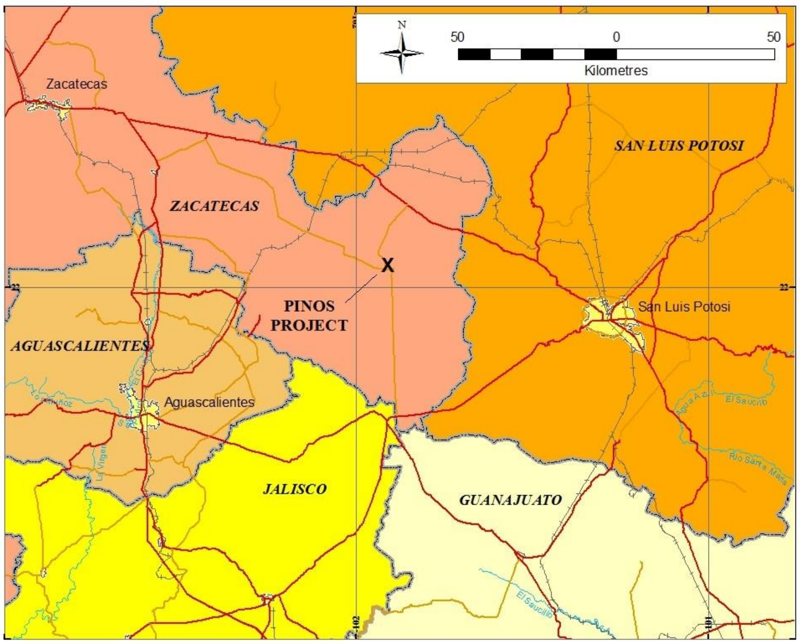
CANDELARIA MINING CORP.

NI 43-101 PRELIMINARY ECONOMIC ASSESSMENT

STUDY FOR THE PINOS PROJECT, ZACATECAS, MEXICO



Prepared By:

José Antonio Olmedo, Geol. Eng., M.Sc.
David J. Salari, P.Eng.

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1. SUMMARY

1.1 Introduction.

Candelaria Mining Corp. (hereafter called “Candelaria”), a TSX Venture Exchange listed symbol (Symbol: CAND.V), commissioned D.E.N.M. Engineering Ltd. (D.E.N.M.) and Jose A. Olmedo (JAO) to prepare an independent preliminary economic assessment for the Pinos Project near Zacatecas, Mexico. The work entailed a review of all past data compiled by Candelaria Mining for the project. Such work included a metallurgical review of the project, flowsheet review, operating and capital costs, and the present project economics. A proposed site plan for the project is shown in Section 18. This Preliminary Economic Assessment (PEA) report is prepared to the standards of NI 43-101.

Previous studies on the property were carried out by Jose A. Olmedo Independent Geol. Eng. MSc., who undertook an independent study for a resource estimate in compliance with National Instrument (NI) 43-101 on the project workings and underground areas. The results from these are incorporated and included in this PEA report in specific sections noted and form the basis for the resource tonnages and grades for the Pinos Project.

Mr. D. Salari, P. Eng., principal of D.E.N.M. Engineering Ltd. (who has not visited the site) is an Independent Qualified Person for matters relating to metallurgy and mineral processing.
Mr. David Salari is responsible for Sections 13 and 17 of this PEA and co-authored Sections 2, 3, 18, 19, 21, 22, 23, 26, 27 and the summary of this report.

Jose A. Olmedo, Geol. Eng. MSc. (who visited the site on four occasions – November 16-18, 2017, January 16-24, 2018, February 28 – March 3, 2018, and August 28-31, 2018) is an Independent Qualified Person for matters relating to geology and resource estimates.

Mr. Jose A. Olmedo is responsible for Section of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and the Summary of this PEA.

This report provides an Independent Compliant NI 43-101 Technical Report entitled “Preliminary Economic Assessment Study for the Pinos Project, Zacatecas, Mexico” of the exploration and development potential of the Candelaria´s Pinos Project, focusing on the initial investment of US $ 13.5 million dollars to exploring, developing, mining and processing mineral with gold and silver values at the mineral vein trend known as Cinco Estrellas.

The purpose of this report is to provide Candelaria and its investors with an independent opinion on the technical and economic aspects and mineral resources at Pinos.

This report provides a summary of the exploration and mining history of the Pinos Project, as well as a mineral resource estimate. It also includes a detailed description of proposed exploration, drilling, mining, and processing program along with a preliminary economic analysis that may sustain further investment in developing this mineral property.

1.2 Property Description and Location

The Pinos Project is in the central part of the Mexican Republic, at the Municipality of Pinos in the southeastern portion of Zacatecas State. It is at 80 Km West from the City of San Luis Potosí and at 140 Km East from Zacatecas State Capital seen in Figure 1.1.

The Pinos Mining Project is accessed from San Luis Potosí via Federal Highway 49 (Zacatecas-San Luis Potosí) for 74.6 Km, then taking a deviation to the south on State Highway 144 (Zacatecas-Pinos-La Trinidad) to the City of Pinos for 26.3 Km. Both highways are paved and in good condition.

Alternatively, the project can be accessed from the City of Zacatecas by taking Federal Highway 49 (Zacatecas-San Luis Potosí / México) for 115 Km, then deviate to the south through State Highway 144 (Zacatecas-Pinos-La Trinidad) for 26.3 Km.

Accordingly, to INEGI (Instituto Nacional de Estadística y Geografía), the climate in Pinos is Semidry Temperate, code 32-043, with average annual rainfall from 300 – 350 mm and average annual temperature of 16.2° Centigrade. The Town of Pinos is located at an altitude of 2,408 meters above sea level.

Pinos Project belongs to the Physiographic Province of the Mesa Central, within the Subprovince of Llanuras y Sierras Potosinas – Zacatecanas. The topography in the project area is gentle with shallow creeks generally cutting south and southwest–sloping terrain with elevations ranging from 2,360 to 2,900 meters above sea level. Highlands in the north and northeast are steep-sided.
Vegetation is mainly composed of xerophyte shrubs growing in a poor planosol soil.

The planned processing plant, project offices, labs, and warehouses lie about 2 Km west of the Town of Pinos which population of about 7,000 inhabitants.

The Town of Pinos has lodging and is a source of skilled and unskilled labor and basic supplies. Electric power and water are readily available in Pinos. It has gas stations, telephone, internet, bank facilities and it has regular bus service to nearby large cities as well.
The nearest airport is in San Luis Potosí. Non-basic supplies can be easily sourced from the cities of San Luis Potosí and Zacatecas. Zacatecas State is well known for its availability of highly skilled people in mining and drilling.

Figure 1.1: Location Map

Source: JAO (2018)

1.3 Property Ownership

The Pinos Project consists of 29 mining concessions for exploration, mining, and production, totaling 3,816.2735 hectares.

These concessions are held by Minera Apolo S.A. de C.V. ("Minera Apolo" or "Apolo") and its subsidiary Minera Catanava. The Pinos Project mining concessions are owned jointly by Minera Apolo, S.A. de C.V., and Candelaria Mining Corp., through its Mexican subsidiary Grupo Minero

Candelaria, S.A.P.I., owns 60% of Apolo and has a direct interest in buying additional adjacent mining concessions.

All mining concessions are in good standing, and they are not subject to any unusual or onerous conditions, and their existence or validity will not be affected by any change of control.
Minera Apolo, S.A. de C.V., is the owner of 85.49 hectares of surface land. This land is sufficient for engineering and construction requirements; including, the dynamic leaching mill, tailings pond, warehouses, offices, and mining infrastructures.

A Mexican ejido is a land-owning cooperative with a defined number of associates (ejidatarios). The Ciudad Pinos Ejido controls surface rights in the northern and western parts of Candelaria's Pinos Project. Minera Apolo S.A. de C.V. through its subsidiary 100% owned subsidiary Minera Catanava, S.A. de C.V., has an agreement with Ciudad de Pinos Ejido, which allows the company a right-of-way on established roads on ejido lands and exclusive use of a right-of-way for access to the project's plant and offices in the western part of the project.

The surface-use agreement is valid for the life of the project and may not be changed because of a change of ejido's leadership. Minera Apolo, S.A. de C.V. must pay royalties in the amount of the 1.5% (One and a half percent) of the Net Smelter Return from production from the mining concessions to Donald Frazier McLeroy Felkins, María Guadalupe Chiw Castillo, and Kathleen McLeroy Chiw and decedents, on a quarterly basis.

There are no known significant factors or risks that may affect access, title, or the right or ability to perform work on the project. The project has no known environmental liabilities.

1.4 History

Gold and silver were originally discovered at, Pinos by Spanish conquistadores in 1556. Historical data registers a Gold Equivalent of 800,000 ounces, produced mainly by British Candelaria Mining Co., during the Pinos boom period from 1870 to 1910 and by Compañía Minera Zacatecana from 1932 to 1942.

1.5 Geological Setting and Mineralization

Geologically at Cinco Estrellas mineralized trend, there is a siliciclastic calcareous stratigraphic sequence affected by thrust faulting and Cretacic ductile deformation sequenced by normal displacement faulting and fragile Tertiary deformation.

Stratigraphic column at Pinos is related to the accretion of Guerrero Terrane (Alisitos Arc Petrotectonic Assemblage) followed by deep-basin sediments (Gulf of Mexico Petrotectonic Assemblage) and finally continental red beds (Molasses) and acid vulcanism (Sierra Madre).

Locally, there are 3 main structural faulting domains at Pinos; Tectonically, it is inferred that the first system (NW-SE, Fátima, San Javier and Inmaculada) relate to the structures of the argentiferous belt of Zacatecas, which extends from Durango – Fresnillo – Zacatecas, possibly associated with the limit of Guerrero and Sierra Madre terranes. The normal-lateral system N25°E was possibly formed along with Tertiary extension associated with the Mexican Basin and Range; Cinco Estrellas vein trend is part of this tectonic system, and finally the N-S normal faulting system is probably associated with the last extensional period of the Late Tertiary (Graben de Aguascalientes, Graben de San Luis Potosí, Falla El Obraje, and others).

Gold-silver mineralization in Pinos District occurs in the form of veins and stockworks structurally controlled by NW-SE, NE-SW and N-S fracture-faulting systems described earlier; it is hosted in rocks of the Proaño Group, Fortuna Formation, Caracol Formation and to a lesser extent in rhyolitic flows and ignimbrites of the Pinos Volcanic Complex. Vein structures show more than 25 kilometers linearly in length within the district besides extensive areas of mineralized breccia and stockworks.

Grupo Proaño, related to euxinic, deep-basin back arc sediments and ductile deformation; it, improved the consolidation of widest veins and ore shoots (3 m – 5 m width). Grupo Proaño is the best suitable host rock at Pinos Gold District, in accordance the information of drill holes and systematic sampling of old workings, possibly the iron-rich sediments contribute to the enrichment of Au-solutions by chemical reactions between iron and sulfide. However, this theory has not been proved yet.

Rhyolitic Porphyry, the San Matías (San Judas) Target (Regional Exploration) shows an altered rhyolitic porphyry with advanced argillic alteration and stockwork. The stockwork is formed by quartz veinlets with halos of iron oxides; these veinlets are ranging 5 cm – 20 cm of separation. Stockwork is bisected by major 20 cm – 40 cm high-grade parallel veins separated between 30 – 80 m. The results and historical data of old works and exploratory RC and diamond drill holes indicate the possibility of Au disseminated deposit.

Mineralization is mainly associated with quartz and calcite. There are different textured types of presentation of quartz, varying from chalcedony white banded, crystalline banded, platy, ginguro, massive and smoky, in the middle area of Cinco Estrellas vein, pink quartz was also observed.
Most of the gold and silver phases occurred as liberated grains. Overall, these precious metal particles had an average diameter of 1.5 microns for gold particles and 2.5 microns for silver particles.

Mineralized veins at the Pinos District consist of the classic ginguro, banded and brecciated epithermal variety. The vein textures are attributed to the brittle fracturing-healing cycle of the fault-hosted veins during and after faulting. Primary quartz textures include, massive, crustiform, colloform, cockade and combed. Replacement quartz texture includes platy, pseudo bladed and saccharoidal.

The mineral assemblage and textural and geochemical character of the Pinos veins indicate that they are at high structural levels of a low-sulphidation system. Very fine-grained sulfide minerals may be present in the greenish-gray bands in veins; sulfide minerals are otherwise generally absent.

1.6 Exploration and Drilling History

Modern exploration works started in 1975 with a joint venture between Bethlehem Steel and Industrias Peñoles; they performed an exploration program coordinated and directed by Minera Apolo and reported by McLeroy and others (1981). The joint venture focused its work on the old San Luis, Cinco Estrellas, Griego, and Peñitas mines of the Cinco Estrellas trend, and on the La Paz and Tiro Cuatro mines of the La Paz trend.

The joint venture conducted an 8-hole diamond drilling campaign totaling 1,281.15 m from November 1980 to June 1981. Drilling concentrated on the Cinco Estrellas, San Rafael, Purísima, and La Paz zones. The core was not available for view at the time of the author's visits, and no information from these drill holes has been considered by Candelaria for its mineral resource estimations.

In 1983, Minera Apolo S.A. de C.V., the Mexican company managing the Bethlehem/Peñoles joint venture, acquired all the Pinos joint venture claims. Sporadic work was carried out between 1983 and 1996, including vein sampling by C. Aspinall in 1993, and exploration of the San Gil vein by All North Resources in 1994.

In 1996, Hecla Mining Corporation explored the Pinos district. Hecla focused on the altered contact of the rhyolite/trachyte dome complex to the east and north of the known vein systems, looking for a Carlin Type of mineralization and drilled 27 reverse circulation holes on targets such as the apparent lithocap south of San Ramón, El Africano and some other areas susceptible for disseminated mineralization.
Romarco Minerals Inc. optioned the Pinos ground in 2006. Romarco's work concentrated on the northern part of the Cinco Estrellas vein zone, from Tanous to San Luis; with, an 8-hole diamond drilling program and extensive underground sampling on the Tanous and San Miguelito shafts. Romarco intersected vein mineralization in 7 of the eight drill holes.

Highest precious-metal values intersected in drilling were 6.05 m at 5.16 g/t gold and 19.0 g/t silver. Highest values from underground sampling were 7.2 g/t gold and 142 g/t silver at the Tanous shaft and 6.94 g/t gold and 43 g/t silver at San Miguelito. From these, information from only one drill hole was used in Candelaria's resource estimation; which is, R-DDH-05A-07 (physical core is at Candelaria's drill core warehouse in Pinos).

Romarco also conducted detailed geologic mapping of the western part of the Pinos district, using the Hunter Surveying maps and orthophotos as a base.

In 2010, Excalibur Resources and Minera Apolo entered into an exploration/mining joint venture agreement forming Minera Catanava, S.A. de C.V., to work on a 143-hectare portion of the northwestern part of the Apolo concession block in September 2010. In addition to the exploration/development work, Catanava constructed a processing plant. The joint venture agreement between Excalibur and Apolo was terminated on 12 January 2015, leaving Apolo with 100% ownership of the entire concession block.
Branco Resources began in May 2014 with a compilation of maps, sections, reports provided by Minera Apolo and review of work done by Bethlehem Steel and Peñoles. Branco did confirmation sampling and metallurgical tests performing a Scoping Study focused on the Cinco Estrellas trend defining four mineralized zones; namely, Peñitas, Griego, Cinco Estrellas-San Miguel, and Natividad-Mina 25 veins. Among main conclusions from Branco's scoping report is that the Pinos Project from an exploration perspective is that nearly all of the exploration has been concentrated in a very small area only on the Cinco Estrellas vein itself. The La Paz vein, Azul vein, San Ramón vein, Candelaria vein, Asturiana vein, San Miguel del Oro vein, El Africano vein, and others are nearly unexplored other than limited sampling in small old workings and one drill hole or nothing for which we have little data. Their combined strike length is more than 23 kilometers. Moreover, that the entire district potential yielded the possibility from 400,000 oz AuEQ to 800,000 oz AuEQ.

Notes from Donald McLeroy include that from a sampling of old workings at the El Africano vein said that the vein is at least 8 meters wide at Africano creek and carried 5 to 6 grams gold. It is also intriguing that All North Resources and McLeroy (verbal communication) mentions "strongly silicified areas bordering the Pinos dome with Au anomalies, it could be generating a larger Au dissemination target for future."

In 2015, Stephen Maynard, Qualified Person, collected six rock samples from underground locations on the Cinco Estrellas trend, and two samples of dump material; one of each from the San Ramón and Candelaria mine dumps; his results verified the previous sampling.
During the second half of 2015 and first quarter of 2016 and underground sampling and mapping program was undertaken by Candelaria Mining Corp., to provide a detailed of vein understanding of vein geometry and to confirm gold and silver values from previous sampling and historical mining.

This program was focused on the Cinco Estrellas Mineralized Trend; including the mining works known as San Miguel, San Francisco, San Luis, Griego, Peñitas, Natividad and Mina 25. About one thousand systematic (every 1 meter), rock-chip channel samples were collected from a vein, hanging and foot-

wall structures. Each sample with a minimum of 12 Kg to restrict “nugget effect” on geochemical analysis. It also included a bulk sampling on Candelaria waste dump.
Satisfactory results obtained, allowed Candelaria to execute an extensive diamond core drilling campaign. From May to September 2016, Candelaria performed 33 core diamond drill holes at the three areas of Cinco Estrellas Mineralized trend known as San Francisco, San Carlos de Arandas and San José de Peñitas with a total of 4,729.50 meters, executed by Energold Drilling.

1.7 QA/QC and Data Verification

Candelaria underground and drilling core sampling included a strict program of Quality Assurance and Quality Control (QA/QC), consisting of blind submission of rig duplicates, standards for gold and silver, and blanks for gold and silver, The results of the QA/QC analysis present reasonable confirmation of the reproducibility of assay results with no indication of bias in the analysis of either gold and silver or significant contamination problems at the laboratory. ALS Global geochemistry laboratory was used to obtain a certified analysis.

A comprehensive program of data entry was undertaken by the author comparing assay certificates to the electronic database provided by Candelaria to ensure that the transcription of gold and silver assay data was accurate, finding the perfect match among those values.
The author of this report reviewed the whole drilling logs from Candelaria database verifying that such data was accurately used in mineral estimation procedures.

1.8 Mineral Resource Estimate

Mineral Resource modeling and estimation were prepared by Jose Antonio Olmedo, Eng. Geol. MsC, (Independent, QP) (“JAO”) and Candelaria’s Héctor González using appropriate software, such as Target of Geosoft®, Statgraphics (Version 18) and Autocad 3-D.

JAO reviewed the information of Candelaria’s database obtained from the Candelaria’s Exploration Program 2015-2017, which was used for this mineral resource estimation and validation of technical procedures; including, QA/QC, 2-D sections, statistical and geostatistical, analysis, 3-D Modeling, and grade and tonnage estimations concluding that these procedures meet best practice standards in mineral resource estimation under CIM Definition Standards for Mineral Resources and Mineral Reserves, 2014.

For geostatistical vein modeling and due to different structural dominions, the Cinco Estrellas Mineralized trend was divided into four major areas, namely: San José Peñitas, San Carlos Arandas, San Francisco and Natividad.

Classification of mineral resources was performed based on modeled blocks above a cut-off grade of AuEq of 2.2 g/t, accordingly to the following minimum requirements:

- Measured Resources. Model blocks with AuEq grades were estimated by wells of 1.5m X 1.5 X total depth excavated by a backhoe in mineral dumps within an average distance of 12 m.
- Indicated Resources. Model blocks with AuEq grades estimated by a minimum of 3 drill holes or channel samples located within a maximum distance of 45 m.
- Inferred Resources. Model blocks which do not meet the criteria for measured or indicated resources; but and are within a maximum distance of 80 m from a single drill hole.

Table 1.1 Summary of Cadelaria's Mineral Resource Estimation.

Candelaria Mining Corporation
Pinos Project

A. UNDERGROUND MINERAL RESOURCES

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Indicated	2.2	10	San José de Peñitas	98,448	3.0	51.3	1.34
			San Francisco	52,177	5.0	43.3	1.77
			San Carlos de Arandas	19,174	2.6	29.0	2.1
			Natividad	5,897	5.8	78.5	1.08
Total Indicated	**2.2**	**10**	**ALL**	**175,697**	**3.6**	**47.4**	**1.5**

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Inferred	2.2	10	San José de Peñitas	328,770	3.0	51.3	1.34
			San Francisco	145,480	5.0	43.3	1.77
			San Carlos de Arandas	45,539	2.6	29.0	2.1
			Natividad	9,479	5.8	78.5	1.08
Total Inferred	**2.2**	**10**	**ALL**	**529,267**	**3.6**	**47.7**	**1.5**

B. OTHER MINERAL RESOURCES

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Measured			Candelaria Dumps	85,847	1.6	82.9	0
Total Measured			**ALL**	**85,847**	**1.6**	**82.9**	**0**

Source: JAO (2018)

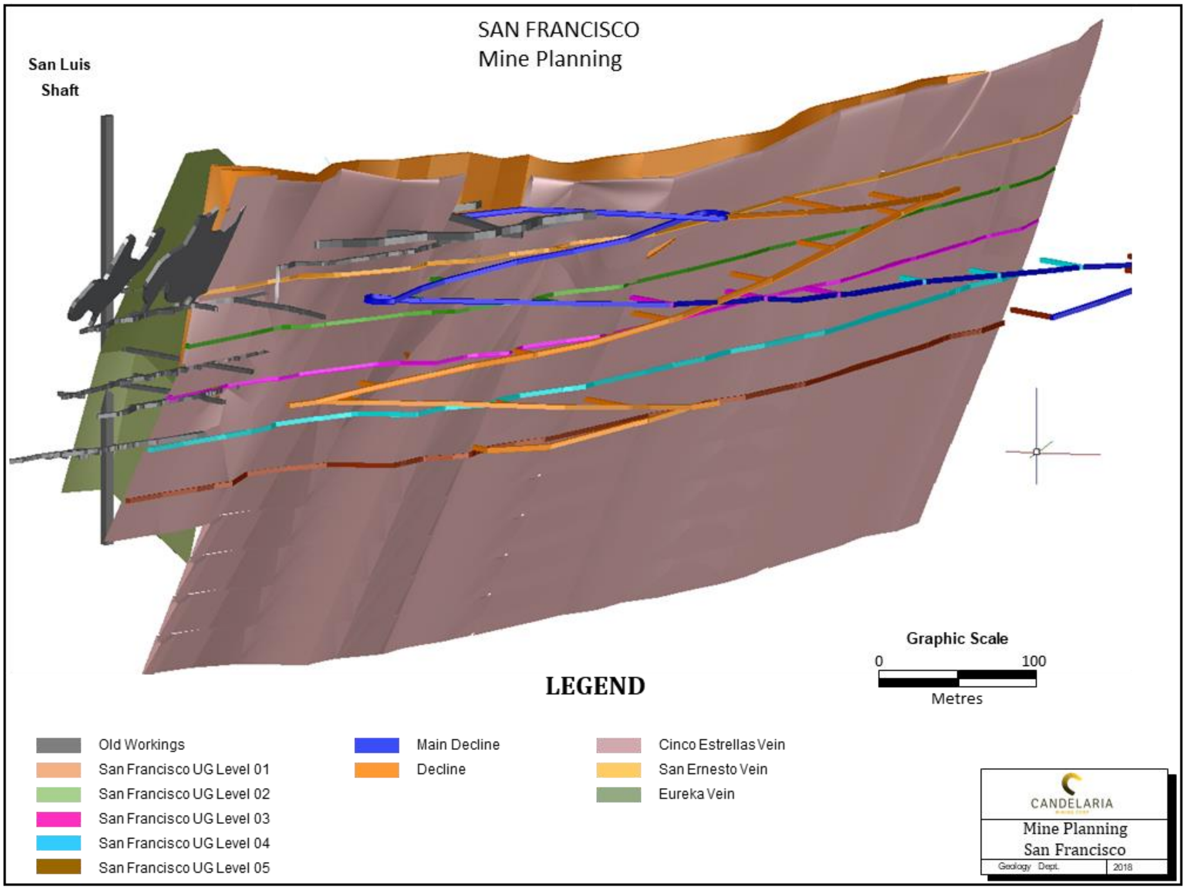
1.9. Candelaria Exploration, Mining Development, and Processing Program

In January 2018, Candelaria Mining Corp. completed an extensive program to start developing its mining concessions in Pinos; this program includes, mining development, mining extraction, diamond core drilling exploration, and mineral processing. The objective is to commence mining production at Cinco Estrellas Vein, generating short-term profits, allowing Candelaria to develop the potential of the entire property through further exploration to scale this project into a major mining district.

A total of 13,450 meters of mining development and 9,645 meters of stopes preparation are projected in this mining program along the Cinco Estrellas Mineralized Trend. These mining workings will provide mineral production of 200 tpd for the first year of operation, 300 tpd for the second and third years and 400 tpd from the fourth year on. Selected mining method is Cut and Fill using waste rock fill.

Candelaria's proposed direct mining development and preparation, consisting in ramps, drifts and raises along vein structures, is in the author's opinion, the best suitable way to better evaluate this narrow vein system of Bonanza type of ore shoots; underground development gives more certainty in confirming the continuity of mineralization, changes in dip and dip direction, local faulting and displacements, veining intersections and large variations in grade and thicknesses of mineralized structures.

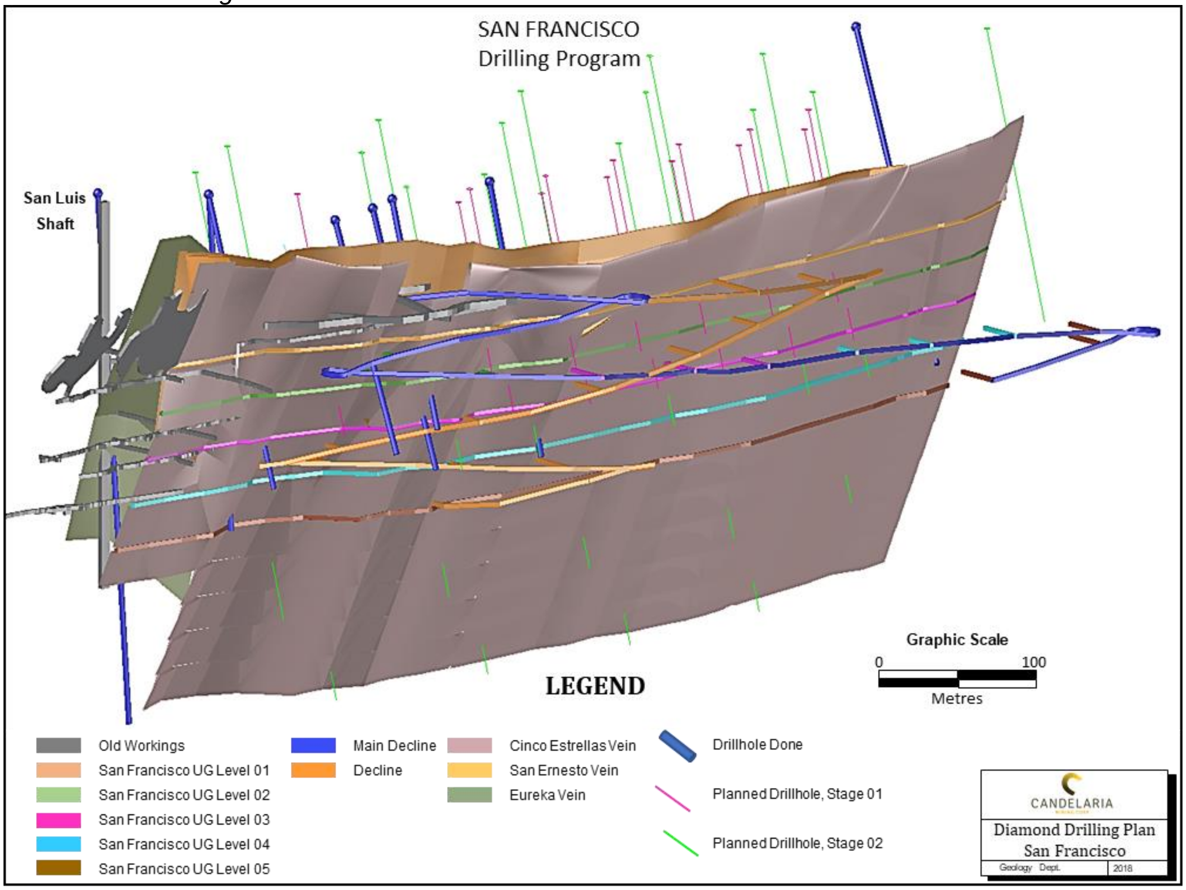
Figure 1.2: 3-D Image of Planned Mining Workings in San Francisco Domain.



Source: Candelaria Mining Corp. (2018)

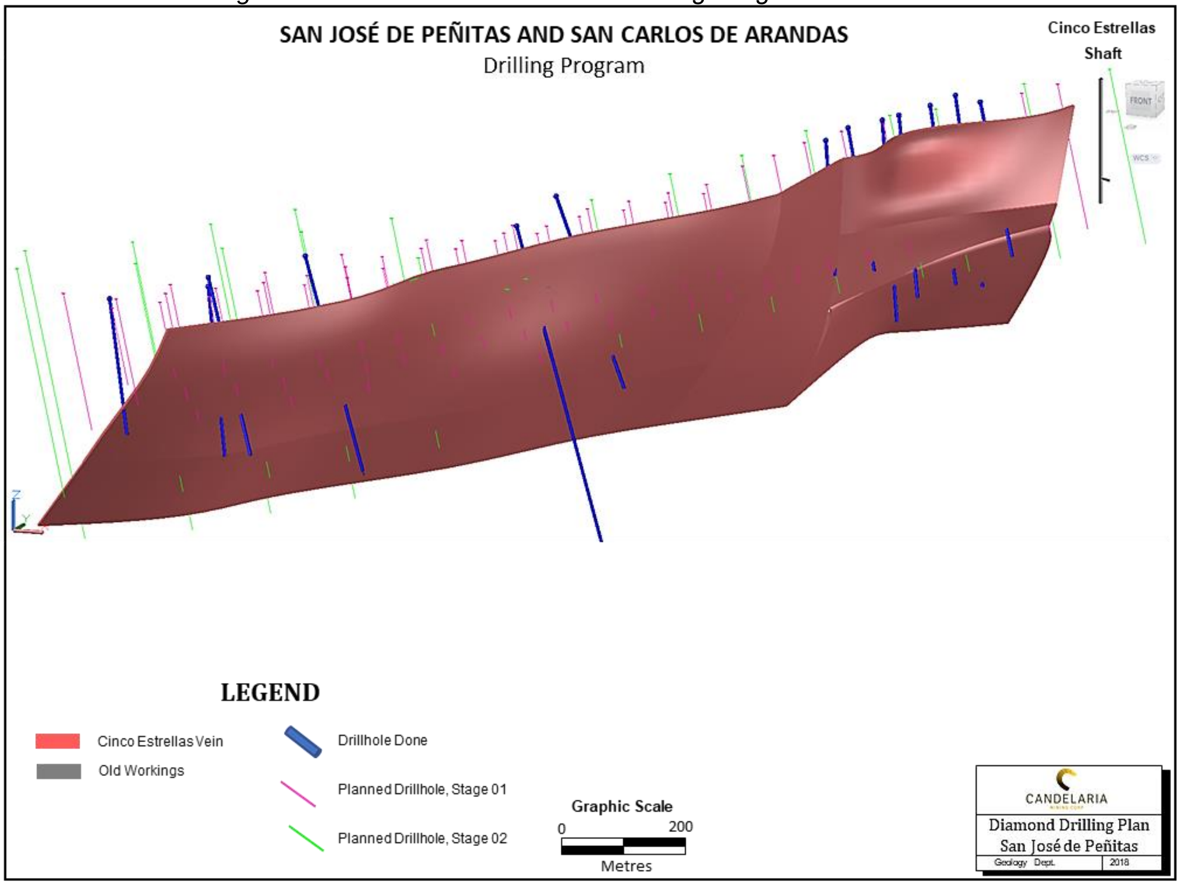
An initial 7,000 meters of diamond core drilling campaign is planned to start by 3rd month of LOM's preproduction year 0, followed by a second campaign of sustaining diamond core drilling of 5,900 meters planned to start by the 1st quarter of LOM's 2nd year of operation to better define mineralization along mining development of the existing mineral resources and to possibly generate additional resources.
Candelaria's Planned Drilling Program Cinco Estrellas' San Francisco Domain in Longitudinal Section. Source: Candelaria Mining Corp,

Figure 1.3: Candelaria's Planned Drilling Program Cinco Estrellas' San José de Peñitas and San Carlos de Arandas Domains in Longitudinal Section.



Source: Candelaria Mining Corp. (2018)

Figure 1.4 – Candelaria's Planned Drilling Program – Section 2

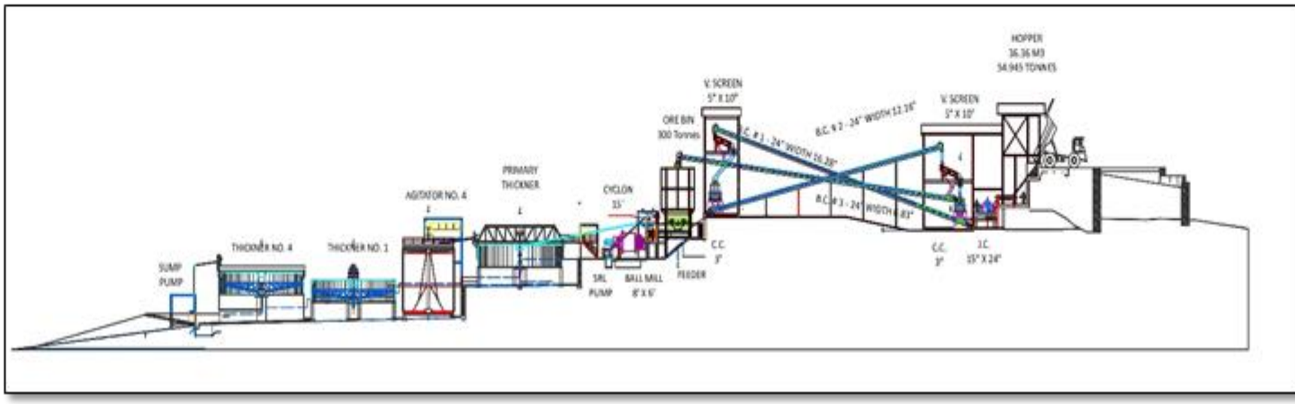


Source: Candelaria Mining Corp. (2018)

As a result, from metallurgical testing performed on Pinos true representative samples, a dynamic leaching plant is proposed by Candelaria to process mineral, starting with 200 tpd in the first year, 300 tpd on 2nd year and 400 tpd from 4th year on, with expected recoveries of 90% for Gold and 80% for Silver, through dynamic NaCN solution. Dynamic leaching process in simplistic terms consists in mineral milling, cyanide leaching and precipitation of the final product.

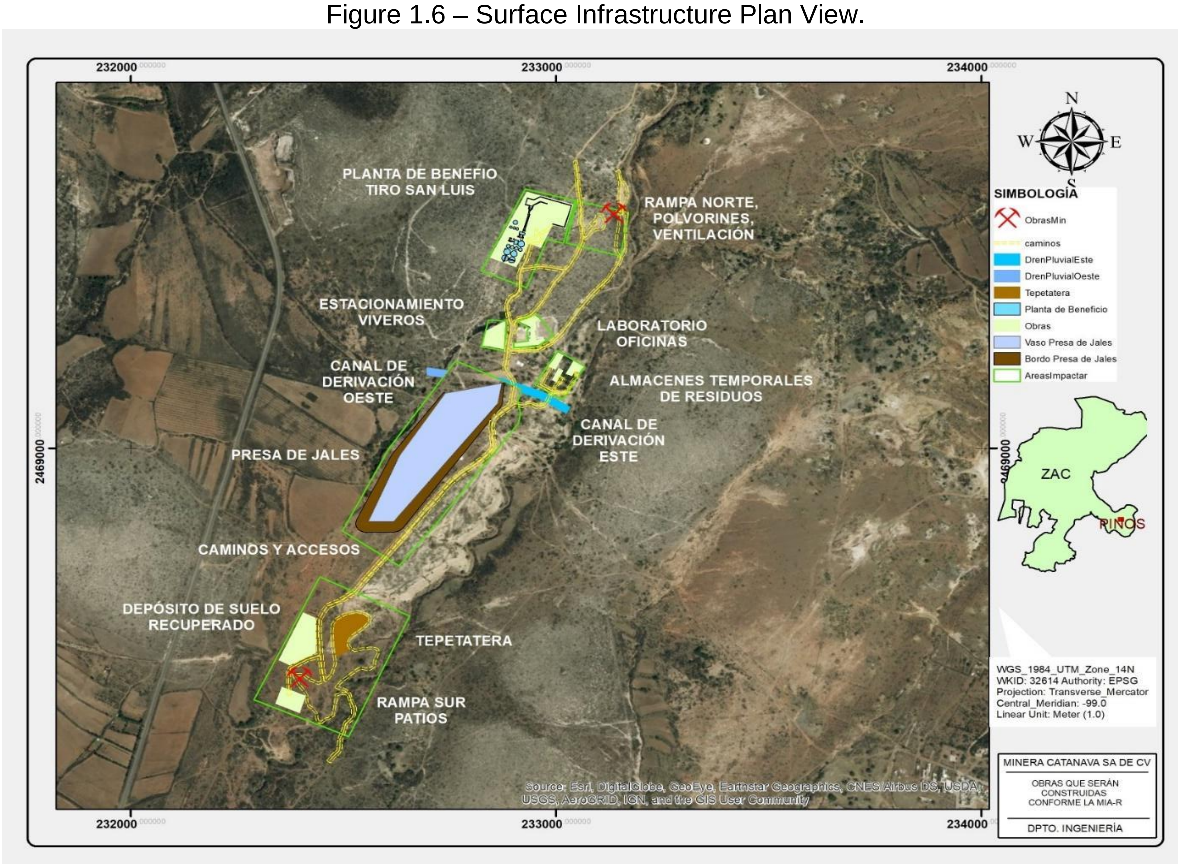
The remanufactured processing plant presently owned by Candelaria (CAND) consists of a crushing circuit, a mill(s) and classification circuit, and an agitated leach plant, countercurrent-decantation, and Merrill-Crowe precipitation. A tailings impoundment is located near the plant.

Figure 1.5 – Dynamic Cyanide Plant Lay-Out



Source: Asesoria Metalurgica (2018)

Figure 1.6 – Surface Infrastructure Plan View.



Source: Candelaria Mining Corp. (2018)

The tailings impoundment is a 100% owned property of Candelaria Mining Corp; it is constructed just below the process plant site. The impoundment is double lined with the first liner made of a clay material that acts as a leak prevention system with the effective absorption and protection to the upper second liner. The second liner is a welded 60 mil HDPE geomembrane, in accordance to geotechnical studies by GeoQuality Mexico and environmental requirements (NOM-141-SEMARNAT-2003). The method of subsequent embankment construction to obtain full capacity is up-stream, with a planned high of 14.92

m, including a final 1-meter free volume for protection of tailings pond during the maximum modeled 100-year storm event; also, the protection includes two derivation channels designed by flow model analysis.

The products from this dynamic leaching plant will be Au-Ag precipitates, all of which contain payable gold and silver

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1.10 Environmental Studies and Permitting

Candelaria has done extensive work to fulfill all regulatory agency requirements in order to put the Pinos Project into production: the following table summarizes actual status of each permit.

Table 1.2 - Permitting Status.

PERMIT	STATUS	DATE EXPECTED	AUTHORITY	COMMENTS
EIA (MIA-Regional)	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Manifiesto de Impacto Ambiental
Environmental Risk Survey	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Manifiesto de Impacto Ambiental
EIA (ETJ)	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Use of forestall land
Explosives Storage	Closed	Granted	Secretaría de la Defensa Nacional	Renewal for 2018
Laboral	Closed	Granted	Secretaría del Trabajo y Previsión Social	Granted by PASST (Self-Management Program)
Laboral	Closed	Granted	Instituto Mexicano del Seguro Social	Social security of workers and medical care
Mexican Company	Closed	Granted	Secretaría de Relaciones Exteriores	Approval for constitution of companies and subsidiaries
Taxes	Closed	Granted	Secretaría de Hacienda y Crédito Público	Company registration, tax registration and rights
Mining Activities	Closed	Granted	Secretaría de Economía	Mine concessions, mining production and investment
Infrastructure	Closed	Granted	Secretaría de Infraestructura Zacatecas	Access for hydraulic pipeline and roads from Zacatecas paved road
Local taxes	Closed	Granted	Secretaría de Finanzas Zacatecas	Use of vehicles, payroll tax.
Power	Closed	Granted	Comisión Federal de Electricidad	New supply granted by CFE with modifications to Pinos project grid system from the power station.
Groundwater Use Allowance	Closed	Granted	Comisión Nacional del Agua	San Luis shaft

Groundwater Use Allowance	Pending	2017Q3-2018Q2	Comisión Nacional del Agua	El Oasis Ranch Aquifer (Aquifer capacity granted)
Additional Land	Pending	2018Q4	Registro Agrario Nacional	Land acquisition granted by Cd. Pinos Ejido and landowners.

Source: Candelaria Mining Corp. (2018)

As part of informative activities of Candelaria Mining Corp at Pinos project, personnel of the company informed the inhabitants of the Pinos community, including the Ciudad Pinos ejido, neighbors, municipal authorities, local and regional commerce owners and public, the advantages of the project to local economy; as, generation of employment, social programs, environmental programs for protection of animals and plants, and principally, all the engineering procedures and normativity of a social and environmentally responsible industry.

1.11 Project Economics

Capital and operating costs for the Pinos Project have been estimated primarily in detail by Candelaria management with actualized input from its most experienced Technical Services staff and compared with the author's knowledge of similar underground operations in Mexico. These costs are based on the design outlined in the exploration, mining development, mining preparation, ore extraction and processing presented along this report. Due to the detailed cost data provided by Candelaria, the author(s) considers these costs to have an accuracy of +/- 20%. All costs are expressed in US dollar at an exchange rate of 18.68 Mexican pesos per US dollar. No escalation factors have been applied to any costs, present or future capital.

A total of US $13.0 million is estimated to put Pinos Project in operation plus $0.5 million of Working Capital.

*Table 1.3 – Summary of Initial CAPEX**

Capital Costs (millions)		
Mine Development	**$**	**5.90**
Process	**$**	**5.70**
Infrastructure	**$**	**1.20**
Working capital, owner & indirect costs	**$**	**0.70**
Total Initial Capital	**$**	**13.50**

*Projected sustaining capital for life of mine is US $9.15 million
Source: JAO (2018)

Table 1.4 - Summary of Sustaining CAPEX

SUSTAINING CAPEX US $	
Mill Expansion (400tpd)	$1,000,000.00
Mine Preparation and Expansion	$3,000,000.00
Exploration	$3,000,000.00
Permitting, Environmental	$483,810.00
Maintenance	$1,500,000.00
Mine Closure	$166,500.00
TOTAL SUSTAINING CAPEX	**$9,150,310.00**

Source: JAO (2018)

Estimated operating costs for the Pinos Project at 200, 300 and 400 tpd are given below:

Table 1.5 – Summary of Operating Costs

SUMMARY OF OPERATING COSTS US $ / t			
	200 tpd	300 tpd	400 tpd
Mine Operating Cost ($/t)	$39.57	$39.48	$39.39
Mill Operating Cost ($/t)	$30.77	$29.52	$28.26
Administrative Cost ($/t)	$10.00	$9.00	$8.00
Maintenance Cost ($/t)	$2.02	$1.87	$1.72
TOTAL OPERATING COSTS	**$82.36**	**$79.87**	**$77.37**

Source: JAO (2018)

The Pinos Project economics were evaluated using a discounted cash flow (DCF) method that requires annual cash inflows and outflows to be projected, from which the resulting net annual cash flows are estimated and then discounted back to the Project financing date.

The next table shows the fundamental parameters and assumptions used in projected DCF analysis:

Table 1.6 – Summary of Economic Performance Parameters and Assumptions

Parameters and Assumptions		
A.	**Financial Parameters**	
	Gold Price	$1,250.00
	Silver Price	$17.00
200 tpd	Mine Operating Cost ($/t)	$39.57
	Mill Operating Cost ($/t)	$30.77
	Administrative Cost ($/t)	$10.00
	Maintenance Cost ($/t)	$2.02
300 tpd	Mine Operating Cost ($/t)	$39.48
	Mill Operating Cost ($/t)	$29.52
	Administrative Cost ($/t)	$9.00
	Maintenance Cost ($/t)	$1.87
400 tpd	Mine Operating Cost ($/t)	$39.39
	Mill Operating Cost ($/t)	$28.26
	Administrative Cost ($/t)	$8.00
	Maintenance Cost ($/t)	$1.72
	Government Royalty (Mining Profit)	7.50%
	Government Royalty (Precious Metal Revenues)	0.50%
	Donald McLeroy Royalty	1.50%
	Discount Rate	5%
	Governmental Income Tax	30%
B.	**Technical Parameters**	
	Pinos Average Grade (EQ g Au/ton)	4.60
	Cuttoff Grade (EQ g Au/ton)	2.20
	Ore Production Rate tpd (first year)	200.00
	Ore Production Rate tpd (second - third year)	300.00
	Ore Production Rate tpd (fourth year)	400.00
	Mill Au Recovery	90.00%
	Mill Ag Recovery	80.00%
	Mine Dilution	10.00%
	Operation days per Quarter	83.95
	Life of Mine (Years)	7.00
	Ounce Troy/grams	31.1035
	Ore Processed (kt)	790.81
	Recovered Gold Equivalent (Oz)	88,934
C.	**Capital Investment**	
	Initial Capex + Working Capital	$13,500,000
D.	**Sustaining Capital Expenditures**	
	Sustaining CAPEX	$9,150,310

Source: JAO (2018)

The economic model presented here is considering only the mineral resources estimated on Cinco Estrellas Vein Trend given in this report; including, Measured Resources of 85,847 MT, grading Au 1.6 g/t and Ag 82.9 g/t, 175,697 MT grading Au 3.6 g/t and Ag 47.4 g/t of Indicated Resources and 529,267

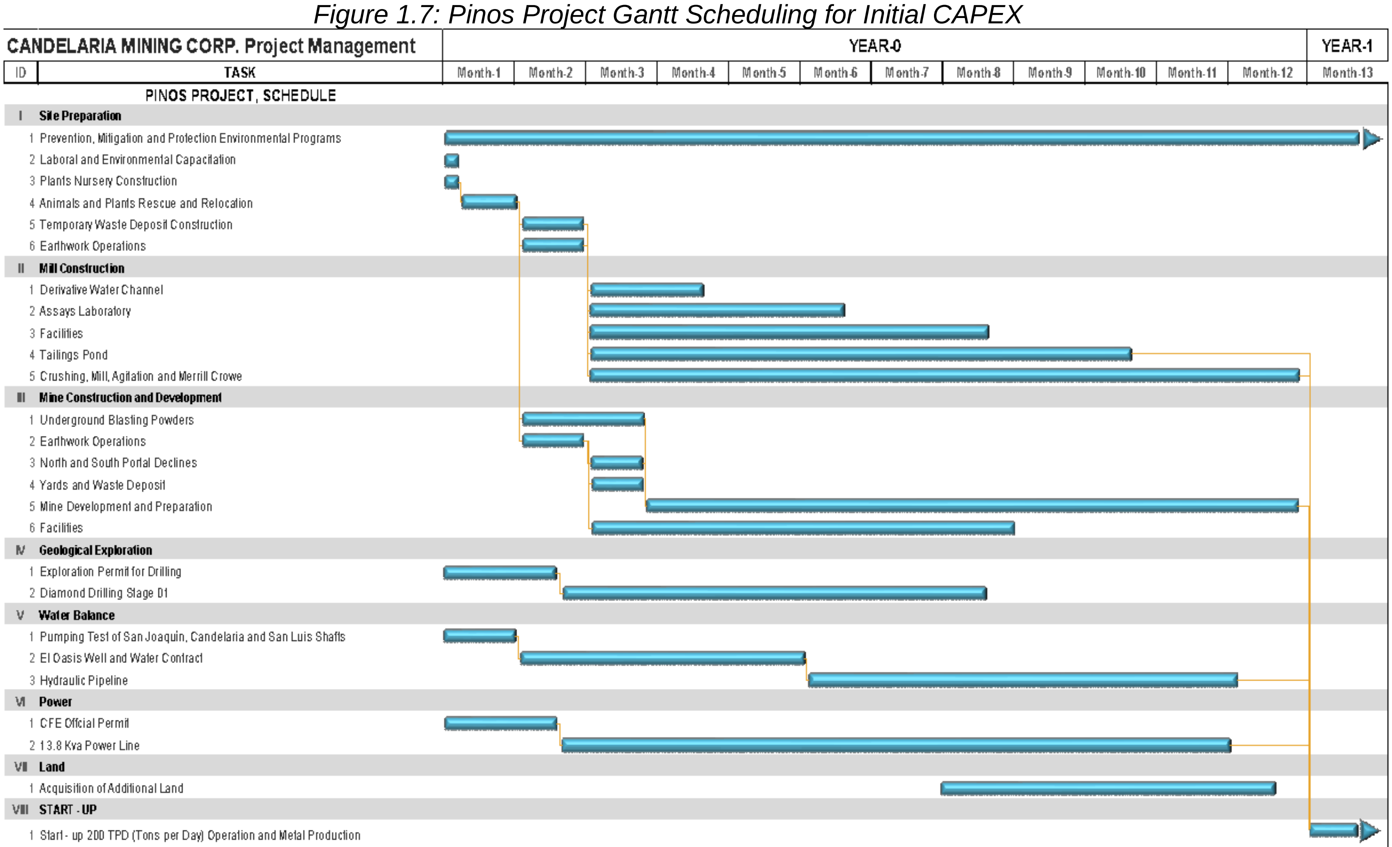
MT grading Au 3.6 g/t and Ag 47.7 g/t of Inferred Resources. All these above a Cut Off Grade of 2.2 g/t Au Eq. Tonnage and grades were taken exactly from mineable blocks as mining development advances. A detailed summary of estimated cash flows for LOM 7 Year is shown in Section 22 of this PEA.

Results from after-tax DCF shows an after-tax positive Net Present Value (NPV) of US $12.2 million, using a Discount Rate of 5%, with an Internal Rate of Return of 25%, and a Payback Period of 3.3 years, based on years LOM production plan for 7 years, assumed metal prices and integrated dynamic cyanide leaching treatment of gold and silver.

Sensitivity analysis from this preliminary economic assessment revealed that Net Present Value and Internal Rate of Return figures are most sensitive to changes in gold price.

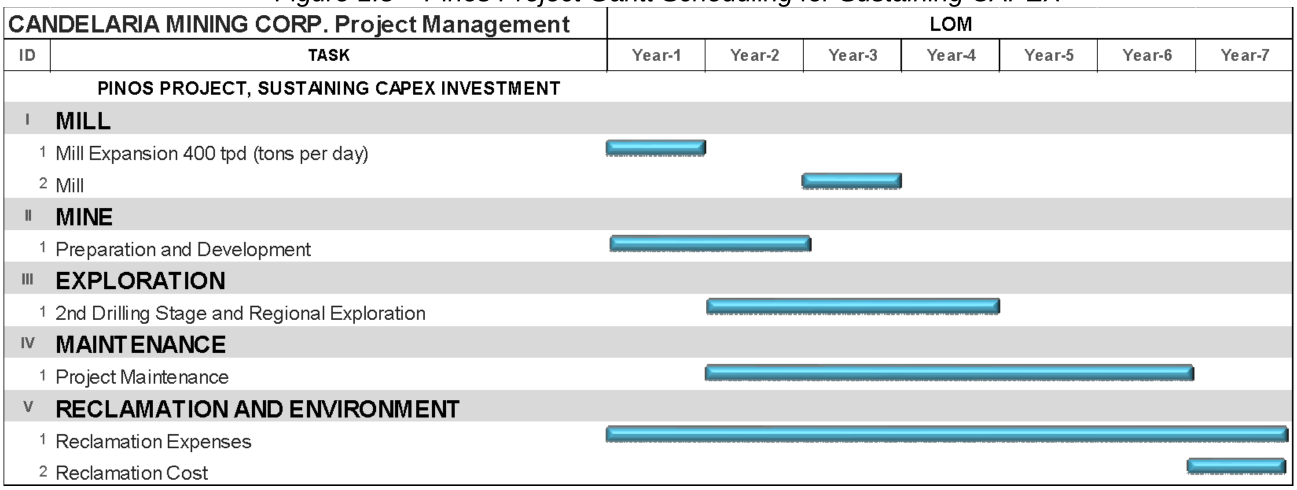
Scheduling for initial capital and sustaining capital activities are given in the following figures 1.7 and 1.8:

Figure 1.7: Pinos Project Gantt Scheduling for Initial CAPEX



Source: Candelaria Mining Corp. (2018)

Figure 1.8 – Pinos Project Gantt Scheduling for Sustaining CAPEX



Source: Candelaria Mining Corp. (2018)

1.12 Interpretations and Conclusions

1.12.1 Geology and Resource

- Candelaria has completed an industry standard exploration drilling program covering the Cinco Estrellas mineralized epithermal vein system along a straight length of 2.2 Km, with 33 drill holes, and total length of 4,700 m.
- The exploration work has been accompanied by an industry standard QA/QC program showing high quality test results.
- Candelaria has conducted extensive mine underground channel sampling and detailed core logging, resulting in a high-quality geologic model.
- The results of underground channel sampling and drilling analytical testing, core logging, geological interpretation, topographical surveying and 3-D modelling provide good support for an industry standard resource estimation.
- Professional topographical surveys are in accordance to best practices guidelines of international codes for exploration.
- Software for mineral resource estimation used by Candelaria; such as: Target-Arc GIS, AutoCAD, and Stratigraphic Centurion are accepted tools for international codes of mineral resource estimations.
- JAO considers that Candelaria's diamond drill hole, and surface and underground chip sampling databases used in the generation of the Mineral Resource Estimation presented here, to be adequate for classification of mineral resources at this project stage.
- In JAO's opinion, Candelaria´s Mineral Resource Estimation of Measured Resources that include 10% mining dilution of 85,847 MT, grading Au 1.6 g/t and Ag 82.9 g/t, 175,697 MT grading Au 3.6 g/t and Ag 47.4 g/t of Indicated Resources and 529,267 MT grading Au 3.6 g/t and Ag 47.7 g/t of Inferred Resources (all these above a Cut Off Grade of 2.2 g/t Au Eq) are well supported because most data for block model krigging interpolation, were obtained from the systematic underground chip sampling every 1 meter; in addition, strict capping of high assay values avoiding nugget effects and no possible ore shoots considerations, makes this estimation conservative.

- JAO considers that Cut-Off grade estimation of 2.2 g/t AuEq is quite appropriate, due to good appreciation of economic inputs, extraction and processing recoveries.

1.12.2 Exploration and Development

- Candelaria´s proposed direct mining development consisting in ramps, drifts and raises along vein structures is in the author's opinion, the best suitable way to better evaluate this narrow vein system of Bonanza type of ore shoots; underground development gives morecertainty in confirming the continuity of mineralization, changes in dip and dip direction, local faulting and displacements, veining intersections and large variations in grade and thicknesses of mineralized structures.
- Systematic sampling of drifts and raises along vein structures will give much more confidence in expected volume and grade of the deposit as well as validation of true thickness at depth, mineable blocks.
- JAO believes that with the opening of proposed mining levels, there are chances of discovering possible ore shoots under the three domains of Cinco Estrellas, namely: Peñitas, Arandas and San Francisco as old mining ore shoots extraction were stopped historically atthe water level.
- JAO considers that with the execution of planned mining development, further underground crosscutting will be readily available to explore adjacent mineralized veins from developed stopping levels.
- Regarding the mining method chosen by Candelaria mining experts, it has been proven in Mexico that the best suitable mining method for this kind of deposit is Cut and Fill, using waste rock fill.
- Proposed mining development procedures are in JAO's opinion very detailed and adequate to expect satisfactory results real performance.
- Regarding the recovery method proposed of Dynamic Cyanide Leaching, D.E.N.M. found that Candelaria´s metallurgical tests performed on true representative sample composites show excellent recoveries; for gold (90% in the Design Criteria) and silver (80% in the Design Criteria).
- JAO's overall geological appreciation of Pinos Project is very positive in the sense that further exhaustive exploration at depth of adjacent brownfield opportunities in other targets such as the Santa Rita, La Paz, San Ramón, San Javier, Candelaria and El Africano mineralized vein trends, as well as in potential of disseminated deposits on the land package, may substantially increase mineral resources to bring the project to bigger scale.

1.12.3 Economic Analysis

- Initial Capital Investment of US $13.5 million demonstrates that this is a low CAPEX project for the start-up Pinos production, generating positive cash flows after only one year is a positive result.
- Sustaining Capital of US $9.2 million, is in the opinion of JAO, sufficient to accomplish the planned development for this mining project. Therefore, this 7-year LOM project is realistic to complete a first stage of mining operation with the exploration and development spending used in this PEA.
- After validating Pinos Operating costs and comparing efficiencies using benchmarks from analogous Mexican mines currently in operation, JAO considers an average operating costs of US $82.36 / t for 200 tpd, US $79.87 / t for 300 tpd and US $77.37 / t for 400 tpd as very detailed and adequate to be included in projected cash flows.
- Results from economic analysis using after tax discounted cash flow method indicates a strong and positive performance for the conceptual Pinos Project; based on Candelaria's extensive available technical information and current metal price environment. Parameters and assumptions are well established and considered to be adequate at this stage of evaluation. Sensitivity analysis demonstrate that Pinos Project is highly susceptible to variations in gold price and metal recovery; the premise of an average price of Gold of US $1,250 / Oz and a silver price of $17 / Oz for LOM, is considered by the JAO as adequate and in line with the 3 year trailing

average gold and silver prices. Recent 43-101 technical reports submitted to SEDAR consider prices from US $1,250 to $1,300 for an ounce of gold and US $16 to $18 for an ounce of silver in their forecast predictions.

- Candelaria's environmental studies were approved by SEMARNAT and all permits to start-up operations have been granted, and social or community impact has been settled in best terms for all parties.
- JAO believes that the Pinos Property is highly prospective ground demonstrating significant upside exploration potential.
- As a final statement, the author considers that the Pinos gold-silver deposit represents a project with a great deal of potential for being an important precious metal producer in this local region of the state of Zacatecas.

1.12.4. Recommendations

- Recommendations for the next phase of work proposed here include: starting as soon as possible mining development works, geology, surface and underground diamond core drilling, and construction of processing facilities. (process optimization testwork, permitting application process, FEED, Closure Plan)
- Timing is a fundamental factor for investors to secure their money return; therefore, JAO recommends Candelaria to consider the alternative of getting a mining contractor to start developing ramps and drifts, saving time searching for skilled mining labor and equipment maintenance, accomplishing production milestones; meanwhile, contractor may continue developing mine levels faster, mitigating financial risks in this way.
- Regarding Candelaria's planned diamond core drilling campaigns, the first with a budget of $1.05 MD starting in the third quarter of pre-production, and a second one starting the second year of operation, with US $3 MD provision; it would be desirable to start sooner the second campaign to upgrade mineral resources earlier, diminishing production risks vital to investors.
- JAO recommends that the QA/QC sample and laboratory analysis evaluation continue to be do ne on a regular basis during subsequent drilling campaigns and sending duplicates to a secondary lab.
- Regarding mining parameters such as the size of mineable blocks, it is recommended to wait until sublevel openings start to give the proper assessment of geometry for mineable blocks from a cost perspective.
- Although, main conclusions cited above reveal that this first development proposal might be feasible for Candelaria to start generating positive cash flows short-term on a small-scale mining operation of 400 tpd, JAO considers that Candelaria's property deserves more exploration investment right away to evaluate its full potential.
- Exploration work to date on the Pinos mining concessions has been focused on the Cinco Estrellas mineralized trend. It is recommended that the Company evaluate the property for mineralization beyond such trend; so, it is recommended to place at least 2 additional geology brigades on the field to assess other very interesting localities, such as: San Javier, El Africano and Fátima mineralized vein systems, San Ramón at deeper levels considering that field evidence suggests a lithocap covering this area, targeting deeper levels on a possible porphyry system and exploring areas where the potential for a stockwork and disseminated deposits may upgrade this project into a major mining operation.

2. INTRODUCTION

2.1 General

Candelaria Mining Corp. (hereafter called “Candelaria”), a TSX Venture Exchange listed symbol (Symbol: CAND.V), commissioned D.E.N.M. Engineering Ltd. (D.E.N.M.) and Jose A. Olmedo (JAO) to prepare an independent preliminary economic assessment for the Pinos Project near Zacatecas, Mexico. The work entailed a review of all past data compiled by Candelaria Mining for the project. Such work included a metallurgical review of the project, flowsheet review, operating and capital costs, and the current project economics. A proposed site plan for the project is shown in Section 18. This Preliminary Economic Assessment (PEA) report is prepared to the standards of NI-43-101.

In January 2018, Candelaria Mining Corp. completed an extensive program to start developing its mining concessions in Pinos; this program includes, mining development, mining extraction, diamond core drilling exploration, and mineral processing. The objective is to commence mining production at Cinco Estrellas Vein Trend, generating mid-term profits, allowing Candelaria to explore and potentially develop the entire mining property access the ability to scale-up this project.

The purpose of this report is to provide Candelaria and its investors with an independent opinion on the technical and economic aspects and mineral resources at Pinos Project, focusing on the initial investment of US 13.5 million dollars for exploring, developing, mining and processing mineral containing gold and silver values at the vein trend known as Cinco Estrellas.

JAO completed information reviews and conducted four field visits to the Pinos property in the Zacatecas State of Mexico; the first from November 16 to November 18, 2017, the second field trip from January 16th to January 24th, 2018, the third field visit from February 28th to March 3rd, and the fourth visit from August 28th to August 31st, 2018.

During these visits, JAO conducted a geological reconnaissance of the property; including, surface and underground exposures, a review of available data and files, a validation of the QA/QC (Quality Assurance and Quality Control) of surface, underground and core sampling and laboratory results as well as the sampling preparation site, drill core warehouse and geochemical laboratory.

The information herein is derived from a review of the documents listed in references and from information provided by Candelaria Mining. A complete list of the reports available to the author is found in References cited throughout this report. Published literature has been reviewed and cited in the References Section.

The results of the company’s underground sampling and diamond drilling programs completed have been reviewed and verified by JAO; including, sampling, analytical and test data, and other relevant data, compiled by Candelaria’s geological staff.

JAO has reviewed and verified the available data; including, drill logs, assay certificates and additional supporting information sources, and believes that the mineral resource estimates disclosed here were conducted professionally and competently.

JAO highlights the active participation of Candelaria’s Mr. Héctor González in the elaboration of this report, contributing with his excellent geological knowledge and his sound expertise in epithermal precious metals deposits, mining exploration techniques, and software management.

This report provides a summary of the exploration and mining history of the Pinos Project, as well as a mineral resource estimate. It also includes a detailed description of proposed exploration, drilling, mining, and processing program along with a preliminary economic analysis that may sustain further investment in developing this mineral property.

The opinions, conclusions, and recommendations presented in this report are those of the authors and are conditional upon the accuracy and completeness of the information supplied by Candelaria Mining. The authors reserve the right; but, are not obliged, to revise this report if additional information becomes known to them after the date of this report.

The reader is cautioned that PEA's are indicative and not definitive and that the resources used in the mine plan include Inferred Mineral Resources that are too speculative to be used in economic analysis, except as allowed for by Canadian Securities Administrator's National 43-101 (43-101) in PEA studies. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There is no certainty that Inferred Resources could be converted to Indicated or Measured Resources or Mineral Reserves, and as such, there is no certainty that the results of this PEA will be realized.

2.2. Qualifications of Consultants

Mr. José A. Olmedo (JAO) is an independent consultant who is responsible for Sections of 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27 and the Summary of this Independent, Compliant with NI 43-101, Preliminary Economic Assessment of Pinos Project, Zacatecas.

Mr. Olmedo is a Geological Engineer graduated from Universidad Nacional Autónoma de México (UNAM) and has a Master of Science Degree in Mineral Exploration (MINEX) from McGill University, Canada; as well as various diplomas and certificates in business administration, economics and technical software, and has sufficient experience which is relevant to the style of mineralization under study. José has 42 years broad geological experience, specializing in mineral resource estimation, mine project evaluation and reporting according to international reporting codes. He has produced or reviewed mineral resource estimates for a wide variety of commodities and mineralization styles. Mr. Olmedo is a Registered Member in good standing of the Society of Engineers for Mining, Metallurgy & Exploration (SME) certified as Competent Person - #4267997RM and an active member in good standing of the Asociación de Ingenieros de Minas, Metalurgistas y Geólogos de México, A.C. - #15655. He fulfills the requirements to be a "Qualified Person" for NI 43-101.

Mr. David Salari (DENM) is a Metallurgical Engineer who is responsible for Sections of 13 and 17 with input and comments in Sections 1, 2, 18, 19, 21, 22, 25, 26, 27 and the Summary of this Independent Compliant with NI 43-101 Preliminary Economic Assessment of the Pinos Project.

Mr. D. Salari, is a Metallurgical Engineer and graduated from the University of Toronto (1980) with 38 years' experience in metallurgy, process design, capital and operating costs, economic analysis and extensive operation, construction, and commissioning experience. Mr. Salari is a Professional Engineer of Ontario and has the Designation as a Consulting Engineer. He fulfills the requirements of a "Qualified Person" (QP) as set out in the National Instrument 43-101 and meet the requirements based on education, experience, independence, and affiliations with a professional association.

2.3 Independence

Mr. Olmedo and Mr. Salari have no relationship with CAND and hold solely a professional association between client and independent consultants. This report is prepared in return for fees based upon agreed commercial rates and the payments of these fees is in no way contingent on the results of this report.

2.4 Units of Measurement and Currency

Metric Units are used throughout this report unless noted otherwise. Currency is U.S. dollars (“US$). At the time of this report the currency exchange rate was 18.38 MxP per US$1. Candelaria uses US$ for most of its official costs and budget numbers and as such this report did not convert any currency figures during this study. A conversion factor of 31.1035 grams per Troy ounce gold and silver and 2.205 lb per metric tonne were used when necessary.

2.5 Abbreviations

Abbreviations in this report are listed in Table 2.1 below.

TABLE 2.1
LIST OF ABBREVIATIONS

	Description		Description
3D	Three Dimensional	Mm	Millimetre
AAS	Atomic Absorption Spectrometry	MxP	Mexican peso
Ag	Silver	NN	Nearest Neighbour
Au	Gold	NQ	Size of Diamond Drill Rod/Bit/Core
CIM	Canadian Institute of Mining, Metallurgy and Petroleum	NSR	Net Smelter Return
cm	Centimetre	Oz	Ounce
Comp	Composite	Ppb	Parts Per Billion
CRM	Certified Reference Material Or Certified Standard	Ppm	Parts Per Million
Cu	Copper	QA	Quality Assurance
CV	Coefficient Of Variation	QC	Quality Control
DDH	Diamond Drill Hole	QP	Qualified Person
D.E.N.M.	D.E.N.M. Engineering Ltd.		
g	Gram	RC	Reversed Circulation Drillhol e
g/m^3	Grams Per Cubic Metre	ROM	Run of Mine
g/t	Grams Per Tonne	RQD	Rock Quality Designation
ICP	Inductively Coupled Plasma	RST	Trading Symbol of Rosita Mining Corp.
ICP-AES	Inductivity Coupled Plasma Atomic Emission Spectroscopy	SD	Standard Deviation
ID2	Inversed Distance Squared	SG	Specific Gravity
IP	Induced Polarization	SMU	Selective Mining Unit
ISO	International Standards Organisation	T	Tonnes

JAO	José A. Olmedo		
kg	Kilogram	t/m^3	Tonnes Per Cubic Metre
km	Kilometres	Tpa	Tonnes Per Annum
km^2	Square Kilometres	US$	United States of America Dollars
koz	Thousand Ounces		
kt	Thousand Tonnes		
lb	Pound	UTM	Universal Transverse Mercator
m	Metres		
Ma	Million Years	X	Easting
Mag	Magnetometer Survey	Y	Northing
		Z	Elevation

Source: DENM 2018

3. RELIANCE ON OTHER EXPERTS

JAO has relied on files of Candelaria Mining and personal communications from its staff, mainly from Eng. Geo. Héctor González and Eng. Min. Carlos Vallejo Rebolledo for information regarding geology, mining history, exploration and mining programs, metallurgy, mining concessions, surface rights, duties, taxes, and environmental matters. Technical reports prepared by previous operators on the project were also provided by Candelaria Mining as well as validation of mineral tenement and land tenure status or material issues with third parties.

JAO also has relied on Candelaria's Independent Qualified Person, Mr. Stephen Maynard, a Qualified Person as defined by National Instrument 43-101. Mr. Maynard reviewed and verified the technical data of the Candelaria's exploration program in which the exploration and mining development proposed here, is based; including, underground sampling and drilling on the Cinco Estrellas Mineralized Trend, assuring Quality Assurance QA / Quality Control QP procedures and results, as stated in Candelaria's published press releases. Candelaria Mining Corp. Published Reports, July 2016 and October 31, 2016.

In addition, D.E.N.M. has relied on detailed information provided by CAND. This has included but not limited to Pinos metallurgy and testing, recovery methods - process review, process design criteria, process capital and operating costs, and the project Cash Flow details.

Legal information disclosed in this PEA was provided by Enrique A. Peralta R., from Peralta Abogados, a Mexican Law Firm, authorized by Minera Catanava, S.A. de C.V., by Oscar Alonso Reyes de la Campa, the sole administrator, and legal representative for Minera Catanava, S.A. de C.V.

Sam Wong, Candelaria's CFO contributed to this PEA with audited financial figures for Candelaria's exploration expenses for 2015, 2016 and 2017 given in Section 9, as well as for projected corporate tax calculations and discount rate as shown in projected cash flow analysis shown in Section 22.
Interpretations, conclusions, and recommendations are those of JAO and D.E.N.M..

4. PROPERTY DESCRIPTION AND LOCATION

This section is a summary of legal aspects regarding Pinos project property. Legal information regarding ownership, mineral titles, land tenure and surface rights was provided to the JAO by Enrique A. Peralta R., from Peralta Abogados, a Mexican Law Firm, authorized by Minera Catanava, S.A. de C.V., by Oscar Alonso Reyes de la Campa, the sole administrator, and legal representative for Minera Catanava, S.A. de C.V. JAO reviewed all original constitutive acts of involved companies, contracts, and agreements and relied on the information presented here.

4.1 Property Location

The Pinos Project is in the central part of the Mexican Republic, at the Municipality of Pinos in the southeastern portion of Zacatecas State. It is at 80 Km West from the City of San Luis Potosí and at 140 Km East from Zacatecas State Capital.

Fig. 4.1 Location Map.

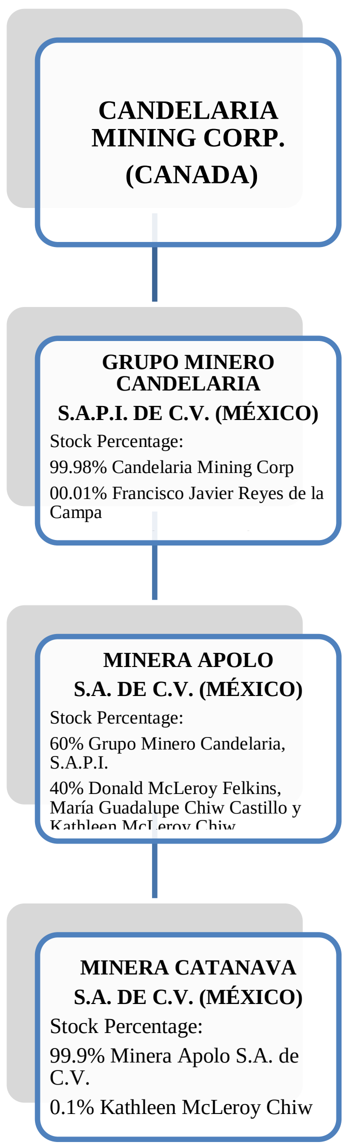
Source: Candelaria Mining Corp. (2018)

4.2 Project Ownership and Mineral Concessions

The Pinos Project consists of 29 mining concessions for exploration, mining, and production, totaling 3,816.2735 hectares. Fig. 4.3 Pinos Mining Claims, Table 4.1. Mining Concessions.

These concessions are held by Minera Apolo and its subsidiary Minera Catanava.
The Pinos Project mining concessions are owned jointly by Minera Apolo, S.A. de C.V., and Candelaria Mining Corp., through its Mexican subsidiary Grupo Minero Candelaria, S.A.P.I., Candelaria owns 60% of Apolo and has a direct interest in buying additional adjacent mining concessions. Legal public writing from companies involved are summarized below in Table 4.1.

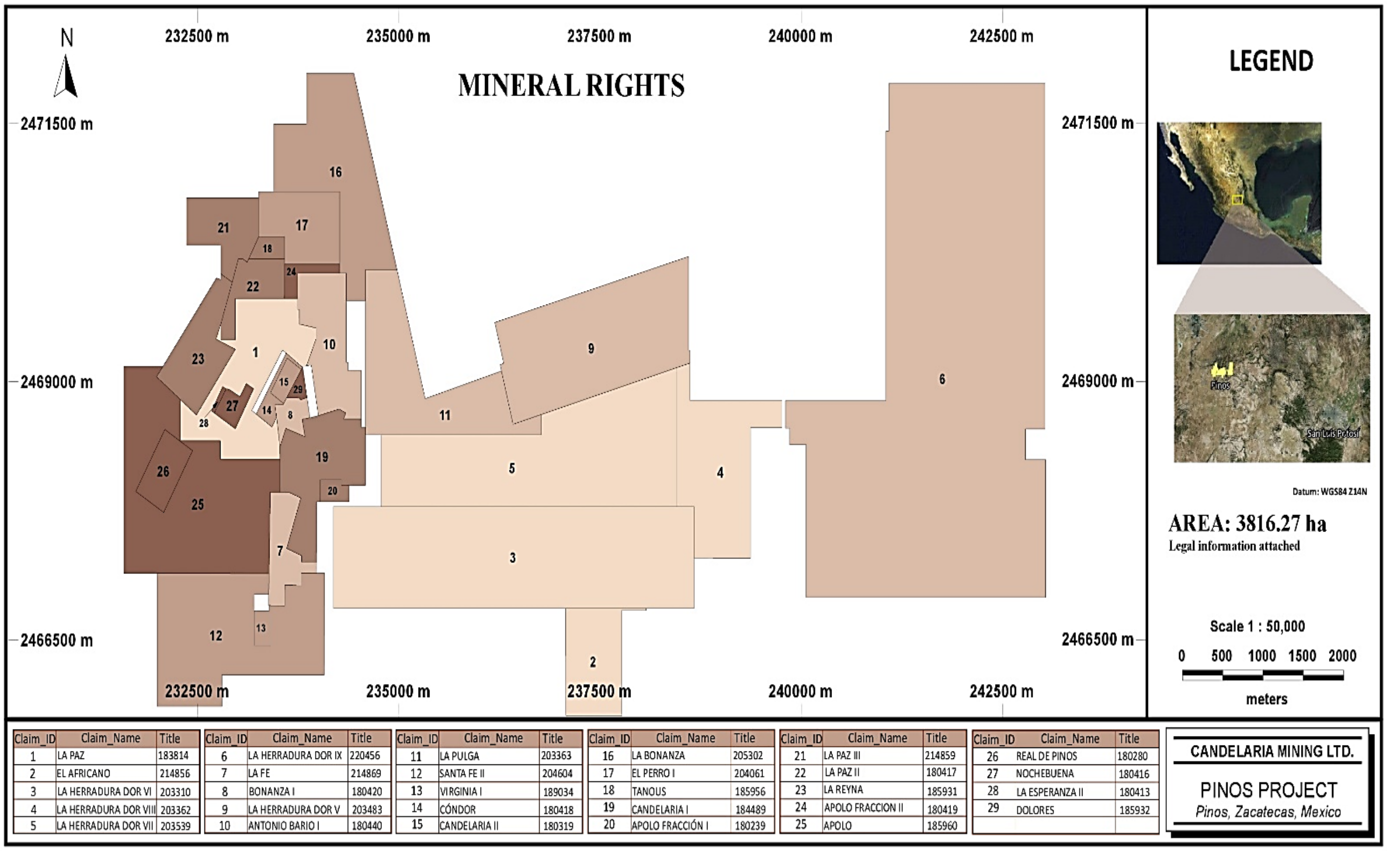
Figure 4.2 – Pinos Project Company Structure



Source: Candelaria Mining Corp. (2018)

As these different companies are mentioned throughout this report, JAO recommends readers to simplify those names to Candelaria; as Grupo Minero Candelaria is a Mexican subsidiary of Candelaria Mining Corp., and Minera Catanava is a subsidiary of Minera Apolo, S.A. de C.V. and Candelaria owns 60% of Apolo.

Figure 4.3 - Pinos Mining Claims



Source: Candelaria Mining Corp. (2018)

Table 4.1 – Mining Concessions

PROJECT	CLAIM	TITLE	SURFACE (has)	VALIDITY		OWNER	STATUS
				START	FINISH		
Pinos	Fraccion I Apolo	180239	7.3784	24/03/1987	23/03/2037	Minera Apolo	Valid
Pinos	Real de Pinos	180280	28.0000	24/03/1987	23/03/2037	Minera Apolo	Valid
Pinos	Candelaria II	180319	8.0000	24/03/1987	23/03/2037	Minera Apolo	Valid
Pinos	La Esperanza II	180413	1.1063	25/03/1987	24/03/2037	Minera Apolo	Valid
Pinos	Nochebuena II	180416	10.4245	25/03/1987	24/03/2037	Minera Apolo	Valid
Pinos	La Paz II	180417	30.7413	25/03/1987	24/03/2037	Minera Catanava	Valid
Pinos	Condor	180418	8.2477	25/03/1987	24/03/2037	Minera Apolo	Valid
Pinos	Fraccion II Apolo	180419	10.4892	25/03/1987	24/03/2037	Minera Catanava	Valid

Pinos	Bonanza I	180420	11.8097	25/03/1987	24/03/2037	Minera Apolo	Valid
Pinos	Antonio Bario I	180440	72.8234	25/03/1987	24/03/2037	Minera Catanava	Valid
Pinos	La Paz	183814	122.2521	22/11/1988	21/11/2038	Minera Catanava	Valid
Pinos	Candelaria I	184489	86.0468	07/11/1989	06/11/2039	Minera Apolo	Valid
Pinos	La Reina	185931	59.3491	14/12/1989	13/12/2039	Minera Apolo	Valid
Pinos	Dolores	185932	3.6656	14/12/1989	13/12/2039	Minera Apolo	Valid
Pinos	Tanous	185956	8.3487	14/12/1989	13/12/2039	Minera Catanava	Valid
Pinos	Apolo	185960	243.2248	14/12/1989	13/12/2039	Minera Apolo	Valid
Pinos	Virginia I	189034	6.9801	05/12/1990	04/12/2040	Minera Apolo	Valid
Pinos	La Herradura Dorada VI	203310	450.0000	28/06/1996	27/06/2046	Minera Apolo	Valid
Pinos	La Herradura Dorada VIII	203362	144.6085	19/07/1996	18/07/2046	Minera Apolo	Valid
Pinos	La Pulga	203363	155.2092	19/07/1996	18/07/2046	Minera Apolo	Valid
Pinos	La Herradura Dorada V	203483	240.9784	09/08/1996	08/08/2046	Minera Apolo	Valid
Pinos	La Herradura Dorada VII	203539	329.9504	30/08/1996	29/08/2046	Minera Apolo	Valid
Pinos	El Perro I	204061	61.7254	12/12/1996	11/12/2046	Minera Catanava	Valid
Pinos	Santa Fe II	204604	215.4695	26/03/1997	25/03/2047	Minera Apolo	Valid
Pinos	La Bonanza	205302	166.5896	08/08/1997	07/08/2047	Minera Apolo	Valid
Pinos	El Africano	214856	71.7891	04/12/2001	03/12/2051	Minera Apolo	Valid
Pinos	La Paz III	214859	51.4413	04/12/2001	03/12/2051	Minera Catanava	Valid
Pinos	La Herradura Dorada IX	220456	1173.6392	29/07/2003	28/07/2053	Minera Apolo	Valid
Pinos	La Fe	214869	35.9852	04/12/2001	03/12/2051	Minera Apolo	Valid

3,816.2735 has

Source: Candelaria Mining Corp. (2018)

Each mining concession is in full force and effect and has been duly validated by the Mexican Mining Bureau and is free from any liens and encumbrances. Titles for mining concessions have a validity issued for 50 years.

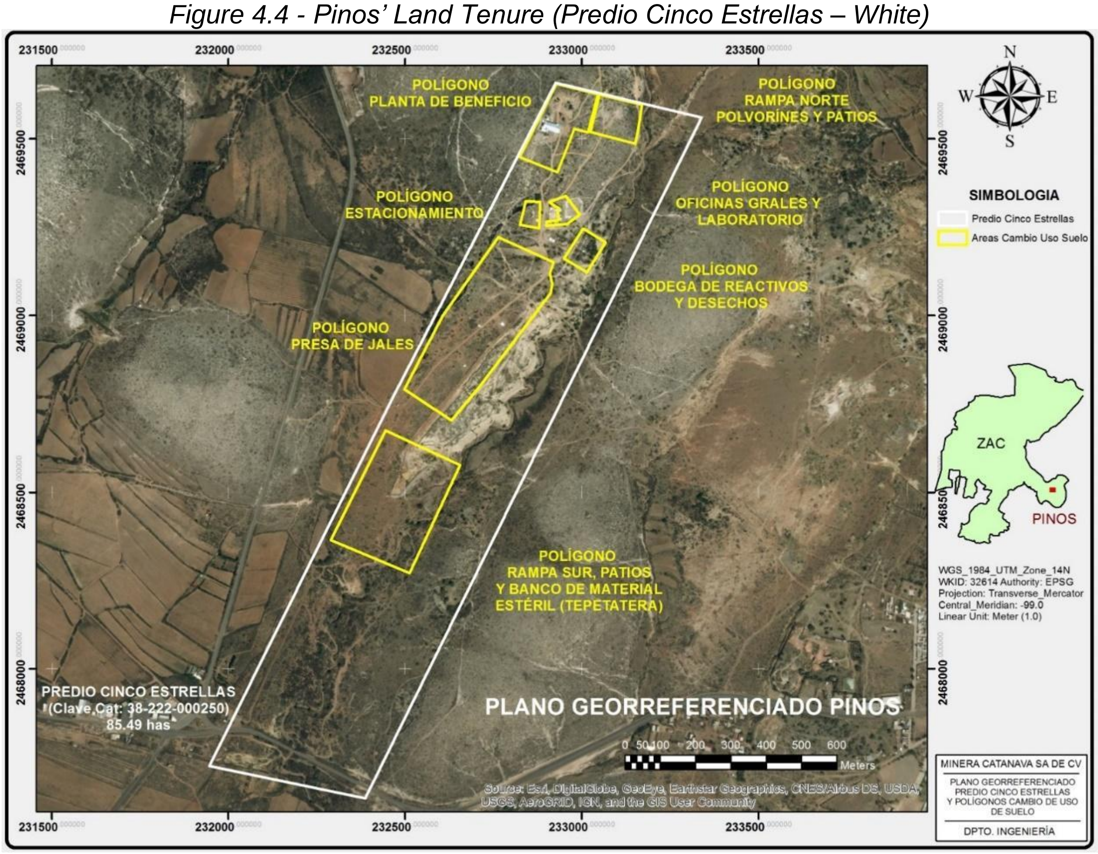
All mining concessions are in good standing, and they are not subject to any unusual or onerous conditions, and their existence or validity will not be affected by any change of control. JAO verified actual data from the "Reporte de Concesiones Mineras" et al. August 13, 2018, signed by Eng. Alejandro Martínez Monroy, independent mining property consultant for Catanava.

Mining rights must be paid on a semi-annual basis on Mexican mining concessions to keep these in good standing. Taxes are calculated on a per hectare basis that increases with the number of years the concession is valid. Also, exploration and development expenditures must be filed with the Mexican Bureau of Mines on an annual basis.

4.3 Land Tenure

Minera Apolo, S.A. de C.V., is the owner of 85.49 hectares of surface land. Please refer to Figure 4.4 Pinos' Land Tenure. This land affords sufficient capacity for engineering and construction requirements; including, the dynamic leaching mill, tailings pond, warehouses, offices and mining infrastructures.

Figure 4.4 - Pinos' Land Tenure (Predio Cinco Estrellas – White)



Source: Candelaria Mining Corp. (2018)

4.4 Surface – Use Agreements

4.4.1 Ejido Ciudad Pinos

A Mexican ejido is a land-owning cooperative with a defined number of associates (ejidatarios). The Ciudad Pinos Ejido controls surface rights in the northern and western parts of the Pinos Project. Minera Apolo through its subsidiary Minera Catanava, S.A. de C.V. has an agreement with Ciudad de Pinos Ejido called "Contrato de Uso y Derecho de Paso en Tierras Ejidales", which allows the company a right-of-way on established roads on ejido lands and exclusive use of a right-of-way for access to the project's plant and offices in the western part of the project. Figure 4.5. Pinos' mineral concessions and Ciudad Pinos Ejido

The surface-use agreement is valid for the life of the project and may not be changed because of a change of ejido's leadership.

4.5 Royalties, Agreements and Encumbrances

On February 27, 2015, Grupo Minero Candelaria, S.A.P.I de C.V., a Mexican subsidiary of Branco Resources, Ltd. changed its name to Candelaria Mining Corp. on March 17, 2016. This was certified on the Register of Companies Province of British Columbia, Canada, with a signed sales contract for 60% of Apolo, S.A. de C.V. total shares with the owners namely Donald Frazier McLeroy Felkins, María Guadalupe Chiw Castillo and Kathleen McLeroy Chiw.

This contract refers primarily that Branco Resources (Candelaria Mining, Corp.) will earn the 60% interest by a) paying US$250,000 to Apolo shareholders on the closing date; b) issuing 20,000,000 Branco shares to Apolo shareholders in stages over 18 months from the closing date; c) paying US$250,000 to Apolo shareholders by 8 months after the closing date; d) funding a minimum of US$3.5M in exploration expenditures in the first year after closing date; e) lending, or arranging a loan for a minimum of US$1M to Apolo within one year of the closing date. Accordingly, to Enrique A. Peralta R., all these liabilities have been adequately covered by Candelaria as per the effective date of this report.

Derived from sales contract cited above, Minera Apolo, S.A. de C.V. must pay royalties in the amount of the 1.5% (One and a half percent) of the Net Smelter Return for the mining concessions time of validity to the sellers, namely Donald Frazier McLeroy Felkins, María Guadalupe Chiw Castillo and Kathleen McLeroy Chiw and heritage, on a three-month basis.
Also, the contract obligates Minera Apolo, S.A. de C.V. to pay the amount of US 100,000.00 dollars to Donald Frazier McLeroy Felkins, María Guadalupe Chiw Castillo and Kathleen McLeroy Chiw, on an annual basis, only if:

- i) The society Candelaria-Apolo reach a minimum commercial mining production of 250 tons per day.
- ii) Gold price is above US 1,100.00 dollars per Troy Ounce.
- iii) Silver price is above US 17.00 dollars per Troy Ounce.

The contract also states that Grupo Minero Candelaria has the right of preference to acquire the balance of 40% of the Minera Apolo stock and NSR royalties still owned by the sellers.

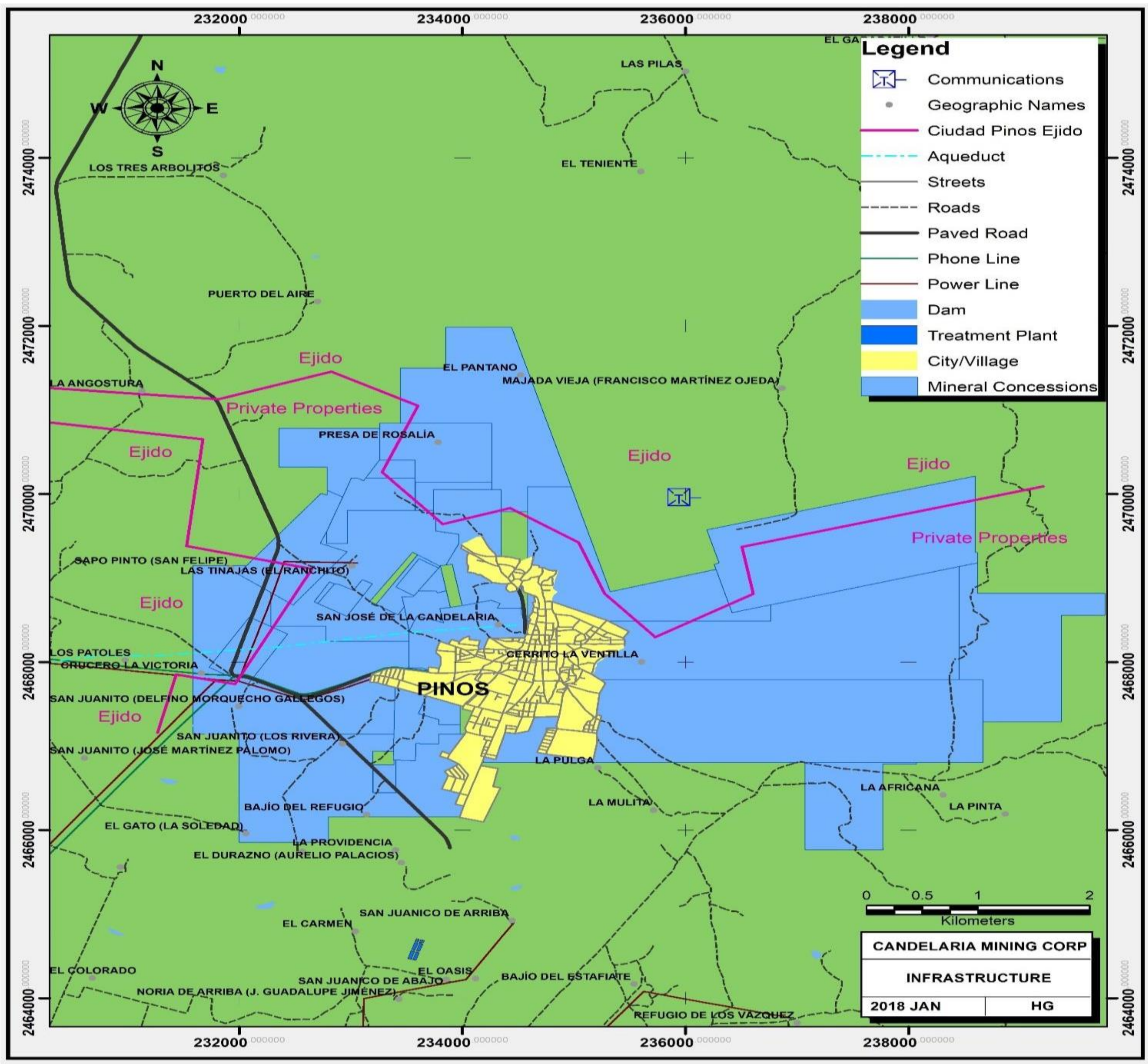
4.6 Other considerations

There are no known significant factors or risks that may affect access, title, or the right or ability to perform work on the project.

4.7 Environmental Liabilities

The project has no known environmental liabilities.

Figure 4.5 – Pinos' mineral concessions and Ciudad Pinos Ejido



5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Access

The Pinos Mining Project is accessed on paved highways by departing from San Luis Potosí on Federal Highway 49 (Zacatecas-San Luis Potosí) for 74.6 Km, then taking a deviation to the South through State Highway 144 (Zacatecas-Pinos-La Trinidad) to the City of Pinos for 26.3 Km.
Alternatively, access can also be made by departing from the City of Zacatecas via Federal Highway 49 (Zacatecas-San Luis Potosí / México) for 115 Km, then deviate to the South through State Highway 144 (Zacatecas-Pinos-La Trinidad) for 26.3 Km. Refer to Figure 1.1. – Location Map.

5.2 Climate, Physiography and Vegetation

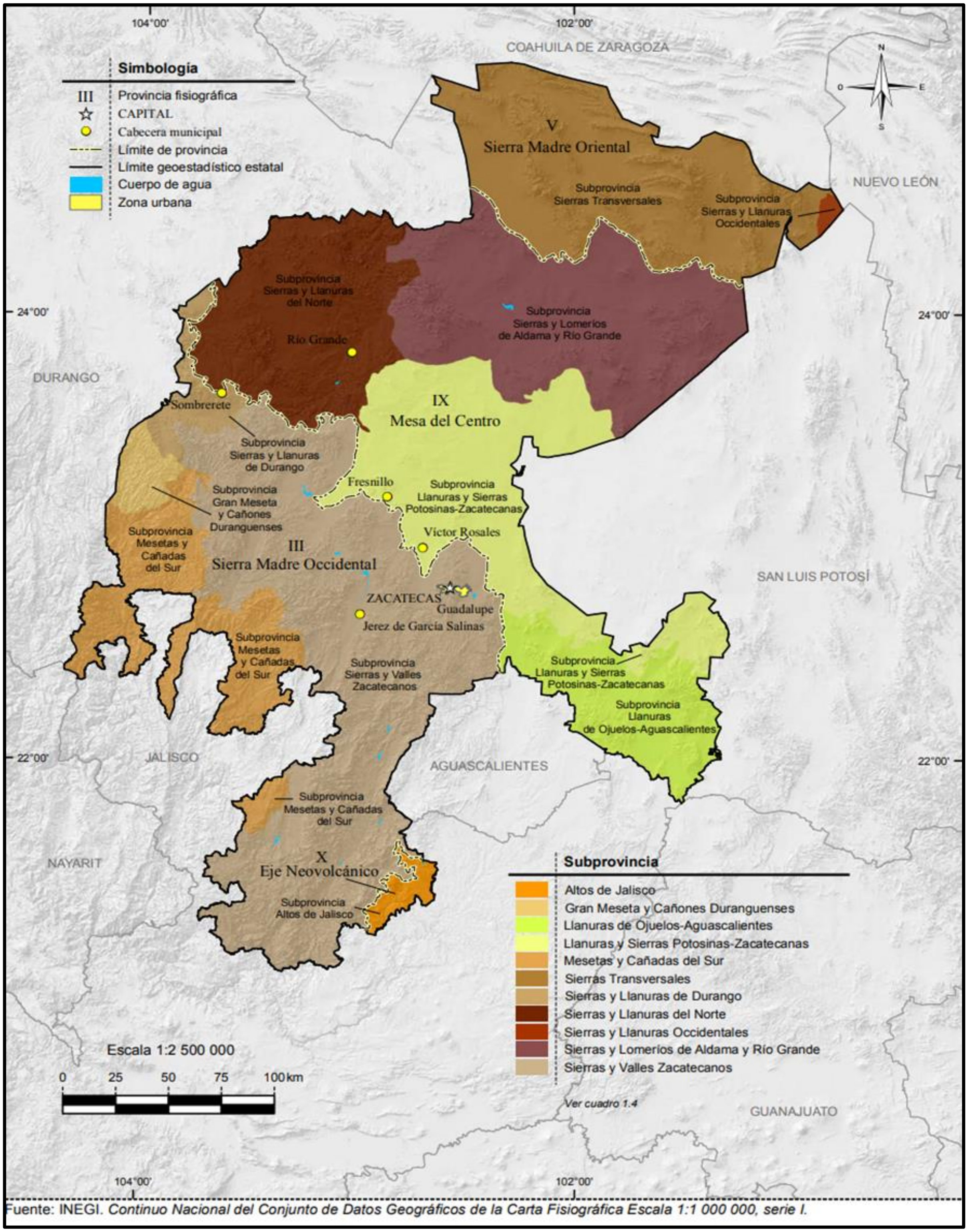
According, to INEGI (Instituto Nacional de Estadística y Geografía), the climate in Pinos is Semidry Temperate, code 32-043, with average annual rainfall from 300 – 350 mm and average annual temperature of 16.2° Centigrade.

The Town of Pinos is located at an altitude of 2,408 meters above sea level. Pinos Project belongs to the Physiographic Province of the Mesa Central, within the Subprovince of Llanuras y Sierras Potosinas – Zacatecanas. Fig. 5.1 – Physiographic Provinces.

The topography in the project area is gentle with shallow creeks generally cutting south and southwest – sloping terrain with elevations ranging from 2,360 to 2,900 meters above sea level. Highlands in the north and northeast are steep-sided.

Vegetation is mainly composed of xerophyte shrubs growing in a poor planosol soil.

Figure 5.1 - Physiographic Provinces.



Source: INEGI. Anuario Estadístico y Geográfico de Zacatecas. 2016

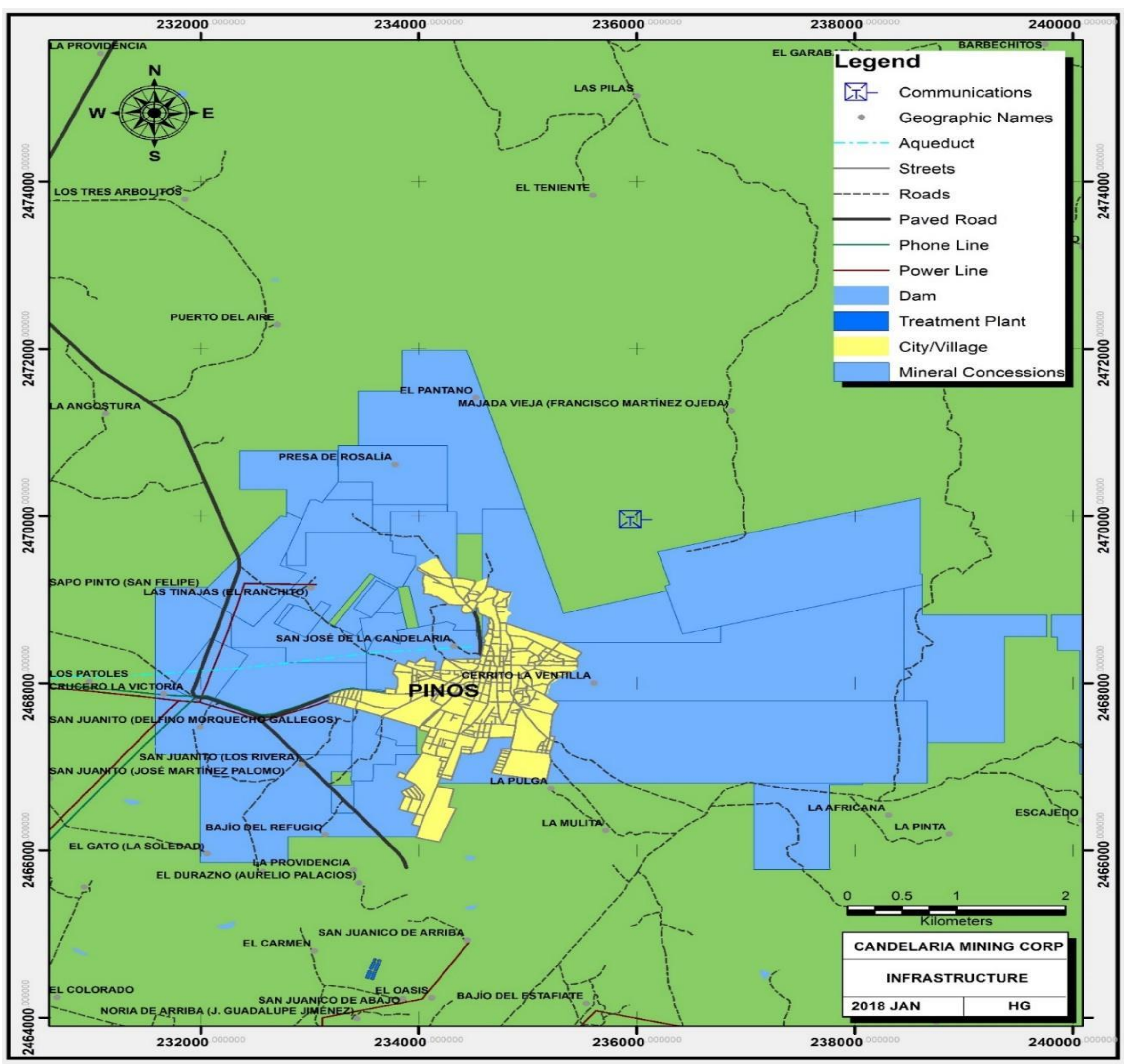
5.3 Local Resources and Infrastructure

The planned processing plant, project offices, labs, and warehouses lie about 2 Km west of the Town of Pinos with a population of about 7,000 inhabitants. See Fig. 5.2.

The Town of Pinos has lodging and is a source of skilled and unskilled labor and basic supplies. Electric power and water are readily available in Pinos. It has gas stations, telephone, internet, banking facilities and it has regular bus service to nearby large cities as well.

The nearest airport is in San Luis Potosí. Non-basic supplies can be easily sourced from the cities of San Luis Potosí and Zacatecas. Zacatecas State is well known for its availability of highly skilled people in mining and drilling.

Figure 5.2 - Infrastructure



Source: Candelaria Mining Corp. (2018)

6. HISTORY

6.1 Historical Production

Historical data from Pinos Gold District is mostly compiled from information related to Bosquejo Histórico de Zacatecas, page 308, published in 1892 (http://cdigital.dgb.uanl.mx/la/1080046493/1080046493 44.pdf); Hoffman, 1923; García G.P. 1923; Muller, 1930; and Aleman, et al.,1977.

Historical mining production figures given here are “estimates,” JAO has not done sufficient work to verify production data such as grade, tonnage, recovery, and costs from past mine operators on Pinos property.

Gold and silver were initially discovered at Pinos by Spanish conquistadors in 1556. Since 1650 there have been several mines and small plants in operation, and it is reported that at that time the mines produced 131,358 Oz Au Eq. Figure. 6.1. Table 6.2

From that time until mid-1800’s production was continuous; but, on a relatively small scale.
Around 1860, most of the district had been acquired by British interests (Candelaria Mining, not the issuer of this report). A boom period lasted from about 1870 to 1910, during which all the superb shafts (52 in total, still in good conditions) were sunk, and most production took place. They sank more than 50 shafts and developed more than 40 km of level workings. Bonanza-grade gold and silver were discovered in 1871, leading to the construction of small-scale ore roasters and doré production. Most of the shafts stopped at water table (90 to 120 m); however, Cornish pumps driven by steam power using imported coal were installed in richest places such as the San Ramón and General shafts, where workings reportedly extend to about 290 meters. Recovery was by grinding and amalgamation, and many of the old stopes were back-filled with waste and tailings.

With the advent of Mexican Revolution in 1910, mining activities ceased mainly due to the lack of supplies and workers. Minor exploitation and metallurgical testing were carried out in the 1920’s. In 1930, Asturiana Gold Company worked La Asturiana vein within the district, with an estimated production shown below in Fig. 6.1.

In 1932, the Compañía Minera Zacatecana installed a 150 TPD (tonnes per day) cyanide plant at the Cinco Estrellas Mine site, treating ore from that mine upgraded by extremely rich, hand selected ore from pillars, and ore shoots from throughout the district. This operation ceased in 1942 because of the death of the owner and the lack of supplies and explosives availability during the World War II years.

Table 6.1 - Pinos Historic Production.

AVAILABLE DATA, NUEVA ESPAÑA				
	Mark	**Grams**	**Oz**	**Oz Au EQ**
Au	12,000.00	2,760,000.00	88,735.99	131,358.24
Ag	489,933.00	112,684,590.00	3,622,890.99	
*** The Castilla's Mark used by Spanish Empire is equivalent to 230 grams*				

CANDELARIA MINING CORP (ENGLAND)				
From 1894 to 1900 (Ore shipped to San Luis Potosí Smelting and Refining Co)				
Production:	**13,000.00**	**tonnes**		
	g/t	**Grams**	**Oz**	**Oz Au EQ**
Au	80	1,040,000.00	33,436.75	48,188.26
Ag	3,000	39,000,000.00	1,253,878.18	
CANDELARIA MINING CORP (ENGLAND)				
From 1900 to 1904 (Ore shipped to San Luis Potosí Smelting and Refining Co)				
Production:	**13,440.00**	**tonnes**		
	g/t	**Grams**	**Oz**	**Oz Au EQ**
Au	80	1,075,200.00	34,568.46	49,819.25
Ag	3,000	40,320,000.00	1,296,317.13	
CANDELARIA MINING CORP (ENGLAND)				
From 1904 to 1908 (Ore processed at Pinos and ore shipped to San Luis Potosí Smelting and Refining Co)				
Production:	**108,000.00**	**tonnes**		
	g/t	**Grams**	**Oz**	**Oz Au EQ**
Au	80	8,640,000.00	277,782.24	400,333.23
Ag	3,000	324,000,000.00	10,416,834.12	
GRAN TOTAL oz Au EQ Candelaria Mining Corp (Inglaterra):				**498,340.74**

ASTURIANA GOLD CO (1930)				
Production:	**32,400.00**	**tonnes**		
	g/t	**Grams**	**Oz**	**Oz Au EQ**
Au	5	162,000.00	5,208.42	5,208.42
Ag	0	0.00	0.00	

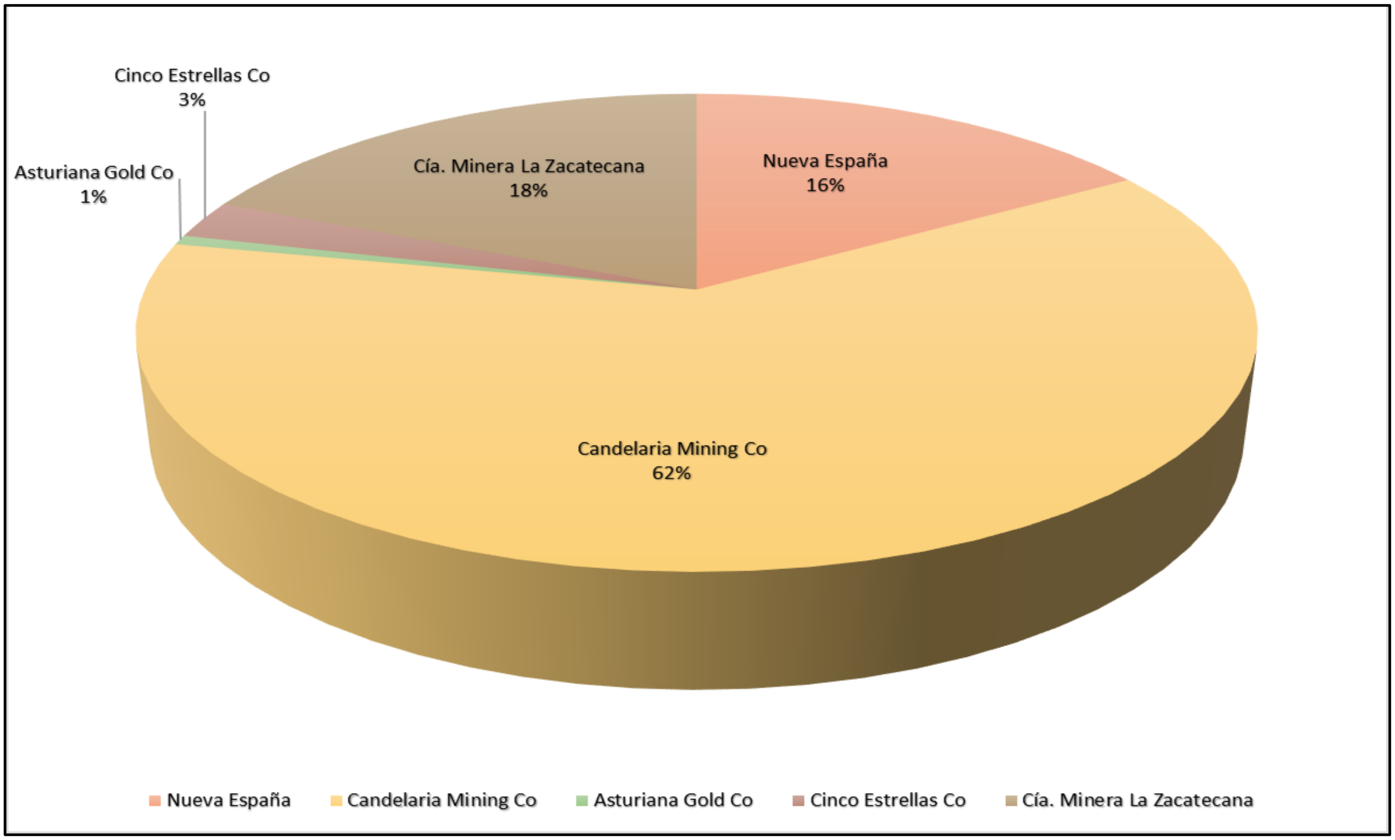
SHAEFER, CINCO ESTRELLAS MINE, 1898- ? (García, 1923, op. cit.)				
Production:	**75,000.00**	**tonnes**		
	g/t	**Grams**	**Oz**	**Oz Au EQ**
Au	7.5	562,500.00	18,084.78	20,694.66
Ag	92	6,900,000.00	221,839.99	

LA ZACATECANA MINING COMPANY (1932-1942)		
Production::	**540,000.00**	**tonnes**

	g/t	Grams	Oz	Oz Au EQ
Au	7.5	4,050,000.00	130,210.43	149,001.58
Ag	92	49,680,000.00	1,597,247.90	
GRAN TOTAL PINOS (Historical Information)				**804,603.64** ozAuEQ

Source: *Candelaria Mining Corp. (2018)*

Figure 6.1 Estimated Historical Production Pinos Gold District. Source Candelaria Mining Corp.



Source: Candelaria Mining Corp. (2018)

Table 6.2 – Estimated historical production

Production Stage	oz Au EQ
Nueva España	131,358.24
Candelaria Mining Co	498,340.74
Asturiana Gold Co	5,208.42
Cinco Estrellas Co	20,694.66
Cía. Minera La Zacatecana (Same owner of the El Cubo Mine, Guanajuato)	149,001.58
TOTAL	**804,603.64**

Source: *Candelaria Mining Corp. (2018)*

Some small-scale mining took place in the 1940's and '50's.

6.2 Historical Exploration

Most of the summary of historical exploration works until 2014 presented in this report was excerpted from disclosed information by Stephen R. Maynard, M.S., C.P.G. in Compliant 43-101, "Summary Technical Report on the Pinos Project, Zacatecas, Mexico" for Branco Resources, LTD., now Candelaria Mining, Corp. Effective Date 27 January 2015, and filed on SEDAR under Candelaria Mining Corp. displayed in italics in this section.

The author has reviewed the references cited in above mentioned Technical Report and relies on the information given there regarding historical exploration of the subject property.
Long after a Canadian company Tanous Corporation, carried out some exploration work in the western part of the old district in the mid-1960's, reportedly two diamond drill holes were completed; but, no records of this work exist today. Some Mexican governmental agencies carried out minor geological work during the 1960's and early 1970's.

Local miners and mining companies maintained some 20 claims that covered most of the district; however, these claims were declared free by the government and these were subsequently claimed by a joint venture between USA Bethlehem Steel Corporation and Industrias Peñoles (Minera Apolo, S.A. de C.V.) in 1977, to explore the old district. An extensive exploration program continued until 1983 when Bethlehem Steel shut down all their foreign operations and sold their interests to Peñoles.

The exploration program of the Bethlehem Steel and Industrias Peñoles was coordinated and directed by Minera Apolo and reported by McLeroy and others (1981). The joint venture focused its work on the old San Luis, Cinco Estrellas, Griego, and Peñitas mines of the Cinco Estrellas trend, and on the La Paz and Tiro Cuatro mines of the La Paz trend.

The joint venture conducted an 8-hole diamond drilling campaign totaling 1,281.15m from November 1980 to June 1981. Drilling concentrated on the Cinco Estrellas, San Rafael, Purísima, and La Paz zones (Table 6.2; Figure 6.2) (McLeroy and others, 1981). The cores were not available for view at the time of the author's visits, and no information from these drill holes has been considered by Candelaria for its mineral resource estimations.

Graphic logs indicate a poor recovery in much of the drilling. Assay results are therefore potentially unreliable indicators of true grades.
The JV accomplished the following:

- Rehabilitating of shafts and production levels.
- Mapping and sampling of old workings and surface (approximately 7,000 samples)
- 1,281 m of core drilling in 6 holes.

In 1983, Minera Apolo S.A. de C.V., the Mexican joint venture company managing the Bethlehem/Peñoles joint venture, acquired all the Pinos venture claims. Sporadic work was carried out between 1983 and 1996, including vein sampling by C. Aspinall in 1993, and exploration of the San Gil vein by All North Resources in 1994 (Thiersch, 1994).

After, former Bethlehem Manager Dr. D.F. McLeroy acquired much of the new district by staking and purchasing the company holdings of Minera Apolo, S.A. de C.V. from Peñoles and entered an option agreement with All North Resources, Ltd., in November 1993.
From 1993 to 2000, All North Resources was an intermediary, bringing Minera Hecla into Pinos supposedly by some business participation.

In 1996, Hecla Mining Corporation explored the Pinos district. Hecla focused on the altered contact of the rhyolite/trachyte dome complex to the east and north of the known vein systems looking for a Carlin Type of mineralization and drilled 27 reverse circulation holes on targets such as the apparent lithocap south of San Ramón, El Africano and some other areas susceptible for disseminated mineralization. (Schmidt, 1997) (Table 7). Drilling performed by Hecla had very poor recovery; so, inferred values for Au and Ag from this drilling campaign have not been taken into consideration for any Candelaria's resource estimation analysis. Details of the Hecla program are referred as Minera Hecla, S.A. de C.V. "Summary of 1996/ 1997 Exploration Activities. Pinos Project. Zacatecas, Mexico". Eberhard A. Schmidt. September 1997. Also, Hecla contracted with Hunter Surveying, Inc., of Orangevale, CA, USA, to produce a detailed topographic map with 2-m contour intervals based on orthophotos of the Pinos district.

During years 2000 to 2005, McLeroy tried to carry out a small-scale mining operation, on high-grade locations throughout his properties; however, due to low precious metals pricing, the lack of financial resources to install a processing plant, and problems with his partners, the development project was canceled.

During the period from 2006 to 2008, McLeroy negotiated an option with Romarco Resources which performed geological exploration.

Romarco Minerals Inc. optioned the Pinos ground in 2006. Romarco's work concentrated on the northern part of the Cinco Estrellas vein zone, from Tanous to San Luis; with, an 8-hole diamond drilling program (Table 7, Figure 21) and extensive underground sampling on the Tanous and San Miguelito shafts. Romarco intersected vein mineralization in 7 of the 8 core holes. Highest precious-metal values intersected in drilling were 6.05 m at 5.16 g/t gold and 19.0 g/t silver. Highest values from underground sampling were 7.2 g/t gold and 142 g/t silver at the Tanous shaft and 6.94 g/t gold and 43 g/t silver at San Miguelito. Romarco's sample locations and metal values are shown in Figure 6.3. From these, only information from one drill hole was taken by Candelaria's resource estimation; which is, R-DDH-05A-07. JAO checked this physical core of this drill hole and certificate of assay results at Candelaria's drill core warehouse. Photo 6.1.

Romarco also conducted detailed geologic mapping of the western part of the Pinos district, using the Hunter Surveying maps and orthophotos as a base.
Romarco withdrew in 2008 due to of the lack of liquidity and the crisis of the financial markets, citing that they would devote themselves to their Haile Gold Mine in South Dakota (Today Oceana Gold).

Photo 6.1 - Physical core checking of Romarco drill hole and certificate of assay results at Candelaria's drill core warehouse

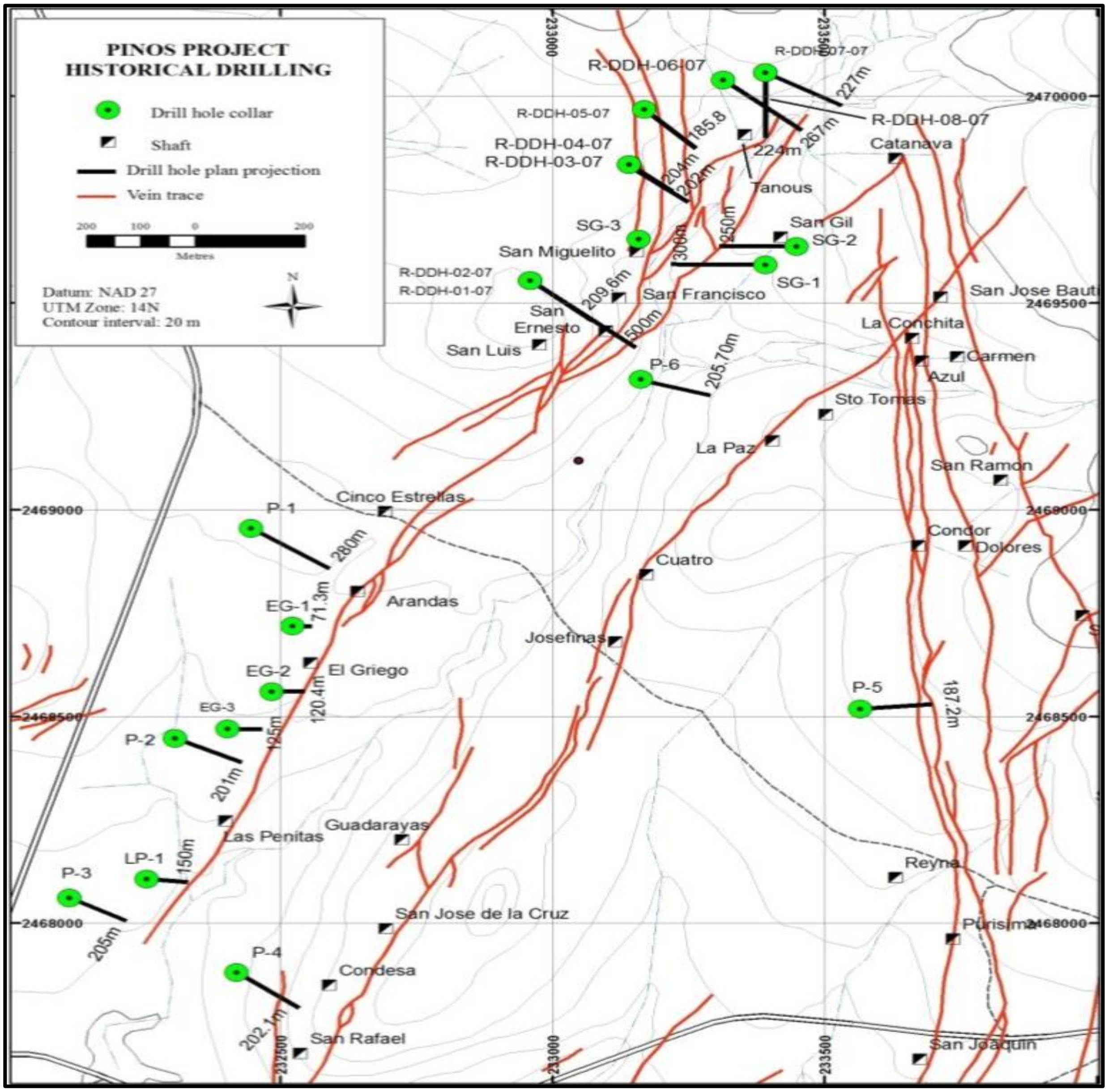
Source: JAO (2018)

Table 6.3 – Summary of Pinos Project historical core drilling. Drill Logs are available for P-series holes (McLeroy and others, 1981). R-series hole collar locations, bearing, inclination, and depth are taken from Romarco map. EG-, LP-, and SG- hole information is taken from geologic mapping by Thompson (2007). Collar and plan projections are shown in Figure 6.2. Collar coorinates and elevations are approximate.

Diamond Drill Hole	Company	Year Collared	Az (°)	Inclination (°)	Depth (m)	NAD27, Zone 14N		Elevation (m)
						UTM E	UTM N	
P-1	Beth/Peñoles	1980	122.5	-52	279.8	232446	2468964	2450
P-2	Beth/Peñoles	1980	113	-47	201.1	232305	2468450	2430
P-3	Beth/Peñoles	1981	121	-55	205.3	232117	2468062	2424
P-4	Beth/Peñoles	1981	128	-45	202.2	232419	2467881	2416
P-5	Beth/Peñoles	1981	85	-45	187.2	233286	2468383	2459
P-6	Beth/Peñoles	1981	106	-50	205.7	233161	2469313	2476
EG-1	Hecla	?	90	-60	71.3	232521	2468717	
EG-2	Hecla	?	90	-60	120.4	232484	2468561	2438
EG-3	Hecla	?	90	-60	125.0	232403	2468469	2434
LP-1	Hecla	?	100	-60	150	?	?	?
SG-1	Hecla	?	270	-55	300.0	233390	2469593	2476
SG-2	Hecla	?	270	-55	250.0	233270	2469593	2474
SG-3	Hecla	?	95	-50	250	?	?	?
R-DDH-01-07	Romarco	2007	130	-45	500.0	232960	2469553	2492
R-DDH-02-07	Romarco	2007	130	-60	209.6	232960	2469553	2492
R-DDH-03-07	Romarco	2007	130	-45	202.0	233140	2469837	2486
R-DDH-04-07	Romarco	2007	130	-60	204.0	233140	2469837	2486
R-DDH-05A-07	Romarco	2007	130	-45	185.8	233166	2469968	2494
R-DDH-06-07	Romarco	2007	130	-45	267.0	233337	2469952	2494
R-DDH-07-07	Romarco	2007	120	-45	227.0	233488	2470042	2498
R-DDH-08-07	Romarco	2007	180	-45	224.0	233488	2470042	2498

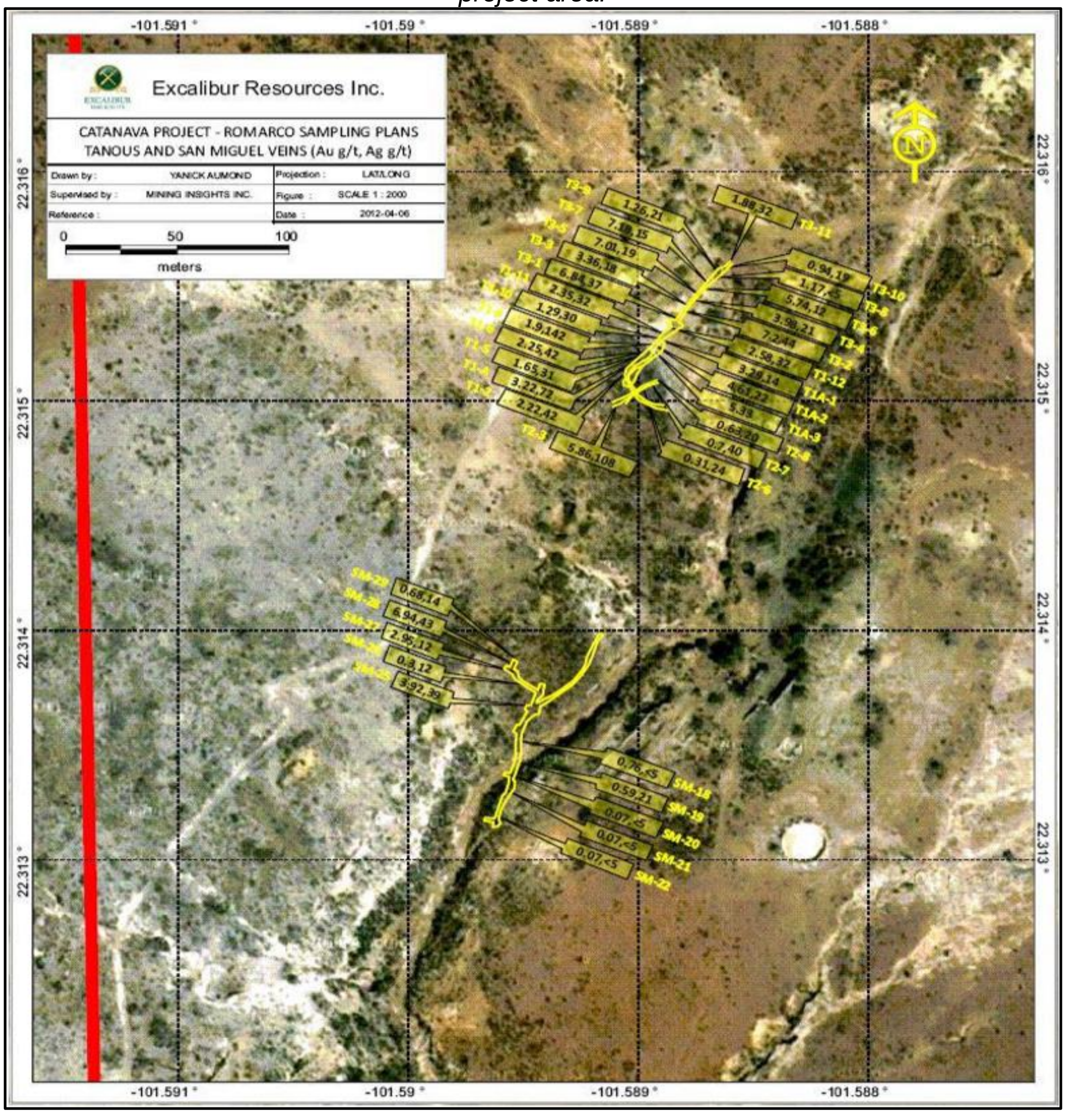
Source: JAO (2018)

Figure 6.2 - Historical drilling collar-location map. From Maynard et al. 2015. See Table 6.2 for an explanation of data sources.



Source: JAO (2018)

Figure 6.3. Sample location map for Romarco program at Tanous and San Miguel veins. From Excalibur Resources' website. The red line on the left side of the figure is the western boundary of the Minera Catanava project area.



Source: Excalibur Resources Inc. (2012)

Between 2010 and 2014, Excalibur Resources and Minera Apolo entered into an exploration/mining joint venture agreement forming Minera Catanava, S.A. de C.V., to work on a 143-hectare portion of the northwestern part of the Apolo concession block in September 2010. In addition to the exploration/development work described below, Catanava constructed a processing plant on site that has been dismantled. The joint venture agreement between Excalibur and Apolo was terminated on 12 January 2015, leaving Apolo with 100% ownership of the entire concession block.
Carter (2013) summarized the exploration work of Catanava as follows, taken from Maynard et al. 2015.

Since the September 2012 report there has been 700 meters of drifting and 200 samples, have been taken and assayed at the Actlabs laboratories.

Development of the Natas Vein which is exposed at surface less than 100 meters east of the plant and will relate to the southwest extension of the Camino adit. It was first mapped and sampled in 2012 by the Company with satisfactory results.

The Natas Vein is part of the Cinco Estrellas vein system which is marked by numerous horsetail structures. Development of this higher-grade gold vein is the current focus for the Catanava gravimetric plant. It is important to note that this zone is open laterally and vertically forming high-grade ore shoots and that exploration and development in both directions are expected to increase the known mineralized volume.

The opening and the preparation of the Natas Vein adit started in September 2013. The development of the Natas Vein is currently on two levels approximately totaling 125 meters. The Upper Level or "Bloque Superior" is prepared from the surface to confirm the high grades, while access from Rampa Camino will connect with Natas Level 01 approximately 35 m below. Subsequently, both mine drifts will relate to raises for ventilation and prove the lateral and vertical continuity of the ore shoots. Finally, when the stope is developed, the ore will be mined systematically through traditional cut and fill methods and a stope ramp.

Systematic sampling of development headings has delineated a high-grade ore shoot that has been opened laterally over 30 meters in length. Also, the Camino's vein yielded good grades at Drift 12N. The 200-sample Catanava sampling program was focused on new exposures generated by the 700 meters of new drifting on the Natas and Camino's veins. Continuous chip samples were taken across veins at intervals ranging from 2 to 20 meters along strike. Accordingly, to S. R. Maynard Technical Report 43-101, et al. 2015, methods and quality ensured that samples are representative, and that bias is removed by ensuring that samples are continuous across the structure.

For details on Catanava's historical results, please review in Candelaria Mining Corp. SEDAR files for S. R. Maynard 43-101 Compliant Technical Report.

During the period 2011 through 2014, Minera Catanava and Minera Apolo spent a total of US$1,003,456 on the Pinos Project. Branco Resources spent a total of US $33,186 on the project in 2014. In 2014, Branco Resources, Inc., now Candelaria Mining Corp., entered into a binding letter of agreement with stockholders of Minera Apolo to acquire 60% ownership of Minera Apolo, they began in May 2014 with compilation of maps, sections and technical reports provided by Minera Apolo, and review in detail the work done by Bethlehem Steel and Peñoles. They also did confirmation sampling, and metallurgical testing described in detail in the reference cited ahead. At the request from Branco Resources, Stephen Maynard, M. S. C.P.G., prepared an NI 43-101 Technical Report on the Pinos Project, January 2015. Stephen Maynard NI 43-101 Technical Report.

A summary of relevant conclusions and interpretation of exploration results from Maynard et al. 2015 is given here:
"Historical exploration work and exploration work was done since 2010 by Minera Catanava and Branco Resources indicate significant potential to develop mineral resources on a low sulphidation gold-silver epithermal vein system below and adjacent to portions of veins worked in the 19th and 20th centuries. Also, gold and silver may be recovered from historical dumps and tailings piles.

The Pinos Project is a low-sulphidation epithermal gold-silver vein system that occupies north-south- and northeast-southeast-trending extensional fractures and normal faults. The fracture and fault system and the adjacent Pinos Volcanic Complex appear to be related to the NW-trending Río Santa María (or San Luis-Tepehuanes) Fault Zone. The Río Santa María Fault Zone appears to act as the locus for the concentration of low-sulphidation gold-silver deposits in the Fresnillo and Zacatecas districts in Zacatecas state, as well as the Real de Ángeles gold district in San Luis Potosí state.

Veins in the Pinos District are hosted by Cretaceous limestone, limy sediments, and black shale variously assigned to the Cuesta del Cura and Taraises Formations. Veins are known to cut the Pinos Volcanic Complex in the area of the Tanous mine, which makes them of probable midTertiary age.

Veins contain quartz, silica-cemented breccia, and calcite. Veins are banded and locally vuggy; they commonly contain calcite and frequently feature chalcedonic silica after calcite (bladed quartz). Alteration associated with veining includes clay, locally intense hematite, jarosite fracture coatings within veins. Alteration is limited in hanging- and footwalls of veins. Gold and silver mineralization occur as micron-scale flakes of gold-silver selenides, silver selenides, selenium sulphosalts, native gold, electrum, and silver sulphide. Mineralization is concentrated in greenish gray banded quartz similar to "ginguro"-style mineralization common in low-sulphidation systems in many parts of the world.
Independent sampling by the author of this report returned values ranging from 0.892 to 5.28 g/t Au and from 4.2 to 263 g/t Ag in vein samples at Peñitas, Griego, Nivel 25, and Natas. Comparison of the author's samples to nearby historical sampling confirms the presence of gold-silver mineralization of roughly similar values.

Minera Catanava installed a 150 tpd mill at the Pinos Project. At the time of the author's visit, ore from the Noria de Angeles project (not part of the Pinos Project) was being processed there.
No NI-43-101-compliant reserve or resource estimate has been made at the Pinos Project. No mine plan has been formed, and exploration is not at an advanced enough stage to estimate potential gold and silver production. No significant risks or uncertainties have been identified that would affect reliability or confidence in the exploration information or future mineral resource estimates.

The author has proposed a work program of approximately CDN$1,430,000 that includes detailed topographic and geologic (structural, lithological, and alteration) mapping of the Pinos Project; trenching and sampling of existing dumps and tailings; rehabilitation of the haulage level on the Cinco Estrellas trend; muck piles related to shafts from historic works on the Property; detailed structural mapping and close-spaced chip sampling of all accessible underground exposures of vein systems; a 5,000-metre diamond drilling program; and petrographic/metallurgical studies on mineralized material".

In January 2015, Branco Resources (Candelaria Mining Corp.) acquired from Excalibur Resources its holdings in Catanava (49%), becoming part of Minera Apolo partnership.
During the first six months of 2015, further work on the regional geology of the district was performed, resulting in a new model of exploration.

In May 2015 the new ownership gave a new focus to the Pinos Project and efforts were concentrated on sampling systematically every meter at accessible old mining works, providing detailed geology of the Cinco Estrellas vein trend; as well as, geochemical sampling on old waste dumps using the backhoe for representative lab analysis. Details on this sampling campaign are given in Section 9.

In 2016, Candelaria Mining Corp. through its Mexican subsidiary Grupo Minero Candelaria, acquired 60% of Minera Apolo, S.A. de C.V., and from May to September 2016, a diamond drilling campaign was performed with the objective of estimating mineral resources and verifying the lateral and vertical continuity of the mineralized structures previously detected with systematic sampling along old workings and trenches. Details on this drilling campaign are given in Section 10.

By August 2018 Candelaria elaborated an exploration-mining development-mining production and processing program reviewed and supervised by JAO, to be described in further sections.
6.3 Historical Mineral Resources and Mineral Reserves Estimates

Historical mineral resource and mineral reserves estimations are not disclosed here. These results from previous owners are not material for this report; because the issuer of this report does not treat historical estimates as current mineral resources or mineral reserves.

6.4 Regional Exploration History

In 1977, the Consejo de Recursos Minerales, former Servicio Geológico Mexicano, performed a regional geological and mining study of the Pinos District. Estudio Geológico-Minero del Distrito de Pinos, Zacatecas. Sergio Alemán González and Ignacio Herrera Mendieta. Enero, 1977. SGM Archivo Técnico. TI 320221.

This regional study was performed on an area of 225 Km^2; including the Pinos Mining District of about 13.5 Km^2. Although, most mines from the Pinos District were inaccessible at that time, it was recommended to rehabilitate the most important old workings; such as, Esquipulas, Anexa a Esquipulas, San Miguel del Oro, Purísima, Tiro 4, La Perla, San Juan de Las Cargas and San Luis (Cinco Estrellas) to perform an underground systematic channel sampling providing information to delineate possible ore shoots and estimating mineral resources.

In December 1998, Sociedad Exploradora Minera, S.A. de C.V., completed the technical report of the geological-mining and geochemical chart of Pinos for the Consejo de Recursos Minerales, former Servicio Geológico Mexicano. Carta Geológico-Minera y Geoquímica Pinos F14-A72. Estado de Zacatecas. Scale 1:50,000.

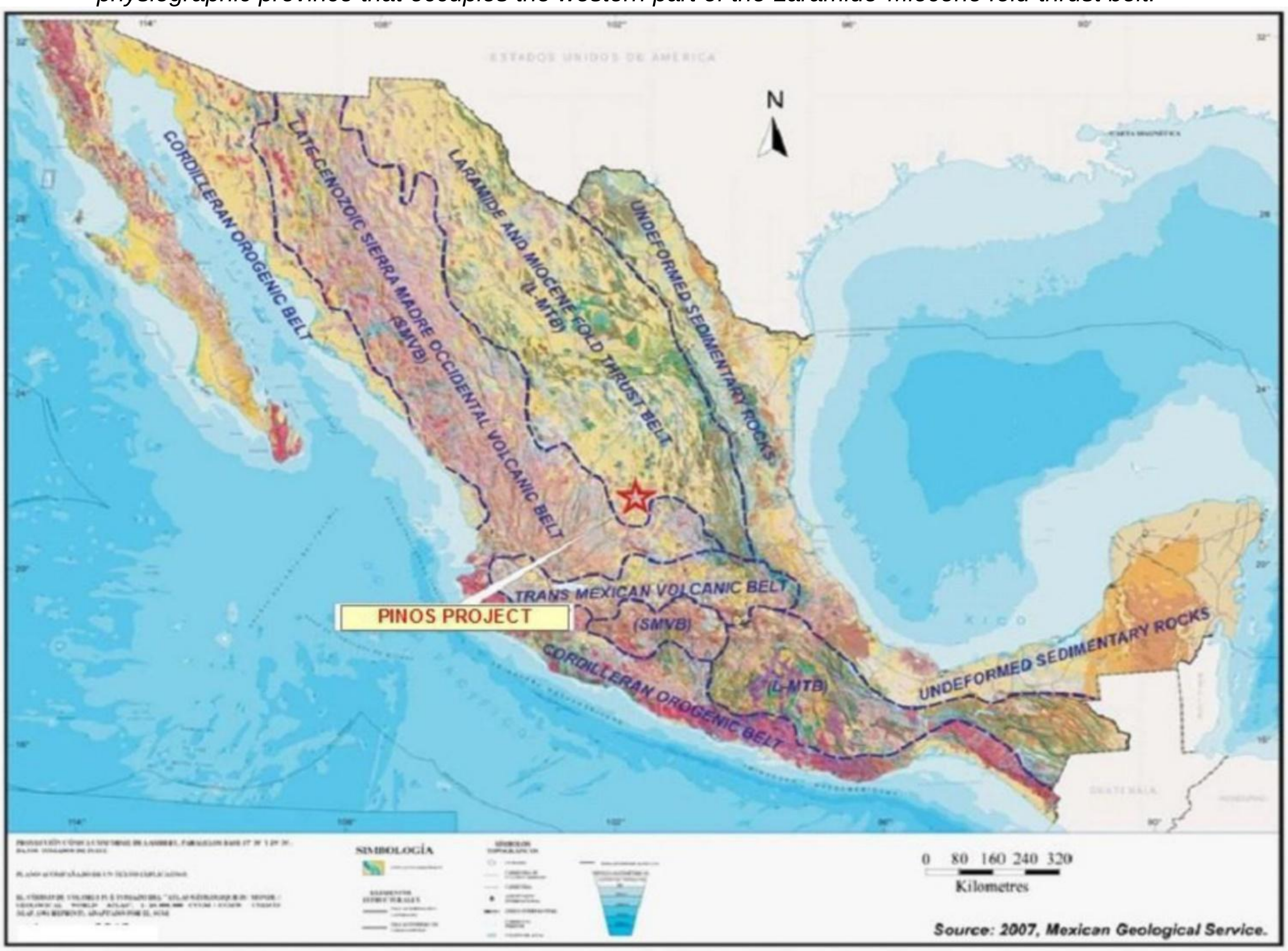
This published chart shows regional geological lithostratigraphic units, structural features, and location of mining works as well as stream sediments geochemistry survey.
Published and unpublished reports are referenced in Section 27.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1. Regional Geology

As stated earlier, the Pinos Project lies in the Mesa Central Physiographic Province, at the border between the Laramide-Miocene fold and thrust belt and the Mid-Tertiary Sierra Madre Occidental volcanic belt. Fig. 7.1. Principal Geologic Belts of Mexico. The Mesa Central's boundary with the Sierra Madre Occidental volcanic belt is formed by the Aguascalientes fault; its boundary to the east with the Laramide-Miocene fold and thrust belt is marked by the Taxco-San Miguel de Allende fault.

Figure 7.1 - Principal Geologic Belts of Mexico. The Mesa Central, in which Pinos Project is located, is a physiographic province that occupies the western part of the Laramide-Miocene fold-thrust belt.



Source: *Servicio Geológico Mexicano et al. 2007.*

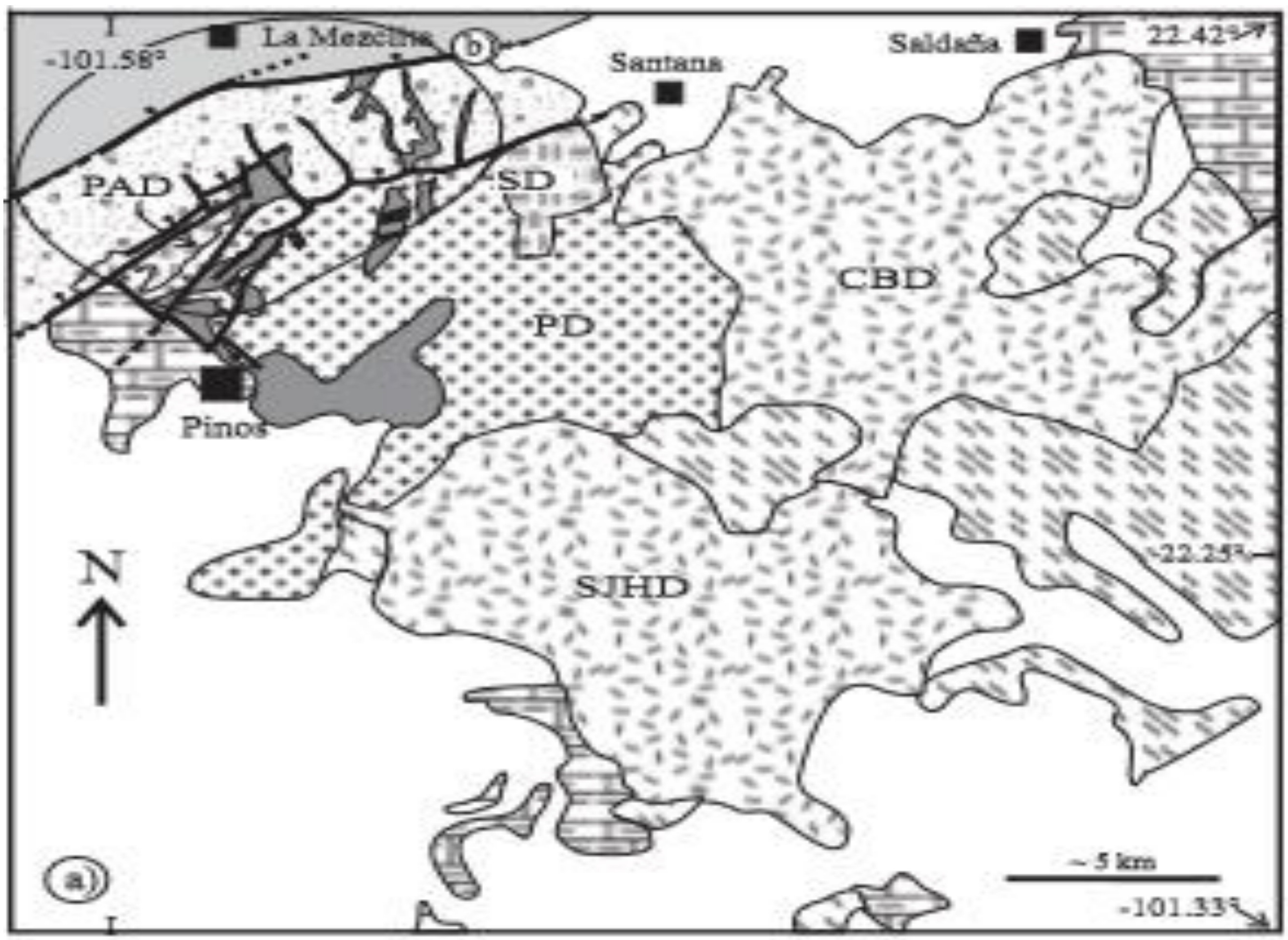
The Mesa Central is underlain by metamorphosed Late Triassic turbidites and Middle Jurassic andesites and polymictic conglomerates. This metavolcanic and metasedimentary rock package is considered by many workers to be part of the allochthonous tectonostratigraphic Guerrero Terrane. Cretaceous sedimentary rocks overlie the Guerrero Terrane rocks; these rocks are dominantly platform carbonate, with significant portions of phosphate, chert, and shale. Lithostratigraphic units are described in Section 7.2.1.

Late Cretaceous-Early Tertiary granitic stocks locally intrude the Mesozoic rocks. The Mesozoic strata and granites are overlain by red-bed conglomeratic sandstone and matrix-supported polymictic conglomerates. Clasts in the conglomerates were derived from the Mesozoic basement, subaerial felsic volcanics; including, tuffs and pyroclastic ash flows and tourmaline-bearing muscovite granite. The Pinos red bed sequence includes clasts of the Peñón Blanco granite (40Ar/39Ar=50.94 +/- 0.47 My). Fig. 9. Generalized Lithologic Map of the Pinos Region. That in addition to providing a minimum age for the end of the Laramide orogeny in the Mesa Central, offers evidence of uplift and denudation of the granite before or synchronous with red bed deposition (Aranda and others, 1977).

The Pinos Volcanic Complex overlies and intrudes the Mesozoic and Lower Tertiary rocks. It shows as an uplifted area of typical domic structures. The main components of the dome complex are a dark-red, porphyritic potassium-rich trachyte, and buff-colored, porphyritic rhyolite. The mingling of these two lava units has been demonstrated (Aranda and others, 2007).

Field relations at the Pinos Volcanic Complex demonstrate a close temporal relationship between felsic volcanism and extension. Faulting in Pinos is complex as it includes arrays of Cenozoic normal faults with NS, NW and NE trends, for which cross-cutting relations are ambiguous.

Figure 7.2 Generalized Lithological Map of the Pinos Region. Lava domes: Pinos (PD), Puerto del Aire (PAD), Cerro Blanco (CBD), San Juan de Los Herrera (SJHD), and Saldaña ((SD). Taken from Aranda and others, et al. 2007. Volcanism and extension in the Mesa Central: the case of Pinos, Zacatecas.



Source: JAO (2018)

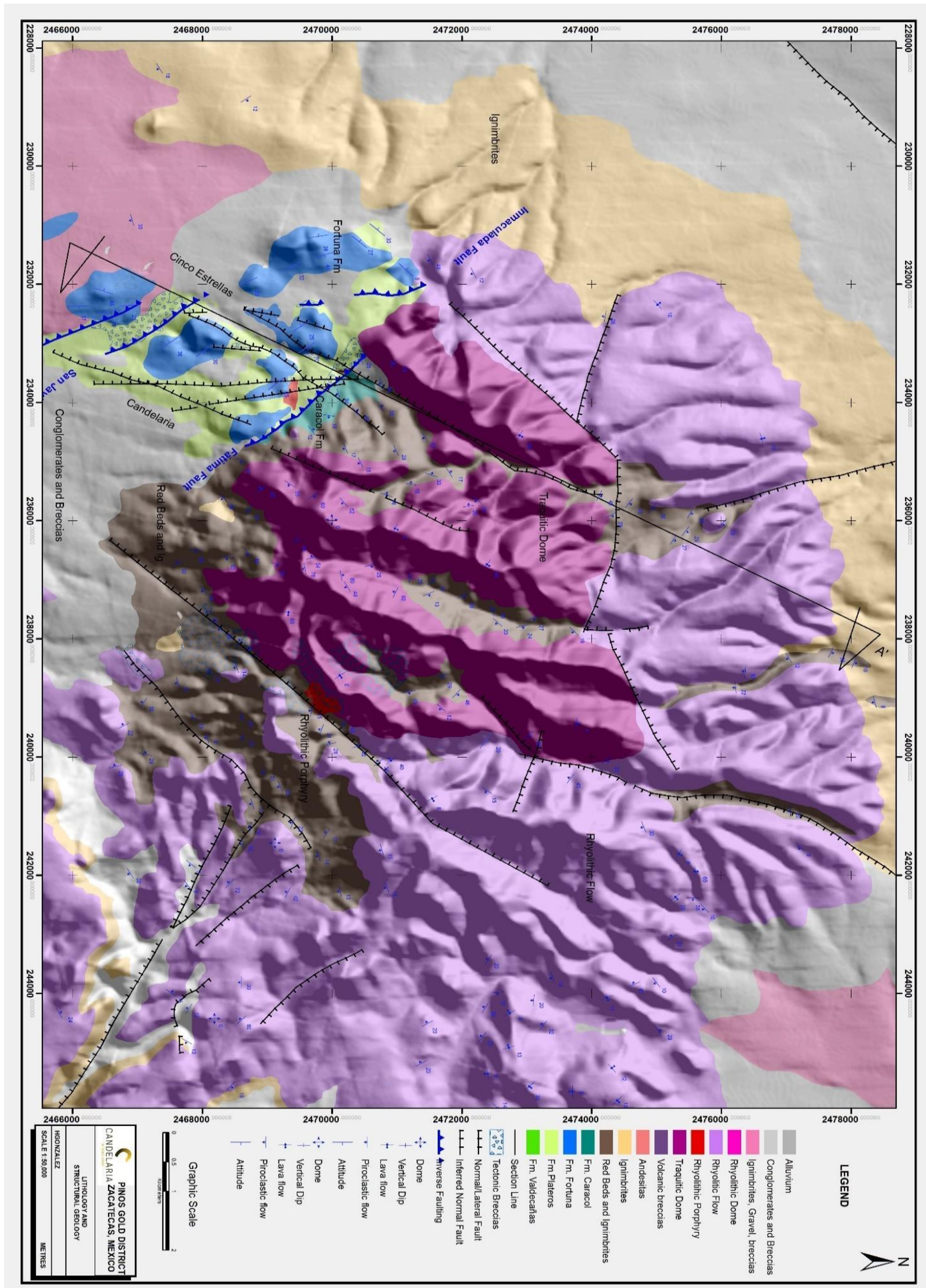
7.2 Local and Property Geology

Locally, Pinos epithermal Au-Ag vein mineralization is related to the Mid-Tertiary Pinos Volcanic Complex formed by domes, associated lava flows, and ash flow tuffs. Part of the Mesozoic sequence is exposed around the flanks of the Pinos Volcanic Complex. The Mesozoic is folded and overlain in angular discordance by clastic red beds, which are informally named as Pinos red beds. Fig. 7.3. Lithology and Structural Geology and Fig. 7.4. Simplified Geological Model. Section A-A'.

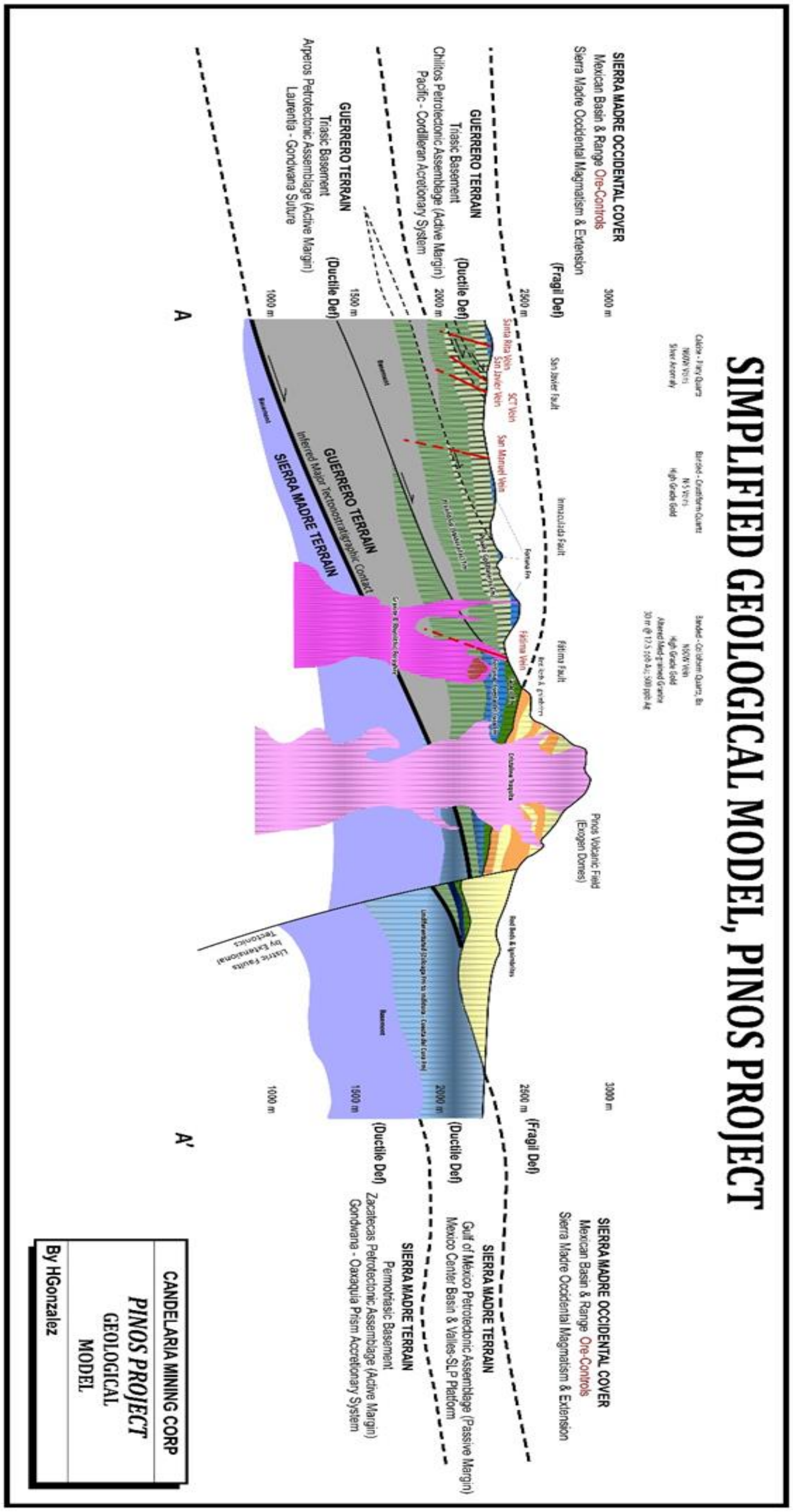
Local geological maps as seen in Figures 7.3 and 7.4, were interpreted by Candelaria's geologist Héctor González after working the Pinos area for many years resulting from the detailed surface and underground mapping, drill hole logging and extensive sampling analysis. JAO reviewed all local geological data in the field during four site visits dated previously in Section 1. Looking at the simplified geological section, it is noticeable, a thrust contact between Guerrero Terrain and the Sierra Madre Oriental; tectonostratigraphic provinces are observed and explain why locally there is a lateral contact between younger Sierra Madre Terrain Caracol Fm., with older Guerrero Terrain Plateros Fm., along with the Fátima fault. JAO validated this fact in the field.

Geologically at Cinco Estrellas mineralized trend, there is a siliciclastic calcareous stratigraphic sequence affected by thrust faulting and Cretacic ductile deformation sequenced by normal displacement faulting and fragile Tertiary deformation.

Figure 7.3 – Pinos Project – Lithology and structural geology map



Source: Candelaria Mining Corp. (2018)



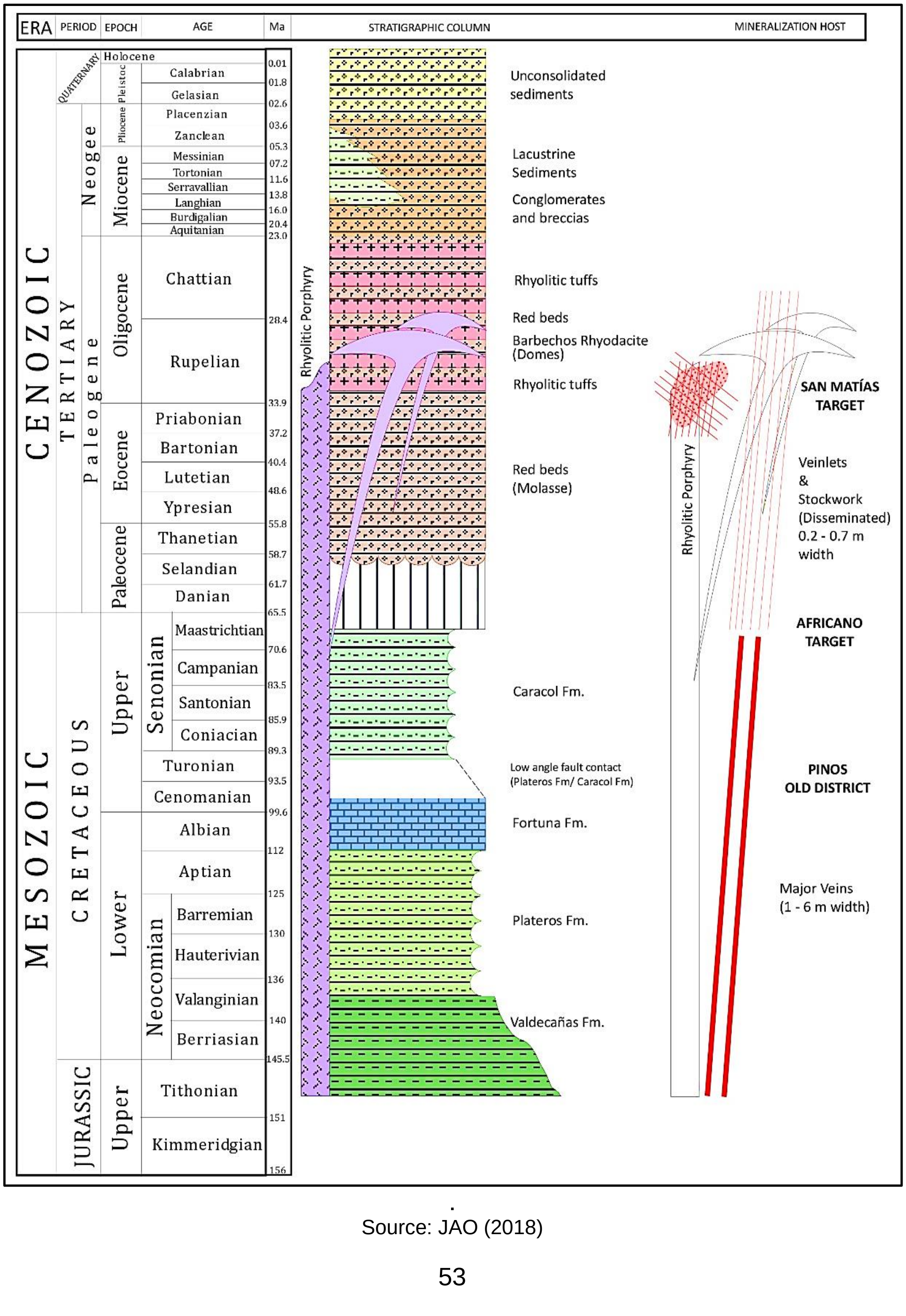
AA Figure 7.4 – Pinos Project. Simplified Geological Model. Section

Source: Candelaria Mining Corp. (2018)

7.2.1 Stratigraphy

The Pinos stratigraphic column is related to the accretion of Guerrero Terrane (Alisitos Arc Petrotectonic Assemblage) followed by deep-basin sediments (Gulf of Mexico Petrotectonic Assemblage) and finally continental red beds (Molasses) and acid vulcanism (Sierra Madre). Refer to Fig. 7.5. Stratigraphic Colum. From the base, there are the following stratigraphic units:

Figure 7.5 – Local Stratigraphic column



.
Source: JAO (2018)

7.2.1.1 Grupo Proaño (Guerrero Terrane).

Hingler (1967), refers to Proaño Formation to three stratigraphic units composed by sandstones, carbonaceous shales, and sandstones again, as identified at Proaño mine by Stone and McCarthy (1942). De Cserna (1976), upgraded this formation up to Proaño Group, dividing it into two formations; the lower, Valdecañas Formation composed by greywackes and shales and the upper unit named Plateros Formation constituted by carbonaceous shales, calcareous shales, and greywackes.
Rocks from these formations outcrop in various sites of Pinos region as well as in the highway to Ojuelos, Jalisco. A brief description of these are as follows:

Valdecañas Formation*.* It constitutes a rock package subdivided into two members; the superior one, consists of black shales and mudstone of laminated stratification whose lithology varies from carbonaceous to calcareous, the inferior is constituted of an alternating sequence of thin strata of fine greywackes showing grey-greenish color with dark grey to black shales, the Candelaria's CA16P1018 drill hole cut this last member to a thickness greater than 100 m, its lower contact is unknown in the area.

Rocks from the upper member were intersected by many Candelaria's drill holes and are observed in the San Luis and San Ramón shafts.

It is assumed that the Proaño Group underlies the Fortuna limestone (at Pinos other authors correlate it with the Cuesta del Cura Formation); however, isolated data derived from scarce outcrops, allows to suppose contacts by faulting; so, there maybe are repetitions in the stratigraphic sequence, this structural feature has not been demonstrated, yet.

Considering paleontological studies reported by H. Ochoterena (1971) in De Cserna (1976), it is ubicated in the Late Valanginian-Early Hauterivian age.
Plateros Formation*.* It constitutes a rock package subdivided into two fractions; the superior consists of siltstones, sandstones, clayey limestones and shales, showing a reddish-ochre color, the inferior member is composed of shales and mudstone of massive stratification whose lithology varies from carbonaceous to calcareous. These lithological units were intersected by Candelaria's core drilling and are observed at depth in the San Luis and San Ramón shafts.

7.2.1.2 Fortuna Formation (Cuesta del Cura Formation)

Burckhart (1930), reported the existence of some limestone outcrops in the area between Fresnillo and Plateros; later, De Cserna (1976) paleontological determined by E. Rivera-Palacio (1971) and Alencaster de Félix (1972) were provided, allocating this unit in the Lower Cretaceous. Its locality type is situated to the west of the City of Fresnillo at La Fortuna Hill formed by thin layers of limestone of grey color.

Outcrops of this formation in the Pinos region, stand out in the form of little hills, mainly in the area near the Pinos village; here, limestones show no apparent regional dips, and it is inferred that occasionally they could have a tectonic contact with Proaño Group; however, this theory has not been proven, yet.
The rocks that make this lithostratigraphic unit are light grey to beige limestones with stratification varying from thin to medium; base horizons are distinguished by the presence of bands and nodules of black flint, as well as fine-grained calcareous sandstone layers of yellowish color. Towards the top, limestones change to thicker stratification and sandstones acquire reddish dyes.

7.2.1.3 Caracol Formation

Imlay (1937), describes this formation as a series of devitrified tuffs, shales, sandstones and limestones. He placed Arroyo El Caracol as the locality type, in the middle portion of the Sierra de Parras, Coahuila. Distribution of these rocks within the area of Cinco Estrellas is restricted to an outcrop of approximately eight square kilometers in the northern part and isolated outcrops on stream banks in the northwestern; it is also observed in breccias associated with thrust faulting commonly as angled blocks of 1-2 inches in diameter.

The Caracol Formation is composed of two units; the inferior, consisting of an alternating series of clayey limestones of grey color and shales of shades that vary from grey to greenish grey, in thin to medium strata; whereas, the upper portion is composed of dark grey tuffs in thin to medium layers. This later unit has not been observed in Pinos. Accordingly, to regional topographical features, its thickness is estimated to be around 250 meters.

North of Cinco Estrellas, at Tanous area, the Caracol Formation is in contact with the Proaño Group by thrust faulting, the inverse stratigraphic contact is very evident. Photo 7.1.
Its age is addressed as Conacian-Santonian and correlates with the Parras and San Felipe formations in northeastern Mexico.

Photo 7.1 - Inverse Stratigraphic Contact. Source: JAO

Source: JAO (2018)

7.2.1.4 Pinos Red Beds

As noted earlier a thick sequence of red beds named Pinos Red Beds by Aranda and others (2007), is overlaying the Upper Cretaceous Caracol formation in the Pinos area unconformably.
These beds are formed by well-lithified conglomeratic sandstone and matrix-supported, generally fine-grained to medium-grained, polymictic conglomerate. Clasts in the Pinos red beds were derived from the Mesozoic basement (limestone+sandstone+shale+propylitized andesitic lavas), subaerial felsic volcanic rocks of unknown provenance, and tourmaline-bearing muscovite granite. Clast composition, size, and their relative abundance vary from one site to another.

In the upper parts, the Pinos red beds are locally interlayered with subaerial felsic volcanic rocks, including ash-fall tuffs, at least one densely welded ash-flow tuff, and water-laid or reworked pyroclastic material. Colors of the conglomerate and sandstone in the red bed sequence depend on the relative abundance of clasts. The sequence tends to be dark red in those sites where propillitized andesitic fragments are abundant; gray, where limestone and chert clasts dominate, and yellow where ash-fall tuffs and volcaniclastic sediments are concentrated.

The tectonic setting where these rocks accumulated is still debated; however, most authors have been interpreted these rocks as molasse deposits accumulated in topographic lows after the Laramide Orogeny or as fanglomerates associated to post-Laramide normal faulting.

7.2.1.5 Pinos Volcanic Complex

The lava flows associated to Tertiary Pinos Volcanic Complex occur above the Pinos Red Beds. Contact in places between lava flows and red beds is roughly concordant, and both units are equally tilted to the north. In many sites the contact is clearly angular, showing unconformity between steeper Pinos Red Beds and the more gently dipping lavas, finally in other places the red bed sequence and the lavas of the dome complex are in fault contact, and intrusive relations between the felsic lavas and the red beds are interpreted as feeder dikes for the dome complex (Aranda and others et al. 2007).

Locally two different lava types in the Pinos area have been identified (Aguillón-Robles et al., 1996); a dark red, porphyritic potassium-rich trachyte cropping near the Town of Pinos called as Pinos Trachyte by Aranda and others (et al.,2007). Moreover, a second lava type on the northwestern part of the complex called Puerto de Aire Rhyolite (Aranda and others et al., 2007), which is buff-colored porphyritic rhyolite. Contact relations between the trachyte and rhyolite that locally; these were emplaced simultaneously.

7.2.1.6 Conglomerates and Sandstone

Lithology of this young unit from Miocene to Pleistocene is represented by a series of polymictic fragments from eroded rocks of the whole region, predominantly by rhyolitic and ignimbrite fragments of variable sizes from 3 to 15 centimeters of diameter, sub-rounded to rounded in shape, cemented in a calcareous sandy matrix forming a caliche surface on most of the Pinos area, difficulting geological prospection.
These rocks are a pluvial type by slope foot accumulations dragged by streams.

7.2.1.7 Unconsolidated Sediments

These sediments are unconsolidated rock fragments accumulated in valleys, low lands and stream mouths, the difference with above-described conglomerate is that these are loose fragments, well rounded with polymictic limes, sands, and gravels. The thickness of this unit is no more than 2.5 m.
The age SGM allocated to this unit is Holocene, presenting a fluvial reservoir environment restricted to the sides of streams, flat parts of passive streams, flood valleys, and alluvial fans.

7.2.2. Structural Geology

Tectonic structures in the Pinos area vary from macro-structures recognized at a regional scale to local structures identifiable on an outcropping scale. Figure 7.6. Tectonic Lineaments.
At regional level, Candelaria's expert team has recognized major thrust faults; these are the Fátima, San Javier and Inmaculada faults, as shown in Fig. 7.7. The Fátima thrust fault puts in contact rocks of the Proaño Group with younger Caracol Formation, this structure occupies part of the northwestern portion of the Pinos Candelaria's property and probably extends southward, and it is related to the emplacement of rhyolitic domes. North of the claimed area, in an old quarry close to the Pinos-La Pendencia paved road, there is another regional thrust fault (Inmaculada Fault), where it is evident a stratigraphic reverse contact between rocks of Proaño Group and younger Fortuna Formation. Towards the south of the Pinos Project, the San Javier and SCT veins, seem to have a close relationship with similar thrust system.

There is another tectonic system of normal faults with lateral displacements; this system displaces the Inmaculada Thrust Fault

There is also a system of normal faults with lateral components, the first shifts to the reverse fault described above, with lengths between 3 and 5 kilometers, its trend is NE-25°-SW, dipping to the northwest and takes place in rocks that constitute the Proaño Group and the Fortuna Fm.
The second system has lengths between 2 and 4 Km, the general bearing is N-S and dipping almost vertical, it affects the rocks of the Proaño Group and Fortuna limestone, the latter affects the normal faults NE-SW and the reverse faults. It is essential to mention that in the three tectonic systems, cavity filling structures with associated gold mineralization have been found and constitute the vein system throughout the mining district. Fig. 7.7. Mineralized Veins in Pinos Gold District.

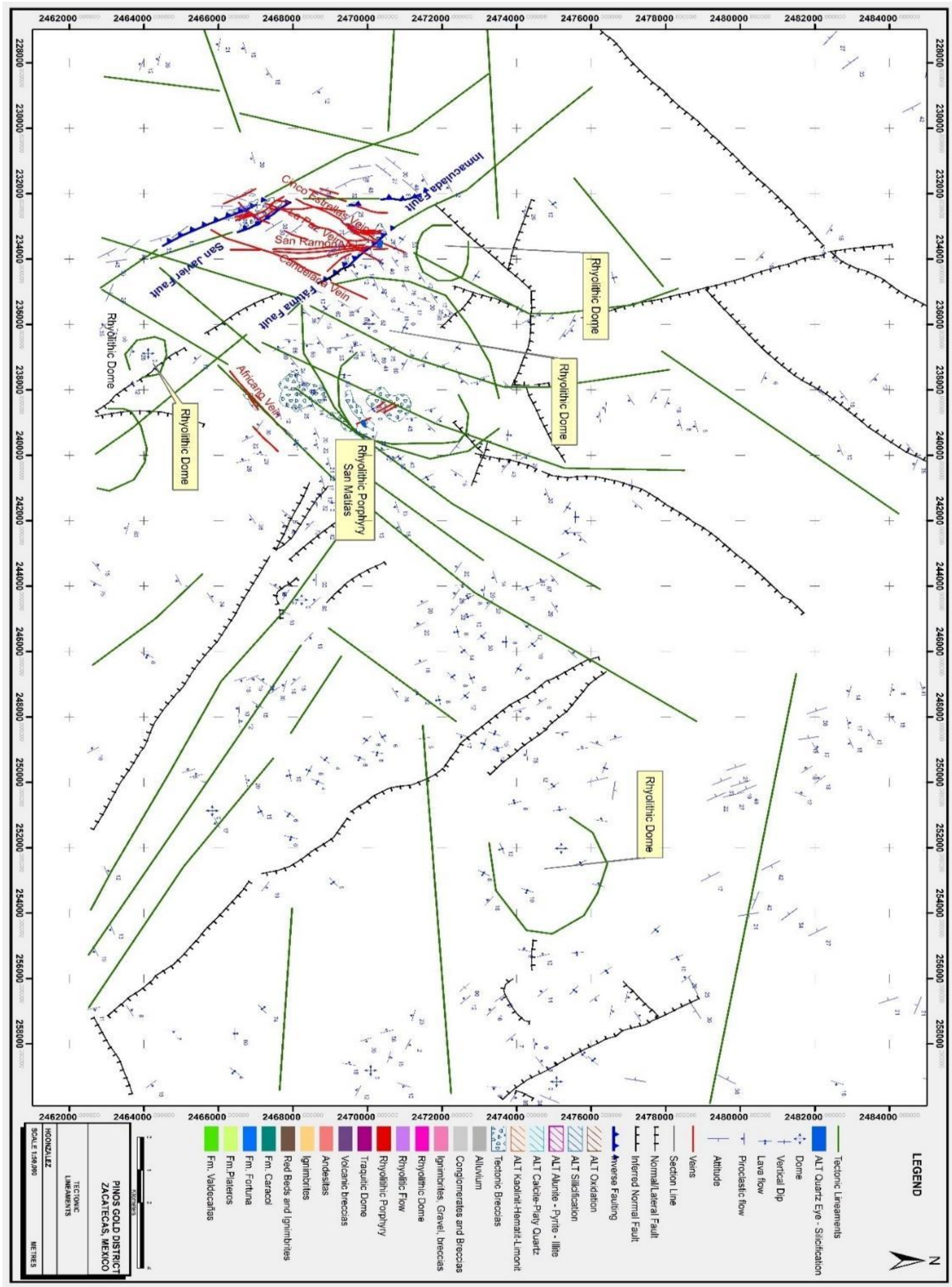
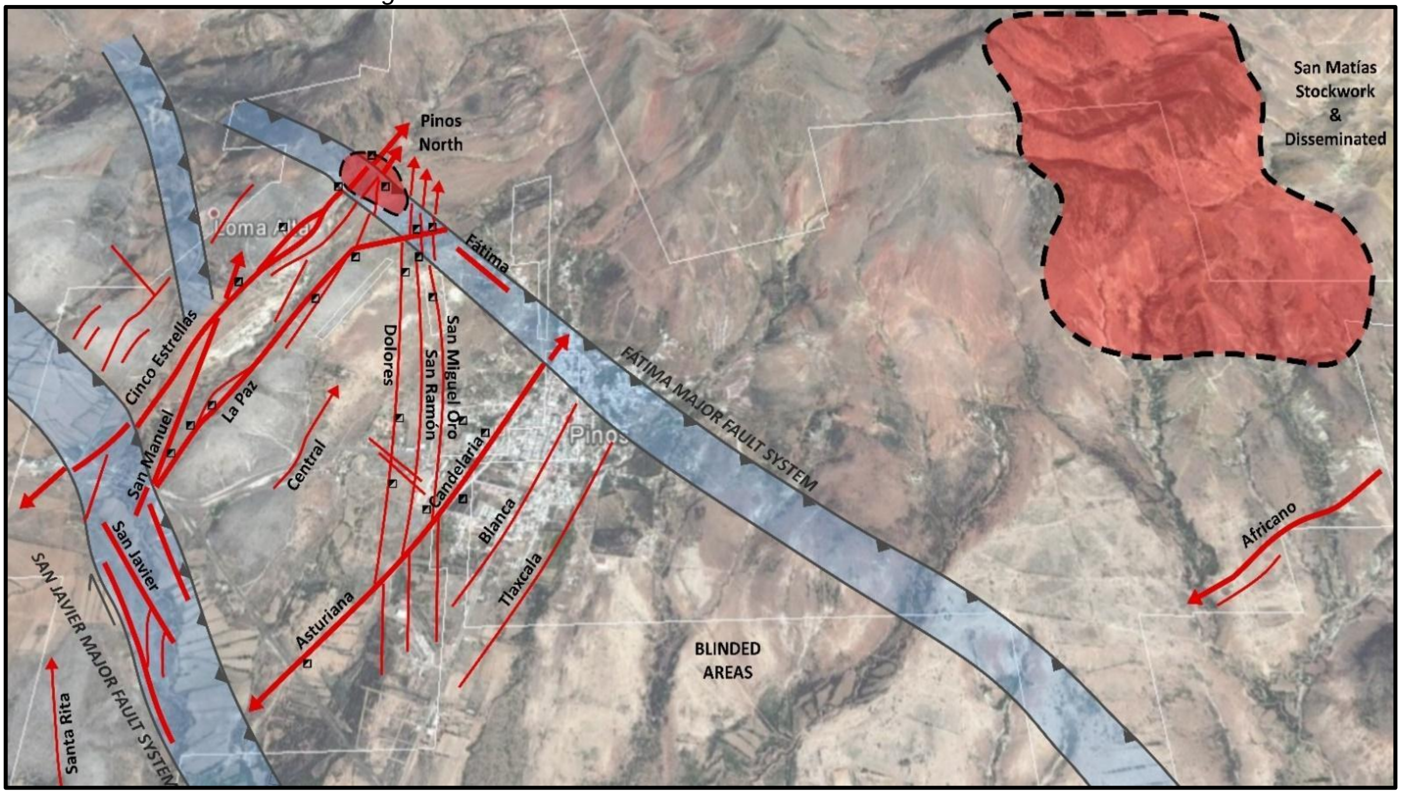


Figure 7.6 - Tectonic Lineaments. From Candelaria Mining Corp

Source: Candelaria Mining Corp. (2018)

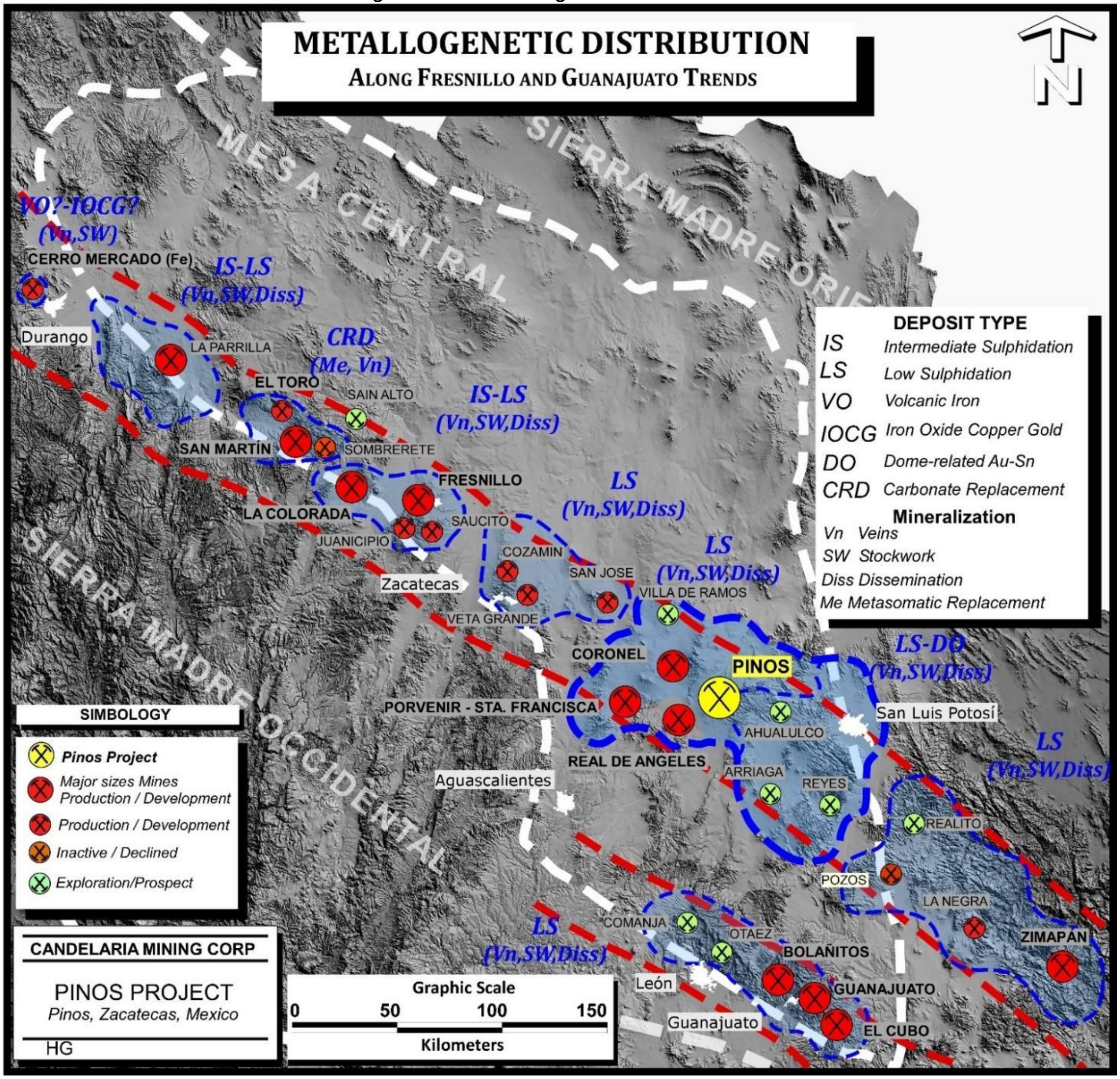
Figure 7.7 - Mineralized Veins in Pinos Gold District.



Source: Candelaria Mining Corp. (2018)

Tectonically, it is inferred that the first system (NW-SE, Fátima, and Inmaculada) relates to the structures of the argentiferous belt of Zacatecas, which extends from Durango – Fresnillo – Zacatecas. Fig. 7.8 Metallogenetic Distribution and Figure 7.9 World-class and major mines possibly associated with the limit of Guerrero and Sierra Madre terranes. The normal-lateral system N25°E was possibly formed along with Tertiary extension associated with the Mexican Basin and Range; Cinco Estrellas vein trend is part of this tectonic system, and finally the N-S normal faulting system is probably associated with the last extensional period of the Late Tertiary (Graben de Aguascalientes, Graben de San Luis Potosí and Falla El Obraje).

Figure 7.8 - Metallogenetic Distribution.

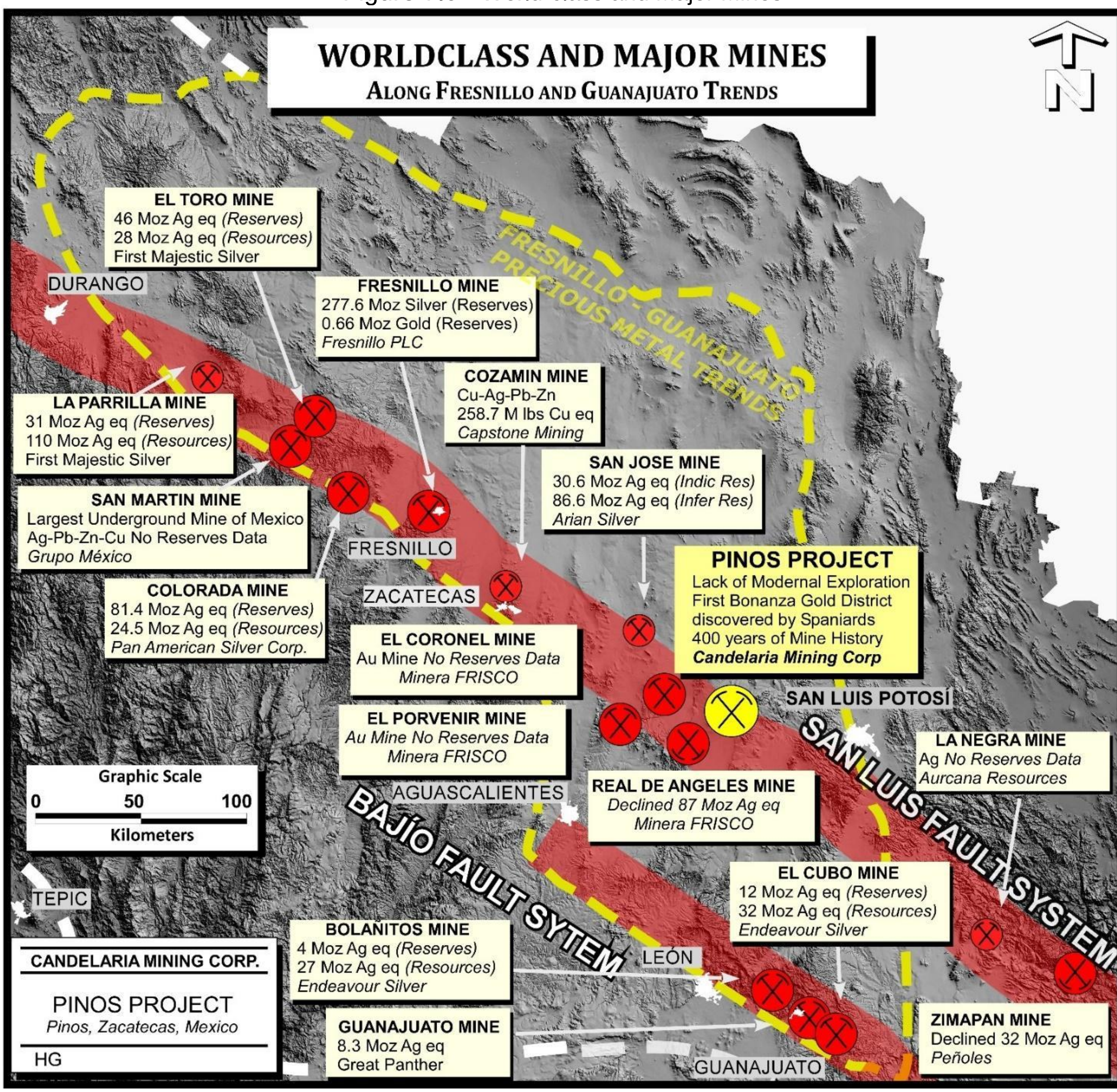


Source: Candelaria Mining Corp. (2018)

7.3 Mineralization

As it can be seen from Figure. 16 World Class and major mines, the Pinos Project is part of the important mineralized NW-SE trend in the Mesa Central of Mexico, along with the so-called Fresnillo-Guanajuato Trend with world-class precious metals active mines; such as Fresnillo, La Parrilla, San Martín, La Colorada, Real de Ángeles, and Guanajuato, among others.

Figure 7.9 - World-class and Major Mines.



Source: Candelaria Mining Corp. (2018)

Gold-silver mineralization in Pinos District occurs in the form of veins and stockworks structurally controlled by NW-SE, NE-SW and N-S fracture-faulting systems described earlier; it is hosted in rocks of the Proaño Group, Fortuna Formation, Caracol Formation and to a lesser extent in rhyolitic flows and ignimbrites of the Pinos volcanic complex. Vein structures show more than 25 kilometers linearly in

length within the district besides extensive areas of mineralized breccia and stockworks. Figure 17 Simplified Mineralization Model.
Veins are of cavity filling type of mineralization related to fault and fracture systems forming well-defined tabular bodies; vein thicknesses vary from 0.5 up to 6m depending primarily on the suitability of host rocks.

The lithological units of Pinos District have varied characteristics; it influenced the position and intensity of subsequent fracturing, dissolution, and mineralization.

Grupo Proaño, related to euxinic, deep-basin back arc sediments and ductile deformation, it improved the consolidation of widest veins and ore shoots (3 m – 5 m width). Grupo Proaño is the best host rock at Pinos Gold District, in accordance the information of drill holes and systematic sampling of old workings, possibly the iron-rich sediments contribute to the enrichment of Au-solutions by chemical reactions between iron and sulfide. However, this theory has not been proved yet. Figure 18 Cross Section 8040NE, San José de Peñitas and Figure 19 Cross Section 9700NE, San Francisco
Fortuna Formation related to deep-basin of passive margin and accretion of oldest back-arc basin improved the formation of high-grade narrow veins accompanied by quartz-calcite stockwork.

Rhyolitic Porphyry, the San Matías Target (Regional Exploration) shows an altered rhyolitic porphyry with advanced argillic alteration and stockwork. The stockwork is formed by quartz veinlets with halos of iron oxides; these veinlets are ranging 5 cm – 20 cm of separation. Stockwork is bisected by major 20 cm – 40 cm high-grade parallel veins separated between 30 – 80 m. The results and historical data of old works and exploratory RC and diamond drill holes indicate the possibility of Au disseminated deposit.

Volcanic Rocks, the mineralization associated with felsic rocks is related to veinlets, it usually is millimetric and has not sufficient density, mainly at rhyolitic flows and tuffs.
The vertical extension of Pinos Gold District is unknown, British operators reached ore up to a 295m depth in Candelaria mine, and deepest drilling has intercepted mineralization close to 200m of vertical depth.

Mineralization is mainly associated with quartz and calcite. There are different textured types of presentation of quartz, varying from chalcedony white banded, crystalline banded, platy, ginguro, massive and smoky, in the middle area of Cinco Estrellas vein pink quartz was also observed. Mineralogy is mainly represented by native gold, argentite, and acanthite, with no presence of base metals, gangue is related to calcite and possibly barite. The correlation of the ratios Ag: Au is null.
Gold mineralization is related to Native Gold and Fischesserite (Ag_3AuSe_2), it was reported in a mineralogical study completed by Terra Mineralogical Services in which a composite sample from the San Gil mine (sample ground to 100% passing 106 microns) contained 12 gold particles and 210 silver-bearing mineral grains. The main gold carrier was Fischesserite (Ag_3AuSe_2), with minor amounts of Native Gold and Electrum. Most of the gold and silver phases occurred as liberated grains. Overall, these precious metal particles had an average diameter of 1.5 microns for gold particles and 2.5 microns for silver particles.

Silver occurs primarily in dark sulfide-rich bands within the veins as Argentite and Electrum. Predominate (silver) carriers were Acanthite (Ag_2S) (54%), Aguilarite (Ag_4SeS) (34%) and Naumannite (Ag_2Se) (9%), of Petrovskaite (Ag Au(S, Se)) (3%).

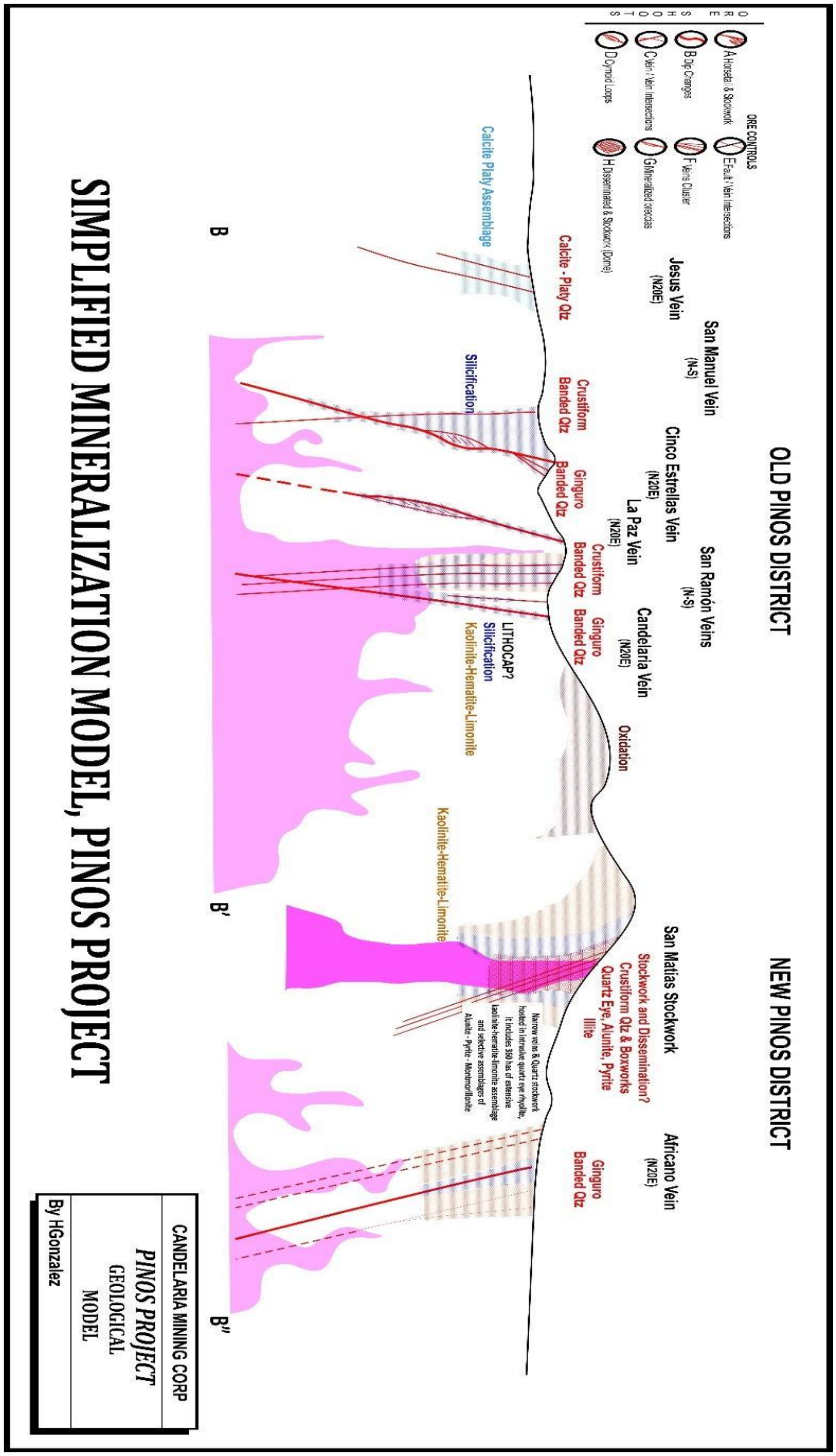
A composite of material from the Candelaria Mine dump was studied by CIMAV Chihuahua et al. in 2016 with the purpose of identifying the mineralogy of depth levels of the district (>250m). This dump sample yielded by XRD a gangue constitution of Quartz (SiO_2), less Calcite ($CaCO_3$), Muscovite (H_2KAl_3 $(SiO_4))_3$, traces of Basanite ($CaSO_4$-0_{67} H_20), Hydrothermal Silica (SiO_2), Orthoclase ($AlSi_3O_8$); and

finally traces of Titanite. Ore minerals were reported as Native Gold, Pyrite (FeS_2,), Argentite (Ag_2S), Hematite (Fe_2O_3), Aguilarite (Ag_4SeS) and traces of Chalcopyrite ($CuFeS_2$).
Mineralized veins at the Pinos District consist of the classic ginguro, banded and brecciated epithermal variety. The vein textures are attributed to the brittle fracturing-healing cycle of the fault-hosted veins during and after faulting. Primary quartz textures include, massive, crustiform, colloform, cockade and combed. Replacement quartz texture includes platy, pseudo bladed and saccharoidal.

Most production related to tonnage was extracted from two of the principal district vein systems, the Cinco Estrellas and Candelaria; there, systems are NE20°-25°. Less tonnage but highest grades were extracted from San Ramón and Dolores' veins, these veins are N-S. Mineralization related to Inverse faulting at Inmaculada and San Javier systems shows only Ag anomalies.

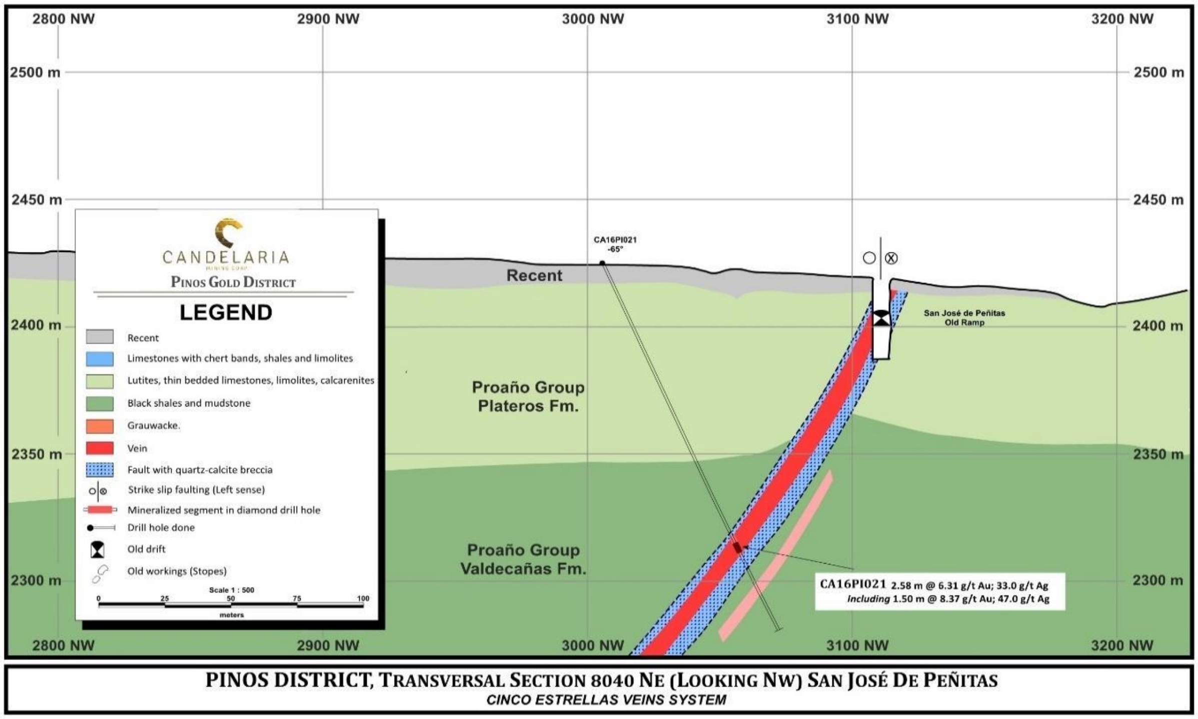
San Matías target shows mineralogy of Quartz, Alunite, Hematite, Illite, Montmorillonite, Gold and Pyrite/Arsenopyrite, into silica groundmass of quartz-eye rhyolitic porphyry.

Figure 7.10 - Simplified Mineralization Model.



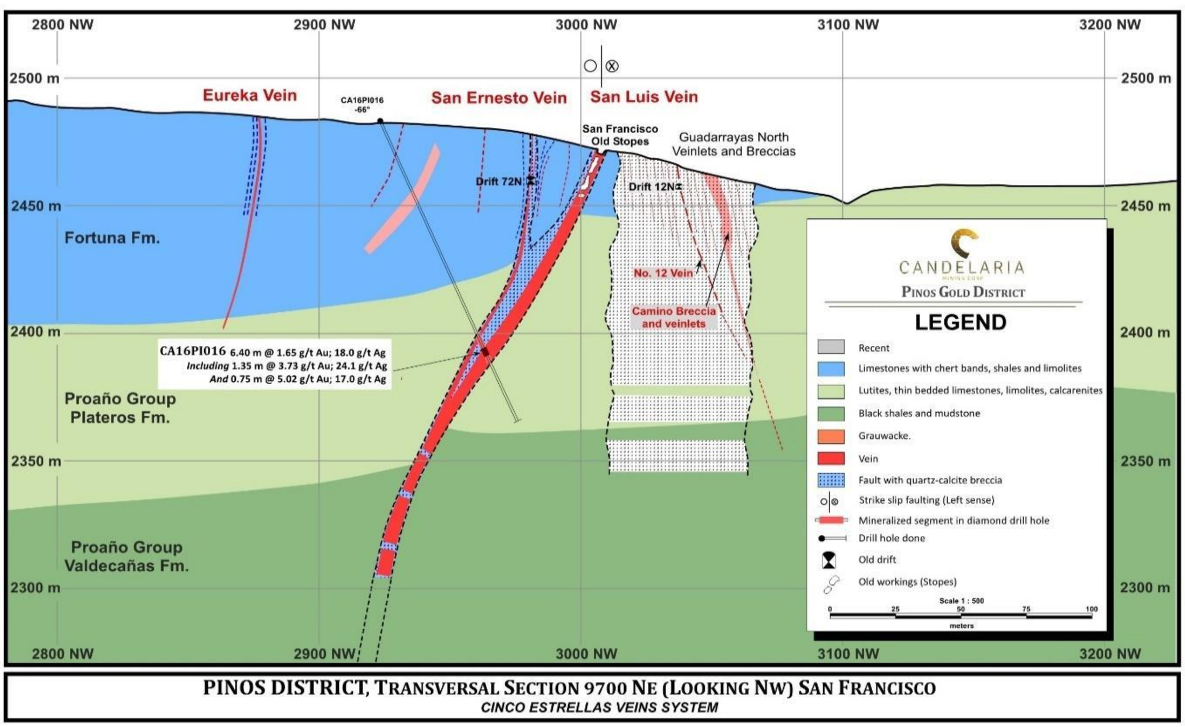
Source: Candelaria Minina Corp. (2018)

Figure 7.11 – Cross Section 8040NE, San José de Peñitas.



Source: Candelaria Mining Corp. (2018)

Figure 7.12 - Cross Section 9700NE, San Francisco.



Source: Candelaria Mining Corp. (2018)

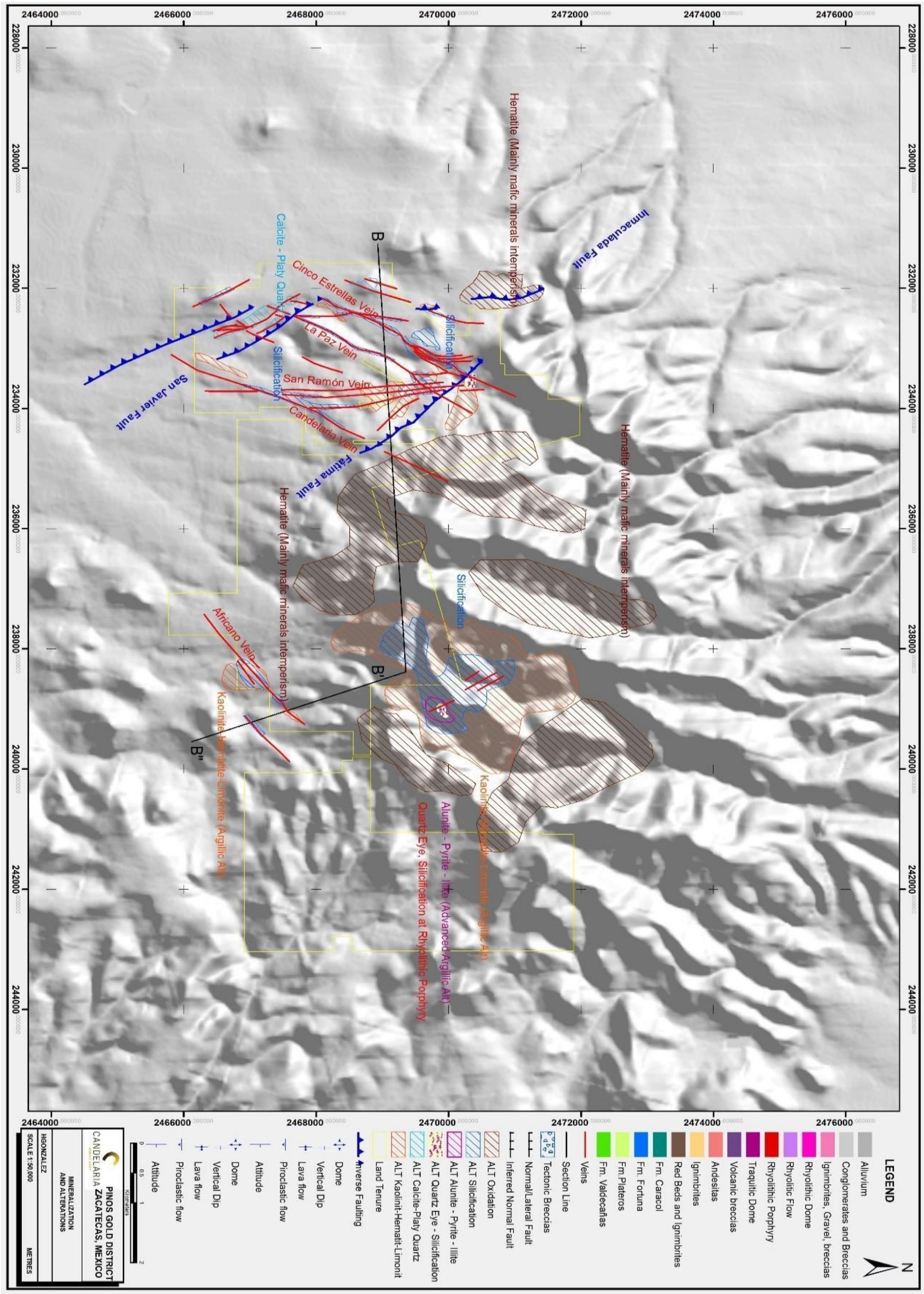
Apparently high-grade economic concentrations of precious metals or bonanzas are present in "ore shoots" distributed vertically and laterally at union of cymoid loops (San Miguel, San Carlos Arandas and San José Peñitas in the trenching zone); outside of cymoid loop union, the economic mineralization's is concentrated only at footwall veins of cymoid loops (San Francisco, San Miguelito). Marginal grades are present at hanging wall veins of the cymoid loop (San Ernesto Vein). Base metal values are generally absent, Pinos appears to be a low sulphidation system with pathfinders of Barite, Mercury, less Arsenopyrite and low quantities of Pyrite.
It has not been identified a complete vertical mineralogical zonation in the vein system, except at district scale where the central and deepest old Candelaria mineralization dumps show traces of chalcopyrite. Only at San Francisco area and Candelaria dumps there is a very poor correlation of the gold/silver ratio, while in the rest of district it is null. Silicification is usually present and associated with veins, breccias, and stockworks. Argillization is extensive and is the most notable superficial feature of the district, usually associated with mineralized structures. Bonanza-grade gold-silver mineralization is known to occur in banded chalcedony- "ginguro" sulfide-rich layers in low sulphidation epithermal systems. Figure 20. Pinos Project Alteration and Mineralization Map.

Photo 7.2 - Example of Cinco Estrellas vein structures. Darker greenish-gray bands contain highest gold and silver values. Dark bands are reminiscent of "ginguro" bands of Corbet, et al. 2012.

Source: Maynard et al. (2015)

The mineral assemblage and textural and geochemical character of the Pinos veins indicate that they are at high structural levels of a low-sulphidation system. Very fine-grained sulfide minerals may be present in the greenish-gray bands in veins; sulfide minerals are otherwise generally absent.
Bladed Quartz, Calcite, and banded and cockaded veining indicate high levels in hydrothermal systems. Anomalous arsenic and antimony, typical of the upper levels of epithermal veins, are present in vein sampling. Mercury is reported in mineral concentrates from the district. The presence of these elements indicates high levels within the vein system.

Figure 7.13 - Pinos Project. Alteration and Mineralization Map

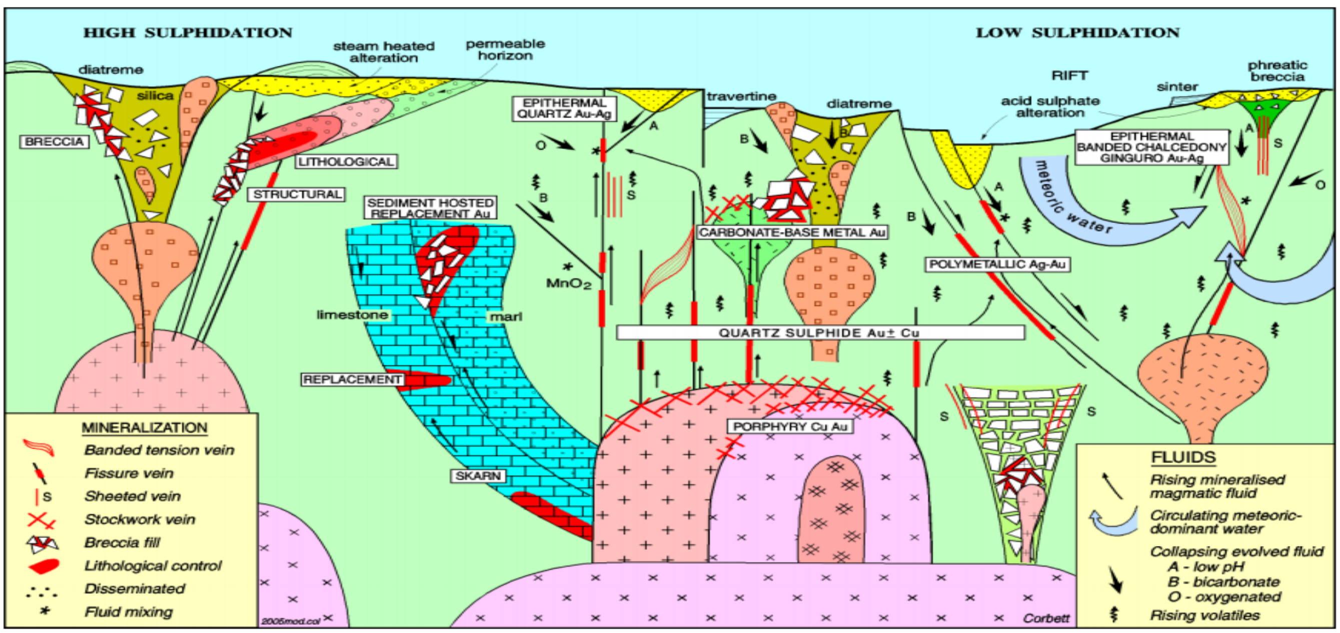


Source: Candelaria Mining Corp. (2018)

8. DEPOSIT TYPES

As discussed earlier, the objective of this Preliminary Economic Assessment is the Cinco Estrellas vein system trending NE 20°SW shown in Fig. 20. The type of deposit is considered epithermal of low sulphidation; where mineralization is located along fissure filling, structurally controlled.
Gold and silver mineralization on the Pinos Property is typical of low-sulphidation epithermal systems associated with alteration assemblages including quartz and clay minerals, showing ginguro bands in high-grade zones. These deposits are formed at relatively shallow depth, typically from just below the surface to a little over one kilometer deep, from reduced, neutral-Ph hydrothermal fluids with temperatures of <150°C to 300°C. Fig. 8.1, shows the low sulphidation model described by Corbett et al. 2007 where styles of low sulphidation Au are distinguished according to mineralogy and relation to intrusion source rocks and influence of precious metal grade.

Figure 8.1 A conceptual model is illustrating styles of high sulphidation and low sulphidation mineralization.



Source: Corbett et al. (2007)

Mineralization at Pinos is contained in veins, brecciated vein systems, and stockwork, which are localized by geological structures, and range in size from 0.5m to 10m wide for veins and 200m to 900m for stockworks. The three main mineralized vein structures trends are northeast, north, and northwest.

Mineralization is comprised of quartz veins and veinlets, vein stockworks, and hydrothermal breccias that carry gold, silver, and some microscopic sulfide minerals.
The alteration halos extending outward in the wall rock away from the vein are typically small in extent and are overprinted by surficial oxidation and argillization. Soil and rock sampling results also indicate a very short dispersion of silver and gold from the mineralized veins structures.
Strong silicification and lithocaps related to intermediate and advanced argillic alterations for San Ramón and San Matías, respectively, suggest a possible altered quartz-eye porphyry for Au disseminated deposit.

9. EXPLORATION

9.1 Candelaria Underground Sampling Program 2015-2016

During the second half of 2015 and first quarter of 2016 and underground sampling and mapping program was undertaken by Candelaria Mining Corp., to provide a detailed of vein understanding of vein geometry and to confirm gold and silver values from previous sampling and historical mining. This program was executed by Héctor Gonzalez P. Eng. Geo., and supervised by Stephen R. Maynard, M.S., CPG. QP for Candelaria Mining Corp.

This program was focused on the Cinco Estrellas Mineralized Trend; including the mining works known as San Miguel, San Francisco, San Luis, Griego, Peñitas, Natividad and Mina 25. About one thousand systematic (every 1 meter), rock-chip channel samples were collected from a vein, hanging and foot-wall structures. Each sample contained a minimum of 12 Kg to restrict “nugget effect” on geochemical analysis. It also included a bulk sampling on Candelaria waste dump.
Based on underground sampling and mapping program, by April 2016, Candelaria actualized its mineral potential for Cinco Estrellas Vein Trend.

With these results, Candelaria authorized the programmed diamond core drilling campaign choosing Energold, Corp., as drillers, starting in May 2016, finishing in September 2016. Further details on this drilling campaign are given in Section 10, Candelaria Drilling Campaign.

On July 11th, 2016, Candelaria Mining Corp. published results as “Candelaria Mining Corporation Announces Confirmation of High-Grade in Underground Sampling and Commencement of Drilling Program at its Pinos Gold Project, Zacatecas, Mexico.”

The following was taken from said published report, which was supervised by QP, Stephen Maynard, MS, CPG; accordingly, to NI 43-101 disclosure standards. For details refer to Candelaria Mining Corp. published reports on Pinos Project, July 2016 and October 31, 2016.

“Of the 97 underground samples that the company sent to ALS for gold and silver analyses, 28 samples assayed over five parts per million (ppm) gold and 13 samples assayed over 100 ppm silver. The highest values reported by ALS were 91.9 ppm gold and 561 ppm silver. ALS's gold and silver assay results for the 65 samples that assayed more than five ppm gold are presented in the attached table. The rest of the underground samples were analyzed by the company's in-house laboratory, which showed results consistent with those returned by ALS.

The underground sampling program confirms continuity of high-grade gold-silver vein mineralization along the Cinco Estrellas structure," stated Sokhie Puar, Candelaria's president and chief executive officer. "The drilling program currently underway is testing the downdip projections of vein mineralization in the historic Pinos gold camp."

A quality assurance/quality control system is in place to assure the reliability of assay results. Standard pulps of known concentrations of gold and silver, blanks, and duplicate samples are inserted into the sample stream every 20 samples. Standards and blanks allow for control of the quality of assaying and sample preparation. Duplicate samples (a second split of the drill core assay interval) indicate the homogeneity of the assayed sample.

All samples are placed into a plastic rock-sample bag and sealed with tape under the supervision of the project geologist. Each sample is labeled, cataloged and delivered to the ALS preparation laboratory in

Zacatecas, Mexico. Pulps prepared at the ALS C Zacatecas facility are sent to the ALS laboratory in North Vancouver, B.C., Canada.

All samples are analyzed for gold using fire assay with an atomic absorption finish. Samples that assay more than 10 grams per ton gold are reanalyzed using fire assay with a gravimetric finish. All samples are analyzed for silver using fire assay. Select samples are analyzed for a multielement package using a multi acid digestion ICP AES (plasma emission spectroscopy). ALS is an internationally recognized independent laboratory operating to ISO 17025 quality assurance standards.

Table 9.1 - Highlights from Underground Sampling Cinco Estrellas Vein.

HIGHLIGHTS OF ALS GOLD AND SILVER RESULTS FROM UNDERGROUND SAMPLES, CINCO ESTRELLAS VEIN						
Sample	**Line**	**Mine/Area**	**Level**	**Length (m)**	**Au (g/t)**	**Ag (g/t)**
1089	SJ-05	San Jose	5	0.3	8.31	84
1099	SJ-08	San Jose	5	0.32	5.56	100
1105	SJ-09	San Jose	5	0.4	12.5	77.2
1118	SJ-12	San Jose	5	0.28	8.05	68.6
1132	SJ-15	San Jose	15	0.6	5.22	63.5
1139	SJ-16	San Jose	15	0.5	6.49	34.5
1150	SJ-19	San Jose	15	0.3	6.82	12.2
1155	SF-02	SFrancisco	35	0.45	7.07	18.6
1179	SF-07	SFrancisco	35	0.3	5.26	29.8
1188	SF-09	SFrancisco	35	0.3	5.36	27.8
1266	SF-13	SFrancisco	35	0.3	6.78	33.8
1276	SF-15	SFrancisco	35	0.46	16.1	77.2
1299	SF-19	SFrancisco	35	0.4	39.9	73.3
1352	SF-20	SFrancisco	35	0.45	9.28	36.9
1523	P-8A	SJ Peñitas	20	0.6	10.45	173
1528	P-9	SJ Peñitas	20	0.3	6.53	154
1552	P-16	SJ Peñitas	20	0.3	7.12	263
1568	P-18	SJ Peñitas	20	0.6	5.93	48.5
1587	P-21	SJ Peñitas	20	0.4	9.94	65.8
111263	NA-03	Natividad	12	0.4	21.9	22.3
111267	NA-04	Natividad	12	0.4	7.2	28.1
111287	NA-09	Natividad	12	0.4	91.9	535
111301	NA-12	Natividad	12	0.4	39.4	91.3
111312	NA-15	Natividad	12	0.3	23.3	51.9
111337	NA-21	Natividad	12	0.4	7.06	93.9
111421	CE-01	5 Estrellas	22	1.1	10.75	19.5
111428	CE-02	5 Estrellas	22	1.05	7.2	8.5
111337	NA-21	Natividad	12	0.4	7.06	93.9
111421	CE-01	5 Estrellas	22	1.1	10.75	19.5
111428	CE-02	5 Estrellas	22	1.05	7.2	8.5

Source: S. Maynard (2016)

Qualified person. Stephen Maynard, MS, CPG, has acted as the qualified person as defined in National Instrument 43-101 for this disclosure and has supervised the preparation of the technical information in this release.

JAO verified sample locations, QA/QC procedures, and certificates of analysis during his four field visits. Between April and October 2016, surface and underground sampling continued El Camino and Tiro San Luis old mining workings and San Ramón waste dumps.

From November 2016 to June 2017, a sampling of El Africano vein, Peñitas trenches, Las Abejas, SCT, San Miguel 2nd level, San Alberto and San Joaquín was done; and at geological level, the San Matías Target was validated as a possible disseminated deposit (open pit/bulk tonnage).
From July to September 2017, a sampling of El Camino old working (12 and 72 veins), San Manuel and San Rafael was terminated.

Finally, between October 2017 and March 2018, Candelaria performed the actual mineral resource estimation disclosed here in Section 22, using all available information from its extensive exploration program; including, lab results on sampling of old mining workings, trenches and drill holes, utilizing software from Geosoft™ ArcGIS Target for geostatistics and 3-D Modeling, and Statgraphics for statistical inference and declustering.

9.2 Exploration Expenditures

Exploration expenditures for years 2015, 2016, and 2017 are US 2.135 million dollars.

9.3 Candelaria Exploration Proposal 2018

In August 2018, Candelaria Mining Corp. completed an extensive program to start developing its mining concessions in Pinos. This program includes: mining development, mining extraction, diamond core drilling exploration, and mineral processing. The objective is to commence mining production at Cinco Estrellas Vein, generating mid-term profits, allowing Candelaria to develop the potential of the entire property through further exploration to determine the potential to scale this project into a larger production profile.

A detailed description of Candelaria’s planned programs is found in further sections; including drilling (Section 10), mining development (Section 16), mining extraction (Section 16) and mineral processing (Section 17), and a preliminary economic assessment of this whole proposal is given in Section 22.

10. DRILLING

10.1 Candelaria Drilling Campaign 2016

From May to September 2016, Candelaria performed 33 core diamond drill holes at the three areas of Cinco Estrellas Mineralized Trend known as San Francisco, San Carlos de Arandas and San José de Peñitas with a total of 4,729.50 meters, executed by Energold Drilling. Table 10.2. Topographic Drilling Data. Fig. 10.1. Drill Hole Location Map.

JAO verified the location of drill holes in the field, database, geological log descriptions, drill sections, geological interpretation in two and three dimensions as well as Q/C procedures and lab analysis during four visits to the project site. Discussions of such verifications are given in further sections.

10.1.1 Core Recovery

Core recovery for all 33 drill holes performed by Energold under the supervision of Héctor Gonzalez Eng. Geo. was above 90%, every core logged in the field by Candelaria's geologist has the TCR (Total Core Recovery) and RQD (Rock Quality Designation) results.
TCR = Total Length of Core Recovered / Drilled Length X 100 = Percentage of core recovery.
Results: every one of the 33 drill holes is above 90%, JAO verified results by doing an aleatory inspection of drill cores finding these appropriate to be used in a resource estimate.
RQD = Length of Core in Pieces > 100mm / Drilled Length X 100 = Percentage of intact core pieces longer than 100 millimeters in the Total Length of the Core.

Results: some cores show percentages below 90%; however, the author considers that as recovery is above 90%, there is no bias introduced in the sampling procedures to be considered in the geological modeling.

Photo 10.1 - JAO verifying the results and doing an aleatory inspection of drill cores.

Source: JAO (2018)

10.1.2 True Thickness

As Pinos project is in a mountainous area, there are some restrictions to place drill collars to intercept mineralized veins orthogonally; moreover, these veins do not follow straight directions; so, most drill holes are oblique to vein's strike, dip and terrain inclination. For these reasons, Candelaria's Héctor Gonzalez calculated true thickness for all vein intersections drilled, based on the method described by F.W. Wilmer, M. Dalheimer, and M. Wagner. Economic Valuation in Exploration. 2nd Edition. Springer.

The author reviewed true thickness calculations for reported vein intersections from Candelaria's logs; the following is an example for true thickness calculations.

Table 10.1 – Example of true thickness calculations

					Au-AA24	Ag-OG62
					Au	Ag
ID BARRENO	DE	A	TOTAL	MUESTRA	ppm	ppm
CA16PI018	92.91	93.18	0.27	345624	1.675	61
CA16PI018	93.18	93.50	0.32	345626	11.05	275
CA16PI018	93.50	94.11	0.51	345627	1.195	14
	92.91	94.11	1.10		**4.18**	**101.46**
	93.18	93.50	0.32		11.05	275
Cálculo Espesor Real (Mw)		Mw = LB * RM				
LB	1.10	*Longitud de intersección mineralizada en barreno*				
RM		*Factor de reducción de espesor para vetas y cuerpos tabulares irregulares, derivado de diferencias geotécnicas en la roca encajonante y/o planos pre-mineralización irregulares (o ambos), tal que el plano del barreno sea diferente a el ángulo de máxima pendiente de la estructura mineralizada en el plano vertical y no es ortogonal a la dirección real de la veta en el plano horizontal (Wellmer et al, 2008).*				
RM		RM=(cos β) * [(seno(α) + (cos(α) * (cos(γ) * (tan(β))]				
	ÁNGULO	RADIANES				
α	70.40	1.23	*Ángulo real de barreno en intersección (Medición Reflex)*			
β	45.00	0.79	*Ángulo de contacto (veta) con intersección de barreno*			
γ	12.00	0.21	*Ángulo resultante entre la diferencia del ángulo de máxima pendiente de la estructura mineralizada y el ángulo horizontal del barreno en el plano horizontal (Factor de oblicuidad)*			
RM		0.90	'=COS(45)*((SENO(70.4))+(COS(70.4))*(COS(12))*(TAN(45)))			
Mw		0.99	Ancho real del intersección		'=1.10*0.90	
		0.29	Ancho real de intersección alta ley		'=0.32*0.90	

Source: JAO (2018)

10.1.3 Collar and Down Hole Surveys

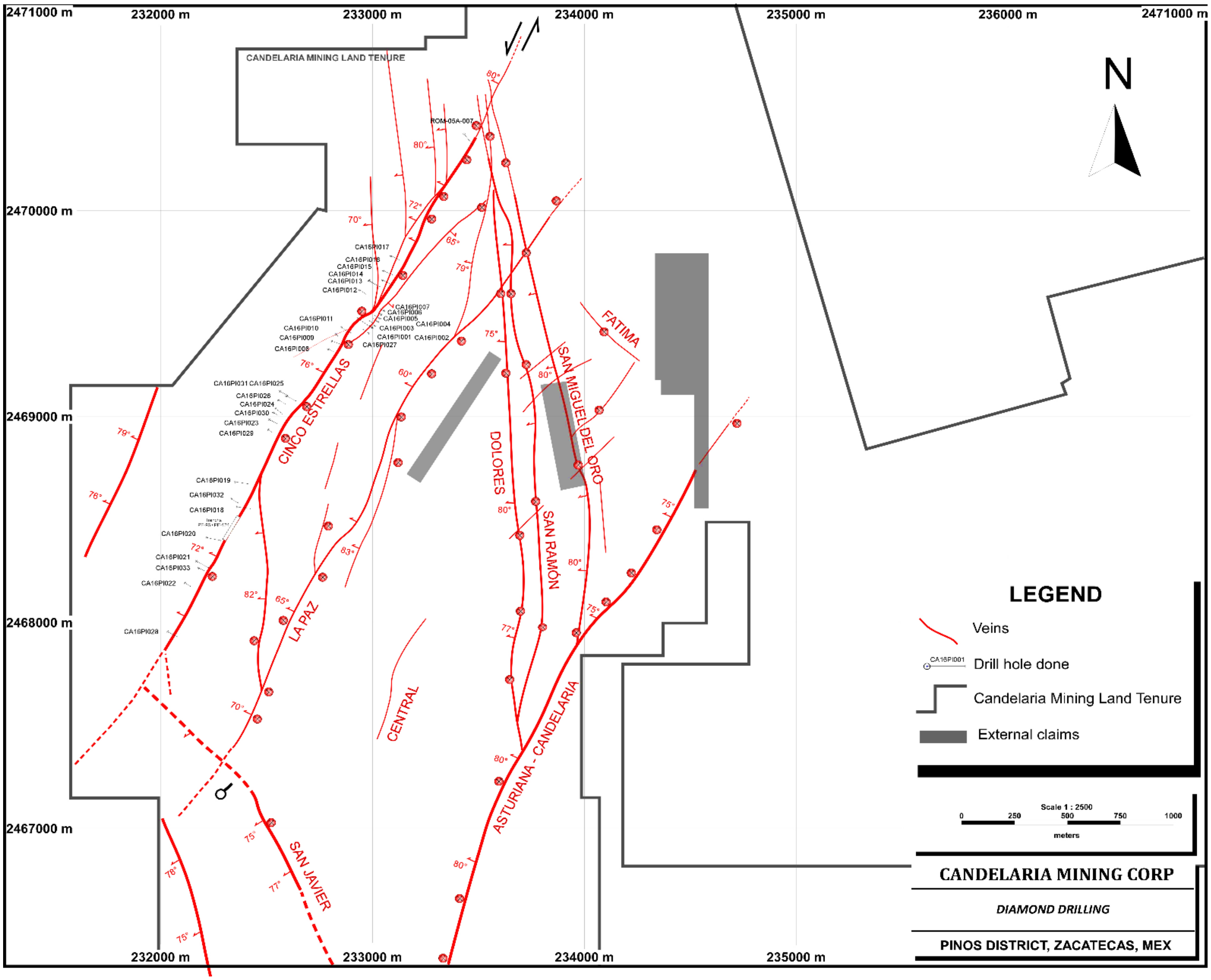
Candelaria's drill collars survey was carried out by using a Sokkia Total Station, CX series field equipment which has an outstanding precision of 4 millimeters for 1,000 meters. The author considers this collar survey as appropriate in building block models. All measures are in UTM. The downhole survey was carried out by Energold by using Reflex equipment for every drill hole executed. The methodology used was to measure drill deviations up from the bottom and then measure deviations every 50m going back towards the collar to correlate any deviations to collar coordinates.

Table 10.2 - Topographic Drilling Data.

TDH_Hole	DH_East	DH_North	DH_RL	DH_Dip	DH_Azimuth	DH_Bottom
CA16PI001	232998.0	2469429.5	2479.90	-50.5	305.0	134.20
CA16PI002	232998.4	2469429.1	2479.90	-77.0	307.0	80.30
CA16PI003	233011.7	2469443.0	2480.68	-66.0	312.0	82.40
CA16PI004	233023.5	2469459.5	2481.34	-75.0	312.0	103.70
CA16PI005	233034.2	2469476.0	2481.94	-65.0	302.0	67.10
CA16PI006	233043.7	2469493.7	2482.59	-80.0	303.0	125.05
CA16PI007	233052.7	2469512.7	2482.78	-56.0	300.0	53.85
CA16PI008	232790.1	2469329.1	2470.50	-80.0	117.0	164.70
CA16PI009	232805.2	2469367.5	2474.10	-66.0	110.0	134.20
CA16PI010	232827.4	2469400.2	2477.79	-86.0	138.0	186.05
CA16PI011	232851.3	2469432.9	2482.08	-71.0	120.0	164.70
CA16PI012	232940.3	2469614.4	2500.68	-82.0	124.0	250.10
CA16PI013	232983.1	2469658.0	2494.64	-66.0	118.0	143.35
CA16PI014	232983.2	2469657.8	2494.62	-81.0	126.0	158.60
CA16PI015	233047.6	2469663.2	2485.73	-63.0	117.0	115.90
CA16PI016	233051.4	2469708.1	2483.22	-66.0	115.0	128.10
CA16PI017	233087.1	2469781.1	2484.03	-70.0	117.0	132.15
CA16PI018	232357.4	2468562.2	2431.96	-77.0	98.0	295.85
CA16PI019	232351.1	2468683.4	2434.37	-65.0	99.0	176.90
CA16PI020	232216.8	2468411.6	2425.02	-70.0	101.0	196.75
CA16PI021	232167.9	2468298.0	2424.67	-66.0	119.0	159.75
CA16PI022	232115.2	2468190.8	2422.95	-76.0	120.0	118.95
CA16PI023	232512.2	2468985.7	2447.34	-71.0	118.0	126.60
CA16PI024	232539.5	2469040.8	2449.45	-74.0	128.0	158.60
CA16PI025	232592.9	2469100.6	2453.33	-68.0	119.0	137.25
CA16PI026	232553.7	2469081.7	2451.15	-75.0	120.0	157.05
CA16PI027	232981.6	2469405.3	2478.48	-53.0	305.0	54.90
CA16PI028	232032.7	2467955.6	2416.46	-70.0	118.5	152.55
CA16PI029	232509.6	2468935.2	2445.58	-81.0	126.0	117.40
CA16PI030	232531.4	2469020.4	2448.60	-81.0	123.0	175.25
CA16PI031	232562.2	2469123.3	2452.71	-75.0	119.0	167.70
CA16PI032	232331.5	2468600.5	2431.45	-76.0	120.0	161.65
CA16PI033	232179.3	2468265.2	2423.80	-79.0	118.0	147.90
					Total (m)	**4729.50**

Source: JAO (2018)

Figure 10.1 - Drill Hole Location Map



Source Candelaria Mining Corp. (2018)

Drilling tested down dip extensions of known vein mineralization, below existing works, as well as the existence of previously unknown veins parallel to the principal vein.

10.1.4 Drilling Results

All Database of this drilling; including, topography, downhole survey, geological logs, and lab certificates are in Candelaria’s digital database, this digital database is being used for Candelaria’s different software licenses; such as CAD, ARC-GIS and Target for 3-D modeling. The following tables and figures display the results from this drilling campaign.

Table 10.3 - Drilling Intersections Average Grades.Source: Candearia Mining Corp.

Drill Hole	Interval From (m)	Interval To (m)	Lenght (m)	True Width (m)	Au g/t	Ag g/t	Comments
CA16PI001	37.03	38.60	1.57	1.42	**7.28**	**27.09**	Target: Natividad South (Natividad Vein)
Including	37.03	37.83	0.80	0.72	**14.20**	**39.50**	*Pink banded quartz vein*
CA16PI002	53.00	61.85	8.85	7.97	0.02	4.14	Target: Natividad South (Natividad Vein) *Strongly brecciated and veinlets zone*
CA16PI003	53.25	53.85	0.60	0.43	0.18	**50.60**	Target: Natividad South (Natividad Vein)
	68.00	68.75	0.75	0.54	0.15	15.00	*Two Strongly brecciated and veinlets zone*
	73.30	73.85	0.55	0.40	0.20	5.70	*of 49.1-59.15 m and 64.15-73.85 m*
CA16PI004	54.90	78.95	24.05	15.19	0.04	9.29	Target: Natividad North (Natividad Vein)
Including	55.40	56.00	0.60	0.38	0.31	**51.90**	*Strongly brecciated and veinlets zone*
CA16PI005	47.20	47.85	0.65	0.50	**1.17**	**15.40**	Target: Natividad North (Natividad Vein)
							Silicified breccia, veinlets zone (26.4-48.35m)
CA16PI006	36.10	40.80	4.70	2.00	0.01	0.77	Target: Natividad North (Natividad Vein)
	64.68	75.40	10.72	4.57	0.03	7.16	*Two Silicified breccias and quartz veinlets*
CA16PI007	31.20	32.65	1.45	1.38	0.43	23.79	Target: Natividad North (Natividad Vein)
CA16PI008	102.65	104.30	1.65	1.01	**1.00**	**11.45**	Target: San Luis South (Cinco Estrellas Vein)
	103.70	104.30	0.60	0.37	**1.51**	**7.00**	*Strongly brecciated and veinlets zone*

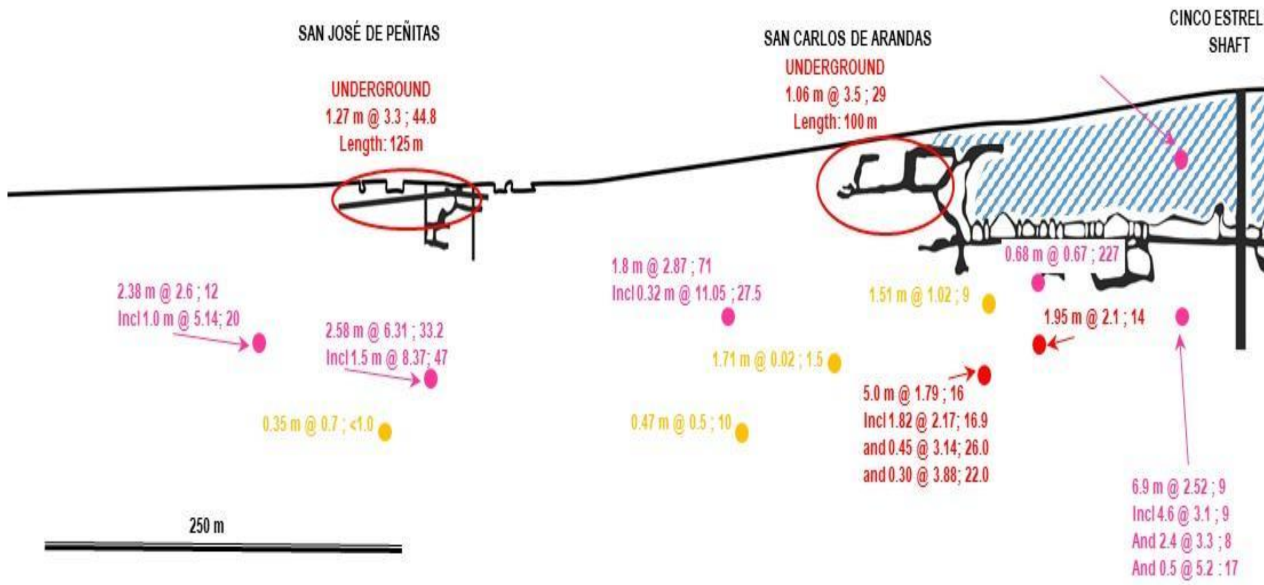
CA16PI009	103.80	104.40	0.60	0.44	0.55	9.00	Target: San Luis South (Cinco Estrellas Vein)
CA16PI010	159.66	165.90	6.24	2.39	0.02	2.37	Target: San Luis South (Cinco Estrellas Vein)
CA16PI011	107.79	108.38	0.59	0.43	**1.16**	**22.00**	Target: San Luis South (Cinco Estrellas Vein)
CA16PI012	128.20	129.10	0.90	0.42	**4.84**	**6.00**	Target: San Luis (Eureka Vein, San Luis Vein)
	172.81	173.16	0.35	0.24	**2.67**	**37.00**	*Silicified brecciaS (128.2 m - 129.1 m and 172.61 - 177.6 m)*
CA16PI013	121.40	122.20	0.80	0.68	**1.27**	**3.00**	Target: San Luis (San Luis Vein)
CA16PI014	96.70	97.90	1.20	0.40	**0.75**	**2.00**	Target: San Luis (Eureka Vein, San Luis Vein)
	148.60	150.00	1.40	0.56	**0.60**	**120.61**	
CA16PI015	71.10	72.20	1.10	0.92	**1.33**	**20.25**	Target: San Francisco (San Luis Vein)
CA16PI016	97.60	100.15	2.55	2.04	**2.86**	**24.06**	Target: San Francisco (San Luis Vein)
Including	98.80	100.15	1.35	1.08	**3.73**	**24.11**	
And	99.40	100.15	0.75	0.60	**5.02**	**17.00**	
CA16PI017	123.32	124.02	0.70	0.41	**0.71**	**94.00**	Target: San Francisco (San Luis Vein)
CA16PI018	92.91	94.11	1.20	0.99	**4.18**	**101.46**	Target: San José de Peñitas North (Cinco Estrellas Vein)
Including	93.18	93.50	0.32	0.29	**11.05**	**275.00**	
CA16PI019	154.29	156.00	1.71	1.20	0.02	1.50	Target: San José de Peñitas North (Cinco Estrellas Vein)
CA16PI020	181.70	184.35	2.65	1.84	0.02	5.34	Target: San José de Peñitas (Cinco Estrellas Vein)

CA16PI021	121.00	123.58	2.58	2.10	**6.31**	**33.26**	Target: San José de Peñitas (Cinco Estrellas Vein)
Including	121.00	122.50	1.50	1.22	**8.37**	**47.00**	
CA16PI022	94.72	96.19	1.47	1.00	**3.68**	**15.52**	Target: San José de Peñitas (Cinco Estrellas Vein)
CA16PI023	108.15	109.80	1.65	1.13	**2.37**	**14**	Target: El Griego (Cinco Estrellas Vein)
CA16PI024	70.15	74.75	4.60	2.65	0.02	6.75	Target: El Griego (Cinco Estrellas Vein)
CA16PI025	106.50	113.40	6.90	4.91	**2.52**	**8.75**	Target: San Carlos de Arandas (Cinco Estrellas Vein)
Including	108.20	112.85	4.65	3.31	**3.10**	**8.99**	
And	110.40	112.85	2.45	1.74	**3.32**	**8.33**	
And	106.50	107.00	0.50	0.36	**5.2**	**17**	
And	110.40	110.80	0.40	0.28	**4.13**	**10**	
CA16PI026	36.68	37.04	0.36	0.25	**3.13**	**3**	Target: San Carlos de Arandas (New Blinded Vein)
	142.63	146.40	3.77	2.66	0.01	1.90	Target: San Carlos de Arandas (Cinco Estrellas Vein) Breccias
CA16PI027	42.24	42.60	0.36	0.32	**1.01**	**5.00**	Target: Natividad South (Natividad Vein)
CA16PI028	93.07	96.10	3.03	1.92	0.02	4.02	Target: Highway (Cinco Estrellas Vein)
CA16PI029	91.99	93.50	1.51	0.83	**1.02**	**10.50**	Target: El Griego (New Blinded Vein)
	105.63	111.56	6.23	3.41	**1.49**	**13.84**	Target: El Griego (Cinco Estrellas Vein)
Including	108.65	110.47	1.82	1.00	**2.17**	**16.90**	
And	108.65	109.10	0.45	0.25	**3.14**	**26**	
And	110.17	110.47	0.30	0.16	**3.88**	**22**	

CA16PI030	157.96	159.78	1.82	1.14	0.02	4.37	Target: San Carlos de Arandas (Cinco Estrellas Vein) Breccias
CA16PI031	36.60	40.85	4.25	2.79	**4.33**	**6.94**	Target: San Carlos de Arandas (New Blinded Vein)
Including	38.40	40.85	2.45	1.64	**6.53**	**9.55**	
And	40.25	40.85	0.60	0.40	**8.48**	**10**	
	88.45	89.44	0.99	0.63	0.43	7.33	Target: San Carlos de Arandas (Blinded Mineralized Breccias)
	132.66	136.28	3.62	2.31	0.04	3.62	Target: San Carlos de Arandas (Cinco Estrellas Vein)
	162.70	163.84	1.14	0.73	0.01	4.00	*Cinco Estrellas Vein divided by apparent cymoid loop structure*
CA16PI032	146.40	146.87	0.47	0.29	0.5	10	Target: San José de Peñitas North (Cinco Estrellas Vein)
CA16PI033	115.35	115.70	0.35	0.22	0.701	<1	Target: San José de Peñitas (Cinco Estrellas Vein)

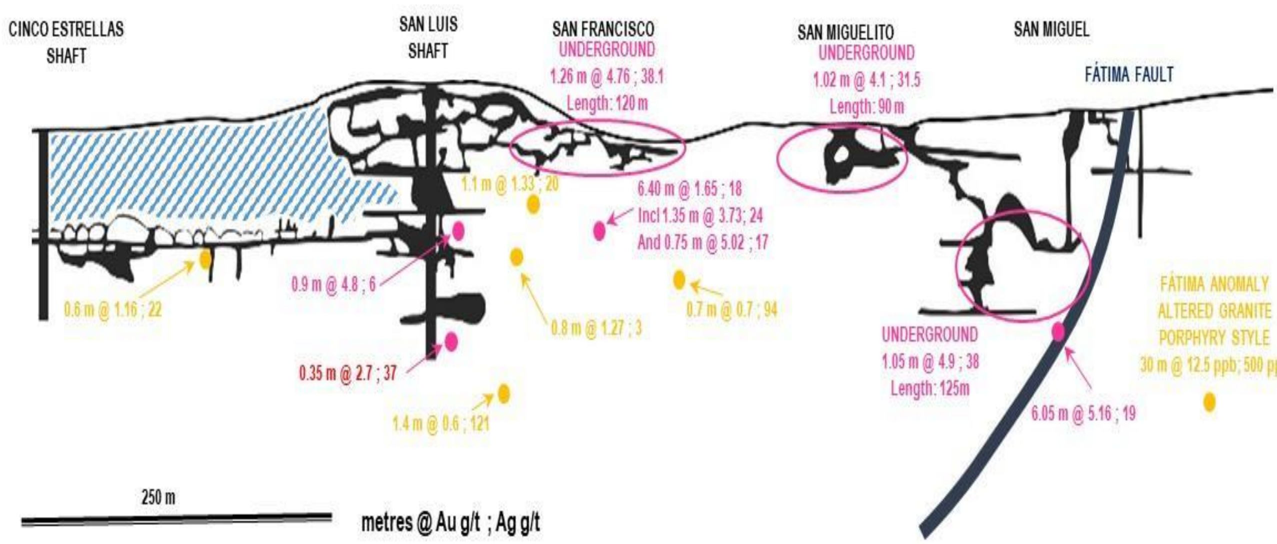
Source: Candelaria Mining Corp. (2018)

Figure 10.2 - Longitudinal section of Cinco Estrellas Vein from San José de Peñitas to Cinco Estrellas Shaft, showing in graphical mode, all surface, underground and drilling lab results. Source: Candelaria Mining Corp.



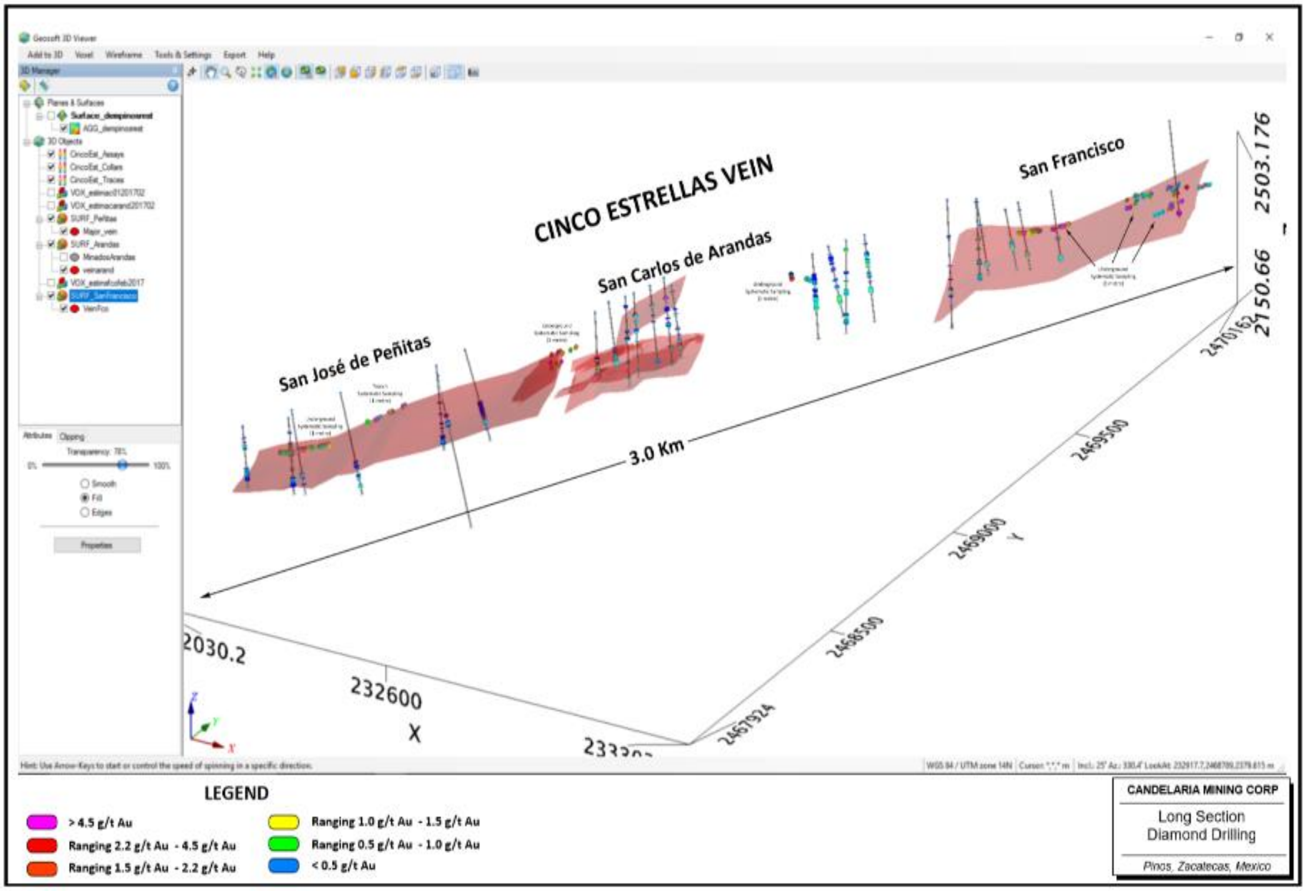
Source: Candelaria Mining Corp. (2018)

Figure 10.3 Longitudinal section of Cinco Estrellas Vein from Cinco Estrellas Shaft to San Miguel, showing in graphical mode, all surface, underground and drilling lab results. Source: Candelaria Mining Corp.



Source: Candelaria Mining Corp. (2018)

Figure 10.4 Tridimensional view of drill hole intersections and vein modeling of Cinco Estrellas vein. Source: Cadelaria Mining Corp.



Source: Candelaria Mining Corp. (2018)

Figures: 10.2, 10.3, 10.4, show in detail, old mining works, surface, underground and drilling lab results as well as geological interpretation of veining structures, intersections and plunges for Cinco Estrellas vein and mining areas; including, San José de Peñitas, San Carlos de Arandas, and San Francisco.

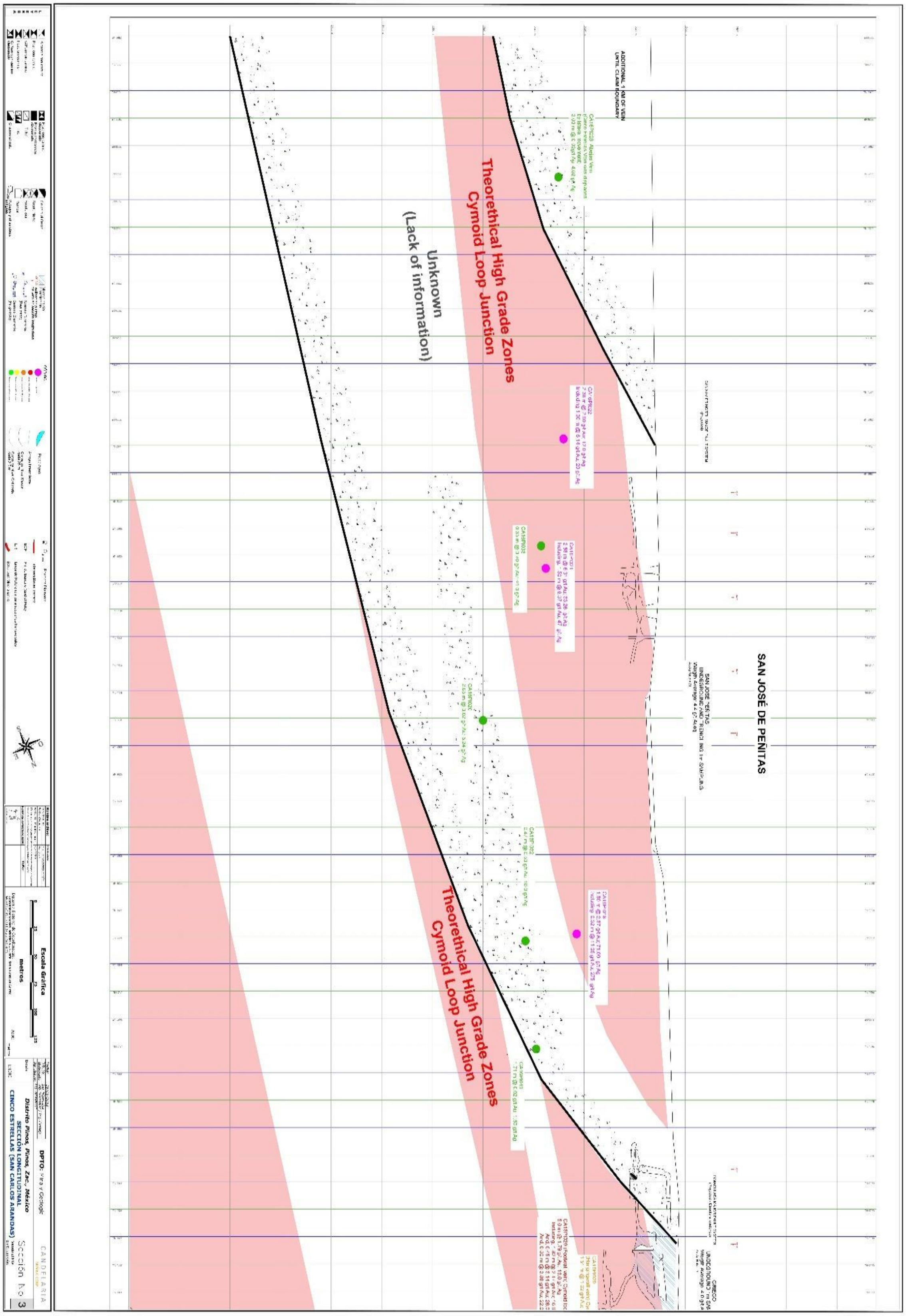


Figure 10.5. CAD detailed longitudinal section of San José de Peñitas. Source: Candelaria Mining Corp. (2018)

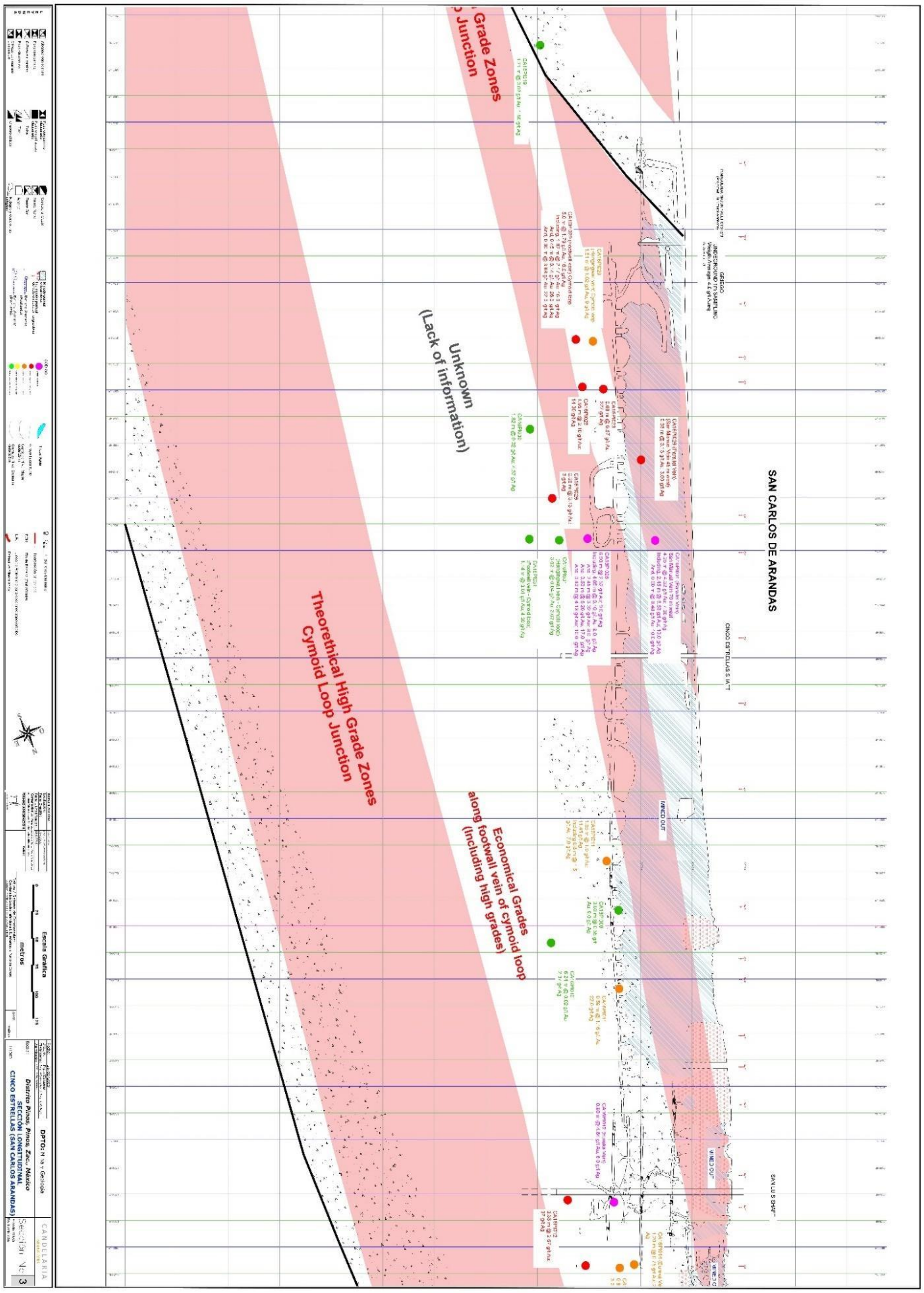


Figure 10.6. CAD detailed longitudinal section of San Carlos de Arandas. Source: Candelaria Mining Corp. (2018)

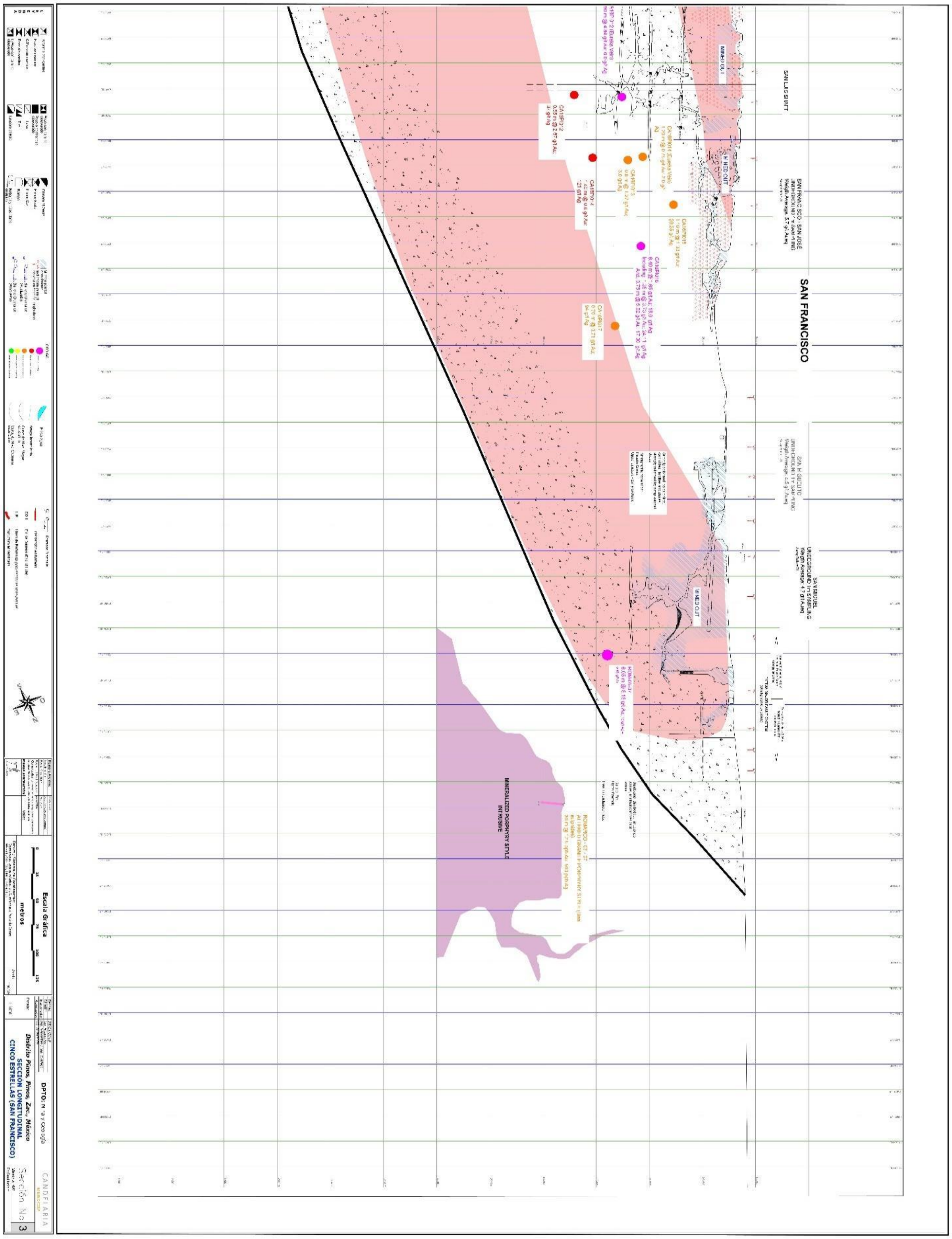


Figure 10.7 CAD detailed longitudinal section of San Francisco. Source: Candelaria Mining Corp. (2018)

A press release titled "Candelaria Announces Results of 33-hole, 4,700-meter Diamond Drill Program of the Pinos Gold Project, Zacatecas, Mexico", was released 31 October 2016. The technical information published in this press release was reviewed and verified by QP, Stephen Maynard, MS, CPG; accordingly, to NI 43-101 disclosure standards. Refer to Candelaria Mining Corp. (Source: Published Reports on Pinos Project, October 31, 2016).

Table 10.4 - Drilling Intersections Average Grades.

Hole	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)	AuEq (g/t)
CA16PI001	37.65	38.6	1.95	5.88	28	6.27
Including	37.03	37.83	0.8	14.2	40	14.75
CA16PI005	47.2	47.85	0.65	1.17	15	1.38
CA16PI008	102.65	104.3	1.65	1	12	1.17
CA16PI011	107.79	108.38	0.59	1.16	22	1.46
CA16PI012	128.2	129.1	0.9	4.84	6	4.92
	172.81	173.16	0.35	2.67	37	3.18
CA16PI013	121.4	122.2	0.8	1.27	3	1.31
CA16PI014	78.54	79.2	0.66	0.94	1	0.95
	96.7	97.9	1.2	0.75	2	0.78
	148.6	150	1.4	0.6	121	2.27
CA16PI015	71.1	72.2	1.1	1.33	20	1.61
CA16PI016	96.55	102.95	6.4	1.65	18	1.9
Including	98.8	100.15	1.35	3.73	24	4.06
And	99.4	100.15	0.75	5.02	17	5.25
CA16PI017	123.32	124.02	0.7	0.71	94	2.01
CA16PI018	92.31	94.11	1.8	2.87	71	3.85
Including	93.18	93.5	0.32	11.05	275	14.85
CA16PI021	121	123.58	2.58	6.31	33	6.77
Including	121	122.5	1.5	8.37	47	9.02
CA16PI022	93.81	96.19	2.38	2.6	12	2.77
Including	95.19	96.19	1	5.14	20	5.42
CA16PI023	88.17	88.45	0.28	0.67	227	3.81
	88.8	89.15	0.35	0.56	168	2.88
	107.85	109.8	1.95	2.1	14	2.29
CA16PI025	106.5	113.4	6.9	2.52	9	2.64
Including	108.2	112.85	4.65	3.1	9	3.22

And	110.4	112.85	2.45	3.32	8	3.43
And	106.5	107	0.5	5.2	17	5.43
And	110.4	110.8	0.4	4.13	10	4.27
CA16PI026	36.68	37.04	0.36	3.13	3	3.17
CA16PI027	42.24	42.6	0.36	1.01	5	1.08
CA16PI029	91.99	93.5	1.51	1.02	9	1.14
	106.56	111.56	5	1.79	16	2.01
Including	108.65	110.47	1.82	2.17	14	2.36
And	108.65	109.1	0.45	3.14	26	3.5
And	110.17	110.47	0.3	3.88	22	4.18
CA16PI031	36.6	40.85	4.25	4.32	7	4.42
Including	38.4	40.85	2.45	6.53	10	6.67
And	40.25	40.85	0.6	8.48	10	8.62

Source: Candelaria Mining Corp. Press Release. October 31, 2016.

Our geological team at the Pinos project has demonstrated the continuity of gold mineralization below the known workings on the Cinco Estrellas vein structure," stated Ramon Perez, a chief executive officer of Candelaria Mining. "The company plans to continue exploring in areas of high-grade mineralization on the Cinco Estrellas vein and other veins in the district."

Company staff logged and prepared the drill samples for shipment at a warehouse facility at the project site. Samples were bagged and sent, along with regularly inserted blanks and standards, to the ALS-Chemex preparation facility in Zacatecas, Mexico, for preparation. Prepared sample pulps were then sent to ALS Chemex's analytical facility in Vancouver, B.C., Canada.

Stephen R. Maynard, a qualified person as defined by National Instrument 43-101, has reviewed and verified the technical data in this release, including the quality assurance/quality control procedures and results".

10.2 Candelaria's Diamond Core Drilling Proposal 2018

Two stages of diamond core drilling have been proposed here along with the mine developing and mine extraction to be disclosed in Section 16.
The objective is to consolidate and upgrade actual mineral resources and to generate new information for further mineral resource estimations.

Costs per drilled meter showed below were estimated by adding 20% to the real costs obtained in Candelaria's previous drilling campaign in 2016; these costs include, rig pads, topographical collar drill locations, drilling, core logging, core sampling, sampling preparation, sample transportation and certified lab analysis.

The budget for these two proposed drilling campaigns is included in the economic forecast shown in Section 21.

10.2.1 Stage 1. Initial CAPEX

A minimum of 6,700 meters of core diamond drilling is considered in this proposal, starting on the 3rd month of LOM's preproduction year 0, the cost of 7,000 m of diamond drilling is included in Initial Capex with Plant Construction and Mine Development.

The estimated budget of US $1'050,000 also includes reports for environmental permits for drilling, contingencies, and possible additional drilling footage.

The objective is to improve certainty in Indicated Mineral Resources and to create additional Inferred Mineral Resources for Cinco Estrellas' mining levels 2nd and 3rd, as well as to reduce drilling spacing in the 4th level of San José Peñitas looking for more mineral resources. A breakdown of drilling footage, costs and targets are shown in Table 10.5 and Figures 10.8 and 10.9 display planned drill holes in a longitudinal section of Cinco Estrellas.

Table 10.5 - Summary of Drilling Stage 1.

MINE	METERS	US$COST	TARGETS, FIRST DRILLING CAMPAIGNE
San Francisco	1,408.04	$ 211,205.67	Indicated Resources, maximal spacing 35 meters.
San Carlos Arandas	556.53	$ 83,478.94	Indicated Resources, maximal spacing 35 meters.
San José Peñitas	4,605.32	$ 726,979.07	Indicated Resources (Spacing 35 m); Inferred Resources (Spacing 70 m)
ALL	**6,569.88**	**$ 1,021,663.68**	

Source: Candelaria Mining Corp. (2018)

10.1.2 Stage 2. Sustaining CAPEX

A minimum of 5,900 meters of diamond core drilling is proposed here, starting by the 1st quarter of LOM's 2nd year, the cost of 6,000m of diamond drilling is included in Sustaining Capital Costs as indicated in Section 21.

The objective is to up-grade Inferred Mineral Resources by reducing drill hole spacing along with planned mining openings and mining stopes for mining levels 2nd and 3rd, as well as to reduce spacing between existing drill holes to up-grade Inferred Mineral Resources for levels 4th and 5th, and to generate additional Inferred Mineral Resources at depth (levels 6th and 7th).

It is considered that along with successful completion of this 2nd drilling campaign and underground mining developing planned, the life of mine may be improved up 10 years. Refer to Table 10.6 and Fig. 10.9.

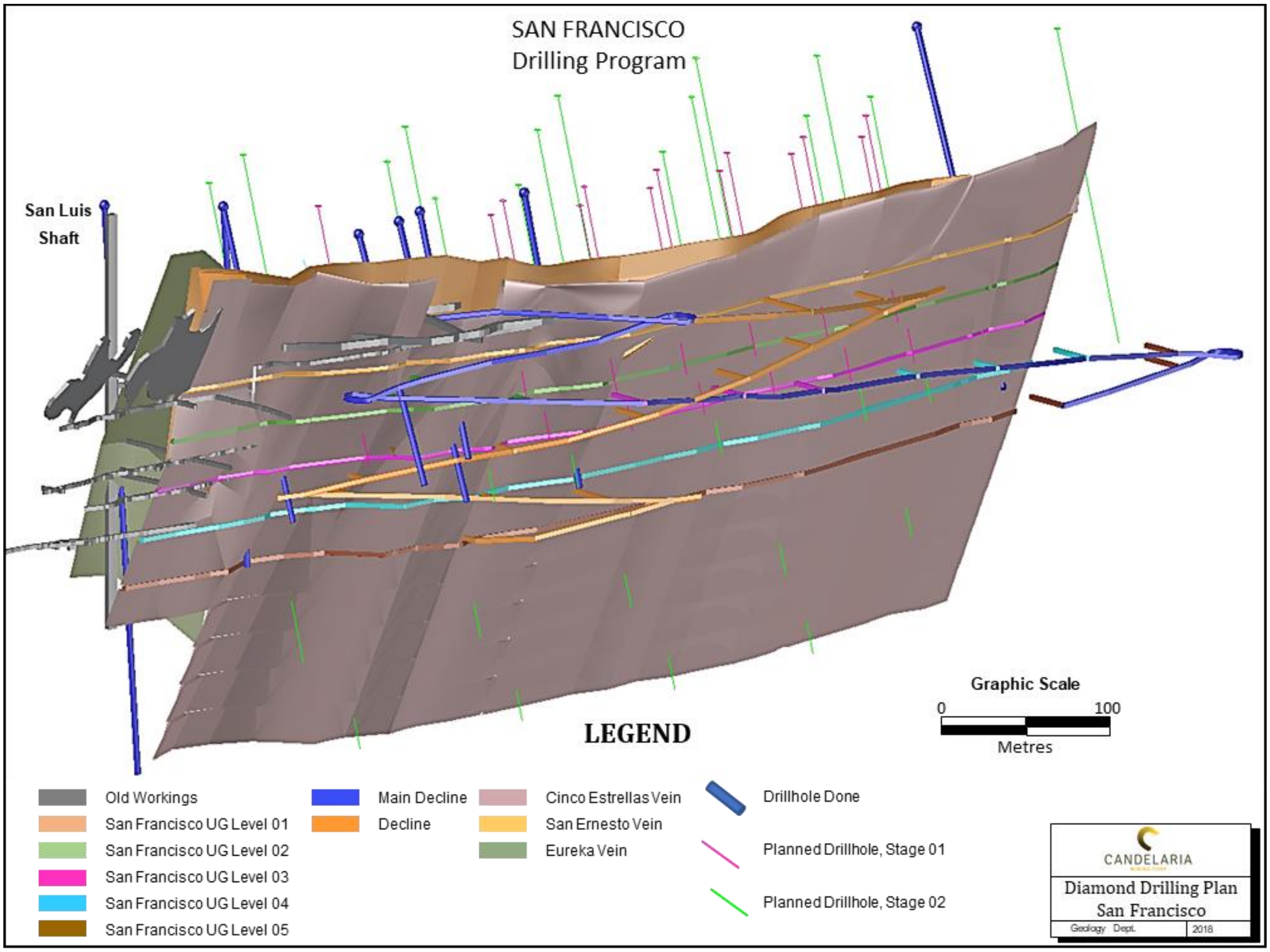
Table 10.6 - Summary of Drilling Stage 2.

MINE	METERS	US$COST	TARGETS, SECOND DRILLING CAMPAIGNE
San Francisco	**3,004.94**	**$ 547,563.26**	Inferred Resources, maximal spacing 70 meters.
San Carlos Arandas	**800.18**	**$ 140,030.67**	Inferred Resources, maximal spacing 70 meters.
San José Peñitas	**2,068.69**	**$ 382,707.69**	Inferred Resources, maximal spacing 70 meters.

ALL	**5,873.80**	**$ 1,070,301.63**	

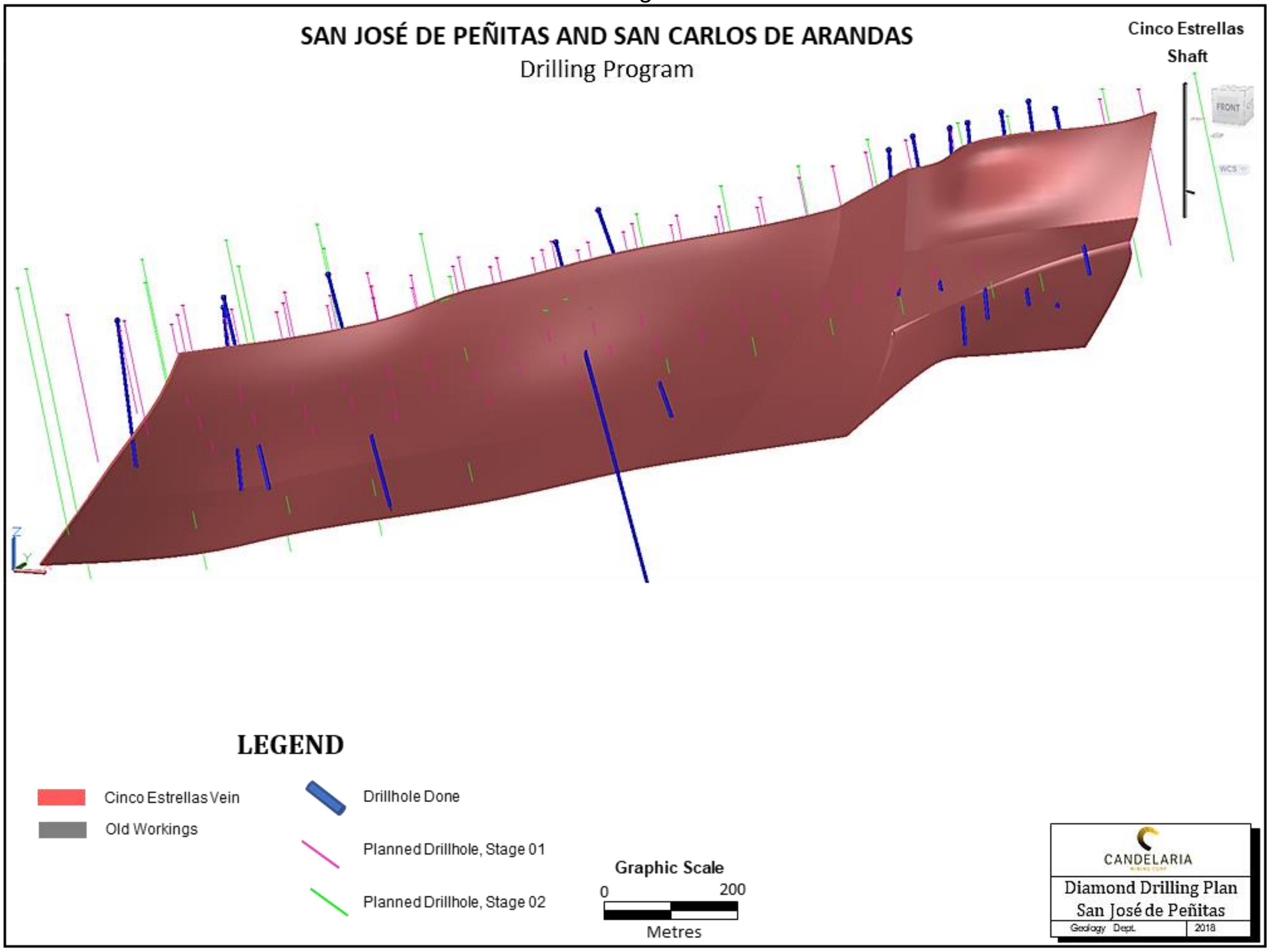
Source: Candelaria Mining Corp. (2018)

Figure 10.8 - Candelaria's Planned Drilling Program Cinco Estrellas' San Francisco Domain in Longitudinal Section.



Source: Candelaria Mining Corp. (2018)

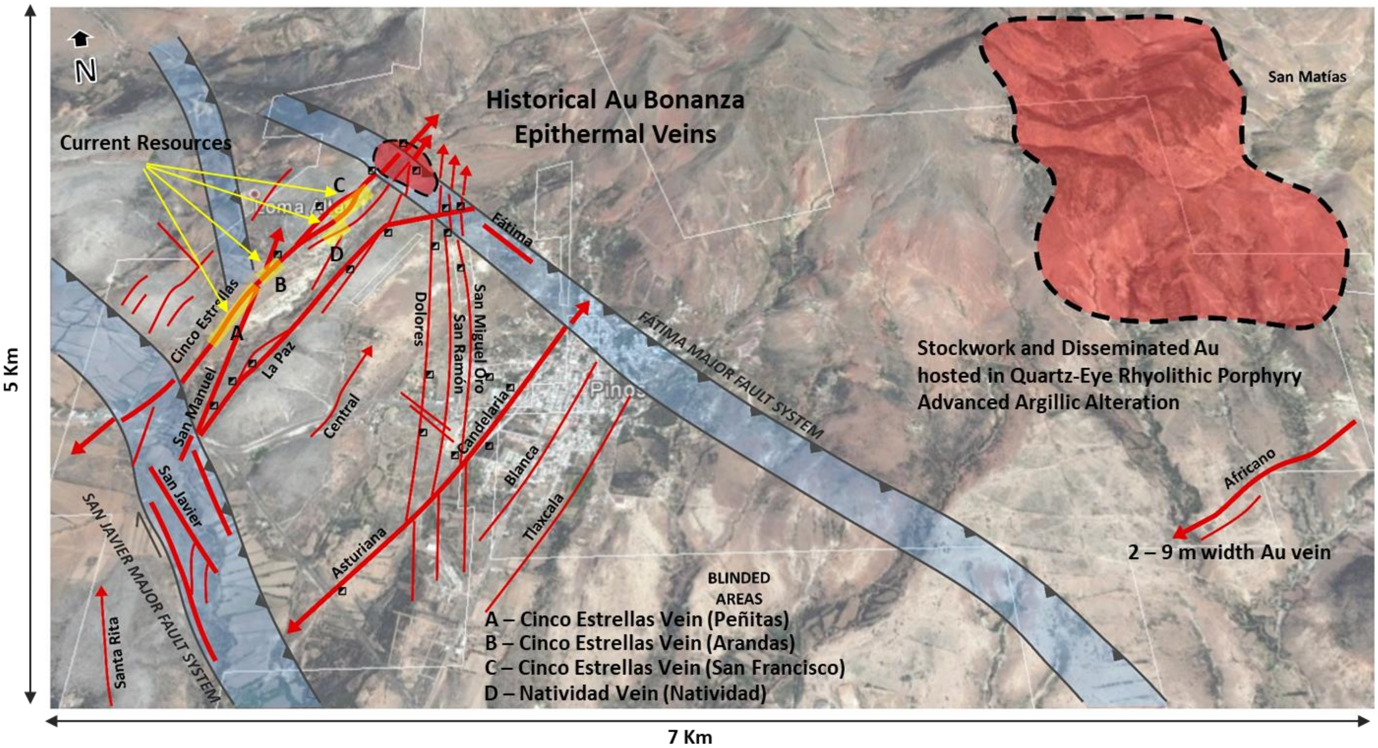
Figure 10.9 - Candelaria's Planned Drilling Program Cinco Estrellas' San José de Peñitas Carlos de Arandas Domains in Longitudinal Section.



Source: Candelaria Mining Corp. 2018

JAO expects that positive cash flow would provide resources for mine expansion, drilling at La Paz, San Javier, Azul, San Ramón, Candelaria and Asturiana zones, finally, the review and drilling of regional exploration targets, such as Africano and San Matías. Fig. 10.10 shows Cinco Estrellas' Vein Trend Domains object of this PEA and upside potential.

Figure 10.10 - Cinco Estrellas' Vein Trend Domains object of this PEA and upside potential.



Source: Candelaria Mining Corp. (2018)

11. SAMPLE PREPARATION, ANALYSIS, AND SECURITY

11.1 Introduction

This section describes the methodology and analytical assay results for exploration activities performed by Candelaria on its Exploration Program 2015-2016, which is the basis for disclosure of estimated mineral resources detailed in Section14.

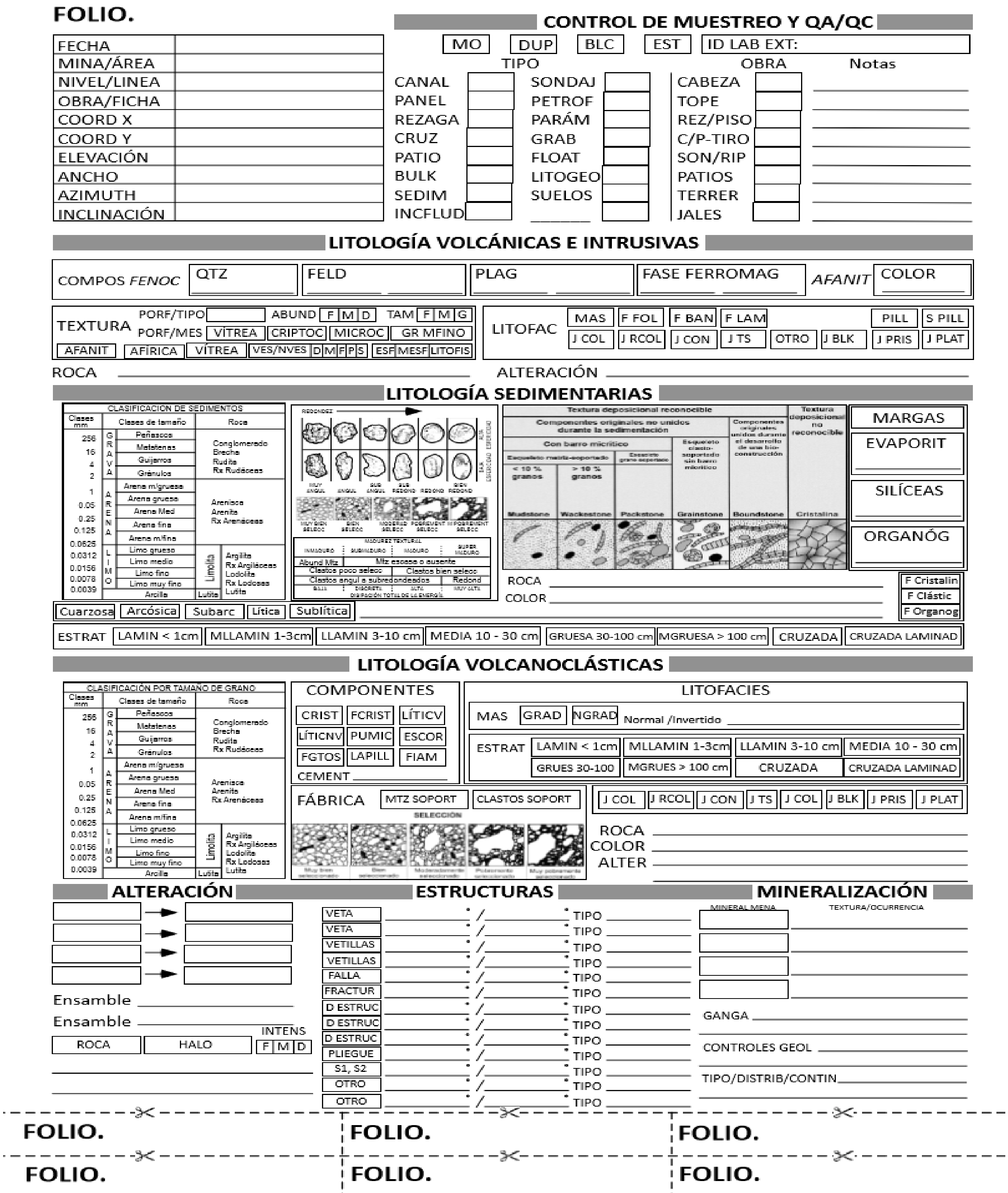
For Candelaria Mining Corp., it is paramount to have effective quality assurance and quality controls (QA/QC) protocols during sampling, custody and laboratory analysis in the work areas; the process is and must always be auditable and mechanized. The samples are always supervised by a geologist.
The geological-structural characteristics of the mining district, the type of mineral deposit and the particularities of the gold mineralization with high grades are the priority basis in sampling criteria; to minimize statistical bias and possible nugget effect, sampling always try to comply with the Chi-Square Distribution, performing a Smirnov-Kolgoronov goodness test if necessary.
Continuous sampling lines are orthogonally delimited to mineralized structures and/or structural tendencies, then the lines are divided into several samples, depending on their quartz textures, evidence of mineralization, brecciated zones, stockworks, and alterations in the hanging and foot-walls, usually with a maximum of 8 samples per sampling line, except in narrow veins, where a singular sample per sampling line is obtained.
In the sampled area, geologists proceed to put aluminum identifiers, flagging tape and paint in the case of channel samples, and paper labels using permanent markers and flagging tape on the diamond drill cores.
Regardless of the type of sampling, a detailed topographical survey is carried out; at both, the diamond hole collar, or in the first channel sample at the hanging wall contact of the mineralized structure or outcrop; under this premise, the position of the channel samples follows the same principle of plotting a drill hole; where the initial sample is the collar and the rest follow accordingly throughout the length of the hole and its trace. The numerical data is fed to the database and ArcGIS-Target software.

11.2 Surface, Trenches and Underground Sampling, and Geochemical Analysis

11.2.1 Methodology

Samples are carefully taken using mechanical disc saws, hammer drills, metal wedges, and 3 lb mallets, depending on the hardness. Sampling channels are continuous 20 – 25 cm wide and 15 – 20 cm deep, obtaining weight per sample of between 10 and 25 Kg with the objective of reducing possible nugget effect using continuous samples of greater volume.
In the case of dump sites, samples are taken using a backhoe, under the same sampling standards used for soil mechanics and rocks. First, the trenches are excavated under appropriate measures of safety; these can reach 3 m of depth; once, the excavation is complete, and the area is secured, continuous vertical channels are taken and then, subdivided into granulometric meshes, the resulting bulk screened samples may reach weights between 60 and 100 Kg.
All samples are labeled at their site of origin, identified with permanent marker in the visible part of the bag using foliated serial labels. Candelaria Mining Corp. uses a comprehensive format of sampling and geological control with the objective to standardize not only the sampling; but, also the digital database capture for ArcGIS – Target software. The process is reliable. Refer to Fig. 11.1. Sampling Format.

Figure 11.1 - Candelaria Mining Corp Sampling Format.



FOLIO.

CONTROL DE MUESTREO Y QA/QC

FECHA	
MINA/ÁREA	
NIVEL/LINEA	
OBRA/FICHA	
COORD X	
COORD Y	
ELEVACIÓN	
ANCHO	
AZIMUTH	
INCLINACIÓN	

MO | DUP | BLC | EST | ID LAB EXT:

TIPO		OBRA	Notas
CANAL	SONDAJ	CABEZA	
PANEL	PETROF	TOPE	
REZAGA	PARÁM	REZ/PISO	
CRUZ	GRAB	C/P-TIRO	
PATIO	FLOAT	SON/RIP	
BULK	LITOGEO	PATIOS	
SEDIM	SUELOS	TERRER	
INCFLUD		JALES	

LITOLOGÍA VOLCÁNICAS E INTRUSIVAS

COMPOS *FENOC* | QTZ | FELD | PLAG | FASE FERROMAG | *AFANIT* | COLOR

TEXTURA PORF/TIPO | ABUND F M D | TAM F M G
PORF/MES VÍTREA | CRIPTOC | MICROC | GR MFINO
AFANIT | AFÍRICA | VÍTREA | VES/NVES D M F P S | ESF MESF LITOFIS

LITOFAC MAS | F FOL | F BAN | F LAM | PILL | S PILL
J COL | J RCOL | J CON | J TS | OTRO | J BLK | J PRIS | J PLAT

ROCA ____ ALTERACIÓN ____

LITOLOGÍA SEDIMENTARIAS

CLASIFICACION DE SEDIMENTOS

Clases mm		Clases de tamaño	Roca
256	GRAVA	Peñascos	Conglomerado Brecha Rudita Rx Rudáceas
16		Matatenas	
4		Guijarros	
2		Gránulos	
1	ARENA	Arena m/gruesa	Arenisca Arenita Rx Arenáceas
0.05		Arena gruesa	
0.25		Arena Med	
0.125		Arena fina	
0.0625		Arena m/fina	
0.0312	LIMO	Limo grueso	Limolita: Argilita Rx Argiláceas Lodolita Rx Lodosas
0.0156		Limo medio	
0.0078		Limo fino	
0.0039		Limo muy fino	
		Arcilla	Lutita: Lutita

Textura deposicional reconocible: Componentes originales no unidos durante la sedimentación — Con barro micrítico (Esqueleto matriz-soportado: < 10 % granos, > 10 % granos; Esqueleto grano soportado); Esqueleto clasto-soportado sin barro micrítico; Componentes originales unidos durante el desarrollo de una bio-construcción. Textura deposicional no reconocible.
Mudstone | Wackestone | Packstone | Grainstone | Boundstone | Cristalina

MARGAS | EVAPORIT | SILÍCEAS | ORGANÓG

ROCA ____ COLOR ____

F Cristalin | F Clástic | F Organog

Cuarzosa | Arcósica | Subarc | Lítica | Sublítica

ESTRAT | LAMIN < 1cm | MLLAMIN 1-3cm | LLAMIN 3-10 cm | MEDIA 10 - 30 cm | GRUESA 30-100 cm | MGRUESA > 100 cm | CRUZADA | CRUZADA LAMINAD

LITOLOGÍA VOLCANOCLÁSTICAS

CLASIFICACIÓN POR TAMAÑO DE GRANO

Clases mm		Clases de tamaño	Roca
256	GRAVA	Peñascos	Conglomerado Brecha Rudita Rx Rudáceas
16		Matatenas	
4		Guijarros	
2		Gránulos	
1	ARENA	Arena m/gruesa	Arenisca Arenita Rx Arenáceas
0.05		Arena gruesa	
0.25		Arena Med	
0.125		Arena fina	
0.0625		Arena m/fina	
0.0312	LIMO	Limo grueso	Limolita: Argilita Rx Argiláceas Lodolita Rx Lodosas
0.0156		Limo medio	
0.0078		Limo fino	
0.0039		Limo muy fino	
		Arcilla	Lutita: Lutita

COMPONENTES: CRIST | FCRIST | LÍTICV | LÍTICNV | PUMIC | ESCOR | FGTOS | LAPILL | FIAM | CEMENT ____

FÁBRICA | MTZ SOPORT | CLASTOS SOPORT — SELECCIÓN

LITOFACIES: MAS | GRAD | NGRAD | Normal /Invertido ____
ESTRAT | LAMIN < 1cm | MLLAMIN 1-3cm | LLAMIN 3-10 cm | MEDIA 10 - 30 cm | GRUES 30-100 | MGRUES > 100 cm | CRUZADA | CRUZADA LAMINAD
J COL | J RCOL | J CON | J TS | J COL | J BLK | J PRIS | J PLAT

ROCA ____ COLOR ____ ALTER ____

ALTERACIÓN

Ensamble ____
Ensamble ____
INTENS F M D
ROCA | HALO

ESTRUCTURAS

VETA, VETA, VETILLAS, VETILLAS, FALLA, FRACTUR, D ESTRUC, D ESTRUC, D ESTRUC, PLIEGUE, S1, S2, OTRO, OTRO — ____° /____° TIPO ____

MINERALIZACIÓN

MINERAL MENA | TEXTURA/OCURRENCIA

GANGA ____
CONTROLES GEOL ____
TIPO/DISTRIB/CONTIN ____

FOLIO. | FOLIO. | FOLIO.
FOLIO. | FOLIO. | FOLIO.

Source: Candelaria Mining Corp. (2018)

Once described and tagged, samples are sealed at the sampling site, then are taken to Candelaria's sample warehouse for review and final inventory.

11.2.2 Sample Analysis and Custody

In the Pinos Project, two ways of testing were used, namely:
1) Fire Assay / Au-Ag cupellation at Pinos Candelaria´s lab facilities.
2) One out of every previously tested 20 vein samples is randomly selected (sometimes one in 10), for analysis and verification in the ALS Global Labs. (ALS Minerals. 2103 Dellarton Highway, North Vancouver, British Columbia, V7H 0A7, Canada) Certified by the Standards Council of Canada.
3) ALS Global conducts the custody of samples from Candelaria's lab in Pinos, Zacatecas to its sample preparation center in the City of Zacatecas and then sends those prepared samples to ALS Minerals in Vancouver for analysis.
4) Sample submission using ALS pick-up services to ALS Global, specifying the following procedures accordingly to ALS method codes:

- Preparation: Code, Prep-31. The sample is crushed and pulverized before quartering it, to ensure the greatest release and representativeness of Gold particles; it is crushed to 70% less than 2 mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns.
- Au Analysis: Code, AA24. Au by fire assay using atomic absorption finish; if the value is greater than or equal to 10 g/t Au, it is assayed by Au Code GRA22 using the same fire assay previous process; but, with gravimetric finish.
- AG and Multielement Analysis: Code, MEICP41. It consists of sample analysis for 32 elements including Silver by induction of plasma; if the value of silver is greater than or equal to 200 g/t, samples are assayed by fire assay method Code ME- Ag GRA22 with gravimetric finish.

5) Assay results, together with certificates, are input into the Candelaria's Pinos Database.

11.3 Core Drilling Sampling and Analysis

All samples were shipped to ALS Global Labs, without exception. The process and analysis are like those described previously; the only difference is the sampling procedure.

11.3.1 Methodology

Samples are carefully taken using a fixed diamond disc mechanical saw, HQ cores marked following their polarity, then they are divided in half.

The sample is taken as an orthogonal reference of structural patterns, and it is subdivided according to the texture of quartz, evidence of mineralization and lithologic-structural contacts, with minimum widths of 0.3 m and a maximum of 1.5 m, except in areas of low core recovery. Half of the core is saved as a witness, and the other half is delivered to ALS Global.

All samples are labeled in the core warehouse, identified with permanent marker in the visible part of the bag using foliated serial labels provided by ALS Global. Candelaria Mining Corp uses a comprehensive log and sampling book; this is executed individually by hole, with the objective to standardize not only the sampling; but, also the digital database capture for ArcGIS – Target software. The Drilling Database is an Excel format with tabs for DH Collar, Deviation Survey using Reflex Method, DH Length, Drill Core Recoveries and Ratios, Detailed Lithology-Structural Descriptions, Mineral Alterations, Geochemical Analysis, Average Grades, and Real Thickness Calculations. This format is friendly with most statistical, geostatistical and 2, and 3-D modeling software; including, Candelaria's ArcGIS Target licensed software.

11.3.2 Sample Analysis and Custody

Once described and tagged, samples are sealed at the sampling site, then are taken to Candelaria's sample warehouse for review and final inventory. Logistics and analytical methods were performed as follows:
1) 100% of the drill hole samples are delivered for analysis to ALS Global Zacatecas Geochemistry Lab, accordingly to the following:
2) ALS Global conducts the custody of samples from Candelaria's lab in Pinos, Zacatecas to its sample preparation center in the City of Zacatecas.
3) Sample submission using ALS pick-up services to ALS Global, specifying the following procedures accordingly to the following ALS method codes:

- Preparation: Code, Prep-31. The sample is crushed and pulverized before quartering it, to ensure the greatest release and representativeness of Gold particles; it is crushed to 70% less than 2 mm, riffle split off 250g, pulverize split to better than 85% passing 75 microns.
- Au Analysis: Code, AA24. Au by fire assay using atomic absorption finish; if the value is greater than or equal to 10 g/t Au, it is assayed by Au Code GRA22 using the same fire assay previous process; but, with gravimetric finish.
- AG and Multielement Analysis: Code, MEICP41. It consists of sample analysis for 32 elements including Silver by induction of plasma; if the value of silver is greater than or equal to 200 g/t, samples are assayed by fire assay method Code ME- Ag GRA22 with gravimetric finish.

4) Assay results, together with certificates, are fed to the Candelaria's Pinos Database.

11.4 Quality Assurance and Quality Control (QA/QC)

QA/QC surface sampling description and core logging performed by Candelaria has been reviewed by the author of this report, finding it adequate to sustain auditing from any international code examination. The following analysis was performed by the author based on Candelaria's lab analysis certificates.

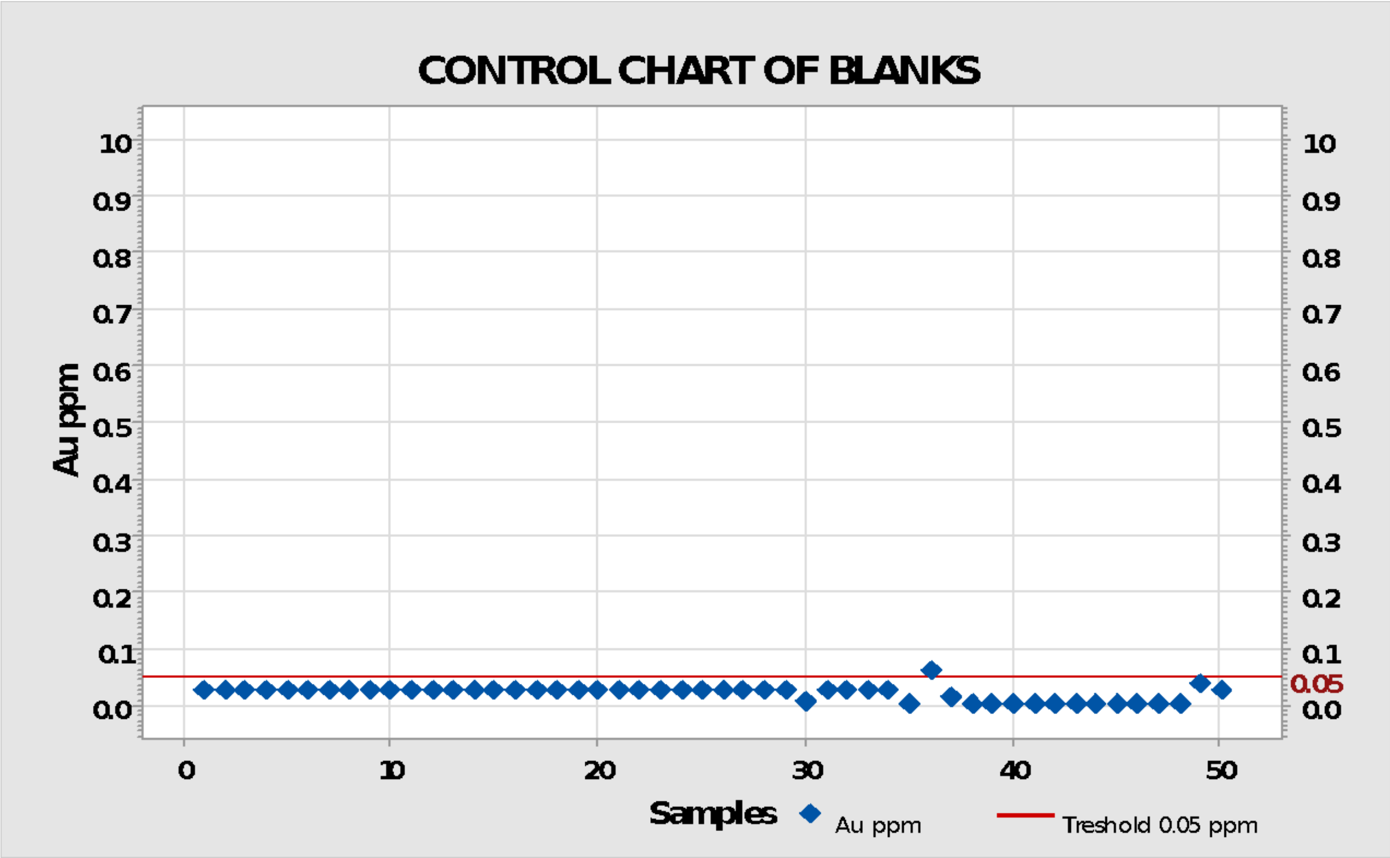
11.4.1 Blanks, Standards, and Duplicates

For quality control, blanks and standards were inserted for every 20 samples, while a blank of limestone or unaltered diorite was inserted every 20 samples, next 20 sample interval was inserted a certified standard. Candelaria Mining provided with data contained in its database. Blanks, standards, and certificates of standards were available for inspection.
The database grouped underground channel samples and thirty-three holes drilled in Cinco Estrellas vein between May 2016 and September 2016 assayed at the ALS Global laboratory. During the campaign blanks and standards were inserted into the sample stream. Candelaria did not select duplicates for secondary analysis in this stage.

11.4.1.1 Blanks

A total of 50 blanks property of Candelaria (unaltered diorite from Zacualpan, Mexico State) were inserted into the sample stream out of which one-sample were above the threshold value of 0.05 ppm, Au. The detection limit was reported at 0.005 ppm, Au. Figure 11.2 shows the control chart of blank performances for the Pinos' database.

Figure 11.2 - Control Chart of Blanks performance for the diamond drilling and underground channel sampling.



Source: Candelaria Mining Corp. (2018)

11.4.1.2 Standards

A total of 44 standards were inserted. Three different standards were used; 26 from CDN Resource Laboratories Ltd. 2-20148-102nd Ave. Langley, B.C. VIM 4B4, Canada. Moreover, 18 from Rocklabs. P.O. Box 18-142. Alen Innes 1743, Auckland.

Standards are displayed independently due to the difference of Au grades. All standards include corresponding specification sheets, compiled from round-robin assaying for more than 50 laboratories all over the world.

- CDN Resources Laboratories Ltd. Reference Material CDN-ME-1206.

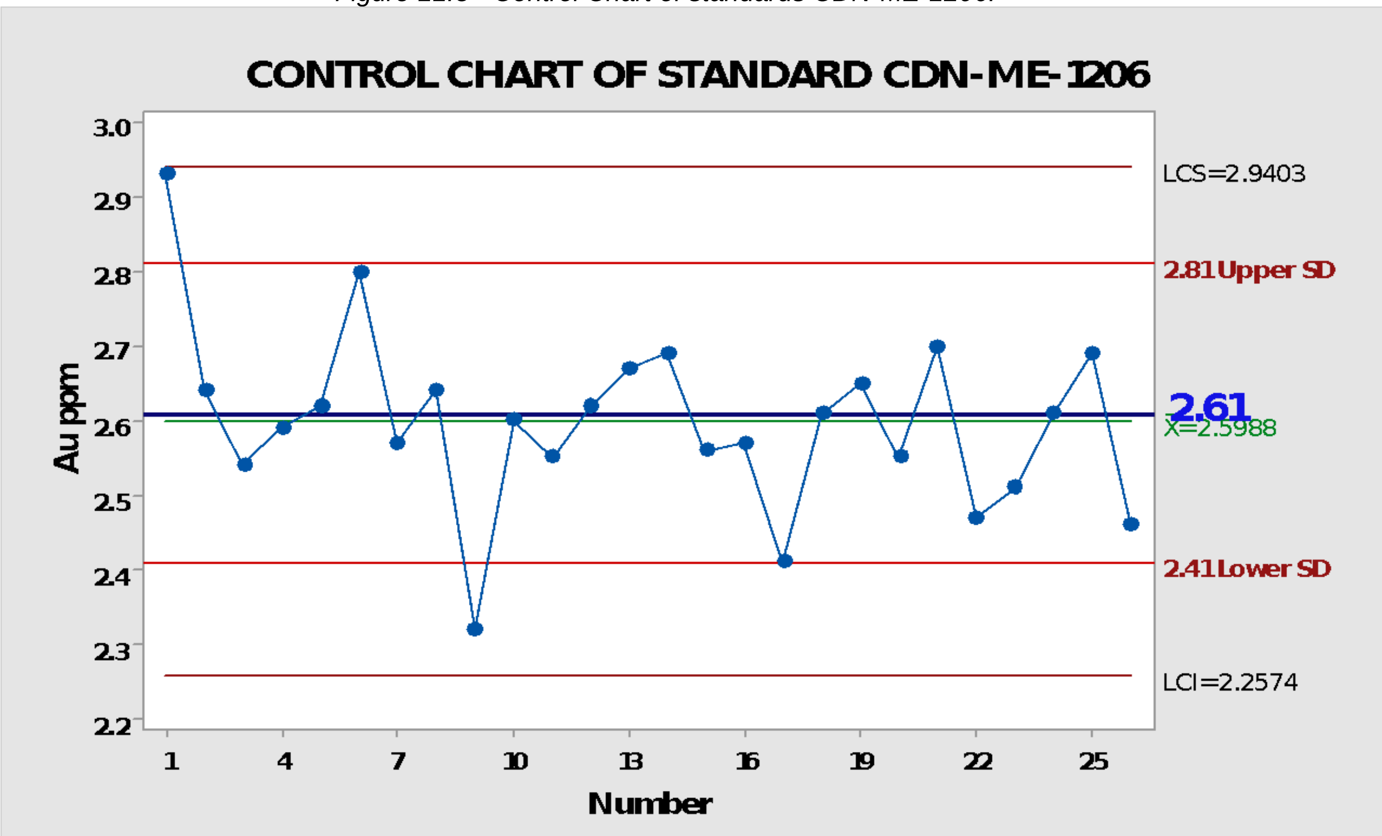
A total of 26 standards of CDN-ME-1206 were used into the stream sampling; statistics are summarized in Table 11.1 and Figure 11.3. Two standards failed their respective ± 0.2 standard deviation limits by the specifications of Table 11.2.

Table 11.1 - Statistics of 26 standards of CDN-ME-1206.

Variable	N	Mean	Standard error of the mean	Dev.Std.	Minimal	Q1	Median	Q3	Maximal
Au	26	2.5988	0.0235	0.1196	2.3200	2.5475	2.6050	2.6550	2.9300

Source: Candelaria Mining Corp. (2018)

Figure 11.3 - Control Chart of standards CDN-ME-1206.



Source: Candelaria Mining Corp. (2018)

Table 11.2 - From Specification Sheet: Recommended values and the “Between Lab” Two Standard Deviations for Reference Material CDN-ME-1206.

Gold	2.61 g/t ± 0.20 g/t	Certified Value
Silver	274 g/t ± 14 g/t	Certified Value
Copper	0.790 % ± 0.038 %	Certified Value
Lead	0.801 % ± 0.044 %	Certified Value
Zinc	2.38 % ± 0.15 %	Certified Value

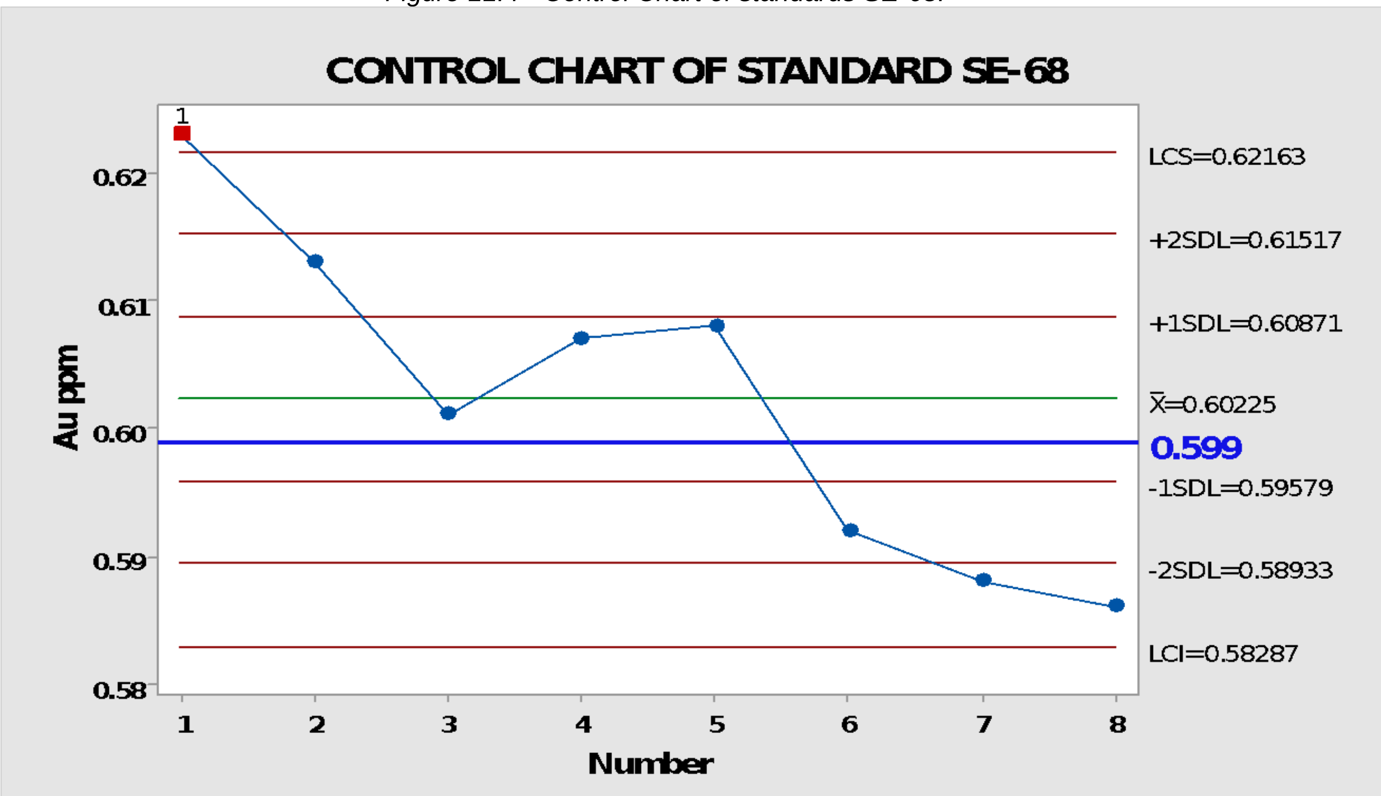
Source: Candelaria Mining Corp. (2018)

- Rocklabs. Reference Material SE-68

A total of 8 standards of SE-68 were used into the stream sampling, Since the Rocklabs standard deviations were not known, the author elected the 68–95–99.7 rule, it is used to record the percentage of values that lie within a band around the mean in a normal distribution with a width of two, four and six standard deviations, respectively; more accurately, 68.27%, 95.45% and 99.73% of the values lie within one, two and three standard deviations of the mean. Reference Material SE-68 has a recommended gold concentration of 0.599 g/t Au; The 95% Confidence Interval: ± 0.004 g/t Au.

A total of 3 samples of the standards failed the 2 standard deviations limits set by three-sigma rule (+2SDL and -2SDL). Figure 11.4 shows the control chart of standards performance.

Figure 11.4 - Control Chart of standards SE-68.



Source: Candelaria Mining Corp. (2018)

Statistics are summarized in the next Table.

Table 11.3 - Statistics of SE-68.

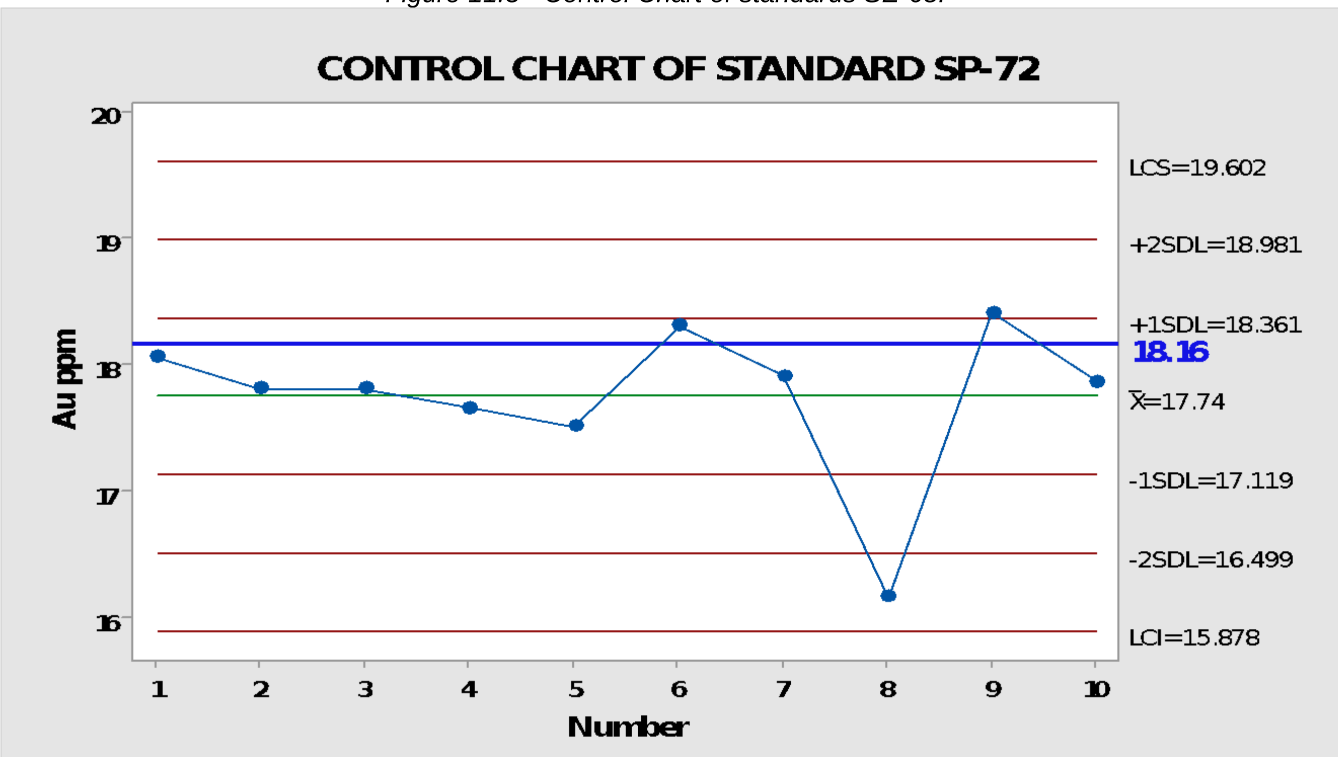
Variable	N	Mean	Standard error of the mean	Dev. Std.	Minimal	Q1	Median	Q3	Maximal
Au	8	0.60225	0.00458	0.01296	0.58600	0.58900	0.60400	0.61175	0.62300

Source: Candelaria Mining Corp. (2018)

- Rocklabs. Reference Material SP-72

A total of 10 standards of SP-72 were used into the stream sampling, Since the Rocklabs standard deviations were not known, the author elected the 68–95–99.7 rule, it is used to remember the percentage of values that lie within a band around the mean in a normal distribution with a width of two, four and six standard deviations, respectively; more accurately, 68.27%, 95.45% and 99.73% of the values lie within one, two and three standard deviations of the mean. Reference Material SP-72 has a recommended gold concentration of 18.16 g/t Au; The 95% Confidence Interval: ± 0.10 g/t Au. Silver concentration is 83.0 g/t Ag; The 95% Confidence Interval: ± 0.90 g/t Au Only one-sample of the standards failed the 2 standard deviations limits set by three-sigma rule (+2SDL and -2SDL). Figure 11.5 presents the control chart of standards performance.

Figure 11.5 - Control Chart of standards SE-68.



Source: Candelaria Mining Corp. (2018)

Statistics are summarized in the next table 11.4

Table 11.4 - Statistics of SP-72.

Variable	N	Mean	Standard error of the mean	Dev.Std.	Minimal	Q1	Median	Q3	Maximal
Au	10	17.740	0.197	0.622	16.150	17.612	17.825	18.113	18.400

Source: Candelaria Mining Corp. (2018)

11.4.1.3 Duplicates

Duplicates were not inserted on the sampling stream for ALS Global; these were analyzed at Candelaria's Pinos Lab. Although, Candelaria's Pinos lab has a good crushing and good sample preparation equipment, and a good cupellation unit; JAO is not disclosing such results because best practices for estimating mineral resources and mineral reserves states that all the core sample preparation process of samples should be done in an ISO certified laboratory.

JAO recommends that for Candelaria's further exploration proposal include the insertion of at least one duplicate of every 10 samples to an ISO certified lab and the use of a third-party ISO certified lab for duplicates on selected drill interceptions. This recommendation also applies for Candelaria's previous drilling campaign drill cores to improve certainty on lab-quality results for further technical reports.

11.5 Adequacy of Results

Despite lack of duplicates analysis, the results from blanks and standards have indicated a sound consistency of the precision and accuracy in all the ranges of grades present in Cinco Estrellas vein trend, giving good reliability to be included in this preliminary economic assessment technical report.
Evaluating the QA/QC procedures, the author concludes that blanks and standards statistical analysis results indicate the very good performance of the analytical procedures, where most samples returned grades within the accepted limits.

12. DATA VERIFICATION.

12.1 Procedures

The procedures used during the Candelaria’s exploration programs; including, surface and underground sampling and diamond core drilling campaign were verified during the JAO four field visits, and these practices were found to follow industry standards.

JAO relied on the information from Candelaria's exploration data files provided by Candelaria’s Hector González Eng. Geo., which were supervised, and some publicly disclosed information reviewed by QP. Stephen R. Maynard, C.P.G. in Press Release October 31, 2016.

Accordingly, to Candelaria’s Hector Gonzalez (personal communication), all pulps and sample leftovers from analytical testing were returned to Candelaria Mining Corp., always using ALS Global custody to Candelaria’s warehouse facilities in Pinos.

Currently, there are more than 3000 tested rock-chip and drill-core samples and 100% of the witnesses, leftovers and pulps; including the original sample.
JAO validated in the field, that; these samples, are stored and secured in Candelaria’s warehouse facilities at Pinos Project for future audits, bulk sampling for metallurgical testing, and petrographic-mineragraphic studies.

JAO validated in the field, the sampling methods used by Candelaria by checking underground channel sampling done in old mining works and reviewing thicknesses and grades, the core sampling from randomly selected core boxes. Collection of channel samples, as well as core drilling, are consistent with industry standards.

12.2 Database

JAO reviewed Candelaria’s Pinos Database; including, surface and drilling logs comparing these with randomly selected core boxes and verified that such data was accurately used in mineral estimation procedures to be discussed in the following sections.
JAO also reviewed the drilling database against ALS Global assay certificates. In 2018, a selection of ALS analytical certificates was selected at random from the files provided to JAO by Candelaria, and these were compared back to the drilling database. Such comparison represented a total of 50 samples. The author does note that all samples reviewed from the certificates matched the database exactly.

12.3 Limitations

No external auditor or consultancy, including the author, has validated 100% of the database with independent samples or third-party laboratory checks, but the random sampling that has occurred is statistically appropriate to provide reasonable confidence as to the accuracy of the resource estimation.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

There has been much work completed on the Pinos project regarding metallurgical testing of all types of representative sample. The detailed work included over the years is:

- Head Grade Analysis including particle size metal distribution
- Mineralogy of the Pinos ore showing distribution of the gold and silver indicating the abundance of fine-grained gold and silver (60 % Au and 70 % Ag approximately)
- Grindability Testing for determination of Work Index (W_i) based on P80 grind size of 200 mesh (74µ)
- Cyanidation Testing – retention time (0-72 hours) vs recovery profiles, reagent addition rates for NaCN and lime (pH).
- Flotation Alternatives to treat the Pinos Ore

Details of the associated work are summarized in the Sections below (References as noted):

13.1. Previous Metallurgical Testing

13.1.1. Bethlehem Steel Cyanide Leaching and Carbon Adsorption Testing

Bethlehem Steel / Industrias Peñoles carried out tests of cyanide leaching and carbon adsorption on dump samples from the Candelaria and San Ramón dumps in 1980 - 1981.

Pasquali (1980) noted that "test work was carried out on cyanide leaching of samples from the Candelaria and San Ramón dumps. Dilute pulp leach tests on specific size fractions showed that extraction of gold and silver increased as particle size decreased." Independent commercial leach testing of dump samples processed to < 100 mesh and leached at 45% solids over 24 hours on head gold grades of 3.58 g/t (San Ramón dump) and 1.48 g/t (Candelaria dump) resulted in gold recoveries from ranged from 27% to 69% based on the ore source and the concentration of sodium cyanide (Table 15).

Longer leaching times did not always result in better recovery. For San Ramon ores, recoveries peaked faster with finer-grained samples at 24 hours and did not noticeably increase beyond that time (Pasquali, 1980). For Candelaria ores, the finest grain size gave the best recovery, but recovery for the coarsest grain size continued after the first 24 hours.

13.1.2. Bethlehem Steel Flotation and Cyanidation Testing

Pasquali (1980) reported that "neither gravity separation techniques are recommended for processing ore or dump material from the Pinos prospect for recovery of gold and silver.

Gravity techniques show no significant separation or concentration of gold and silver. Froth flotation tests showed that gold and silver could be concentrated into a froth product at recoveries like that of cyanidation but at recovered grades too low to be pyro-smelted.

Subsequent cyanidation tests on flotation concentrates gave overall gold and silver recovery lower than those achieved by cyanidation alone."

Table 13.1 – Cyanide Leach Test Results, Bethlehem Steel/ Peñoles 1980 – 1981.

Dump	Gold (g/t)	Silver (g/t)	Dump Sample	% Extraction		NaCN Data	
				Gold	Silver	+ kg/t	-kg/t
Candelaria	1.48	105.4	Candelaria 1	69.2	72.9	7.22	3.04
			Candelaria 2	64.3	77.2	4.27	2.18
San Ramon	3.58	129.5	San Ramon 1	45	74.5	7.25	3.25
			San Ramon 2	27.6	68.5	4.48	3.62
Averages	2.53	117.45	Candelaria	66.75	75.05	5.75	2.61
			San Ramon	36.3	71.5	5.87	3.44

Source: Bethlehem Steel / Peñoles (1981)

13.1.3. Minera Catanava (Excalibur Resources) Ore Processing

According to Carter (2013) Minera Catanava installed a gravity system using shaking tables. At the time of Carter's report in late 2013, "the gravity plant had been operating on fresh ore for about 2-3 months and Catanava reported that 80% of the gold and 20-30% of the silver was recovered in a gravity concentrate".

13.1.4. Catanava Bottle-Roll Cyanide Leach testing

Catanava submitted three (3) mill concentrate samples to ME Metalurgia y Equipos de Guadalajara for bottle-roll cyanide leach testing. The results suggested gold and silver recoveries with cyanide leaching of concentrate of about 98% may be expected.

13.1.5. Catanava Flotation-cyanidation

Composite samples from the San Ramón mine dump were submitted to flotation-cyanidation tests with a range of grinding times. With a grind time of 40 minutes, gold and silver recoveries for the San Ramón dump samples were 68.31% and 46.4%, respectively (Rivera, 2014).

13.1.6. Branco Resources Metallurgical Testing

INGEMIN conducted cyanidation and flotation tests on a mineralized sample averaging 3.08 g/t Au and 111.6 g/t Ag from Pinos in 2014 (INGEMIN, 2014). INGEMIN's conclusions were as follows:

1) Sample matrix is hard white silica, which requires grinding times of 38 to 40 minutes to yield 62-65% at minus 200 mesh.
2) Cyanidation recovery was acceptable, with 91.67% gold recovery and 74.46% silver recovery after 36 hours. With 12 more hours of leaching, and additional 6.25% of silver was recovered.
3) Cyanide consumption was 1.14 kg/tonne, slightly high for the head grade of the sample.
4) Flotation of gold and silver resulted in approximately 70% recovery.
5) The best flotation results were obtained using reactive agents XAP and MaxGold. The agent Aerophina 3418A yielded slightly lower recovery.
    - a) A second washing of concentrates appears to improve recovery by roughly 5%.
    - b) Precious-metal values are finely disseminated in the silica matrix. 8. Flotation recovery improved to 79.8% gold and 87% silver by grinding ore to 81% minus 200 mesh.
    - c) The study was intended only to determine the susceptibility of Pinos ore to cyanidation and flotation techniques. Further testing will be necessary to design a recovery plant.
    - d) A second washing of concentrates appears to improve recovery by roughly 5%.
    - e) Precious-metal values are finely disseminated in the silica matrix.
6) Flotation recovery improved to 79.8% gold and 87% silver by grinding ore to 81% minus 200 mesh.

7) The study was intended only to determine the susceptibility of Pinos ore to cyanidation and flotation techniques. Further testing will be necessary to design a recovery plant.

S. Maynard (2015), concluded, “the fine-grained nature of gold and silver-bearing minerals in Pinos ores and the available studies suggest that cyanide leaching would be the most effective method of extraction. More comprehensive testing will be necessary to draw definitive conclusions regarding optimum methods of processing and extraction”.

13.2. Catanava (Candelaria Mining Corp.) Cyanide Leaching Testing

In 2017, Asesoría Metalúrgica performed cyanide leaching testing over representative bulk composite from San José de Peñitas, Griego, Natividad and San Francisco old mines, using Cyanide/Anhydrous Lime Solution to maintain a PH of 10.5. Refer to Table 13.2, achieving the following results taken from Asesoría Metalúrgica (Marcos Sánchez Estrada) report.

Table 13.2 - Cyanide and Anhydrous Lime Consumption.

Run Off Mine Grade	Au g/t	Ag g/t	Consumption g/t NaCN	Consumption g/t Anhydrous Lime
	4.22	77.16	2005	1750

Source: Asesoria Metalúrgica (2017)

The conditions and results of 3 metallurgical tests on Minera Catanava's fresh ore are shown in Table 13.3, and in graphic form in Fig. 13.1 and Fig. 13.2.

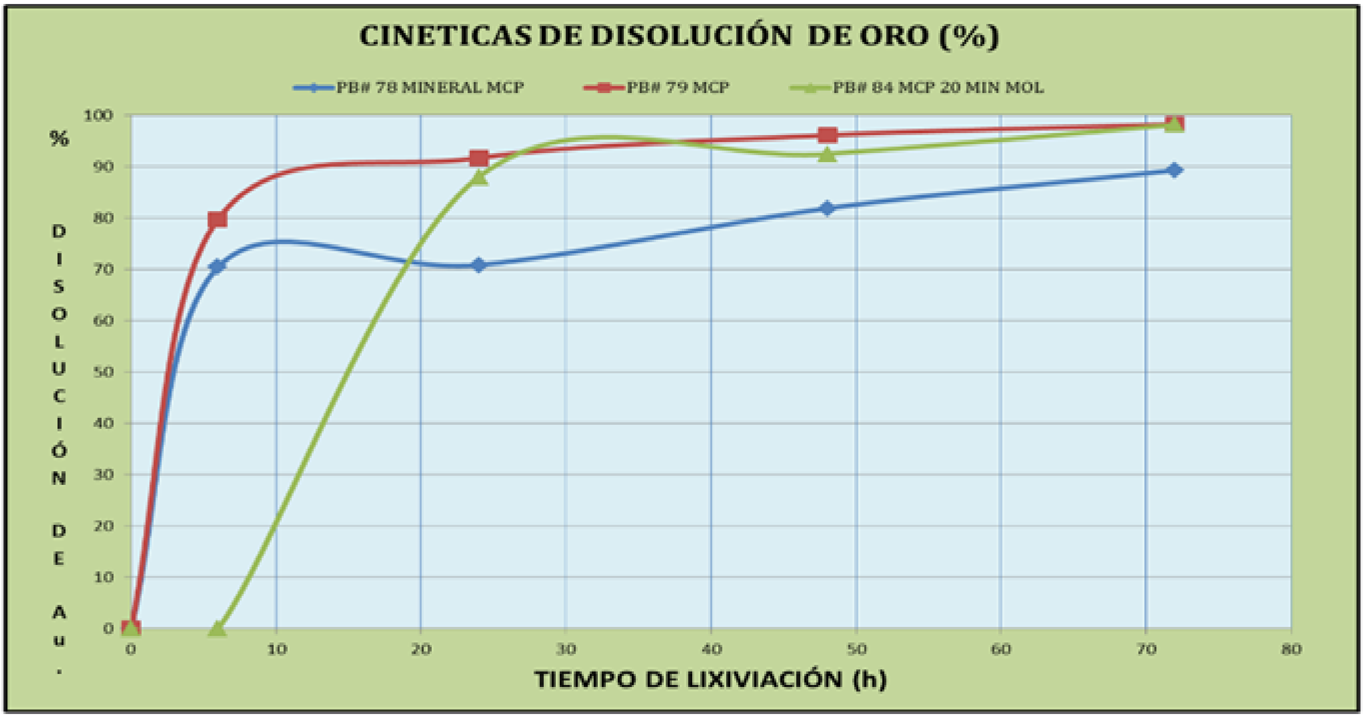
Dissolution according to the sample results subjected to experimentation are excellent for Au with an average of 95% and for the Ag of the order of 81.5%.

Table 13.3 - Dissolution Results

Test No.	Head Grade		Leaching Time (hrs.)	% Dissolution		% -200 mesh
	Au g/t	Ag g/t		Au	Ag	
78	4.22	77.16	72	89.32	73.00	56.00
79	4.22	77.16	72	98.27	87.09	56.00
84	4.22	77.16	72	98.19	84.89	67.68

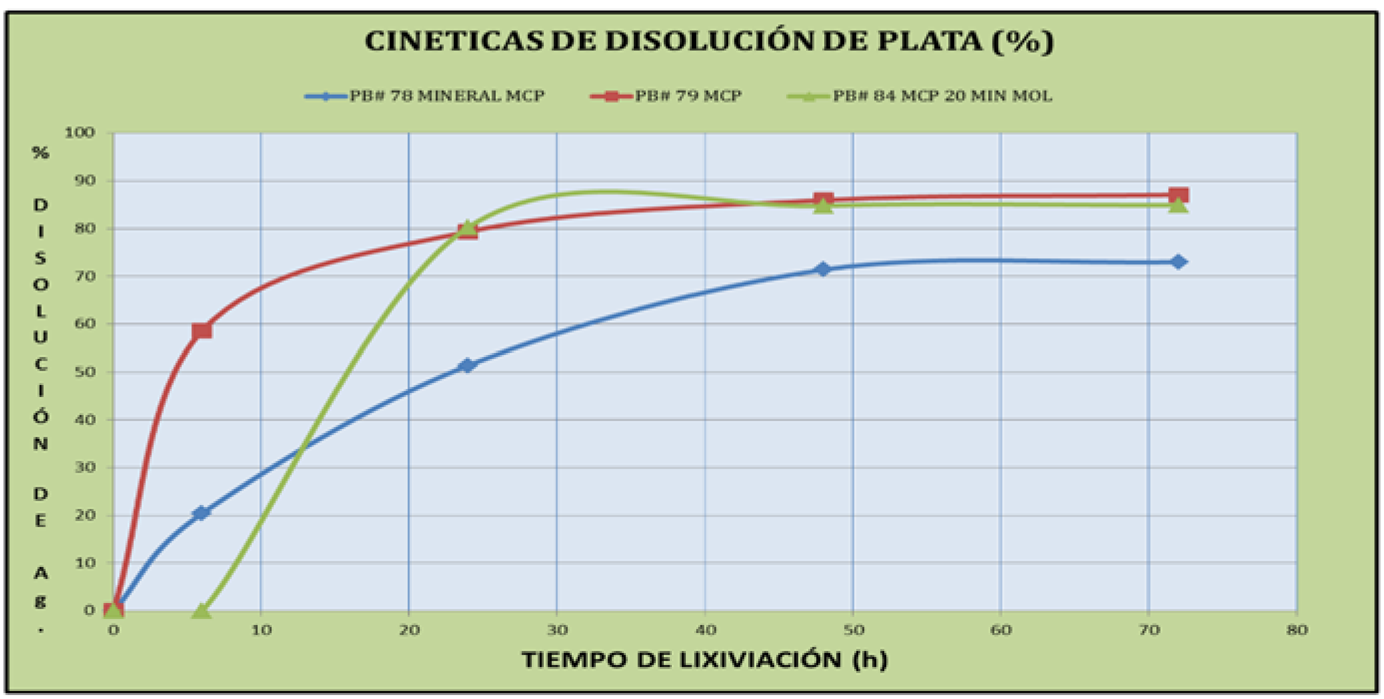
Source: Asesoria Metalúrgica (2017)

Figure 13.1- Au Dissolution Kinetics



Source: – Asesoria Metalurgica (2017)

Figure 13.2 - Ag Dissolution Kinetics



Source: Asesoria Metalurgica (2017)

Once Cyanidation metallurgical process was proven as the best method to be used in concentrating Gold and Silver from Cinco Estrellas Mineralized Trend, in June 2017, Asesoria Metalúrgica assessed Catanava to install a dynamic cyanidation processing plant. These details allowed for the development of the Pinos process design criteria shown in Section 17.2.

Processing plant location, lay-out and equipment are described in Section 17 of this report.

13.3 Recommendations

Further work recommended followjng this recent testing is:

- Variability Test Program for further property evaluation and economics
- Optimization of grind size for fine gold and silver liberation for ideal cyanidation preparation
- Optimization of Cyanide and reagent addition for operation cost reduction.

14. MINERAL RESOURCE ESTIMATES

14.1. Introduction

This Mineral Resource Estimate presented here does not use any historical mineral resource or mineral reserve estimation.

The Mineral Resource estimate presented herein has been prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1 and in conformity with generally accepted "CIM Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines. Mineral Resources have been classified by the "CIM Standards on Mineral Resources and Reserves: Definition and Guidelines":

Measured Mineral Resource: "A 'Measured Mineral Resource' is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity."

Indicated Mineral Resource: "An 'Indicated Mineral Resource' is that part of a mineral resource for which quantity, grade or quality, densities, shape, and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed."

Inferred Mineral Resource: "An 'Inferred Mineral Resource' is that part of a mineral resource for which quantity and grade or quality can be estimated by geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes."

Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no guarantee that all or any part of the Mineral Resource will be converted into Mineral Reserves. Confidence in the estimate of Inferred Mineral Resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

All Mineral Resource estimation work reported herein was reviewed and supervised by JAO, an independent Qualified Person as defined by NI 43-101 based on education, affiliation with a professional association and past relevant work experience. This Mineral Resource estimate is based on information and data supplied by Candelaria Mining Corporation obtained during Candelaria's Exploration Program 2015-2017; including the underground and trenching sampling program, and diamond drilling campaign Mineral Resource modeling and estimation were prepared by JAO and Candelaria's Héctor González using appropriate software, such as Target of Geosoft®, Statgraphics (Version 18) and Autocad 3-D. JAO reviewed the information of Candelaria's database used for this mineral resource estimation and validated technical procedures; including, QA/QC, 2-D sections, statistical and geostatistical, analysis, 3-D Modeling, and grade and tonnage estimations concluding that these procedures meet best practice standards in mineral resource estimation under CIM Definition Standards for Mineral Resources and Mineral Reserves, 2014.

For geostatistical vein modeling and due to different structural dominions, the Cinco Estrellas Mineralized trend was divided into three major areas, namely: San José Peñitas, San Carlos Arandas, and San Francisco. Natividad vein was modeled in a separate database. Only these four localities were taken into the mineral resource estimate because they have enough data for estimation; other areas were dismissed. Vein modeling for each one of these areas is shown in figures 14.1, 14.2, 14.3, and 14.4.

14.2 Deposit Geology Related to Resource Estimation

Mineralization in the Pinos District is derived of a major tectonic-stratigraphic border along Guerrero Terrane and Sierra Madre Terrane, probably active since Cretacic or early Tertiary, the evidence shows thrust faulting with continuous successions of thrusting during accretion, also, this process facilitated the emplacement of intrusives along the contact between terranes permitting the emplacement of exogenous rhyolitic domes and metal-enriched acid intrusions.

During the early tertiary started an extensional tectonic process named the Mexican Basin and Range, it formed a new structural regime controlled by normal faulting and normal-lateral faulting with subsequent filling of cavities by hydrothermal fluids.

Economical contact of the geostatistical modeling was based in the geological and mineralogical evidence of the hanging wall and footwall limits of veins and the pitch measures along slicken lines of Cinco Estrellas vein. Measures along pitch of normal-lateral faults were similar to the angle of the ore shoots geometry of historically mined out zones; actually, results were similar to the low-angles of pre-mineralized thrust faults that controls the stratigraphic relationships along district.

14.3 Source of Data

Sample data was provided by Candelaria's Pinos Database, with full records of systematic underground sampling, trenching and diamond drilling realized by Candelaria’s personnel from 2015 until 2017. Distance units are reported in meters, and assay grade units are reported as grams per metric ton.

14.4 Vein Modeling

Vein models reported here were based on wireframing modeling using Target software of Geosoft®. A traditional approach to creating a geologic model is to interpret the geology and results on cross sections and maps.

The second stage with the support of specialized software extend the interpretations to three-dimensional volumes. It is referred to as deterministic geologic modeling because it does not carry a measure of uncertainty. Geologic interpretation and modeling use the data and general geologic knowledge gained from Pinos’ exploration and geology and other studies in the context of the type of deposit. This information may include geological knowledge of the project, the hypothesis related to the genesis of the deposit, and experience with similar exploration projects and mines.

Deterministic geologic modeling may define the geological contact (lithological hanging wall and footwall contacts, including the major structural control where the vein was emplaced); the mineralogical contact (as defined by vein and mineralized breccias mineralogy); and, economic contact (as defined by the supposed economic thickness and block modeling by krigging). The contacts are combined to create a valid solid triangulation (geosurface) for use in building the resource block model.

The modeling methodology as implemented by Candelaria and supervised by the JAO, can be summarized as follows:

- Set the vein to be modeled, its overall dip and dip direction, and the drill hole and channel databases to be used.
- By practical purpose and increase the reliability of the Cinco Estrellas Vein model, it was divided into three major structural areas, as follow: San José de Peñitas, San Carlos de Arandas and San Francisco, otherwise, vein modeling will have a geostatistical error derived of three different structural dominions in a single interpretation. Natividad Vein was modeled in a single database.
- Extract along cross sections' geological data and surveys the hanging wall (HW) and footwall (FW) vein intercepts from the drill hole and channel sampling databases. Combine interpreted or surveyed HW and FW points to control the vein model interpretation where required.
- The drawing of geological shapes was based on drill hole information, systematic sampling, trenching (all include collar, survey, and assays); finally, other geologic knowledge that includes a model for ore deposition, surface mapping, and structural and mineralogical information.
- The surface was referred to Digital Terrain Model (DTM), it was generated using ArcGIS and Autocad. The data for creating the DTM was directly the topographical 2-m contours from photogrammetric restitution, direct survey data and topographical controls of the project through precision GPS and topographic equipment described earlier in this report.
- Local topographic grid, collars, roads, underground workings, drill setups and final set of cross-section lines were marked on the ground directly by surveyors, in accordance to the best practices and QP guidelines. The survey is based in Datum WGS84 UTM Z14; elevations are referred to sea level.
- Based in common rules about extrapolating of the last points of information, a safe option was used to avoid excessive extrapolation in vein Modeling, where the geosurface model was delineated using an isotropic radius of maximal 150m depth, in other words, geologists used the maximal criteria algorithmically assigned in a classification of inferred resources, only for vein Modeling.
- Drill hole data and a plan view of drill hole locations provided a starting point for geological interpretation. Sections are systematic each 25m/50m and chosen based on the drill hole distribution. Multiple sections are combined to form a 3-D model that is consistent with information from all sections.

The simplest method used to obtain models of geologic attributes were based on two-dimensional interpretation, generally done on cross-sections, it is highly recommended for vein-type deposits. The importance of vein modeling is related to delineation of three dimensional limits for further grade-tonnage estimation by krigging; in simple terms, the vein model defines an accurate geological model avoiding the overestimation of tonnage because krigging methodology considers the information of all assays in the database, including the values outside of vein contact; however, as hanging wall and footwall were defined during the vein Modeling; then, all blocks outside of geological contact (vein) were not considered here, avoiding the estimation extending to wall rock. Vein modeling is shown in the following figures:

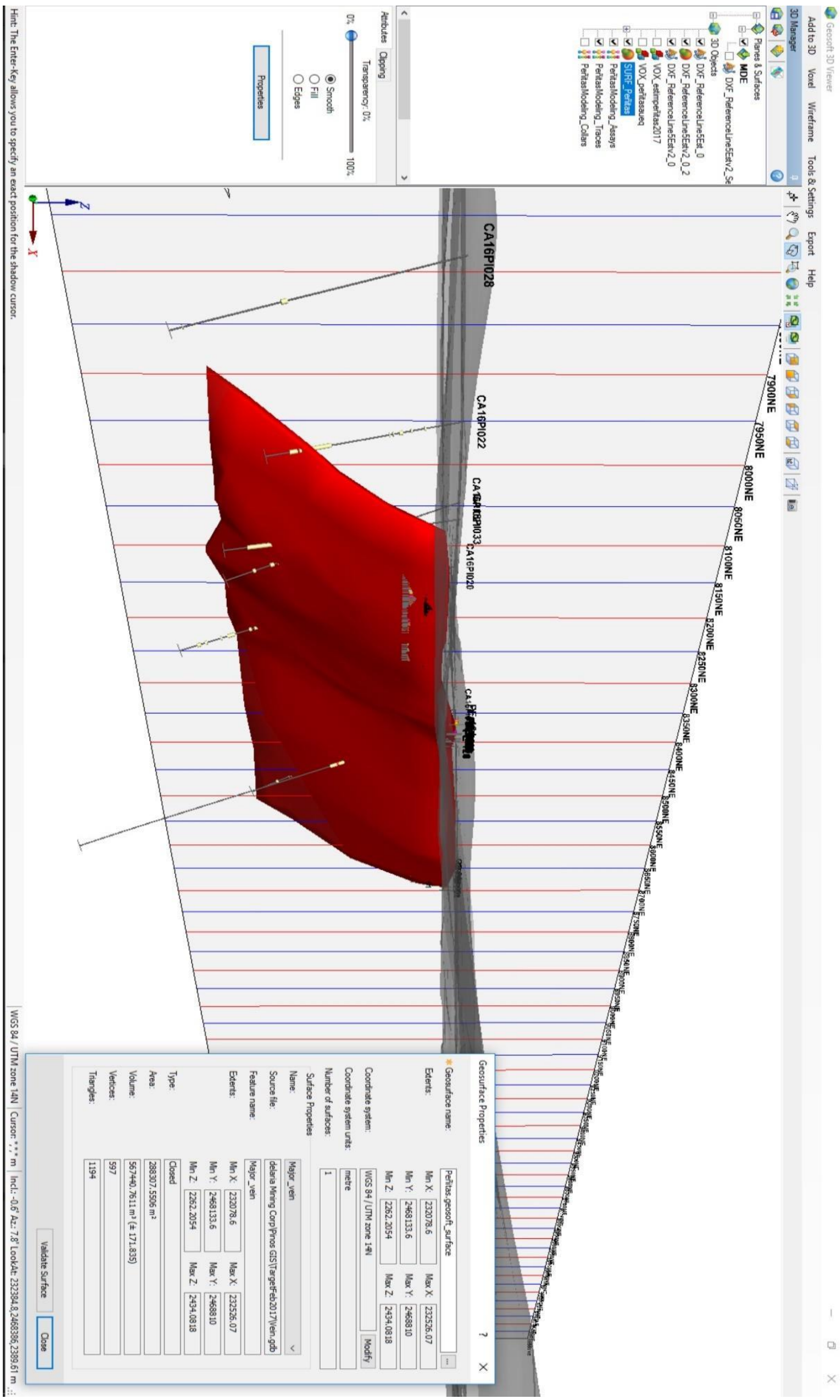
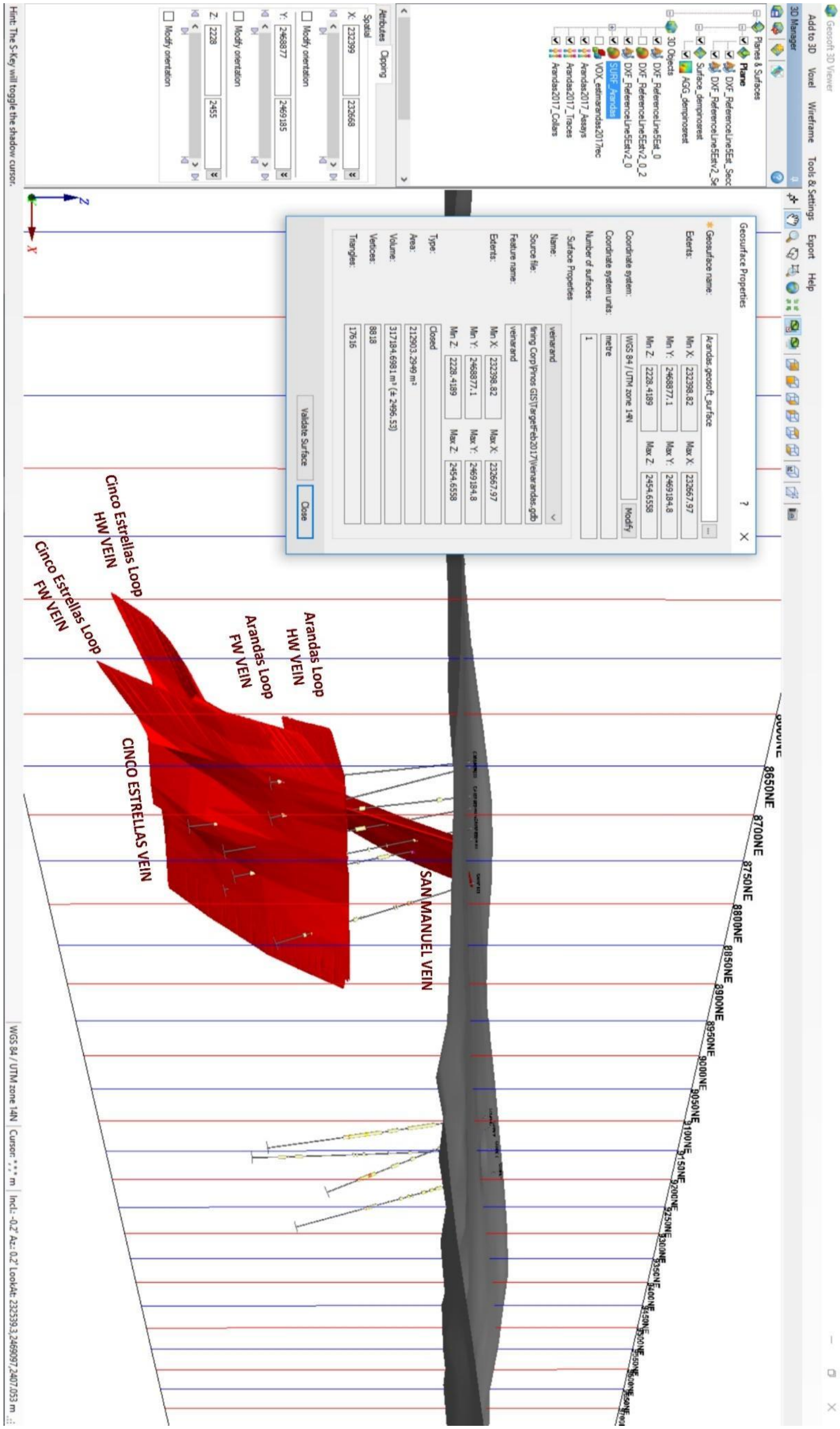


Figure 14.1 - Cinco Estrellas vein modeling at San José de Peñitas, including DEM and main reference line for cross-sections.

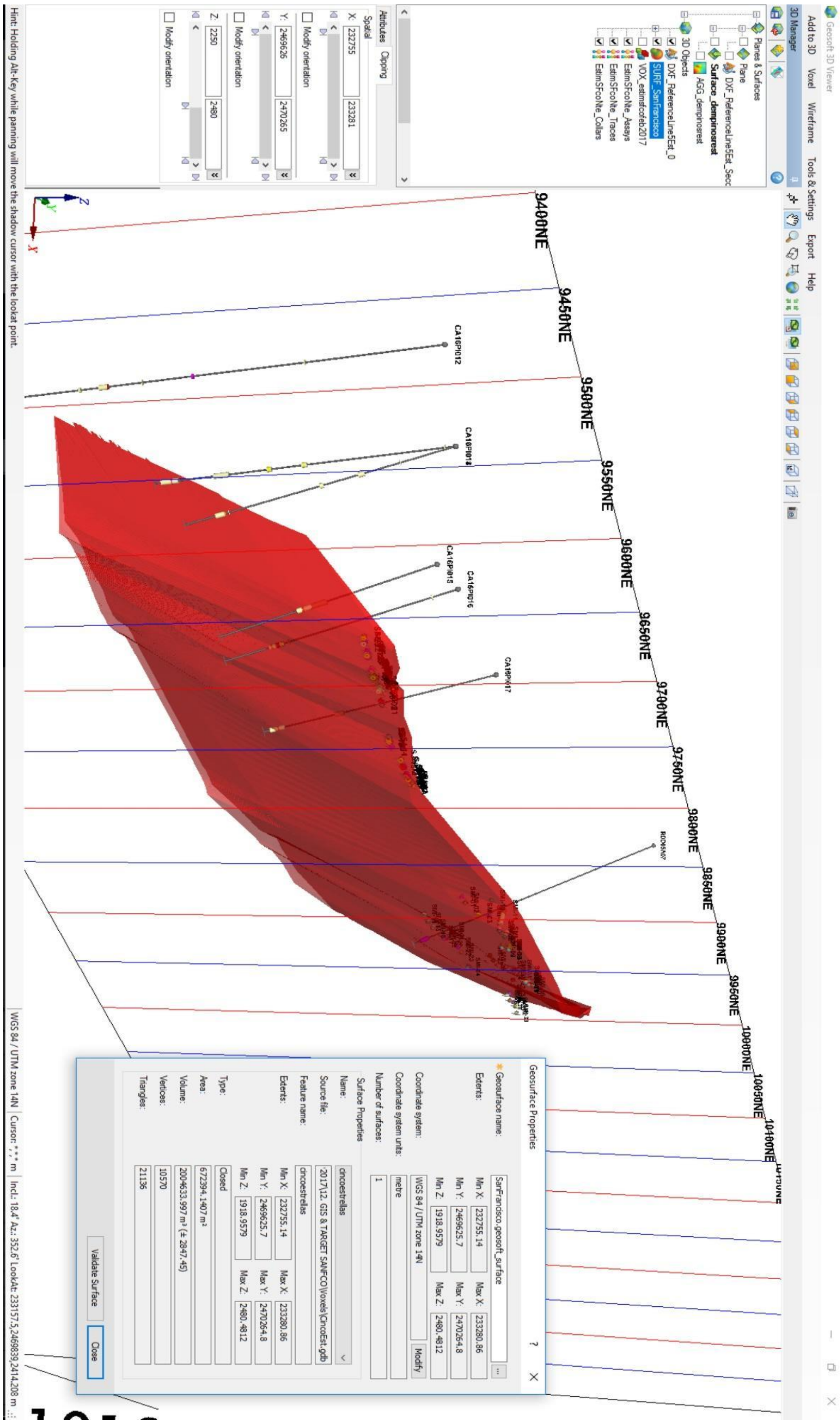
Source: JAO (2018)

Figure 14.2 - Cinco Estrellas vein modeling at San Carlos de Arandas, including DEM and main reference line for cross-sections.



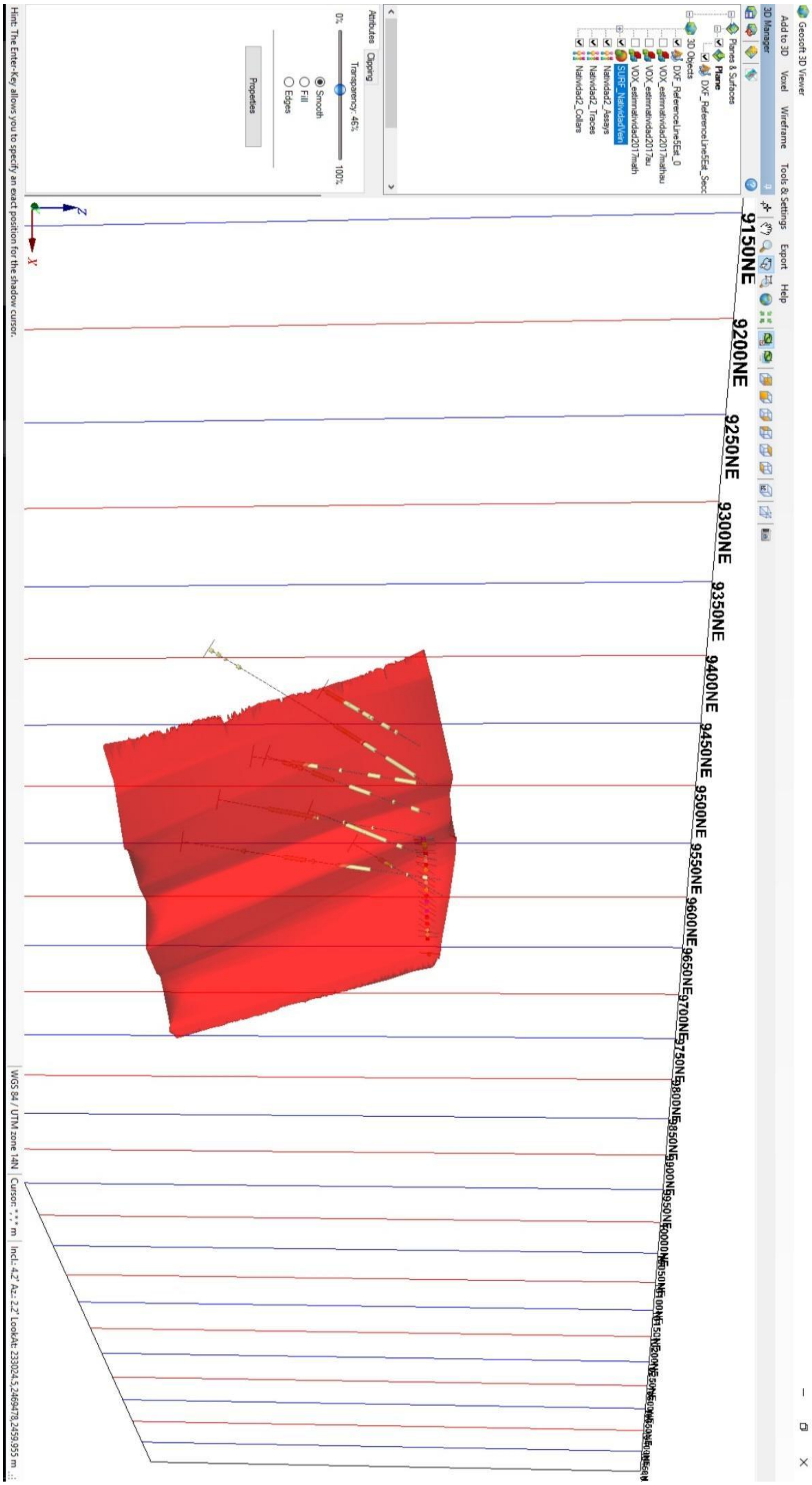
Source: JAO (2018)

Figure 14.3 - Cinco Estrellas vein modeling at San Carlos Francisco, including DEM and main reference line for cross-sections.



Source: JAO (2018)

Figure 14.4 - Natividad vein modeling, including DEM and main reference line for cross-sections.



Source: JAO (2018)

14.5 Density.

Candelaria Mining Corp commissioned to Asesoría Metalúrgica to perform density and specific gravity tests on the several bulk samples of the metallurgical testing, bulk samples were selected of all the mineralized zones forming representative composites.
Tests were realized by Specific Gravity Flask (Le Chatelier), this process supports several standards as ASTM C128, ASTM C188, AASTO T133. The average density for all the domains was 2.69 g/cc.

14.6 Assays Data Statistics and Capping.

Summary assay statistics were calculated separately by Cinco Estrellas vein and Natividad vein. Cinco Estrellas vein was divided into three major zones, by the structural dominions, as follow:

Table 14.1 - Structural dominions along Cinco Estrellas Vein.

VEIN	STRUCT DOMINIONS	GEOLOGICAL FEATURES
Cinco Estrellas	San José Peñitas	1 - 6 m width. Consolidated major vein without cymoid loops.
Cinco Estrellas	San Carlos Arandas	1-3.5 m width. Cymoid loop and intersection with San Manuel Vein
Cinco Estrellas	San Francisco	1-2 m width. Cymoid loop, narrow veins - high grade.

Source: Candelaria Mining Corp. (2018)

Natividad high-grade vein was analyzed in a separate database. Databases include all the drill-hole assay samples and chip assay samples. Chip sample strings have been converted to pseudodrill-holes.

JAO and Hector Gonzalez of Candelaria Mining Corp agreed in use two-ways for analysis of data into Pinos Project and compared it, due to the heterogeneity of grades into the mineral deposit; these are Cumulative Distribution Function and Variography - Krigging analysis.

14.6.1 Assays Statistics by Cumulative Distribution Function.

The cumulative distribution function (CDF) is the universal way to express a state of incomplete knowledge for a continuous variable. Cumulative histograms can be created at the resolution of the data; the most important is to determine how representative each sample is and if it is related to actual mineralization.

The analysis started with the filter of all the assays values outside of vein contact limited by HW and FW (Geological/Mineralogical contact), previously defined by logging of drill holes (including the downhole survey and recuperation measures) and survey of underground working, furthermore applied the analysis through Statgraphics Centurion software.

The analysis realized by JAO and Candelaria’s geologist, includes measures of central tendency, measures of variability, and measures of shape, it includes the Frequency Tabulation, where this option performs a frequency tabulation by dividing the range of data samples into equal width intervals and counting the number of data values in each interval.

The frequencies show the number of data values in each interval, while the relative frequencies show the proportions in each interval. The first point is to define with enough discretion that Au assays from the database are being accomplished with lognormal or normal distribution.

By this analysis, it shows that the mean or average value is sensitive to extreme values (or outliers). The outliers of Pinos are a small number of very high values that strongly affect the summary statistics like the mean or variance of the data, the correlation coefficient, and measures of spatial continuity.
In accordance to the exploratory data analysis (EDA) that represents the final statistical tests of the data before estimation of the mineral resources, the author and Candelaria's geologist used a Box-and-Whisker plot diagram for revising the essential aspects of the random distribution.

Box-and-Whisker plot shows the data as a box and lines extending from the box called whiskers, the box denotes the central 50% of the distribution, while the lower limit of a box is set to 25th percentile and the upper limit is set to 75th of percentile. Median (50th percentile) is shown as a straight line crossing the box. The lines extending from the box (whiskers) usually extend to 5^{th,} and 95th percentiles and the data lying outside of these extremes (outliers) are denoted as dotes. The Box-and-Whisker diagram allowed to visualization of the different data of grades grouped by dominions, identifying the extreme values related to high grades that affected the mean, variance and measures of spatial continuity.

14.6.1.1 San José de Peñitas (Cinco Estrellas Vein).

The analysis of Au (g/t) assay was designed to summarize a single sample of data. It yielded various statistics and graphs, including the confidence intervals, the most important graphics are summarized in Figures 14.5, 14.6, 14.7, and 14.8.

As result CDF and EDA analysis for San José de Peñitas dominion, JAO and Candelaria´s geologists defined a new cluster for expected values, at that time, new expected values were analyzed by capping the highest grades to 12 g/t Au, in accordance to visual outliers plotted in Box-and-Whisker diagram.
Probabilistic analysis displays 95.0% confidence intervals for the mean and standard deviation of data. The classical interpretation of these intervals is that, in repeated sampling, these intervals will contain the true mean or standard deviation of the population from which the data come 95.0% of the time, including:

95.0% confidence interval for mean: 3.99912 +/- 0.243159 [3.75596, 4.24227]
95.0% confidence interval for standard deviation: [1.8334, 2.17873]
In practical terms, it can be stated with 95.0% confidence that the true mean for grades ranging the cutoff grade and capped to 12 g/t Au is somewhere between 3.75596 and 4.24227, while the true standard deviation is somewhere between 1.8334 and 2.17873.

Figure 14.5 – Box and Whisker plot of San José de Peñitas Database. Source: Candelaria Mining Corp. (2018)

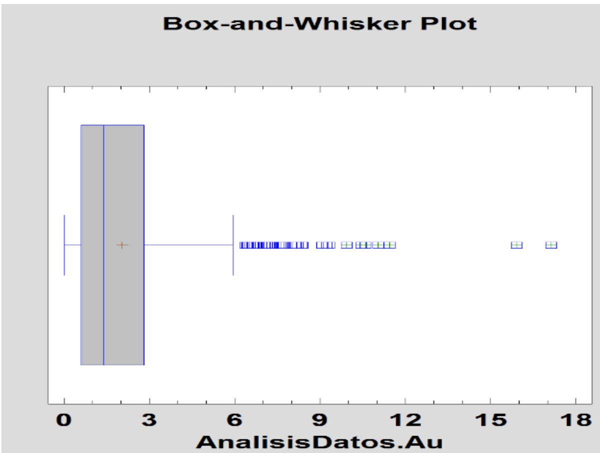


Figure 14.6 – Histogram of San José de Peñitas Database. Source: Candelaria Mining Corp. (2018)

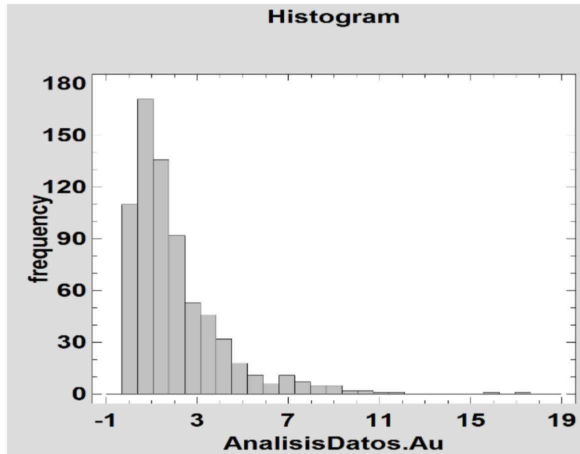


Figure 14.7 – Quantile plot of San José de Peñitas Database with extreme values capped. Source: Candelaria Mining Corp. (2018)

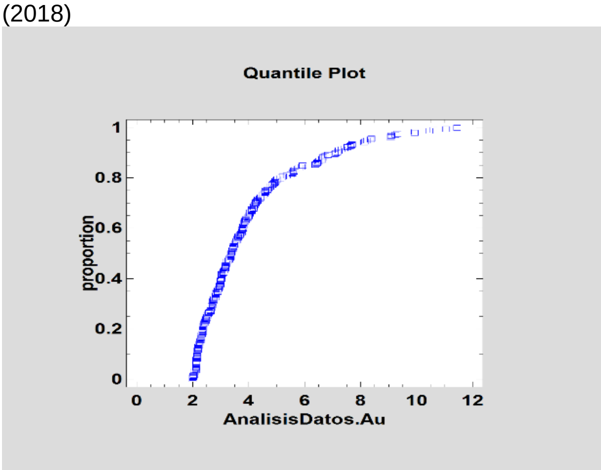
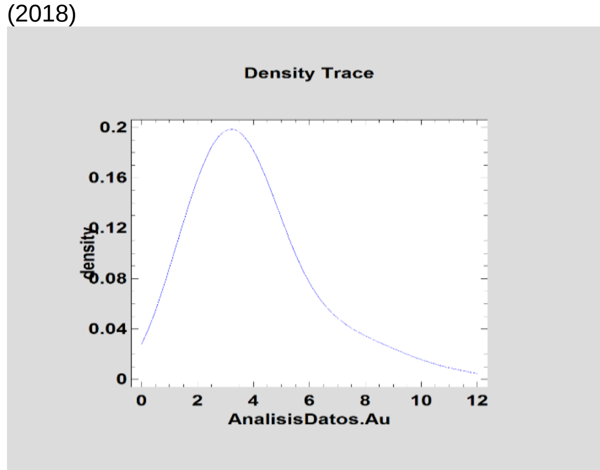


Figure 14.8 – Density trace of San José de Peñitas Database with extreme values capped. Source: Candelaria Mining Corp. (2018)



The silver analysis was defined as sub-product of Au; so, Ag values analyzed were between 2.0 g/t Au and extreme values capped (>12 g/t Au) along Au zones previously defined.

It can be stated with 95.0% confidence that the true mean Ag is somewhere between 51.1113 and 62.9306, while the true standard deviation is somewhere between 44.5581 and 52.9509.

In both cases for Au and Ag the true standard deviation reflects the significant quantity of information and variation of data; in simple words, the heterogeneity of mineral deposit, these atypical values that affect the standard deviation were reduced after of removing the extreme values.

14.6.1.2 San Carlos de Arandas (Cinco Estrellas Vein).

The statistical and cumulative analysis of Au (g/t) from San Carlos de Arandas was designed to summarize a single sample of data. It yielded various statistics and graphs, including the confidence intervals, the most important plots are summarized in figures 14.9, 14.10, 14.11, and 14.12.

Because of such analysis, a new cluster for expected values could not be defined, because of the minimal information and heterogeneity the Arandas data. It was analyzed by variography instead to be shown later in this section.

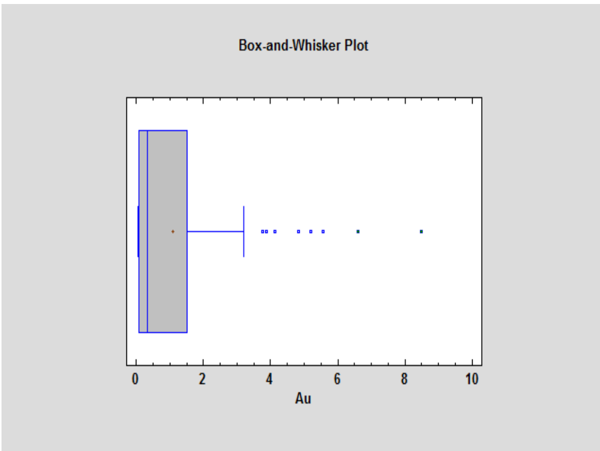


Figure 14.9 – Box and Whisker plot of the San Carlos Arandas Database. Source: Candelaria Mining Corp. (2018)

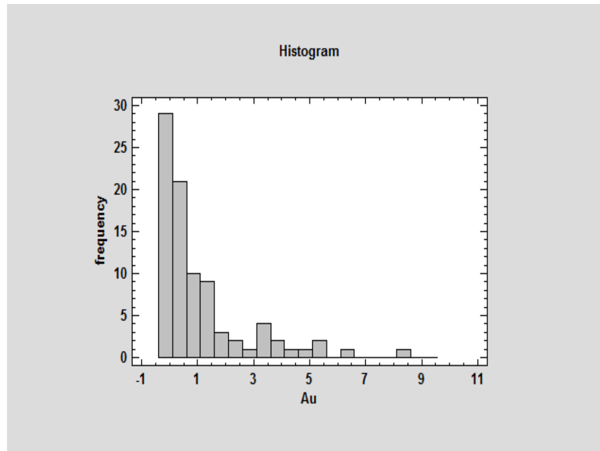


Figure14.10 – Histogram of San Carlos Arandas Database. Source: Candelaria Mining Corp. (2018)

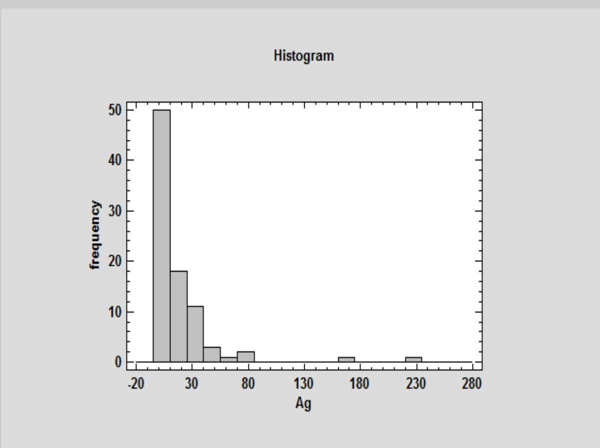


Figure 14.11 - Histogram (Ag) of San Carlos Arandas Database. Source: Candelaria Mining Corp. (2018)

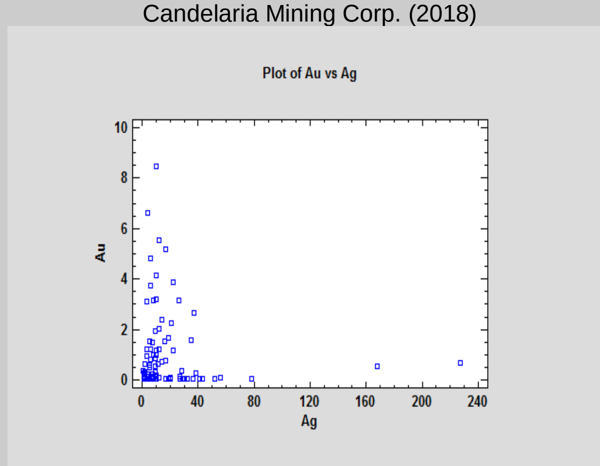


Figure 14.12 – Nule correlation for Au/Ag of San Carlos Arandas Database, variables are not dependent. Source: Candelaria Mining Corp. (2018)

14.6.1.3 San Francisco (Cinco Estrellas Vein).

The analysis of Au (g/t) from San Francisco was designed to summarize a single sample of data. It yielded various statistics and graphs, including the confidence intervals, the most important plots are summarized in Figures 14.13, 14.14, 14.15, and 14.16.

Frequency Tabulation analysis was performed by dividing the range of San Francisco Au data values into equal width intervals and counting the number of data values in each interval. The frequencies show the number of data values in each interval, while the relative frequencies show the proportions in each interval.

Figure 14.13 – Box and Whisker plot of the San Francisco Database. Source: Candelaria Mining Corp. (2018)

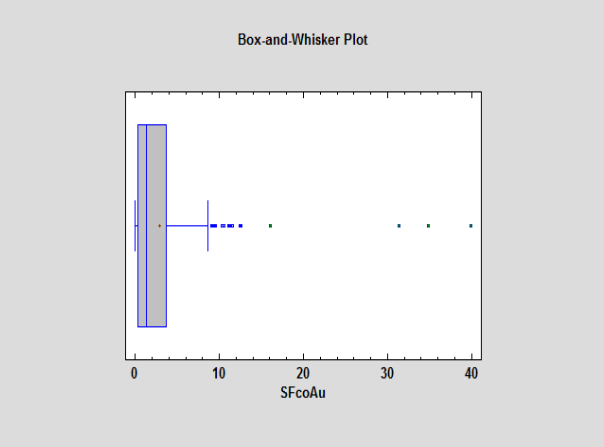
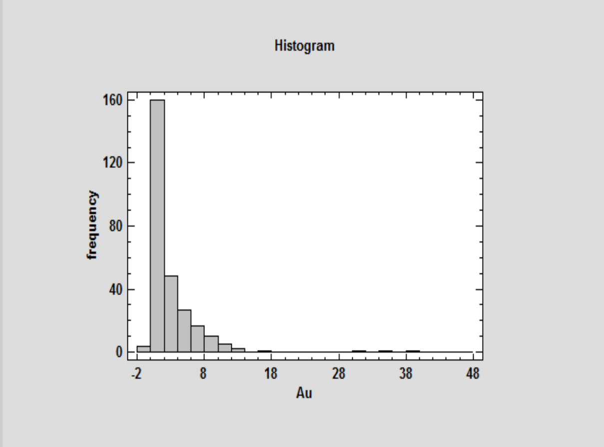


Figure 14.14 – Histogram of San Francisco Database. Source: Candelaria Mining Corp. (2018)



Similar to the San José de Peñitas data, the information defined with enough discretion that Au assays of San Francisco accomplishes with lognormal distribution and the mean, or average value is sensitive to extreme values (or outliers).

As result of that analysis, Candelaria´s geologists defined a new cluster for expected values, at this time, new expected values were analyzed by capping the highest grades to 20 g/t Au, in accordance to visual outliers plotted in Box-and-Whisker diagram.

Probabilistic analysis displays 95.0% confidence intervals for the mean and standard deviation of data. The classical interpretation of these intervals is that, in repeated sampling, these intervals will contain the true mean or standard deviation of the population from which the data come 95.0% of the time, including:

95.0% confidence interval for mean: 5.22218 +/- 0.534355 [4.68783, 5.75654]
95.0% confidence interval for standard deviation: [2.49695, 3.26025]

In practical terms, it can be stated with 95.0% confidence that the true mean of Au EDA for San Francisco for grades ranging the cutoff grade and capped to 20 g/t Au is somewhere between 4.68783 and 5.75654, while the true standard deviation is somewhere between 2.49695 and 3.26025.

Figure 14.15 – Density trace of San Francisco Database with extreme values capped. Source: Candelaria Mining Corp. (2018)

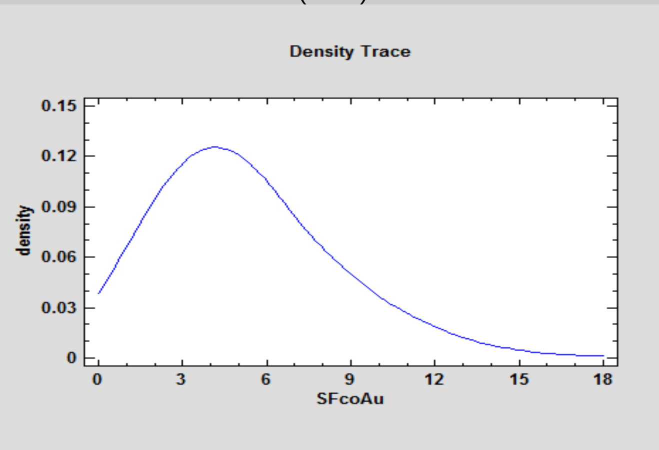
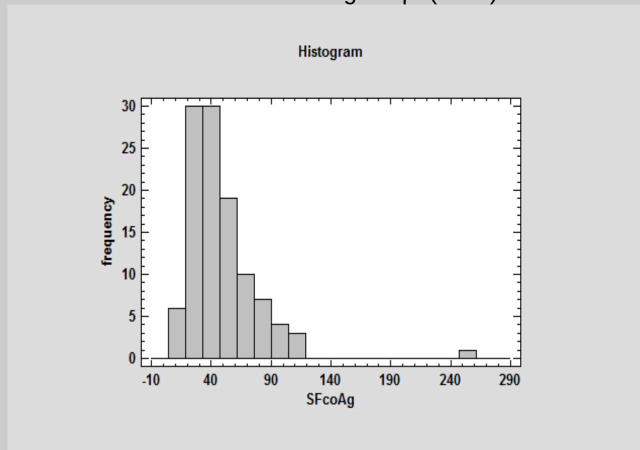


Figure 14.16 – Histogram (CF for Ag) of San Francisco Database with extreme Ag values capped. Source: Candelaria Mining Corp. (2018)



The silver analysis was defined how sub-product of Au, so Ag values analyzed were between 2.0 g/t Au and extreme values capped (>20 g/t Au) along Au ore shoots previously defined.

Finally, it can be stated with 95.0% confidence that the true mean SFcoAg is somewhere between 42.2664 and 53.9798, while the true standard deviation is somewhere between 27.3671 and 35.7331.

14.6.1.4 Natividad Vein.

The analysis of Au (g/t) from Natividad vein was similar to the statistical revision of the San José de Peñitas and San Carlos de Arandas; it was designed to summarize a single sample of data. It yielded various statistics and graphs, including the confidence intervals, the most important plots are summarized in Figures 14.17, 14.18, 14.19, and 14.20. Frequency Tabulation analysis was performed by dividing the range of Natividad Au EDA into equal width intervals and counting the number of data values in each interval. The frequencies show the number of data values in each interval, while the relative frequencies show the proportions in each interval.

Figure 14.17. Box and Whisker plot of Natividad Database. Source: Candelaria Mining Corp. (2018)

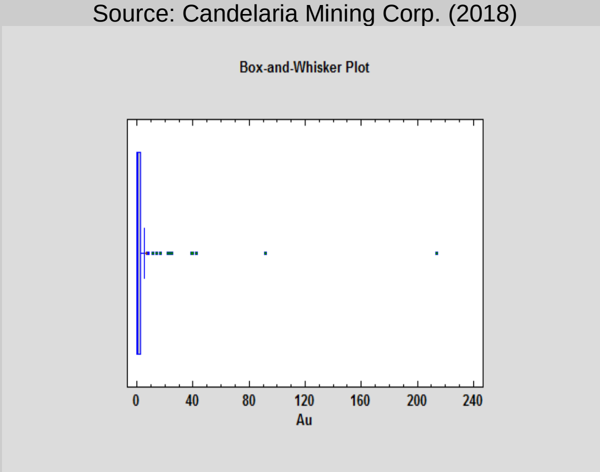


Figure 14.18. Histogram of Natividad Database. Source: Candelaria Mining Corp. (2018)

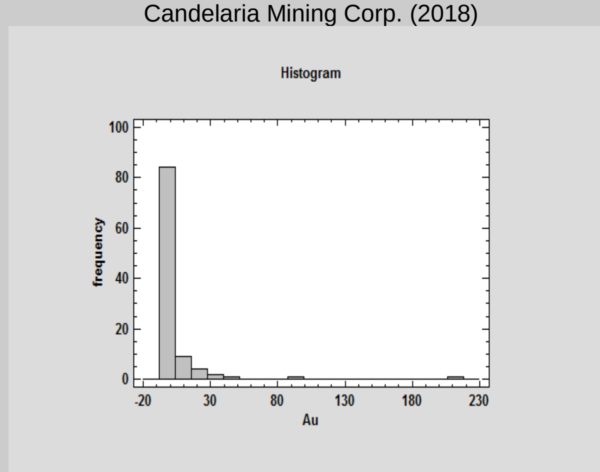


Figure 14.19. Histogram of Natividad Database with extreme values capped. Source: Candelaria Mining Corp. (2018)

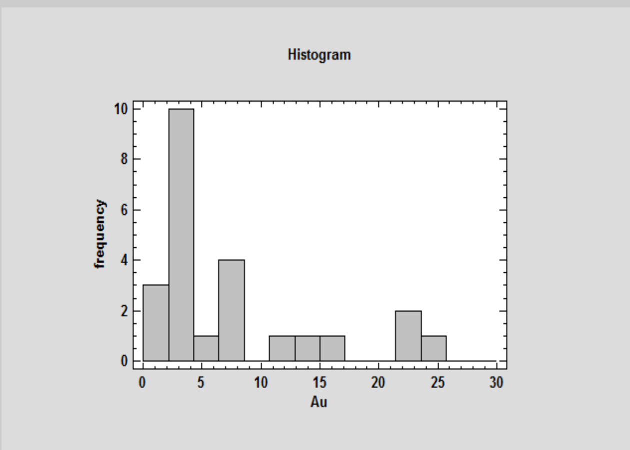
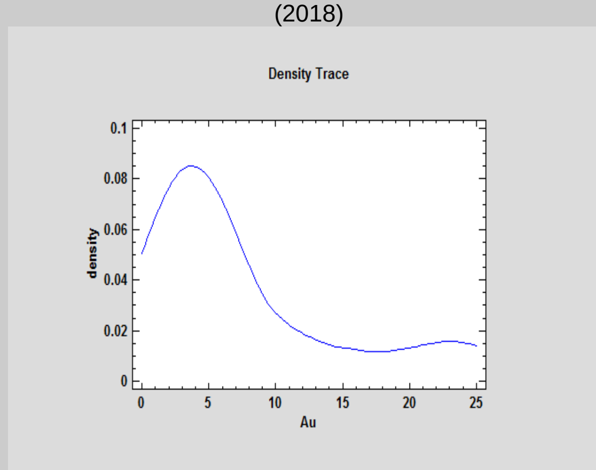


Figure 14.20. Density trace of Natividad Database with extreme values capped. Source: Candelaria Mining Corp. (2018)



Similar to the nearest Cinco Estrellas vein (San Francisco area), the information defined that Au assays of Natividad are accomplished with lognormal distribution, and the mean or average value is sensitive to extreme values (or outliers).

As result of the previous analysis, Candelaria´s geologists defined a new cluster for expected values, at this time, new expected values will be capping the highest grades to 30 g/t Au, in accordance to visual outliers plotted in Box-and-Whisker diagram.

Probabilistic analysis displays 95.0% confidence intervals for the mean and standard deviation of data. The classical interpretation of these intervals is that, in repeated sampling, these intervals will contain the true mean or standard deviation of the population from which the data come 95.0% of the time, including:
95.0% confidence interval for mean: 7.63083 +/- 3.04193   [4.5889, 10.6728]
95.0% confidence interval for standard deviation: [5.59895, 10.1053]

In practical terms, it can be stated with 95.0% confidence that the true mean AnalisisDatosNativ.Au for grades ranging the cutoff grade and 30 g/t Au is somewhere between 4.5889 and 10.6728, while the true standard deviation is somewhere between 5.59895 and 10.1053.

The silver analysis was defined as sub-product of Au, so Ag values analyzed were between cutoff grade (2 g/t Au) and extreme values capped (>30 g/t Au).

95.0% confidence interval for mean: 87.295 +/- 37.6206 [49.6744, 124.916]
95.0% confidence interval for standard deviation: [69.244, 124.976]

Finally, it can be stated with 95.0% confidence that the true mean NativAg is somewhere between 49.6744 and 124.916, while the true standard deviation is somewhere between 69.244 and 124.976.

In both cases, for Au and Ag the true standard deviation reflects the significant quantity of information and variation of data, in simple words, the heterogeneity of mineral deposit, these atypical values that affect the standard deviation were reduced after of removing the extreme values.

Figure 14.21. Histogram (CF for Ag) of Natividad Database with Au extreme values capped. Source: Candelaria Mining Corp. (2018)

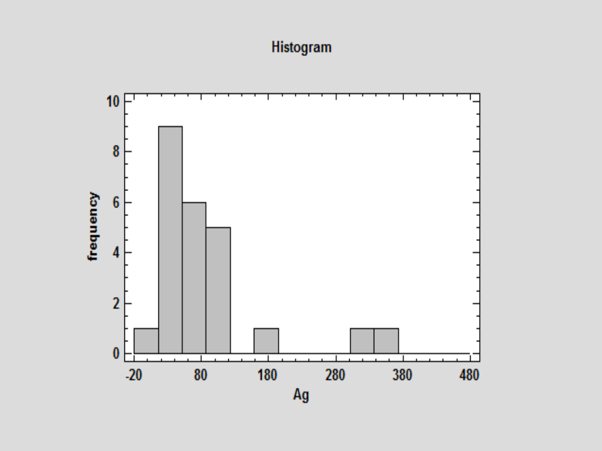
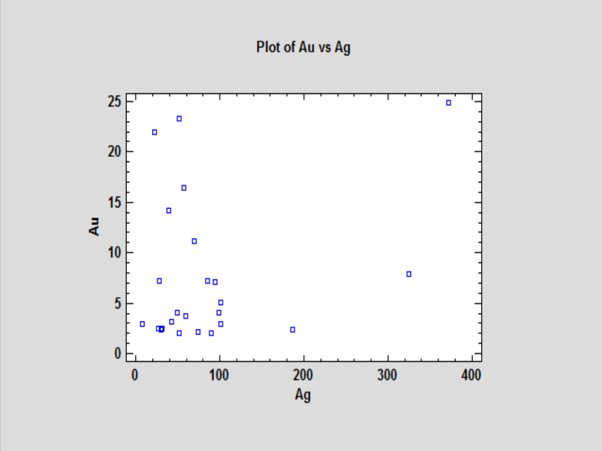


Figure 14.22. The null correlation for Au/Ag of Natividad Database. Source: Candelaria Mining Corp. (2018)



14.7 Composites.

The composites were defined by drill hole assay sample lengths within the range from 0.03m to 1.5m; and, chip assay sample lengths within the defined veins range from 0.25 m to 1.7 m. A minimum length of 1.0 m was selected for compositing to generate single intercept composites across the width of the vein. A minimum grade of 3.0 AuEQ was selected for compositing.

Length-weighted composites were calculated within the defined vein. All intervals were sampled systematically avoiding missing sample intervals. The compositing process started at the first point of intersection between the drill hole and the vein intersected and halted on exit from the vein.

Target of Geosoft system provides the ability to create a composite database from an input From-To assay database. The composite database includes all the selected drill holes from the input database and the From-To interceptions and all the assay channels from the database as seen in Table 13.

Table 14.2 – Selected composite database, the minimal grade was 3.0 g/t AuEQ.

Hole_ID	DH_East	DH_North	DH_RL	Length	Au_ppm	Ag_ppm	Aueq_ppm	Aueq_ppm_Labels
CA16PI018	232384.28	2468555.51	2343.02	1.8	2.87	71.12	3.75	1.8m @ 3.75 Aueq_ppm
CA16PI021	232208.04	2468270.20	2313.65	4.6	3.62	22.09	3.89	4.6m @ 3.89 Aueq_ppm
CA16PI022	232133.55	2468177.17	2330.37	1.6	3.36	14.54	3.54	1.6m @ 3.54 Aueq_ppm
GR-03	232525.27	2468774.83	2430.00	1.4	3.31	19.27	3.55	1.4m @ 3.55 Aueq_ppm
GR-07	232504.27	2468764.09	2410.00	1.0	5.36	71.00	6.24	1.0m @ 6.24 Aueq_ppm
GR-09	232514.97	2468788.06	2405.00	1.0	4.19	43.80	4.73	1.0m @ 4.73 Aueq_ppm
PE-06	232271.57	2468259.82	2392.37	2.9	2.00	151.56	3.89	2.9m @ 3.89 Aueq_ppm
PE-08A	232269.36	2468257.78	2392.37	2.8	3.18	59.55	3.92	2.8m @ 3.92 Aueq_ppm
PE-14	232267.42	2468251.57	2392.37	1.0	2.69	99.65	3.93	0.9m @ 3.93 Aueq_ppm
PE-16	232264.44	2468251.52	2392.37	1.9	4.23	48.64	4.83	1.9m @ 4.83 Aueq_ppm
PE-18	232264.60	2468248.75	2392.37	1.6	3.25	37.95	3.72	1.6m @ 3.72 Aueq_ppm
PE-21	232262.97	2468246.21	2392.37	1.8	3.68	34.77	4.11	1.8m @ 4.11 Aueq_ppm
PE-25	232250.83	2468233.15	2392.37	1.8	2.95	65.67	3.77	1.8m @ 3.77 Aueq_ppm
PE-27	232250.51	2468230.65	2392.37	3.1	3.22	49.58	3.84	3.0m @ 3.84 Aueq_ppm
PE-28	232248.98	2468230.80	2392.37	1.5	3.07	78.72	4.04	1.5m @ 4.04 Aueq_ppm
PE-29	232249.59	2468228.67	2392.37	2.2	3.28	42.47	3.81	2.2m @ 3.81 Aueq_ppm
PE-30	232248.27	2468228.59	2392.37	4.0	5.52	33.94	5.94	4.0m @ 5.94 Aueq_ppm
PE-31	232247.97	2468227.48	2392.37	1.3	3.78	23.64	4.07	1.3m @ 4.07 Aueq_ppm
PE-34	232246.23	2468224.99	2392.37	2.3	3.45	43.64	3.99	2.3m @ 3.99 Aueq_ppm
PE-36	232243.95	2468224.49	2392.37	0.9	3.31	61.11	4.07	0.9m @ 4.07 Aueq_ppm
PE-37	232243.80	2468223.21	2392.37	2.1	3.70	6.99	3.79	2.1m @ 3.79 Aueq_ppm
PE-38	232243.02	2468222.59	2392.37	3.5	4.82	37.64	5.29	3.5m @ 5.29 Aueq_ppm
PE-40	232241.68	2468221.11	2392.37	3.3	3.10	52.12	3.75	3.3m @ 3.75 Aueq_ppm
PE-41	232240.47	2468221.04	2392.37	1.2	3.20	31.04	3.59	1.2m @ 3.59 Aueq_ppm
PE-44	232239.50	2468218.41	2392.37	3.2	3.95	20.55	4.20	3.2m @ 4.20 Aueq_ppm
PE-45	232239.97	2468216.61	2392.37	1.1	3.38	50.28	4.01	1.1m @ 4.01 Aueq_ppm
PE-52	232235.59	2468211.89	2392.37	1.3	3.35	19.98	3.60	1.3m @ 3.60 Aueq_ppm
PE-54	232234.62	2468210.34	2392.37	2.3	3.25	36.25	3.70	2.3m @ 3.70 Aueq_ppm
PE-55	232234.15	2468209.45	2392.37	1.6	3.76	41.59	4.28	1.6m @ 4.28 Aueq_ppm
PE-56	232233.26	2468209.19	2392.37	1.1	3.22	41.48	3.74	1.1m @ 3.74 Aueq_ppm
PE-58	232233.09	2468207.20	2392.37	1.2	2.64	71.73	3.54	1.2m @ 3.54 Aueq_ppm
PE-59	232232.50	2468206.51	2392.37	1.2	3.24	31.72	3.63	1.2m @ 3.63 Aueq_ppm
PE-61	232231.69	2468204.64	2392.37	1.0	3.47	44.24	4.02	1.0m @ 4.02 Aueq_ppm
PE-66	232228.92	2468201.55	2392.37	2.4	3.16	49.98	3.78	2.4m @ 3.78 Aueq_ppm
PE-67	232228.72	2468201.60	2392.37	3.1	3.05	65.05	3.86	3.1m @ 3.86 Aueq_ppm
PE-68	232227.82	2468201.02	2392.37	2.9	4.80	96.69	6.00	2.8m @ 6.00 Aueq_ppm
PE-69	232226.78	2468200.76	2392.37	1.1	4.05	52.22	4.70	1.1m @ 4.70 Aueq_ppm
PE-70	232225.43	2468200.42	2392.37	1.7	2.95	44.41	3.51	1.7m @ 3.51 Aueq_ppm
PE-71	232225.28	2468199.38	2392.37	2.8	4.87	54.64	5.54	2.8m @ 5.54 Aueq_ppm
PE-72	232224.45	2468198.80	2392.37	2.7	4.23	48.91	4.83	2.7m @ 4.83 Aueq_ppm
PE-73	232223.67	2468198.19	2392.37	1.7	3.11	47.13	3.70	1.7m @ 3.70 Aueq_ppm
PE-74	232223.30	2468197.28	2392.37	1.5	2.97	45.40	3.54	1.5m @ 3.54 Aueq_ppm

PE-75	232222.28	2468196.74	2392.37	2.0	2.88	60.33	3.63	2.0m @ 3.63 Aueq_ppm
PE-76	232221.72	2468196.23	2392.37	2.1	3.45	95.20	4.64	2.1m @ 4.64 Aueq_ppm
PE-81	232217.99	2468192.40	2392.37	1.1	3.25	107.62	4.58	1.1m @ 4.58 Aueq_ppm
PE-87	232212.38	2468188.92	2392.37	1.2	3.51	67.63	4.35	1.2m @ 4.35 Aueq_ppm
PE-88	232211.97	2468188.30	2392.37	0.9	3.91	72.87	4.82	0.9m @ 4.82 Aueq_ppm
PE-95	232205.61	2468184.82	2392.37	1.9	3.71	22.84	4.00	1.9m @ 4.00 Aueq_ppm
PE-96	232335.13	2468348.12	2423.50	1.4	5.55	64.50	6.36	1.4m @ 6.36 Aueq_ppm
PE-97	232335.32	2468349.11	2423.50	1.4	5.66	99.71	6.90	1.4m @ 6.90 Aueq_ppm
PE-98	232335.51	2468350.09	2423.50	1.4	3.57	46.21	4.14	1.4m @ 4.14 Aueq_ppm
PE-99	232335.75	2468351.05	2423.50	1.5	3.78	52.07	4.43	1.5m @ 4.43 Aueq_ppm
PE-100	232336.03	2468351.99	2423.50	1.7	4.43	70.15	5.31	1.7m @ 5.31 Aueq_ppm
PE-102	232336.28	2468354.01	2423.50	1.4	3.64	37.57	4.11	1.4m @ 4.11 Aueq_ppm
PE-103	232336.38	2468355.04	2423.50	1.2	3.73	55.25	4.41	1.2m @ 4.41 Aueq_ppm
PE-104	232336.70	2468355.96	2423.50	1.5	3.23	33.33	3.65	1.5m @ 3.65 Aueq_ppm
PE-106	232336.99	2468357.96	2423.50	1.3	3.33	31.54	3.72	1.3m @ 3.72 Aueq_ppm
PE-109	232337.71	2468361.91	2423.50	1.2	4.09	39.28	4.58	1.2m @ 4.58 Aueq_ppm
PE-113	232344.55	2468391.22	2424.00	2.2	3.34	61.92	4.11	2.2m @ 4.11 Aueq_ppm
PE-116	232346.90	2468393.39	2424.00	1.2	5.26	58.12	5.98	1.2m @ 5.98 Aueq_ppm
PE-118	232353.63	2468426.04	2423.80	2.3	3.22	29.40	3.59	2.3m @ 3.59 Aueq_ppm
PE-119	232354.36	2468426.85	2423.80	1.0	3.96	35.06	4.40	1.0m @ 4.40 Aueq_ppm
PE-120	232353.81	2468428.07	2423.80	1.8	3.03	38.48	3.51	1.8m @ 3.51 Aueq_ppm
PE-122	232354.27	2468430.01	2423.80	1.9	3.38	50.80	4.01	1.9m @ 4.01 Aueq_ppm
PE-123	232354.21	2468431.07	2423.80	1.4	2.95	48.83	3.55	1.4m @ 3.55 Aueq_ppm
CA16PI023	232540.92	2468965.81	2344.28	2.0	2.10	13.54	2.27	2.0m @ 2.27 Aueq_ppm
CA16PI025	232626.03	2469076.92	2350.30	5.2	2.83	8.57	2.93	5.2m @ 2.93 Aueq_ppm
CA16PI029	232521.73	2468924.56	2336.88	2.5	2.11	15.43	2.30	2.5m @ 2.30 Aueq_ppm
CA16PI031	232570.42	2469117.52	2414.28	2.7	6.06	8.98	6.17	2.6m @ 6.17 Aueq_ppm
CA16PI016	233085.91	2469687.09	2392.31	1.4	3.73	24.11	4.03	1.4m @ 4.03 Aueq_ppm
RDD05A07	233226.27	2470058.06	2359.90	6.0	5.16	19.00	5.40	6.0m @ 5.40 Aueq_ppm
SJ-08	233157.68	2469713.73	2458.00	1.1	4.91	134.22	6.58	1.1m @ 6.58 Aueq_ppm
SJ-09	233157.11	2469712.42	2458.00	2.9	5.16	40.20	5.66	2.9m @ 5.66 Aueq_ppm
SJ-10	233156.76	2469711.75	2458.00	2.0	4.12	73.03	5.02	1.9m @ 5.02 Aueq_ppm
SJ-11	233153.20	2469707.59	2458.00	1.8	6.17	56.80	6.87	1.8m @ 6.87 Aueq_ppm
SJ-12	233151.77	2469711.73	2455.80	1.4	3.55	57.24	4.26	1.4m @ 4.26 Aueq_ppm
SJ-14	233141.95	2469706.12	2451.30	1.9	4.70	50.95	5.34	1.9m @ 5.34 Aueq_ppm
SJ-15	233139.75	2469703.23	2451.30	2.1	5.60	48.04	6.19	2.0m @ 6.19 Aueq_ppm
SJ-16	233139.03	2469702.50	2451.30	2.4	4.42	39.55	4.91	2.4m @ 4.91 Aueq_ppm
SJ-17	233138.25	2469701.80	2451.30	1.4	4.19	36.89	4.65	1.4m @ 4.65 Aueq_ppm
SF-04	233114.84	2469664.50	2458.00	1.6	5.63	33.91	6.05	1.6m @ 6.05 Aueq_ppm
SF-09	233112.16	2469656.11	2458.00	1.1	3.35	45.23	3.91	1.1m @ 3.91 Aueq_ppm
SF-15	233108.37	2469651.13	2458.00	2.0	3.90	40.86	4.41	2.0m @ 4.41 Aueq_ppm
SF-16	233108.15	2469650.01	2458.00	1.1	4.01	29.97	4.38	1.0m @ 4.38 Aueq_ppm
SF-18	233102.19	2469644.52	2458.00	2.2	3.50	25.93	3.82	2.2m @ 3.82 Aueq_ppm
SF-19	233101.17	2469643.66	2458.00	2.8	18.20	42.97	18.73	2.8m @ 18.73 Aueq_ppm
SF-20	233100.72	2469642.93	2458.00	1.1	6.57	34.87	7.01	1.1m @ 7.01 Aueq_ppm

SF-21	233099.50	2469642.20	2458.00	1.7	6.84	45.40	7.41	1.7m @ 7.41 Aueq_ppm
SF-22	233095.86	2469637.66	2458.00	2.6	6.58	47.90	7.17	2.6m @ 7.17 Aueq_ppm
SMI-05	233229.11	2469907.61	2455.00	2.1	3.25	42.14	3.77	2.1m @ 3.77 Aueq_ppm
SMI-08	233240.21	2469918.05	2458.00	1.2	3.82	27.55	4.17	1.1m @ 4.17 Aueq_ppm
SMI-12	233232.41	2469899.87	2461.00	1.8	3.23	25.70	3.55	1.8m @ 3.55 Aueq_ppm
SMI-24	233245.80	2470034.83	2398.00	1.9	7.66	31.83	8.05	1.9m @ 8.05 Aueq_ppm
SMI-42	233248.36	2470011.27	2435.00	1.4	5.06	98.88	6.28	1.4m @ 6.28 Aueq_ppm
CA16PI001	232980.19	2469445.40	2450.87	2.0	5.88	28.01	6.31	2.0m @ 6.31 Aueq_ppm
NA-01	233025.29	2469512.14	2473.10	1.3	16.90	350.09	22.29	1.3m @ 22.29 Aueq_ppm
NA-02	233026.26	2469516.05	2473.10	1.8	1.48	102.13	3.05	1.8m @ 3.05 Aueq_ppm
NA-03	233026.97	2469519.71	2473.10	2.4	12.53	31.24	13.02	2.4m @ 13.02 Aueq_ppm
NA-07	233032.64	2469531.05	2473.10	2.0	7.74	21.27	8.07	2.0m @ 8.07 Aueq_ppm
NA-08	233033.75	2469534.17	2473.10	2.1	12.36	52.18	13.17	2.0m @ 13.17 Aueq_ppm
NA-09	233036.27	2469536.55	2473.10	3.8	10.15	86.49	11.48	3.8m @ 11.48 Aueq_ppm
NA-10	233038.78	2469537.14	2473.10	1.7	38.48	36.91	39.05	1.7m @ 39.05 Aueq_ppm
NA-12	233044.91	2469538.34	2473.10	1.5	11.53	40.63	12.16	1.5m @ 12.16 Aueq_ppm
NA-15	233054.32	2469540.74	2473.10	1.6	9.30	81.25	10.55	1.6m @ 10.55 Aueq_ppm
NA-16	233057.06	2469541.83	2473.10	1.3	2.46	41.55	3.10	1.3m @ 3.10 Aueq_ppm
NA-18	233061.70	2469543.26	2473.10	1.0	2.10	67.93	3.15	1.0m @ 3.15 Aueq_ppm
NA-21	233071.09	2469547.57	2473.10	1.0	2.94	95.31	4.41	1.0m @ 4.41 Aueq_ppm

Source: Candelaria Mining Corp. (2018)

14.8 Cut-off Grade

The cut-off grade was estimated from before-tax cash flow described in Section 22, using the following premises:

- Gold Price: US $1,250/Oz. (Oz: Troy Ounce)
- Silver Price: US $17.50/Oz. (Oz: Troy Ounce)
- Production Rates: 1st Year = 200 tpd; 2nd Year = 300 tpd; 3rd Year = 300 tpd and from 4th Year to LOM (Life Of Mine) = 400 tpd. (tpd: tons per day)
- Average operating cost for the Pinos Project at 200 ton per day is estimated to be US $82.36 / t ore processed; at a capacity of 300 tons per day US $79.87 / ton and for 400 tons per day in US $77.37 / t.
- Processing Recovery: 90% for Gold and 80% for Silver.
- Specific Gravity: 2.69 g/cm^3.

The resultant Cut-off Grade is 2.2 g/t AuEq.
Gold Equivalent Formula: AuEq = Au / (Ag + F); where F = (Au Price X Processing Recovery) / (Ag Price X Processing Recovery).
Adequacy and discussion of parameters above mentioned are given in Section 22.

14.9 Geostatistics

During the process JAO and Candelaria's Héctor Gonzalez performed geostatistical test through Inverse Distance Squared (ID2), Nearest Neighbor (NN) and Ordinary Krigging (OK), however, resultant models of ID2 and NN were not correlated with Pinos geological model, only the Ordinary Krigging showed similitude with the geological model, then JAO and Héctor González of Candelaria Mining decided the use of Krigging estimation techniques.

Krigging provides the best estimate of the mean value of a regionalized variable. It provides the Best Linear Unbiased Estimator (BLUE) of the grade. During krigging, each sample is assigned a sample weight. The weighted samples are then linearly combined to give the best estimate. It is the best estimate because the procedure minimizes the expected error between the estimated grade and the true grade. Sample weights are calculated such that the variance of the estimate is a minimum.

Variance can be calculated using the sample positions and the variogram function. Estimated variance is extremely useful because it allows the user to explore the risk of the estimate. Geostatistics is becoming a more widely accepted and applied method for calculating resources; however, its use is much more widespread for sedimentary, lateritic, disseminated and porphyry-type deposits than for vein deposits, it is generally believed that because of the often-erratic nature of vein mineralization.

Vein mineralization in Pinos is characterized by:

1) An erratic grade distribution along drifts, stopes, raises and drill data, where a high-grade sample of 20 g/t Au is separated only 0.5 m of another low-grade sample of 0.5 g/t Au and one-meter ahead the sample yield 4.5 g/t Au, so, the fusion of several tools like the compositing, cumulative frequency, kriging, and geometric/physical grade distribution establishes the weight average of block.

2) The presence of outliers or extreme values, in which a small number of higher grade samples fouls the grade estimation process. The use of probabilistic and geostatistical tools identify the outliers for capping.

3) Veins have more structural controls than disseminated; thus, the ore along epithermal veins is limited by non-continuous ore shoots (i.e., Au-enriched zones defined by mineralogical contacts) and the hangingwall and footwall (geological contact). The understanding of ore shoot distribution along the strike direction, average lengths and plunge; and, the use of specialized software that discriminates the block models beyond the geological contact of hangingwall and footwall reduce overestimations of mineral deposit.

When using non-geostatistical grade estimating methods such as arithmetic or graphical methods, those extreme values or ‘outliers’ can cause the grade of a point or block to be overestimated.

Sample grade is a regionalized variable because it is distributed throughout space. The variability of the grade throughout that space is described by a function called the variogram, through of krigging, samples and the variogram are used to estimate the mean grade of a point, area, or volume. Thus, the variography is the measure of the variability of samples with distance in a particular direction or the value of one sample with other samples at similar distances in a given direction or envelope.

Parameters resulting of variographic analysis were used to estimate values for each block of the block modeling, however the main difference with geometrical estimating methods is related to the variography is selective, because this analysis refused the blocks that did not meet minimum samples requirements, for example, in Pinos the drill hole CA16PI018 with high grade was not included into the Modeling due to remoteness with nearest sample pairs.

Mineral Resource Estimation was performed using standard Krigging interpolation techniques using Target Software licensed from Geosoft®. Mineral resources are based on the cut-off grade of 2.2 g/t AuEq.

Samples were divided into structural dominions as previously defined; they are San José de Peñitas database, San Carlos de Arandas database, and San Francisco database for Cinco Estrellas vein. Natividad's vein was modeled in a single database. The structural dominions have similar geological and statistical characteristics. Thus, sample data for variograms to be estimated have reliability. Table__ shows the variographic analysis.

Table 14.3 - Variographic analysis.

Area	Metal	Nugget	Sill	Range	Type
San José de Peñitas	AuEQ	0.0	1.6	8	Spherical
San Carlos de Arandas	AuEQ	0.0	0.7255	22	Spherical
San Francisco	AuEQ	0.0	9.5	16	Spherical
Natividad	AuEQ	0.0	300	3.8	Spherical

Source: Candelaria Mining Corp. (2018)

Pinos shows variograms with sill, these have stationary features and are characterized by their rapid increase in variability between the values of the variable as the distance between the locations increases, until its stabilization around the sill. The sill coincides with the finite variance of the variable, which, moreover, presents the average constant.

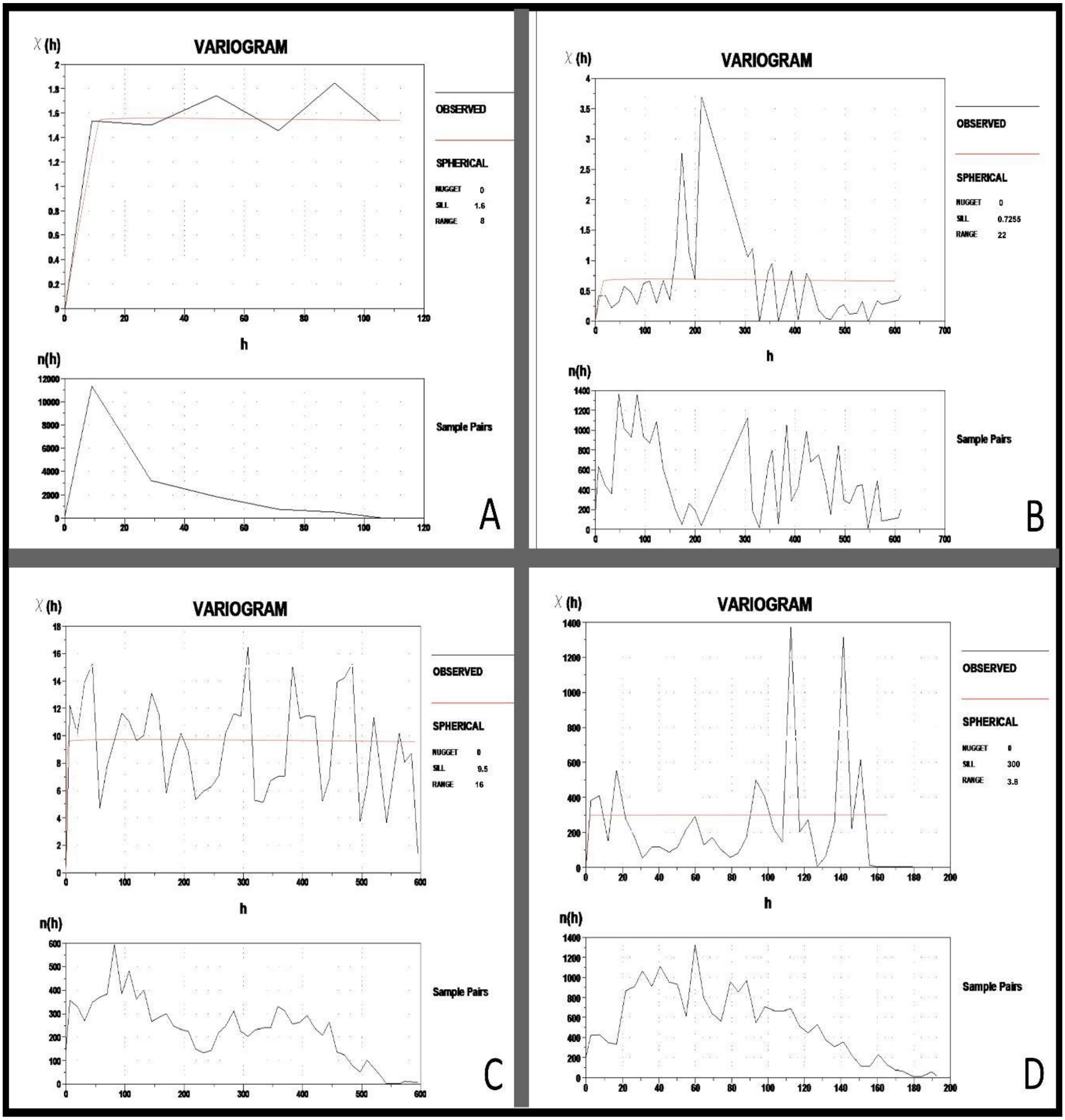
The interpretation of variograms between experimental and theoretical models are:

1. The variograms show different directions in the plane related to the anisotropy of the variable. This difference implies that the values of the variogram do not depend solely on the module of the vector h, as it would of isotropy, but also of its direction, summarizing it is related to heterogeneity of the AuEQ grades.

2. Usually, the variogram start from the origin of coordinates, it doesn´t show a particular jump or discontinuity for h = 0; it may be inferred that it is a minimal “nugget effect." This could mean that the variable (AuEQ) has not some degree of discontinuity for small distances, also could indicate a minimal variability by area due to similar geological and geostatistical features.

Parameters generated from the analysis of the variography of each structural dominion were used for grade estimation by krigging and search criteria. Refer to Figure 14.23.

Figure 14.23 Variograms plot of the Pinos Database. ***Cinco Estrellas Vein****: A, San José de Peñitas; B, San Carlos de Arandas; C, San Francisco.* ***Natividad Vein****: D, Natividad.*



Source: Candelaria Mining Corp. (2018)

14.10 Block Modeling

As defined previously the 2-D models created every 25 m were used for geological interpretations and plotting of AuEQ assays to align these with 3-D solid created with Target from Geosoft®.

1. Blocks were defined in function of structural and mineralogical features of the vein, as follow:

a) San José de Peñitas. The X-axis is equal to 2 m along the strike of the vein; Y-axis is equal to 8 m down-dip of the vein; and, Z axis is equal to the true thickness direction of the vein (perpendicular to the vein plane)

b) San Carlos de Arandas. The X-axis is equal to 1.5 m along the strike of the vein; Y-axis is equal to 6 m down-dip of the vein; and, Z axis is equal to the true thickness direction of the vein (perpendicular to the vein plane).

c) Junction and a cymoid loop of the San Carlos de Arandas with San Manuel vein. The X-axis is equal to 1.5 m along the strike of the vein; Y-axis is equal to 5 m down-dip of the vein; and, Z axis is equal to the true thickness direction of the vein (perpendicular to the vein plane).

d) San Francisco. The X-axis is equal to 1 m along the strike of the vein; Y-axis is equal to 3 m down-dip of the vein; and, Z axis is equal to the true thickness direction of the vein (perpendicular to the vein plane).

e) Natividad. The X-axis is equal to 3 m along the strike of the vein; Y-axis is equal to 1 m down-dip of the vein; and, Z axis is equal to the true thickness direction of the vein (perpendicular to the vein plane)

2. Gold and silver were converted to AuEQ as previously defined.

3. Mineral Resources are estimated at a cut-off grade of 2.2 g/t AuEQ.

4. Mineral Resources estimation by Krigging using Target of Geosoft®.

5. A minimum mining width of 1.0 m was used and measured specific gravity was 2.69 t/m3.

6. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

7. Peñitas high grades capped 10 g/t AuEQ. San Francisco high grades capped 20 g/t AuEQ. Natividad high grades capped 30 g/t Au.

8. Maximum search range was 150 m, and Estimation was realized in two dimensions, along strike, and down dip.

9. Anisotropy search ranges of 150 m along strike and 150 m along dip direction, while the minimum number of composites allowed for a block was 1 and the maximal was 5.

Next table shows the final estimated grade values through Univariate Distribution and checking with results of Krigging, finally engineers applying 10% mine dilution.

Table 14.4 - Final Au-Ag grades from Univariate Distribution and Kriging.

Univariate Distribution Analysis and Krigging Analysis			
Area	**Grade**	**Dilution 10%**	
	Au g/t EQ	**Au g/t**	**Ag g/t**
Peñitas	4.00	3.0	51.30
San Francisco	6.20	5.0	43.29
Arandas	3.2	2.6	28.98
Natividad	7.5	5.8	78.57

Source: Candelaria Mining Corp. (2018)

Block Modeling by ordinary krigging of these areas are shown in Figures 14.24 – 14.35.

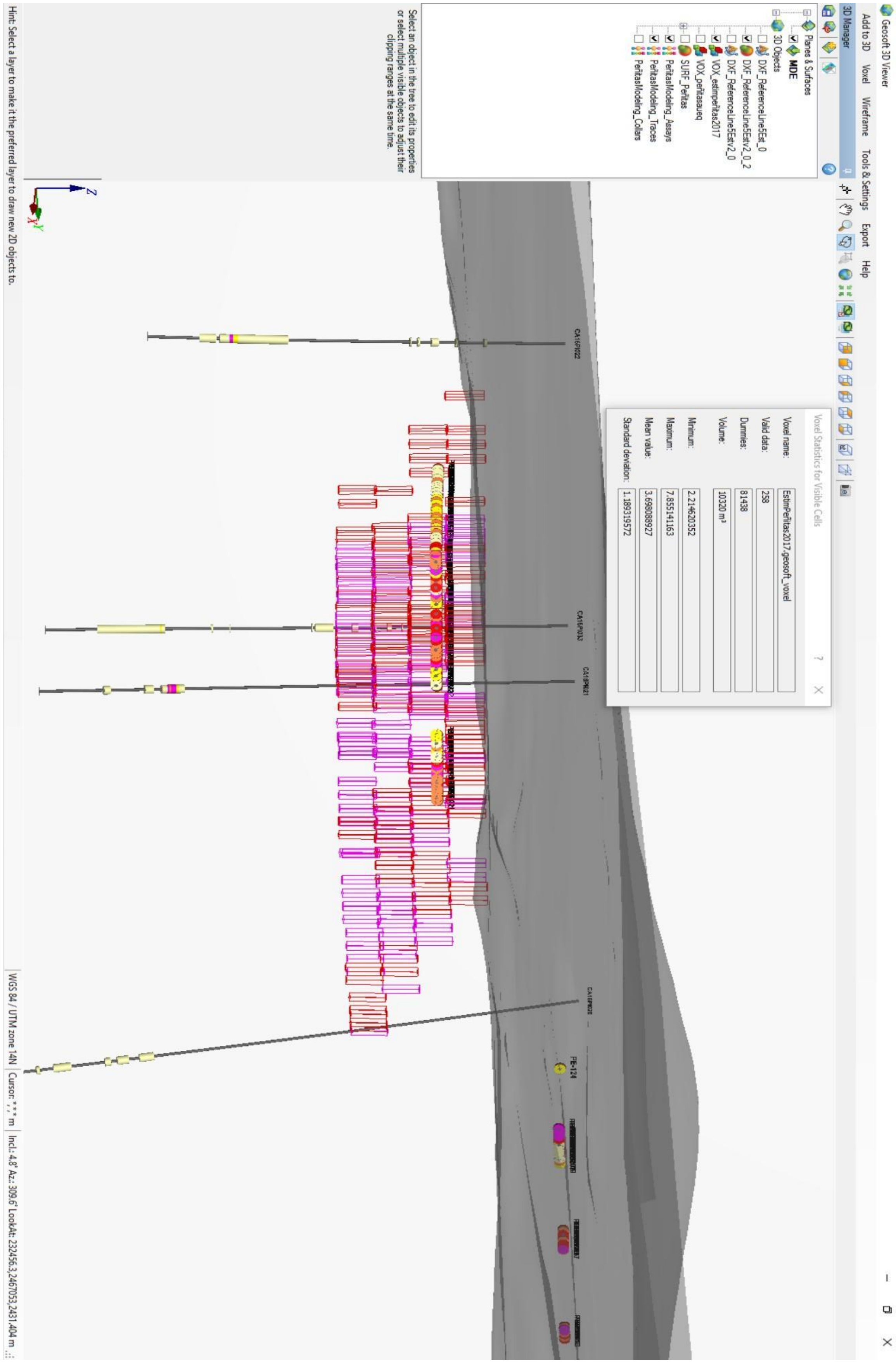


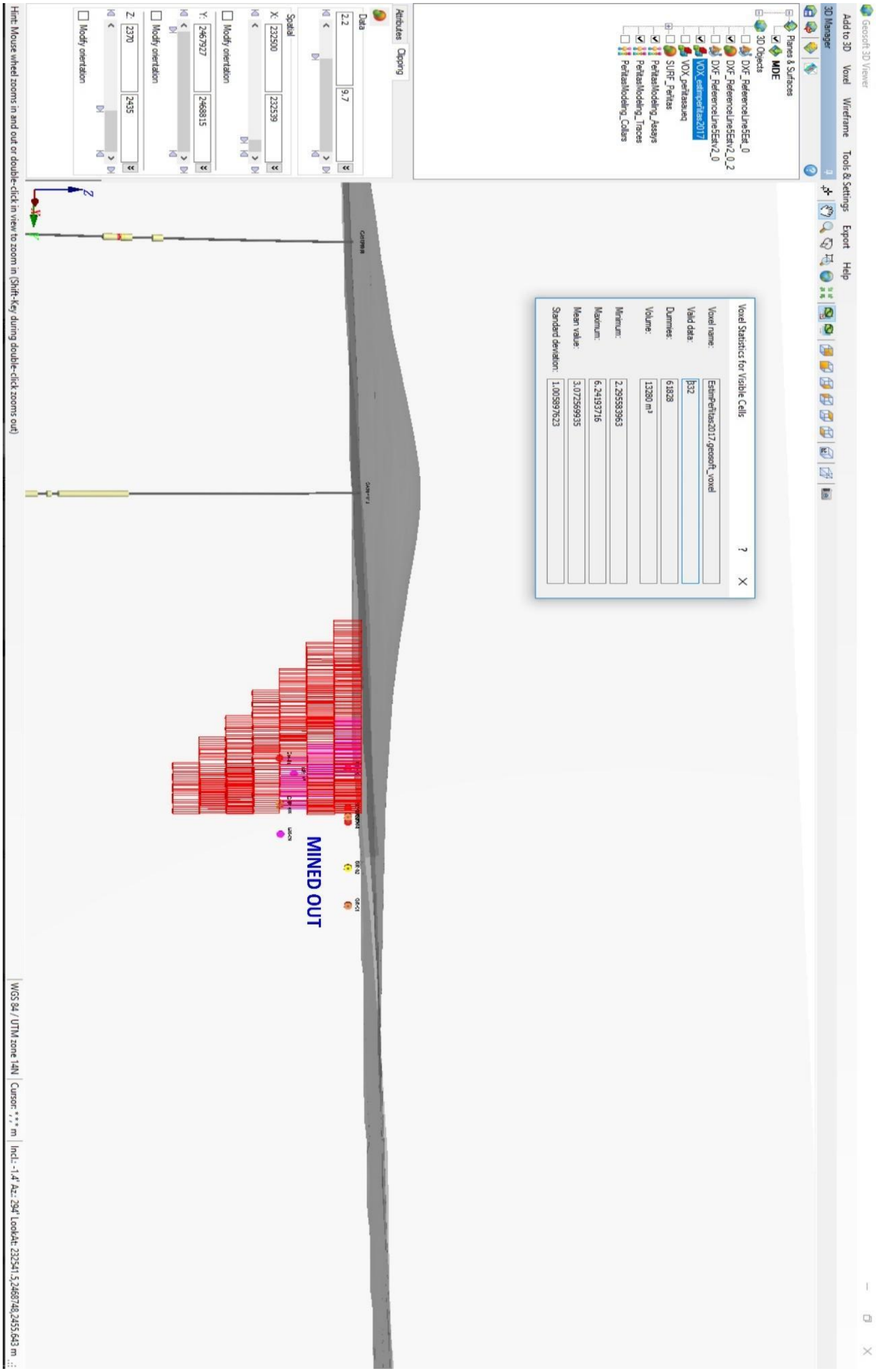
Figure 14.24. Cinco Estrellas Vein block modeling (2x8) with Indicated Resources at the San José de Peñitas old workings.

Source: JAO (2018)

Figure 14.25 Cinco Estrellas Vein block modeling (2x8) with Indicated Resources at the San José de Peñitas trenches.

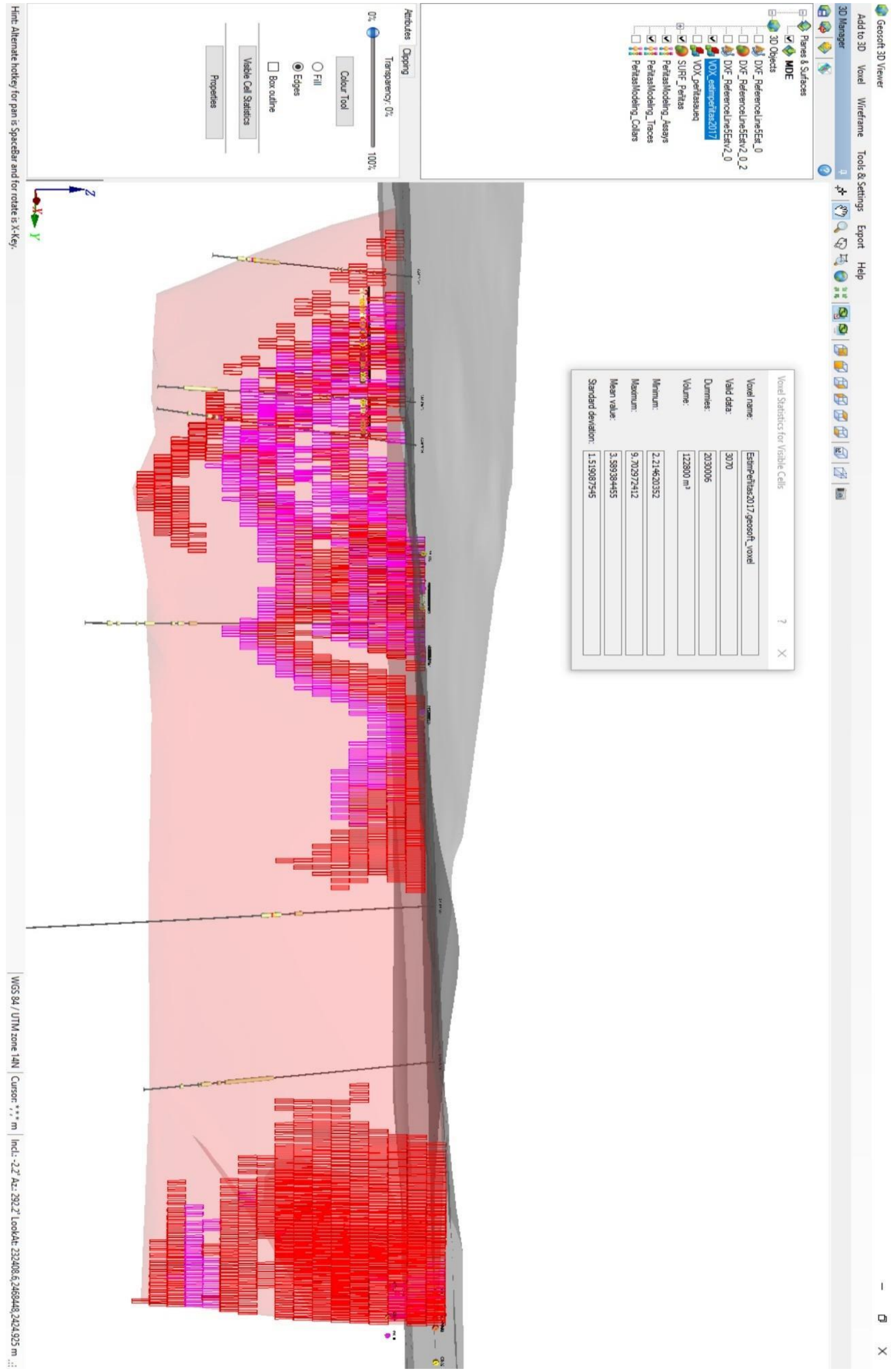
Source: JAO (2018)

Figure 14.26. Cinco Estrellas Vein block modeling (2x8) with Indicated Resources at the Griego old workings.



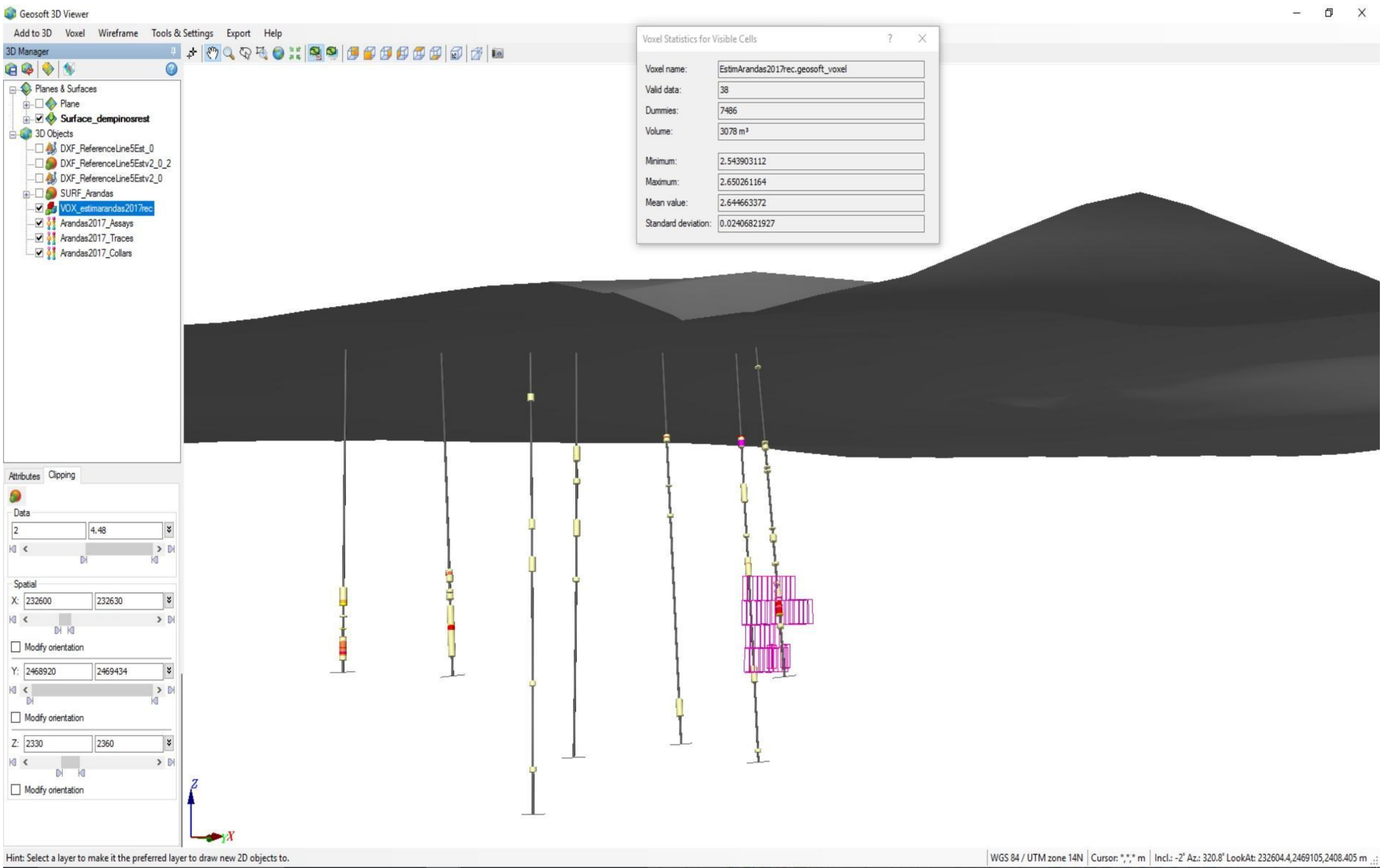
Source: JAO (2018)

Figure 14.27. Cinco Estrellas Vein block modeling (2x8) with Indicated and Inferred Resources at the San José de Peñitas.



Source: JAO (2018)

Figure 14.28. Cinco Estrellas Vein block modeling (1.5x6) with Indicated Resources at the San Carlos de Arandas workings.



Source: JAO (2018)

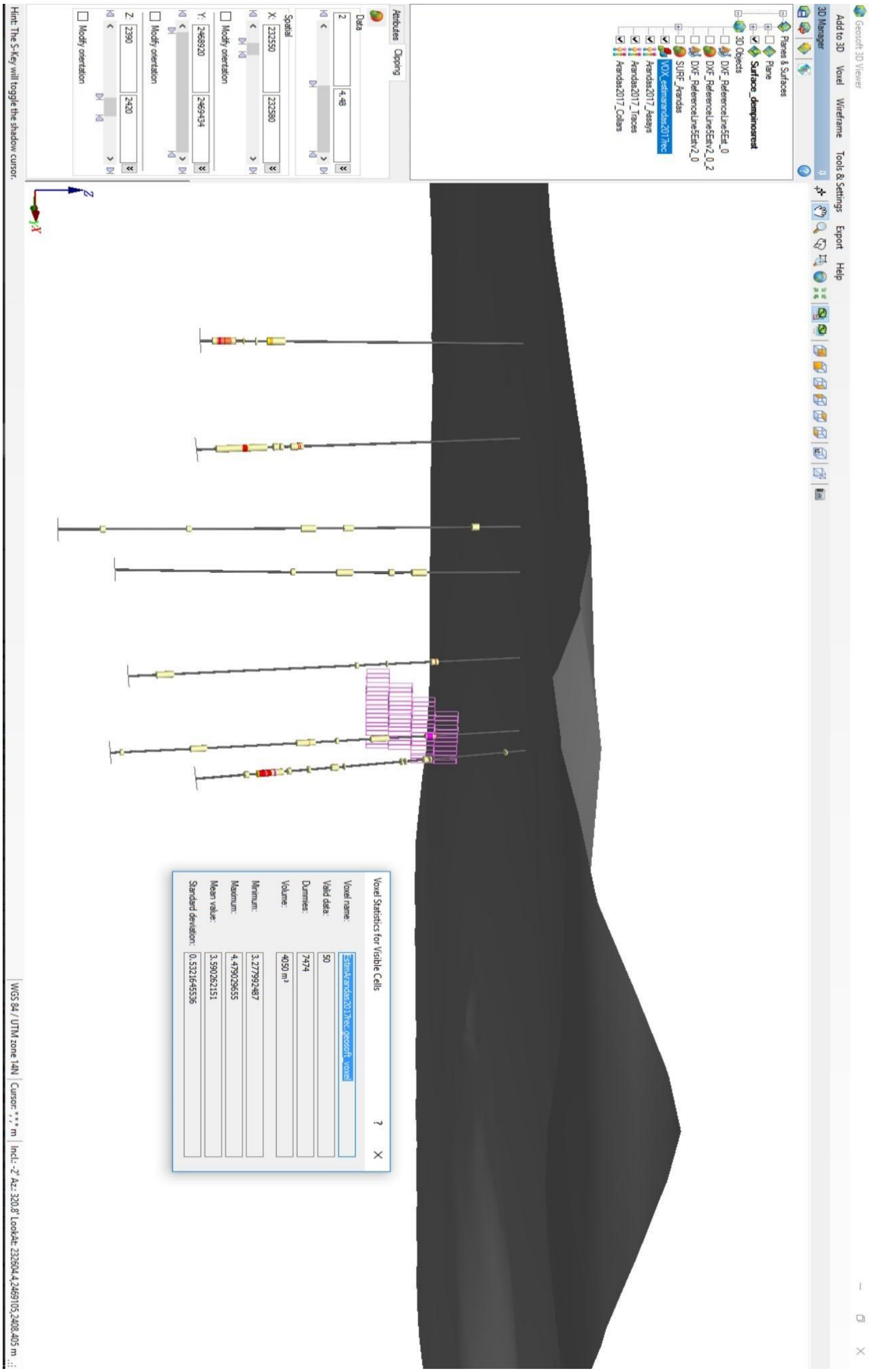
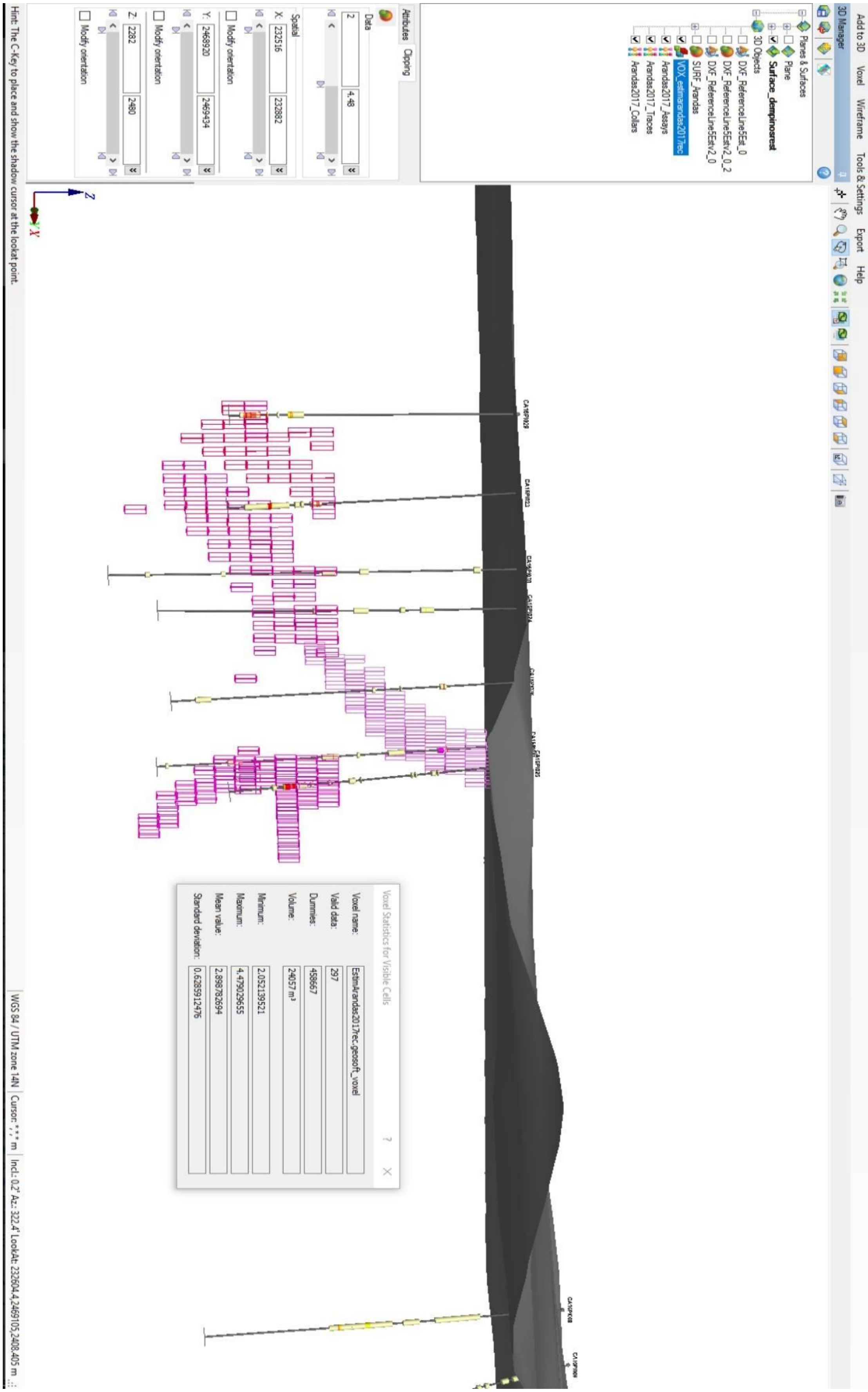


Figure 14.29. Cinco Estrellas Vein block modeling (1.5x5) with Indicated Resources at the San Manuel junction.

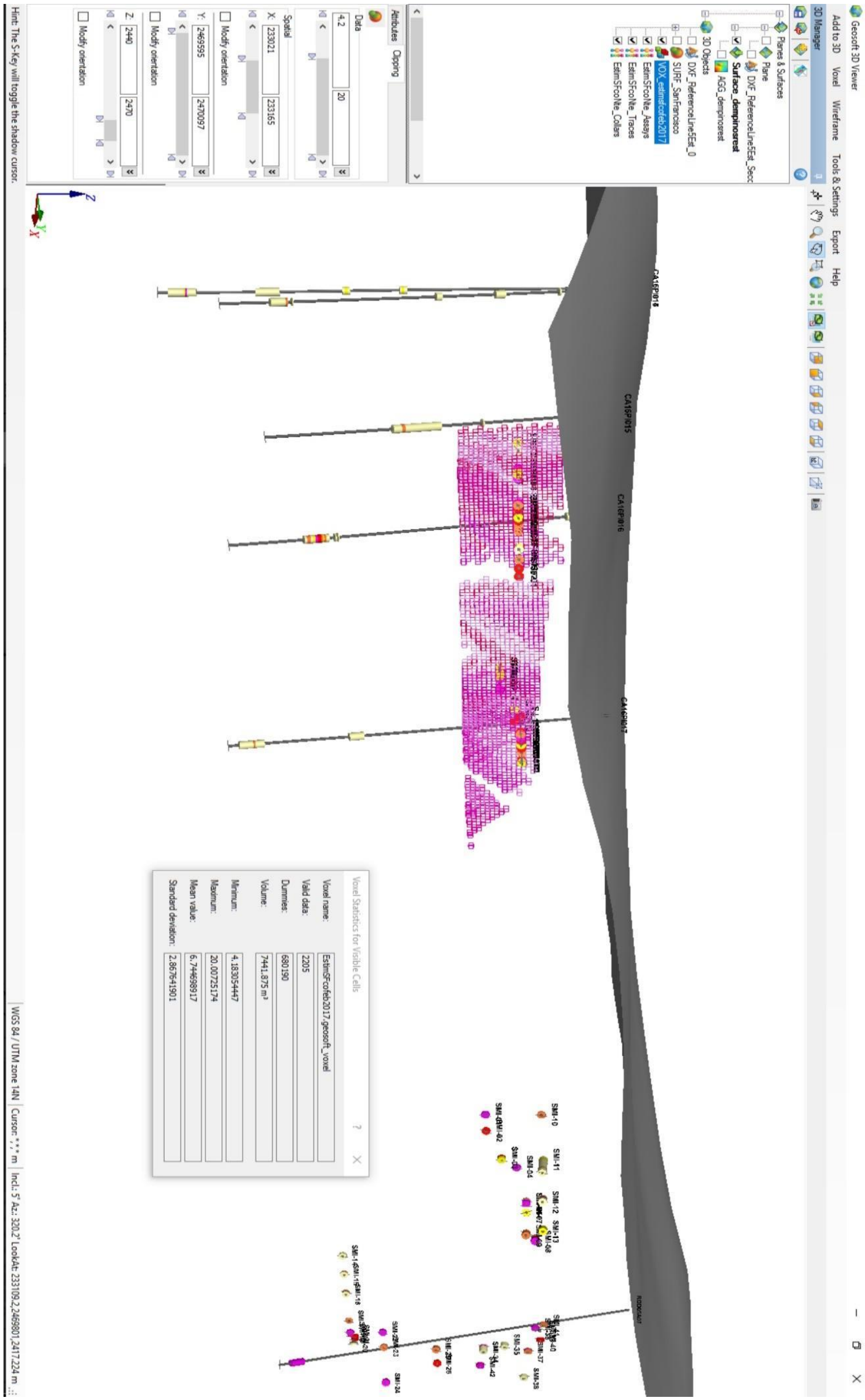
Source: JAO (2018)

Figure 14.30. Cinco Estrellas Vein block modeling (1.5x5) with Indicated and Inferred Resources at the San Carlos de Arandas.



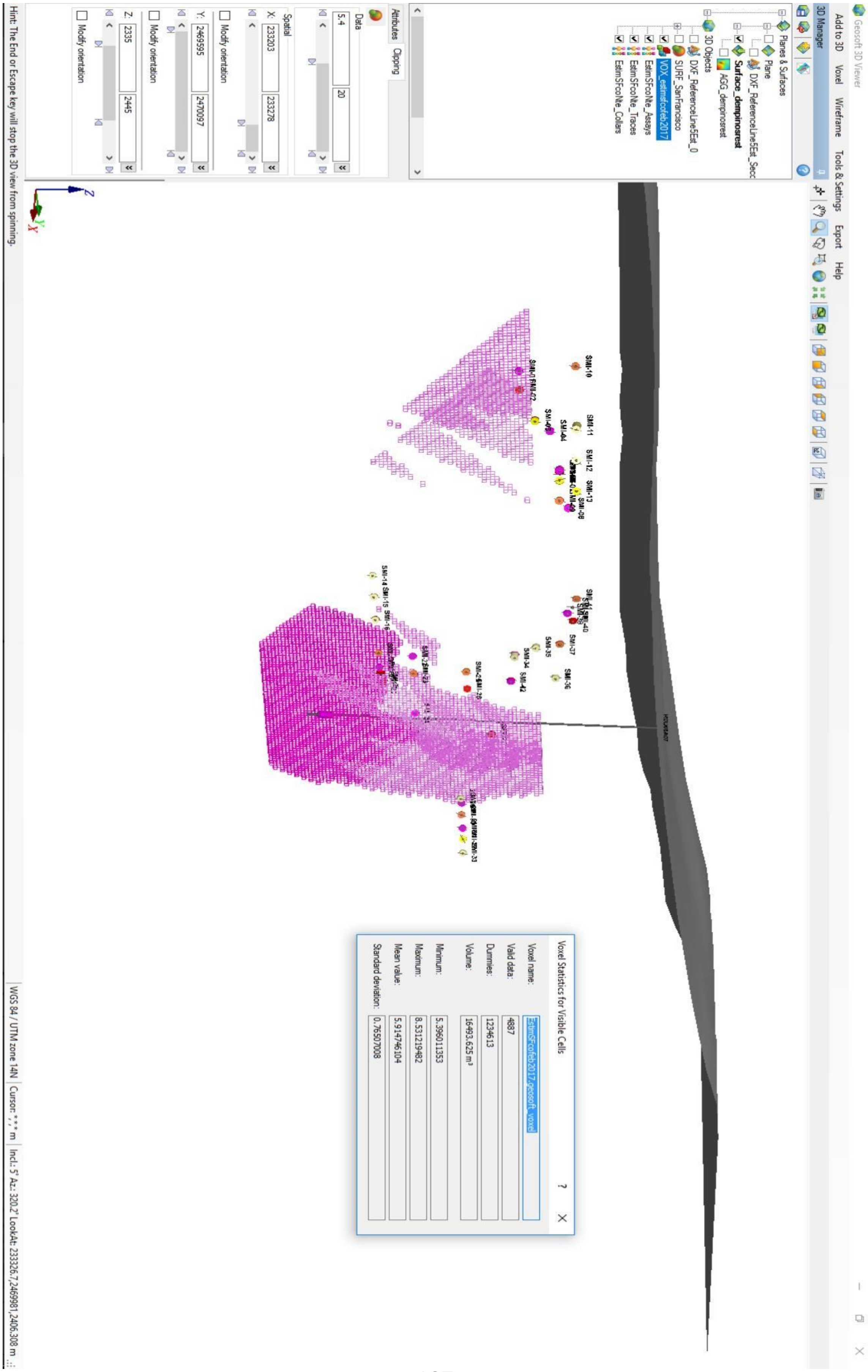
Source: JAO (2018)

Figure 14.31. Cinco Estrellas Vein block modeling (1x3) with Indicated Resources at the San Francisco old workings.



Source: JAO (2018)

Figure 14.32. Cinco Estrellas Vein block modeling (1x3) with Indicated Resources at the San Miguel old workings.



Source: JAO (2018)

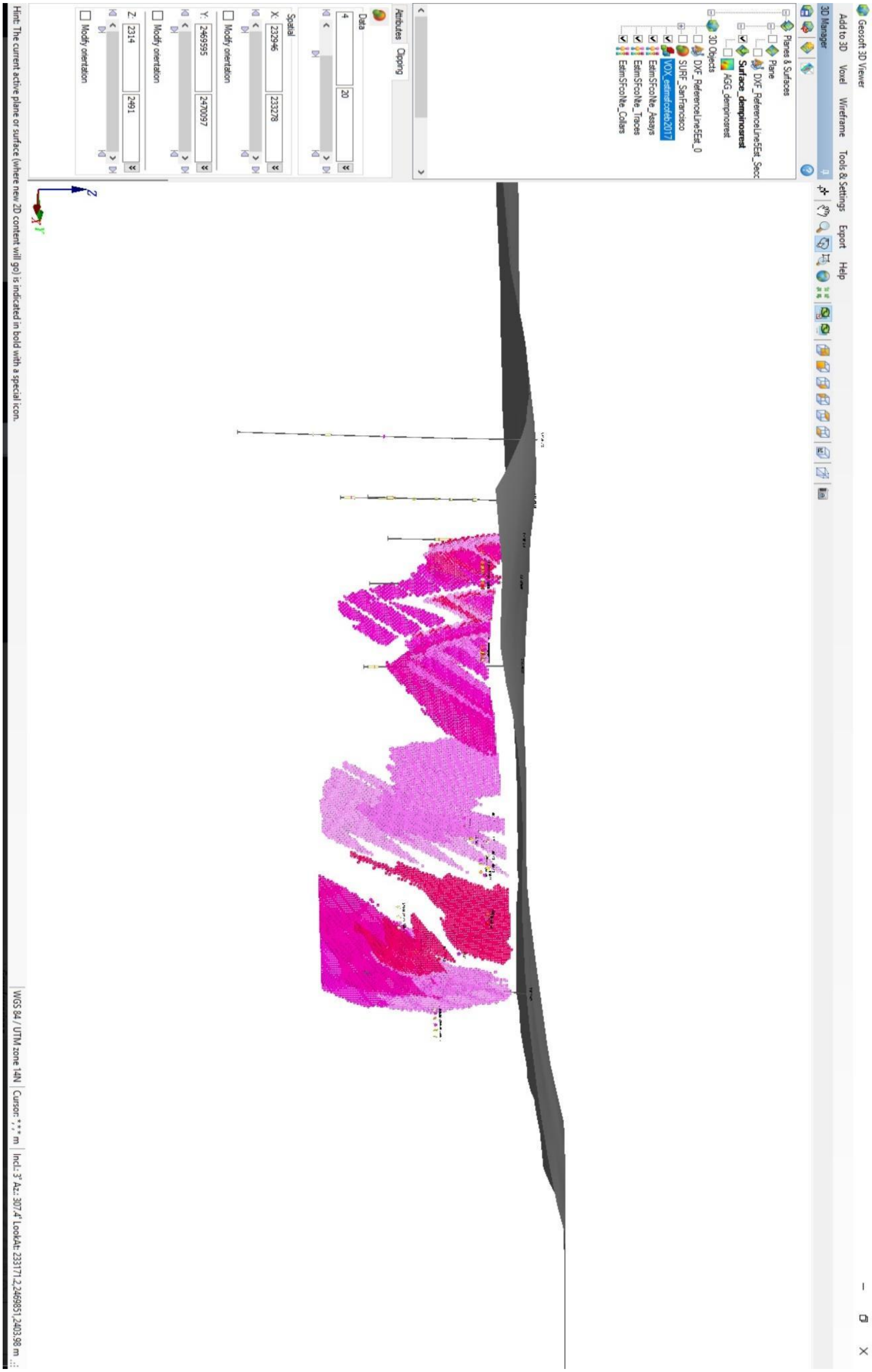
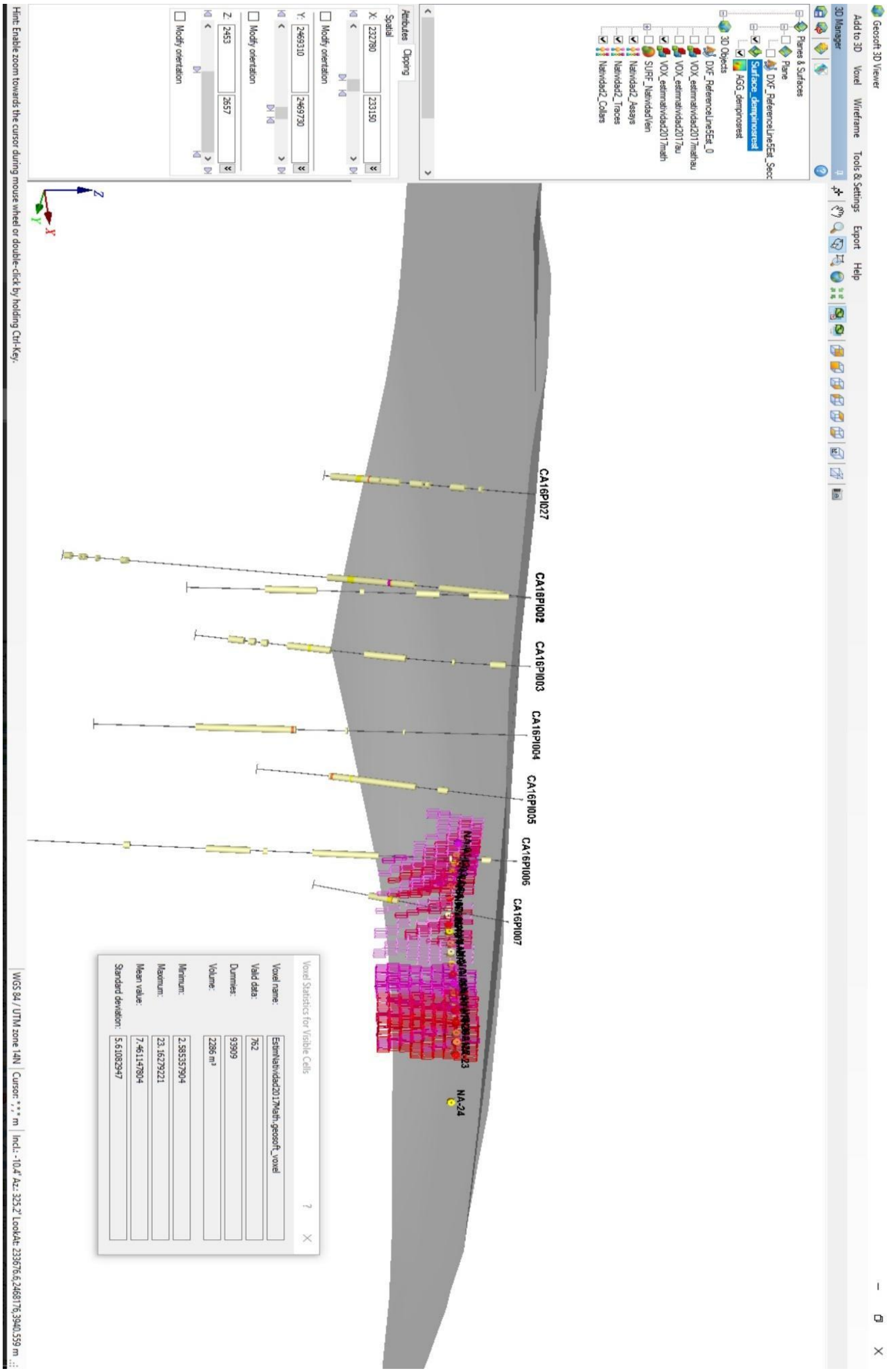


Figure 14.33. Cinco Estrellas Vein block modeling (1x3) with Indicated and Inferred Resources at the San Francisco.

Source: JAO (2018)

Figure 14.34. Natividad Vein block modeling (1x3) with Indicated Resources at the Natividad old workings.



Source: JAO (2018)

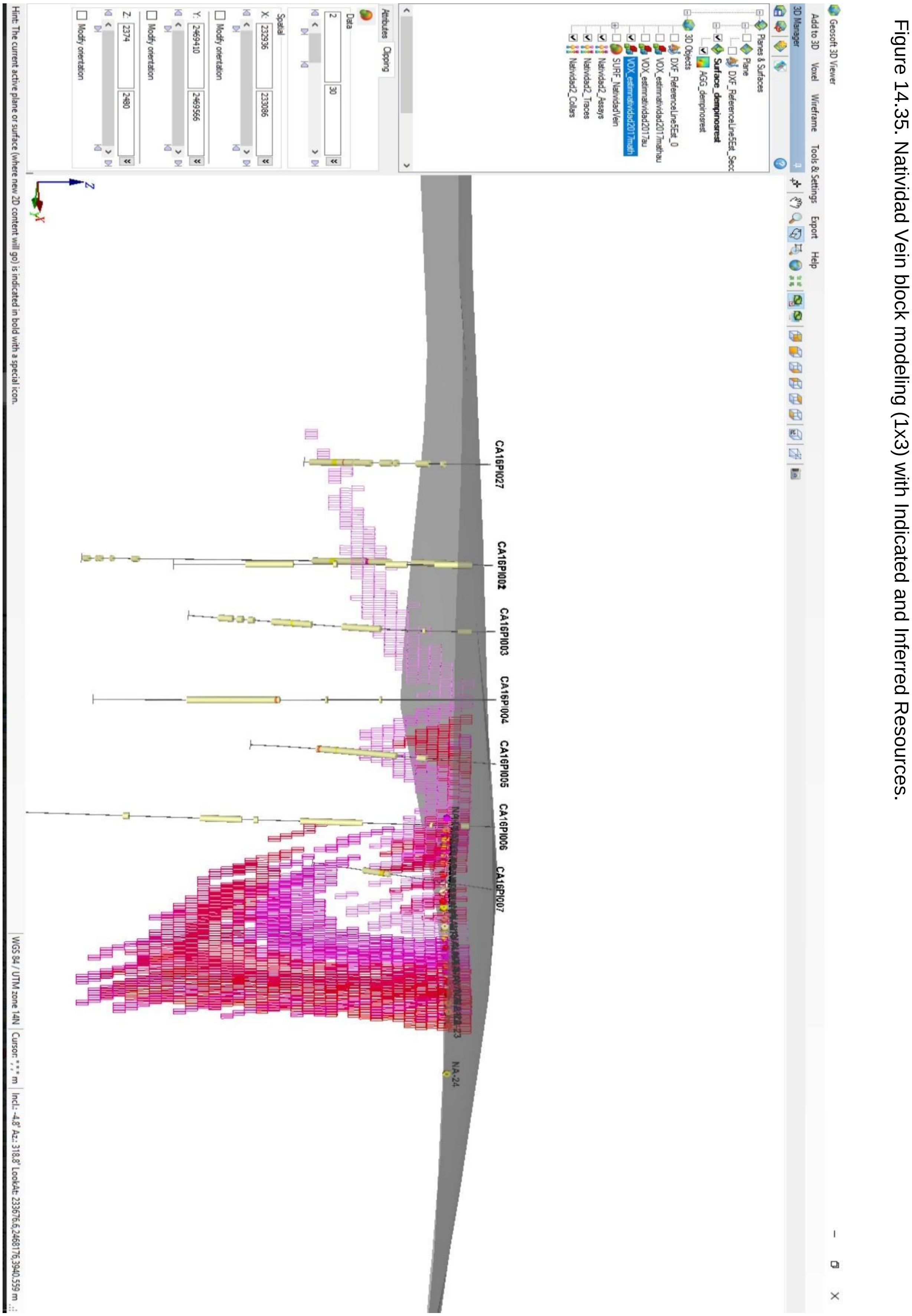


Figure 14.35. Natividad Vein block modeling (1x3) with Indicated and Inferred Resources.

Source: JAO (2018)

14.11 Mineral Resource Classification

Classification of mineral resources was performed based on modeled blocks, accordingly to the following minimum requirements:

- Measured Resources. Model blocks with AuEq grades were estimated by wells of 1.5m X 1.5 X total depth excavated by a backhoe in mineral dumps within an average distance of 12 m.
- Indicated Resources. Model blocks with AuEq grades estimated by a minimum of 3 drill holes or channel samples located within a maximum distance of 45 m.
- Inferred Resources. Model blocks which do not meet the criteria for measured or indicated resources; but and are within a maximum distance of 80 m from a single drill hole.

Table 14.5. Summary of Measured Indicated and Inferred Resources.

Candelaria Mining Corporation

Pinos Project

A. UNDERGROUND MINERAL RESOURCES

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Indicated	2.2	10	San José de Peñitas	98,448	3.0	51.3	1.34
			San Francisco	52,177	5.0	43.3	1.77
			San Carlos de Arandas	19,174	2.6	29.0	2.1
			Natividad	5,897	5.8	78.5	1.08
Total Indicated	**2.2**	**10**	**ALL**	**175,697**	**3.6**	**47.4**	**1.5**

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Inferred	2.2	10	San José de Peñitas	328,770	3.0	51.3	1.34
			San Francisco	145,480	5.0	43.3	1.77
			San Carlos de Arandas	45,539	2.6	29.0	2.1
			Natividad	9,479	5.8	78.5	1.08
Total Inferred	**2.2**	**10**	**ALL**	**529,267**	**3.6**	**47.7**	**1.5**

B. OTHER MINERAL RESOURCES

Resource Class	Cutoff Grade (g Au/t)	Mine Dilution (%)	Area	Tonnes Above Cutoff	Gold Grade (g Au/t)	Silver Grade (g Au/t)	True Vein Width (m)
Measured			Candelaria Dumps	85,847	1.6	82.9	0
Total Measured			**ALL**	**85,847**	**1.6**	**82.9**	**0**

Source: JAO (2018)

14.12 Adequacy of Mineral Resource Estimation

14.12.1. Database.

JAO also finds the diamond hole database to be of sufficient quality to support indicated and inferred levels of mineral resource classification for the estimate. In general, JAO considers the Candelaria's diamond drill hole and mine chip-channel sample database used in the generation of this mineral resource model to be adequate for classification of mineral resources.

14.12.2. Block Model Validation

JAO completed a detailed visual validation of the Pinos block modeling by analyzing the 2-D cross sections and long sections of each vein. The model was checked and validated for proper coding of sample intervals and block model cells in cross sections and level plan views. Interpolated grades were examined relative to the composite values. The checks showed good agreement between the composite and block model values.

14.12.3. Grade Validation

The results of digital modeling showed in this section were validated by JAO using alternative methods; these included a thorough visual view of the model grades about mine and drill hole sample grades, comparisons with other estimations like manual block modeling and grade distribution using swath plots. JAO determined that block grades are a precise representation of assays data and statistical distributions.

14.12.4. Resource Classification

In JAO's opinion, Candelaria´s Mineral Resource Estimation of 176,000 tons of Indicated Mineral Resources, grading 4.7 g/t AuEq, and 384,000 tons of Inferred Mineral Resources, grading 4.5 g/t AuEq, are well supported because most data for block Modeling krigging interpolation, were obtained from the systematic underground chip sampling in every 1 meter; in addition, strict capping of high assay values avoiding nugget effects and no possible ore shoots considerations, makes this estimation conservative.

14.13 Discussion of Results

Mineral resource estimation international practices continue to evolve, to provide information to which modifying factors; such as, mining, metallurgical, economic, marketing, environmental, social and governmental, can be applied. Evolution of definitions over a 30-year period has been slow enough that many practitioners or company executives have in mind definitions they learned when they entered the industry and had not kept up with the changes; however, nowadays, there is a rapid flow of opinions between countries to evolve mineral resource classification.

There is still a strong emphasis from international institutions affiliated to CRIRSCO to support planning with the declaration of Probable and Proven Reserves, implying that Modifying Factors need to be proactively taken into consideration. This implication is still debated on how much and of course, it is up to Qualified Person to declare these.

Also, JAO believes that after reviewing Candelaria's exploration works proposed in this technical report and sound geological knowledge of the subject project, it is reasonably expected that most of Inferred Mineral Resources disclosed here could be upgraded to Indicated Mineral Resources with continued exploration.

15. MINERAL RESERVE ESTIMATE

JAO considers that until the effective date of this PEA, there is not enough exploration information to disclose Mineral Reserve estimates.

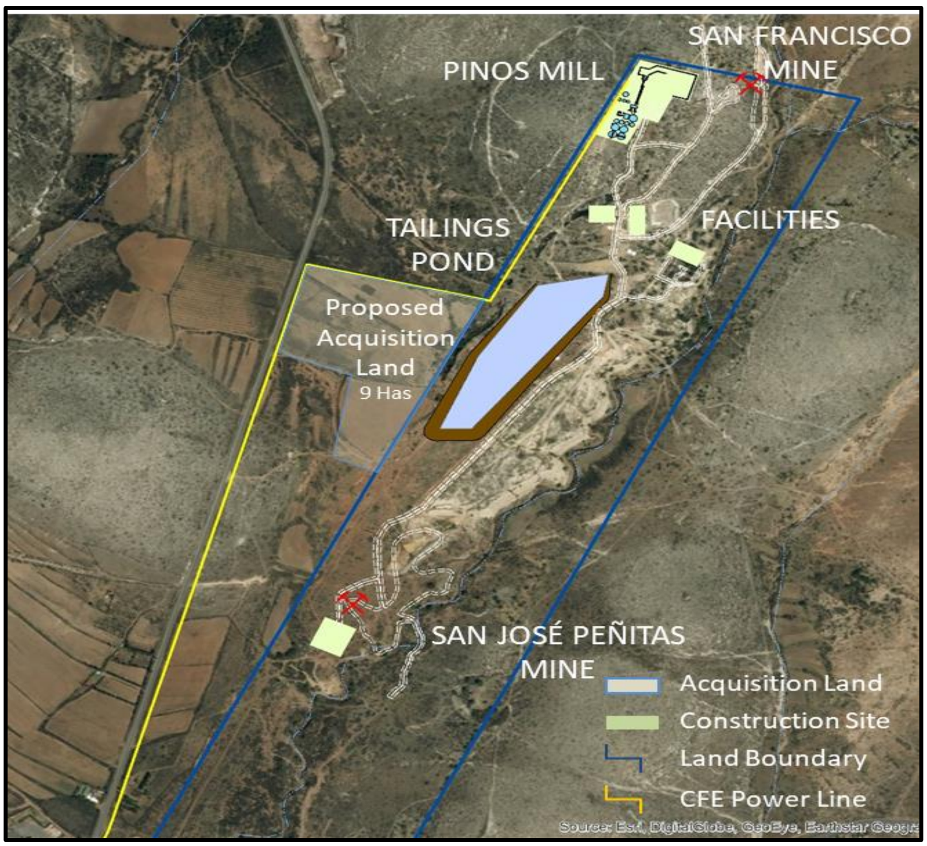
16. MINING METHODS

16.1 Candelaria Exploration, Mining Development and Processing Program 2018.

In January 2018, Candelaria Mining Corp. completed an extensive program to start developing its mining concessions in Pinos; this program includes, surface and underground sampling, mining development, mining extraction, diamond core drilling exploration, and mineral processing.

The technical content of the mining program has been provided by Candelaria's technical staff; namely, Eng. Geo. Héctor Gonzalez and Eng. Min. Carlos Vallejo, under the leadership of Eng. Min. Armando Alexandri, COO of Candelaria Mining Corp. and supervised by JAO. This program is based on Cinco Estrellas and Natividad current mineral resources given in the last section. Figure 16.1 shows mines, mill, and facilities of the Pinos Project.

Figure 16.1. Mines, Mill, and Facilities, Pinos Project.



Source: Candelaria Mining Corp. (2018)

16.1.1 Mine Development

Pinos' mining program is an underground mining operation that has been in discontinuous operation since the 16th century with a height of production at the end of 19th century. Last Cinco Estrellas mining operation was in 1932-1942, today it is supported by evidence of +500,000 tons of tailings. Over the years, the mine has employed many mining methods including shrinkage, sublevel stopping, and a primitive cut and fill.

A total of 13,450 meters of mining development and 9,645 meters of mining preparation are projected in this mining program along the Cinco Estrellas Mineralized Trend, Table 16.1, 16.2 and 16.3 show detailed mining working lengths and dimensions, and Figure 16.2 shows a 3-D image of planned mining workings in San Francisco Domain. These mining workings will provide mineral production of 200 tpd for the first year of operation, 300 tpd for the second and third years and 400 tpd from the fourth year on. Selected mining method is Cut and Fill using waste rock fill.

The proposed chronogram of the San José de Peñitas development is shown in Table 16.4.

Table 16.1 – Detailed Development Working Lengths.

AREAS	DEVELOPMENT				
	GRAL DECLINE	DRIFTS	CROSSCUTS	RAISES	SUB-TOTAL (m)
Peñitas	1,089	3,447	210	708	**5,454**
Arandas	733	2,520	150	244	**3,647**
San Francisco	1,064	2,588	195	502	**4,349**
Total	**2,886**	**8,555**	**555**	**1,454**	**13,450**

Source: Candelaria Mining Corp. (2018)

Table 16.2 – Detailed mining Preparation working lengths.

PREPARATION				
TRANSPORT DRIFT	SERVICE RAMP	CROSSCUTS	RAISES	SUB-TOTAL (m)
685	1,040	225	1,680	**3,630**
760	1,240	255	951	**3,206**
674	911	195	1,029	**2,809**
2,119	**3,191**	**675**	**3,660**	**9,645**

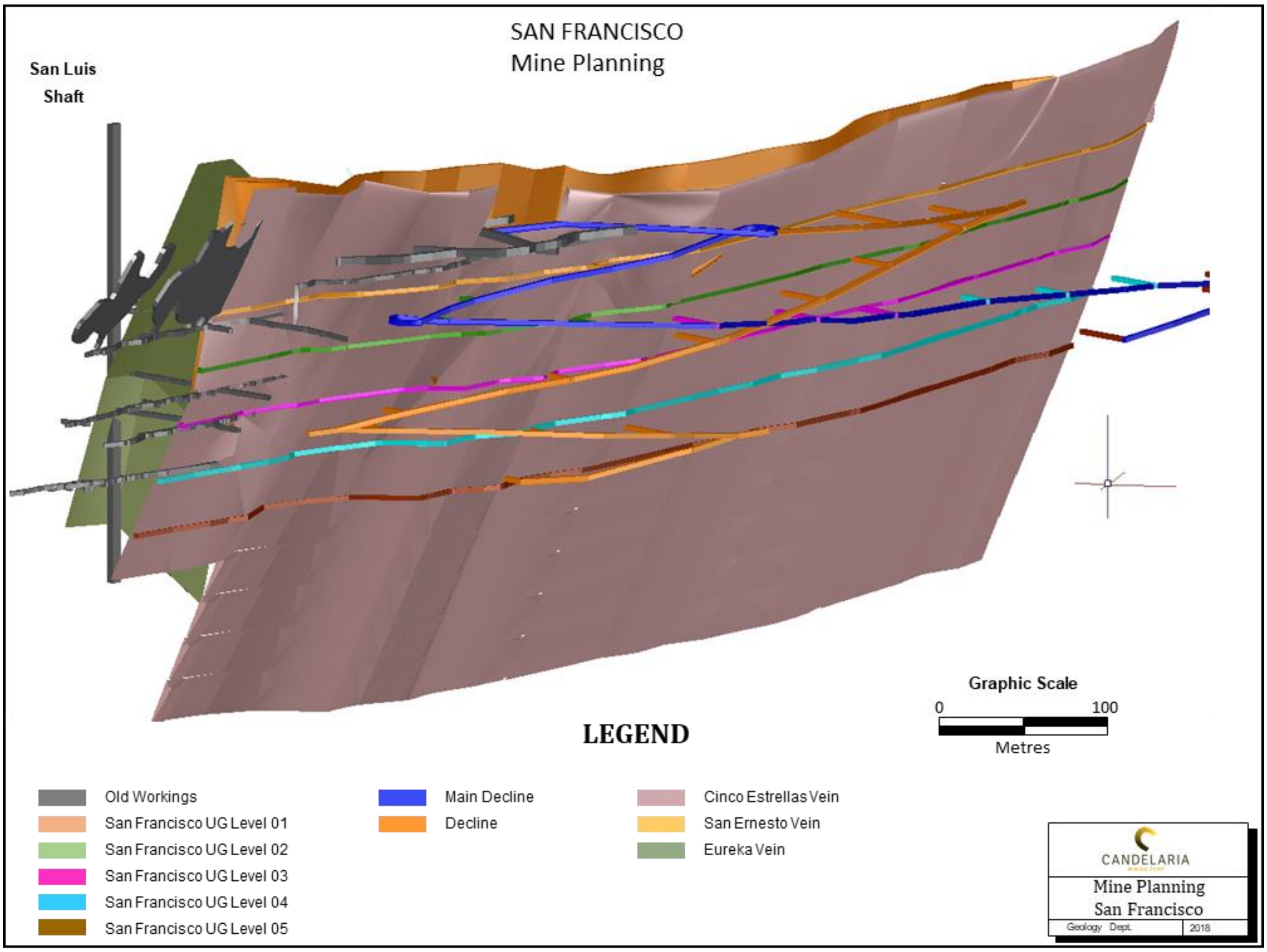
Source: Candelaria Mining Corp. (2018)

Table 16.3 – Dimension of mine workings.

WORK TYPE	DIMENSIONS (M)	COMMENTS
General Decline	2.5 x 2.5	First years the mineral will be transport by truck.
General Decline Slope	12%	The slope may increase to 13.5%
Drifts and Crosscuts	2.5 x 2.5	Miners will drill all the section, but the mine production includes the selection of economic grades to avoiding dilution.
Raises	1.5 x 1.5	Exploration, ventilation, services and emergency exits

Source: Candelaria Mining Corp. (2018)

Figure 16.2 – 3-D Image of Planned Mining Workings in San Francisco Domain.



Source: Candelaria Mining Corp. (2018)

Table 16.4 – Chronogram of San José de Peñitas development.

San José de Peñitas UG	**m**		**Months**																							
			1				**2**				**3**				**4**				**5**				**6**			
Decline portal to Crosscut 8350	147		■	■	■	■	■	■																		
Decline (-), from Crosscut 8350 to Crosscut of 2396 level	116							■	■	■	■															
Crosscut 01 to 2386 Level	15											■														
Crosscut 01 to North Drift (2386 level)													■													
Crosscut 01 to South Drift (2386 level)													■													
Gral Decline (-), from Crosscut 8350 to Decline (-) 2390.7	76											■	■	■												
Decline 2390.7 (-) to crosscut 2386 level	39														■	■										
Crosscut 02 to 2386 level	15																■									
Crosscut 02 to North Drift (2386 level)																		■								
Crosscut 02 to South Drift (2386 level)																		■								
Gral Decline (-), from 2386 level to Decline (-) 2374 level	102												■	■	■	■	■	■								
Decline 2374 (+) to crosscut 2386 level	102																■	■	■	■	■	■				
Crosscut 03 to 2386 level	15																				■	■	■			
Crosscut 03 to North Drift (2386 level)																							■	■	■	■
Crosscut 03 to South Drift (2386 level)																							■	■	■	■

Source: Candelaria Mining Corp. (2018)

16.1.2 Mine Access

The mine planning of the Candelaria Mining Corp. is divided in two major mine access, the south mine access is a decline, it will connect the surface with underground mineral blocks, and it will be used for mineral extraction for both, San José de Peñitas and San Carlos de Arandas - Refer to Figure 16.3.
The north decline of San Francisco will connect the surface from the old Camino workings to San Francisco and San Miguel mineral. See photo 16.1.

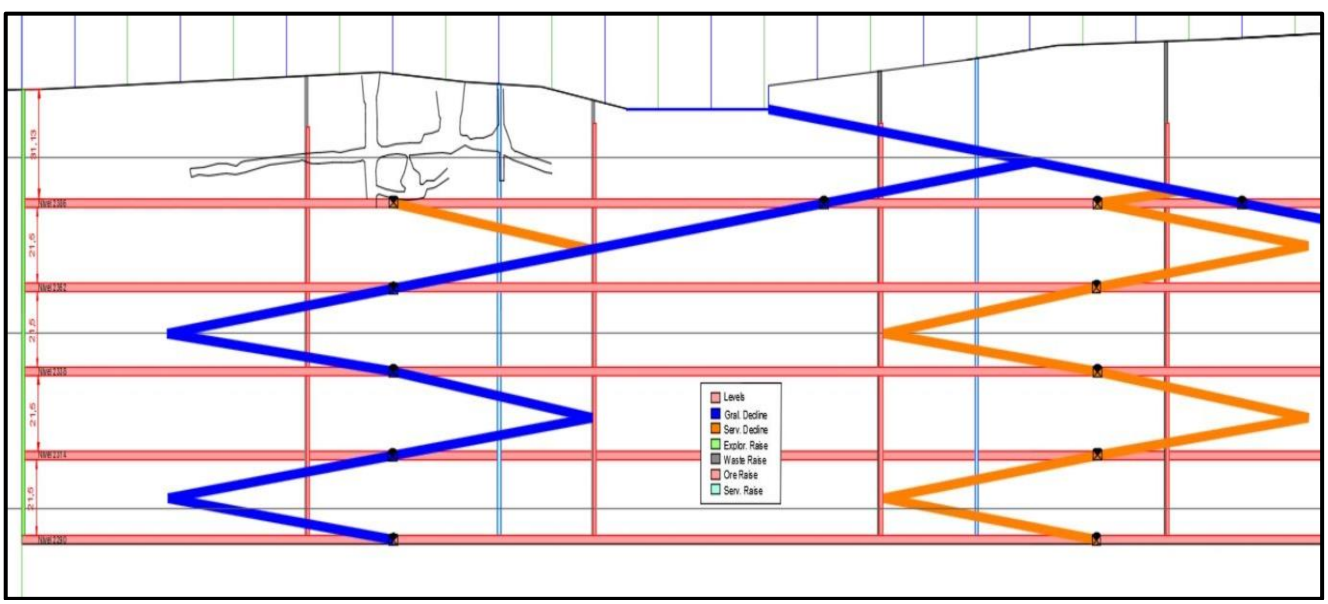
Photo 16.1 – Old Camino workings.

Source: JAO (2018)

Both mine accesses will have enough space to allow for stockpiles, movement of equipment, waste rock deposits, power, and water infrastructure; the south mine access in Peñitas will include offices, maintenance workshop, mine warehouse, and nursery.

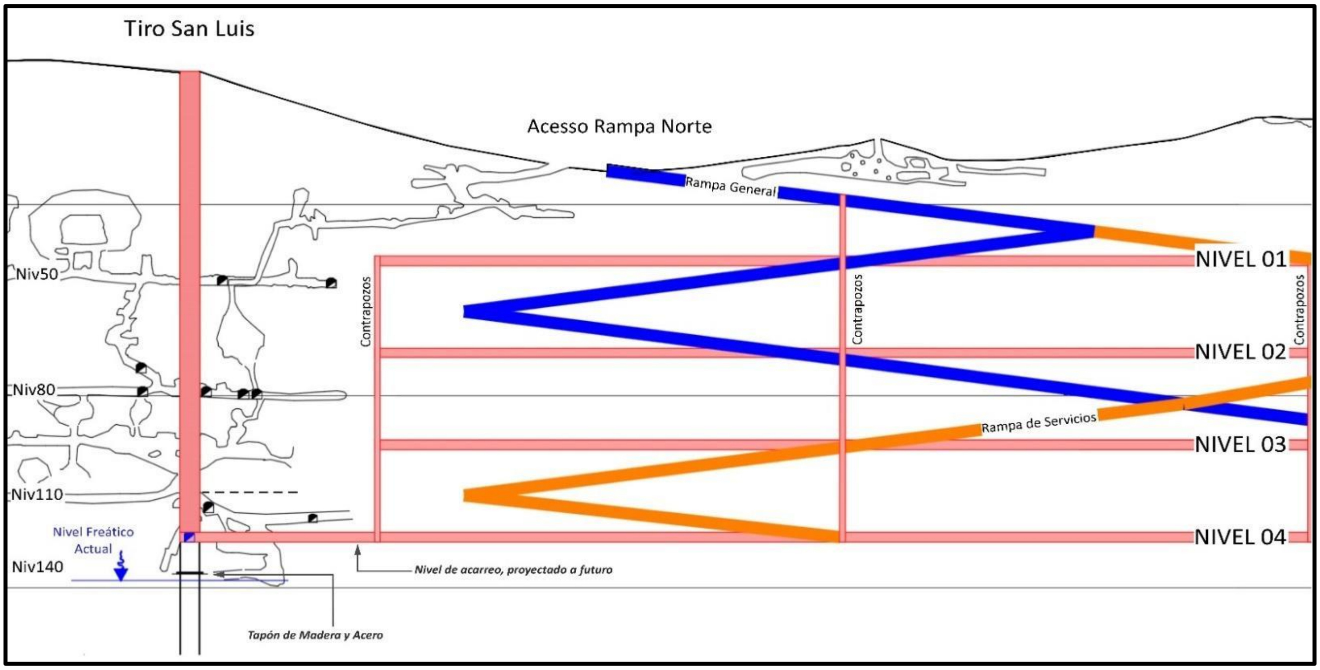
Currently, the mine planning did not consider the use of the old production levels of Cinco Estrellas (San Luis shaft – Cinco Estrellas shaft), namely 50L, 80L, 100L, and 140L, including the old haulage level from the El Griego to San Luis shaft (600 m). Refer to Figure 16.3 and 16.4.

Figure 16.3 – Planned Mine Development at San José de Peñitas showing South Decline.



Source: Candelaria Mining Corp. (2018)

Figure 16.4 – Planned Mine Development at San Francisco, showing North Decline.



Source: Candelaria Mining Corp. (2018)

Candelaria Mining Corp will also develop a main haulage track drift at 04 Level; it will be used for connecting the south and north mining operations using San Luis Shaft to feed the Pinos processing plant, decreasing operation costs of mineral transport and maintenance of mine equipment.

16.1.3 Geotechnical

Rock characteristics at Pinos are typical of Fresnillo – Zacatecas rock conditions in dry climates, little water, and competent rock. In accordance to the Q-system for rock mass classification developed at the Norwegian Geotechnical Institute (NGI) in 1974; it originally included more than 200 tunnel case histories, mainly from Scandinavia (Barton et al., 1974).

In 1993 the system was updated to include more than 1000 cases (Grimstad and Barton, 1993). It is a quantitative classification system for estimates of tunnel support, based on a numerical assessment of the rock mass quality using the following six parameters. Refer to Table 16.5.

• Rock quality designation (RQD).
• Number of joint sets (Jn).
• Roughness of the most unfavorable joint or discontinuity (Jr).
• The degree of alteration or filling along the weakest joint (Ja).
• Water inflow (Jw).
• Stress condition is given as the stress reduction factor (SRF); composed of Loosening load in the case of shear zones and clay-bearing rock; Rock stress in competent rock; and, Squeezing and swelling loads in plastic, incompetent rock.

The above six parameters are grouped into three quotients to give the overall rock mass quality:

$$Q = RQD/Jn \ x \ Jr/Ja \ x \, Jw/SRF$$

Where:

• The first two parameters represent the overall structure of the rock mass, and their quotient is a relative measure of the block size.
• The second quotient is described as an indicator of the inter-block shear strength.
• The third quotient is described as the “active stresses.”

Table 16.5 – Description and ratings for the input parameters of the Q-system

RQD *(Rock Quality Designation)*

Very poor	RQD = 0 - 25%
Poor	25 - 50
Fair	50 - 75
Good	75 - 90
Excellent	90 - 100

Notes:
(i) Where RQD is reported or measured as < 10 (including 0), a nominal value of 10 is used to evaluate Q
(ii) RQD intervals of 5, i.e. 100, 95, 90, etc. are sufficiently accurate

Jn *(joint set number)*

Massive, no or few joints	Jn = 0.5 - 1
One joint set	2
One joint set plus random joints	3
Two joint sets	4
Two joint sets plus random joints	6
Three joint sets	9
Three joint sets plus random joints	12
Four or more joint sets, heavily jointed, "sugar-cube", etc.	15
Crushed rock, earthlike	20

Notes: *(i) For tunnel intersections, use (3.0 x Jn); (ii) For portals, use (2.0 x Jn)*

Jr *(joint roughness number)*

a) Rock-wall contact, b) rock-wall contact before 10 cm shear	
Discontinuous joints	Jr = 4
Rough or irregular, undulating	3
Smooth, undulating	2
Slickensided, undulating	1.5
Rough or irregular, planar	1.5
Smooth, planar	1.0
Slickensided, planar	0.5

***Note**: i) Descriptions refer to small scale features, and intermediate scale features, in that order*

c) No rock-wall contact when sheared	
Zone containing clay minerals thick enough to prevent rock-wall contact	Jr = 1.0
Sandy, gravelly or crushed zone thick enough to prevent rock-wall contact	1.0

Notes:
i) Add 1.0 if the mean spacing of the relevant joint set is greater than 3 m
ii) Jr = 0.5 can be used for planar, slickensided joints having lineations, provided the lineations are oriented for minimum strength

Ja *(joint alteration number)*

	JOINT WALL CHARACTER		Condition	*Wall contact*
Contact between joint walls	CLEAN JOINTS	Healed or welded joints:	filling of quartz, epidote, etc.	Ja = 0.75
		Fresh joint walls:	no coating or filling, except from staining (rust)	1
		Slightly altered joint walls:	non-softening mineral coatings, clay-free particles, etc.	2
	COATING OR THIN FILLING	Friction materials:	sand, silt, calcite, etc. (non-softening)	3
		Cohesive materials:	clay, chlorite, talc, etc. (softening)	4

	FILLING OF:	Type	*Some wall contact* *Thin filling (< 5 mm)*	*No wall contact* *Thick filling*
Some or no wall contact	Friction materials	sand, silt calcite, etc. (non-softening)	Ja = 4	Ja = 8
	Hard cohesive materials	compacted filling of clay, chlorite, talc, etc.	6	5 - 10
	Soft cohesive materials	medium to low overconsolidated clay, chlorite, talc,	8	12
	Swelling clay materials	filling material exhibits swelling properties	8 - 12	13 - 20

Jw *(joint water reduction factor)*

Dry excavations or minor inflow, i.e. < 5 l/min locally	p_w < 1 kg/cm^2	Jw = 1
Medium inflow or pressure, occasional outwash of joint fillings	1 - 2.5	0.66
Large inflow or high pressure in competent rock with unfilled joints	2.5 - 10	0.5
Large inflow or high pressure, considerable outwash of joint fillings	2.5 - 10	0.3
Exceptionally high inflow or water pressure at blasting, decaying with time	> 10	0.2 - 0.1
Exceptionally high inflow or water pressure continuing without noticeable decay	> 10	0.1 - 0.05

Note: *(i) The last four factors are crude estimates. Increase Jw if drainage measures are installed*
(ii) Special problems caused by ice formation are not considered

SRF *(Stress Reduction Factor)*

Weakness zones intersecting excavation	Multiple weakness zones with clay or chemically disintegrated rock, very loose surrounding rock (any depth)	SRF = 10
	Single weakness zones containing clay or chemically disintegrated rock (depth of excavation < 50 m)	5
	Single weakness zones containing clay or chemically disintegrated rock (depth of excavation > 50 m)	2.5
	Multiple shear zones in competent rock (clay-free), loose surrounding rock (any depth)	7.5
	Single shear zones in competent rock (clay-free), loose surrounding rock (depth of excavation < 50 m)	5
	Single shear zones in competent rock (clay-free), loose surrounding rock (depth of excavation > 50 m)	2.5
	Loose, open joints, heavily jointed or "sugar-cube", etc. (any depth)	5

Note: *(i) Reduce these SRF values by 25 - 50% if the relevant shear zones only influence, but do not intersect the excavation.*

		σ_c / σ_1	σ_θ / σ_c	SRF
Competent rock, rock stress problems	Low stress, near surface, open joints	> 200	< 0.01	2.5
	Medium stress, favourable stress condition	200 - 10	0.01 - 0.3	1
	High stress, very tight structure. Usually favourable to stability, may be except for walls	10 - 5	0.3 - 0.4	0.5 - 2
	Moderate slabbing after > 1 hour in massive rock	5 - 3	0.5 - 0.65	5 - 50
	Slabbing and rock burst after a few minutes in massive rock	3 - 2	0.65 - 1	50 - 200
	Heavy rock burst (strain burst) and immediate dynamic deformation in massive rock	< 2	> 1	200 - 400

Notes: *(ii) For strongly anisotropic stress field (if measured): when 5 < σ_1/σ_3 <10, reduce σ_c to 0.75 σ_c. When σ_1/σ_3 > 10, reduce σ_c to 0.5 σ_c*
(iii) Few case records available where depth of crown below surface is less than span width. Suggest SRF increase from 2.5 to 5 for low stress cases

			σ_θ / σ_c	SRF
Squeezing rock	*Plastic flow of incompetent rock under the influence of high pressure*	Mild squeezing rock pressure	1 - 5	5 - 10
		Heavy squeezing rock pressure	> 5	10 - 20
Swelling rock	*Chemical swelling activity depending on presence of water*	Mild swelling rock pressure		5 - 10
		Heavy swelling rock pressure		10 - 15

Source: Grimstad and Barton (1993)

16.1.3.1 Geotechnical Results of Pinos' Mine Workings.

Candelaria contracted a rock mechanics' expert Eng. Victor Manuel Navarro finding the following results for Cinco Estrellas field observations and calculations yielded:

Table 16.6 – Average parameters of Pinos project.

RQD	**Jr**	**Jn**	**Ja**	**Jw**	**SRF**
70	2.5	6	8	1	2.5

The Average Rock Quality (Q) is 0.59.

The Q-value is related to tunnel support requirement by defining the equivalent dimensions of the underground opening. This equivalent dimension, which is a function of the size and type of the excavation, it is obtained by dividing the span, diameter or wall height of the excavation (Dt) by a quantity called the excavation support ratio (ESR), given as ESR = Dt / De. Ratings of ESR are shown in Table 16.6 where the equivalent dimension is

$$De = \; Dt/ESR$$

If the ESR = 1.6, and Dt = 3

De = 1.6 m

In accordance with Grimstad and Barton graphic the conclusion is minimal support. Refer to Figure 16.6.

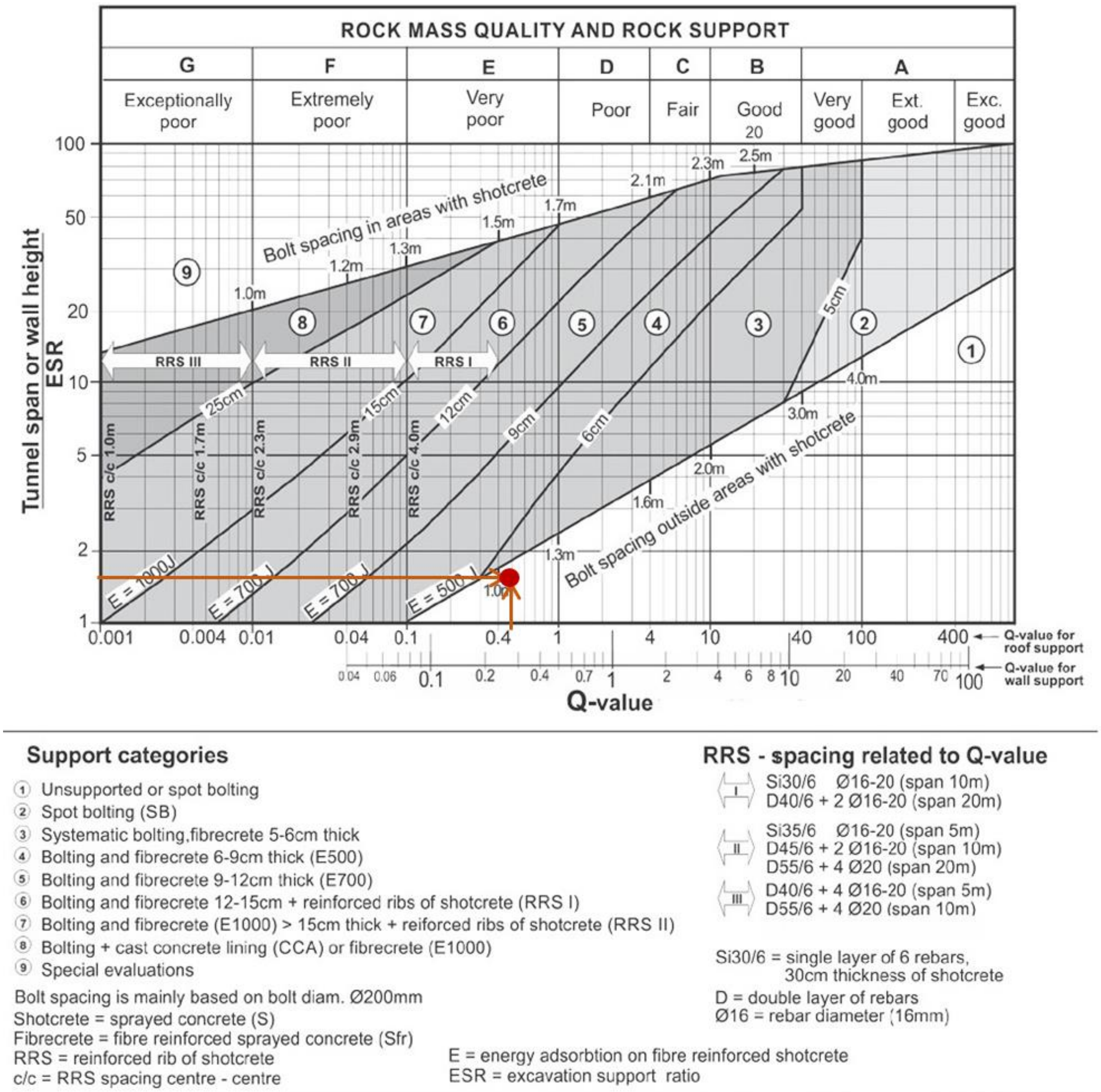
Source: Candelaria Mining Corp. (2018)

Table 16.7 – ESR Ratings. Source: Candelaria Mining Corp.

TYPE OR USE OF UNDERGROUND OPENING	ESR
Temporary Mine Openings	3.5
Vertical shafts, rectangular and circular respectively	2.0 – 2.5
Water tunnels, permanent mine openings, adits, drifts	1.6
Storage caverns, road tunnels with little traffic, access tunnels, etc.	1.3
Power stations, road and railway tunnels with heavy traffic, civil defense shelters, etc.	1.0
Nuclear power plants, railroad stations, sport arenas, etc.	0.8

Source: Candelaria Mining Corp. (2018)

Figure 16.6 – Recommended support for Pinos UG workings.



Source: Grimstad and Barton (1993)

16.1.3.2 Rock Bolts.
The geotechnical study recommended the use of split-set; these are rock bolts with only 2 parts, a tube, and a matching domed bearing plate. The high strength steel tube is slotted along its length. One end is tapered for easy insertion into a drill hole, and the other has a welded ring flange to hold the bearing plate. With the bearing plate in place, the tube is driven into a slightly smaller hole, using the same standard percussion drill that made the hole. As the tube of the rock bolt slides into place, the full length of the slot narrows, causing radial pressure to be exerted against the rock over its full contact length.
Split-set utility hangers can make screen and mesh installation much more manageable, faster, and safer. After the opening is secured with split-set stabilizers, install the mesh all at once by driving split-set utility hangers inside the stabilizer tubes.

16.1.3.3 Mine Entrance.
The low magnitude of compressional stress along mine entrance requires additional support; it should be a masonry frame, arc or shotcrete with mesh.

16.1.4 Ventilation and Emergency Exits

Underground mining relies on diesel equipment in the process to extract the ore and waste rock and to transport backfill to the stopes. The project is ventilated through connection to the surface. Also, this air route will include travel through historic mining areas and from there, it is directed to the underground levels and distributed to the main drift zones via horizontal and vertical openings.
All of the air eventually exhausts out through shafts and raises. Fans will be located in development headings ventilating working faces.
The emergency exits will be available on the project; surface communication through adapted raises.

16.1.5 Power Distribution and Mine Dewatering.

Electrical power to the mine is provided by Mexican power grid through Comisión Federal de Electricidad (CFE). Currently, the existent power line of the Pinos project have a 13.2 Kv of capacity, due to the new requirements of dynamic leaching process and underground mining, it will be increased to 13.8 Kv.
The Pinos Gold Project does not have an excess of mine water. Theactualphreatic level at Pinos is ranging of 2,277 to 2,340 m above sea level; perhaps the deepest mine levels in the future will need a dewatering system via pumping; however, most water will be recycled, and inflow from the surrounding rock is expected to be minimal.

16.2 Mining Methods.

16.2.1. Cut and Fill Mining.

The primary mining method at the Project is Cut and Fill mining which is a cost-effective method to mine complex geology of Mine District.

Cut and Fill is a favored choice for steeply dipping and sometimes irregular ore bodies and preferred by mines that require the capability of selective mining and adaptability to variations in the rock mass. Cut and Fill mining is generally referred to as a medium & small-scale mining method.
Mining is carried out in horizontal slices along the stopes, where the bottom slice is mined first. The excavated area is then backfilled, and production continues upwards. Each production level is accomplished by drifting until the entire slice has been mined. The slice is then backfilled, and the fill becomes the working platform from which the next slice is mined.

Mucking is done for providing access to the top slices within the stope. When a stope is completed, a new access drift from the ramp is created to continue the production within the upper stope. One of the advantages of Cut and Fill mining is the possibility to reuse waste for backfill material, such as waste rock from development.

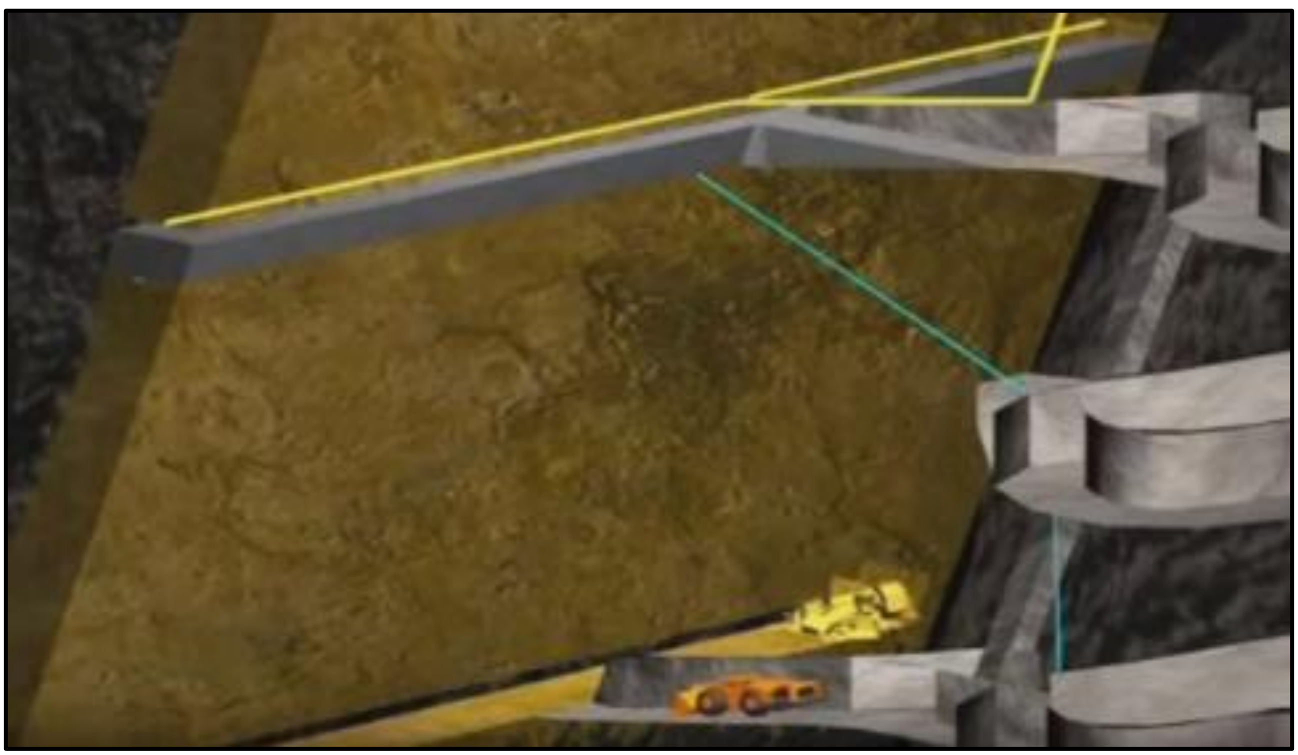
After of Industrial Safety revisions and underground precision surveys, the first steps of Cut and Fill start with selection of economical mineable widths and the marking of it along the roof of the stope, then a second step depends on the hangingwall conditions and regularity of the mineral grades along vein, normally if the grade is irregular, the process continues with the stope drilling and only the charging and blasting of the best grades zones (mineable width selection), then miners ventilate the blast fumes and the ore selected by selection is mucked out and dumped into an orepass or onto a truck, finally miners continues with charging and blasting of the marginal grades or waste, this material will be used of backfilling.

Before continuing with the next round, the rocks need to be reinforced. How this is done is decided by the mine for each situation. The mining continues until the entire slice of the ore has been mined. Since the mining can be tailored to suit the shape of the orebody, it is possible to minimize dilution of waste rock.

In order to access more production points, a second entrance can be opened at another level in the ore body and excavated in parallel.

The equipment used for mining the ore is usually the same as what is used for development. As the ore body is mined, the rock stresses increase in the pillar above the mine area. Cut and Fill method has the advantage of high selectivity with good ore recovery and low dilution.

Figure 16.7 – Cut and Fill Mining Method, showing the main decline, raises, vein and services.



Source: Tamrock – Sandvick

16.2.2. Backfilling

Waste rock is moved from development to stopping whenever possible; if an area does notexist for wastefill for immediate disposal of waste rock, it is moved to surface waste rock deposit (Tepetatera), then the waste rock is hauled back into the mine as neededto the stopes for final disposal, normally the narrow veins are self-sufficient for backfill.

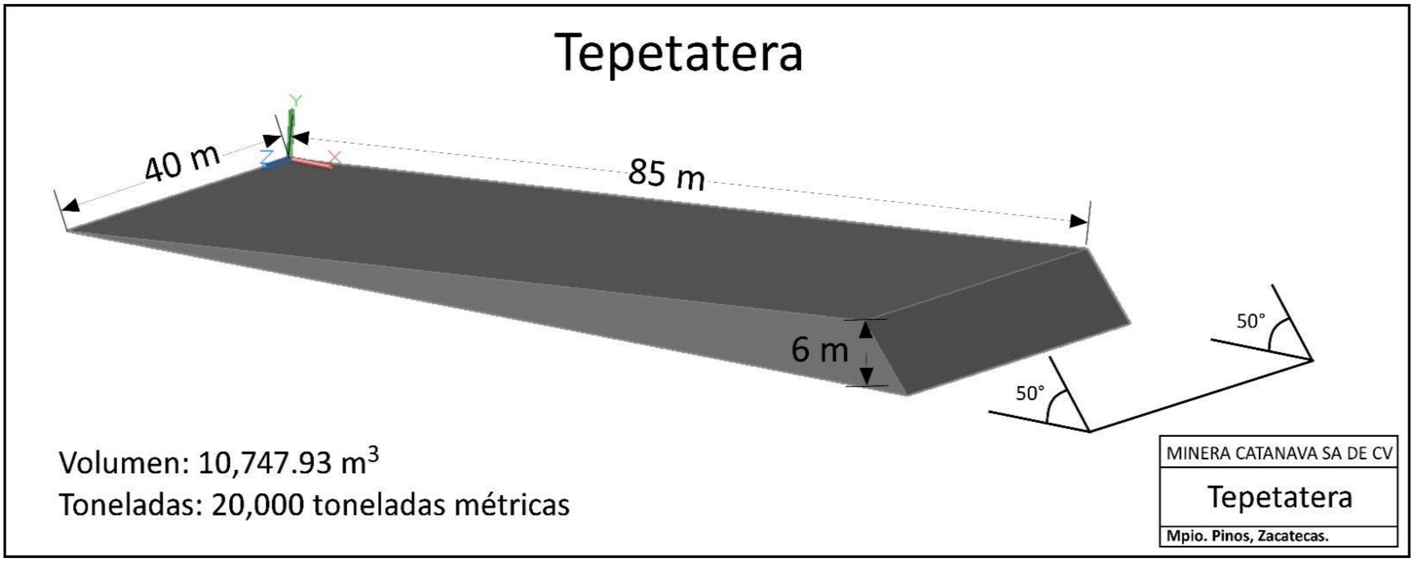
Table 16.8– UTM Coordinates of Waste Rock Deposit.

Area	WGS84, UTM Z14 East	WGS84, UTM Z14 North
Waste Rock Deposit	232,502.00	2,468,542.00

The planned capacity of surface waste rock deposit is ± 20,000 tons, with maximal high of 6 m, the slopes at maximal capacity are 50° with horizontal proportion of 85 m, however, during rainy season or if 80% of granulometry is over 40 cm, the angles of 50° will be modified to 35° to avoiding any incidents.

Source: Candelaria Mining Corp. (2018)

Figure 16.8 – Waste rock deposit.



Source: Candelaria Mining Corp. (2018)

16.2.3. Scheduling

Candelaria contracted a group of Mexican mining engineers to prepare an independent estimation of operating expenditures and mine planning and scheduling.
For all lateral development and stopping scheduling, the following parameters are utilized.

- 28 working days per month
- 3 shifts per day (8 hours)
- Drilling for blasting of 1.8 m
- Advance per drilling of 1.5 m
- Advance per day of 4.5
- Drifts, declines, and crosscuts of 2.5 x 2.5 m.
- Stopes of 40 holes per shift and driller
- Raises of 1.5 x 1.5 m
- Scoop tram of 2.5 yd moves 16 buckets in average for drift of 2.5 m x 2.5 m

- The mineable width of the Peñitas veins is 1.3 m
- The specific gravity of 2.69
- Considering the use of mine contractor

Project scheduling and total tonnes processed.

- Year-0. Engineering, procurement, and construction
- Year-1. 200 tpd
- Year-2 and Year-3. 300 tpd
- Year-4 and rest of LOM. 400 tpd.

Tables 16.9, 16.10, and 16.11 show details on mining development for Cinco Estrellas vein domains.

Table 16.9 – Mining Development of the San José de Peñitas, Pinos Project.

Mining Work	**Mine Development**	**m**
Main Decline 12% slope	Main Decline from Portal to Crosscut Peñitas	147
	Crosscut Peñitas to Level 2386	116
	Level 2396 to Level 2362	202
	Level 2362 to Level 2338	208
	Level 2338 to Level 2314	208
	Level 2314 to Level 2290	208
Drifts	Drift north Level 2386	516
	Drift south Level 2386	177
	Drift north Level 2362	514
	Drift south Level 2362	178
	Drift north Level 2338	513
	Drift south Level 2338	177
	Drift north Level 2314	513
	Drift south Level 2314	174
	Drift north Level 2290	513
	Drift south Level 2290	172

Crosscuts	Main Decline to Level 2386	15
	Main Decline to elevation 2370.3	15
	Main Decline to Level 2362	15
	Main Decline to elevation 2354.6	15
	Main Decline to elevation 2346.3	15
	Main Decline to Level 2338	15
	Main Decline to elevation 2330.6	15
	Main Decline to elevation 2322.3	15
	Main Decline to Level 2314	15
	Main Decline to elevation 2306.6	15
	Main Decline to elevation 2298.3	15
	Main Decline to Level 2290	15
	Main Decline to Level 2386	15
	Main Decline to elevation 2377.9	15
Raises	Exploration Raises 7875 (4 of 21.5 y 1 of 31 m)	117
	Crosscuts for raises communication 7875 (10 of 5 m)	50
	Raises for ventilation, services and exit 8100 (4 of 21.5 y 1 of 33 m)	119
	Crosscuts for raises communication 8100 (11 of 5 m)	55
	Raises for ventilation, services and exit 8325 (4 of 21.5 y 1 of 40 m)	126
	Crosscuts for raises communication 8325 (11 of 5 m)	55
	Exploration Raises 8550 (4 of 21.5 y 1 of 50 m)	136
	Crosscuts for raises communication 8550 (10 of 5 m)	50
	Total	**5,454**

Source: Candelaria Mining Corp. (2018)

Table 16.10 – Mining Development of the San Carlos de Arandas, Pinos Project.

Mining Work	Mine Development	m
Main Decline 12% Slope	Continuation from Peñitas Main Decline to Level 2362	117
	Level 2362 to Level 2338	208
	Level 2338 to Level 2314	202
	Level 2314 to Level 2290	206
Drifts	Drift South Level 2386	117
	Drift South Level 2362	117
	Drift North Level 2338	443
	Drift South Level 2338	321
	Drift North Level 2314	242
	Drift South Level 2314	520
	Drift North Level 2290	242
	Drift South Level 2290	518
Crosscut	Decline to Elevation 2370.3	15
	Decline to Level 2362	15
	Decline to Elevation 2354.6	15
	Decline to Elevation 2346.3	15
	Decline to Level 2338	15
	Decline to Elevation 2330.6	15
	Decline to Elevation 2321.2	15
	Decline to Level 2314	15
	Decline to Elevation 2298	15
	Decline to Level 2290	15
Raises	Raises of ventilation, services and exit 8105 (2 of 21.5 y 1 of 5 m)	48
	Crosscut to communicate Raises 8105 (5 of 5 m)	25
	Raises of ventilation, services and exit 9055 (2 of 21.5 m)	43
	Crosscut to communicate Raises 9055 (5 of 5 m)	25
	Exploration Raises 9300 (2 of 21.5 m (1 of 30 m)	73
	Crosscut to communicate Raises 9300 (6 of 5 m)	30
	Total	**3,647**

Source: Candelaria Mining Corp. (2018)

Table 16.11 – Mining Development of the San Francisco, Pinos Project.

Mining Work	Mine Development	m
Main Decline 12% slope	Crosscut to Level 2434	222
	Level 2434 to Level 2410	209
	Level 2410 to Level 2386	208
	Level 2386 to Level 2362	217
	Level 2362 to Level 2338	208
	Drift North Level 2434	287
Drifts	Drift South Level 2434	127
	Drift North Level 2410	287

	Drift South Level 2410	127
	Drift North Level 2386	82
	Drift South Level 2386	332
	Drift North Level 2362	129
	Drift South Level 2362	543
	Drift North Level 2338	129
	Drift South Level 2338	545
	Decline to Level 2434	15
Crosscuts	Decline to Elevation 2426.6	15
	Decline to Elevation 2418.3	15
	Decline to Level 2410	15
	Decline to Elevation 2402.6	15
	Decline to Elevation 2394.3	15
	Decline to Level 2386	15
	Decline to Elevation 2377.9	15
	Decline to Elevation 2370.3	15
	Decline to Level 2362	15
	Decline to Elevation 2354.6	15
	Decline to Elevation 2346.3	15
	Decline to Level 2338	15
	Exploration Raises 9600 (4 of 21.5 m and 1 of 10 m)	96
Raises	Crosscuts to communicate raises 9600 (10 of 5 m)	50
	Raises of ventilation, services and exit 9816 (4 of 21.5 m and 1 of 5 m)	91
	Crosscuts to communicate raises 9816 (5 of 5 m)	25
	Raises of ventilation, services and exit 10027 (1 of 21.5 m (1 of 8.5 m)	30
	Crosscuts to communicate raises 10027 (4 of 5 m)	20
	Exploration Raises 10250 (6 of 21.5 m)	130
	Crosscuts to communicate raises 10250 (12 of 5 m)	60
	Total	**4,349**

Source: Candelaria Mining Corp. (2018)

16.2.4. Operation Expenditures (Tables 16.12 and 16.13).

The basis of operational expenditures estimation was through comparison with underground mine operations in México, such as, Zacualpan Mine of Impact Silver, Rosario Mine of Santacruz Silver and San Martín of Starcore International. Also, OPEX include input from information from previous mining cost and logistics from Minera Catanava files of 2012 – 2014, provided by Candelaria's engineers Carlos Vallejo and Armando Alexandri.

Table 16.12 – Operation Expenditures, Pinos Project.

GENERAL COSTS

MINING OPERATING COSTS US $ / t				TOTAL
MINERAL EXTRACTION		**28.61**		**28.61**
WAGES	$	1.32		
SALARIES	$	13.82		
DIVERSE MATERIALS	$	3.48		
SAFE EQUIPMENT	$	0.09		
STEEL DRILLING	$	0.07		
SPARE PARTS	$	1.05		
TIRES	$	3.64		
FUEL AND LUBRICANTS	$	0.62		
ELECTRICAL POWER	$	2.25		
EXPLOSIVES	$	1.32		
MINERAL AND WASTE HAULAGE	$	0.67		
EQUIPMENT CONTINGENCY	$	0.28		
MINE DEVELOPMENT AND STOPE PREPARATION	**$**	**8.48**		**8.48**
WAGES	$	0.90		
SALARIES	$	4.48		
DIVERSE MATERIALS	$	0.74		
SAFE EQUIPMENT	$	0.06		
STEEL DRILLING	$	0.05		
SPARE PARTS	$	0.29		
FUEL AND LUBRICANTS	$	0.28		
ELECTRICAL POWER	$	1.01		
EXPLOSIVES	$	0.67		
WATER PUMPING	$	2.48		**2.48**
WAGES	$	0.36		
DIVERSE MATERIALS	$	0.98		
SAFE EQUIPMENT	$	0.05		
SPARE PARTS	$	0.06		
ELECTRICAL POWER	$	1.04		
TOTAL MINING OPERATING COSTS	**$**	**39.57**	**$**	**39.57**

PROCESSING PLANT OPERATING COSTS US $ / t				TOTAL
CRUSHING	**$**	**4.34**		**4.34**
WAGES	$	1.83		
DIVERSE MATERIALS	$	1.70		
SAFE EQUIPMENT	$	0.03		
SPARE PARTS	$	0.38		
FUEL AND LUBRICANTS	$	0.07		

GENERAL COSTS

ELECTRICAL POWER	$	0.33		
MILLING AND DYNAMIC CYANIDE LEACHING	**$**	**23.44**		**23.44**
WAGES	$	1.62		
SALARIES	$	6.90		
DIVERSE MATERIALS	$	1.80		
SAFE EQUIPMENT	$	0.04		
SPARE PARTS	$	0.78		
FUEL AND LUBRICANTS	$	1.41		
ELECTRICAL POWER	$	5.60		
STEEL MILL	$	2.52		
REACTIVES	$	2.39		
SHIPPING	$	0.39		
LABORATORY	**$**	**2.99**		**2.99**
SALARIES	$	1.17		
DIVERSE MATERIALS	$	0.36		
SAFE EQUIPMENT	$	0.06		
SPARE PARTS	$	0.13		
FUEL AND LUBRICANTS	$	0.98		
ELECTRICAL POWER	$	0.09		
REACTIVES	$	0.20		
TOTAL PROCESSING PLANT COSTS	**$**	**30.77**	**$**	**30.77**

ADMINISTRATIVE OPERATING COSTS US $ / t				TOTAL
ADMINISTRATIVE	**$**	**10.00**		**10.00**
WAGES	$	2.04		
VACATIONAL COMPENSATION FEE	$	0.28		
VACATIONS	$	0.08		
ANNUAL COMPENSATION FEE	$	1.70		
NON DEDUCTIBLE EXPENSES	$	2.58		
TRIP EXPENSES	$	0.32		
MEALS	$	1.82		
TELEPHONES	$	0.08		
SHIPPING EXPENSES	$	0.02		
DIVERSE TAXES AND RIGHTS	$	0.04		
OFFICE ARTICLES	$	0.10		
OTHER EXPENSES	$	0.61		
INTERNET SERVICES	$	0.33		
TOTAL ADMINISTRATIVE COSTS	**$**	**10.00**	**$**	**10.00**

MAINTENANCE OPERATING COSTS US $ / t				TOTAL

GENERAL COSTS

MAINTENANCE	**$**	**2.02**		**2.02**
WAGES	$	0.09		
SALARIES	$	1.41		
DIVERSE MATERIALS	$	0.19		
SAFE EQUIPMENT	$	0.04		
SPARE PARTS	$	0.09		
FUEL AND LUBRICANTS	$	0.03		
ELECTRICAL POWER	$	0.12		
SHIPPING EXPENSES	$	0.05		
TOTAL MAINTENANCE COSTS	**$**	**2.02**	**$**	**2.02**

Opex 200 tpd	**$ 82.36**
Opex 300 tpd	**$ 79.87**
Opex 400 tpd	**$ 77.37**

Source: Candelaria Mining Corp. (2018)

Table 16.13 – Summary of Operation Expenditures, Pinos Project.

SUMMARY OF OPERATING COSTS US $ / t			
	200 tpd	300 tpd	400 tpd
Mine Operating Cost ($/t)	$39.57	$39.48	$39.39
Mill Operating Cost ($/t)	$30.77	$29.52	$28.26
Administrative Cost ($/t)	$10.00	$9.00	$8.00
Maintenance Cost ($/t)	$2.02	$1.87	$1.72
TOTAL OPERATING COSTS	**$82.36**	**$79.87**	**$77.37**

Source: Candelaria Mining Corp. (2018)

16.2.5. Initial Mine Equipment for 200 - 300 tpd.

A summary of Candelaria's mining equipment is listed in Table 16.14

Table 16.14 – Summary of Underground Mining Equipment, Pinos Project.

Description	Quantity
Scoop tram 1 yd	2
Scoop tram 1 ½ yd or 2 yd	2
6 tons haulage truck	2
600 cfm compressor	2
Jacklegs	6
Pumps	2
Service trucks	3

Source: Candelaria Mining Corp. (2018)

Figures 16.9, 16.10 and 16.11 show the longitudinal section of Pinos mine development, in Cinco Estrellas' Domains; including, San José Peñitas, Arandas, and San Francisco.

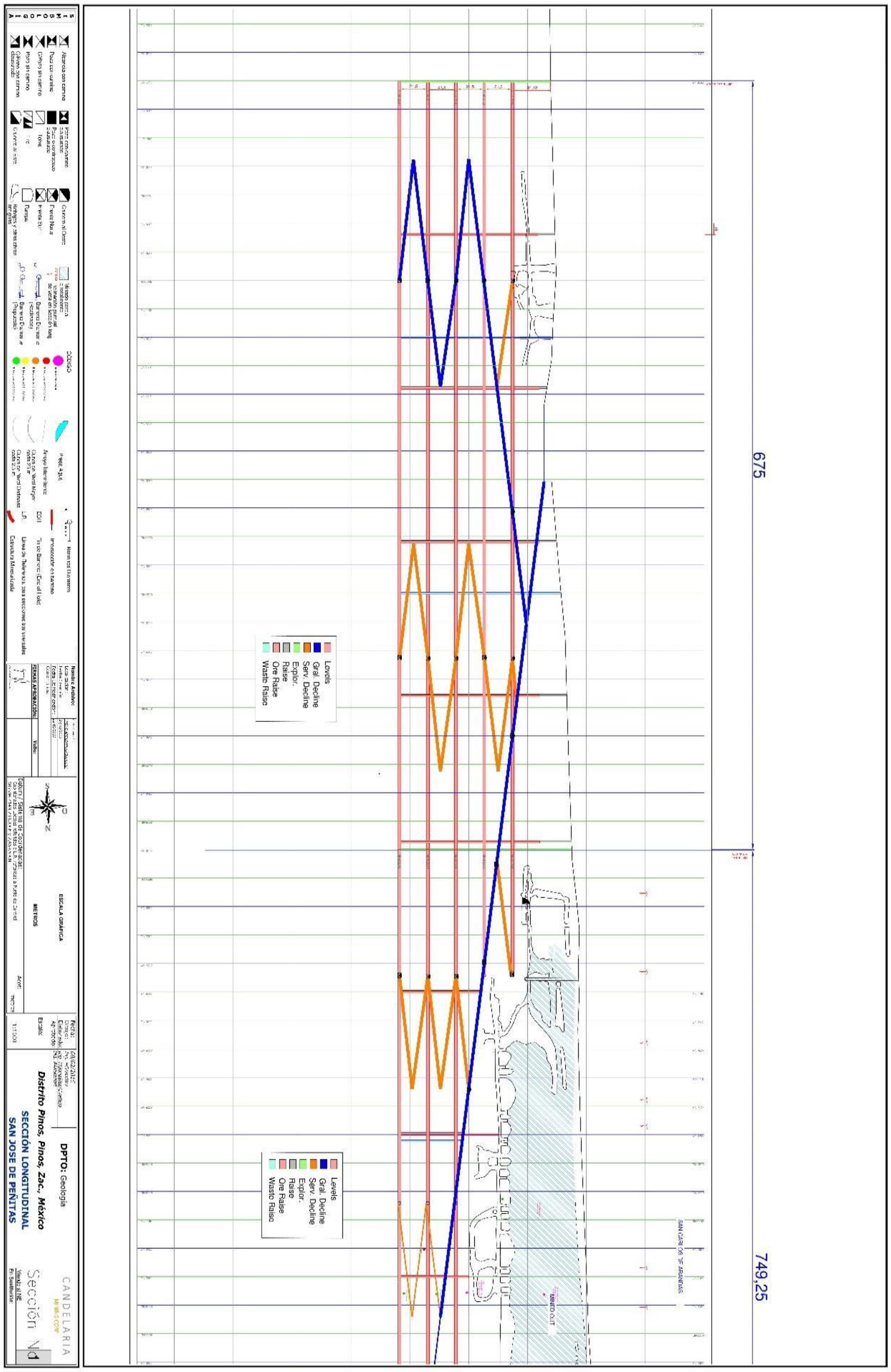


Figure 16.9. Pinos Mine Development, San José de Peñitas.

Source: Candelaria Mining Corp. (2018)

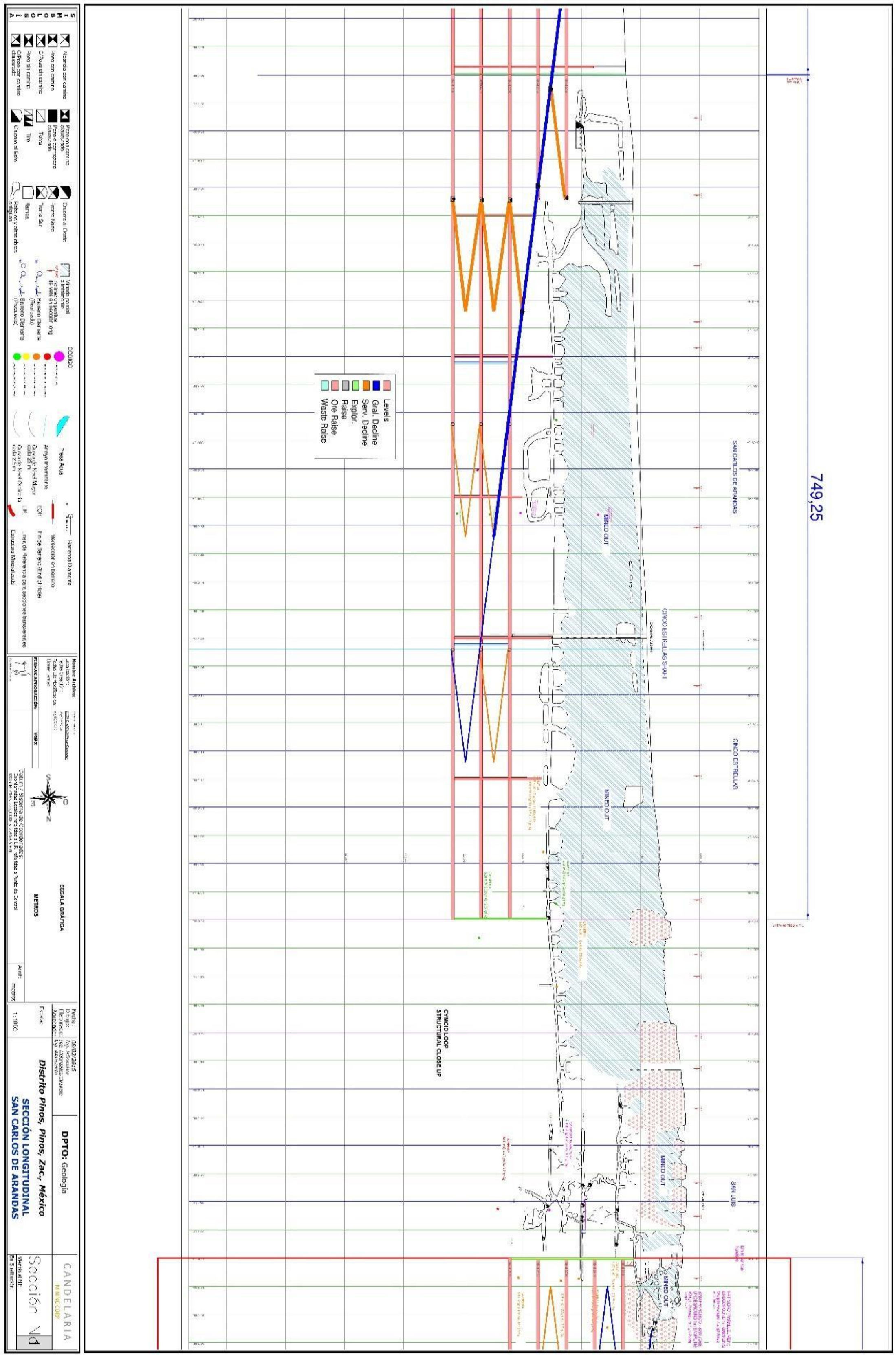


Figure 16.10 - Pinos Mine Development, San Carlos de Arandas.

Source: Candelaria Mining Corp. (2018)

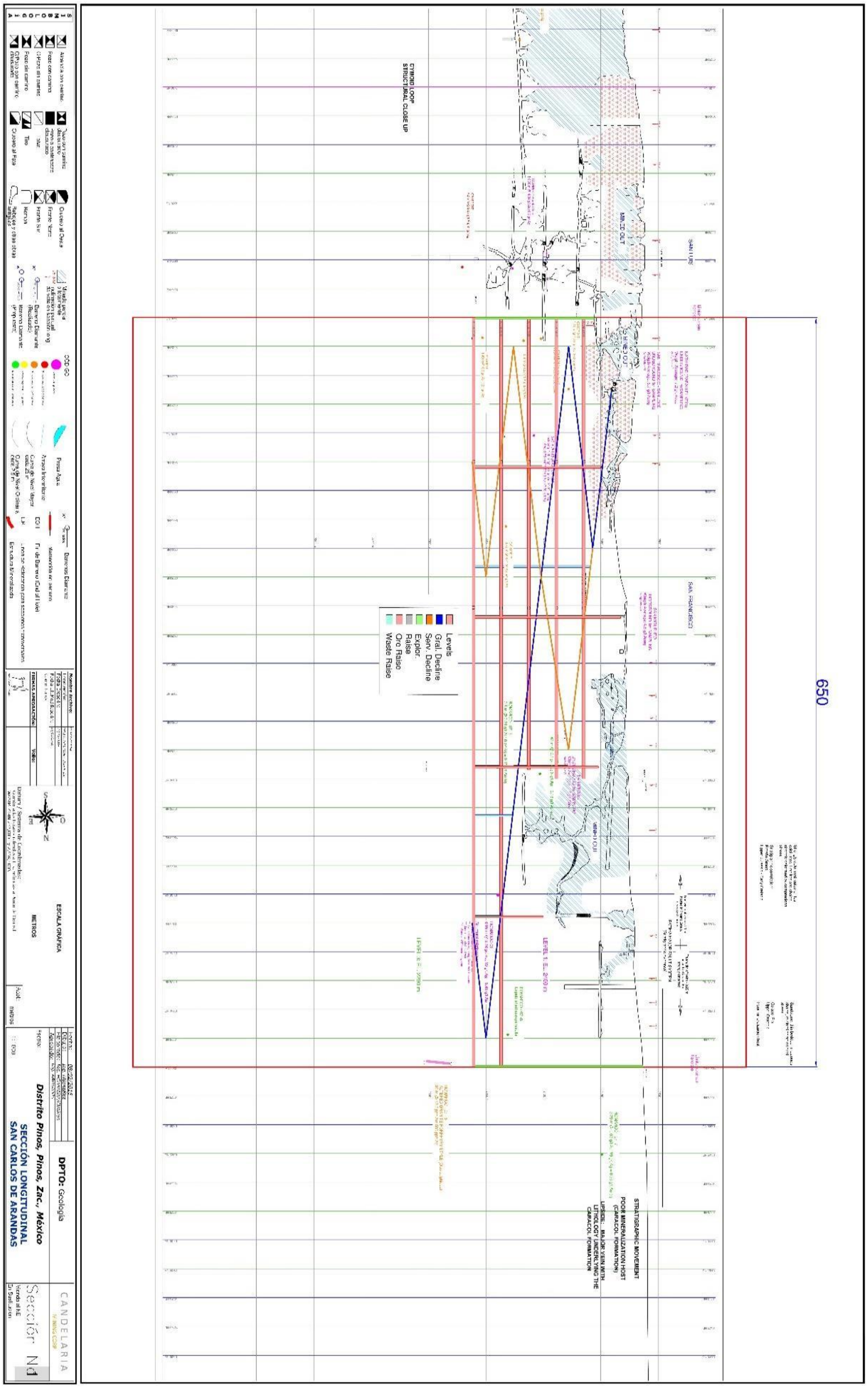


Figure 16.11. Pinos Mine Development, San Francisco.

Source: Candelaria Mining Corp. (2018)

16.2.6. Adequacy of Method and Approach

Regarding the mining method chosen by Candelaria mining experts, it has been shownin Mexico that the best suitable mining method for Pinos vein kind of deposit is Cut and Fill, using waste rock fill. Candelaria's proposed direct mining development and preparation, consisting of ramps, drifts and raises along vein structures is in JAO's opinion, the best suitable way to better evaluate this narrow vein system of Bonanza type of ore shoots; underground development gives more certainty in confirming the continuity of mineralization, changes in dip and dip direction, local faulting and displacements, veining intersections and large variations in grade and thicknesses of mineralized structures.

Systematic sampling of drifts and raises along vein structures will certainly give more confidence in expected volume and grade of the deposit as well as validation of true thickness at depth, and mineable blocks will upgrade classification from actual mineral resources.

Also, JAO believes that with the opening of proposed mining levels, there are chances of discovering possible ore shoots under the three domains of Cinco Estrellas; namely, Peñitas, Arandas, and San Francisco as some old mining ore shoots extraction was stopped at that time water table level.
Finally, once the mining development starts, further underground cross-cutting will be readily available to explore adjacent mineralized veins from developed stopping level.

17.RECOVERY METHODS

17.1. Process Overview

The Pinos remanufactured process facility (purchased by CAND) will consist of the following circuits and include all pumping, piping, and electrical components.

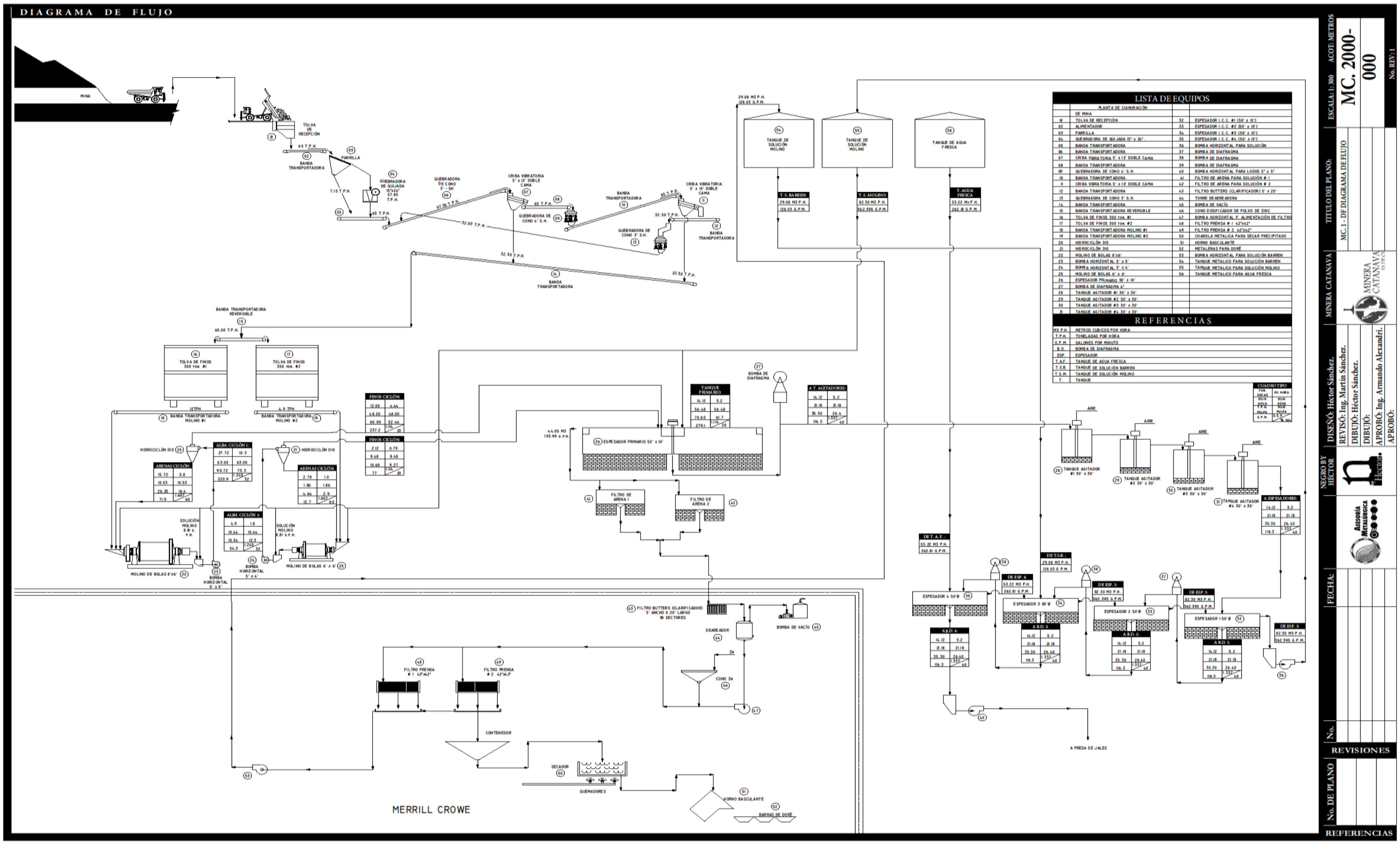
- ROM crushing Plant to produce a mill feed size of P80 - -3/8-in. Circuit will include jaw crusher with closed circuit secondary and tertiary cone crushers
- Milling Circuit including two (2) closed circuit balls mills, one (1) primary thickener, four(4) cyanidation leach tanks, four(4) counter current decantation washing thickeners
- Complete Merrill Crowe Zinc Precipitation including clarification, deaeration, zinc feeding, and gold and silver precipitate filters to produce a saleable precipitate.

The process milling rate will be starting with 200 mtpd in the first year, 300 mtpd on 2nd year and and 3rd years and 400 mtpd from 4th year to the 7th year, with designed recoveries of 90% for Gold and 80% for Silver

The Pinos process is shown in Figure 17.1 – Process Flow Diagram - Drawing # MC.2000-00.

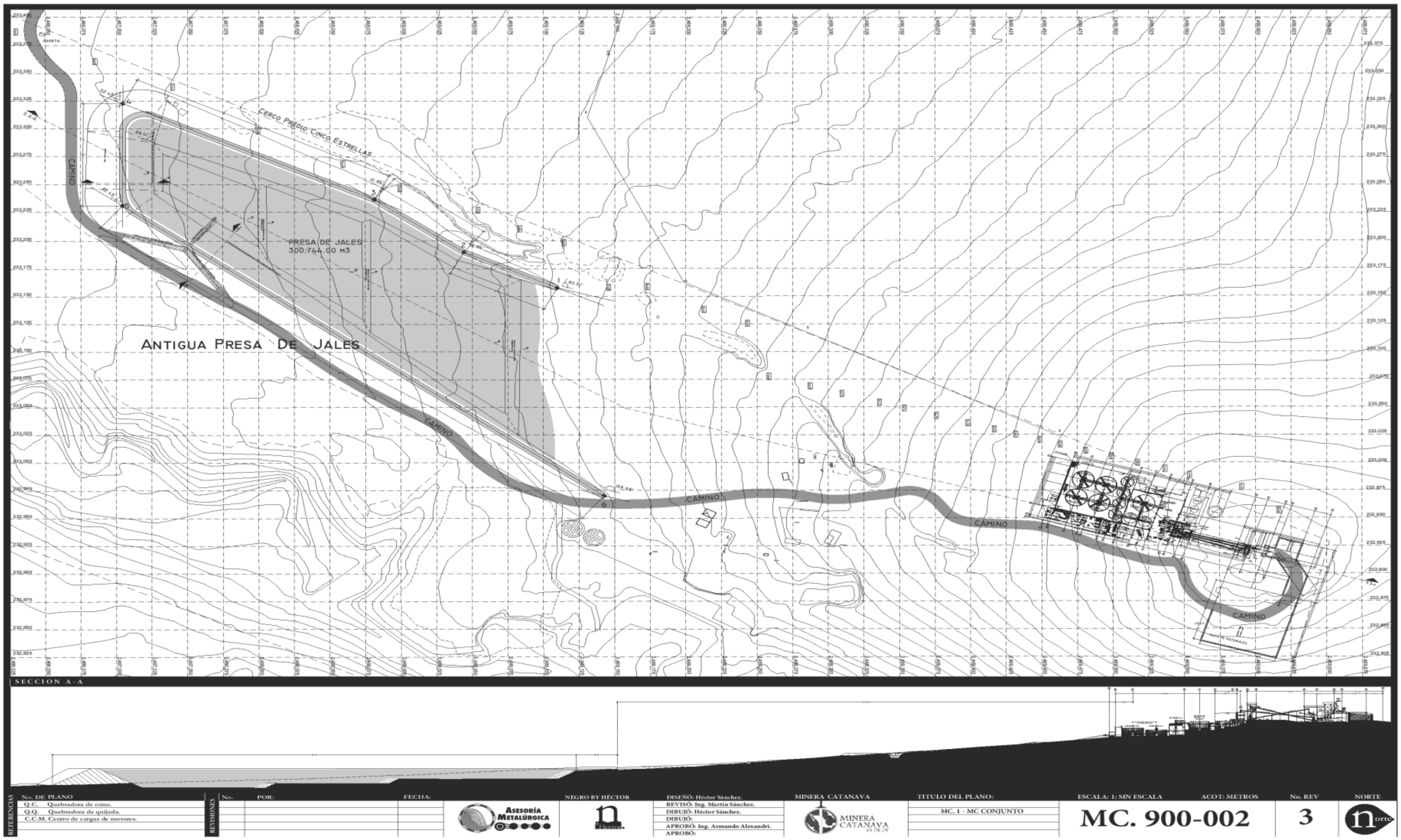
The proposed site and plant plan are shown in Figure 17.2, 17.3 and 17.4 - Drawing # – MC.900-002, MC-250-01, MC-300-001.

Figure 17.1 Process Flow Diagram.



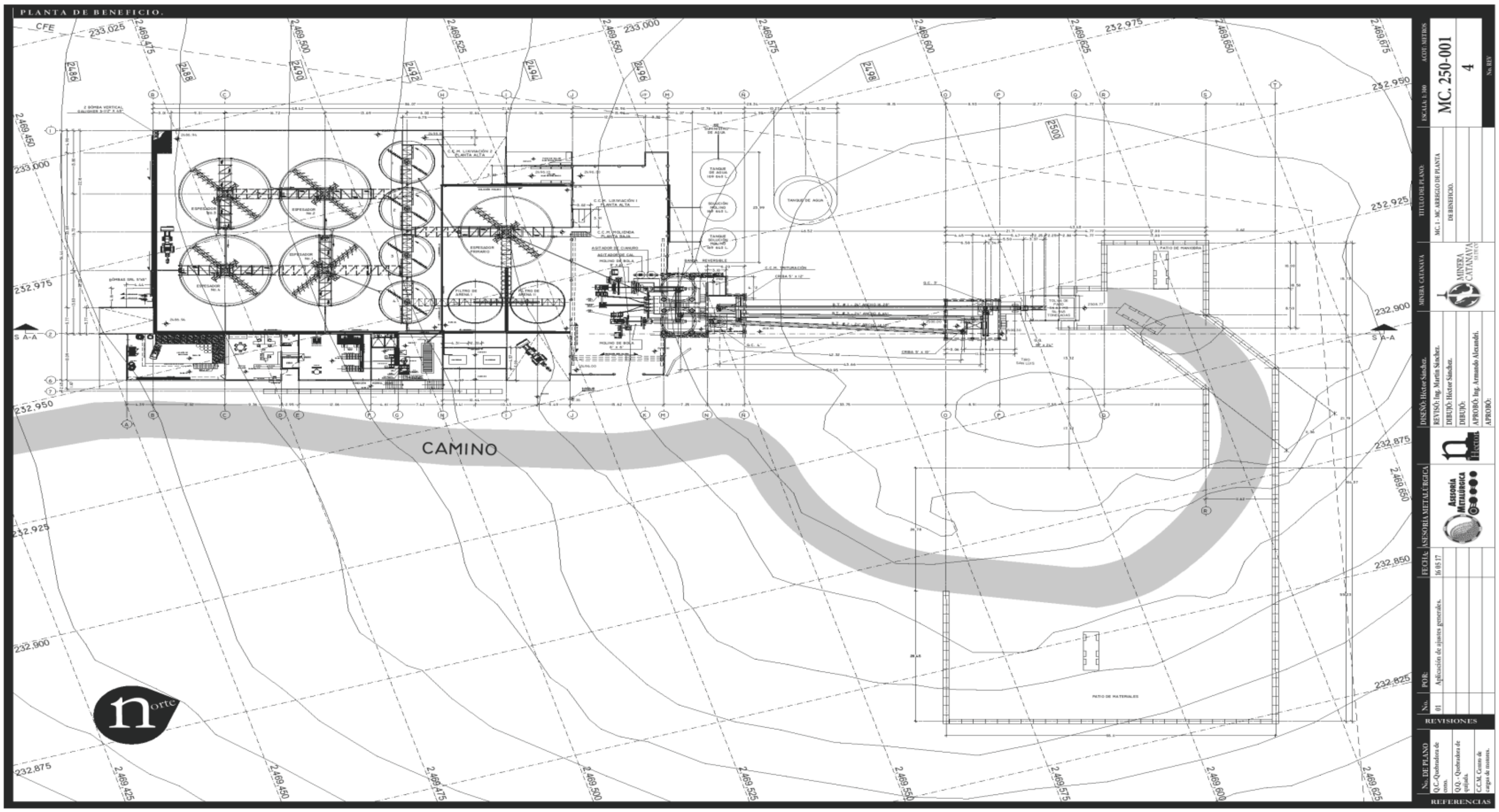
Source: Asesoria Metalurgica (2018)

Figure 17.2 – Overall Proposed Site and Plant Plan.



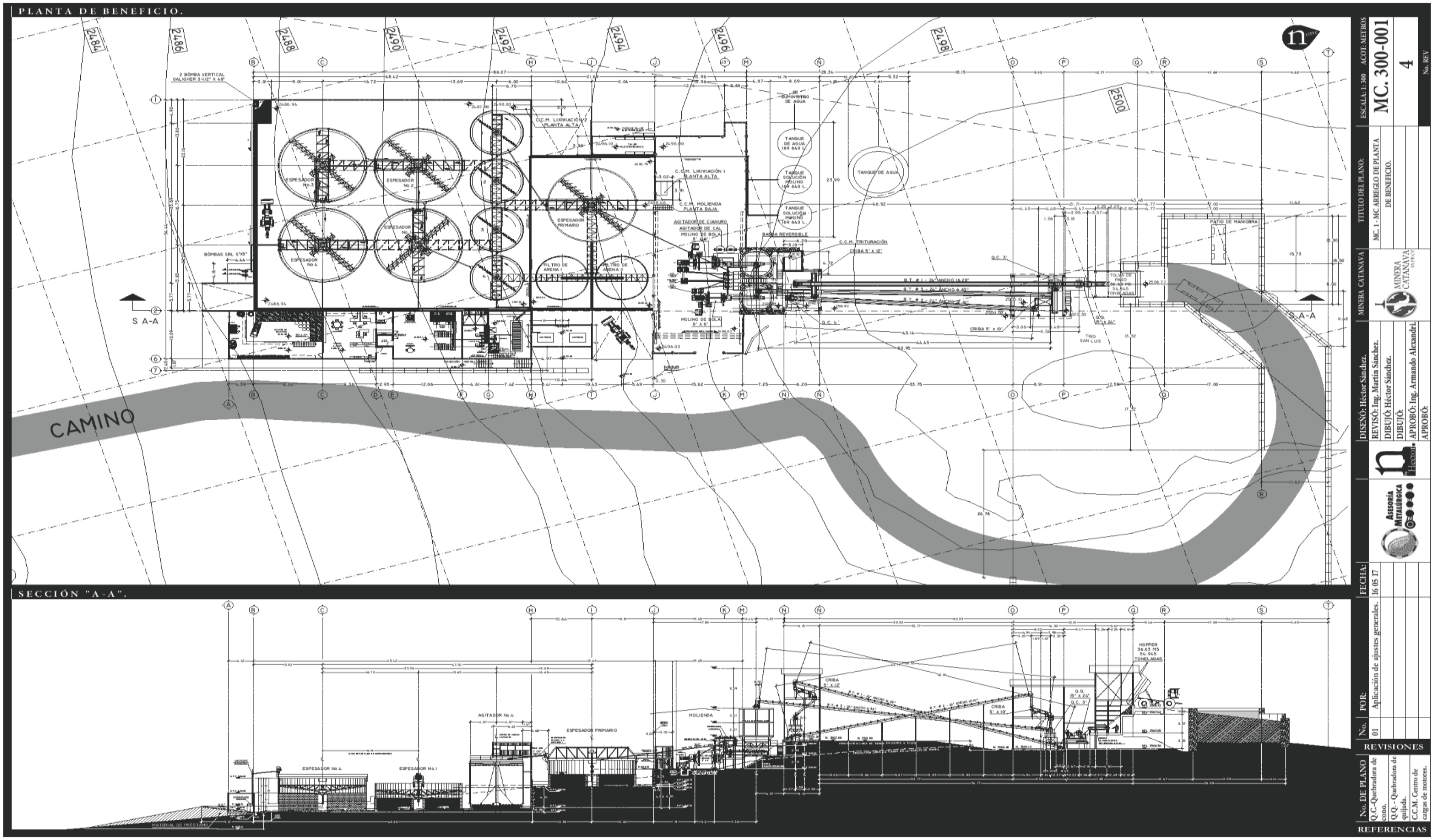
Source: Asesoria Metalurgica (2018)

Figure 17.3 – Overall Process Site and Plant Plan.



Source: Asesoria Metalurgica (2018)

Figure 17.4 – Detailed Site and Plant Plan.



Source: Asesoria Metalurgica (2018)

17.1.1. Processing Plant Description

Dynamic leaching process in simplistic terms consists in mineral milling, cyanide leaching and precipitate the final product. The mineralogy of Pinos are Quartz SiO_2; Calcite $CaCO_3$; rarely Muscovite $KAl_2(AlSi3O_{10})$ (F, $OH)_2$; traces of Bassanite $CaSO_4*0.5(H_2O)$; Hydrothermal Silica SiO_2; Orthoclase $KAlSi_3O_8$; and finally, minimal traces of Titanite $CaTiSiO_5$. Silver values are related to Acanthite Ag_2S, Hematite Fe_2O_3 and Aguilerite Ag_4SeS.

The Pinos Mill parameters are shown in Table 17.1 and overall plant layout in Figure 17.7,

Table 17.1. Pinos Mill Parameters.

Pinos Mill Capacity (mtpd)	Specific Gravity g/cc	Volumetric Weight k/m3	Work Index (Kw h short ton)
200 - 400	2.69	1670	16.83

Source: Candelaria Mining Corp. (2018)

17.1.1.1 Crushing.

Ore for processing circuit is stockpiled on a large patio (capacity 10,000 to 15,000 tons) near the crushing zone; during operation, the raw material is usually delivered to the primary crusher's dump hopper by dump trucks, excavators or directly from San Luis shaft.

The ore is transferred to a Jaw crusher through Conveyor # 01, furthermore, crushed ore is moved to a double deck vibrating screen of 5' x 12' through conveyor # 02; with the oversize from screening, it is conveyed to a secondary cone crusher 4' ¼ using a conveyor # 03, finally crushed ore is transferred to screen of 5' x 10', where final product, is moved to ore bin; by the way, due the WI parameter of the Pinos ore, the oversize ore from second screen of 5' x 10' (After jaw crusher and secondary cone crusher) is conveyed a tertiary cone crusher of 3' and reinserted to crushing circuit from conveyor # 02. The final product for milling is reduced to -95 mm (-3/8 inch).

17.1.1.2 Milling and Classification.

In accordance to milling testing, engineers determined an ideal pulp of 65%-75% passing the -200 mesh (74µm).

Milling of the Pinos ore include an 8' x 7' and 6' x 6' ball mills, while the classification of particles is done via closed circuit milling - two hydrocyclones D-15 each for each ball mill.

17.1.1.3 Leaching

Mineral in form of pulp ranging from 25% to 30% solids is deposited in a Primary Thickener of 50' x 10', in this deposit start the recovery of rich solutions from the mill, if the process requires a major leaching reaction, engineers add a fresh cyanide solution of 1500 ppm to 1750 ppm NACN.

Rich solution from the primary thickener is transferred to clarifier and the pulp from the discharge of primary thickener is pumped to four agitation tanks type AIR-LIFT de 30' x 30', it is to continue with leaching process, the tanks have four lateral siphons, the objective is to make sure the maximal depletion of Au and Ag values.

Residence time of solutions into the agitation tanks is 96 hours (exceeding the required time from the testwork for high gold and silver recovery). Finally, the pulp of fourth agitation tank comeback to primary thickener tank through countercurrent washing, then the pulp continues again the process through agitation tanks, where the final pulp from last fourth agitation tank is pumped to tailings pond.
The solution from countercurrent washing is send to primary thickener tank and then it is transferred to Mill Solution Tank for recirculation new use at mill process.

17.1.1.4 Filtration and Clarification.
The pregnant solution from the leaching circuit will have suspended solids (200 – 300 ppm) that are deleterious to the Merrill Crowe Process – thus requiring two(2) stages to clarify the pregnant solution to contain less than 10 ppm, and preferably 5 ppm total suspended solids.

The first stage of solution clarification includes primary sand Filters followed by a second stage vacuum leaf clarifier / filter.

17.1.1.5 Merrill-Crowe.
Following clarification of the Au-Ag rich process solution, the stream must deaerated utilizing a “packed” deaeration tower under high vacuum. Typical pregnant solution has dissolved oxygen ranging from 5-8 mg/L and needs to be reduced to 0.5-1.0 mg/L. Again, this ensure efficient utilization of the added zinc for precipitation of the gold and silver.

A liquid ring vacuum pump is utilized to ensure removal of the dissolved oxygen prior to zinc addition.

The chemical reactions of NaCN solution rich in Au-Ag in contact with Zinc will precipitate as shown:
2Na Ag(CN)2+Zn=Na2Zn(CN)4+2Ag
NaAu(CN)2=NaZn(CN)4+2Au

Based in these chemical reactions, the process needs 0.166 gr Zn for recover 1 gr Au, and 0.300 gr Zn for the recovery of 1 gr Ag.

Final volume (m^3): 319,904.63 Projected life of tailings pond: 5.5 years for complete the first bench. The precipitate process requires 0.303 gr Zn per 1 gr recovery Au and 0.606 gr Zn per 1 gr recovery Ag.
A minimal solution addition of fresh NaCN together with Zn, also, is recommended the use of Lead Nitrate (acting as an activator) in small quantities (20 – 30 gr/tonne) avoiding additional reactions that affect the precipitation.

17.1.1.6 Refinery
Pinos project scheduling does not consider the production of doré bars on site. The resultant precipitate from the Merrill Crowe process will be initially sold to refiners with the best refining terms. There is also the possibility of the construction of a refinery either on-site or in the nearest commercial city.

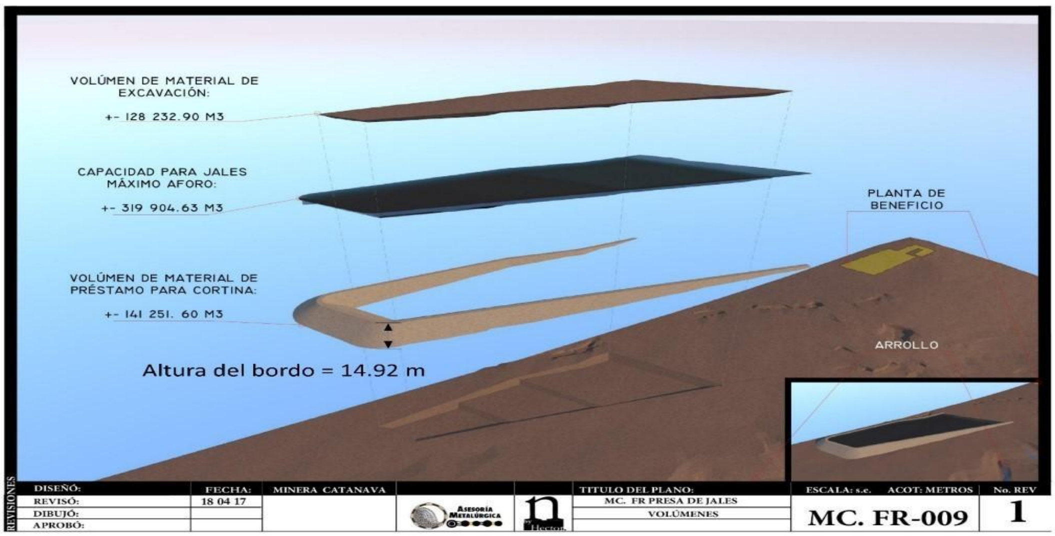
17.1.2. Tailings
The tailings impoundment is a 100% owned property of Candelaria Mining Corp, it is constructed just below the process plant site. The impoundment is double lined with the first liner made of a clay material that acts as a leak prevention system with the effective absorption and protect the upper second liner. The second liner is a welded 60 mil HDPE geomembrane, in accordance to geotechnical studies by GeoQuality Mexico and environmental requirements (NOM-141-SEMARNAT-2003). The method of subsequent embankment construction to obtain full capacity is up-stream, with a planned high of 14.92 m, including a final 1-meter free volume for protection of tailings pond during maximal storm, also, the protection includes two derivation channels designed by flow model analysis.

Technical parameters for the design of tailings pond are:
Morphology: Hills
Seismicity: Peniseismic Zone
Hydrology: Dry
Maximal storm period: 100 years related to desert zone.
Stability analysis: The project includes the both analyses recommended by the normativity: Finite Static Element and Finite Seismic Element.
Monitoring: The tailings pond project includes 3 piezometers and 2 monitoring wells.

Other requirements are: Accomplishment of environmental and water discharge normativity, avoid the invasion of external properties, operation with tailings discharge through high density polyethylene conduit 4" Ø.
Maximal tailings discharge: 400 tpd
Water discharge: 16.22 m^3/hr

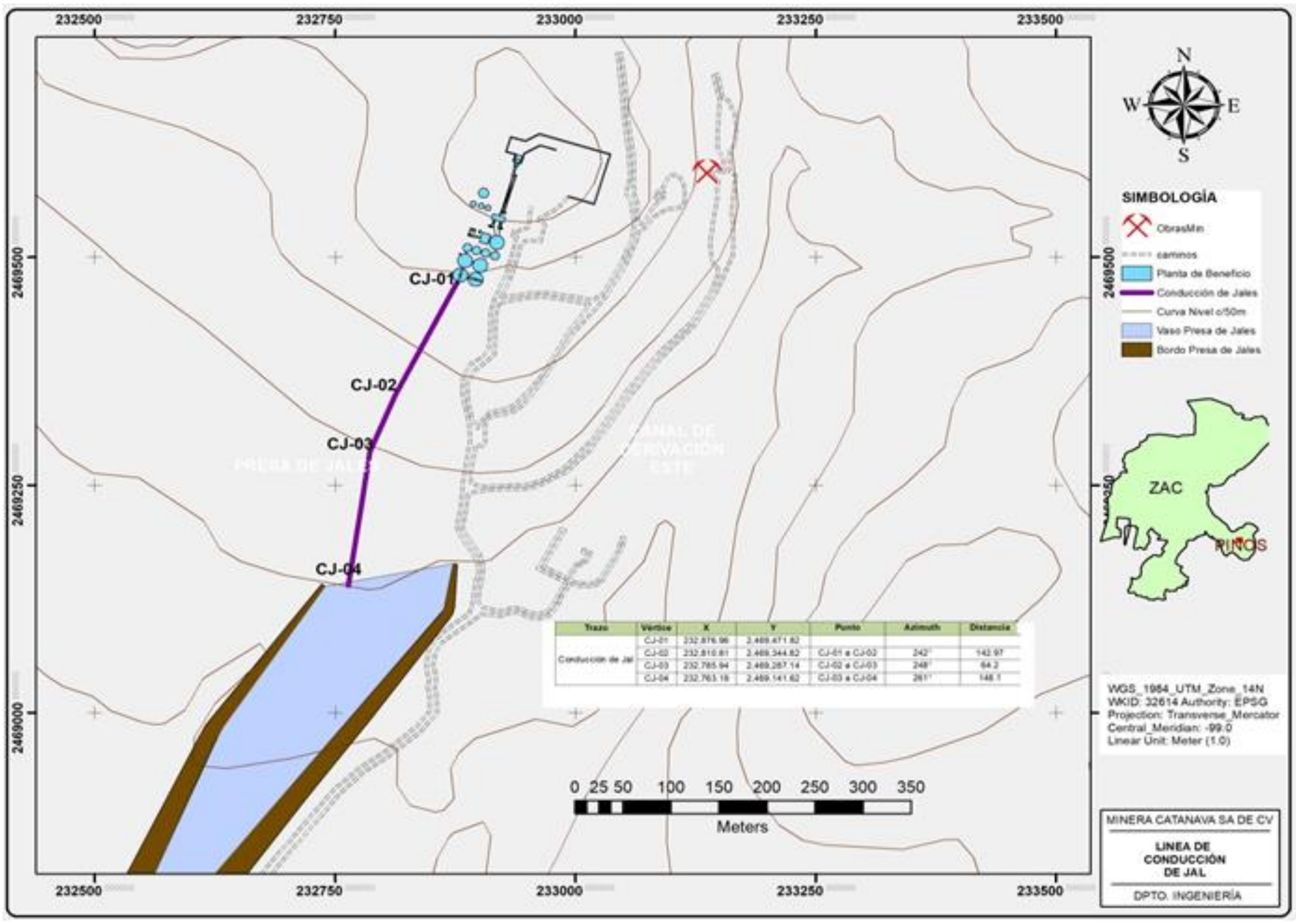
Details of the tailings pond and location are shown Figure 17.5 and 17.6.

Figure 17.5 – Tailings Pond Design



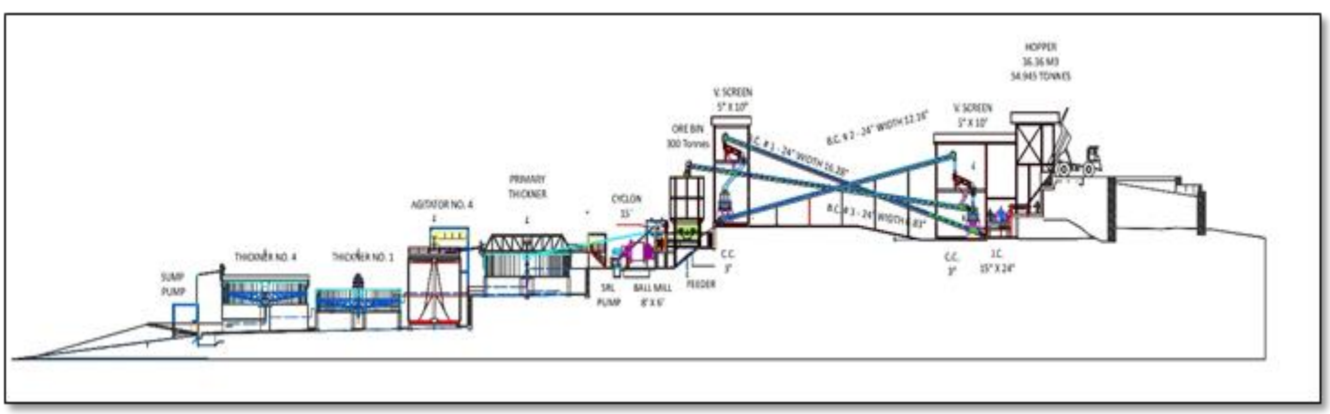
Source: Asesoria Metalurgica (2018)

Figure 17.6 – Tailings Pond and Pipeline



Source: Asesoria Metalurgica (2018)

Figure 17.7 – Dynamic Cyanide Plant Lay-Out.



Source: Asesoria Metalurgica (2018)

17.1.3. Laboratory

CAND has constructed a complete laboratory for assaying ROM samples and further metallurgical testing at site. It will also be utilized for process control and daily metallurgical balances.
The Pinos laboratory methodology consists of the following stages:
Sample Preparation – drying, crushing, splitting, pulverization
Fire Assay including micro-balances
Atomic Adsorption for solution analysis and process control.
Metallurgical Testing – bottle roll dynamic leaching, particle size distribution

17.2 Process Design Criteria

The preliminary process design criteria used for the Pinos PEA was developed from metallurgical testing results, calculated factors and certain process assumptions as noted in Table 17.2

Table 17.2 Process Design Criteria.

	Units (metric)	Value	Comments
Feed Composition:			
Gold	g/t	3.90 3.75 3.48 3.20 3.43 2.14	Years 1-2 Year 3 Year 4 Year 5 Year 6 Year 7 (Low grade stockpile)
Silver	g/t	47.60 44.90 46.38 49.10 47.98 71.66	Year 1-2 Year 3 Year 4 Year 5 Year 6 Year 7
Nominal Plant Throughout	Tpa	67,160 100,740 134,320 119,209	Year 1 Year 2-3 Year 4-6 Year 7
Mill Recoveries	% Au % Ag	90 % 72 % 80 % 66 %	Years 1-6 Year 7 (LG Stockpile) Years 1-6 Year 7 (LG Stockpile)
Cyanidation Leaching Retention Time	Hours	72	Excess in purchased plant
Cyanide Consumption	Kg/T	1.5	
Lime Required, CaO	Kg/T	1.75	pH modifier to 11.0
Grind Size, P_{80}	microns	75	Cyclone overflow to primary thickener
Bond Work Index	Kwh/sdt	16.83	Medium Harness
Bulk Densities	MT/cu.mt.	1.67	
Specific Gravity	gm/cc	2.69	

Merrill Crowe Process			
Solution S.G.	gm/cc	1.0	
Suspended Solids Pregnant Solution	ppm	< 10.0	
Deaeration oxygen level	mg/L	0.5	
Vacuum Required	in. Hg	24	High vacuum
Crushing Circuit			
Nominal Circuit Throughout	MTPH	40	

Source: D.E.N.M. (2018)

17.3 Adequacy of Processing Method

The process requirements are well understood, and consistent with similar projects elsewhere throughout the world. The unit operations for the Pinos process were selected based on the physical and metallurgical needs of the Pinos Project to achieve maximum extraction of gold.
The purchased crushing, milling and processing plant, which was designed and constructed by the engineering firm Asesoría Metalúrgica of Chihuahua, Chih. and is a remanufactured plant, which utilizes standard processing equipment and unit operations. A wet tailings impoundment (for water recycle) is located near the plant.

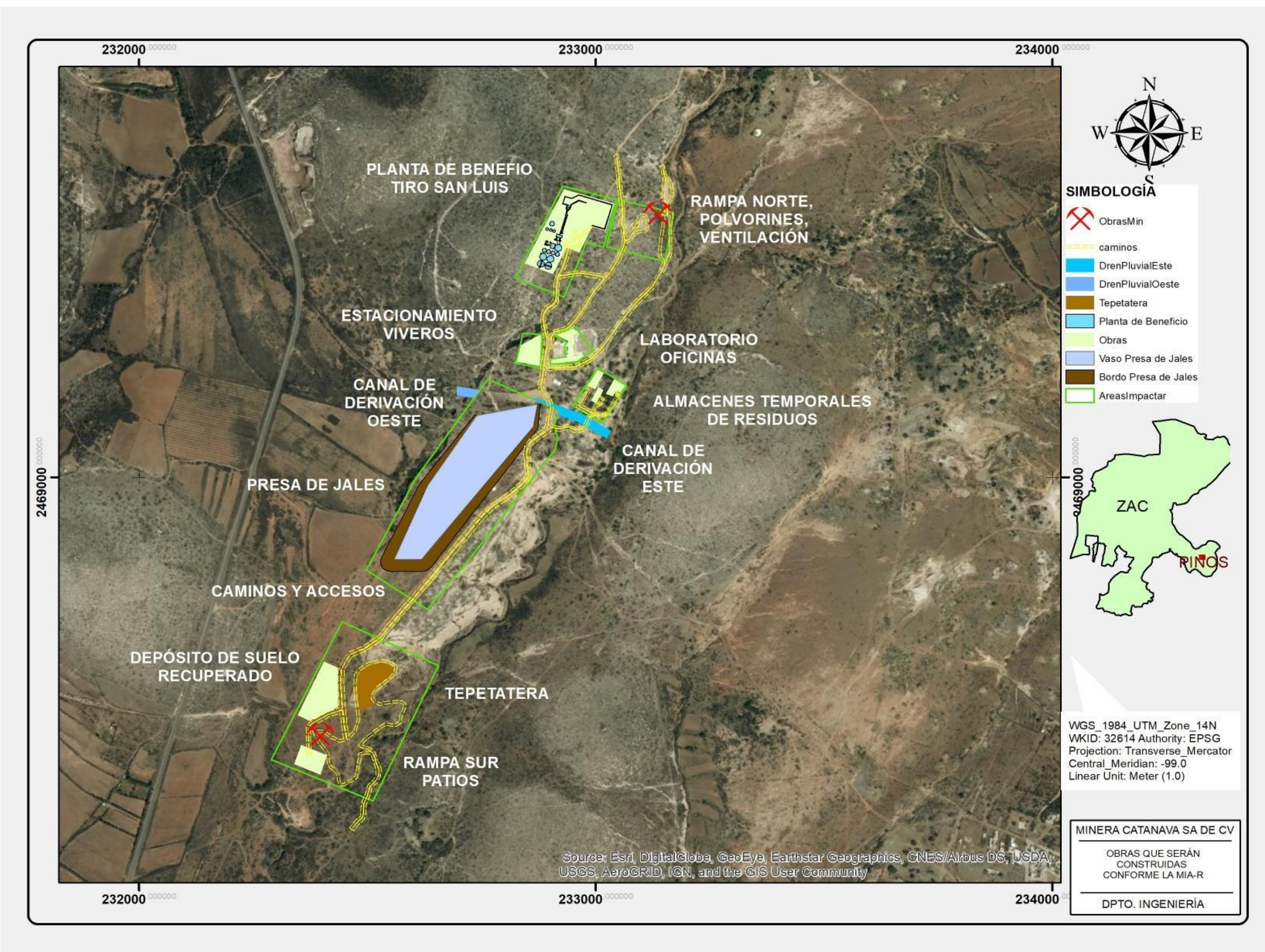
The product from the Pino plant will be Au-Ag precipitate, a readily payable gold and silver that has been shown in the cash flow based on today's metal prices.

18. PROJECT INFRASTRUCTURE

Pinos has been an active mine district in small and medium scale for almost 400 years, characterized by periods of inactivity, related to Mexican independence war, Mexican civil wars and drop of precious metals prices.

During this timeframe, the onsite infrastructure has been updated, upgraded and improved continuously by its respective historical owners. Surface infrastructure plan view is shown in Figure 18.1.

Figure 18.1 Surface Infrastructure Plan View.



Source: Candelaria Mining Corp. (2018)

18.1 Location and Access

The Project is located adjacent to the town of Pinos, Zacatecas, which is a village of +7,000 inhabitants just 500 km northwest from Mexico City. Pinos Project is accessible via maintained public highways and paved roads connecting the state of Zacatecas with the center of México through a modern system of highways. The town of Pinos provides infrastructure and necessary services to mine employees.

18.2 Accommodations and Camp Facilities

The Project does not have a camp facility located near the main administration offices, the employees and contractors working on site are currently accommodated at acommodations in the town of Pinos, which offers more options for employee room and board, including hostels, hotels, and rent of houses.

18.3 Electrical Power and On-site Distribution

The Project's power supply is sourced through Mexican CFE (National Enery commission) grid through a power line which provides power to the Project transformer station; the new operation includes an increase of power from 13,500 Kva to 13,800 Kva. A Diesel plant is considered as providing energy in the event of a power outage, where the mine, process plant, and surface facilities can still function.

18.4 Water Supply

18.4.1 Potable Water

Potable water is abundant in the town of Pinos and mine site for human consumption. It is supplied from the Pinos aqueduct; it crosses the mine property just 200 meters of San José de Peñitas portal and facilities and local water wells.

18.4.2 Process Water

To accomplish requirements dictated by SEMARNAT to grant the environmental permit EIA (MIA); as well as to secure enough water for processing plant, Candelaria did two hydrological studies; one for underground water in local aquifers performed by Sistemas Tecnológicos e Investigaciones en Ingeniería, S.A. de C.V. "Estudio Geohidrológico Realizado en el Municipio de Pinos, Zacatecas para la Minera Catanava". April 2016, and the other for surficial, and underground old mining workings performed by the same company titled "Analisis Hidrológico, Tránsito por el Vaso y Diseño de Canal Pluvial para la Presa de Jales de la Mina Catanava en Pinos, Zacatecas."

Results from these studies reveal that the Oasis Ranch's well may yield over 400 m^3 per day and that San Luis Shaft may produce 200 m^3 per day.

Process water estimated consumption is for 200m^3 per day. Candelaria will be supplied by San Luis Shaft (Candelaria has an active water use permit with CONAGUA and certified by SEMARNAT), for additional water requirements, the company may pump additional volumes from Candelaria and San Joaquín shafts. Also, if necessary Candelaria may take water for processing mineral from El Oasis Ranch well.

Water quality from streams, aquifers and old mining works have been proved by Candelaria's physicochemical analysis on surficial and underground water samples performed by Index-Lab in April 2017 to be acceptable under SEMARNAT regulations.

A budget of US$165,013 has been provided as shown in Section 21 under Initial CAPEX; including, pumping capacity tests, access easement for a water line and hydraulic pipeline and well rehabilitation.

18.5 Fuel and On-site Storage Facility

Fuel is supplied to the onsite commercial supplier of Pinos village, located to 2.5 Km of the project site. The diesel fuel for the underground machinery will be transported from the onsite storage tanks to the underground and surface operations.

18.6 Warehousing and Material Handling

The Project will have a central warehouse building of 680 m^2 into the Plant installations, small secondary storages for material handling of mine and services will locate strategically inside work areas.

18.7 Site Security

The Company employs internal security for the vigilance of current explosives storages, in accordance to Mexican Army Normativity, for the mine and plan operation, internal and external security will monitor the Project from a central security outpost at the main gate. Currently, the project is surrounded by a fence.

18.8 Communication

Voice and data communications are routed through Telmex (Phone and Internet), Telcel (Mobile and Internet) and Movistar (Mobile and Internet), the project has good communication capabilities and cell phone coverage.

Future on-site and underground communications will be via a radio network; it will be maintained and extended as needed by the project personnel.

18.9 On-site Transport and Infrastructure

Light vehicles and pickups are provided on-site to transport mine workers from accommodations to their respective work areas. Also, the Company will provide bus transportation from the town of Pinos to mine site on scheduled shift rotations.

18.10 Solid Waste Disposal

Waste is managed in dumpsters and other appropriate waste containers. In accordance to normativity, waste is divided in dangerous, special management and urban solids, the disposal of it is in special areas approved by SEMARNAT regulations for final disposal by an external contractor (Dangerous and Special Management), and Urban Solids Residues are disposed at the Pinos Landfill.

18.11 Parts and Mine Supply Freight

All supplies and other consumables required to operate the mine, process plant and surface facilities are brought in via all season access paved road from San Luis Potosí (80 Km); Querétaro (260 Km); Guanajuato (380 Km); Guadalajara (400 Km); Aguascalientes (150 Km) and Zacatecas (120 Km) by various freight-forwarding contractors or personnel of the company.

18.12 Mobile and Fix Equipment Maintenance Facility

There are planned 2 maintenance bays, welding and tire facilities at the Project to providing an enclosed facility for all maintenance activities. These facilities are especially useful during the winter season when the temperature can plunge as low as -3°C.

18.13 First Aid and Ambulance

The Pinos village has two clinics, related to IMSS (National Security System) and Pinos Regional Clinic (Zacatecas local government). The company will have a first-aid clinic according to the STPS regulations by labor authorities after the Company has a staff of 50 direct employment; the project will have ambulance and full-time trained personnel on standby for any medical attention or emergency that may arise. After 100 employees are highered s, on the project as the Mexican Laboral normativity requires a full-time doctor.

18.14 Office and Administration Buildings

Currently, the project has an exploration office on the Pinos project site, with engineer's accommodations; for the future operations, the company will build an office and administration facility that can accommodate the necessary engineering, geological, accounting, safety, environmental, and administrative personnel.

19. MARKET STUDIES AND CONTRACTS

19.1. Market Studies

No market studies are currently relevant as the Pinos Project will produce a readily saleable commodity in the form of gold and silver contiaining precipitates.

19.2. Contracts

As of the effective day of this report Candelaria has not entered into any material contracts required for the development of the Pinos Project; including, mining, concentrating, smelting, refining, sales and hedging, and forward sales contracts or arrangements.

20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

20.1 Environmental Studies

All mining and environmental activities in México are regulated by the Mexican Mining Agency) Dirección General de Minas DGM) and by the Mexican Environmental Agency (Secretaría del Medio Ambiente y Recursos Naturales SEMARNAT), under corresponding Laws and Regulations.

The most recent mine development and operations (i.e., gravimetric-flotation processing) at Pinos Project commenced in 2010 according to information from previous owners, which formed the basis of the 2011 Environmental Impact Assessment EIA Particular Mode (Manifiesto de Impacto Ambiental, Modalidad Particular).

Technical studies submitted by Candelaria during 2015-2017 to obtain the EIA, SEMARNAT (Mexican Environmental Agency) determined that a regional EIA was not needed, subsequently a local EIA was submitted, and the corresponding permit was granted on April 27, 2018.

One aspect of obtaining said permit is that certified results from the geochemical and metallurgical analysis performed by Intertek+ABC Analytic of Mexico from Pinos' tailings pond samples which revealed that "the Pinos' tailings and waste rock did not produce acid drainage and the concentrations of elements are nontoxic."

The EIA approval requires additional conditions to be met in the future including; fulfilling the prevention and mitigation measures outlined in the report, submit to a monitoring and reporting process verified by a 3rd party expert, obtain a reclamation performance bond, provide annual reporting on tailings embankment, cyanide leaching facilities and waste rock facilities, submit a detailed closure plan, and notification at the completion of construction of environmental impacts as well as notification of start-up and cessation of operation dates.

According to the Pinos' mangagement, all the activities of current operations follow current regulations that govern the different instruments of environmental evaluations for the mining sector that were designed and required by the Secretariat of Environment and Natural Resources (SEMARNAT) and the Federal Attorney for Environmental Protection (PROFEPA).

Based on company's information, it is confirmed that Candelaria Mining Corp. and its Mexican subsidiaries possess all the required permits by the local and federal authorities, as required by the current environmental legislation in the United States of Mexico.

The Tailings Pond was designed according to regulations (NOM-141-SEMARNAT-2003 and legislation applicable) with a holding storage capacity of about 0.7 million tons. Candelaria Mining Corp contracted the firm Asesoría Metalúrgica and GeoQuality México to study and design the new tailings pond detailed in various sections of this PEA.

20.2 Mine Closure Plan

Even though a mine closure plan is not obligatory for mining companies during the early years of operation; however, due to Candelaria's environmentally friendly policies, it prepared a detailed Mine Closure Plan which was submitted to SEMARNAT in February 2018.

Environmental objectives of Mine Closure are related to Passive Closure as these will continue for approximately 5-years from the end of mine operations.

The objectives are.
a) Human Health and Security. The mine closure activities were designed with emphasis on guaranteeing the health and security of people and communities properties and in accordance with regulations.

b) Physical Stabilization. The mine closure plan was designed to assure the physical stabilization of mill, mine facilities, mine workings, tailings pond, waste deposits and yards in general.

c) Geochemicaly Stability. The mine closure plan is regulated by the federal and local requirementsto avoid the migration of particles and fluids and mitigating impacts, remediating and confining at official waste deposits or dangerous waste.

d) Landscaping. The closure plan includes various activities to maintain regional landscaping for a complete reincorporation of animals and plants.

e) Water. To ensure the recycling of water during production activities to the extent possible. The closure program includes the monitoring of aquifers and nearest streams and wells to making sure that local communities will have clean water for their activities and necessities.

f) Social. It is foreseen that during the operation stage, Candelaria will pursue an agreement with the community that allows Candelaria to transfer (after mine closure) its infrastructure that is no longer useful for the company to the communities or nearby municipalities.

20.3 Environmental Expenses

An external staff of biologist and engineers; including, environmental, forestry and geohydrological experts along with Candelaria's technical staff defined environmental expenses for the entire life of mine and passive closure of the mine.

The budget for environmental requiring totaling US$715,310 is shown in Table 20.1. It includes each of the environmental monitoring and surveillance programs, and the elements, and parameters to be monitored, frequencies, the monitoring stations, and mine closure. These expenses are distributed along life of mine and 5 years after mine closure

Table 20.1 - Environmental Expenses.

Activity	US
Plants Rescue and Relocation	$27,784
Animals Rescue and Relocation	$8,940
Mitigation Measures	$49,465
Plant Nursery	$26,231
Special Areas of Conservation (Desertic Plants)	$18,469
Biannual Reforestation Programs	$64,240

Plants Maintenance	$13,919
Animals maintenance	$13,919
Environmental Training	$74,946
Follow up to SEMARNAT Resolution	$37,473
Geochemistry stabilization and monitoring (Dust and particles)	$20,878
Noise Analysis	$20,878
Luminosity Analysis	$20,878
Water monitoring	$120,450
Physical stabilization	$18,737
Landscaping	$26,767
Social Management (Environmental Protection)	$32,120
Contingency 20%	$119,218
TOTAL (US)	$715,310

Source: Candelaria Mining Corp. (2018)

Continuous environmental expenses are considered in this PEA under Sustaining Capital Costs and Mine Closure.

20.4 Permitting

Candelaria Mining Corp and Mexican subsidiaries have all the permits, in accordance with mining, environmental, labor, tax and other Mexican regulations for the construction and operations of the Pinos mining and metallurgical complex.

Additional land required for future tailings pond was submitted to Cd. Pinos Ejido during Cd. Pinos Ejido General Meeting in August 2016; they approved to sell 9 has of surface land adjacent to Pinos tailings pond.

According to Candelaria's legal opinion provided to JAO, the Pinos Project is currently in legal and environmental compliance; furthermore, JAO is not aware of any pending environmental liabilities within the Pinos Project area of operations. Table 20.2 shows the list of permits granted and pending for Pinos Project.

Table 20.2 - Permitting Status.

PERMIT	STATUS	DATE EXPECTED	AUTHORITY	COMMENTS
EIA (MIA-Regional)	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Manifiesto de Impacto Ambiental
Environmental Risk Survey	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Manifiesto de Impacto Ambiental
EIA (ETJ)	Closed	Granted	Secretaría de Medio Ambiente y Recursos Naturales	Use of forestall land
Explosives Storage	Closed	Granted	Secretaría de la Defensa Nacional	Renewal for 2018
Laboral	Closed	Granted	Secretaría del Trabajo y Previsión Social	Granted by PASST (Self-Management Program)
Laboral	Closed	Granted	Instituto Mexicano del Seguro Social	Social security of workers and medical care
Mexican Company	Closed	Granted	Secretaría de Relaciones Exteriores	Approval for constitution of companies and subsidiaries
Taxes	Closed	Granted	Secretaría de Hacienda y Crédito Público	Company registration, tax registration and rights
Mining Activities	Closed	Granted	Secretaría de Economía	Mine concessions, mining production and investment
Infrastructure	Closed	Granted	Secretaría de Infraestructura Zacatecas	Access for hydraulic pipeline and roads from Zacatecas paved road
Local taxes	Closed	Granted	Secretaría de Finanzas Zacatecas	Use of vehicles, payroll tax.
Power	Closed	Granted	Comisión Federal de Electricidad	New supply granted by CFE with modifications to Pinos project grid system from the power station.
Groundwater Use Allowance	Closed	Granted	Comisión Nacional del Agua	San Luis shaft
Groundwater Use Allowance	Pending	2018Q4	Comisión Nacional del Agua	El Oasis Ranch Aquifer (Aquifer capacity granted)
Additional Land	Pending	2018Q4	Registro Agrario Nacional	Land acquisition granted by Cd. Pinos Ejido and landowners.

Source: Candelaria Mining Corp. (2018)

20.5 Social or Community Impact

Zacatecas State and Pinos' communities are friendly with mine activities, the history of Zacatecas is related to the mining industry since Spaniards times, including the Pinos Municipality.
In 2016 December, the Zacatecas Governor tried to apply a new special environmental tax for all industries, principally the mine companies; however, the so-called "impuesto minero" was submitted by Federal government to Suprema Corte de Justicia, the maximal justice tribune of México, the argument

of federal government establishes that mining regulations are under the jurisdiction of only the federal authorities, presently the local proposal is in standby.

Pinos project has the following characteristics:

1. Pinos Municipality does not have first nation's communities.
2. Pinos Project and related claims are outside of historical areas.
3. Pinos does not represent a risk for local communities; they are improving the development of mine industry due to the generation of new employments avoiding migration.
4. Pinos Project and related claims are not inside of any protected natural area or related to special environmental management.
5. The touristic attraction of village (Pueblo Mágico) is related to historical mining; the main touristic zones are outside of Pinos project and claims.
6. The mine operations, processing plant and future expansion of the Pinos project are outside of urbanized areas.

As part of informative activities of Candelaria Mining Corp at Pinos Project, personnel of the company informed the residents of the town of Pinos'; including, the Ciudad Pinos Ejido, neighbors, municipal authorities, local and regional commerce owners and the public regarding the benefits of the project into local economy, including the generation of employment, social programs, environmental programs for protection of animals and plants, and principally, all the engineering procedures and normativity of a social and environmentally responsible industry.

The following figures 20.1 – 20.7 explain graphically the location of the tailings pond, service areas, waste rock disposal (tepetatera) areas, reforestation plan, and animals rescue plan.

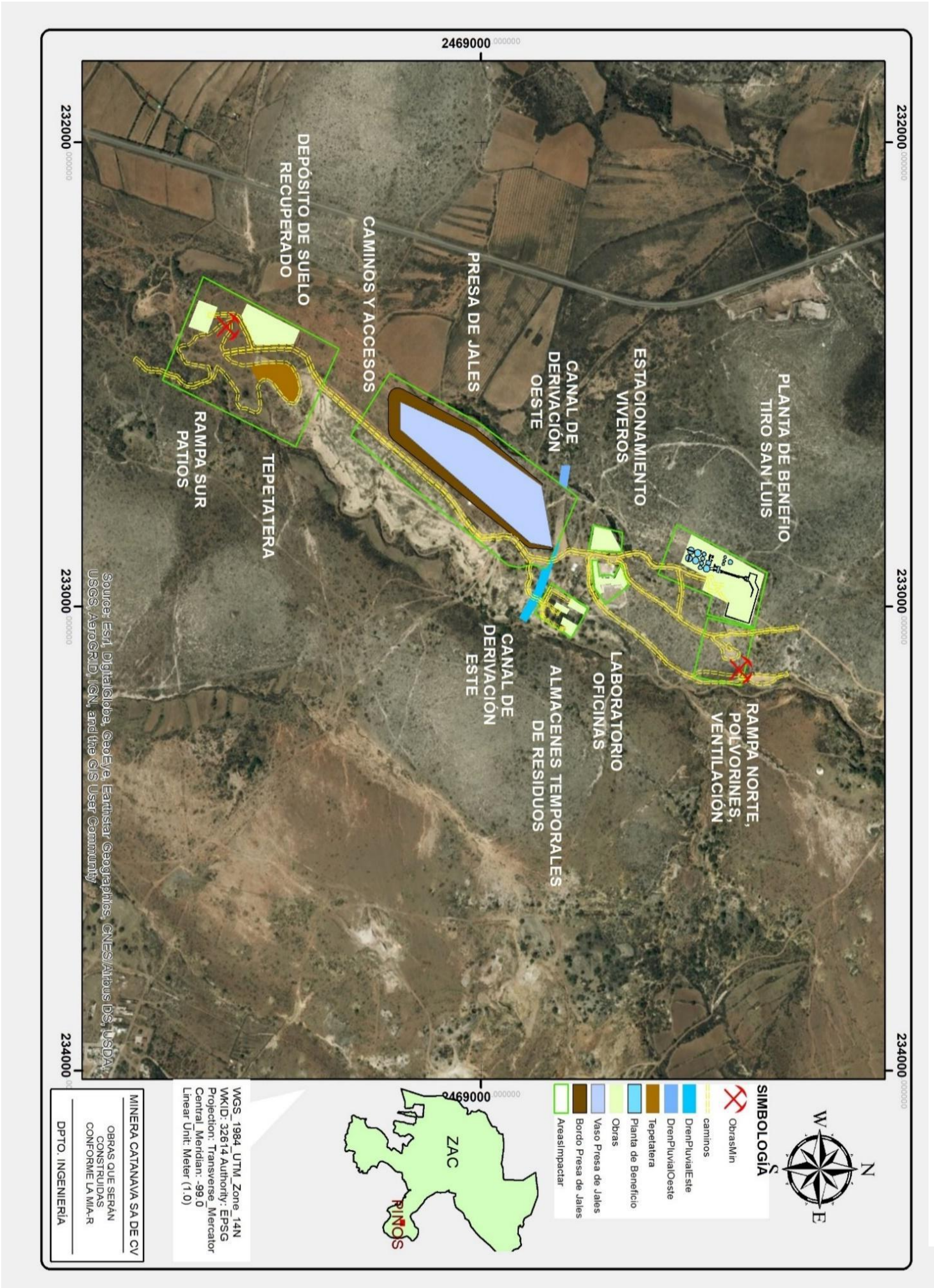


Figure 20.1 New polygons for construction, development and facilities.

Source: Candelaria Mining Corp. (2018)

Figure 20.2. Recovered soil deposit. FMining Corp

Source: Candelaria Mining Corp. (2018)

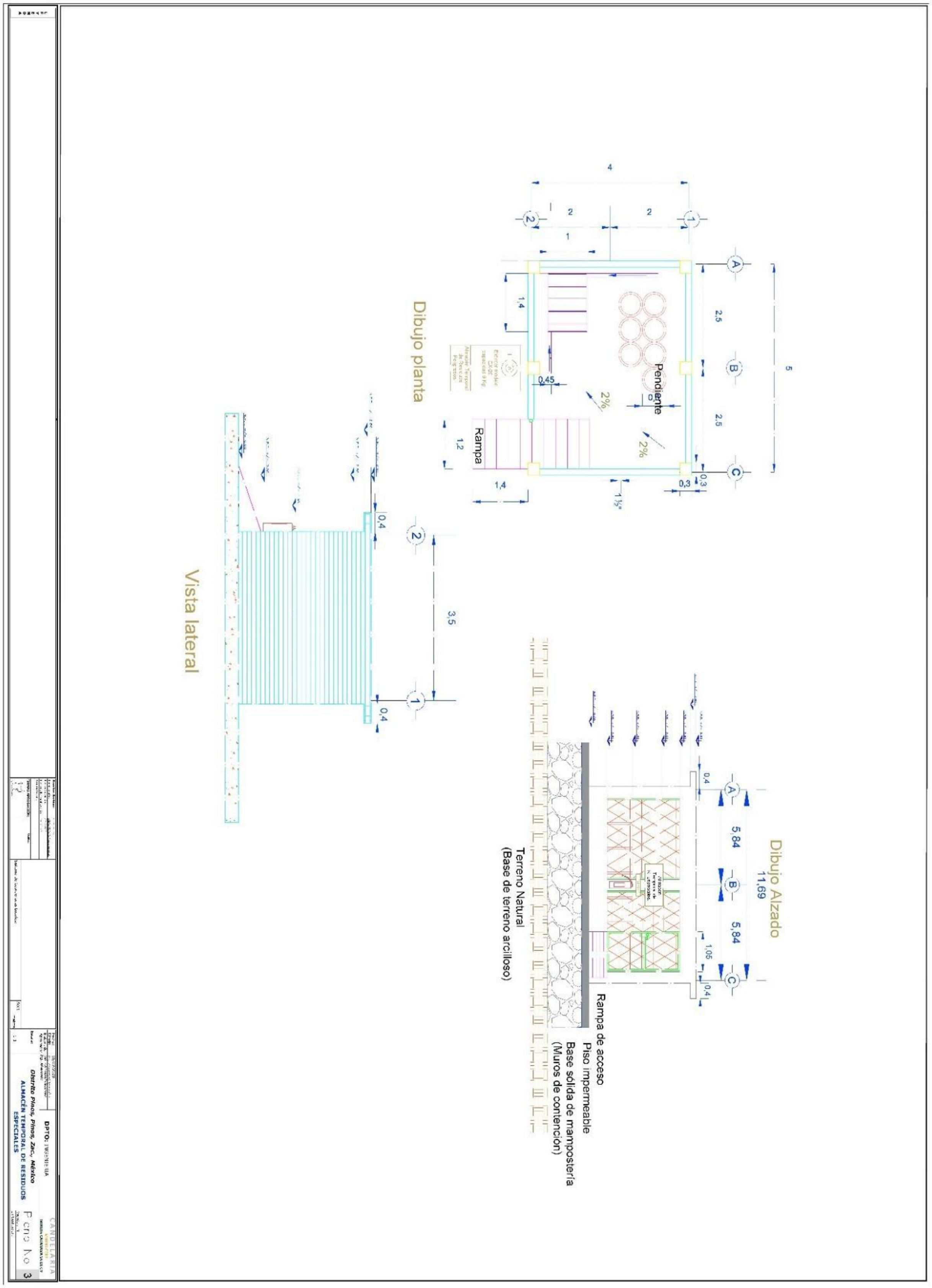


Figure 20.3. Temporary storage of dangerous waste.

Source: Candelaria Mining Corp. (2018)

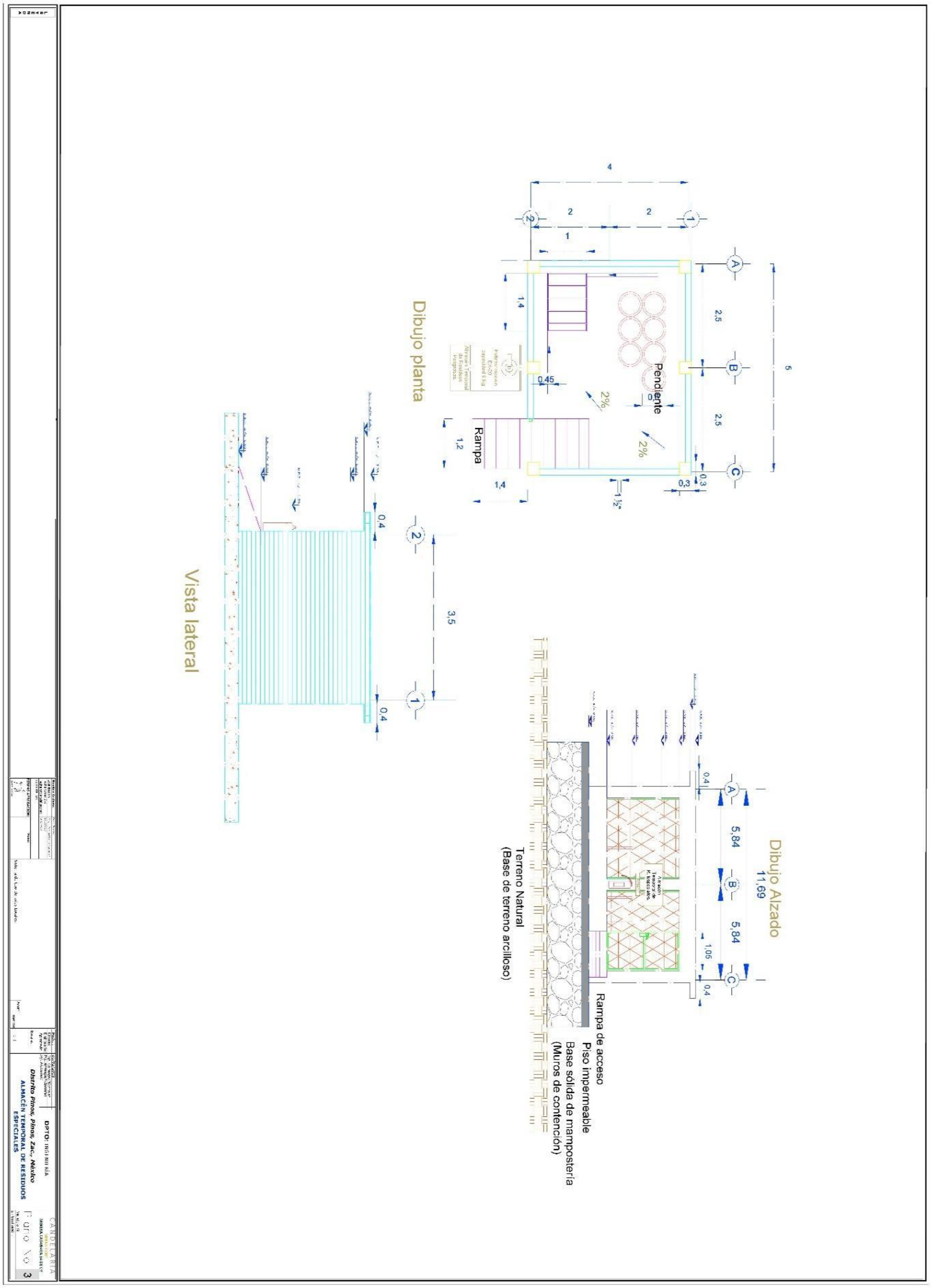
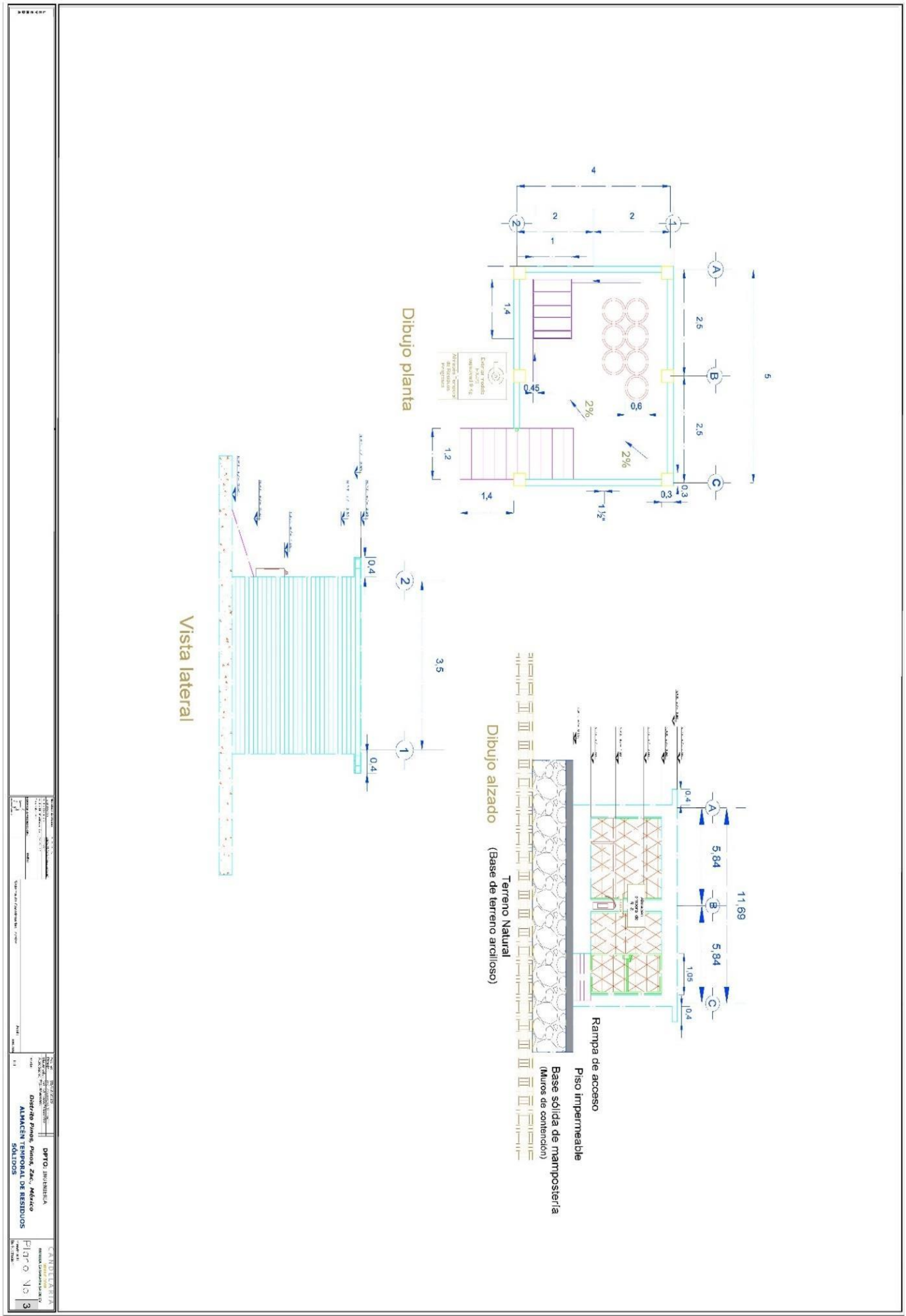


Figure 20.4. Temporary storage of special management waste.

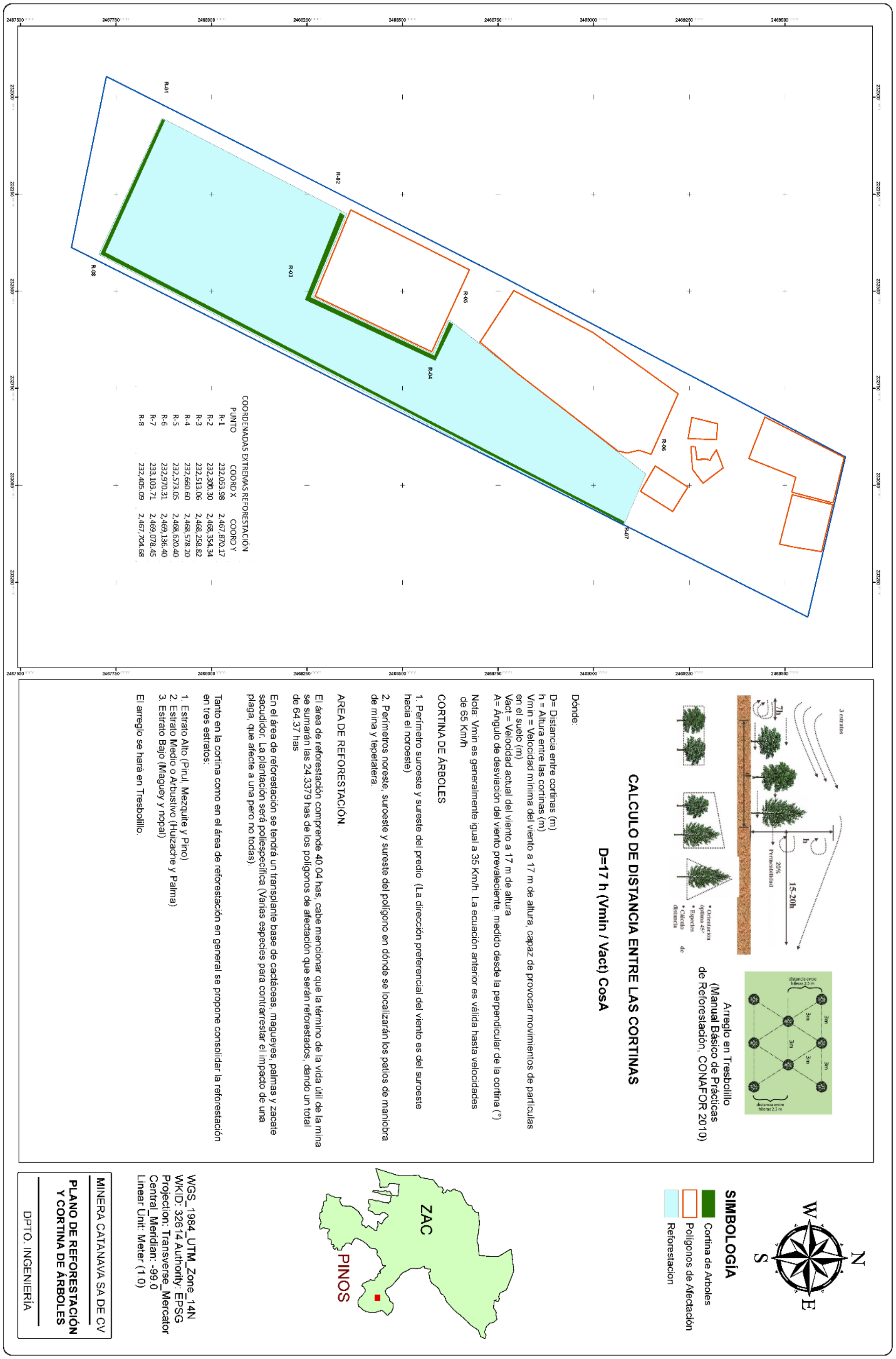
Source: Candelaria Mining Corp. (2018)

Figure 20.5 Temporary storage of solid waste.



Source: Candelaria Mining Corp. (2018)

Figure 20.6 Reforestation plan.



Source: Candelaria Mining Corp. (2018)

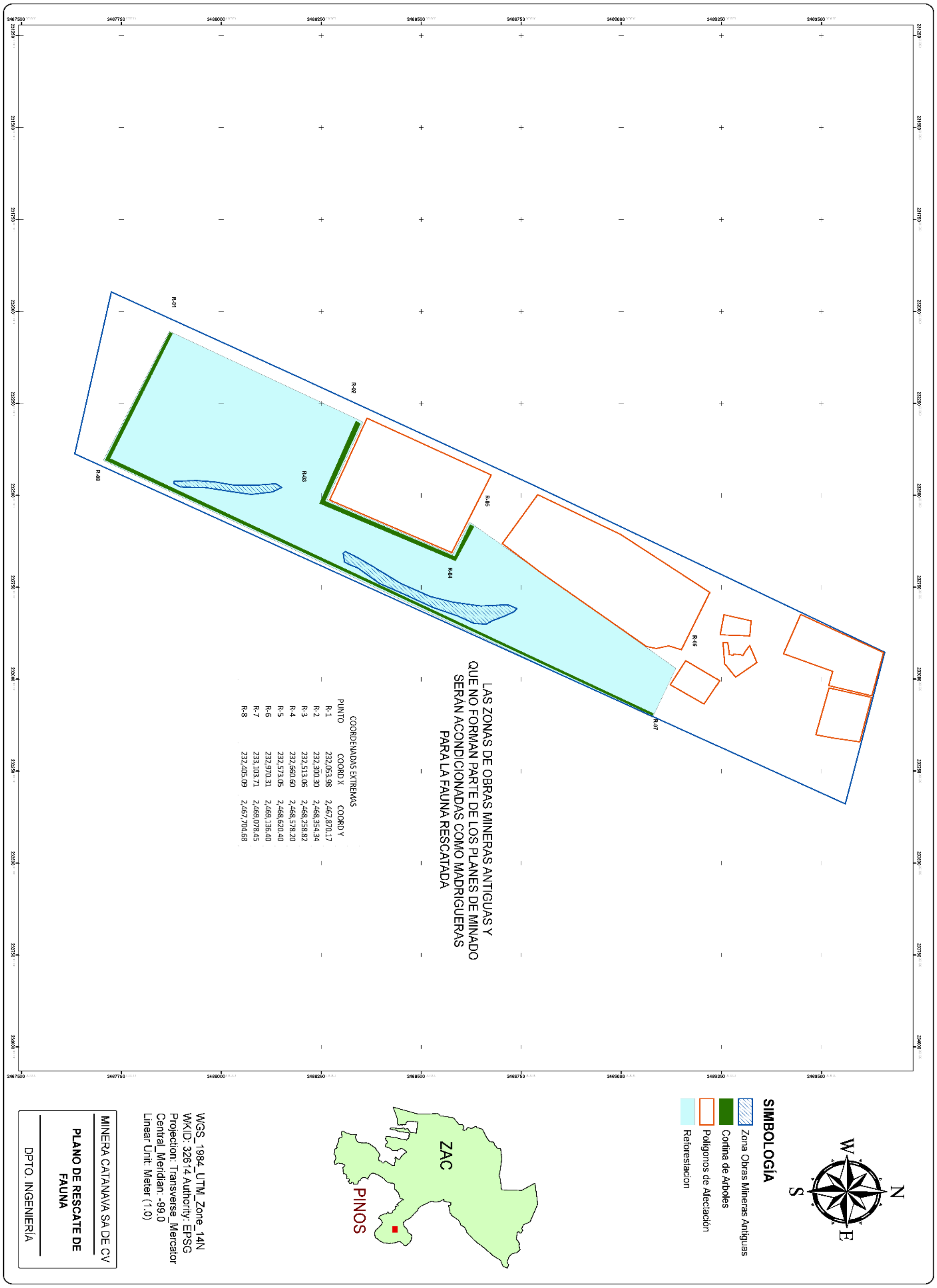


Figure 20.7 Animals Rescue Plan

Source: Candelaria Mining Corp. (2018)

21. CAPITAL AND OPERATING COSTS.

21.1. Introduction

Capital and operating costs for the Pinos Project have been estimated primarily in detail by Candelaria with actualized input from its most experienced Technical Services staff and compared with JAO knowledge of similar underground operations in Mexico.

These costs are based on the design outlined in the exploration, mining development, mining preparation, ore extraction, and processing presented along with this report. Due to the detailed cost data provided by Candelaria, JAO considers these costs to have an accuracy of +/- 20%.
All costs are expressed in US dollars at an exchange rate of $18.68 Mexican pesos per US dollar. No escalation factors have been applied to any costs, present or future capital.

21.2 Capital Costs

21.2.1 Initial Capex

Preproduction Work Program Budget includes:

1. Mine.
2. Geology
3. Water Balance and hydraulics
4. Land Acquisition and Power
5. Permits and Social Management
6. Mill and Tailings Pond.

A total of US $13 million is estimated to put Pinos Project in operation plus US $0.5 million of Working Capital. The required pre-production capital expenditure for the Pinos Project is summarized in Table 21.1.

Table 21.1 Required pre-production capital expenditure.

Capital Costs (millions)		
Mine Development	**$**	**5.90**
Process	**$**	**5.70**
Infrastructure	**$**	**1.20**
Working capital, owner & indirect costs	**$**	**0.70**
Total Initial Capital	**$**	**13.50**

Source: JAO (2018)

21.2.2. Sustaining Capital Costs

Sustaining Capex includes all investments in exploration, mine development, equipment, permitting, environmental necessary to upgrade the mine facilities and sustain the continuity of the operation. Projected sustaining capital costs for mine life are US $9.15 million and are summarized in Table 21.2.

Application of these economic resources is shown in Section 22, Table 22.1 of Economic Analysis, Summary of Economic Forecast.

Table 21.2. Summarized Sustaining Capital Expenditures.

SUSTAINING CAPEX US $	
Mill Expansion (400tpd)	$1,000,000.00
Mine Preparation and Expansion	$3,000,000.00
Exploration	$3,000,000.00
Permitting, Environmental	$483,810.00
Maintenance	$1,500,000.00
Mine Closure	$166,500.00
TOTAL SUSTAINING CAPEX	**$9,150,310.00**

Source: JAO, (2018)

Mill Expansion (US $ 1 million). This project involves the expansion of a production plant, consisting of equipment and construction which increases production to 400 tpd from 3rd year of LOM.
Mine Preparation and Expansion (US $ 3 million). Mine development includes the mining works and equipment through the generation of ramps, ventilation raises and extraction openings throughout the mine life, with the objective of increasing the confidence in the mineral resource estimation to include this material to be processed in the life of mine.

Exploration (US $3 million). Exploration sustaining costs include direct mining exploration, geology, sampling, geochemistry and surface and underground diamond core drilling; which, along with mining development may confirm and upgrade actual mineral resource inventory and may increase mineral resources to further up-side of the life of mine.
Environmental (US $0.48 million). Sustaining costs for environmental monitoring, permits and reclamation expenses.

Maintenance (US $ 1.5 million). These are projected sustaining capital expenses for maintenance of mining and processing machinery and equipment and general infrastructure during LOM.
Mining Closure (US $ 0.166 million). The plan and design for project closure are detailed in Section 20.

21.3. Operating Costs

Operating costs for all areas of the Project have been estimated from first principles. Labor costs are estimated using actualized salary, wage, and benefit requirements. Unit consumptions of material, supplies, power, water, and delivered supply costs are also estimated using real values from current similar underground mining operations in Mexico.

It is expected that the bulk of the deposit will be amenable to mining using a standard drill, blast, load, and haul underground cut and fill methods. Ore processing will be performed using dynamic cyanide leaching procedures.

Average operating cost for the Pinos Project at 200 ton per day is estimated to be US $82.36 / t ore processed; at a capacity of 300 tons per day US $79.87 / ton and for 400 tons per day in US $77.37 / t. Table 21.3 summarizes estimated operating costs

Table 21.3. Summary of Operating Costs.

SUMMARY OF OPERATING COSTS US $ / t			
	200 tpd	300 tpd	400 tpd
Mine Operating Cost ($/t)	$39.57	$39.48	$39.39
Mill Operating Cost ($/t)	$30.77	$29.52	$28.26
Administrative Cost ($/t)	$10.00	$9.00	$8.00
Maintenance Cost ($/t)	$2.02	$1.87	$1.72
TOTAL OPERATING COSTS	**$82.36**	**$79.87**	**$77.37**

Source: JAO (2018)

Detailed operating costs accordingly to distinct categories are given in tables 21.4, 21.5, 21.6, and 21.7.

Table 21.4. Pinos Operating Costs.

GENERAL COSTS

MINING OPERATING COSTS US $ / t			TOTAL
MINERAL EXTRACTION		**28.61**	**28.61**
WAGES	$	1.32	
SALARIES	$	13.82	
DIVERSE MATERIALS	$	3.48	
SAFE EQUIPMENT	$	0.09	
STEEL DRILLING	$	0.07	
SPARE PARTS	$	1.05	
TIRES	$	3.64	
FUEL AND LUBRICANTS	$	0.62	
ELECTRICAL POWER	$	2.25	
EXPLOSIVES	$	1.32	
MINERAL AND WASTE HAULAGE	$	0.67	
EQUIPMENT CONTINGENCY	$	0.28	
MINE DEVELOPMENT AND STOPE PREPARATION	**$**	**8.48**	**8.48**
WAGES	$	0.90	
SALARIES	$	4.48	
DIVERSE MATERIALS	$	0.74	
SAFE EQUIPMENT	$	0.06	
STEEL DRILLING	$	0.05	
SPARE PARTS	$	0.29	
FUEL AND LUBRICANTS	$	0.28	
ELECTRICAL POWER	$	1.01	
EXPLOSIVES	$	0.67	
WATER PUMPING	$	2.48	**2.48**
WAGES	$	0.36	
DIVERSE MATERIALS	$	0.98	
SAFE EQUIPMENT	$	0.05	
SPARE PARTS	$	0.06	
ELECTRICAL POWER	$	1.04	
TOTAL MINING OPERATING COSTS	**$**	**39.57**	**$ 39.57**

PROCESSING PLANT OPERATING COSTS US $ / t			TOTAL
CRUSHING	**$**	**4.34**	**4.34**
WAGES	$	1.83	
DIVERSE MATERIALS	$	1.70	
SAFE EQUIPMENT	$	0.03	
SPARE PARTS	$	0.38	
FUEL AND LUBRICANTS	$	0.07	

GENERAL COSTS

ELECTRICAL POWER	$	0.33		
MILLING AND DYNAMIC CYANIDE LEACHING	**$**	**23.44**		**23.44**
WAGES	$	1.62		
SALARIES	$	6.90		
DIVERSE MATERIALS	$	1.80		
SAFE EQUIPMENT	$	0.04		
SPARE PARTS	$	0.78		
FUEL AND LUBRICANTS	$	1.41		
ELECTRICAL POWER	$	5.60		
STEEL MILL	$	2.52		
REACTIVES	$	2.39		
SHIPPING	$	0.39		
LABORATORY	**$**	**2.99**		**2.99**
SALARIES	$	1.17		
DIVERSE MATERIALS	$	0.36		
SAFE EQUIPMENT	$	0.06		
SPARE PARTS	$	0.13		
FUEL AND LUBRICANTS	$	0.98		
ELECTRICAL POWER	$	0.09		
REACTIVES	$	0.20		
TOTAL PROCESSING PLANT COSTS	**$**	**30.77**	**$**	**30.77**

ADMINISTRATIVE OPERATING COSTS US $ / t				TOTAL
ADMINISTRATIVE	**$**	**10.00**		**10.00**
WAGES	$	2.04		
VACATIONAL COMPENSATION FEE	$	0.28		
VACATIONS	$	0.08		
ANNUAL COMPENSATION FEE	$	1.70		
NON DEDUCTIBLE EXPENSES	$	2.58		
TRIP EXPENSES	$	0.32		
MEALS	$	1.82		
TELEPHONES	$	0.08		
SHIPPING EXPENSES	$	0.02		
DIVERSE TAXES AND RIGHTS	$	0.04		
OFFICE ARTICLES	$	0.10		
OTHER EXPENSES	$	0.61		
INTERNET SERVICES	$	0.33		
TOTAL ADMINISTRATIVE COSTS	**$**	**10.00**	**$**	**10.00**

GENERAL COSTS

MAINTENANCE OPERATING COSTS US $ / t				TOTAL
MAINTENANCE	**$**	**2.02**		**2.02**
WAGES	$	0.09		
SALARIES	$	1.41		
DIVERSE MATERIALS	$	0.19		
SAFE EQUIPMENT	$	0.04		
SPARE PARTS	$	0.09		
FUEL AND LUBRICANTS	$	0.03		
ELECTRICAL POWER	$	0.12		
SHIPPING EXPENSES	$	0.05		
TOTAL MAINTENANCE COSTS	**$**	**2.02**	**$**	**2.02**

Opex 200 tpd	**$ 82.36**
Opex 300 tpd	**$ 79.87**
Opex 400 tpd	**$ 77.37**

Source: Candelaria Mining Corp. (2018)

To adapt the cash costs into a wider vision of estimated costs of producing an ounce of Gold and following the cost framework (WCG, 2013), discussed at SME Annual Meeting Feb. 19-22, 2017, Denver, Co. Adjusted Operating Costs and All In Sustaining Operating Costs are given here in tables 21.8 and 21.9. All In Costs (AIC) are not estimated here; because, these include non-related projects to Pinos operation.

Adjusted Operating Costs are defined as operating costs plus royalties and production taxes.

Table 21.5. LOM Adjusted Operating Costs.

LOM ADJUSTED OPERATING COSTS US $ / Au Eq Oz	
OPEX	664.10
REFINING	1.65
GOVERNMENTAL ROYALTY (Mining Profit)	41.30
GOVERNMENTAL ROYALTY (Precious Metals Revenues)	6.25
THIRD PARTY ROYALTY	18.77
TOTAL AOC	**732.07**

Source: JAO (2018)

All In Sustaining Costs are defined as Adjusted Operating Costs plus Sustaining Capital Costs

Table 21.6. LOM All In Sustaining Costs

LOM ALL IN SUSTAINING COSTS US $ / Au Eq Oz	
OPEX	$664.10
REFINING	$1.65
SUSTAINING CAPEX	$102.89
GOVERNMENTAL ROYALTY (Mining Profit)	$41.30
GOVERNMENTAL ROYALTY (Precious Metals Revenues)	$6.25
THIRD PARTY ROYALTY	$18.77
TOTAL AISC	**$834.86**

Source: JAO (2018)

*Important Notice: Corporate General and Administrative Costs must be added to All In Sustaining Costs; including, shared-based remuneration and other corporate overhead.
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22. ECONOMIC ANALYSIS

22.1 Forward-Looking Statement

The results of the economic analysis discussed in this section depend on inputs that are subject to a few known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented here. Such uncertainties and factors include, among others, changes in general economic conditions and financial markets; changes in prices for gold and silver; technological and operational hazards during the development of the project; risks inherent in mineral exploration; uncertainties inherent in the estimation of mineral resources and metal recoveries; the timing and availability of financing; governmental and other approvals; political unrest or instability and labor relations issues, among others. Although Candelaria has attempted to identify crucial factors that could cause actual actions, events or results to differ materially from those described in this section, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended.

Also, the author cautions that this report is preliminary in nature and includes inferred mineral resources. In strict sense, these resources are considered too speculative geologically to have economic consideration applied to them to be characterized as mineral reserves. The current basis of project information is not enough to convert in-situ mineral resources to mineral reserves; however, a Qualified Person must be readily available for Candelaria to declare Compliant Mineral Resources and Reserves as the Pinos Development Program advances.

22.2. Preliminary Economic Assessment Methodology

The Pinos Project economics were evaluated using a discounted cash flow (DCF) method that requires annual cash inflows and outflows to be projected, from which the resulting net annual cash flows are estimated and then discounted back to the Project financing date.
Considerations for this analysis include the following:

- The cash flow model was prepared by the JAO based on Candelaria's predicted production.
- All costs are constant 2018, 3rd Quarter US dollars.
- Inflation is not included in this model.
- Annual cash flows are assumed to occur at the end of each respective year.
- For simplification purposes, the pre-operative initial capital cost is being projected in year 0.
- The net present value (NPV) is calculated by discounting the annual cash flows back to year 0 period at the 5% discount rate.
- The Internal Rate of Return (IRR) is calculated as the discount rate that yields NPV to zero.
- The Payback Period is the amount of time, in years, required to recover the Initial Capital Cost.

22.3. Summary of Economic Performance Parameters and Assumptions

Table 22.1 - Shows the fundamental parameters and assumptions used in projected DCF analysis.

Parameters and Assumptions		
A.	**Financial Parameters**	
	Gold Price	$1,250.00
	Silver Price	$17.00
200 tpd	Mine Operating Cost ($/t)	$39.57
	Mill Operating Cost ($/t)	$30.77
	Administrative Cost ($/t)	$10.00
	Maintenance Cost ($/t)	$2.02
300 tpd	Mine Operating Cost ($/t)	$39.48
	Mill Operating Cost ($/t)	$29.52
	Administrative Cost ($/t)	$9.00
	Maintenance Cost ($/t)	$1.87
400 tpd	Mine Operating Cost ($/t)	$39.39
	Mill Operating Cost ($/t)	$28.26
	Administrative Cost ($/t)	$8.00
	Maintenance Cost ($/t)	$1.72
	Government Royalty (Mining Profit)	7.50%
	Government Royalty (Precious Metal Revenues)	0.50%
	Donald McLeroy Royalty	1.50%
	Discount Rate	5%
	Governmental Income Tax	30%
B.	**Technical Parameters**	
	Pinos Average Grade (EQ g Au/ton)	4.60
	Cuttoff Grade (EQ g Au/ton)	2.20
	Ore Production Rate tpd (first year)	200.00
	Ore Production Rate tpd (second - third year)	300.00
	Ore Production Rate tpd (fourth year)	400.00
	Mill Au Recovery	90.00%
	Mill Ag Recovery	80.00%
	Mine Dilution	10.00%
	Operation days per Quarter	83.95
	Life of Mine (Years)	7.00
	Ounce Troy/grams	31.1035
	Ore Processed (kt)	790.81
	Recovered Gold Equivalent (Oz)	88,934
C.	**Capital Investment**	
	Initial Capex + Working Capital	$13,500,000
D.	**Sustaining Capital Expenditures**	
	Sustaining CAPEX	$9,150,310

Source: JAO (2018)

22.3.1. Adequacy of Parameters and Assumptions

As it will be seen further in this section, the Pinos Project is most sensitive to gold price. JAO considers the forecasted price of gold of US $1,250 / Oz and US$ 17 /Oz of silver is adequate for this first economic appraisal. These prices are consistent with the three-year trailing average price for both metals and is a commonly used metric for valuation of metals prices in this type of analysis. Precious metal price forecasting is highly speculative, and significant caution tends to be used in the analysis; Also, it is worth to mention that lately 43-101 technical reports submitted to SEDAR consider prices from US $1,250 to $1,300 for an ounce of gold and US $16 to $18 for an ounce of silver in their forecast predictions.

It is expected that the bulk of the deposit will be amenable to mining using a standard drill, blast, load and haul underground cut and fill mining methods. Moreover, ore processing using standard dynamic cyanide leaching has been proved to be successful in recovering gold and silver from this deposit as discussed earlier in previous sections. Operating costs associated with these processes have been verified by JAO and compared satisfactorily with current similar mining operations in Mexico.
JAO considers that discount rate must be in accordance to Company's WACC (Weighted Average Cost of Capital), which depends on the Company's internal financial structure (not available at this moment for the author); including, cost of equity, cost of debt, corporate tax rate, risk free rate of return, sensitivity of the expected stock return to the market return. A 5% discount rate has been given by Candelaria's Chief Finance Officer to be applied on Discounted Cash Flow Method used in this PEA, as well as corporate tax calculations.

The economic model presented here is considering only the mineral resources estimated on Cinco Estrellas Vein Trend given in this report; including, Measured Resources of 85,847 MT, grading Au 1.6 g/t and Ag 82.9 g/t, 175,697 MT grading Au 3.6 g/t and Ag 47.4 g/t of Indicated Resources and 529,267 MT grading Au 3.6 g/t and Ag 47.7 g/t of Inferred Resources. All these above a Cut Off Grade of 2.2 g/t Au Eq. Tonnage and grades were taken exactly from mineable blocks as mining development advances.

22.4. Summary of Results

Table 22. 2 shows a summary of estimated cash flows.

Table 22.2 Cash Flow Model.

Candelaria Mining												
PEA Study												
Pinos Project												
		Investment				Operating Years						
		Year 0		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**		**Project Totals**
PRODUCTION:												
avg tonnes per day processed				200	300	300	400	400	400	400		
tonnes processed				67,160	100,740	100,740	134,320	134,320	134,320	119,209		790,809
Mill Grade - Au (gm/Tonne)				3.90	3.90	3.75	3.48	3.20	3.43	2.14		
Mill Grade - Ag(gm/Tonne)				47.65	47.60	44.90	46.38	49.10	47.98	71.66		
% Mill Recovery (Au)	90%			0.90	90%	90%	90%	90%	90%	72%		
% Mill Recovery (Ag)	80%			0.80	80%	80%	80%	80%	80%	66%		
Recovered gold (oz)				**7,579**	**11,368**	**10,931**	**13,506**	**12,437**	**13,312**	**6,264**		**75,398**
Recovered silver (oz)				**82,310**	**123,336**	**116,340**	**160,216**	**169,630**	**165,743**	**177,789**		**995,364**
Recovered Gold Equivalent (oz)				**8,698**	**13,046**	**12,513**	**15,685**	**14,744**	**15,566**	**8,682**		**88,934**
Mill REVENUE:												
Gold Price ($US/oz)				$1,250.00	$1,250.00	$1,250.00	$1,250.00	$1,250.00	$1,250.00	$1,250.00		
Silver Price ($US/oz)				$17.00	$17.00	$17.00	$17.00	$17.00	$17.00	$17.00		
Gold Revenue ($US)				$9,473,677	$14,210,515	$13,663,957	$16,882,578	$15,546,546	$16,639,663	$7,829,953		$94,246,888
Silver Revenue ($US)				$1,399,276	$2,096,711	$1,977,780	$2,723,669	$2,883,712	$2,817,639	$3,022,409		$16,921,194
Gross Au/Ag($US)				**$10,872,952**	**$16,307,226**	**$15,641,736**	**$19,606,246**	**$18,430,258**	**$19,457,301**	**$10,852,363**		**$111,168,082**
Royalty				**$163,297**	**$244,912**	**$234,916**	**$294,469**	**$276,824**	**$292,238**	**$163,071**		**$1,669,727**
Refining				**$13,505**	**$20,249**	**$19,308**	**$25,042**	**$24,651**	**$25,245**	**$19,065**		**$147,064**
Net revenue				**$10,696,150**	**$16,042,065**	**$15,387,513**	**$19,286,735**	**$18,128,784**	**$19,139,818**	**$10,670,227**		**$109,351,291**
OPERATING COSTS ($US):	*200tpd*	*300tpd*	*400tpd*									
Mining Costs	$39.57	$39.48	$39.39	$2,657,487	$3,977,357	$3,977,357	$5,291,312	$5,291,312	$5,291,312	$1,579,715		$28,065,854
Processing Costs	$30.77	$29.52	$28.26	$2,066,719	$2,973,572	$2,973,572	$3,796,088	$3,796,088	$3,796,088	$3,584,089		$22,986,216
Administrative Costs	$10.00	$9.00	$8.00	$671,600	$906,660	$906,660	$1,074,560	$1,074,560	$1,074,560	$953,672		$6,662,272
Maintenance Costs	$2.02	$1.87	$1.72	$135,663	$188,194	$188,194	$230,460	$230,460	$230,460	$143,244		$1,346,675
Subtotal Operating Costs (Year 1)	**82.36**	$ U.S./tonne		$5,531,469	$8,045,784	$8,045,784	$10,392,420	$10,392,420	$10,392,420	$6,260,720		$59,061,017
Subtotal Operating Costs (Year 2-3)	**79.87**	$ U.S./tonne										
Subtotal Operating Costs (Year 4..)	**77.37**	$ U.S./tonne										
Total Operating Cost				$5,531,469	$8,045,784	$8,045,784	$10,392,420	$10,392,420	$10,392,420	$6,260,720		$59,061,017
Cash Flow before Capital				**$5,164,681**	**$7,996,281**	**$7,341,729**	**$8,894,315**	**$7,736,363**	**$8,747,398**	**$4,409,507**		$50,290,274
CAPITAL COSTS ($US):												
Mine Development		$ 4,650,487		$ 2,000,000	$ 1,000,000							$ 7,650,487
Exploration		$ 1,225,000		$ -	$ 1,200,000	$ 1,200,000	$ 600,000					$ 4,225,000
Land, Water, Power		$ 1,212,013										$ 1,212,013
Permitting, Environmental & Closure		$ 212,500		$ 80,635	$ 80,635	$ 80,635	$ 80,635	$ 80,635	$ 80,635	$ 166,500		$ 862,810
Plant and Tailings		$ 5,700,000		$ 1,000,000	$ 250,000	$ 250,000	$ 250,000	$ 500,000	$ 250,000			$ 8,200,000
Working Capital and indirects	Included in Cont.	$ 500,000		-$ 156,752	-$ 57,772	-$ 18,233	-$ 84,258	-$ 32,219	$ 28,138	$ 321,095		$ 500,000
Subtotal Capital		$ 13,500,000		$ 2,923,883	$ 2,472,863	$ 1,512,402	$ 846,377	$ 548,416	$ 358,773	$ 487,595		$22,650,310
Cumulative capital		$ 13,500,000		$ 16,423,883	$ 18,896,746	$ 20,409,148	$ 21,255,526	$ 21,803,942	$ 22,162,715	$ 22,650,310		
Net Cash Flow before Taxes		**-$ 13,500,000**		**$ 2,240,798**	**$ 5,523,418**	**$ 5,829,327**	**$ 8,047,937**	**$ 7,187,947**	**$ 8,388,625**	**$ 3,921,912**		**$ 27,639,964**
Gov't royalty and mining tax				**-$ 303,457**	**-$ 624,696**	**-$ 646,027**	**-$ 787,219**	**-$ 693,096**	**-$ 775,723**	**-$ 398,635**		**- 4,228,853**
Less Income Taxes 30%				**$ -**	**$ -**	**$ -**	**-$ 1,618,162**	**-$ 1,260,691**	**-$ 1,487,424**	**-$ 383,033**		**- 4,749,310**
Net Cash Flow after Taxes		**-$ 13,500,000**		**$ 1,937,341**	**$ 4,898,722**	**$ 5,183,300**	**$ 5,642,556**	**$ 5,234,161**	**$ 6,125,478**	**$ 3,140,244**		**$ 18,661,801**
Cumulative Cash Flow		**-$ 13,500,000**		**-$ 11,562,659**	**-$ 6,663,937**	**-$ 1,480,638**	**$ 4,161,919**	**$ 9,396,080**	**$ 15,521,557**	**$ 18,661,801**		
	Pre-Tax	**Post tax**		**Rate**								
	$27,639,964	$18,661,801		0%								
	$22,959,520	$15,149,115		2.5%								
	$19,028,135	$12,201,701		5%								
	$15,710,716	$9,717,650		7.5%								
	$12,899,343	$7,615,543		10%								
	$5,208,480	$1,890,302		20.0%								
IRR	**33%**	**25%**										

Source: D.E.N.M.-CAND-JAO (2018)

The Pinos Project Preliminary Economic Analysis shows an after-tax positive Net Present Value (NPV) of US $12.2 million, using a Discount Rate of 5%, with an Internal Rate of Return of 25%, and a Payback Period of 3.6 years, based on years LOM production plan, assumed metal prices and integrated dynamic cyanide leaching treatment of gold and silver.
The author considers the financial model to be a reasonable estimate of the economic situation at Pinos and based on the assumptions in this report; the Pinos project shows a positive discounted cash flow over the LOM and an attractive internal rate of return.

22.4. Sensitivity Analysis

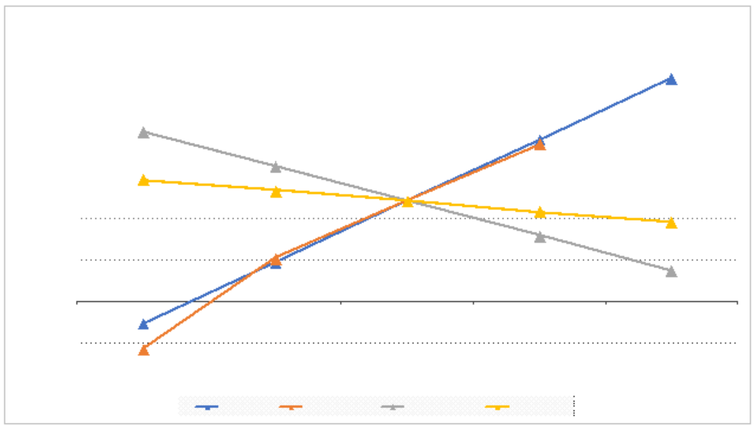
An after-tax sensitivity analysis for Net Present Value (NPV) and Internal Rate of Return (IRR) on the gold price, metal recovery, operating costs and Initial Capex at a +/- 10% increments are presented in Figure 22.1.

Figure 22.1. Sensitivity Analysis.

PINOS PROJECT
Sensitivity Analysis

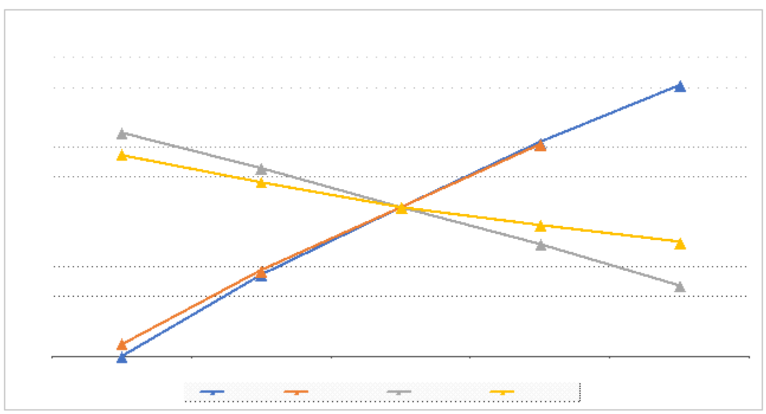
A. NPV Sensitivity

Range	Gold Price	Gold Recovery	Operating Cost	Initial Capex	
-20%	-$2,611,095	-$5,715,131	$20,575,733	$14,773,130	-20%
-10%	$4,795,303	$5,325,265	$16,388,717	$13,487,416	-10%
Base Case	$12,201,701	$12,201,701	$12,201,701	$12,201,701	0%
10%	$19,608,100	$19,078,138	$8,014,686	$10,915,987	10%
20%	$27,014,498		$3,827,670	$9,630,273	20%



B. IRR Sensitivity

Range	Gold Price	Gold Recovery	Operating Cost	Initial Capex	
-20%	0.00%	2%	37%	34%	-20%
-10%	14%	14%	32%	29%	-10%
Base Case	25.00%	25.00%	25.00%	25.00%	0%
10%	36%	35%	19%	22%	10%
20%	45%		12%	19%	20%



Source: JAO (2018)

Both NPV and IRR display the greatest sensitivity to gold metal prices and metallurgical recoveries according to the sensitivity analysis.

23. ADJACENT PROPERTIES

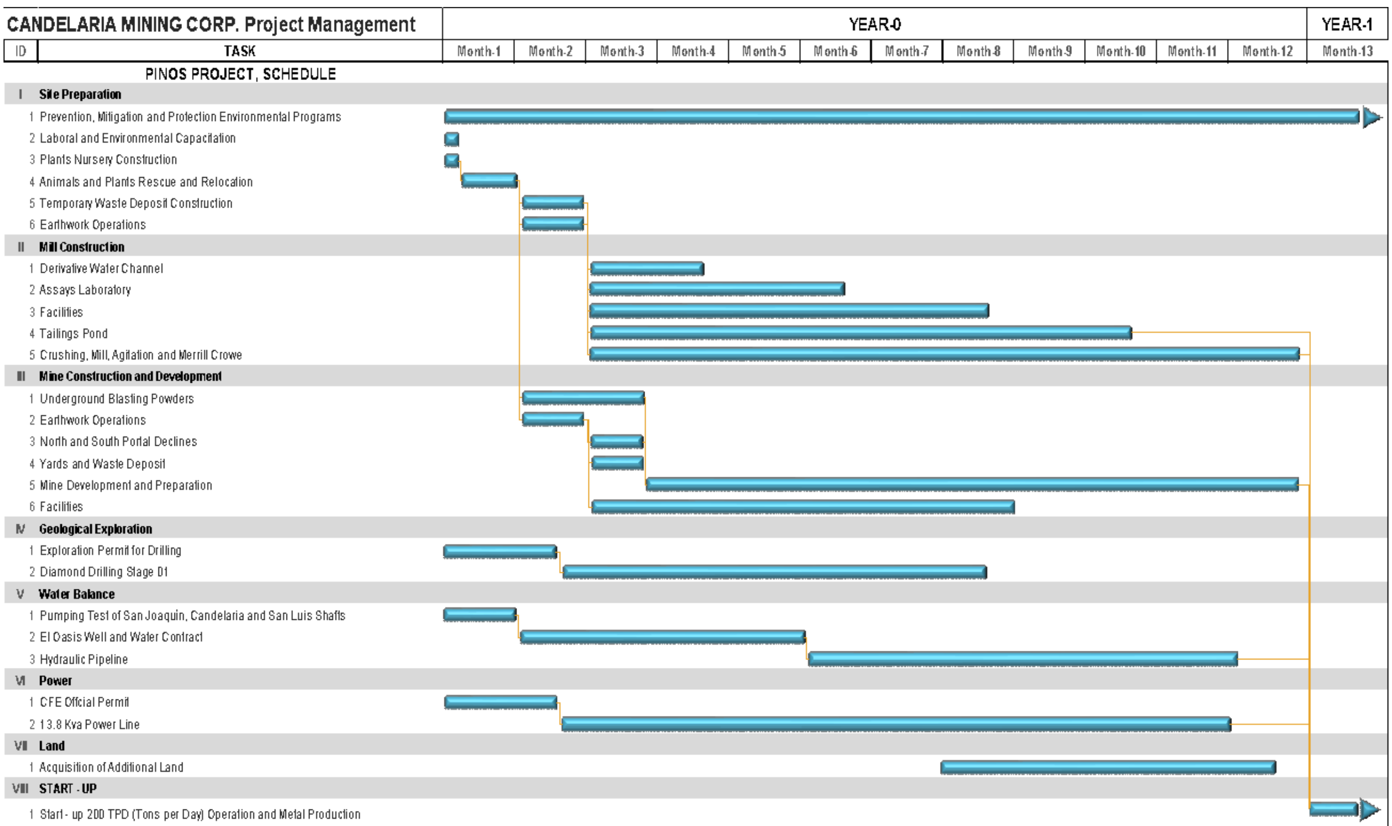
No adjacent properties are known to impact the Pinos Project.

24. OTHER RELEVANT DATA AND INFORMATION

Detailed scheduling for capital investment planned to develop the Pinos Project are shown in Figures 24.1 and 24.2

24.1 Scheduling for Initial CAPEX Activities

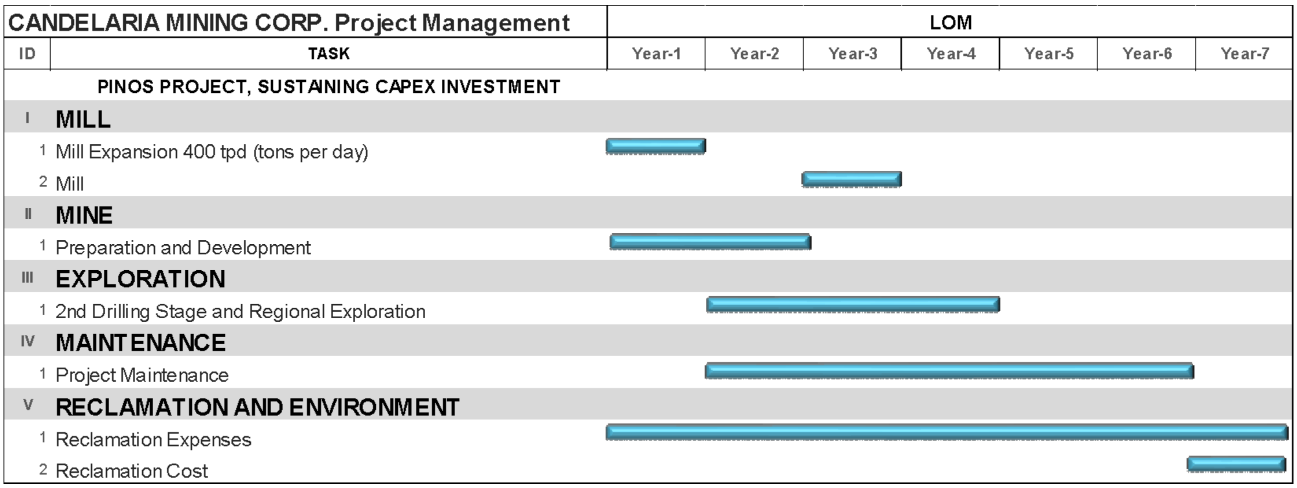
Figure 24.1 Pinos Project Gantt Scheduling for Initial CAPEX - Source: Candelaria Mining Corp. (2018)



Source: JAO (2018)

24.2 Scheduling for Sustaining Capital Activities

Figure 24.2 - Pinos Project Gantt Scheduling for Sustaining CAPEX – Source : Candalaria Mining Corp. (2018)



Source: JAO (2018)

25. INTERPRETATIONS AND CONCLUSIONS

25.1. Conclusions

25.1.1. Geology and Resource

- Candelaria has completed an industry standard exploration drilling program covering the Cinco Estrellas mineralized epithermal vein system along a strike length of 2.2 Km, with 33 drill holes, and total length of 4,700 m.
- The exploration work has been accompanied by an industry standard QA/QC program showing high quality test results.
- Candelaria has conducted extensive mine underground channel sampling and detailed core logging, resulting in a high-quality geologic model.
- The results of underground channel and drilling analytical testing, core logging, geological interpretation, topographical surveying and 3-D modelling provide good support for an industry standard resource estimation.
- Professional topographical surveys are in accordance to best practices guidelines of international codes for exploration.
- Software for mineral resource estimation used by Candelaria; such as: Target-Arc GIS, AutoCAD, and Stratigraphic Centurion are accepted tools for international codes of mineral resource estimations.
- The author considers that Candelaria's diamond drill hole, and surface and underground chip sampling databases used in the generation of the Mineral Resource Estimation presented here, to be adequate for classification of mineral resources at this project stage.
- In author's opinion, Candelaria´s Mineral Resource Estimation of Measured Resources of 85,847 MT, grading Au 1.6 g/t and Ag 82.9 g/t, 175,697 MT grading Au 3.6 g/t and Ag 47.4 g/t of Indicated Resources and 529,267 MT grading Au 3.6 g/t and Ag 47.7 g/t of Inferred Resources (all these above a Cut Off Grade of 2.2 g/t Au Eq) are well supported because most data for block modelling krigging interpolation, were obtained from the systematic underground chip sampling every 1 meter; in addition, strict capping of high assay values avoiding nugget effects and no possible ore shoots considerations, makes this estimation conservative.
- The author considers that Cut-Off grade estimation of 2.2 g/t AuEq is quite appropriate, due to good appreciation of economic inputs, extraction and processing recoveries.

25.1.2. Exploration and Development

- Candelaria´s proposed direct mining development consisting in ramps, drifts and raises along vein structures is in the author's opinion, the best suitable way to better evaluate this narrow vein system of Bonanza type of ore shoots; underground development gives high certainty in confirming the continuity of mineralization, changes in dip and dip direction, local faulting and displacements, veining intersections and large variations in grade and thicknesses of mineralized structures.
- Systematic sampling of drifts and raises along vein structures will give much more confidence in expected volume and grade of the deposit as well as validation of true thickness at depth, mineable blocks will upgrade classification from actual mineral resources.
- The author believes that with the opening of proposed mining levels, there are chances of discovering possible ore shoots under the three domains of Cinco Estrellas, namely: Peñitas, Arandas and San Francisco as historic mining of ore shoots were stopped at the water level.
- The author considers that with the execution of planned mining development, further underground crosscutting will be readily available to explore adjacent mineralized veins from developed stopping levels.

- Regarding the mining method chosen by Candelaria mining experts, it has been proved in Mexico that the best suitable mining method for this kind of deposit is Cut and Fill, using waste rock fill.
- Proposed mining development procedures are in JAO's opinion very detailed and adequate to expect satisfactory results in further real performance.
- Regarding the recovery method proposed of Dynamic Cyanide Leaching, the author responsible found Candelaria´s metallurgical tests performed on true representative sample composites show high recoveries; for gold (above 90%) and silver (above 80%).
- The author's overall geological appreciation of Pinos Project is very positive in the sense that further exhaustive exploration at depth of adjacent brownfield opportunities in other targets such as the Santa Rita, La Paz, San Ramón, San Javier, Candelaria and El Africano mineralized vein trends, as well as in the San Judas greenfield which may contain disseminated deposits, may substantially increase mineral resources to bring the project to a bigger scale.

25.1.3. Economic Analysis

From experience in similar projects, the low capital of Pinos at an initial capital investment of US $13.5 million to start Pinos production and generating positive cash flows after only one year is a positive aspect of this project.

- Exploration Sustaining Capital of US $3 million, is in JAO's opinion, enough to accomplish the planned development for this mining project. Therefore, this 7-year LOM project should complete a first stage of mining operation, depending on exploration results from this budgeted exploration funds.
- After validating Pinos operating costs and comparing efficiencies using benchmarks from similar Mexican mines currently in operation, JAO considers an average operating costs of US $82.36 / t for 200 tpd, US $79.87 / t for 300 tpd and US $77.37 / t for 400 tpd as very detailed and adequate to be included in projected cash flows.
- Analysis from economic modeling using after tax discounted cash flow method indicates a strong and positive result for the conceptual Pinos Project, based on Candelaria's extensive available technical information and current metal price environment. Parameters and assumptions are well established and considered to be adequate at this stage of evaluation. Sensitivity analysis demonstrates that Pinos Project is highly susceptible to variations in gold price and metal recovery; the premise of an average price of Gold of US $1,250 / Oz for LOM, is considered by the JAO as adequate. and consistent with recent 43-101 technical reports submitted to SEDAR which consider prices from US $1,250 to $1,300 for an ounce of gold and US $16 to $18 for an ounce of silver in their models.
- Candelaria's environmental studies were approved by SEMARNAT and all permits to start-up operations have been granted, with social and community impact has been settled in best terms for all parties.
- The author believes that the Pinos Property is highly prospective ground demonstrating significant upside exploration potential.

25.2 Risks and Opportunities

Overall, the Pinos Project is considered to be of medium risk at the time of this report.

25.2.1 Project Risks

A list of potential risks is provided below:

- Metallurgical Performance – Metal Production – The sensitivity analysis indicates the project is highly sensitive to metal production and any variations in the overall metal production (gold and silver) stream will affect the project cash flow. Future planned testwork should strengthen the metallurgical design (i.e. recovery)

- Metal Prices – as with metal production, metal prices have a large effect on the project.

- The report for the proposed production scenario uses Indicated and Inferred Mineral Resources for the Mine. Mineral Resources do not have the same demonstrated economic viability as Mineral Reserves.

25.2.2 Project Opportunities

The three major potential opportunities include the following:

- Capital Costs – as the processing plant and specific mining equipment is "in hand" with CAND, there will be no escalation concerns for pricing used in this study. It also allows for an expedited schedule to production from the commencement of construction to commissioning the 200 mtpd plant.
- Metallurgical recoveries and Metal Prices. As stated previously, the project is sensitive to metal production and metal prices. At present, with any increase toward higher metal prices (gold and silver), the project viability increases.
- Additional Acquisition and Exploration Potential in the Pinos surrounding area

26. RECOMMENDATIONS

- The author's recommendations for the next phase of work proposed here include to start as soon as possible mining development works, geology, surface and underground diamond core drilling, and construction of processing facilities.
- Timing is a fundamental factor for investors to secure a return on their investment; therefore, JAO recommends that Candelaria consider the alternative of getting a mining contractor to start developing ramps and drifts, saving time searching for skilled mining labor and equipment maintenance, accomplishing production milestones; meanwhile, contractor should facilitate developing mine levels faster, mitigating financial risks in this way.
- Regarding Candelaria's planned diamond core drilling campaigns, the first with a budget of $1.05 MD starting in the third quarter of pre-production, and a second one starting the second year of operation, with US $3 MD provision; it would be desirable to start sooner the second campaign to upgrade mineral resources sooner, diminishing potential production risks.
- The author recommends that the QA/QC sample and laboratory analysis evaluation continue to be done on a regular basis during subsequent drilling campaigns and sending duplicates to a secondary lab.
- Regarding mining parameters such as the size of mineable blocks, it is recommended to wait until sublevel openings start to give the proper assessment of geometry for mineable blocks cost from a cost perspective.
- Although, main conclusions cited above reveal that this first development proposal might be feasible for Candelaria to start generating positive cash flows short-term on a small-scale mining operation of 400 tpd, the author considers that Candelaria's property deserves more exploration investment to evaluate its full potential.
- Exploration work to date on the Pinos mining concessions has been focused on the Cinco Estrellas mineralized trend. It is recommended that the Company evaluate the property for mineralization beyond this trend; so, it is recommended to place at least 2 additional geology brigades in the field to assess other very interesting localities, such as: San Javier, El Africano and Fátima mineralized vein systems, San Ramón at deeper levels considering that field evidence suggests a lithocap covering this area, targeting deeper levels on a possible porphyry system and San Judas where a potential stockwork and disseminated deposits may upgrade this project into a major mining operation.

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APPENDIX A – QP CERTIFICATES

CERTIFICATE OF QUALIFIED PERSONS

JOSE A. OLMEDO, P.ENG. GEO

I, José A. Olmedo, P.Eng Geo, MSc, of Valle de México 26, Loma de Valle Escondido, Atizapán, 52930 Estado de México, México, do hereby certify that:

1. This certificate applies to the Technical Report entitled "NI 43-101 Preliminary Economic Assessment Study for the Pinos Project, Zacatecas, México", with an effective date of September 13, 2018, (the "Technical Report") prepared for Candelaria Mining Corp.

2. I am an independent consultant with an-office at Valle de México 26, Loma de Valle Escondido, Atizapán, 52930. Estado de México, México;
3. I am a graduate of the Universidad Nacional Autónoma de México with a bachelor's degree in Geological Engineering with Honorific Mention and a graduate of the McGill University, Montreal, Canada with a Master of Science degree – Applied in Mineral Exploration with honors;
4. I have been actively involved for 42 years with national and international corporations in mineral exploration, economic assessment, and marketing of petrochemicals and mineral commodities. My performance is results-oriented, with start-up expertise and have proved highly successful in project management, corporate finances, and strategic planning;
5. I am a Registered Member in good standing of the Society of Engineers for Mining, Metallurgy & Exploration (SME) certified as Competent Person - #4267997RM and an active member in good standing of the Asociación de Ingenieros de Minas, Metalurgistas y Geólogos de México, A.C. - #15655;
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI-43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for NI 43-101.

I am independent of the issuer and related companies applying all the tests in Section 1.5 of NI 43-101;

7. I did four personal inspection visits to the subject property: 1) November 16-18, 2017; 2) January 16-24, 2018; 3) February 28-March 3, 2018; 4) August 28-31, 2018, totaling 20 full days at site;
8. I am responsible for the review and preparation of Sections of 1,2,3,4,5,6,7,8,9,10,11,12,14,15,16,18,19,20,21,22,23,24,25,26,27 and the Summary of this report;
9. I have no prior involvement with the project this is subject to this Technical Report;
10. As of the effective date of this Technical Report, to the best of my knowledge, information, and belief, this technical report contains all scientific and technical information that is required to be discussed to make the Technical Report not misleading;
11. I have read NI 43-101, and the Technical Report has been prepared under NI 43-101 and Form 43-101F1.

Effective Date: September 13, 2018.

Signing Date: This 16th day of October, 2018

José A. Olmedo. P. Eng. Geo.MSc.

DAVID J. SALARI, P.ENG.

I, David J. Salari, P.Eng., of 59 West Street, Oakville, ON, L6L 2Y8, do hereby certify that:

1. This certificate applies to the Technical Report entitled "NI 43-101 Preliminary Economic Assessment Study for the Pinos Project, Zecatecas, Mexico", with an effective date of September 13, 2018, (the "Technical Report") prepared for Candelaria Mining Corp.
2. I am a metallurgical engineer with an office at Suite 300-10, 1100 Burloak Drive, Burlington, ON, L6L 2Y8;
3. I am a graduate of the University of Toronto with a Bachelor's of Applied Science (BASc) – Metallurgy and Material Science;
4. I have been actively involved in mining and mineral processing since 1980 with extensive experience in metallurgical and mill testing and design, mill capital and operating costs, construction, commissioning, and mill operations;
5. I am a member in good standing of the Professional Engineers Ontario - #40416505 and I am the designated P.Eng. for D.E.N.M. Engineering Ltd. – Certificate of Authorization – Professional Engineers Ontario - #100102038 and Designation as a Consulting Engineer – Professional Engineers Ontario - # 4012;
6. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101. I am independent of the Issuer and related companies applying all of the tests in Section 1.5 of NI 43-101;
7. I have not visited the Pinos Project site
8. I am responsible for the review and preparation of Sections of 13,17 and co-authored Sections 2,3,18,19,21,22,23,26,27 and the summary of this report.
9. I have had no prior involvement with the property this is subject to this Technical Report;
10. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be discussed to make the Technical Report not misleading;
11. I have read NI43-101, and the Technical Report has been prepared in accordance with NI 43-101 and Form 43-101F1.

Effective Date: September 13, 2018

Signing Date: this 16th day of October, 2018

"David J. Salari" (original signed and sealed)

David J. Salari, P.Eng.