted in grey limestone.

La Vibora

La Vibora is located 5 km west-northwest of La Esperanza and comprises a 270 m by 120 m zone of jasperoid as fracture fill and replacement of silicified limestone, with an outer zone of marble. Reconnaissance rock chip sampling returned maximum values of 1245 ppm arsenic, 52 ppm antimony, 26 ppm molybdenum with no anomalous gold or silver. There is potential for a blind causative intrusion at depth.

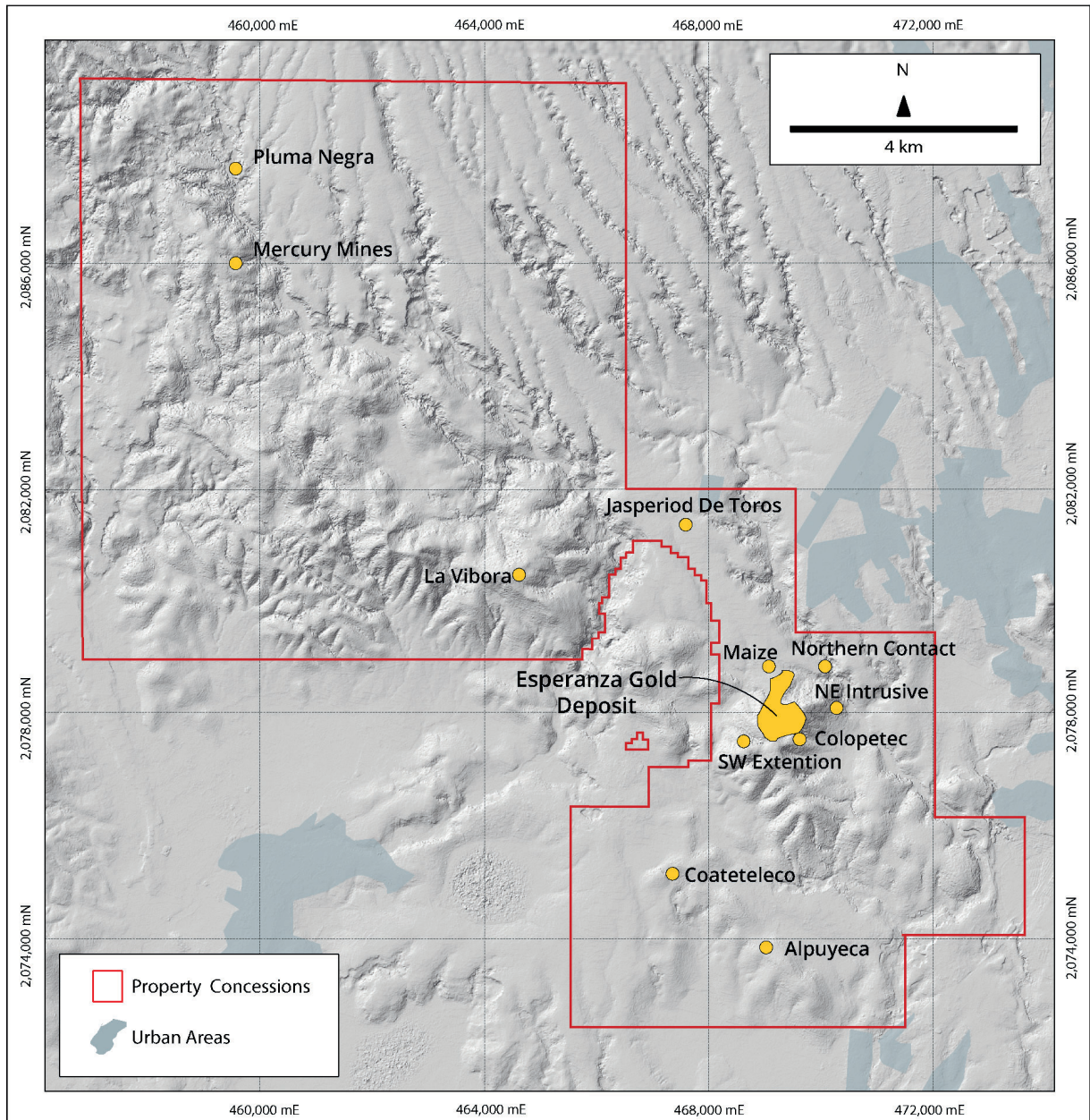


Figure 13: Map showing mining concession boundaries, the Esperanza Deposit footprint, and near-deposit and reconnaissance exploration targets. The base map is a digital terrain model derived from SPOT 5 data.

Mercury Mines

The Mercury Mines target is located 15 km northwest of La Esperanza, and comprises historic underground mine workings over 300 by 150 m from an area known as the Santa Rosa mercury district. Mineralization comprises fracture hosted quartz-cinnabar veins hosted within brecciated limestone with patchy marble alteration. There is potential for increased precious metal concentrations down dip from the mercury bearing mineralised interval.

Pluma Negra

Pluma Negra is located approximately 15 km northwest of Esperanza. It consists of an east-west trending, black silicified limestone breccia, associated with a fault/fold structure. The prospect occurs on the top portion of a fairly

steep hill. Outcrop in the area is poor — but a strike length of strike length of 150 m before outcrop is lost under cover. Nine samples taken from the black limestone breccia assayed 0.986 g/t Au, 0.693 g/t Au, 0.425 g/t Au, 0.424 g/t Au, 0.249 g/t Au, 0.212 g/t Au, 201, 0.146 g/t Au and 0.046 g/t Au. Morales-Ramirez considers these values highly significant.

7 DEPOSIT TYPE

Esperanza is an exoskarn deposit hosted by a carbonate-bearing sedimentary sequence, intruded by a granodiorite stock. Mineralization is hosted by the sedimentary strata and abuts the intrusive body, comprising of a typical skarn assemblage of prograde garnet, pyroxene, wollastonite and vesuvianite and a retrograde, overprinting assemblage of tremolite-actinolite, clays, epidote, chlorite and silica.

Gold mineralization is thought to have formed during retrograde alteration and appears to have some spatial association with silica alteration. The skarn has subsequently been oxidised which may have caused supergene enrichment of gold.

7.1 Skarn Deposits

Concession wide mapping has been undertaken at various scales since at least 2003 when Teck were active in the area.

ESM mapping identified three skarn zones parallel to the intrusive contacts at La Esperanza. Skarn regressively weathers and resistive jasperoid zones were used as exploration vectors in mapping. The exploration targets described in section 6.3.2 have been mapped on a reconnaissance basis.

Mapping has been a principal target generation tool in the past and successfully identified exploration targets worthy of follow up geochemical, geophysical and drilling programs.

Deposit Morphology

Skarn deposits can form directly at and along the contact between the intrusion and host carbonate rocks, as strata-bound deposits in discrete pods or larger sheet-like bodies within the carbonate sequence, or within the intrusion itself. Therefore, they can form in a wide range of morphologies and orientations and can occur up to approximately 1 km from the causative intrusion.

Mineralogy

Skarn mineralogy comprises an early formed, high temperature prograde assemblage typically comprising of a variable content of garnet, pyroxene, wollastonite, vesuvianite and magnetite, which is overprinted by a retrograde, lower temperature assemblage of epidote, chlorite, tremolite-actinolite, calcite, quartz, clays and sulphides. The abundance of each mineral and extent of retrograde alteration varies depending on original host rock chemistry, proximity to the intrusive body, and localised structural features.

Sulphide Assemblage

Sulphide mineralization occurs as disseminations, massive pods and lenses, or is associated with quartz±calcite veins and fault hosted zones. Sulphide minerals are usually formed during retrograde alteration or overprint the retrograde alteration, and typically comprise chalcopyrite-bornite-pyrite in copper bearing skarns, pyrite-pyrrhotite-arsenopyrite in gold skarns, or sphalerite-galena-pyrite in lead-zinc skarns, for example.

Trace Element Assemblage

A range of trace elements including silver, bismuth tellurium, cadmium and molybdenum are often associated with mineralization.

7.2 Exploration Technique

Identification of felsic to intermediate composition intrusions, or structural features, which intrude or cross cut carbonate bearing stratigraphy.

- # Mapping of alteration zonation within the host stratigraphy should focus on the identification of zones of marble or hornfels which represent the distal parts of a system, nodular or veined zones with skarn alteration assemblages, through to massive skarn mineralization, which may be oxidised by supergene alteration to form gossans.
- # Geochemical sampling, whether stream sediment, soil or from rock (chips, channel samples or drilling), should investigate the concentrations of gold, copper, lead, zinc, tin and tungsten as the primary metals of interest. Pathfinder elements including arsenic, antimony, bismuth, cadmium tellurium, mercury, molybdenum, silver should also be mapped and used as vectors to mineralization. All metals are zoned from distal lower temperature assemblages to proximal higher temperature assemblages, which provides a strong exploration vector to mineralization.
- # The geophysical signature of deposits may include chargeability anomalies associated with disseminated sulphide, with coincident and adjacent magnetic anomalies if magnetite is included in the alteration assemblage. The host intrusion may also present as a magnetic anomaly.
- # Mapping and interpretation of drill results should be cognisant that the morphology of skarn deposits on a project scale can be pipe-like to sheet-like bodies of mineralization, located along the contacts between intrusions and host stratigraphy, stratabound within the carbonate units, localised around faults, or hosted within the intrusions as pendants or xenolith-like inclusions. The morphology of skarn deposits on a prospect or mine scale can be complex due to the association of mineralization with irregular zones of retrograde alteration, overprinting and multiphase alteration, localised concentrations of the target mineralization by faults and fractures, and lenticular or poddy nature of original carbonate replacement during prograde alteration.

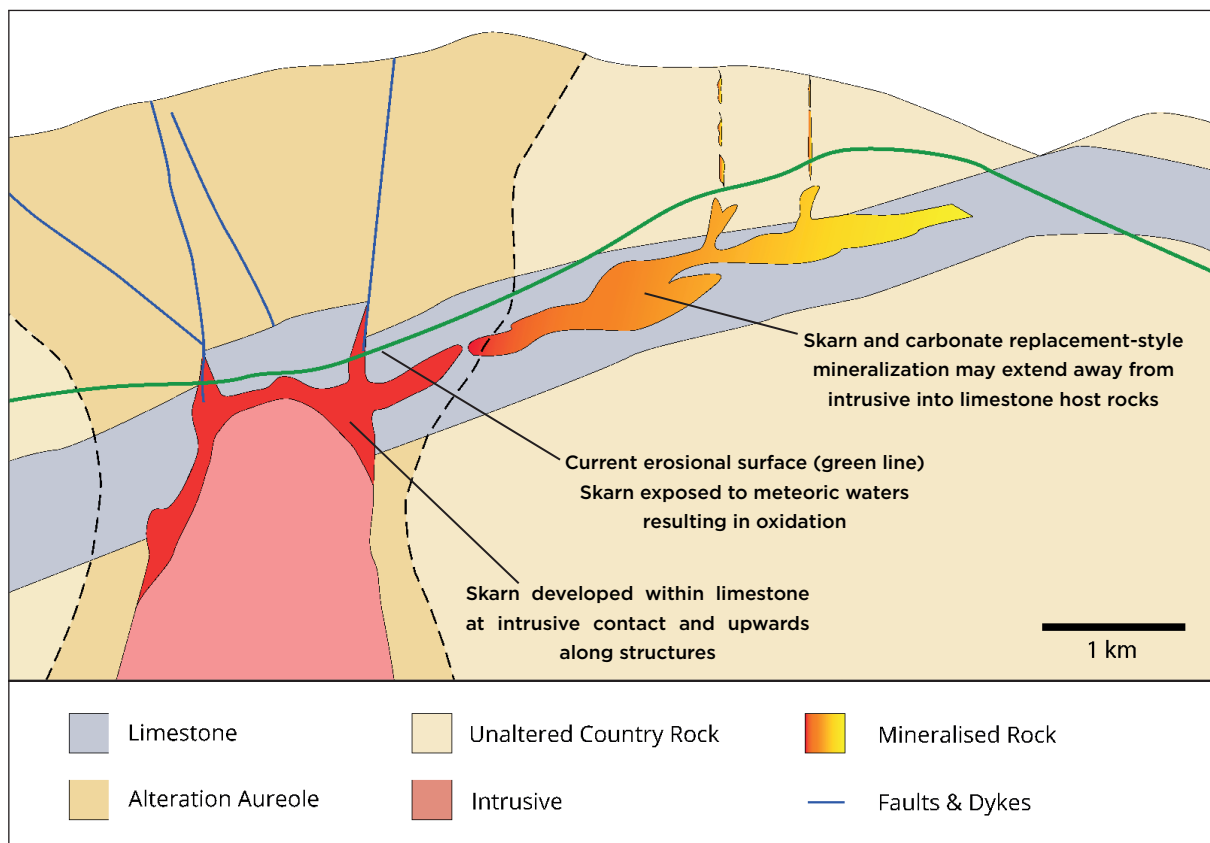


Figure 14: Schematic representation of a gold skarn developed proximal to an intrusion within a limestone host.

8 EXPLORATION

The Company has not conducted any exploration at the property. Historical exploration work conducted by previous operators — taken from review of the Alamos data-room and prior NI 43-101 Technical Reports on the Property — is presented in Sections 5.1 (Pre-Alamos Exploration History) and 5.2 (Acquisition and Activity by Alamos) of the Report.

9 DRILLING

To date there has been no drilling by the Company on the Property. Historical drilling conducted by previous operators is summarized in Section 5.3 of this report (Historical Drilling).

Historical drilling methodology — based on review of the data-room and prior NI 43-101 Technical Reports (Kirkham, 2014 and Bond *et al.*, 2011) — is discussed in this section as it better places methodology in the context of drilling.

9.1 Overview of Historical Drilling

Initial exploration drilling in 1998 by Teck included four core holes (822 m) which intercepted only weakly anomalous gold mineralization with moderate silver grade.

ESM drilled the Property between 2005 and 2012 — for a total of 42,142 metres of reverse circulation drilling (245 holes) and 26,770 m of diamond core drilling (140 holes). ESM's completed drilling in five phases — Phases 1 and 2 comprised exploration drilling; Phase 3 was infill drilling for estimation of a maiden resource; Phase 4 comprised additional exploration drilling; and Phase 5 was infill drilling in support of an updated mineral resource estimate. Phase 5 included geotechnical and metallurgical investigations.

9.2 Historical Diamond Drilling Procedure

Teck and ESM collared in HQ diameter core and reduced to NQ or NQ2 diameter core in poor ground conditions or where required to meet target depth. All collars were closed with a cement block labelled with the hole name, inclination and azimuth.

Core was placed in boxes and photographed. Core was then marked for cutting and measured to determine percent recovery. Geotechnical logging comprised RQD measurement — followed by geological logging of lithology, alteration assemblage and mineralization.

- Teck drill core was half-cut using a core saw. Sample intervals were selected based on lithology and alteration and were typically between 1 and 3 m in length.
- ESM drill core was sawn in half using a core saw. Sample intervals were selected on the basis of lithology and alteration. Between 2005 and 2008 sample intervals were typically between 1 and 2 m in length — at some point between 2005 and 2008 the sample interval was changed to 1.5 m to match the RC drilling sample interval.

One half of the core was sampled and the remaining half was retained in the core box for future reference. Specific gravity was measured on core at approximately 2 m intervals using either a volumetric or a water submersion method.

9.3 Historical RC Drilling Procedure

ESM used 4.5 to 5.5 inch diameter reverse circulation drill holes between 2007 and 2010. The Phase 3 RC drilling is reported to have had water introduced to the hole to 'improve or maintain sample recovery due to more difficult drilling conditions as a result of varying mineralogical alteration products and rock fracturing that is commonly associated with the gold skarn zone' (Bond *et al.*, 2011). Phase 4 RC drilling utilised a compressor booster to keep the hole dry which is reported to have improved recoveries.

All RC holes were sampled at 1.5 m intervals using a riffle splitter to half each sample at the rig. The splitter was cleaned with water and air after each run. A sieved sample of the chips for each interval was placed in labelled chip trays and

photographed. Chips were logged including lithology, alteration assemblage and mineralization. One half of the sample was submitted for analysis and the remaining half was retained for future reference.

9.4 Authors Comment

Based on the data available — Morales-Ramirez is of the opinion that diamond drilling protocol and protocol used for Phase 4 and Phase 5 RC drilling followed industry-recognized standards techniques. It appears that this drilling was appropriate for the style of mineralization and stage of project.

Phase 3 RC drilling — which introduced water to assist with recovery — did not follow industry-recognized standards of best practice. Whilst sample quality may have been acceptable — the results of Phase 3 RC drilling should be treated with caution. Morales-Ramirez recommends that the assay/grade profile of Phase 3 RC holes be reviewed against assay/grade profiles of surrounding Phase 1, 2 4 or 5 drill holes. This would provide a better assessment of Phase 3 drilling integrity — as opposed to twinning a small number of holes with inherent issues such as hole deviation.

10 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Given that the Company has not conducted any sampling or drilling — this Section is historical in nature. It is based on review of the information and data provided by Alamos and historical NI 43-101 Technical Reports (Kirkham, 2014 and Bond *et. al.*, 2011).

RCS, Teck and ESM implemented quality assurance and quality control procedures during sampling and drilling that followed industry-recognized standards of best practice at the time. Sample types included soil, rock-chip, channel, and drill core and RC chip samples.

10.1 General Comment

Recursos Cruz Del Sur S. A. de C. V. (“RCS”)

RCS collected a number of rock-chip samples in 1993 and 1994 which were submitted to Bondar-Clegg — samples collected by RCS in 2002 were analysed by Chemex.

Morales-Ramirez notes that these samples were taken during early reconnaissance exploration and have no bearing on the subsequent drill program or mineral resource estimation — they are not considered further.

Teck

Between 1996 and 1998 Teck collected approximately 184 rock-chip dump, float and outcrop samples and 291 drill core samples from 4 scout drill holes. All samples were submitted to ALS Chemex for preparation and analysis.

Morales-Ramirez notes that these samples were collected 25 years ago, were reconnaissance in nature, and have no bearing on the subsequent drill program or mineral resource estimation. They are not considered further.

Esperanza Resources (“ESM”)

ESM commenced exploration in 2003 and have collected over 27,600 samples — including 84 soil samples; more than 700 selective outcrop, float, or channel samples; and 26,859 diamond drill core and RC samples.

Given the historical resource was based on the work by ESM — Morales-Ramirez has reviewed in detail sample security, sample collection, and sample preparation and analytical protocol — as discussed below and in Section 11 (Verification) of this report.

10.2 ESM Sampling Protocol

Soil Sampling

Soil samples were taken over an area of 500 m by 300 m along the northwestern flank of Esperanza Deposit. Four lines — oriented normal to strike of mineralization at 305° — were sampled at 25 m centres. Each line was 500 m long and lines were spaced 100 m apart. Samples were taken at a depth of approximately 25 cm and sieved through a 20 mesh screen to obtain a 1 to 2 kg sample.

Rock Chip Outcrop and Float Sampling

A small number (*ca.* 68) of rock-chip samples were taken from areas of outcropping silicification and jasperoid development. Sample locations were recorded using hand held GPS units with nominal ± 5 m accuracy.

Channel Sampling

Approximately 285 continuous channel samples (generally 1 to 2 m long) were collected perpendicular to the strike

of the gold skarn. Visual observations of gold assay grades in channel samples relative to nearby diamond drill core samples appear to have good correlation. Channel samples were located by hand held GPS units with a nominal ± 5 m accuracy.

Core Sampling

ESM completed 121 (22,822 m) diamond drill holes between February 2005 and June 2012. Whole core was first photographed and RQD and percent recovery was calculated. Detailed geological logging — with graphic columns depicting rock types, alteration and mineralization — was then completed.

Core was cut into two equal halves and one half was sampled. Sample length was initially between 1 to 2 m and constrained by geological boundaries. As the program evolved it became apparent that the gold mineralization extended across some geological boundaries and sampling protocol was changed to an interval length of 1.5 m — consistent with the sample length for RC drilling. Examination of remaining half-cut core by Morales-Ramirez indicates that core was sectioned in a representative manner.

Reverse Circulation Drill Sampling

ESM completed 245 (42,124 m) RC drill holes between February 2005 and June 2012. Two sample collection flow-paths were employed:

- (a) Phase 3 holes were dry-collared and drilled to depths of approximately 60 m — below which loss of air became an issue. Water was then injected into the hole to better lift bit cuttings and improve recovery.
- (b) The use of a compressor booster for RC drilling in phases 4 and 5 allowed for all holes to be drilled dry with very good recoveries — in line with industry recognized standards of best practice.

Specific Gravity

Specific gravity (“SG”) samples were taken from representative rock types at an interval of approximately 2 m — SG was measured using either volumetric or water submersion methodology. Over 3600 SG measurements were taken and are included in the Esperanza sample database.

Authors Comment

Overall the sampling program of ESM followed industry-recognized standards of best practice and was appropriate for the style of mineralization and stage of project. The ± 5 m locational error associated with hand held GPS measurement of soil and rock chip samples is not considered material. Assay results from core and RC sampling form the basis of the historical resource estimate — as such Morales-Ramirez reviewed drilling and RC sampling in detail.

Core sampling followed standard industry protocol. Phase 4 and 5 RC drilling included the use of a booster compressor — resulting in recovery of dry samples with good recovery. The Author is of the opinion that diamond drilling and Phase 4 and Phase 5 RC drilling was of a high standard, likely produced representative results without bias, and that assay results are suitable for inclusion in historical mineral resource estimates.

The quality of Phase 3 RC drill results is more difficult to verify. Whilst Morales-Ramirez understands that water injection was a direct result of insufficient air-capacity — water injection does not follow industry recognized standards of best practice. The results of Phase 3 RC drilling should be viewed cautiously until results can be further verified. Morales-Ramirez recommends that the assay/grade profiles of Phase 3 RC holes are reviewed against assay/grade profiles of surrounding Phases 1, 2, 4 or 5 drill holes. This would provide a better assessment of Phase 3 drilling integrity — than twinning a small number of holes.

10.3 ESM Sample Security

Samples collected by ESM were placed in individually labelled polythene bags, a water-proof sample number was placed

inside, and bags were sealed with a single-use clip-lock tie. This procedure follows industry-recognized best practice.

Kirkham (2014) states “samples collected by ESM were taken under the direct supervision of geologists and transported to a secure storage facility until shipped to the analytical laboratory. Up until January 2006, samples were delivered by ESM personnel to Cuernavaca and freighted directly to ALS Chemex’s preparation facility in Guadalajara, where ALS Chemex assumed custody of the samples. From January 2006 onwards ALS Chemex took custody of samples at the ESM secure storage facility and transported them to the ALS Chemex Guadalajara preparation laboratory”.

Half-cut core, the remaining half of RC samples, and crush and pulp rejects are stored in a secure storage facility in Cuernavaca (Figure 15).

Morales-Ramirez cannot verify sample chain of custody — but assumes that the disclosure by Kirkham (2014) is NI43-101 compliant. The protocol presented by Kirkham (op. cit.) follows industry recognised standards of best practice. The current core storage facility is very well maintained and organized — appropriate security arrangements are in place. Morales-Ramirez is of the opinion that sample quality and integrity of stored pulp and crush rejects, RC chips and half-cut core, is such that samples could be re-assayed in order to verify the historical database.

10.4 ESM Sample Preparation

All samples were prepared by ALS-Chemex Guadalajara. Samples were logged into the system and assigned a bar-code number. Samples were then crushed to a nominal 70% passing <2 mm. Crushed samples were passed through a single stage riffle splitter and pulverized to 85 % passing <75 microns. ALS sample preparation codes were not provided.

Morales-Ramirez is of the opinion that the sample preparation flow-path follows industry-recognized standards of best practice. Since ALS preparation codes were not provided — the size of the sample submitted to the pulverising station is unknown. That said — correlation of field and pulp duplicates (Section 10.5: Staged Duplicate Samples) suggest that sub-sampling protocol was appropriate.

10.5 ESM Sample Analysis

Pulps were analysed using a 34 or 35 element acid digest-ICP package — samples which assayed over-range for silver, copper, lead and zinc were re-analysed by ICP-AAS. Samples were assayed for gold by fire assay with an AAS finish — over-range samples were re-analysed by fire assay with gravimetric finish.

Morales-Ramirez was unable to fully verify the sample analysis protocol implemented by ESM as ALS methodology codes were not provided. In this respect — the Author could not determine if samples were submitted for two- or four-acid digest prior to ICP analysis. Neither could the Author determine the size of the sample (30 g or 50 g) submitted for fire assay. On balance Morales-Ramirez is of the opinion that sample assay protocol followed industry-recognized standards of best practice — but a better understanding of protocol would help in fully assessing suitability of methodology.

10.6 ESM QA/QC

Review of historical data indicates that ESM implemented an extensive QA/QC protocol that followed industry recognized standards of best practice.

RC and Diamond Twinned Drill Holes

ESM twinned two RC holes with two diamond holes. RC-diamond twins were collared within 2 m of each other and drilled at the same azimuth and declination. Down-hole surveys indicated that hole inclinations deviated slightly — deviation in declination was more pronounced. Changes in inclination and declination between holes is not considered material given the deposit type and style of mineralization.



Figure 15: Photograph of the ESM core, RC chip and sample reject storage facility. Drill core and samples are in excellent condition and order.

RC holes were sampled at 1.5 m intervals which did not honour geological boundaries — diamond holes were sampled at intervals of between 0.5 to 2.0 m dependent upon lithology and alteration. Sampling was more selective in diamond holes and this is reflected in greater gold grade variability as compared to RC holes.

Given the down-hole deviation between hole pairs, and different sample intervals, Morales-Ramirez is of the opinion that assays results between diamond-RC twins show good correlation (Figure 16) and that there is no clear bias between core and RC twin. This supports the validity of RC drilling.

RC Fines Overflow Analysis

To determine the possible loss of gold and silver in fines during wet RC drilling — ESM collected and assayed the fine sediment of 14 samples from the overflow in the sample collection containers. Gold and silver assay results for fines were then compared to original assays.

The Author is of the opinion that this study was unlikely to generate definitive and objective results — as such it is not discussed further.

Field Blanks

At the start of the drilling program field blank samples were inserted into the sample stream every 20 samples at regular intervals — this was later changed to insertion of a field blank randomly at a rate of one per 30 samples. An unmineralized limestone taken from an outcrop near the property was used in phase 1 and 2 drilling — during drilling phases 3 to 5 silica sand was used as the field blank.

Tolerance limits were set at five times (5X) the lower detection limit for the assay technique used. For gold the lower detection limit was 0.05 g/t and for silver the lower detection limit was 0.2 g/t — giving tolerance limits of 0.25 g/t Au and 1.0 g/t Ag. Of the 1274 blanks submitted — 97% of blanks assayed below tolerance limits for gold and 98% assayed below tolerance for silver. ESM do not state if remedial action was taken for blank failures.

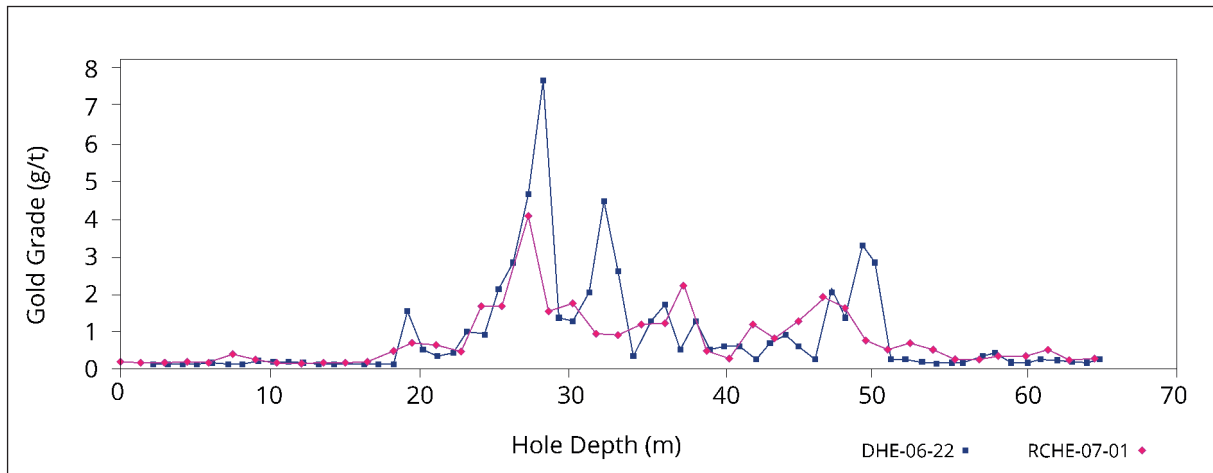


Figure 16: Comparison of gold assay results for diamond drill hole DHE-06-22 and RC twin hole RCHE-07-01. Overall correlation is acceptable. Greater variation in gold assays as compared RC samples — likely reflects the fact that diamond drill core was sampled to geological boundaries.

The Author is of the opinion that the field blank protocol used by ESM followed industry-recognised standards of best practice and the small number of failures do not materially affect the integrity of the assay results. Blank failure tolerance limits were appropriate.

Certified Reference Materials (“CRM’s”)

CRM’s were submitted throughout the course of the drill program. Fifteen gold CRM’s were used — two CRM’s were prepared by Hazen and used in Phases 1 and 2; Rocklabs CRM’s were used in Phases 3, 4 and 5; and one OREAS CRM was used in Phase 4. CRM’s comprised a range of grades from 0.197 g/t Au to 7.732g/t Au. Three of the gold CRM’s were also certified for silver — with a range between 9.27 g/t Ag to ca.16.8 g/t Ag.

Certified Reference Materials were deemed failed if a CRM in one batch assayed outside of $\pm 3SD$ of the mean value or CRM’s in two consecutive batches assayed outside of $\pm 2SD$ of the mean value. Of the 1213 gold CRM’s submitted for assay — 11 were deemed failures.

ALS Chemex re-assayed over 300 pulps from batches with a CRM failure. If results from re-assayed pulps indicated a bias or an incorrect result compared to that originally reported — then ALS Chemex issued a “corrected assay certificate” and the Esperanza database was updated accordingly.

The Author is of the opinion that the CRM protocol used by ESM was of a high standard and followed industry-recognized standards of best practice. Remedial action was taken by ALS Chemex for pulps from batches with CRM failures. The Author notes that the CRM failure rate for gold is less than 1% of CRM’s used. In conjunction with remedial action and re-assay — the CRM failure rate and is not deemed material.

Staged Duplicate Samples

A staged duplicate protocol — whereby field duplicates (the complete second half of the core), crush duplicates (taken at the crushing station) and pulp duplicates (taken at the pulverising station) are inserted into the sample stream and treated as a normal sample — was not implemented. The duplicate program implemented by ESM followed industry-recognized standards of best practice during the 1990.

- Drilling Phases 1 and 2: Pulp duplicates were taken from pulp rejects and analysed. These duplicates were not processed at the same time as the original samples.

- Drilling Phases 3 to 5: A total of 1247 randomly selected field duplicates comprising either quarter-cut drill core, or an equal half of the RC sample, were assayed for gold and silver.

Field duplicate assay results were plotted on Absolute Value of Relative Difference (“AVRD”) charts — where AVRD is defined as the absolute value of the original sample, minus the pair mean (PM), and AVRD (%) is the average of the original and duplicate assay result divided by the PM. ESM considered field duplicates to have a good correlation if >90% of the population has relative differences of less than 30%.

Pulp duplicates from drill Phases 1 and 2, and field duplicates from drill Phases 3 to 5, showed good reproducibility for gold and silver. In the case of Phases 3 to 5 — at the 90th population percentile — the relative difference of gold duplicates was 30% and the relative difference of silver duplicates was 22%.

Staged duplicates comprising field, crush and pulp duplicates that are inserted in to the same sample stream as the original and prepared and assayed at the same time in the same sample batch — provide important information with respect to mineral heterogeneity and field sampling precision, and sub-sampling and sample preparation protocol precision. ESM only submitted pulp duplicates in drill Phases 1 and 2, and field duplicates in Phases 3 to 5, and did not implement a full staged duplicate protocol. This is likely more a reflection of industry-recognised best practice at the time of drilling — than inadequacies in the protocol.

Nevertheless — Morales-Ramirez is of the opinion that the duplicate protocol used by ESM supports the drill assay results and their inclusion in the historical mineral resource estimation. There is no obvious bias and overall precision is good. A staged duplicate protocol with field, crush and pulp duplicates should be implemented if further drilling is conducted.

Additional Pulp Check Assays

Three separate studies were completed using secondary laboratories (Inspectorate Laboratories, SGS Mexico, and ACME Analytical Laboratories Ltd) to check analytical results of diamond drill core and RC samples. A total of 84 original sample pulps were sent to Inspectorate, 277 to SGS and 181 to ACME.

All three studies showed good repeatability between the original ALS Chemex assay and the pulp check assay. The correlation coefficient between original and secondary pairs ranged from 0.988 to 0.998 indicating robust gold assay replication. Approximately 90% of the pulps have a relative difference of less than 15% between the primary and secondary analyses — effectively verifying the original assay results of ALS Chemex.

Whilst the total number of sample pulps submitted for re-assay is small — the Author is of the opinion that the pulp assay results further indicate that samples assayed by ALS Chemex are accurate.

10.7 ESM Database

ESM maintained a master database of all exploration and drilling data — comprising six main types of data as outlined below:

Location Data

Includes drill hole collar location, the starting point for channel samples, and point locations for soil, float and other types of samples. The coordinate system used and any other pertinent information is recorded.

Sample Data

This data file includes sample number; channel or drill hole identification name; from-to intervals; quality control (QC) information (standards, blanks, and duplicates); rock type; sampling date; and geochemical results.

Diamond Drilling Geotechnical Data

Geotechnical data includes hole number; from-to depth interval; percent recovery; RQD percent (based on the sum of all lengths greater than two times the core diameter for any given interval); and any other relevant information with respect to recovery or rock quality.

Drill Log Summary Data

Includes drill hole number; from-to depth intervals; rock type, alteration and mineralization; and geological descriptions.

Down Hole Survey Data

Includes the drill hole number; down-hole survey depth, true azimuth and magnetic azimuth; and hole inclination.

Specific Gravity Data

This file comprises all specific gravity data collected by sampling representative rock types (from diamond drill core) at 2 m intervals.

The ESM database of Kirkham (2014) was for estimation of the Kirkham and Jutras (2015) mineral resources. Kirkham (op. cit.) noted some discrepancies and missing data during an extensive QA/QC of the prior database. In order to ensure the integrity and validity of the database — Kirkham (2014) reconstructed the database directly from the assay certificates supplied by ALS Chemex.

Morales-Ramirez reviewed the Kirkham (2014) database and is of the opinion that it is complete and accurately reflects field data and assay results. The Author cross-checked the database against a small number of original assay certificates.

11 DATA VERIFICATION

Morales-Ramirez visited the property on the 7th and 8th of December 2021. The site visit included an overview of the property from the vantage point of Cerro Jumil hill, and visits to historical drill collars and outcrops, the core storage facility, and the office at Tetlama. Meetings were held with the community liaison team at Tetlama.

- # Morales-Ramirez used a Spot 5 satellite base image over-printed with Property boundaries to verify the location of concessions in the field. Morales-Ramirez is satisfied that the Property boundaries coincide with the geographic field area covered in this report.
- # Field verification of SPOT 5 satellite base imagery confirms that areas set-aside for mine development in the event the project moves forward — such as mine offices, workshops, crushing/ processing facilities, and heap leach pads and waste dumps — can be accommodated within the mining concessions in the areas proposed.
- # The Author visited the diamond drill rig that is conducting geotechnical drilling for input into the environmental impact statement that will be submitted to SEMARNAT. Discussions with the independent geotechnical consultant confirms that, a) an extensive geotechnical drilling program had been completed, b) that drilling was of high quality, and that c) ground conditions are good for the loading of mined material on leach pads.
- # Morales-Ramirez visited the Tetlama Community Liaison Office and met with Alamos community liaison staff, independent environmental consultants, and traditional land-owners. The Author is satisfied that community engagement program is in place and that the local communities are engaging in a very positive manner.
- # Morales-Ramirez briefly reviewed the historical surface soil, rock chip and channel sampling programs and associated database — whilst these programs were important in the discovery history of the Esperanza Gold Deposit, the programs were reconnaissance in nature and have little, if any, material impact on the historical resources.
- # The historical diamond drilling and RC drilling programs — and the resultant geological, drilling and assay database — were reviewed in detail.
 - The location of several drill collars were checked in the field using Spot 5 satellite base imagery and a hand held GPS with nominal accuracy of ± 2 m — collar locations match those of the historical drill database confirming integrity of historical drill collar location data.
 - Historical diamond drill core and RC chip handling, logging and sampling protocol was reviewed — protocol followed industry recognized standards of best practice, and likely generated data that was unbiased, representative of mineralization and type of deposit, and of a high quality sufficient for use in mineral resource estimation.
 - Phase 3 RC drilling relied on water injection to lift bit cuttings due to insufficient compressed air capacity. This procedure does not follow industry-recognised standards of best practice. This does not negate use of Phase 3 RC assays in resource calculation — but Morales-Ramirez recommends that the assay/grade profile of Phase 3 RC holes are compared to assay/grade profiles of surrounding Phases 1, 2, 4 or 5 drill holes. This would provide a much better assessment of Phase 3 drilling integrity — than twinning a small number of holes.
- # The diamond drill core and RC chip sample security, sample preparation and assay protocol, underpinned by a QA/QC protocol implemented by ESM, followed industry recognised standards of best practice.
 - Insertion of field blanks demonstrated that contamination during sample preparation was not a material issue.

- A total of 1213 CRM's were inserted into the sample stream — 11 gold CRM's (or <1% of the total number of CRM's submitted) were deemed failed. Remedial action involved the re-assay of over 300 pulps and re-issue of assay certificates. The Author is satisfied that assays are accurate.
 - Field duplicates (quarter cut drill core or an identical duplicate RC chip sample) and pulp duplicates were submitted for assay. Whilst ESM did not implement a full staged duplicate protocol (using field, crush and pulp duplicates) — the use of field and pulp duplicates followed industry recognized standards at the time. Morales-Ramirez is satisfied that duplicate protocol used by ESM shows that there is no obvious sampling bias and that overall precision is good.
 - Five hundred and forty two pulp rejects were re-assayed at three independent assay laboratories. The correlation coefficient between original and secondary pairs ranged from 0.988 to 0.998 indicating robust assay replication — supporting the accuracy and integrity of the assay results from ALS Chemex.
- # Morales-Ramirez was unable to verify historical down hole survey data. However, plots of drill hole traces and drill hole cross sections show hole deviation typical of that expected. The Author has no reason to doubt the validity of the down hole survey database.
- # The Author reviewed the exploration and drilling database. The database was well organized and appropriate for the stage of exploration and use in resource estimation. A small number of ALS Chemex assay certificates were cross-checked against the assay database. The database accurately reflected the assay certificates.
- # Going forward, in order to verify the historical drilling results, the author recommends that all ALS Chemex assay certificates (if available) be cross-checked against the assay database.
- # Methodology of specific gravity measurement followed industry-recognized standards of best practice. Sample density was excellent and Morales-Ramirez is satisfied that specific gravity assigned to the various rock-types are consistent with expected values from similar deposits worldwide.
- # In order to fully verify the integrity of historical drilling, sampling and assay protocol, and historical drill database, the Author recommends that select diamond and RC drill holes are re-logged and re-sampled. Half cut diamond core, RC chips, and crush and pulp rejects, representing approximately 10% of the historical assay database, should be re-assayed.

12 MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testing by the Company. The results of historical mineral processing and metallurgical testing are included in Section 5 (History) of this report.

13 MINERAL RESOURCE ESTIMATES

There are no current mineral resource estimates for the Property. Historical resources are discussed in Section 5 (History) of this report.

14 ADJACENT PROPERTIES

There are no adjacent properties to the Property. High priority exploration targets adjacent to the Esperanza Deposit are within Property mining concessions.

15 OTHER RELEVANT DATA AND INFORMATION

The author is aware that the previous operators have pursued support of the state authorities in connection with a future Environmental Impact Assessment Report (MIA) for the Esperanza Gold Project. Alamos Gold Inc. has carried out significant social and community engagement related to the Esperanza Gold Project. Zacatecas Silver Corp. plans to continue such social and community engagement prior to the submitting of a MIA.

The author is not aware of any other information or data that may be relevant to this report — other than that already disclosed in previous sections of this report.

16 INTERPRETATIONS AND CONCLUSIONS

The Esperanza Property is located 80 km south of Mexico City and 12 km from Cuernavaca in the State of Morelos. It consists of 8 mining concessions comprising 14,338 hectares. The Company entered into a share purchase agreement dated 28th of February 2022 with Mina de Oro Nacional, S. A. de C. V. Under the terms of the Agreement — Zacatecas Silver Corp. has agreed to acquire all of the issued and outstanding shares of Esperanza Silver de Mexico, S. A. de C. V., which holds title to the Esperanza Gold Project. The details of the acquisition are outlined in Section 3.5 (Purchase Agreement) of this report.

The Esperanza Deposit is a near surface oxidized gold skarn that was extensively drill tested (144 diamond hole for 27,592 m and 245 RC holes for 42,124 m) by Esperanza Resources (ESM). The deposit has been the subject of four mineral resource estimates and two preliminary economic assessments. Morales-Ramirez is of the opinion that the Jutras (2015) Jutras mineral resource estimate best reflects mineralization at Esperanza.

The Jutras (op. cit.) estimate cites a measured and indicated resource of 34.352 MT @ 0.98 g/t Au and 8.09 g/t Ag for 1,083,366 oz of gold and 8,936,201 oz of silver — and an inferred resource of 718,000 tonnes @ 0.80 g/t Au and 15.04 g/t Ag for 18,375 oz of gold and 347,192 oz of silver. This was a pit constrained resource based on US\$ 1400 gold and US\$ 22.0 silver, gold recoveries from 60.4% at 0.20 g/t Au to 71.9% at 1.60 g/t Au, silver recoveries of 25%, a pit slope angle of 38° to 45°, and estimated costs of \$2.40/t (mining), \$4.20/t (processing) and \$0.64/t (G&A). Based on 0.4 g/t Au cut-off.

Morales-Ramirez has not done sufficient work to classify the Jutras (2015) historical mineral resource estimate as current mineral resources or mineral reserves — the Author is not treating the historical estimate as current mineral resources or mineral reserves.

The Author conducted a detailed review of diamond and drilling methodology; chain of custody; drill hole/RC chip logging and sampling protocol; sample preparation and assay protocol; and QA/QC protocol implemented by ESM. The work confirmed to industry recognized standards of best practice and diamond and RC drilling assays appear to be representative of the type and style of mineralization and unbiased. There was no evidence of contamination during sample preparation, certified reference material inserted into the sample stream demonstrate that the assay results of ALS Chemex are accurate, and the use of field and pulp blanks show good field precision and appropriate sampling and sub-sampling protocol.

The Company is treating the Jutras (2015) mineral resource estimate as historical — in order to complete a PEA study a current mineral resource estimate will be required. Whilst there is no certainty that a current resource estimate will be defined, the Author recommends that approximately 10% of the historical assay database is verified by re-sampling the remaining half-cut core, RC chips, and crush and pulp rejects. Historical core, RC chips, and crush and pulp duplicates are stored in a very well maintained and secure facility close to site, and there are no impediments to verification re-sampling.

In conjunction with verification re-sampling, it is recommended that further samples are taken at the same time for bench-scale metallurgy, to determine whether the recovery of gold and silver can be further optimized. Understanding gold and silver deportment, and mineralogy, through detailed petrological study is also an important metallurgical input parameter.

Whilst the Esperanza Deposit has been extensively drill tested — there is the potential to define additional mineralization along the flanks. The high grade gold-silver feeder zone at the western margin of the intrusion is an obvious target. In addition to the Esperanza deposit — there are a number of high priority, near-deposit and concession-wide, exploration targets that require field mapping and sampling, in order to define drill targets.

Morales-Ramirez has identified the following risks that may have a negative impact on future development of the Esperanza Gold Project:

- # There may be a risk of uncertainty with project stakeholders. While the Company will continue to work close with all stakeholders, there is a risk that opposition could delay the exploration and development of the Esperanza Gold Project. Continued dialogue with stakeholders will mitigate this risk.
- # Although significant exploration success has occurred on the La Esperanza deposit, the results of the exploration program on future key targets may be unsatisfactory to the Company.
- # In order to develop the Esperanza Gold Project, the Company will require significant financing, of which there is no assurance.
- # There is significant competition in the exploration and development of mineral properties and there is no assurance that the Company will successfully retain personnel with suitable experience to conduct its future programs efficiently and effectively.

17 RECOMMENDATIONS

The Esperanza Gold Deposit is a near surface, bulk target, oxidized gold skarn system. Between 2005 and 2012 a total of 385 diamond and RC holes were drilled by ESM for a total of 42,142 m of RC drilling and 26,770 m of diamond core drilling. There have been four different historical mineral resource estimates and a PEA economic study by ESM.

Two work phases are recommended (Tables 8 and 9). These phases are not rigid and it is to be expected that some cross over will occur. Nevertheless, they outline recommended work programs and overall sequence.

17.1 Phase I Work Program

In order to complete a PEA study, a current mineral resource estimate will be required. Whilst there is no certainty that a current resource estimate will be defined, the Author recommends that approximately 10% of the historical assay database is verified by re-sampling remaining half-cut core, RC chips, and crush and pulp rejects.

The Author notes that the near-deposit and concession-wide exploration potential is robust and recommends a field mapping and sampling program at the Esperanza deposit and surrounding key targets: Coatetelco, Alpuyeca, Jasperoid de Tores, La Vibora, Mercury Mines and Pluma Negra.

Although metallurgical work has been carried out on the Esperanza Gold Project, the Author recommends that the Company continue with the metallurgical studies to determine whether the recovery of gold and silver can be further optimized. Understanding gold and silver deportment through detailed petrological study is fundamentally important. Metallurgical task-work should also reviewed the potential for enhanced gold and silver recoveries through use of rotary impact crushers (which are likely to cause micro-fractures in comminuted rock) as opposed to conventional jaw crushers.

Item	Cost / USD
General exploration, mapping and sampling	400,000
Drill permitting	50,000
Re-assay historical core and RC chips	200,000
Bench-scale metallurgy	100,000
Petrology for gold-silver deportment	100,000
Resource modelling	150,000
Phase 1 community engagement	250,000
Table 8: Recommended Phase I Work Program: USD 1,250,000	

17.2 Phase II Work Program

On the basis that Phase I exploration and mapping program defines reconnaissance drill targets — the Author recommends that the Company commence a 2500 m diamond drilling exploration program.

A total of 5000 m of drilling should also be allocated to step out drilling around the boundary of the historical resource estimate with a view to potentially upgrading deposit size prior to completing a PEA of the Esperanza Deposit. The high grade feeder zone at the western flank of the intrusion is an obvious target.

Most of the work required to address previous short-comings of the MIA application have now been addressed. The Author recommends that the momentum continues in order to deliver an updated MIA as soon as possible. It is es-

essential that the community engagement strategy that is well designed and supported at community level — is expanded as surface exploration and drilling activities are re-commenced. These activities will generate employment which is important at community level. Ongoing development of new initiatives will also be important.

Item	Cost / USD
Infill / Confirmation drilling (5000 m)	1,500,000
Exploration Drilling (2500 m)	750,000
Preliminary Economic Assessment	1,500,000
Phase 2 community engagement	500,000
Table 9: Recommended Phase I Work Program: USD 4,250,000	

18 REFERENCES

- Ausenco Vector. 2010. Technical Memorandum "Site Visit and Preliminary Geotechnical Investigation, Cerro Jumil Gold/Silver Project, Morelos State, Mexico." Prepared for Esperanza Resources. Ausenco Vector Project No. USVC0011201. 6 pp. August.
- Bond, William D., Turner, Dean D., 2008. Cerro Jumil Project, Mexico, NI 43-101 Technical Report – Prepared for: Esperanza Silver Corporation.
- Bond, William D., Turner, Dean D., 2010. Cerro Jumil Project, Mexico 2010 Resource Update NI 43-101 Technical Report – Prepared for Esperanza Resources Corporation.
- Bond, W. D., Turner, D. D., Dyer, T., Maxwell, D. K., Khoury, C. and Shonts Jr, E. T, 2011. NI 43-101 Technical Report , Preliminary Economic Assessment, Cerro Jumil Project, Morelos, Mexico. Prepared for Esperanza Resources Corporation. 205 pages.
- Cerro Jumil Metallurgical Report, The Center for Advanced Mineral Metallurgical Processing, Montana Tech of the University of Montana Butte, Montana, June 1,2009.
- Dyer, Thomas. 2009. The report titled Cerro Jumil Preliminary Economic Assessment Mining Study Morelos State, Mexico. Prepared for Esperanza Silver Corporation.
- Dyer, Thomas. 2011. Report titled "Preliminary Economic Assessment Mine Study, Cerro Jumil, Mexico," prepared for Esperanza Resource Corporation by Mine Development Associates.
- Golder Associates Inc. 2011. Technical Memorandum "Conceptual Design of Heap Leach Facility, Cerro Jumil Gold Project, Morelos State, Mexico," Prepared for Esperanza Resources, Golder Project No. 113-81626, 5 pp. July.
- Golder Associates Inc. 2011 (update). Preliminary Economic Assessment Update 2011 Cerro Jumil Project, Morelos, Mexico", Prepared by Dean D. Turner, Thomas Dyer, Doug K. Maxwell, Charlie Khoury and Ernest T. Shonts Jr.
- Griffith, David J. 2003. Report on the Esperanza Project. Report for Recursos Cruz del Sur S. A. de C. V. March 2003.
- Lyntek. 2009. Cerro Jumil Preliminary Economic Assessment; Prepared for Esperanza Silver Corporation.
- Lyntek. 2011. Cerro Jumil Preliminary Economic Assessment: Douglas Maxwell, Lyntek Inc. Prepared for Esperanza Resources Corp
- SGS Lakefield Research Ltd. 2006. The recovery of gold by cyanide leaching of two composites, SGS Lakefield Research Ltd., Project 10996-002 Report 1, September 2006.
- SGS Minerals Services, 2008. Determination of the gold and silver recovery by cyanidation of one ore composite, SGS Minerals Services/Durango, Final report SGS-37-07, May 2008.

19 DATE AND SIGNATURE PAGE

For and on behalf of the Authors to accompany the report dated 7th of March 2022 entitled 'Independent Technical Report, Esperanza Gold Project, Morelos State, Mexico'.

"Juan-Manuel Morales-Ramirez"

Juan-Manuel Morales-Ramirez, BSc, MSc, P. Geo
Independent Consultant
7th of March 2022

20 CERTIFICATE OF QUALIFICATION

To accompany the report dated 7th of March 2022 entitled,
'Independent Technical Report, Esperanza Gold Project, Morelos State, Mexico'

I, Juan-Manuel Morales-Ramirez, BSc, MSc, P. Geo, from Hermosillo, Sonora, Mexico,
do hereby certify that:

- 1 I am an independent consultant geologist; my address is Calle Paseo del Norte #47, Colonia Paseo del Sol, Hermosillo, Sonora, Mexico, 83246.
- 2 I graduated with a Bachelor's degree in Geology (Geological Engineering) from Instituto Politécnico Nacional, Mexico City, Mexico in 1976, and MSc (Geology) from Universidad de Sonora in Hermosillo, Sonora, Mexico (thesis pending).
- 3 I am a Certified Professional Geologist (CPG #11234) in good standing with the American Institute of Professional Geologists in Arizona, USA since 2008.
- 4 I have practiced my profession continuously for over 40 years since my graduation in 1976. My exploration experience has been acquired with a variety of companies including: Consejo de Recursos Minerales (SGM); the US Geological Survey; VITRO; US Borax, USMX, Cambior (1992-1997), Noranda and X-Ore (2005-2013) and Silver Pursuit Resources Ltd.
- 5 I have read the definition of 'qualified person' set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a 'qualified person' for the purposes of NI 43-101.
- 6 I am responsible for all sections of this report titled "Independent Technical Report, Esperanza Gold Project, Morelos State, Mexico". I carried out a personal inspection of the Property on 7th and 8th of December 2021.
- 7 As of the date of this Certificate, to the best of my knowledge, information and belief, this Report contains all scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
- 8 I am independent of Zacatecas Silver Corp., the property and property vendor, applying all of the tests in section 1.5 of National Instrument 43-101. I have no prior involvement with the Property that is the subject of the technical report.
- 9 I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 10 I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

"Juan-Manuel Morales-Ramirez"

Mr Morales-Ramirez, BSc, MSc, P. Geo
7th of March 2022

