SAN MARTIN SILVER MINE

San Martín de Bolaños, Jalisco, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Update.

FIRST MAJESTIC SILVER CORP.

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EFFECTIVE DATE

December 31, 2016

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I, Ramón Mendoza Reyes, P.Eng., am employed as Vice President of Technical Services with First Majestic Silver Corp. (FMS).

This certificate applies to the technical report "San Martín de Bolaños, Jalisco, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Update" that has an effective date of December 31, 2016.

I graduated from the National Autonomous University of Mexico with a Bachelor of Science Degree in Mining Engineering in 1989, and also obtained a Master of Science Degree in Mining and Earth Systems Engineering from the Colorado School of Mines in Golden, Colorado, in 2003.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (P.Eng. #158547).

I have practiced my profession continuously since 1990, and have been involved in precious and base metal sulphide mine projects and operations in Mexico, Canada, the United States of America, Chile, Peru, and Argentina.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 *Standards of Disclosure for Mineral Projects* (NI 43–101).

I have visited the San Martín Silver Mine on several occasions from 2015-2017. My most recent site visit was on September 24, 2017.

I am responsible for the preparation of Sections 1.1, 1.2, 1.3, 1.4, 1.9, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 2, 3, 4, 5, 6, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25.1, 25.4, 25.6, 25.7, 25.8, 25.9, 25.10, 25.11, 25.12, 26.1, 26.3 and 27 of the Technical Report.

I am not independent of FMS as that term is described in Section 1.5 of NI 43–101.

I have been involved with the San Martín Silver Mine overseeing operational aspects including geology, mining and metallurgy, since February 2015.

I have read NI 43–101, and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"Signed and sealed"

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Dated: October 31, 2017

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This certificate applies to the technical report "San Martín de Bolaños, Jalisco, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Update" that has an effective date of December 31, 2016.

I graduated from the Autonomous University of Chihuahua with a Bachelor of Geological Engineering Degree in 1998, obtained a Master of Science Degree in Geology from the University of Texas at El Paso, El Paso, Texas, in 2003, and obtained a Philosophical Doctorate degree in Geology from the New Mexico Institute of Mining and Technology, Socorro, New Mexico, in 2010.

I am a member of the Mining and Metallurgical Society of America with Qualified Professional Geology status (MMSA #01470QP). I have practiced my profession continuously since 1999, and have been involved in exploration, geological modelling, mineral resource estimation of narrow veins and carbonate replacement deposits, and evaluation of precious and base metal sulphide prospects, projects and operations in Mexico.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).

I have visited the San Martín Silver Mine on several occasions from 2014 to 2017. My most recent onsite visit was on May 13, 2017.

I am responsible for preparation of Sections 1.5, 1.7, 1.10, 1.11, 1.24, 1.25, 2.1, 2.2, 7, 8, 9, 10, 14.2, 14.3, 25.2, 25.3, 25.5, 26.2, 26.3.3 and 27 of the Technical Report.

I am not independent of FMS as that term is described in Section 1.5 of NI 43–101.

I have been involved in the San Martín Silver Mine as supervisor and coordinator of the exploration, geology and resource estimation disciplines since April 2014.

I have read NI 43–101, and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"Signed and sealed"

Jesús M. Velador Beltrán, MMSA QP Geology

Dated: October 31, 2017

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I graduated from the National Autonomous University of Mexico with a Bachelor in Geological Engineering degree in 1995, and also obtained a Master of Science degree in Geology from the "Ensenada Center for Scientific Research and Higher Education", Ensenada, BC, Mexico, in 2000.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo. #35815).

I have practiced my profession continuously since 1995. I have held technical positions working with database management and Quality Assurance and Quality Control (QA/QC) with exploration, technology and development companies with projects and operations in Canada, Mexico, Peru, Ecuador and Argentina.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).

I have visited the San Martín Silver Mine on several occasions in 2016 and 2017. My most recent site visit was on January 24, 2017.

I am responsible for Sections 1.7, 1.8, 2.1, 2.2, 2.3, 11, 12 and 25.3 of the Technical Report.

I am not independent of FMS as that term is described in Section 1.5 of NI 43–101.

I have been directly involved with the San Martín Silver Mine in my role as the Geological Database Manager for the resource estimation since May 2016.

I have read NI 43–101, and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the technical report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"Signed and sealed"

María Elena Vázquez Jaimes, P.Geo.

Dated: October 31, 2017

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This certificate applies to the technical report "San Martín de Bolaños, Jalisco, Mexico, NI 43-101 Technical Report on Mineral Resource and Mineral Reserve Update" that has an effective date of December 31, 2016.

I graduated from the University of Technology, Sydney, NSW, Australia, with a Bachelor of Applied Science in Geology in 1999, and obtained a Master of Science in Mineral Economics from Curtin University, Perth, WA, Australia, in 2010.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia; Professional Geologist (P. Geo. #178608).

I have practiced my profession continuously since 1999, and have been involved in geological modelling and mineral resource estimation for a number of base and precious metal deposits in Australia, Ireland, Canada, Saudi Arabia and Mexico. Prior to the San Martín Mine, I have been involved in geological modelling and mineral resource estimation of the La Guitarra and La Encantada Silver Mines in Mexico.

As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43–101 Standards of Disclosure for Mineral Projects (NI 43–101).

I visited the San Martín Silver Mine on four occasions in 2016. My most recent site visit was November 30, 2016.

I am responsible for preparation of Section 1.1, 2.1, 2.2, 2.3, 14.1, 14.3 and 25.5.

I am not independent of FMS as that term is described in Section 1.5 of NI 43–101.

I have been involved with the San Martín Silver Mine in my role as Senior Resource Geologists for the geological modelling and resource estimation since May 2016.

I have read NI 43–101, and the sections of the Technical Report for which I am responsible have been prepared in compliance with that Instrument.

As of the effective date of the technical report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make those sections of the Technical Report not misleading.

"Signed and sealed"

Phillip J. Spurgeon, P. Geo.

Dated: October 31, 2017

CONTENTS

List of Figures

List of Tables

1 SUMMARY

1.1 Introduction

This technical report (the Report) was prepared by First Majestic Silver Corp. (FMS) to provide updated Mineral Resource and Mineral Reserve estimates, and updated information on mine and process planning for the San Martín Silver Mine operations (San Martín or the Project) in Jalisco State, Mexico. The operating entity is FMS's indirectly wholly-owned subsidiary Minera El Pilón, S.A. de C.V.

1.2 Project Setting

The San Martín underground mine and processing facility are located 250 km north of Guadalajara city, Jalisco, Mexico. The mining operations are located approximately 10 km to the west of the town of San Martín de Bolaños, while the mill and office facilities are located approximately 3 km east of the town. The mine and process plant can be accessed by all-weather dirt roads.

The infrastructure on site includes support facilities for the operations, which are located near the plant and include the main administrative offices, warehouse, assay laboratory, tailings facilities, maintenance buildings, cafeteria and other employee housing. The Maintenance Department operates from the extensive shops and warehouses located at the plant site and adjacent to the mine.

Exploration and mining operations are conducted on a year-round basis.

1.3 Mineral Tenure, Surface Rights, and Royalties

San Martín consists of 31 contiguous mining concessions in the San Martín de Bolaños mining district covering a total of 37,517 ha.

San Martín has acquired surface rights covering approximately 800 ha that are sufficient to support operations, including plant installation, tailings storage, and other Project requirements.

No royalties or other encumbrances are due on any of the San Martín mining concessions.

1.4 History and Exploration

The general Bolaños mining district, in which San Martín is located, has been producing silver, gold, lead and zinc since colonial times. The San Martín area production has included underground workings along the Zuloaga vein, with some drifting at the Ballenas, Mancha, Plomosa, Melón and Hedionda veins, and discoveries of the Blanca, Condesa, Cinco Señores, and Rosario veins.

According to historical records, over 46 million silver-equivalent ounces have been extracted from approximately 6.7 million tonnes from the Zuloaga and adjacent veins during the period from 1983 to 2016. FMS obtained its 100% interest in the San Martín mine in 2006. FMS production from 2006 to September 30, 2017, represents approximately 37% of the mined tonnes and about 48% of the silver ounces produced over the mine life to date.

Work completed by FMS since 2006 has included geological mapping, limited prospecting and geochemical surveys, core drilling, metallurgical testwork, Mineral Resource and Mineral Reserve estimation, and ongoing mine development and mining extraction.

1.5 Geology and Mineralization

The geological model proposed by FMS for San Martín is a low-sulphidation epithermal deposit.

San Martín is located in the southern portion of the Sierra Madre Occidental physiographic province within the Bolaños graben. There are five main igneous complexes within the Sierra Madre Occidental, including Late Cretaceous to Paleocene plutonic and volcanic rocks, Eocene andesites and rhyolites, Oligocene and Early Miocene silicic ignimbrite pulses, transitional basaltic-andesitic lavas that erupted toward the end of, and after, each ignimbrite pulse, and Late Miocene, Pliocene, and Pleistocene alkaline basalts and ignimbrites.

In the mine area, the stratigraphy has been refined to a basal sequence of undifferentiated welded tuffs, overlain in turn by rhyolitic welded tuffs, rhyolitic welded and non-welded tuffs; andesite and basalt flows; and a sequence of andesitic and rhyolitic tuffs with minor latitic and trachytic tuffs that hosts the mineralization. Rhyolite domes and dikes of late Miocene age intrude all of the previously mentioned units at the San Martín mine. The uppermost units are a post-mineralization series of tuffs and basalts.

The main structures in the San Martín mine are east–west, northwest–southeast, northeast–southwest and north–south strike-slip faults and fractures. The faults and fractures are commonly mineralized, in the form of stockworks, sheeted veinlets, veins, and breccias.

Gangue mineralogy typically includes quartz, calcite, fluorite, epidote, ankerite and adularia, whereas the sulfide mineralogy generally consists of sphalerite, galena, pyrite, chalcopyrite, pyrrhotite and undifferentiated sulfosalts.

Known vein structures include the following veins, splays and fractures: Zuloaga, Rosario, Veladora, Lima, Huichola E-W, Huichola N, Intermedia, Guitarrona, Pitayo, La Reina, Hedionda, La Blanca, La Esperanza, Veta 420, Desprendimiento 7000 and Dique 690.

1.6 Drilling

There is a record of 1,174 drill holes, totaling 178,277 m, having been completed at San Martín since 1996. Following mine acquisition in 2006, FMS has drilled a total of 120,318 m in 731 diamond drill-holes. A significant proportion of those drill holes are located in mined-out areas, and much of the remaining historical data presents issues, such as geological logging inconsistencies, collar topographic inconsistencies, questionable downhole surveys or lack of such surveys, and potentially unreliable sample preparation procedures or assay data. As a result, at the start of 2016, FMS decided to re-log and re-sample the drill holes that intersect the main structures in San Martín. A total of 151 of the 196 holes that support Mineral Resource estimation were re-logged using standardized lithological codes, and re-sampled and assayed, applying current industry standard practices for sample preparation and security, Quality Assurance and Quality Control (QA/QC), and analysis.

FMS categorizes drill-holes into “delineation holes” (used to guide and support the mine operation), “infill holes” (to improve quality of known resources) and “exploration holes” (to add new resources). FMS uses a contractor for most infill and exploration holes, whereas delineation holes use the Company’s own rigs and personnel.

The core diameters used for drilling at San Martín are 36.4 mm (TT46), 47.6 mm (NQ) or 63.5 mm (HQ). The TT46 diameter is generally used only for delineation holes, whereas the bigger NQ and HQ diameters are used for infill and exploration holes. The small-diameter drill holes are not surveyed and are not used in Mineral Resource estimation.

Data collected at San Martín includes, but is not limited to, collar surveys, downhole surveys, logging, Specific Gravity (SG), and geotechnical information. The data collection practices employed by FMS are consistent with industry-standard exploration and operational practices. Core logging is done digitally in Logchief® using tablets or laptop computers; lithology, structures, alteration, mineralogy, sample intervals, recovery and Rock Quality Designation (RQD) information is captured digitally. Core recoveries for surface and underground drilling typically average over 90%. Core recoveries in mineralized intercepts may be less, varying from 85 to 90%, due to brecciation and hydrothermal alteration associated with the fault veins. All core boxes are photographed after they have been logged and sample intervals are marked.

Since 2007, drill-hole collars have been surveyed by the engineering department at San Martín using Sokkia DT6 and SET6 total station instruments, and, more recently, using Trimble S6, S7 and S3 total station instruments. Several different downhole survey instruments have been used in San Martín since 2007. At present, down hole surveys are done every 50 m by a contractor using a Reflex tool. Historical surveys have used Flexit or Tropari survey methods.

Drill holes are typically completed at an angle that is less than 90° with respect to the dip and strike of the structure being explored. This results in an apparent thickness of the drill intercept being greater than the true thickness of the intercept.

Upon completion of the drilling programs, the diamond drill core is securely stored and catalogued in the core storage facility at the San Martín mine site.

Drill core samples are stored in a secure core processing and storage warehouse at San Martín prior to their shipment to the sample processing laboratories. All samples are securely sealed, and chain-of-custody documents are issued for all shipments. Samples are delivered to the laboratories by FMS personnel.

1.7 Sampling and Analysis

Prior to 2015, core was sampled at lengths of 15 cm to 1 m, based on geological and mineralization features. After 2015, the sample lengths from mineralized areas are from 0.30 to 2 m in length, depending on the drill diameter.

Channel sampling is conducted under the supervision of a mine geologist. Channel samples are typically 6 cm wide by 3 cm deep, and sample lengths vary according to the lithology and alteration features.

Production samples include chip samples and muck samples. Chip samples have been the primary means of grade control sampling since 1994. The underground sampling process includes collecting chip samples from every 3 m advance on a heading, and every 3 m along the backs of every third stope lift. Chip samples are generally at least 2 m long and often, but not always, include barren or silver-poor shoulder samples. Lithology boundaries are respected. Muck samples are collected from the muck pile from various underground locations.

Bulk density measurements were made on site by FMS geologists on core samples using the water immersion method. In total, 787 bulk density determinations are in the project database for the La Veladora, Rosario, La Lima, Huichola, Huichola Norte, La Guitarrona, La Hedionda, El Pitayo, Zuloaga, Santa Cecilia, La Esperanza and Enlace 2140 zones. In the opinion of the QP, the number and quality of density data are sufficient to support Mineral Resource estimation.

Due to the re-logging and re-sampling campaign, all historical drill hole assays for those drill holes were replaced by the 2016 assay results. The 2016 re-sample campaign mainly used SGS Durango and FMS's Central Laboratory at La Parrilla as primary laboratories, and Bureau Veritas Mineral Laboratories (BVML) as the secondary laboratory. For the production data, the San Martín mine laboratory has always been the primary laboratory. SGS held ISO 9001 certification from 2008 until mid-2012, by which time the laboratory was ISO 9001:2008 accredited. The Central Laboratory is not independent of FMS. This laboratory gained ISO 9001 accreditation in mid-2015 and ISO 9001:2008 in 2017. The laboratory currently only handles samples from FMS's operations. As of January 1, 2015, the Inspectorate and ACME laboratories operate under BVML. Both laboratories are independent and hold a global certification for quality, ISO9001:2008, and ISO/IEC 17025:2005. At BVML, samples are prepared in the preparation laboratory in Durango, Mexico, and analysed in the analytical laboratory in Vancouver, Canada. The San Martín mine laboratory is not independent of FMS and is not ISO accredited.

Sample preparation at the San Martín mine laboratory included drying, crushing to ½", and pulverizing to minus 200 mesh. Analytical methods included 10 g fire assay for silver with gravimetric finish, and atomic Absorption Analysis (AAS) for iron, zinc, lead, copper cadmium and manganese. Sample preparation at the Central Laboratory consisted of drying, crushing to 80% passing 1/8 inch and pulverizing to 80% passing 106 µm. All samples were analyzed for silver by AAG-13 and gold by AUAA-13 and ICPAW-20. Sample preparation at SGS comprised drying, crushing to 75% passing 2 mm, and pulverizing to 85% passing 75 µm. All samples were analyzed by AAS21E and ICP14B for silver. Over-limit AAS21E silver results were also analyzed by FAG313. Gold was analyzed by fire assay. Over limit results for manganese, lead and zinc primary analyzed by ICP14B were subsequently analyzed by ICP90Q. The BVML sample preparation protocol is crushing to 70% passing 10 mesh and pulverizing to 85% passing -200 mesh (75 µm). All samples are analyzed by four-acid AAS finish and aqua regia Inductively-Coupled Plasma (ICP) finish for silver. Over-limit silver results are analyzed by fire assay gravimetric finish.

FMS instituted a QA/QC program for the 2016 drilling and resampling program with an overall QA/QC insertion rate of about 20%. Duplicates and check samples were inserted randomly. Standards were inserted according to a visual estimate of the mineralization grade, and blanks were inserted between samples containing visible mineralization.

Field, coarse and pulp duplicates from core samples were used to assess laboratory precision at the Central Laboratory, SGS and BVML. Results have shown poor precision and poor-to-moderate correlation for field duplicates with silver and gold results from the Central Laboratory and from SGS. The poor correlation and low precision in both laboratories is most likely attributable to natural deposit heterogeneity. Acceptable precision and good correlation were obtained for coarse duplicates from silver and gold results from SGS and from the Central Laboratory, while pulp duplicate results from both laboratories achieved lower precision but good correlation.

Standard results from the Central Laboratory and SGS indicate that biases are acceptable. Failure results for silver from both laboratories are considered to be acceptable; however, around a 30% of gold failures from the Central Laboratory reflects an analytical accuracy issue for gold with the Central Laboratory, which shows a low bias when compared with certified standard materials. FMS has taken measures to address the assay accuracy issues that were identified at the Central Laboratory.

Pulp and coarse blank reference materials (blanks) showed a significant number of failures occurring at both Central Laboratory and SGS. These failures have not yet been fully investigated, but it appears that either, there is some contamination occurring in both laboratories or that the blank material carries residual silver and gold values. Results show that the contamination of samples from the Central Laboratory is higher than at SGS.

During the 2016 sampling campaigns, coarse reject and pulp from the Central Laboratory and SGS were submitted to BVML for check assay. Paired Central Laboratory and BVML silver and gold pulp check sample results indicated an acceptable positive bias for Central Laboratory silver results and a 13% (unacceptable) positive bias for gold results relative to BMVL results. Paired SGS and BVML coarse reject check assay silver and gold results indicated an acceptable bias for SGS results relative to BVML results.

1.8 Data Verification

FMS staff verification of the drill-hole and channel data consisted of verification for transcription errors; verification of collar and channel locations; down hole survey deviations; verification of down-hole lithology and sample intervals; and conducting site visits to check core, sample security practices and location.

In the opinion of the QP, and based on the results on the database verification performed by FMS, collar coordinates, down-hole surveys, lithology, densities and assay data from the 2016 drilling and sampling campaigns, as well as previous drilling campaigns that were re-logged and re-sampled, are considered sufficiently free of error and adequate to support Mineral Resource estimation. The collected data adequately reflects deposit dimensions, true widths of the mineralization and deposit styles from the San Martín mine.

1.9 Metallurgical Testwork

The metallurgical analysis is primarily based on plant operational data. This is because laboratory work was considered to be of lesser priority, as emphasis was given to tailor the plant to the actual run-of-mine mill feed. There are no metallurgical reports issued by external commercial laboratories. Since 2012, all testwork has been performed at the Central Laboratory.

Since the metallurgical testwork results and data originate from material collected from the plant feed and mine production faces, the samples tested are considered representative of the various types and styles of mineralization and the mineral deposit as a whole.

To determine the metallurgical performance of the different ore types that feed the plant, stope samples collected from mining faces as well as monthly plant composites are regularly sent for assay to FMS's Central Laboratory. Test variables include: leaching time (in hours), grind fineness (% passing 200 mesh), cyanide (NaCN) concentration, and the injection of pure oxygen (O_2; as contrasted with the conventional addition of air). Processing conditions were chosen to replicate those used at the plant at the time the test was performed.

Metallurgical investigation is conducted on monthly composites to systematically evaluate the effect of key processing variables. The objective of this ongoing program is to explore ways to improve silver and gold recoveries, and to assist operations in diagnosing production issues. Study variables include: grind particle size, cyanide dosage, retention time, reagent type, and oxidizing agents such as pure oxygen and lead nitrate, etc.

Within the typical feed grade range (200-300 g/t), silver recovery at the plant varies moderately between 76% and 87% (average = 84%). Laboratory results on monthly composites show higher variation and lower silver recoveries compared to the plant (average = 75%). Ore type and geological domain have a controlling effect on metallurgical performance. Therefore, to control silver recovery, the key is to maintain an adequate blend of ore types feeding the plant. The gold mill feed grade typically varies between 0.4 and 0.8 g/t Au on a monthly basis and, within that range, the recovery is high and consistent. In general, gold recovery increases with increasing head grade; however, the variation is moderate. It can be reasonably assumed that for head grades > 0.3 g/t, gold recovery is close to 92%.

The Life of Mine (LOM) plan assumes that the metallurgical recovery for silver will average 84%, and the metallurgical recovery for gold will average 92%.

There are no known deleterious elements in the doré produced at San Martín. Since 2013, and under current agreements with the refinery, there has been no penalty incurred related to deleterious elements that would increase smelting and refining costs.

1.10 Mineral Resource Estimates

Mineral Resource estimation was performed on a vein system consisting of 13 vein zones. Three vein zones (Intermedia, Pitayo and Hedionda or IPH) were estimated by Entech under supervision of FMS; four vein zones (Rosario, La Veladora, La Lima, and Huichola Norte or RVLH) were estimated by FMS using three-dimensional (3D) estimation methodologies, and six vein zones (Zuloaga, La Esperanza, Veta 420, Dique 690, La Blanca, and Despendimiento 7000, also referred to as the “Other Veins”) were estimated by FMS using two-dimensional (2D) or polygonal estimation. Different interpolation methodologies could be used depending on the vein’s geological and mineralization characteristics.

Intermedia, Pitayo, Hedionda, Rosario, La Lima, La Veladora and Huichola Norte Zones (IPHRVLH)

All available data, including drill holes, channel samples, level maps, and drill core photos, were used for geological solids modelling. Typically, however, only a high-quality data subset to support the estimates.

Exploratory data analysis was conducted prior to selecting the applicable composite interval. Composite lengths varied by vein, ranging from 1–2 m. Statistical and visual analyses were performed to validate the overall domain controls on mineralization and to ensure further domaining was not required. A metal sensitivity analysis was undertaken before any appropriate capping value was applied to composite files.

All applied capping values were individually reviewed for each domain that was capped to ensure the reduction in metal was statistically appropriate and locally relevant.

Where sufficient data were available and as applicable to the final estimation methodology, semi-variograms were modelled. Bulk density values were derived from wax-coated-water displacement method samples, and an average bulk density value of 2.44 was used.

Estimation methods included 2D and 3D compositing and estimation approaches. Interpolation methods included inverse distance weighting (IDW) to the third power (IDW3) and ordinary kriging (OK).

The resource block model was validated by visual comparison of composite grades against the block grades; statistical comparison of global declustered composite grade against estimated grade; and construction of swath plots along the long section axis of the domains, comparing declustered composite grades, estimated grades, number of composites, and tonnage estimated.

A range of criteria was considered when addressing the suitability of the classification boundaries to the Mineral Resource estimates, and could include geological continuity and volume models; drill spacing and drill data quality; recent mining activity; modelling techniques; and estimation properties, including search strategy, number of composites and average distance of composites from blocks.

A review of the estimates for reasonable prospects for eventual economic extraction was conducted, using considerations of metal pricing, silver-equivalent (Ag-Eq) cut-off grades (COG) based on site operating costs, metallurgical recoveries, and metals payability.

Zuloaga, La Esperanza, Veta 420, Dique 690, La Blanca, Desprendimiento 7000 (Other Veins)

In polygonal estimates, longitudinal sections of vein structures were constructed. Polygons were projected from mine levels, or constructed around drill intercepts, and classified as Indicated or Inferred. No Measured Mineral Resource polygons were defined.

Polygons of Indicated Mineral Resources are projected vertically (up and down) 45 m from mine levels informed by chip samples. Indicated Mineral Resources are projected 25 m around drill hole intercepts where there is continuity of mineralization, as indicated by drilling information or by mine levels with sample lines reporting potentially economic grades. Inferred Mineral Resources are projected 50 m from drill hole intercepts or polygons of Indicated Mineral Resources. In most cases, Inferred Mineral Resources are projected 20 m beyond Indicated Mineral Resources.

Grade capping was performed on a sample basis, prior to compositing, by length of channel line or drill hole intercept. An average bulk density value of 2.44 was used. The area, average width, volume, and weighted mean grade were calculated for every polygon.

A review of the estimates for reasonable prospects for eventual economic extraction was conducted, using considerations of metal pricing, silver Cut-off Grade (COG) based on site operating costs, metallurgical recoveries, and metals payability.

1.11 Mineral Resource Statement

Mineral Resources are reported per the following considerations:

- Metal prices considered were $19.00 /oz Ag and $1,300 /oz Au;
- The COG of 150 g/t Ag-Eq is based on actual and budgeted operating and sustaining costs, where Ag-Eq (g/t) = Ag (g/t) + Au (g/t) * 72.2;
- Metallurgical recovery used for oxide minerals was 83% for Ag and 87% for Au; and
- Metal payable used was 99.9% for Ag, and 99.85% for Au in doré produced from oxide minerals.

The Mineral Resources may be impacted by additional infill and exploration drilling that may identify additional mineralization or cause changes to the current domain shapes and geological assumptions. The Mineral Resources may also be affected by subsequent assessments of mining, processing, environment, permitting, taxation, socio-economics, and other factors.

Measured and Indicated Mineral Resources are summarized in Table 1-1, and Inferred Mineral Resources in Table 1-2.

Table 1-1: San Martín Consolidated Mineral Resource Statement, as at December 31, 2016

Zone	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario Zone	Measured		0	0	0	0	0	0	0
	Indicated	Oxides	817	249	0.51	286	6,541	13.40	7,508
	Total Measured + Indicated	Oxides	817	249	0.51	286	6,541	13.40	7,508
La Lima	Measured	Oxides	1	171	0.2	185	5	0.01	6
	Indicated	Oxides	300	219	0.06	223	2,112	0.58	2,154
	Total Measured + Indicated	Oxides	301	219	0.06	223	2,119	0.58	2,161
La Veladora	Measured	Oxides	79	276	0.28	296	701	0.71	752
	Indicated	Oxides	160	189	0.22	205	972	1.13	1,054
	Total Measured + Indicated	Oxides	239	218	0.24	235	1,675	1.84	1,808
Huichola Norte Zone	Measured		0	0	0	0	0	0	0
	Indicated	Oxides	25	177	0.7	228	142	0.56	183
	Total Measured + Indicated	Oxides	25	177	0.7	228	142	0.56	183
Intermedia Zone	Measured	Oxides	35	234	0.05	238	263	0.06	267
	Indicated	Oxides	99	231	0.04	234	735	0.13	744
	Total Measured + Indicated	Oxides	133	232	0.04	235	992	0.17	1,004
Pitayo Zone	Measured	Oxides	51	169	0.79	226	277	1.30	371
	Indicated	Oxides	80	128	1.3	222	329	3.34	571
	Total Measured + Indicated	Oxides	131	144	1.1	223	606	4.63	941
Hedionda	Measured	Oxides	94	267	0.43	298	807	1.30	901
	Indicated	Oxides	215	513	0.92	579	3,546	6.36	4,005
	Total Measured + Indicated	Oxides	309	438	0.77	494	4,351	7.65	4,904
Other Veins	Measured		0	0	0	0	0	0	0
	Indicated	Oxides	440	258	0	258	3,650	0.00	3,650
	Total Measured + Indicated	Oxides	440	258	0	258	3,650	0.00	3,650
Total San Martín	**Measured**	Oxides	260	246	0.4	275	2,054	3.37	2,297
	Indicated	Oxides	2,136	263	0.37	290	18,028	25.50	19,869
	Total Measured + Indicated	*Oxides*	2,396	261	0.38	288	20,081	28.87	22,166

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH and Other Veins were prepared by FMS. The Qualified Person for the IPHRVLH estimate is Phillip J Spurgeon, P.Geo., and the Qualified Person for the Other Veins is Jesús M. Velador Beltrán, MMSA, both employees of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t for IPHRVLH and above silver grade of 150 g/t for Other Veins. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.9% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

Table 1-2: Consolidated Inferred Mineral Resource San Martín, as at December 31, 2016

Vein	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario	Inferred	Oxides	470	202	0.09	208	3,052	1.36	3,151
Bajo Rosario		Oxides	363	250	0.36	276	2,918	4.20	3,221
La Lima		Oxides	719	197	0.05	201	4,554	1.16	4,637
La Veladora		Oxides	409	213	0.06	217	2,801	0.79	2,858
Huichola Norte 2		Oxides	19	167	0.67	215	102	0.41	132
Huichola Norte 3		Oxides	27	443	0.68	492	385	0.59	427
Huichola Norte 4		Oxides	21	246	0.11	254	166	0.07	171
Intermedia		Oxides	17	207	0.02	208	113	0.01	114
Intermedia 2		Oxides	9	206	0.04	209	60	0.01	60
Intermedia 3		Oxides	1	256	0.11	264	8	0.00	8
La Guitarrona		Oxides	13	65	1.68	186	27	0.70	78
La Pitayo		Oxides	246	80	2.45	257	633	19.38	2,032
La Reina		Oxides	10	95	1.03	169	31	0.33	54
Hedionda 1		Oxides	190	519	0.94	587	3,170	5.74	3,585
Hedionda 2		Oxides	55	252	0.45	284	446	0.80	503
Zuloaga		Oxides	410	224	0	224	2,950	0	2,950
Desprendimiento 7000		Oxides	15	305	0	305	145	0	145
La Esperanza		Oxides	111	266	0	266	952	0	952
Dique 690		Oxides	8	286	0	286	75	0	75
Total		*Oxides*	*3,113*	*226*	*0.36*	*251*	*22,588*	*35.55*	*25,155*

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH and Other Veins were prepared by FMS. The Qualified Person for the IPHRVLH estimate is Phillip J Spurgeon, P.Geo., and the Qualified Person for the Other Veins is Jesús M. Velador Beltrán, MMSA, both employees of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t for IPHRVLH and above silver grade of 150 g/t for Other Veins. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.9% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

1.12 Mineral Reserve Estimates

A silver equivalent (Ag-Eq) cut-off grade was estimated to complete San Martín's initial mine design and initiate the process of underground mine optimization. This was developed using the following inputs: commodity price and exchange rate assumptions; current processing plant recoveries for silver and gold; current mining costs; processing, surface haulage, general and administration costs; and treatment and refining costs through current contracts with refining companies. A multiple-COG approach was used for stope optimization, as this allows the operation to benefit from the opportunity of extracting lower-grade material. Following completion of the mine designs and initial schedules, the various COGs were revised based on the detailed financial model. Even when the resulting mining costs estimates were lower than the initial estimates, the higher COGs were used in order to maintain profit margins. The COG was used as the main economic constraint and was derived from a Net Smelter Return (NSR) model prepared with the parameters described earlier; for this purpose, the silver and gold grades were expressed in terms of Ag-Eq. The Ag-Eq grade formula used was:

Ag-Eq Grade = Ag Grade + Au Grade * [(Au Recovery * Au Payable * Au Price)] / (Ag Recovery * Ag Payable * Ag Price)

- Metal prices considered were $18.00 /oz Ag and $1,250 /oz Au.
- Metallurgical recovery used for oxide minerals was 84.3% for Ag, 92.8% for Au.
- Mineable zones were first determined by the initial COG and classification criteria. Stopes were then optimized based on selected mining methods and minimum stope widths.
- Dilution was assumed at 5% and mining recovery at 95% for both development and the areas mined using cut-and-fill methods.

Modifying factors for mining were applied on a stope-by-stope evaluation, and have been determined suitable for conversion to Mineral Reserves. To convert from Mineral Resources to Mineral Reserves, the resource blocks were interrogated by applying economic criteria as well as geometric constraints based on the mining method envisioned. Mineable blocks or stopes were defined by following this process.

1.13 Mineral Reserve Statement

The Mineral Reserve statement for San Martín is provided as Table 1-3.

Table 1-3: Mineral Reserve Statement San Martín, as at December 31, 2016

Zone	Category	k tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario Zone	Proven	0	0	0.00	0	0	0.00	0
	Probable	753	178	0.42	211	4,303	10.18	5,106
	Total (PP)	753	178	0.42	211	4,303	10.18	5,106
La Lima	Proven	2	159	0.06	164	12	0.00	12
	Probable	216	159	0.06	164	1,106	0.40	1,137
	Total (PP)	218	159	0.06	164	1,118	0.40	1,149
La Veladora	Proven	79	162	0.19	177	412	0.49	451
	Probable	248	158	0.18	172	1,260	1.44	1,374
	Total (PP)	328	159	0.18	173	1,672	1.93	1,824
Huichola Norte Zone	Proven	0	0	0.00	0	0	0.00	0
	Probable	20	166	0.65	217	107	0.42	140
	Total (PP)	20	166	0.65	217	107	0.42	140
Intermedia Zone	Proven	21	214	0.04	217	143	0.03	145
	Probable	150	182	0.03	184	873	0.16	886
	Total (PP)	170	186	0.03	188	1,017	0.19	1,032
Pitayo Zone	Proven	0	0	0.00	0	0	0.00	0
	Probable	64	108	0.89	178	222	1.85	368
	Total (PP)	64	108	0.89	178	222	1.85	368
Hedionda	Proven	58	400	0.78	461	750	1.47	865
	Probable	204	392	0.76	452	2,568	5.00	2,962
	Total (PP)	262	394	0.77	454	3,317	6.47	3,828
Zuloaga and other Minor Veins	Proven	0	0	0.00	0	0	0.00	0
	Probable	465	219	0.00	219	3,274	0.00	3,274
	Total (PP)	465	219	0.00	219	3,274	0.00	3,274
Total SAN MARTÍN	**Proven**	**161**	**255**	**0.38**	**285**	**1,317**	**1.98**	**1,473**
	Probable	**2,119**	**201**	**0.29**	**224**	**13,712**	**19.45**	**15,248**
	Total (PP)	**2,280**	**205**	**0.29**	**228**	**15,029**	**21.43**	**16,721**

Notes:

1. The Qualified Person for the Mineral Reserve estimate is Ramón Mendoza Reyes, a FMS employee. Mineral Reserves have an effective date of December 31, 2016.
2. Mineral Reserves are defined using multiple, variable cut-off grades, then stope designs are optimized based on cut-and-fill (resue) using waste-rock fill.
3. The Ag-Eq grade formula used was Ag-Eq Grade = Ag Grade + Au Grade * (Au Recovery * Au Payable * Au Price) / (Ag Recovery * Ag Payable * Ag Price).
4. Key assumptions and parameters include: Metal price of US$18.00/oz Ag, US$1,250/oz Au; metallurgical recoveries of 84.3% for Ag, 92.8% for Au; metal payabilities of 99.9% for Ag, 99.85% for Au; direct mining costs of US$21.00/t, mill feed, process and treatment costs of US$26.50/t mill feed and general and administration (indirect costs) of US$34.50/t. Ore loss of 5% and unplanned dilution is 5%. Mineable shapes were used as geometric constraints.
5. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

Factors that could affect the Mineral Reserves include changes to the following assumptions: unplanned dilution; mining recovery; geotechnical conditions; equipment productivities; metallurgical recoveries; metal prices and exchange rates; mill throughput capacities; operating costs; and capital costs.

1.14 Mining Methods

San Martín veins and deposits are hosted on the side of a mountain range. Access to the workings is through adits developed horizontally, followed by ascendant and descendent ramps developed in waste.

All mine workings in San Martín are located above the water table, and no evidence of water bodies have been found during exploration. There are water inflows in the workings close to surface, mainly during the rainy season, but these inflows are managed by pumping.

Geotechnical studies have been completed in support of design parameters for the excavations, as well as ground support requirements.

San Martín currently uses cut-and-fill mining using resue to extract the mineralization. Resue is a mining variation that implements a two-phased process where the ore is extracted first and then the mining section is extended to allow access to mining equipment for subsequent cuts. A combination of jumbo and conventional (hand-held pneumatic) drills are used and the type of drill used depends on mining widths and availability of the jumbos.

Varying COGs were used to focus development and then lower cut-off grades were used to identify opportunistic lower-grade mineralization that can be sent for processing. This material is typically mineralization that is mined to access higher-grade mineralization. Once the mining locations were identified, stope design was followed by development design using GEOVIA Surpac™. The design component was then imported into mining planning software for sequencing and scheduling (GEOVIA MineSched™).

The current minimum mining width used at site for cut-and-fill mining is 0.8 m, and 2.5 m for equipment access. After the resue portion is mined (typically the mineralization), additional waste is mined to allow for equipment access. Mined waste either reports to the surface waste storage facility or is used as fill for subsequent lifts. When mineralization that is greater than 2.5 m in width is mined, no additional waste is mined. Each drift is mined 3 m high where six drifts are mined to extract 18 m of a 20-m-high panel. Updated designs incorporate a minimum stand-off distance of 20 m to locate ramps away from mineralization. Planned development includes: access drifts; sills (development on mineralization); operating waste development (sills mining material below cut-off); sumps; escapeways and accesses to the escapeways; return airways and accesses to the return airways; stockpiles; and ore passes and access to the ore passes, where required. Vertical development will primarily be completed by conventional mining techniques up to a size of 1.5 m by 1.5 m. Large diameter raises will be excavated either by a raisebore machine (contract) or by longhole raising.

Where necessary, all future production voids will be backfilled. As the operation uses sill pillars to separate active mining blocks, the backfill is uncemented waste rock.

The ventilation system at the San Martín mine is undergoing an upgrade. FMS is planning to install a new ventilation raise from surface to an existing drive near the Hedionda vein. Additional raises will be required to service the distal vein systems (Intermedia, La Lima, etc.) and is currently being optimized by operations.

The ventilation circuit was imported into Ventsim™, an industry-standard software used in ventilation modelling, to model the flows predicted for the mine. The estimated primary ventilation demand was calculated based on a factor of 0.6 m^3/s of fresh air per kW. Equipment is spread over several workplaces and ventilation systems. An additional 15% has been allowed for leakage and is included in the minimum ventilation requirements.

The combined San Martín mining operations are projected to operate for a total of six years. The annual mining schedule is shown in Table 1-4.

Table 1-4: San Martín LOM Production Schedule

Type	Units	Total	2017 *	2018	2019	2020	2021	2022
Production								
Development	kt	**218**	12	26	38	42	42	59
Production – Cut-and-Fill	kt	**2,062**	269	325	385	379	382	322
Total	kt	**2,280**	**281**	**351**	**423**	**421**	**424**	**381**
Average Grades								
Ag	g/t	**205**	260	245	222	184	167	173
Au	g/t	**0.29**	0.48	0.46	0.36	0.28	0.19	0.06

* 2017 forecast.

The existing load-and-haul fleet currently handles up to 900 tpd (27 kt per month), with haulage requirements met by the onsite contractor through the provision of conventional haulage trucks. The mine plan uses development rates and productivities based on the existing fleet.

1.15 Processing Plant

The ore is transported approximately 14 km from the underground mine to the processing plant located on the east side of the community of San Martín de Bolaños and the Bolaños River. The plant has a name plate capacity of 1,300 tpd, and has typically been operating at 860 tpd.

The plant is conventional, consisting of crushing, grinding, leaching, counter current decantation, Merril-Crowe circuits, and a doré bar pouring facility.

1.16 Infrastructure

The existing surface infrastructure includes the processing plant, repair workshops, an analytical laboratory, temporary ore stockpiles, a tailings storage facility, water management and diversion structures, offices, a drill core and logging shack, power substations, and power lines. Existing underground workshop facilities in the Rosario mine include: a washing bay, a lube station, and several repair stations for mobile equipment. The Zuloaga mine has limited activity due to depletion.

The majority of the mine personnel live in San Martín de Bolaños, within walking distance of the plant. A minor portion of the workforce lives in surrounding towns and commute each day.

Short-term plant feed storage stockpiles are located in proximity to the processing plant. Current waste storage facilities have sufficient capacity to store the excess waste from underground development for the LOM plan.

San Martín is currently operating one conventional wet Tailings Storage Facility (TSF). The TSF was designed to hold 7.5 Mt, and the currently-used capacity is estimated at 7.2 Mt. A tailings filter-press system is under construction, with filtered paste tailings expected to be produced by the end of the fourth quarter of 2017. Filtered dry-stack tailings will be stored above the current TSF. The TSF is expected to reach maximum capacity by the end of 2022 after stacking filtered tailings.

The water source for the processing plant is the Bolaños River. Potable water is sourced from municipal wells. FMS has constructed a 13-km-long pipeline from the regional mountains as a back-up process water supply to mitigate the effects of future droughts. Processing water is recycled at a rate of approximately 18% of the water requirements for the leaching process, after the tailings press filters are in operation in late 2017, the expected water recycling rate will be approximately 80%.

The San Martín mine and plant are connected to the national power grid through a substation located about 20 km to the north. The average annual power consumption is 30 MW. Emergency power supply is provided by diesel generators to some of the critical equipment such as ventilation fans, laboratory equipment, data servers and offices.

1.17 Markets and Contracts

The end product from the San Martín mine complex comes in form of silver doré bars. The physical silver doré bars, usually containing greater than 95% silver with some gold and other impurities, are delivered to one of three refineries, where doré bars are refined to commercially marketable 99.9% pure silver bars.

Silver and gold produced at San Martín is sold by FMS using a small number of international metal brokers who act as intermediaries between FMS and the London Bullion Market Association. FMS normally receives 95% of the value of its sales of doré on passing control of its shipments to the metals broker, with final settlements upon outturn of the refined metals, less refining costs. Contracts with refining companies as well as metals brokers and traders are tendered annually and re-negotiated as required.

Based on past performance, no relevant impurities have been recorded in San Martín silver doré bars. Considering the characteristics of the ore, and the processing and concentration practice, it is reasonably expected that San Martín silver doré bars will not carry impurities over the LOM production planned that could be materially penalized at the refineries.

FMS has corporately established a standard procedure to determine the medium and long-term metal price guidance for silver and gold. This procedure considers the consensus of future metal prices forecasts from credible sources, including major Canadian and global banks, projections from financial analysts specializing in the mining and metals industry, and metal price forecasts used by other peer mining companies in public disclosures. Metal prices used in the Report are provided in Table 1-4.

Table 1-5: Metal Prices Assumptions

Metal Price	Units	Used in Resource Estimation	Used in Reserves Estimation and Mine Plan
Silver	$/oz Ag	19.00	18.00
Gold	$/oz Au	1,300	1,250

Foreign exchange rates used in the cost estimates and in the LOM model were USD:CAD 1.30 and USD:MXN 18.70.

As a normal course of business, San Martín has contracts in place for some of the services required for the mining and processing activities. All of these contracts are agreed upon one-year or multi-year terms and in the opinion of the QP, these contracts and commercial terms are in line with industry norms for such contracts.

1.18 Environmental Considerations

Baseline studies completed, or underway, include surface hydrology and geochemical characterization, hydrogeological, soil, air quality, noise, flora and fauna, and cultural and heritage studies. Results will be incorporated into an overall site remediation/reclamation plan.

Environmental liabilities are associated with historical mining activities that occurred prior to FMS obtaining ownership of San Martín. FMS has been leading an effort to inventory and register affected areas, and is currently liaising with the different regulatory bodies and stakeholders in an effort to integrate mitigation and reclamation initiatives.

1.19 Permitting Considerations

The operation has two tailings storage facilities, Tailings Dams 1 and 2, and nine waste rock storage facilities. Tailings handling and disposal is undertaken in accordance with the applicable Mexican regulations. Stability assessments have been completed as required. FMS is completing the installation of a tailings filtering plant that will allow for the generation of dry-stack tailings, thereby reducing the inherent risk associated with wet tailings storage, increasing the amount of process water that can be recycled and reducing the impact to the environment. Not all of the waste rock storage facilities are covered by authorizations or EIAs, because some of the facilities pre-date FMS control of the underlying concessions and surface lands. No tailings or waste rock material to date has been found to be potentially acid-generating or will result in metals leaching.

San Martín is an operating mine; as such, it holds all major environmental permits and licenses required by the Mexican authorities to carry out mineral extracting activities in the mining complex. Monitoring is conducted as required by applicable regulations. FMS is working with Mexican regulatory authorities to address areas with pre-existing environmental legacy issues from historical operators. Certain areas in the Ballenas, Rosario and Mina de Agua mining complex are therefore going through the permitting process.

1.20 Closure Plan

The San Martín closure plan includes the following concepts: post-operation activities, closure of facilities, reclamation of certain areas, monitoring and site abandonment. Closure obligations, as of December 2016, were estimated at about US$3.1 million.

1.21 Social Considerations

FMS addresses social considerations through the Company's Corporate Social Responsibility (CSR) department, using a risk management system, and addressing any deleterious impacts the operation may have on the community. FMS also has active community engagement programs, including face-to-face, in-kind, and sponsorship participation for community events, targeted support for specific community issues, and expenditure of Mining Fund assets on new or improved community infrastructure.

1.22 Capital and Operating Costs

Sustaining capital is focusing on maintaining current operational capacities (plant and equipment) and expansionary capital is focused on expanding appropriate sources of mineralization. Capital costs summaries include a 5% contingency allocation. Sustaining capital cost estimates total US$29.78 million over the six-year mine life, and expansionary capital cost forecasts total US$27.64 million.

San Martín has a well-established cost management system and a good understanding of the operational costs. Operating costs make provision for direct and indirect mining costs, treatment and refining costs, and include a 5% contingency allocation. Over the remaining LOM, operating costs are projected to be $136.28 million.

1.23 Economic Analysis

FMS is using the provision for producing issuers whereby producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production and where no material expansion of current production is planned.

An economic analysis to support presentation of Mineral Reserves was conducted.

1.24 Interpretation and Conclusions

Under the assumptions in this Report, the operations have a positive cashflow and Mineral Reserves can be reported.

1.25 Recommendations

Recommendations have been separated into two phases. The Phase 1 recommendations are made in relation to exploration activities. Recommendations proposed in Phase 2 are suggestions for improvements in current operating procedures, and the program is not contingent on the results of Phase 1 work.

The total cost for the Phase 1 work is about $10.2 million. Phase 1 will consist of underground drilling, drill target generation, a fluid inclusion study, and geophysical surveys.

Phase 2 is estimated at about $4.1 million. The Phase 2 work program is designed to provide additional support to the mining operations, including updated topographic surveys, a fine grinding optimization study, ore characterization studies, reviews of QA/QC data, 3D modelling of the Other Veins to support modern resource estimation practices, ventilation system upgrades, trial long-hole stoping mining studies, and installation of additional self-contained refuge chambers.

2 INTRODUCTION

This technical report (the Report) was prepared by First Majestic Silver Corp. (FMS) to provide updated Mineral Resource, Mineral Reserve estimates and updated information on mine and process planning for the San Martín Silver Mine (San Martín or the Project). The operating entity is FMS's indirectly wholly-owned subsidiary Minera El Pilón, S.A. de C.V.

FMS is a publicly listed company incorporated in Canada and headquartered in Vancouver, BC, with limited liability under the legislation of the Province of British Columbia. The Company is in the business of silver production, development, exploration, and acquisition of mineral properties with a focus on silver production in Mexico.

San Martín is located next to the town of San Martín de Bolaños, about 250 km north of Guadalajara city in Jalisco State, Mexico (Figure 2-1). San Martín comprises a mining complex with two underground mines (Zuloaga and Rosario), one 1,300-tpd processing plant, and one tailings storage facility.

Figure 2-1: General Location of San Martín

Note: Figure prepared by FMS, 2017.

2.1 Effective Dates

The effective date of the Mineral Resource and Mineral Reserve estimates is December 31, 2016. The drill hole database used to support the estimates was closed as of November 23, 2016. The overall effective date of the Report is December 31, 2016.

2.2 Qualified Persons

The following FMS staff serve as Qualified Persons (QPs) as defined in NI 43-101:

- Ramón Mendoza Reyes, P.Eng., Vice President of Technical Services;
- Jesús M. Velador Beltrán, MMSA, Director of Exploration;
- María Elena Vázquez Jaimes, P.Geo., Geological Database Manager.
- Phillip J. Spurgeon, P.Geo., Resource Geologist; and

2.3 Site Visits and Scope of Personal Inspection

Table 2-1 shows the dates of site visits and scope of each QP's personal inspection.

Table 2-1: Dates of Site Visits and Scope of QP's Personal Inspection

QP	Dates	Scope of Personal Inspection
Ramón Mendoza Reyes	- March 13th to 14th, 2015 - September 21st to 24th, 2017	- Assessment of mining conditions, and confirmation of conditions and operability of major infrastructure, processing plant performance, and environmental aspects; and -Review and assessment of geological and geotechnical conditions of mineralized zones, mining extraction practice, dilution and grade control.
Jesús M. Velador Beltrán	Several occasions from 2014 to 2017. Most recent inspections on: - January 10th to 13th, 2017. - May 9th to 13th, 2017.	- Inspection of drill cores with emphasis on mineralization, alteration, structure and paragenesis; - Inspection of drilling sites, underground and surface; - Revision of QA/QC and Specific Gravity (SG) procedures; and - Inspection of preparation of geologic models.
María Elena Vazquez	- August 8th to 14th, 2016. - January 16th to 24th, 2017.	- Consolidation and validation of the 2017 resource estimation database; and - Evaluation of Quality Assurance and Quality Control (QA/QC) data and logging and sampling protocols.
Phillip J. Spurgeon	- May 24th to June 17th, 2016. - July 5th to 22nd, 2016. - August 9th to 23rd, 2016. - November 22nd to 30th, 2016	- Inspection of drill core and review of geological logging and sampling; - Inspection of underground geology and mineralization; - Inspection of underground drilling sites and observation of drilling practises; - Observation of collection of SG measurements; and - Observation of underground channel sampling and inspection of locations with channel samples extracted.

2.4 Information Sources and References

Reports and documents listed in the References section were used to support the preparation of the Report. Specialist input from other disciplines, including legal, process, geology, geotechnical, hydrological and financial, was sought to support the preparation of the Report.

For the purposes of this Report, all information, data, and figures contained or used in its compilation have been provided by FMS unless otherwise stated.

2.5 Units, Currency and Abbreviations

Units of measurement are metric. All costs are expressed in United States dollars unless otherwise noted. Only common and standard abbreviations are used wherever possible. Table 2.2 shows the list of abbreviations used:

Table 2-2: List of Abbreviations and Units

Distances:	mm – millimetre	Other:	tpd – tonnes per day
	cm – centimetre		ktpd – 1,000 tonnes per day
	m – metre		Mtpa - 1,000,000 tonnes per year
	km – kilometre		kW – kilowatt
	masl – metres above sea level		MW – megawatt
Areas:	m2 – square metre		kVA – kilovolt-ampere
	ha – hectare		MVA – Megavolt-ampere
	km2 – square kilometre		kWh – kilowatt hour
Weights:	oz – troy ounces		MWh – megawatt hour
	k oz – 1,000 troy ounces		°C – degrees Celsius
	lb - pound		Ag – silver
	g – grams		Au – gold
	kg – kilograms		Pb – lead
	t – tonne (1,000 kg)		Zn – zinc
	kt – 1,000 tonnes		Cu – copper
	Mt – 1,000,000 tonnes		Mn - manganese
Time:	min – minute		Ag-Eq – silver equivalent
	hr – hour	Assay/Grade:	g/t – grams per tonne
	op hr – operating hour		g/L – grams per litre
	d – day		ppm – parts per million
	yr – year		ppb - parts per billion
Volume/Flow:	m3– cubic metre	Currency:	$ - United States dollar
	m3/hr – cubic metres per hour		
	cu yd – cubic yards		

3 RELIANCE ON OTHER EXPERTS

This section is not relevant to this Report. Information pertaining to mineral tenure, surface rights, royalties, environment, permitting and social considerations, marketing and taxation were sourced from FMS experts in those fields as required.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Project's processing plant is located on the eastern side of the Bolaños River, to the southeast of the town of San Martín de Bolaños at an elevation of 850 metres above sea-level.

The mines are located 10 km northwest from the town at elevations varying between 1,080 and 1,190 metres above sea-level.

The town of San Martín de Bolaños is located about 250 km north of Guadalajara city in the state of Jalisco, Mexico (Figure 2.1). San Martín is situated on the eastern slopes of the southern part of the Sierra Madre Occidental, in the Bolaños River valley.

Location coordinates in Universal Transverse Mercator (UTM) of the center of the San Martín mine area are as follows:

- North: 2,375,500; and
- East: 615,000.

The approximate latitude and longitude coordinates of San Martín are 21° 45'N and 103°45'W.

4.2 Ownership

San Martin is owned and operated by Minera El Pilón, S.A. de C.V., a wholly-owned indirect subsidiary of FMS.

4.3 Mineral Concessions

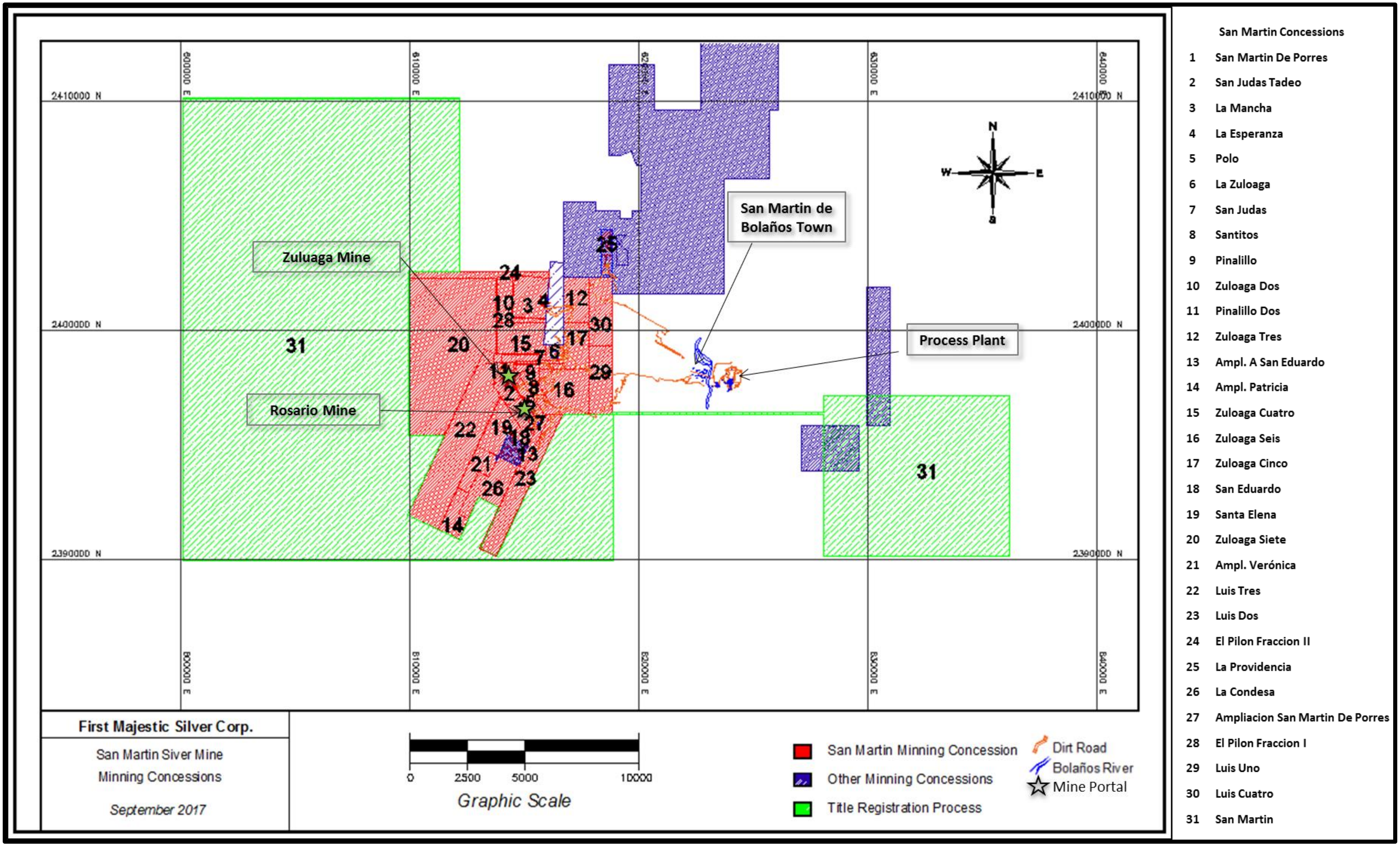
In Mexico, mining concessions are granted by the Economy Ministry and are considered exploitation concessions with a 50-year term. Mining concessions have an annual minimum investment to complete and an annual mining rights fee to be paid to keep the concessions effective. Valid mining concessions can be renewed for an additional 50-year term as long as the mine is active.

San Martín consists of 31 contiguous mining concessions in the San Martín de Bolaños mining district, covering a total of 37,517 hectares. Mineral rights for the earliest titled concessions expire in the year 2024. Table 4-1 and Figure 4-1 summarize the mining concessions.

Table 4-1: San Martín Mining Concessions.

	Name	Title Number	Expiry Date	Status	Ownership	Surface Hectares
1	San Martín De Porres	160810	11-11-2024	valid	San Martín	91.44
2	San Judas Tadeo	160811	11-11-2024	valid		94.89
3	La Mancha	172212	26-10-2033	valid		270.00
4	La Esperanza	175485	30-07-2035	valid		12.56
5	Polo	178829	06-10-2036	valid		88.00
6	La Zuloaga	178831	06-10-2036	valid		9.00
7	San Judas	179604	10-12-2036	valid		140.00
8	Santitos	179605	10-12-2036	valid		69.45
9	Pinalillo	181758	17-11-2037	valid		37.96
10	Zuloaga Dos	185281	13-12-2039	valid		168.87
11	Pinalillo Dos	185284	13-12-2039	valid		79.77
12	Zuloaga Tres	185307	13-12-2039	valid		220.00
13	Ampl. A San Eduardo	186428	29-03-2040	valid		71.02
14	Ampl. Patricia	187325	13-06-2040	valid		150.00
15	Zuloaga Cuatro	188862	28-11-2040	valid		282.52
16	Zuloaga Seis	188867	28-11-2040	valid		425.27
17	Zuloaga Cinco	191989	18-12-2041	valid		245.10
18	San Eduardo	206208	18-11-2047	valid		51.30
19	Santa Elena	216187	11-04-2052	valid		322.76
20	Zuloaga Siete	218104	10-10-2052	valid		2,102.29
21	Ampl. Veronica	218866	22-01-2053	valid		148.66
22	Luis Tres	218872	22-01-2053	valid		1,091.92
23	Luis Dos	220312	22-01-2053	valid		460.00
24	El Pilon Fraccion Ii	220480	11-08-2053	valid		187.12
25	La Providencia	221137	02-12-2053	valid		100.00
26	La Condesa	221189	10-12-2053	valid		300.00
27	Ampliacion San Martín De Porres	221206	10-12-2053	valid		17.26
28	El Pilon Fraccion I	224219	21-04-2055	valid		4.22
29	Luis Uno	226108	15-11-2055	valid		300.00
30	Luis Cuatro	226447	17-02-2056	valid		300.00
31	San Martín	045/ 17772	Applied on 02/03/2012	Title Registration process		29,676.09
Total						***37,517.48***

Figure 4-1: San Martín Mineral Concessions Map



Note: The concession numbers are in accordance with Table 4-1.

4.4 Royalties and Encumbrances

No royalties or any other encumbrances are due on any of the San Martín mining concessions.

4.5 Surface Rights

Surface rights in Mexico are commonly owned either by communities (ejidos) or by private owners.

In the mining district, land is mainly owned by private owners, and to a lesser degree, by ejidos. In either case, the mining concessions include "right of way" rights, although in many cases it is necessary to negotiate access to the land. Federal or state roads allow access to federal or state lands without other requirements.

The Mexican Mining Law includes provisions to facilitate purchasing land required for mining activities, installations and development.

San Martín has acquired surface rights covering approximately 810 hectares (Table 4-2) that are sufficient to support operations, including plant installation, tailings storage, and other Project requirements (Figure 4-2 and Figure 4-3).

Table 4-2: San Martín Land Holdings

Acquired from	Title	Date of Acquisition	Ownership	Hectares
Felipe Ureña Rosas	1,943	25-01-1982	Minera El Pilon, S.A. de C.V.	56.5
Cristobal Fregoso Perales	4,491	09-06-1995		214.0
Hector Davila Santos	1,628	23-06-2006		2.0
Carmen Elena Ureña Viuda De Cortes	1,470	10-03-2006		2.4
Carmen Elena Ureña Viuda De Cortes	4,684	23-01-1996		19.7
Hector Davila Santos	27,044	13-08-2001		0.5
Hector Davila Santos	4,963	15-05-2006		1.5
Martín Martínez Ayon	3,496	17-10-1995		204.0
Secundino Reyes López	4,816	20-06-1996		0.0
Wintila Delgado Sandoval	3,772	25-06-2012		262.8
Aurora Luna Salcedo	1,983	27-06-1997		0.0
Baudelio Bugarin Alvarado	1,984	27-06-1997		35.6
Baudelio Bugarin Alvarado	25,162	11-09-2000		8.6
Samuel Haro Fregoso	31,974	29-05-2015		2.0
Total				*809.6*

Figure 4-2: San Martín Surface Rights General Map

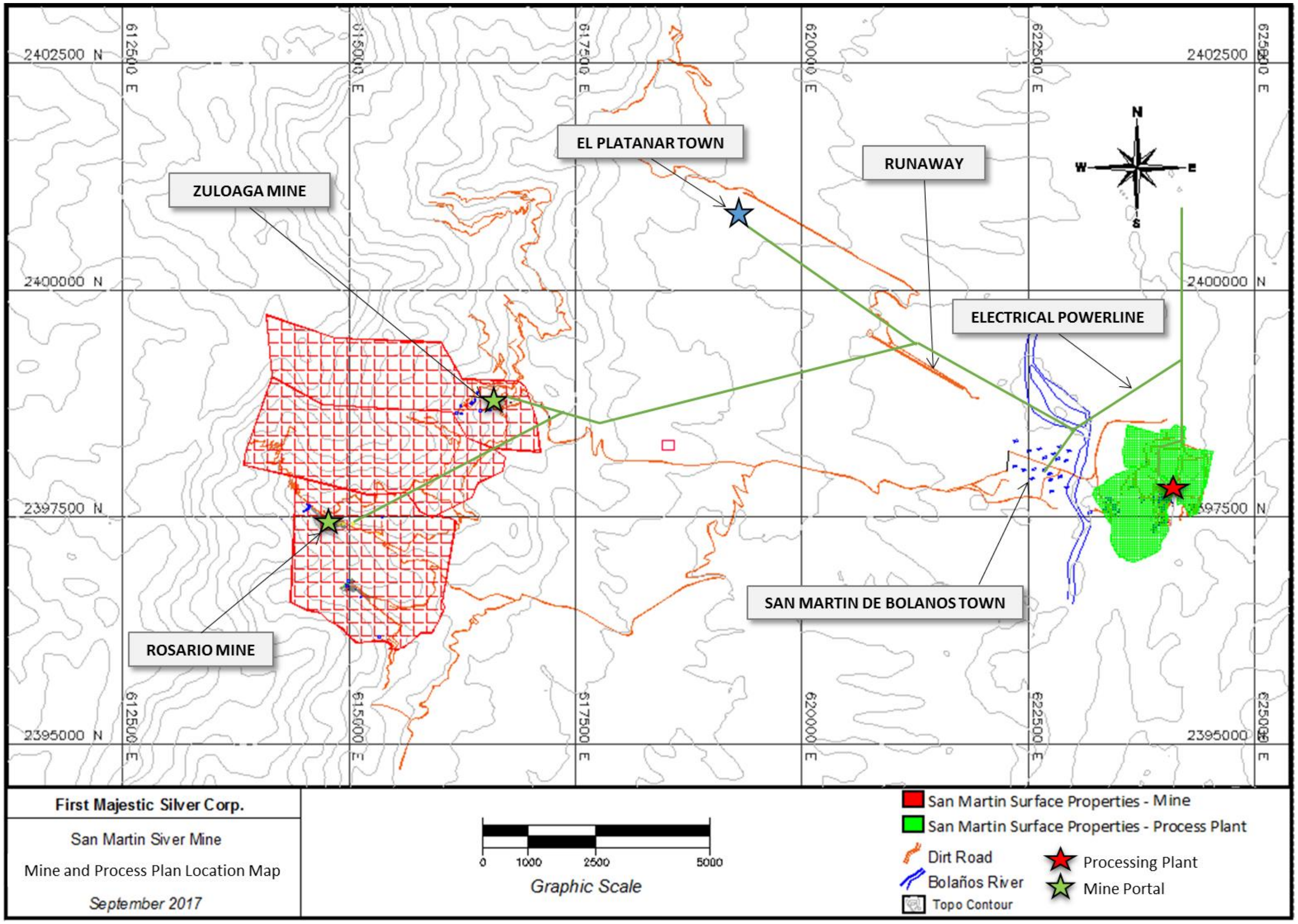
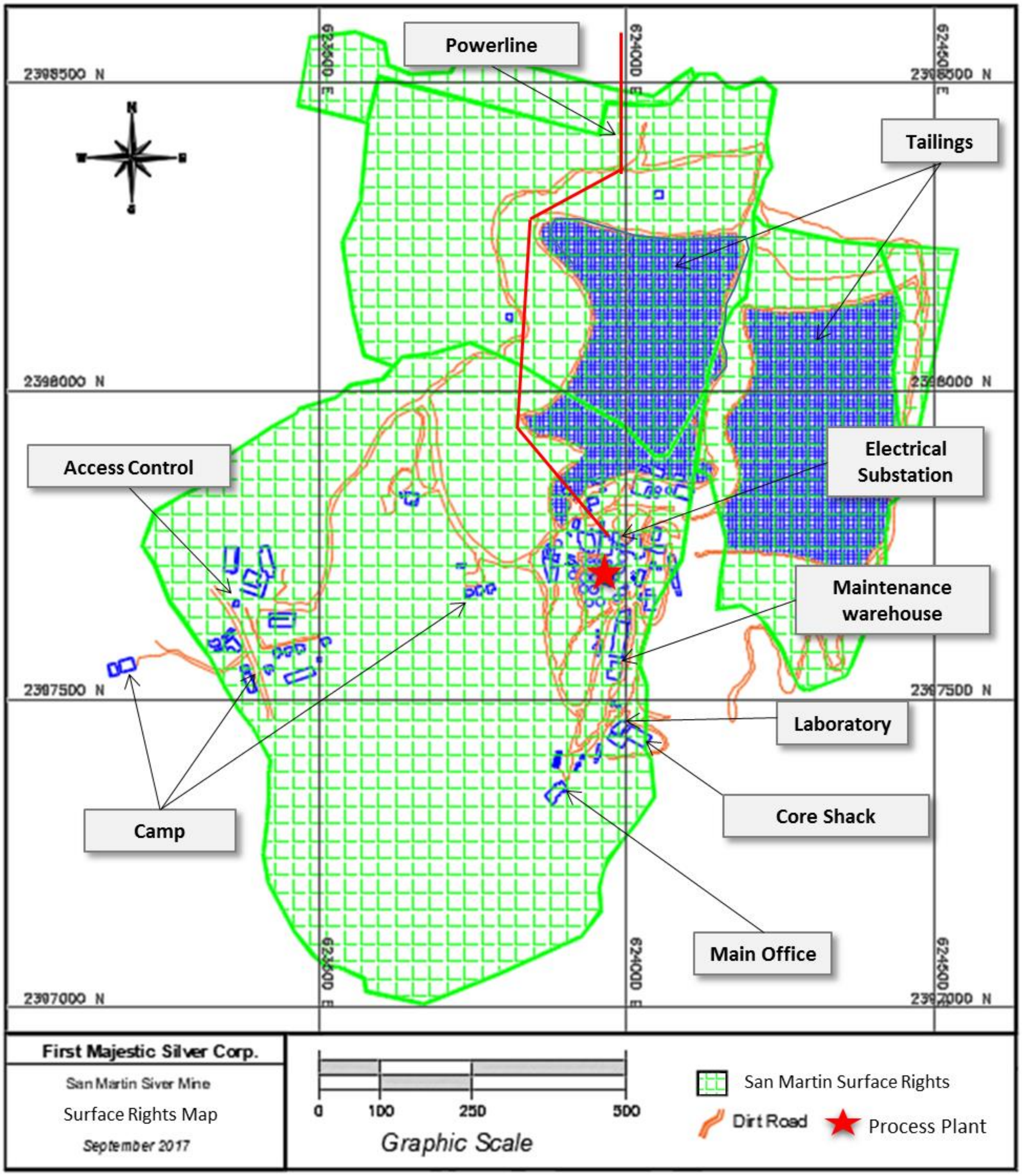


Figure 4-3: San Martín Surface Rights Map Adjacent Process Plant Area



4.6 Permits

Information regarding permitting is presented in Section 20 of the Report.

4.7 Environmental Considerations

Information regarding environmental permits and studies are presented in Section 20 of the Report.

4.8 Social License Considerations

Information regarding social license is presented in Section 20 of the Report.

4.9 Comments on Section 4

The QP is of the opinion there are no significant factors and risks that may affect access, title or right or ability to perform work on the Project.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The town of San Martín de Bolaños is located 250 km north of Guadalajara city, the capital city of the state of Jalisco. Travel time from Guadalajara to the town is about 5 hours by road and about 45 minutes by charter plane.

An alternate access route to San Martín is from the city of Durango. San Martín is about 480 km south of the capital city of Durango. Travel time is approximately 7 hours by road and about 1.5 hours by charter plane. Airports with service for international flights are available in the nearby cities of Durango, Zacatecas, Aguascalientes and Guadalajara.

San Martín's mines are located approximately 10 km to the west of the town of San Martín de Bolaños, while the mill and office facilities are located approximately 3 km east of the town. The mine and process plant can be accessed by all-weather dirt roads.

5.2 Climate

The climate in San Martín is considered to be a local steppe climate. The average annual temperature in San Martín de Bolaños is 24.2°C, with the lowest monthly average in February (19.7°C) and the highest in May (30.5°C).

Average yearly accumulated rainfall in San Martín de Bolaños is registered as 592 mm, most of which occurs during June through October. The highest monthly rate of precipitation is recorded at 197 mm during the month of October. Exploration and mining operations are conducted on a year-round basis.

5.3 Local Resources and Infrastructure

The town of San Martín de Bolaños constitutes the commercial center for the population living in the region. San Martín de Bolaños offers retail, medical services, hospitals, educational facilities (elementary and middle school), communication services and access by highway to the city of Guadalajara. Other major facilities, including international airports, are located in the cities of Guadalajara (the second largest city in Mexico), Zacatecas and Aguascalientes.

The municipality of San Martín de Bolaños has 5,900 inhabitants. The town includes approximately 3,000 people, with FMS's San Martín being the largest employer. The town is connected to the national power grid (Comisión Federal de Electricidad, or CFE), and it has standard telephone lines, internet, and satellite communications.

Most of the people living in nearby villages and along the Bolaños river valley depend on small-scale farming, raising livestock, and growing fruit.

The San Martín mine and plant are also connected to the CFE power grid through a substation located about 20 km to the north, at the Bolaños mine. Water for the town's domestic use is pumped from water wells. The water source for the San Martín processing plant is the Bolaños River, which has a permanent flow, except in extreme drought conditions such as the one that occurred during the 2012 summer months. In that case, water is truck-hauled from the mine for the use of both the town and the processing plant. During the summer of 2012, the company assisted the town of San Martín de Bolaños in building a 10-km long pipeline from a water source near the mine to the town storage tank. The excess water that was not required by the town was used for processing operations during the drought. These installations have been left in place as a backup for future use in similar recurring drought conditions.

Mine and plant installations, including camp facilities, tailings storage and waste disposal areas required for the mining and milling operation of San Martín, are located on land owned by Minera El Pilón, S.A. de C.V.

The infrastructure on site includes the support facilities for the operations, which are located near the plant and include the main administrative offices, warehouse, assay laboratory, tailings facilities, maintenance buildings, cafeteria and other employee housing. The Maintenance Department operates from the extensive shops and warehouses located at the plant site and adjacent the mine. Additional information on the mining infrastructure is included in Section 18 of the Report.

5.4 Physiography

San Martín is located on the eastern slopes of the southern part of the Sierra Madre Occidental, in the Bolaños River valley. It is located at elevations of about 850 masl. The Sierra Madre Occidental consists of a north–northwest mountain range that borders the west coast of Mexico. It comprises peaks, plateaus and elongated valleys along the range which merges into the mountains to the northwest. Deep canyons carved by drainage cross the Sierra Madre Occidental with increasing depth in the northwest portion of the range.

The main drainage within the San Martín region is the Bolaños River which constitutes one of the most important water flows in State of Jalisco; the Bolaños River forms the Bolaños hydrological basin that covers approximately 5,100 sq. km. within three states, Aguascalientes, Jalisco, and Nayarit. The Bolaños River discharges its waters into the Santiago River to the south, which drains into the Pacific Ocean.

Climate and geomorphological conditions in the San Martín area may only support farming and cattle ranching in the river valley. In the surrounding areas, only sparse to moderately dense desert vegetation of bushes and shrubs cover the hill slopes, and farming and ranching are very difficult. Within the mine area, there is a transition zone that changes from desert grasses in the lower elevations to evergreens, pines and oaks and other types of trees at higher elevations.

6 HISTORY

Historical mining production from the Bolaños mining district began in colonial times, mainly from the Bolaños mine, which is located within the northern part of the Bolaños graben, and outside the Project area. The Bolaños mine was developed by Kennecott, Cyprus and other operators into a 1,500-tpd underground mining and processing operation during the early 1980s.

In the San Martín area, past mining developments included primarily underground workings in the Zuloaga vein, with some drifting at the Ballenas, Mancha, Plomosa, Melón and Hedionda veins, and discoveries of the Blanca, Condesa, Cinco Señores, and Rosario veins among other smaller mine developments. According to historical records, over 46 million silver-equivalent ounces have been extracted from about 6.7 million tonnes of mineral reserves from the Zuloaga and adjacent veins during the period from 1983 to 2016.

FMS acquired the San Martín mine in June 2006, and FMS production from 2006 to September 30, 2017, represents approximately 37% of the mined tonnes and about 48% of the silver ounces produced over the mine life.

Table 6-1 presents the silver production from the San Martín mine during FMS's ownership period for the period from 2008 through 2017.

Table 6-1: San Martín Production

Year	Tonnage K Tonnes	Ag gpt	Ag-Eq KOz
2008	254	124	1,009
2009	291	157	1,247
2010	264	168	1,230
2011	287	147	1,106
2012	286	136	1,028
2013	323	153	1,371
2014	364	213	2,118
2015	349	260	2,722
2016	298	241	2,209
2017 (forecast)	281	260	2,691

Table 6-2 shows the work completed in the general mine area. There is no information on the type of exploration activities undertaken prior to FMS's interest. Exploration and drilling activities conducted by FMS are summarized in Section 9 and Section 10.

Table 6-2: Work Summary Table

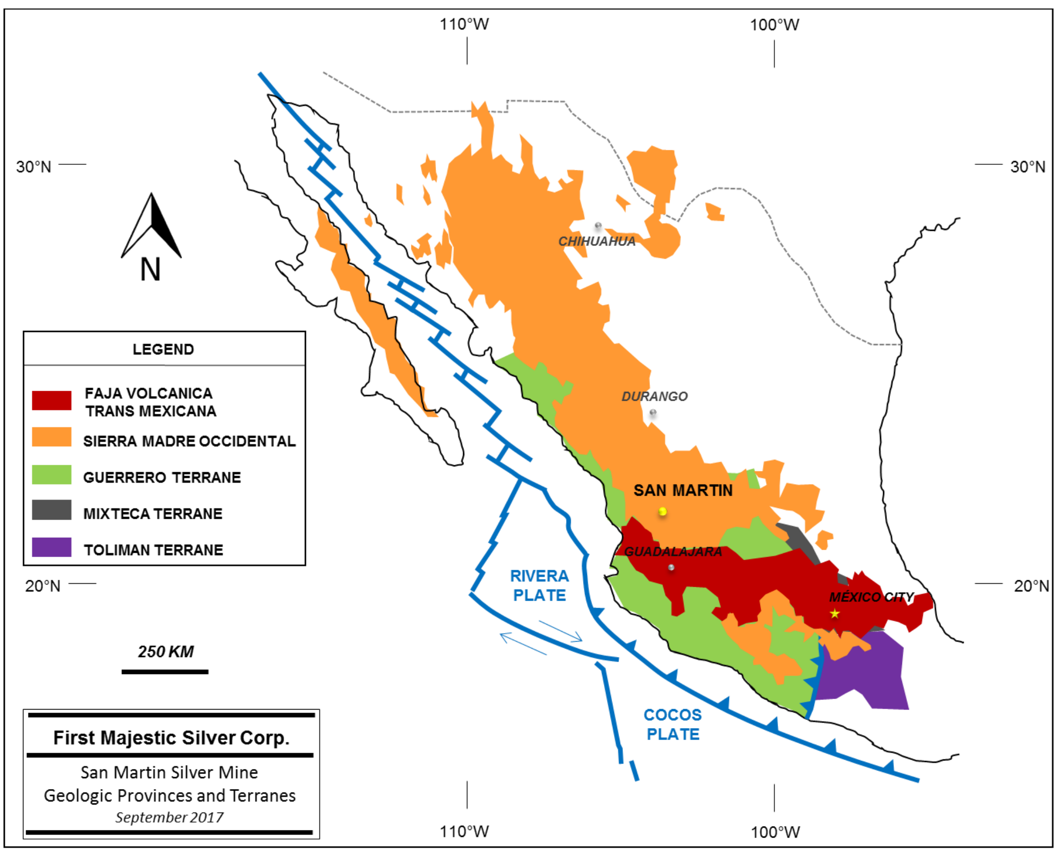
Colonial times	There is record of Hispanic mining production (from the area now known as the Bolaños mine) in the northern part of the Bolaños graben.
1962	Contemporary production began in 1962, when the Davila Santos family acquired properties in the mining districts of Bolaños and San Martín, and established Minerales de Bolaños, S.A.
1974-1980	In 1974, the Davila Santos family started to transport material from the Zuloaga zone at San Martín to the Bolaños process plant, and began production from other abandoned mines in 1976.
1980s	Kennecott and Cyprus acquired the properties in the district of Bolaños and developed the Bolaños mine into a 1,500-tpd underground mining and processing operation.
1981-1983	Héctor Dávila Santos established Minera El Pilón, S.A. de C.V., and began doré bar production from San Martín in 1983.
1997	Vancouver-based First Silver Reserve, Inc. (FSR), by way of reverse takeover, acquired all the shares of the Mexican company Minera El Pilón, S.A. de C.V.
2006	In April 2006, First Majestic Resource Corp. (now FMS) entered into an irrevocable share purchase agreement to acquire the majority share in FSR. FMS took control of FSR and the San Martín Silver Mine in June 2006, and subsequently, a business combination was arranged and approved on September 14, 2006.
2012-2014	A mill expansion was completed during the second quarter of 2014. The expansion included the installation of a new and larger 9.5' x 12' ball mill to replace the older 8.5' x 12' ball mill and production capacity increased from 900 tpd to 1,300 tpd.
2017	FMS has begun the installation of a tailings filter-press system, which is expected to be completed in late 2017 and will increase water recycling capabilities and reduce the tailings deposit stability risk.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Stratigraphy

San Martín is located in the southern portion of the Sierra Madre Occidental physiographic province within the Bolaños graben. The Sierra Madre Occidental (SMO) province is one of the largest volcanic provinces that formed as a result of the subduction of the Farallon plate under North America and consists of five main igneous complexes: (1) Late Cretaceous to Paleocene plutonic and volcanic rocks; (2) Eocene andesites and lesser rhyolites, traditionally grouped into the so-called "Lower Volcanic Complex"; (3) silicic ignimbrites mainly emplaced during two pulses in the Oligocene (ca. 32–28 Ma) and Early Miocene (ca. 24–18 Ma), and grouped into the "Upper Volcanic Supergroup"; (4) transitional basaltic–andesitic lavas that erupted toward the end of, and after, each ignimbrite pulse, which have been correlated with the Southern Cordillera Basaltic Andesite Province of the southwestern United States; and (5) post subduction volcanism consisting of alkaline basalts and ignimbrites emplaced in the Late Miocene, Pliocene, and Pleistocene (McDowell and Keizer, 1977; Clark et al., 1979; Ferrari et al., 2007). Figure 7-1 is a map of Mexico showing the location of San Martín, the SMO, and the Trans Mexican Volcanic Belt (TMVB).

Figure 7-1: Map of Mexico Showing the Location of San Martín, the SMO and the TMVB



The volcanic rocks in San Martín consist predominantly of a column of more than 1,200 m of rhyolite and rhyodacite tuffs and welded tuffs intercalated with subordinate andesite to basaltic andesite lavas and tuffs (Sheubel et al., 1988; Lyons, 1988). According to Sheubel et al. (1988), the volcanic units belong to the Oligocene–Miocene (37–19 Ma) upper volcanic supergroup of the SMO described by Clark et al. (1979). Basaltic andesite lavas and dikes are the youngest rocks in the Bolaños graben with ages of 21–19 Ma (Nieto-Samaniego et al., 1999).

Stratigraphic interpretations for the region were carried out in the Bolaños mine, located approximately 20 km north of the San Martín mine, by Lyons (1988) and in the San Martín mine by Sheubel and Clark (1983) and Lyons (2001). Detailed descriptions of the volcanic stratigraphy for the region are provided by Lyons (1988).

The base of the stratigraphic column is represented by an undifferentiated sequence of welded tuffs referred to as the "Early Volcanics." The welded tuffs are only known to crop out adjacent to the Bolaños mine where they are densely welded tuffs of rhyolitic composition bearing quartz and feldspar phenocrysts.

Above the welded tuffs lies the Bolaños unit, which consists of about 300 m of a maroon-coloured, brittle, eutaxitic, rhyolitic welded tuff with variable amounts of white alkali feldspar phenocrysts and no visible quartz phenocrysts. The Bolaños tuff is divided into three members: a lower eutaxitic member, a middle lithic member, and an upper porphyritic member. Each member of the Bolaños unit represents a cooling unit, and is separated by a 2–10 m-thick, green-to-pink, thinly-bedded, non-welded tuff. The Bolaños unit is correlative with the Rosario unit described in the San Martín mine area by Sheubel et al. (1988).

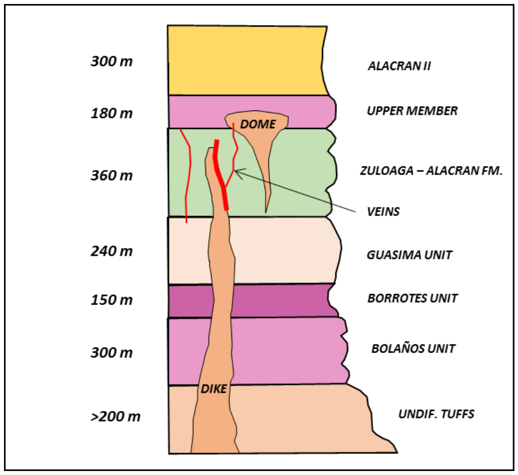
The Borrotes tuff overlies the Bolaños unit, and consists of a 100–150-m-thick sequence of interbedded rhyolitic welded and non-welded tuffs. The Borrotes unit is characterized by having little quartz, feldspar phenocrysts, and spherulite zones. Above the Borrotes tuff is the Guasima unit (240- m thickness) which consists of flows of andesite and basalt bearing sporadic plagioclase and amphibole crystals.

The Zuloaga sequence (360-m thickness) overlies the Guasima unit, and consists of three members consisting mainly of andesitic and rhyolitic tuffs with minor latitic and trachytic tuffs. The upper and lower members are lithic tuffs, and the middle member is a crystal–lithic tuff bearing quartz and feldspar phenocrysts. The Zuloaga sequence is the main host for mineralization in the San Martín mine area, and its middle member has been used as a marker horizon to determine a vertical displacement of approximately 120 m across the Zuloaga unit (Lyons, 2001). The Zuloaga sequence is informally referred to as the "Alacran" formation in the San Martín mine area by the mine geologists.

Rhyolite domes and dikes of late Miocene age intrude all of the previously-mentioned units at the San Martín mine. The domes show a characteristic flow texture, lack pyroclastic material, and contain abundant quartz and feldspar phenocrysts. Lastly, at the top of the stratigraphic column, there are the

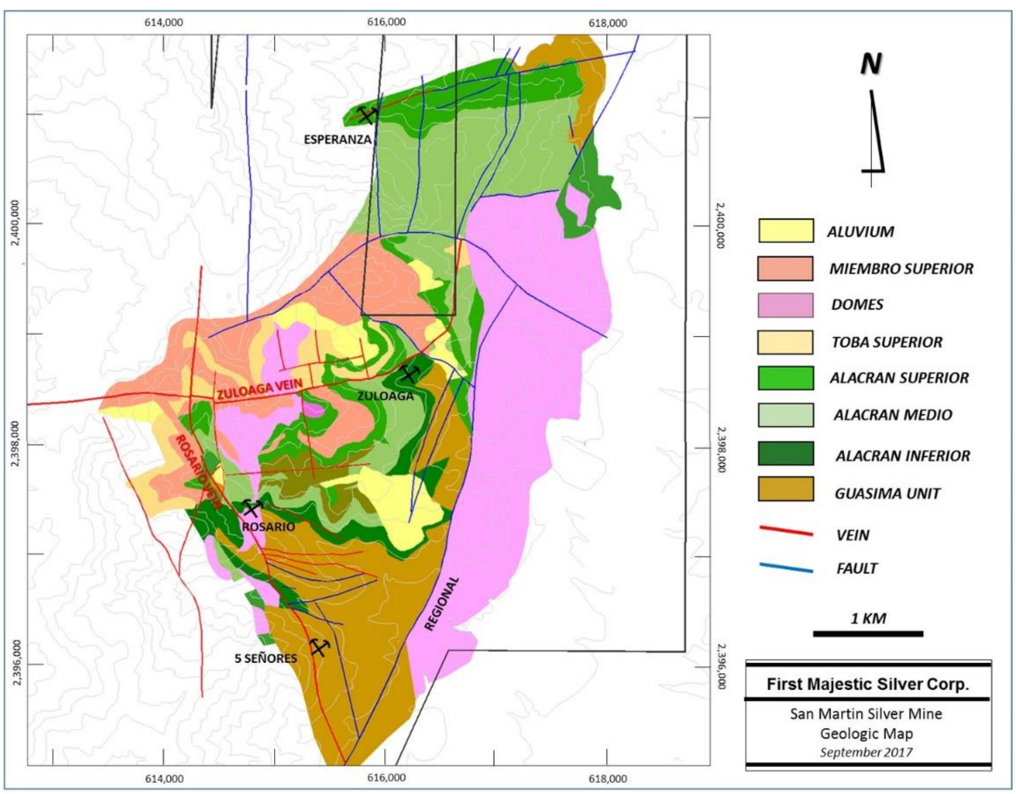
Carboneras unit, the Chimal tuff, the Huila basalt, the San Martín tuff, and the Sotol basalt, all of which are believed to postdate mineralization. The post-mineralization units are informally referred to as the "Upper Member" and "Alacran II" formations in the San Martín mine. Figure 7-2 is a schematic representation of the stratigraphic column, and Figure 7-3 is a geologic map of San Martín.

Figure 7-2: Stratigraphic Column for San Martín



Note: Figure prepared by FMS, 2017.

Figure 7-3: Geological Map of San Martín



7.2 Structural Geology

The district is situated in a 100-by-15 km north–northeast trending Bolaños graben, which began formation around the Miocene age in response to the extensional tectonics that gave rise to the Basin and Range physiographic province in northern Mexico (Scheubel et al., 1988; Starling, 1998; Albinson and Rubio, 2001). Apparent back-arc extension, following convergent plate motion and the ridge jump of the Rivera triple junction from the Gulf of California to the intersection of the Colima–Bolaños grabens, favoured the development of the Basin and Range province (Scheubel et al., 1988; Starling, 1998). The peak of deformation is associated with the north–south bounding faults of the graben, which displace a 21.3-Ma ignimbrite by more than 1 km and expose the mineralization (Lyons, 1988; Scheubel et al., 1988).

Several mafic dikes intrude N30°E faults, in some cases feeding basaltic flows that have been dated at 19.9 Ma. Field evidence suggests that the dikes are synextensional, and thus their age probably represents the peak of extension. The minimum age of faulting is not constrained by any geologic unit.

According to Scheubel et al. (1988), down-dropping produced by the north-trending post-mineralization faults caused the volcanic units to tilt to the west, and also progressively down-dropped the volcanic units and fault–vein systems to the east by about 1,200 m.

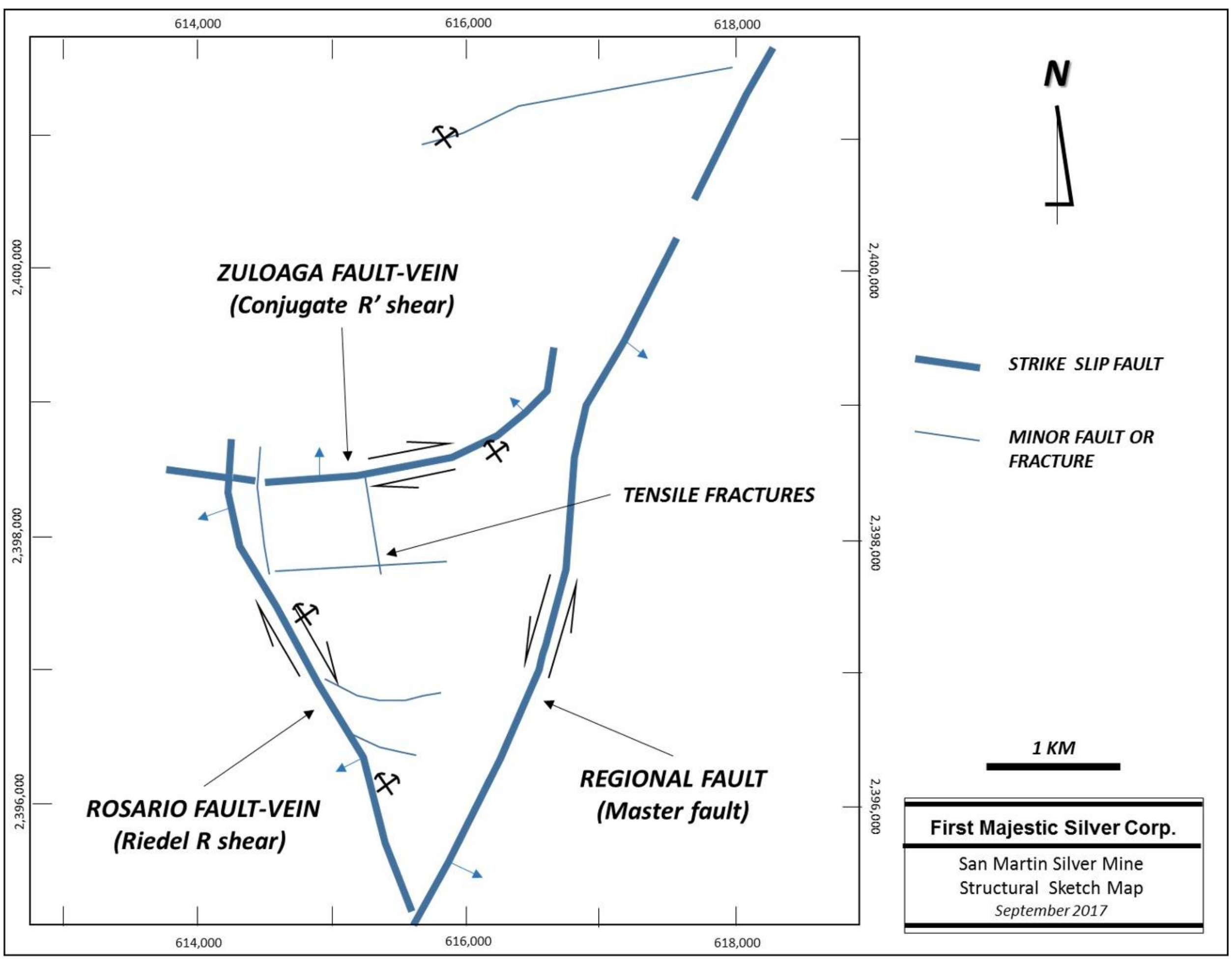
The Regional fault is one of the normal faults related to the Basin and Range extension and seems to postdate mineralization, although in Bolaños, 20 km north of San Martín, the N30°E-trending structures are favourable sites for mineralization. The Regional fault strikes N30°E to N20°E, dips to the east–southeast at variable angles between 65° and near vertical, and can be traced for approximately 8.0 km.

The main structures in the San Martín mine are east–west, northwest–southeast, northeast–southwest, and north–south strike-slip faults and fractures. The faults and fractures are commonly mineralized. The Zuloaga structure runs for approximately 2.8 km, trends almost east–west, and bends to the northeast as it approaches the Regional fault. The structure dips approximately 70° to the north, and based on structural and stratigraphic work carried out by Lyons (2001), it is a normal fault with approximately 120 m of vertical displacement. Starling (1988) proposed that the lead–zinc-rich early mineralization phase developed along the Zuloaga structure under a component of dextral shear, and the later silver-rich phase occurred during a subsequent phase of sinistral reactivation with reversal of shear.

The N30°W-trending Rosario fault is currently the main producing structure in the San Martín mine. The structure dips 65° to 75° to the southwest and has a strike extent of at least 3.2 km. Based on field and satellite image interpretations, Rosario is a strike-slip fault that appears to have a right-lateral displacement with a vertical component, as indicated by the minor veins tailing off to the southeast. The Rosario fault-vein seems to postdate the Zuloaga vein, therefore, no significant offset is observed underground in the Zuloaga mine. Minor or no apparent offset in the Zuloaga mineralization across the Rosario fault may be explained by right-lateral and vertical displacement along the Rosario fault. Using this interpretation, there may be additional exploration potential for the Zuloaga fault, as it may be open west of the Rosario fault at depth. The central portion of the Rosario fault is characterized by a cymoid loop which, according to Starling (1988), developed due to normal faulting across a ductile rock unit bounded by brittle units.

Based on field evidence and satellite images, the Regional fault is interpreted as a sinistral strike-slip fault, which may explain the bending of the Zuloaga structure as it approaches the Regional fault. The other minor structures developed within the triangle formed by the Zuloaga, Rosario and Regional faults may be conjugate shears and tensile fractures associated with the sinistral displacement along the Regional fault and dextral displacement along the Rosario fault. Since many of the structures within the fault triangle could be tensile fractures, they may narrow as they step away from the Rosario fault, and therefore they could have limited exploration potential along strike. Figure 7-4 is a schematic model of the structures with arrows representing the sense of movement.

Figure 7-4: San Martín Structural Map



7.3 Mineralization

Mineralization in the San Martín mine occurs in east–west, northwest–southeast, northeast–southwest and north–south fault structures in the form of stockworks, sheeted veinlets, veins, and breccias. The veins in the San Martín mine can be described as fault veins or mineralized faults, given that the amount of gangue minerals such as quartz, calcite, fluorite, epidote, ankerite and adularia are very limited, i.e., they do not form massive or banded veins typical of open space-filling veins.

The age of mineralization was bracketed by dating the Guasima andesite. Mineralization occurred at approximately 23 Ma during the east–northeast and east–west extensional tectonics of the Basin and Range (Starling, 1998; Sheubel et al., 1988). The ages determined in the San Martín mine area are in agreement with the K/Ar ages reported for the volcanic units in the Bolaños mine by Lyons (1988).

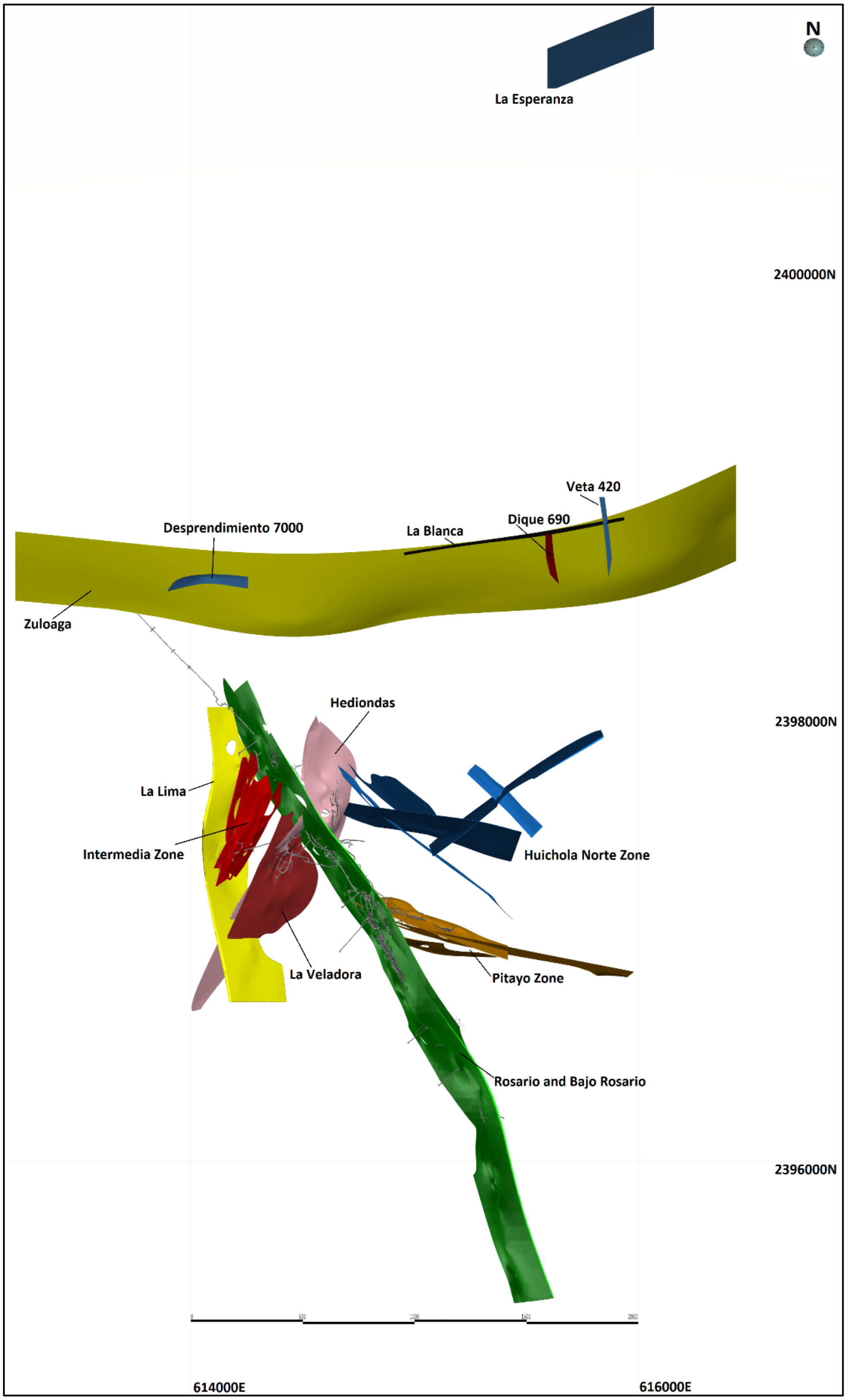
Table 7-1 summarizes the main characteristics for the San Martín veins. Figure 7-5 shows the geological model of veins.

Table 7-1: Characteristics of Major and Minor Veins in San Martín

Vein	Type of structure	Strike	Dip	Strike (m)	Vertical (m)	Width (m)	Location
Zuloaga	Main fault vein	E-W to N45°E	N 70°	2,800	500	2.3	North
Rosario	Main fault vein	N30°W	SW 65° - 75°	3,200	350	2.2	West
Veladora	Splay vein	N35°E	SE 65° - 70°	400	240	2.3	HW of Rosario
Lima	Main fault vein	N10°W	NE 65°	1000	200	2.2	HW of Rosario
Huichola E-W	Tensile fracture	E-W	N 70°	200	100	1.0	FW of Rosario
Huichola N	Tensile fracture	N-S	90°	300	150	1.0	FW of Rosario
Intermedia	Splay vein	N20°E	SE 70°	220	200	1.8	HW of Rosario
Guitarrona	Splay vein	N70°W	NE 70° - 80°	500	250	1.2	FW of Rosario
Pitayo	Splay vein	N70°W	SW 80°	300	220	1.5	FW of Rosario
La Reina	Tensile fracture	N85°W	NE 80°	200	130	1.2	FW of Rosario
Hedionda	Splay vein	N35°E	SE 70°	1,000	270	1.1	FW of Rosario
La Blanca	Splay vein	N80°E	NW 85°	450	200	2.3	HW of Zuloaga
La Esperanza	Main fault vein	N70°E	SE 70°	1,200	200	1.6	North of Zuloaga
Veta 420	Tensile fracture	N10°W	SW 80°	200	150	1.1	HW of Zuloaga
Desprendimiento 7000	Splay vein	E-W	N 80°	150	100	1.0	HW of Zuloaga
Dique 690	Tensile fracture	N-S	SW 80°	150	100	1.0	HW of Zuloaga

Note: HW = hanging-wall; FW = foot-wall.

Figure 7-5: San Martín's Veins - Geological Models in Orthographic View



Note: Figure prepared by FMS, 2017.

Zuloaga

Mineralization in the Zuloaga fault vein is hosted by the Zuloaga sequence (Alacran formation) and occurs in quartz–calcite veinlets and gangue-cemented breccias. The gangue mineral consists of quartz, adularia, fluorite and calcite, whereas the sulfide mineralogy consists of sphalerite, galena, pyrite, chalcopyrite, pyrrhotite and undifferentiated sulfosalts (Albinson and Rubio, 2001). X-Ray Diffraction (XRD) and Short-Wave Infrared (SWIR) spectral analysis identified quartz, calcite, ferroan chlorite, illite, interstratified illite/smectite and rare hematite (Albinson and Rubio, 2001). The Zuloaga fault vein strikes almost east–west and bends (changes strike) to the N50°E–N40°E to the east as it approaches the Regional fault. The vein pinches and swells along strike and varies in width from 10 cm to over 10 m. It exhibits mineralization along a strike length of almost 2.8 km, over a vertical interval of at least 500 m, and has an average width of 2.30 m. Several subsidiary, narrow fractures split from the vein and can be mineralized for short distances.

Rosario

Mineralization in the Rosario fault vein is primarily hosted in rhyolites of the Alacran formation and, in minor proportion, in andesites of the Guasima unit. Mineralization occurs as acanthite, sphalerite, galena, native silver, acanthite and cerargyrite associated with quartz, calcite, epidote, hematite and pyrite veins, forming stockworks and breccia cement. The presence of electrum is also suspected, due to some assays having reported gold concentrations around 1 g/t Au. Based on core observations, the first mineralization stage of consisted of pyrite and hematite veinlets, followed by at least three phases of quartz deposition, where the third quartz event carries most of the acanthite. The quartz phases are followed by a calcite veining event and subsequently by epidote.

Alteration wise, it appears that the first event is a relatively high-temperature albite alteration (albite rims in feldspars) that is followed by propylitic alteration (chlorite–epidote) and finally argillic alteration consisting mainly of interstratified illite–smectite and smectite. The quartz–acanthite deposition phase is associated with interlayered illite-smectite.

Mineralization in the Rosario vein pinches and swells and along strike, and varies in width from 10 cm to 5 m. The structure contains mineralization over a vertical interval of 350 m and has an average thickness of about 2.20 m.

Veladora

The Veladora fault-vein strikes N30°E on average, dips at 55°–60° to the southeast, and has a known strike length of 400 m. The vertical mineralization extent is 240 m, the average width is 2.3 m. The vein sits within the hanging-wall of the Rosario vein structure, and may represent a linking fault between the La Lima and Rosario faults. The Veladora vein is developed at the contact between a rhyolite dome in the hanging-wall and rhyolite tuffs and andesites of the Alacran formation and the Guasima unit, respectively. The vein is characterized by the occurrence of cymoid loops, stockworks, and breccia zones. It also contains gouge zones with a variable thickness between 10 and 40 cm where hematite is abundant.

The mineralogy of the vein consists of quartz and calcite as veins and cement containing native silver, acanthite and minor galena, and sphalerite. The main alteration minerals are hematite, pyrolusite, interlayered illite-smectite, and smectite.

La Lima

The La Lima fault-vein strikes N10°W to the north–south, dips at 65° to the east–northeast, and has a known strike length of 1,000 m. The vertical mineralization extent is 200 m, average width is 2.2 m, and the vein sits within the hanging-wall of the Rosario structure. It is hosted by rhyolites and rhyolite tuffs of the upper Alacran formation. The structure occurs as a fault zone with intense fracturing at the foot-wall and a zone of gouge at the hanging-wall. The fractures are commonly filled by hematite, calcite, quartz, illite–smectite, epidote and minor pyrolusite.

Silver mineralization occurs mainly as native silver and acanthite associated with the oxides filling fractures and the gouge zone.

Huichola E-W

The Huichola E-W vein is a narrow vein that strikes east–west, dips at 70° to the north, and has a known strike length of 200 m. The known vertical mineralization extent is 100 m, average width is 1.0 m and the vein sits within the foot-wall of the Rosario fault vein. The structure is recognized as fracture zone that is hosted by the Guasima unit to the east and the Alacran formation and rhyolite domes to the west. Material within the structure is oxidized and shows strong argillic alteration in the foot-wall, consisting mainly of illite and smectite. A narrow fault zone with gouge often occurs in the hanging-wall.

Silver mineralization in the form of native silver and acanthite is associated with hematite and pyrolusite in the oxide zone.

Huichola N

The Huichola N vein is narrow vein that strikes north–south, is vertical to almost vertical, occasionally dips to the east at 80° to 85°, and has a known strike length of 300 m. The known vertical mineralization extent is 150 m, the average width is 1.0 m, and the vein sits within the foot-wall of the Rosario fault vein. Huichola N is mainly hosted by rhyolites and minor andesites of the lower Alacran formation and the Guasima unit. The foot-wall commonly consists of an andesite dike. The vein consists of a fracture zone with occasional breccia pockets that are cemented by calcite.

The fractures are commonly filled by hematite, calcite, and minor quartz-bearing native silver and acanthite.

Intermedia

The Intermedia vein can is a set of three fracture veins that may be partially linking the Rosario and the Lima fault-veins. The veins strike N20°E on average, and are vertical to almost vertical. They have a strike length between 220 and 320 m, average vertical mineralization extent of 200 m, and average width of 1.8 m. The veins pinch and swell, and also develop cymoid loops along strike. The host rock is mainly a silicified rhyolite dome and locally silicified rhyolite tuffs.

Mineralization occurs as native silver and acanthite in oxides (hematite, goethite and minor pyrolusite) filling fractures.

La Guitarrona

The Guitarrona vein-splay strikes N70°W, dips at 75° to the northeast and has a known strike length of 500 m. The vertical mineralization extent is 250 m, average width is 1.2 m, and the vein is a splay of the Rosario fault in the Rosario fault foot-wall. It pinches and swells, showing variable thickness from 0.3 to 3.0 m (average width 1.2 m), and also forms cymoid loops along strike. The structure has zones of breccia and stockwork at the foot-wall of a fault plane with a narrow zone (10–30cm) of gouge. The vein is predominantly hosted by andesites of the Guasima unit and, in minor proportions, by the rhyolites of the Alacran formation.

Silver mineralization occurs in the form of native silver, acanthite and electrum in quartz and calcite, cementing the breccias zones or developing stockworks, and associated with hematite and goethite. Chlorite, epidote and smectite are the main alteration minerals associated with the structure.

Pitayo

The Pitayo vein-splay strikes N70°W, dips at 80° to the southwest, and has a known strike length of 300 metres. The vertical mineralization extent is 220 m, average width is 1.5 m, and the vein is a splay of the Rosario vein in the Rosario fault foot-wall. The vein consists of a fracture zone with development of breccias cemented by calcite and quartz that carry native silver, acanthite, electrum and traces of galena and sphalerite. It is hosted primarily by andesites of the Guasima unit and, in minor proportion, by rhyolite tuffs of the Alacran formation.

La Hedionda

The Hedionda vein-splay strikes N20°E, dips at 70° to the southeast, and has a known strike length of 370 m. The vertical mineralization extent is 270 m, average width is 1.1 m, and the vein is a splay of the Rosario fault in the Rosario vein foot-wall. The structure pinches and swells, showing width variations from 0.3 cm to 2.5 m (average width of 1.1 m). It consists of zones with hydrothermal breccias cemented with calcite, quartz and fluorite and development of quartz–calcite stockworks in wider zones. Oxidation (hematite, goethite and pyrolusite) and strong argillic alteration (illite and smectite) occur in the vein foot-wall.

Silver mineralization consists of native silver and acanthite associated with quartz cementing breccias and forming stockwork. Sphalerite, galena and chalcopyrite are present at deeper levels of the vein (Huichola level).

La Blanca

The La Blanca vein strikes N80°E, dips at 85° to the northwest, and has a known strike length of 450 m. The vertical mineralization extent is 200 m, average width is 2.3 m, and the vein occurs within the hanging-wall of the Zuloaga fault. The vein pinches and swells, with thickness varying from 0.2 m to 2.3 m. It is an open space-filled quartz–calcite vein bearing banded quartz textures that is hosted by rhyolites and rhyolite tuffs of the Alacran formation.

Silver mineralization occurs mainly as acanthite in quartz and associated with sphalerite and galena.

La Esperanza

The La Esperanza vein strikes N70°E, dips at 70° to the southeast, has a known strike length of 1,200 m, vertical mineralization extent of 200 m, and average width of 1.6 m. The vein pinches and swells, having variable widths between 0.2 m and 2.0 m. It is characterized by having a narrow fault zone with gouge at the hanging-wall and an andesitic dike at the foot-wall contact with the fault. Mineralization occurs in quartz veining at the foot-wall of dike and fault, and is hosted by rhyolites and rhyolite tuffs of the Alacran formation. Silver mineralization occurs as acanthite associated with minor sphalerite and galena.

Veta 420

The Veta 420 vein-splay strikes N10°W, dips at 80° to the southwest, has a known strike length of 200 m, vertical mineralization extent of 150 m, and average width of 1.1 m. The vein occurs within the hanging-wall of the Zuloaga fault and consists of a fracture zone that pinches and swells, varying in width from 0.1 m to 2.3 m. It is hosted by rhyolites and rhyolite tuffs of the Alacran formation, bearing oxidation (hematite and goethite) and propylitization.

Mineralization occurs associated with quartz in quartz–calcite veining that is restricted to the fracture zone.

Desprendimiento 7000

The Desprendimiento 7000 vein-splay strikes east–west, dips at 80° to the north, and has a known strike length of 150 m. The vein has a vertical mineralization extent of 100 m and an average width of 1.0 m. The vein occurs within the hanging-wall of the Zuloaga vein and consists of a fracture zone with quartz–calcite veining that pinches and swells, varying in width from 0.1 m to 1.1 m. It is hosted by rhyolites and rhyolite tuffs of the Alacran formation.

Sulfide mineralization is strongly oxidized to hematite and goethite, and propylitic alteration is restricted to the actual vein. Silver mineralization occurs, as native silver associated with the oxidation zone.

Dique 690

The Dique 690 vein strikes north–south, dips at 80° to the southwest, and has a known strike length of 150 m. The vein has a vertical mineralization extent of 100 m and an average width of 1.0 m. Mineralization occurs in quartz–calcite stockwork at the contact of an andesite–basaltic andesite dike that is hosted by the rhyolites and rhyolite tuffs of the Alacran formation. The stockwork zone pinches and swells, varying in width from 0.7 m to 2.1 m. The vein is strongly oxidized, with sulfides altered to hematite and goethite.

Native silver is associated with quartz veining in the oxidation zone.

7.4 Comments on Section 7

In the opinion of the QP, the deposit settings, lithologies, and structural controls on mineralization are sufficiently well known to support Mineral Resource and Mineral Reserve estimation.

Additional studies on ore and alteration mineralogy are recommended to gain a better understanding of the mineral deposit zoning and potential.

8 DEPOSIT TYPES

The San Martín mine is considered to be a typical example of a low sulfidation epithermal deposit, and the geological model used for exploration as well as the mineral resource estimation is that of a low sulfidation vein-type deposit. Epithermal deposits form at shallow depths in volcanic-hydrothermal and geothermal environments, typically at temperatures between 160°C and 300°C (White and Hedenquist, 1995). They define a spectrum with two end members, low and high sulfidation (Hedenquist et al., 1998).

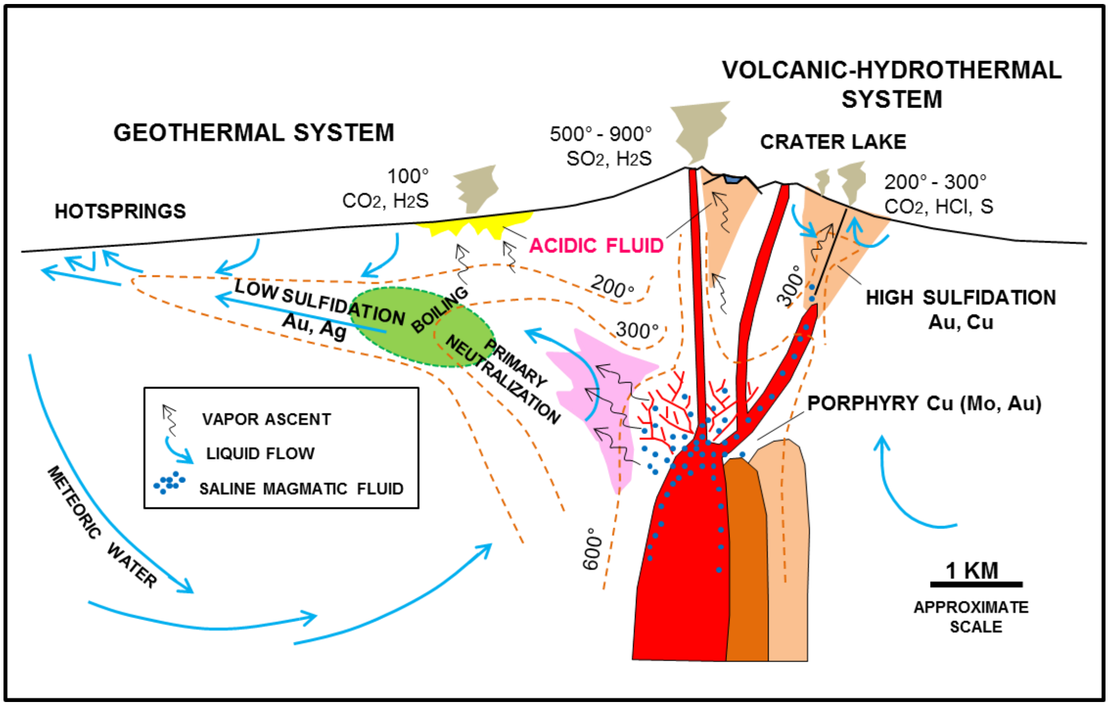
Low sulfidation epithermal deposits represent one of the end members of the epithermal spectrum, and their genesis is complex, generally due to mixing of meteoric and magmatic fluids and to fluid rock interaction during formation. Nevertheless, low sulfidation epithermal deposits are generally formed by diluted, near-neutral reduced fluids and typically contain high precious/base-metal ratios and an alteration assemblage that includes illite, interlayered illite-smectite, smectite and adularia (White and Hedenquist 1995; Hedenquist et al., 1998; Simmons and Brown, 2008). According to several authors, the fluids that formed the Mexican epithermal deposits represent a mixture of fluids with diverse origins varying from meteoric to magmatic (Simmons et al., 1988; Norman et al., 1997; Simmons, 1991; Albinson et al., 2001; Camprubí et al., 2006; Camprubí and Albinson, 2007; Velador, 2010). Figure 8-1 shows the genetic model for epithermal deposits proposed by Hedenquist et al., (1998).

Low sulfidation epithermal vein deposits have been the most important historic producers in Mexico, and some examples include Tayoltita and La Cienega, Durango; Guanajuato, Guanajuato; Parral-Santa Barbara-San Francisco del Oro; Ocampo and Dolores, Chihuahua; and Fresnillo and Zacatecas, Zacatecas (Buchanan, 1981; Clark, et al., 1979; Albinson et al., 2001).

Many epithermal deposits in the Sierra Madre Occidental (SMO) are hosted by the Lower Volcanic Supergroup, although age dating has resolved that most epithermal deposits have Oligocene or Miocene age, thus being coeval with the Upper Volcanic Supergroup (Clark, et al., 1979; Camprubí and Albinson, 2007; Velador, et al., 2010). The age of mineralization at San Martín has not been determined accurately, but K/Ar age determinations in volcanic rocks and fission track dating in fluorite constrains the age mineralization to the Miocene between 19.75 Ma and 24.30 Ma (Sheubel, et al., 1988).

Fluid inclusion microthermometry carried out in sphalerite, quartz and fluorite for the Zuloaga vein indicates average homogenization temperatures and salinities of 297°C and 4.1 wt% NaCl eq (Albinson et al., 2001). The homogenization temperatures and low salinities (diluted fluids) in the Zuloaga vein and the alteration-mineral assemblage (interstratified illite/smectite in Zuloaga and Rosario) are consistent with low sulfidation vein-type deposits described by White and Hedenquist (1995) and Hedenquist et al. (1998). The presence of epidote in Zuloaga, Rosario and Other Veins is also consistent with the homogenization temperatures around 300°C determined for Zuloaga by Albinson et al. (2001).

Figure 8-1: Genetic Model for Epithermal Deposits



Note: Figure from Hedenquist et al., (1998)

8.1 Comments on Section 8

In the opinion of the QP, the deposits in the San Martín mine area are considered to be examples of low sulfidation epithermal deposits. The Miocene age of the mineralization and its association with volcanic rocks of the Upper Volcanic Series is also found for other low sulfidation deposits in Mexico. Additionally, structural-textural features, such as hydrothermal breccias cemented by quartz-calcite, stockworks and cymoid loops, are also common in other low sulfidation epithermal vein-type deposits in Mexico. Based on the previous, the QP believes that the model for low sulfidation deposits is appropriate as an exploration model in the San Martín mine area.

9 EXPLORATION

Direct exploration development and diamond drilling has proven to be the most effective method of exploration in the San Martín area, and is the primary exploration tool. Exploration employs geologic mapping (underground and surface), drilling (underground and surface) and limited prospecting and geochemistry. Geochemical samples are collected from outcrops of veins, faults and hydrothermally altered volcanic rocks using hammer and chisel and a hand-held GPS for sample location. Samples are usually chip samples and care is always taken to honour lithology or alteration contacts.

Mapping of the structures and alteration in the mine area and underground exposures is regularly undertaken by FMS staff. Regional mapping is typically performed at 1:20,000 scale, and semi-detailed mapping is performed at 1:5,000 and 1:2,500 scales. Detailed surface mapping is usually completed at 1:1,000 scale. Underground mapping is completed at 1:500 scale. Surface mapping is used to define near-mine and brownfields exploration targets. Underground mapping is used to support development and guide near-mine exploration.

Previous structural and fluid inclusion and mineralogy studies carried out by Starling (1998) and Albinson and Rubio (2001), suggest that mineralization potential remains open to the west along the Zuloaga structure, and FMS plans to investigate this possibility.

10 DRILLING

There is a record of 1,174 drill holes, totaling 178,277 m, having been completed at San Martín from 1996 to 2016. Following mine acquisition in 2006 until December 3, 2016, FMS has drilled a total of 120,318 m in 731 diamond drill-holes.

A significant proportion of those drill holes are located in mined-out areas, and much of the remaining historical data presents issues, such as geological logging inconsistencies, collar topographic inconsistencies, questionable downhole surveys or lack of such surveys, and potentially unreliable sample preparation procedures or assay data. As a result, at the start of 2016, FMS made a decision to re-log and re-sample the drill holes that intersect the main structures in San Martín. A total of 151 of the 196 holes that support Mineral Resource estimation were re-logged using standardized lithological codes, and re-sampled and assayed, applying current industry standards practices for sample preparation and security, QA/QC, and analysis.

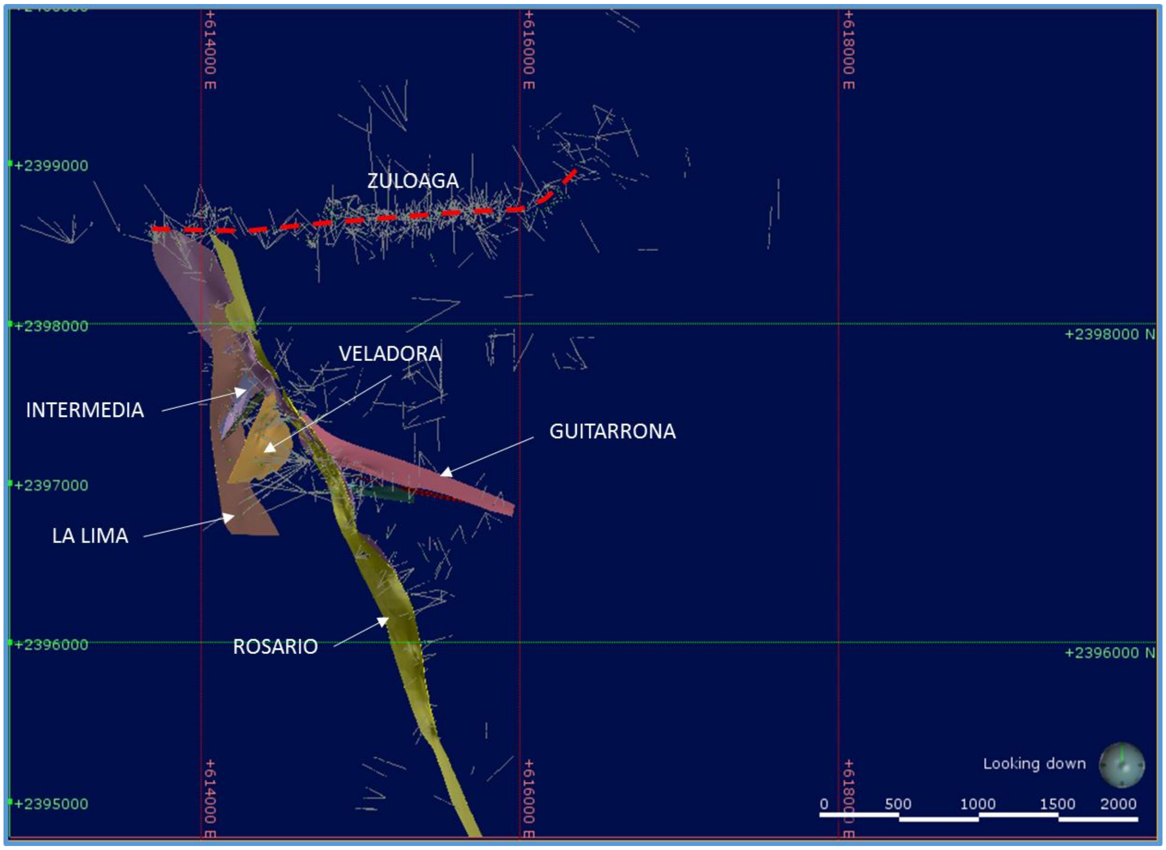
From January to October 2017, a total of 89 drill holes were completed for a total of 22,319 m; drill holes drilled in 2017 are not included in the 3D models nor in the Mineral Resource estimation.

Table 10-1 presents a summary of drilling data used for resource estimation, and Figure 10-1 is a map showing the drilling traces and main vein structures.

Table 10-1: Summary of Diamond Drilling Used for Resource Estimation

Year	Underground Holes		Surface Holes		Total	
	Count	Metres	Count	Metres	Count	Metres
1997			2	292	2	292
1998			2	719	2	719
2007	2	85	1	336	3	421
2008	6	1,272	11	3,651	17	4,923
2011	7	1,139	8	1,528	15	2,668
2012	9	1,395	38	8,670	47	10,065
2013	8	3,251	5	1,562	13	4,813
2014	10	3,989			10	3,989
2015	9	2,062			9	2,062
2016	68	14,964	10	2,976	78	17,940
Grand Total	*119*	*28,158*	*77*	*19,735*	*196*	*47,893*

Figure 10-1: Plan View Showing Drill-hole Traces and Main Veins



Note: Zuloaga vein shown just with an approximate projection since it has not been modelled in 3D.

10.1 Drilling Categories

FMS categorizes drill-holes into "delineation holes" (used to guide and support the mine operation), "infill holes" (to improve quality of known resources) and "exploration holes" (to identify new mineralization or extensions to known mineralization). FMS uses a contractor for most infill and exploration holes, whereas delineation holes utilize the Company's own rigs and personnel.

The core diameters used for drilling at San Martín are 36.4 millimetres (TT46), 47.6 millimetres (NQ) or 63.5 millimetres (HQ). The TT46 diameter is generally used only for delineation holes, whereas the bigger NQ and HQ diameters are used for infill and exploration holes. The small-diameter drill holes are not surveyed and are not used in Mineral Resource estimation.

No Reverse Circulation (RC) drilling has been carried out by FMS.

10.2 Drilling Contractors

Six different diamond drilling contractors have been used in the San Martín mine area since 2007. Table 10-2 summarizes the drilling contractors working between 2007 and 2017.

Table 10-2: Summary of Drilling Contractors Between 2007 and 2017

Year	Contractor	UG	Surface	Diameter
2007	Causa Perforaciones Mineras S.A. de C.V.; Perforación y Mineria Doble R., S.A. de C.V.; Tecmin Servicios S.A. de C.V.	Y	Y	NQ
2008				
2009	Tecmin Servicios S.A. de C.V.; Energold de México S.A. de C.V.	Y	N	NQ
2010		Y	Y	
2011		Y	Y	
2012		Y	Y	
2013	Tecmin Servicios S.A. de C.V.; Servicios Perforación México S.A. de C.V.	Y	Y	HQ, NQ
2014	Tecmin Servicios S.A. de C.V.	Y	N	HQ, NQ
2015	Versa Perforaciones S.A. de C.V.	Y	Y	HQ, NQ
2016		Y	Y	
2017		Y	Y	

10.3 Core Handling and Storage

The standard practice followed by FMS's drillers and contractors under FMS's supervision is as follows:

- Extract the core every 3.05 m (length of two drilling rods);
- Place the extracted core onto a sample collection device;
- Break the core to make the pieces fit into the core box (when necessary);
- Mark the core, using a coloured pencil, at the place where it was broken, and place the core into the core boxes; and
- Place a wooden block at the end of the run with the total depth and core length recovered noted.

The core box, once full, is closed with a top lid and stacked for transportation. Core boxes and lids used by FMS are made of plastic.

Core boxes from underground drilling are transported and delivered to the core shed by the drillers every morning. The core boxes are properly closed and box lids are secured with raffia fiber or rubber bands before transportation. The condition of the boxes and core is checked by one of the exploration geologists at the core shed upon receipt.

In the case of surface drilling, the exploration geologist collects the core boxes every morning from the drilling station, and transports them in a pickup truck to the core shed. The core boxes are properly closed and the box lids are secured with raffia fiber or rubber bands to prevent core from falling out of the box during transportation.

After the core has been logged, photographed, and sampled, the boxes are placed on racks within the secure environment of the core shack.

10.4 Data Collection

Data collected at San Martín includes, but is not limited to, collar surveys, downhole surveys, logging, Specific Gravity (SG), and geotechnical information. The data collection practices employed by FMS are consistent with industry-standard exploration and operational practices.

Core logging is done digitally in LogChief® using tablets or laptop computers; lithology, structures, alteration, mineralogy, sample intervals, recovery and Rock Quality Designation (RQD) information is captured digitally.

All core boxes are photographed after they have been logged, and sample intervals are marked.

10.5 Surveying

Since 2007, drill-hole collars have been surveyed by the engineering department at San Martín using Sokkia DT6 and SET6 total station instruments and, more recently, using Trimble S6, S7 and S3 total station instruments. Collected information includes X, Y, Z coordinates, azimuth, and dip angle. Collar data are downloaded from the total station instruments and then uploaded into a mine server. In 2016, FMS hired the services of J&A Arquitectura and Geomatica S.A. de C.V. to re-survey surface and underground collars used for resource estimation in the WGS84 datum.

Several different downhole survey instruments have been used in San Martín since 2007. At present, downhole surveys are done every 50 m by the contractor Versa Perforaciones using a Reflex tool. Historical surveys have used Flexit or Tropari survey methods.

10.6 Data Spacing

Typically, drill spacing for infill and delineating holes range from 50–90 m. Exploration holes in San Martín are usually drilled at around 100 m data spacing.

Channel samples are spaced 25 m along the strike of the veins.

10.7 Drill Hole Intersections

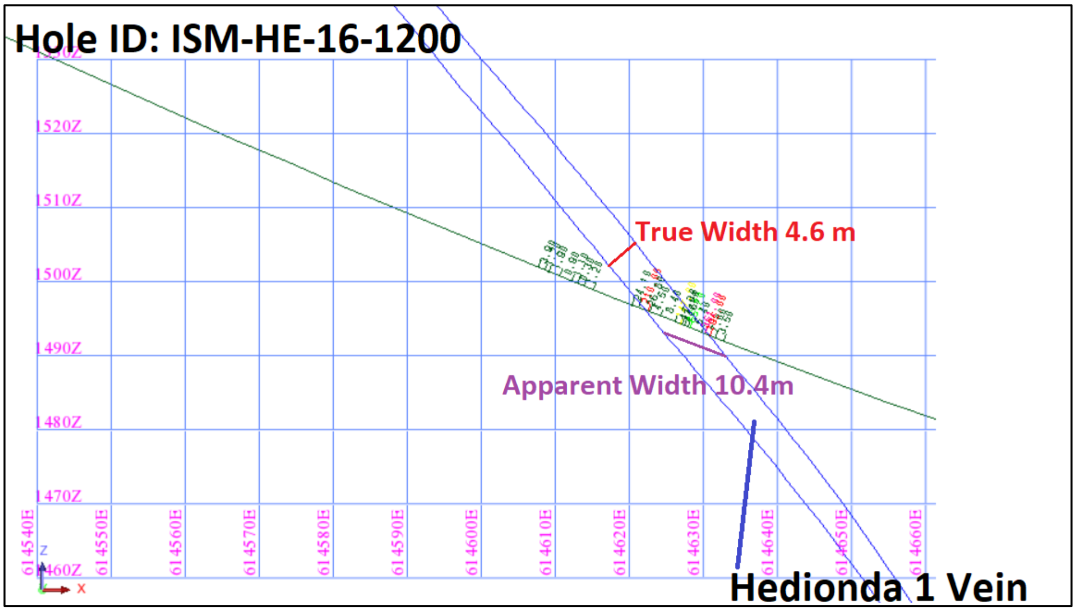
Table 10-3 shows a selection of intersections from each of the major vein structures at San Martín to illustrate the typical grades and widths of the deposits.

Table 10-3: Example Drill Intersections

Zone	Hole ID	Collar X	Collar Y	Collar Z	Total Depth	Azimuth	Dip	From (m)	To (m)	Drilled width (m)	Ag g/t	Au g/t
Intermedia	ISM-I-16-1155	614276.6	2397392.4	1562.0	132.0	327.0	-38.0	95.4	97.7	2.3	92	0.03
	I-1119	614220.6	2397387.2	1563.7	67.7	321.5	1.0	39.8	42.3	2.5	178	0.01
	LI-1117	614224.2	2397384.9	1562.2	201.0	226.5	-81.5	93.3	95.1	1.8	202	0.03
Pitayo	PI-872	615204.6	2396945.0	1592.4	158.6	0.0	-71.0	84.2	85.6	1.4	220	0.68
	PI-909	615003.6	2396903.2	1559.4	151.9	0.0	-41.0	91.5	95.1	3.6	169	0.57
	G-1141	614860.3	2397059.8	1435.6	99.0	341.0	0.0	77.6	79.3	1.7	33	2.41
Hedionda	HE-572	614715.2	2397573.8	1597.6	459.3	312.0	-65.5	149.1	151.5	2.4	107	0.19
	ISM-HE-16-1199	614486.9	2397765.7	1556.1	261.0	111.0	-2.0	93.4	95.1	1.7	124	0.24
	ISM-LV-16-1169	614656.5	2397440.0	1480.6	222.0	280.5	-2.0	167.2	168.1	0.9	264	3.91
Rosario	R-1144	614801.1	2397158.1	1503.6	66.0	261.5	-18.0	15.4	21.8	6.5	179	0.13
	ISM-LV-16-1175	614656.8	2397440.3	1480.6	300.0	244.0	-15.0	99.0	102.0	3.0	106	0.08
	ISM-R-16-1195	614220.8	2397830.6	1568.0	177.0	25.0	-36.5	102.0	104.1	2.1	98	0.07
La Veladora	ISM-LV-16-1151	614545.3	2397398.0	1564.5	192.0	275.0	-17.0	126.7	129.3	2.7	187	0.08
	ISM-LV-16-1167	614675.0	2397136.6	1503.0	336.0	301.5	-22.0	278.7	280.4	1.8	295	0.07
	VE-1149	614545.4	2397397.9	1564.6	198.0	248.0	-26.5	162.0	166.5	4.4	91	0.07
La Lima	LI-1045	614418.6	2397466.4	1563.7	367.2	241.0	-4.0	328.3	330.5	2.3	200	0.04
	LI-1081	614676.0	2397133.2	1504.1	566.0	238.0	6.0	521.3	534.7	13.4	237	0.02
	LI-1084	614676.4	2397132.6	1504.1	604.4	230.5	-10.0	589.2	601.8	12.6	121	0.02
Huichola Norte	SSM-HN-16-08	614907.5	2397715.6	1622.7	339.0	262.5	-50.5	265.4	272.4	7.0	122	0.51
	H-560	615294.1	2397726.6	1651.7	510.8	154.5	-76.0	136.0	136.7	0.7	130	0.97
	SSM-HN-16-15	615517.1	2397555.2	1648.3	377.5	311.5	-53.5	274.2	276.0	1.8	1141	1.11

Drill holes are sometimes completed at angles less than 90° with respect to the dip and strike of the structure being explored. This results in an apparent thickness of the drill intercept being greater than the true thickness of the intercept. Figure 10-2 provides an example of the drilled thickness versus true thickness.

Figure 10-2: Hedionda 1 Cross Section Showing the Apparent (Drilled) and True Thickness



Note: Figure prepared by FMS, 2017.

10.8 Core Recovery

Core recoveries for surface and underground drilling typically averages over 90%. Core recoveries in mineralized intercepts may be less, varying from 85% to 90%, due to brecciation and hydrothermal alteration associated with the fault veins.

10.9 Comments on Section 10

In the opinion of the QP, the quantity and quality of the geological, collar and downhole survey data collected in San Martín are of sufficient quality to support mineral resource estimation as follows:

- Drilling procedures and core logging meet industry standards;
- Recovery data from drill core data are acceptable;
- Collar surveys have been performed using industry-standard instrumentation;
- Downhole surveys were collected using industry-standard instrumentation;
- Depending on the dip of the drill hole, and the dip of the mineralization, drill intercept widths are typically greater than true widths;
- Drill hole intercepts as summarized in Table 10-3 appropriately reflect the nature of the mineralization, and include areas of higher-grade intervals in low-grade drill intercepts; and
- No factors were identified with the data collection from the drill programs that could materially affect resource estimation accuracy or reliability.

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

Approximately 731 holes have been drilled in the San Martín mine area by FMS. However, a significant proportion of those drill holes are located in mined-out areas. The historical data have some issues, such as geological logging inconsistencies, collar topographic inconsistencies, questionable down-hole surveys or lack of such surveys, and potentially unreliable sample preparation procedures or assay data. As a result, at the start of 2016, FMS made a decision to re-log and re-sample the drill holes that intersect the main structures in San Martín. A total of 151 of the 196 holes that support Mineral Resource estimation were re-logged using standardized lithological codes, and re-sampled and assayed, applying current industry standards practices for sample preparation and security, QA/QC and analysis.

11.1 Sampling Methods

Drill Core Sampling

During core logging, geologists mark the drill core intervals to be sampled while respecting lithological contacts, mineralization, alteration, and structural features. Sample lengths from mineralized areas are from 0.30 m to 2 m in length, depending on the drill diameter. Samples are also taken in the waste rock on either side of mineralized zones, with lengths between 1–2 m.

All drill core selected for sampling is cut in half. One half of sampled intervals is retained in the core box for future reference, and the other half is placed in sample bags for shipment to the laboratory. Samples are cut using a diamond saw under supervision of the logging geologist. Sample tickets displaying the sample number are stapled into the core box beside the sampled interval, and a copy is inserted into the sample bag. Samples are placed into plastic sample bags that are marked with the sample numbers along with a sample tag. Sample bags are tied with string and placed in rice bags for shipping to the primary laboratory.

For the 2016 re-log and re-sample campaign, ¼ core samples were used where intervals had been previously sampled, leaving a ¼ core for reference. The re-sampling campaign used the same protocols in term of sampling methodology and sample intervals, as described above.

Channel Sampling

In 2016, FMS commenced power-saw channel sampling to support Mineral Resource estimation around underground mining areas. The process is described below:

- Rock surfaces are washed with water prior to sampling;
- Sample lines are marked at 25 m spaces along the drift where ground conditions permit. The length of the lines respect vein/wall rock contacts and/or textural/mineralogical variations;

- A 6-cm-wideby-3-cm-deep channel is created. Channel sample intervals are marked along the channel line with paint. Sample lengths applied vary according to the lithology and alteration features. The channel samples are first cut with a handheld diamond saw, then the sample is chipped to fragments of less than 6 cm with a handheld percussion hammer. The fragments are collected using a canvas tarp, which is thoroughly cleaned between samples, and deposited in numbered bags to be sent to the designated laboratory; and
- Coordinates from each channel sample are surveyed from a referenced survey peg using a total station instrument.

Production Sampling

Production samples (chip and muck samples) were used in addition to drill hole data to update the Mineral Resources in those areas that are estimated using a two-dimensional (2D) polygonal method.

Chip samples have been the primary means of grade control sampling in the San Martín mine since 2001. The chip sampling process includes collecting chip samples from every 3 m advance on a heading, and every 3 m along the backs of every third stope lift. Chip samples are generally at least 2 m long and often include barren shoulder samples. Lithology boundaries are respected. The sampling procedure includes:

- Delineating sample intervals with paint before sampling;
- Chipping the interval with a hammer; and
- Collecting the dislodged sample material from a tarp laid on the floor.

Muck samples are collected from the muck pile from a number of locations. Production samples are sent to the San Martín on-site laboratory for analysis.

Bulk Density Sampling

Bulk density measurements were made on site by FMS geologists on core samples using the water immersion method.

Bulk density sampling determinations were made on full HQ or NQ core samples, measuring 11 cm on average from recent drill programs, as well as on quarter core samples from historic core. Samples were collected from the mineralized zones and from wall rocks on either side of mineralized zones. The water displacement procedure consists of the following steps:

- Taking a damp weight of sample;
- Drying the sample for 6 hours at 100°C;
- Taking a dry weight of sample;
- Wrapping sample with Kleenpack plastic;
- Taking a dry weight of sample with Kleenpack;

- Displacing water with the sample and weighing the displaced water; and
- Calculating the bulk density, taking into account Kleenpack weight and density.

In total, 787 bulk density determinations are in the project database for the La Veladora, Rosario, La Lima, Huichola, Huichola Norte, La Guitarrona, La Hedionda, El Pitayo, Zuloaga, Santa Cecilia, La Esperanza and Enlace 2140 zones.

In the opinion of the QP, the number and quality of density data determinations are sufficient to support Mineral Resource estimation.

11.2 Analytical Laboratories

Due to the re-logging and re-sampling campaign, all historical drill hole assays for those drill holes were replaced by the 2016 assay results. The 2016 re-sample campaign used mostly SGS Mexico SA de CV in Durango (SGS), and also FMS's Central Laboratory as primary laboratories, and Bureau Veritas Mineral Laboratories (BVML) as the secondary laboratory.

For the production data, San Martín Laboratory has always been the primary laboratory. There is no record of a consistent QA/QC and check assays program in use at the laboratory.

Table 11-1: Analytical Laboratories Used for the Drill-holes Used in Mineral Resource Estimation

Data Type	Primary LAB	Secondary LAB	Sampling /Re-sampling Year	Drilling Year
Drill holes	SGS (independent and certified)	Bureau Veritas Mineral Laboratories (BVML; independent and certified)	2016	1997-2016
	Central Laboratory (not independent and not certified)			
Chip samples	San Martín Laboratory (not independent and not certified)	NA	2012-2016	2012-2016
Channel samples	SGS (independent and certified)	Bureau Veritas Mineral Laboratories (BVML; independent and certified)	2016	2016
	Central Laboratory (not independent and not certified)			

SGS held ISO 9001 certification from at least early 2008 until approximately mid-2012, by which time the laboratory was ISO 9001:2008 accredited.

The La Parrilla Central Laboratory is not independent of FMS. This laboratory gained ISO 9001 accreditation in mid-2015 and ISO 9001:2008 in 2017. The laboratory currently only handles samples from FMS's operations.

Since January 1st, 2015, the Inspectorate and ACME laboratories operate under Bureau Veritas Mineral Laboratories (BVML). Both laboratories are independent and hold a global certification for quality, ISO9001:2008, and ISO/IEC 17025:2005. At BVML, samples are prepared in the preparation laboratory in Durango, Mexico, and analysed in the analytical laboratory in Vancouver, Canada.

The FMS San Martín laboratory is not independent of FMS and is not ISO accredited.

11.3 Sample Preparation and Analysis

FMS San Martín Laboratory

Sample preparation at the San Martín mine laboratory from 2006 to 2014 included drying at 150 °C, followed by crushing in a jaw crusher to 1.3 cm (1/2”) size. A 500-g split was then crushed to a 10-mesh (1/8”) size, pulverized to minus 100 mesh and homogenized. Silver and gold analyses were performed on 10 g samples using fire assay methods.

Sample preparation was adjusted in 2015, and the process now includes drying sample at 105 °C. A 200 g split is then crushed in a jaw crusher to a 10-mesh (1/8”) size and then pulverized to minus 200 mesh and homogenized.

Analysis since 2015 includes:

- 10 g fire assay for silver with gravimetric finish. The silver fire assay detection limit was reported as 3 g/t Ag, a function of the smallest sized doré bead that can be picked up with tweezers; and
- 1 g sample for a three-acid digestion, atomic absorption analysis for iron, zinc, lead, copper cadmium and manganese.

FMS Central Assay Laboratory

Samples at the Central Laboratory are prepared using the following procedure:

- Drying at 100° C for eight hours;
- Crushing to 80% passing 1/8 inch using a jaw crusher;
- Splitting a 200g subsample using a riffle splitter; and
- Pulverizing to 80% passing 106 µm using a pulveriser.

All samples received by the Central Laboratory are logged in and sorted by a Laboratory Information Management System (LIMS). Assay results are reported using LIMS together with results from inserted laboratory quality control samples. The analytical methods are listed in Table 11-1.

All samples were analysed for silver by AAG-13, gold by AUAA-13, and lead, zinc and arsenic by ICPAW-20. Over-limit ICPAW-20 results for these elements were analysed by AWAA-100.

Table 11-2: Central Laboratory Analytical Methods and Detection Limits

Code	Element	Limits	Description
AUAA-13	Au	0.01-10 g/t	Au by AA with Ag inquarting with Au as main element
ASAG-12	Ag	0.002 g/t	30 g fire assay gravimetric finish
ASAG-13	Au	0.01 g/t	20 g fire assay AAS finish
ASAG-13	Ag	0.3 g/t	20 g fire assay with gravimetric finish
AAG-13	Ag	0.5-300 g/t	2 g 3-acid digestion AAS finish
ICPAW-20	20 elements including Pb, Zn, Cu, Fe, As, Mn	0.001-10 %	0.25 g 2-acid/aqua regia digestion/ICP-AES
AWAA-100*	Pb, Zn, Cu, Fe, As, Cd, Mn, Bi, Ni, Sb	0.002 %	2-acid digestion finish by atomic absorption

* ICPAW-20 over limit analysis

SGS de Mexico, S.A. de C.V. (SGS)

Samples at SGS were prepared using the PRP89 preparation method. This method is described as follows:

- Drying at 100° C for six to eight hours, or until the sample weight is constant;
- All sample crushed to 75% passing 2 mm using a Rocklabs Boyd Crusher or Terminator jaw crushers;
- Splitting a 250 g sub-sample using a riffle splitter; and
- Pulverizing to 85% passing 75 µm using a Labtech ESSA LM2 pulveriser. About 100 g is used for analysis and laboratory internal quality control.

The analytical methods for samples submitted to the SGS laboratory are listed in Table 11-3. All samples were analysed by AAS21E and ICP14B for silver. Over-limit AAS21E silver results were also analysed by FAG313. Gold was analysed by fire assay. Over-limit results for manganese, lead and zinc primary analysed by ICP14B were subsequently analysed by ICP90Q.

Table 11-3: SGS Analytical Methods and Detection Limits

Code	Element	Limits	Description
FAA313	Au	0.01 g/t	30 g, Fire Assay, AAS finish
AAS21E	Ag	0.5-300 g/t	2 g, 3-Acid digest, AAS finish. Samples with over detection limits results are analysed by FAG313.
FAG313*	Ag	5 -3000 g/t	30 g, Fire Assay Gravimetric finish. Used only for AAS21E, Ag upper detection limits.
ICP14B	Ag	2-100 ppm	0.25 g, 2-acid/aqua regia digestion/ICP-AES package
ICP14B	Multi-elements including Ag, As, Cu, Fe, Mn, Pb, Zn	0.5-10,000 ppm	0.25 g, 2-Acid/aqua regia digestion/ICP-AES package
ICP90Q	Pb	0.01-30 %	0.20 g, Sodium Peroxide Fusion/ICP-AES Package. Used only for ICP14B, Pb over range.
	Zn	0.01-30%	0.20 g, Sodium Peroxide Fusion/ICP-AES Package. Used only for ICP14B, Zn over range.

Bureau Veritas Mineral Laboratories (BVML)

At the BVML preparation laboratory, samples are crushed in a jaw crusher to 70% passing 10 mesh (2 mm) (PRP70-250), and a 250-g riffle split sample of the crushed material is pulverized in a mild-steel pulveriser to 85% passing -200 mesh (75 µm; PUL85). After the samples are prepared, BVML sends the pulps to be analysed at the BVML laboratory in Vancouver, BC, Canada.

The analytical methods for samples submitted to BVML are listed in Table 11-4. All samples are analysed by four-acid Atomic Absorption Spectroscopy (AAS) finish and aqua regia Inductively Coupled Plasma (ICP) finish for silver. Over-limit silver results are analysed by fire assay gravimetric finish.

Table 11-4: BVML Analytical Methods and Detection Limits

Code	Element	Limits	Description
FA430	Au	0.005 ppm	Lead collection fire-assay fusion-AAS finish
FA530	Ag	20 ppm	Ag by 30 g fire Assay grav. finish over limit method
MA402	Ag	1 ppm	Ag by 4 acid, AAS finish
GC816	Zn	1 ppm	Zinc assay by classical titration in duplicate, over limit method
GC817	Pb	2 ppm	Lead assay by classical titration in duplicate, over limit method
AQ300	Pb, Zn,	1-10 000 ppm	Aqua regia digestion ICP-ES analysis
AQ300	Ag	0.3-100 ppm	Aqua regia digestion ICP-ES analysis
AQ300	Fe	0.01-40 %	Aqua regia digestion ICP-ES finish
AQ374	Pb, Zn	0.01%	1:1:1 aqua regia digestion ICP-ES Finish, over limit method

11.4 Quality Assurance and Quality Control (QA/QC)

This section reviews the QA/QC program and results in terms of assessments of precision, accuracy, contamination, and check assays for the 2016 drilling and resampling programs. Only silver and gold results were assessed.

11.4.1 Insertion Rates

From 2016 onwards, FMS has had a robust QA/QC program in place with a 20% insertion frequency. Table 11.5 shows the QA/QC insertion frequency for the drill holes and channel samples used in resource estimation.

Table 11-5: QA/QC Insertion Rates

	Central Laboratory		SGS	
	Total	Rate	Total	Rate
No. of Batches	168		361	
Originals	3,647		10,871	
Field Duplicates	60	2%	213	2%
Coarse Duplicates	68	2%	224	2%
Pulp Duplicates	73	2%	229	2%
Low Grade Standards	47	1%	98	1%
Medium Grade Standards	63	2%	226	2%
Cut-Off Grade Standard	61	2%	176	2%
High Grade Standard	52	1%	165	2%
Pulp Blank	128	4%	336	3%
Coarse Blank	228	6%	335	3%
Total Rate		***22%***		***19%***

In terms of the QA/QC insertion position, duplicates and check samples are inserted randomly. Standards were inserted according to a visual estimate of the mineralization grade, and blanks were inserted between samples containing visible mineralization.

11.4.2 Assessment of Laboratory Precision

Field, coarse and pulp duplicates from core samples have been used to assess laboratory precision at the Central Laboratory, SGS and BVML.

Duplicate samples were selected by geologists. Field duplicates were taken by splitting half core into quarter core, where one quarter of core represents the original sample and the other quarter the duplicate sample. Coarse and pulp samples were taken by the laboratory from reject samples, during the laboratory preparation process. Primary and duplicate samples were submitted to the laboratory in the same batch for analysis.

Scatter plots and Absolute Relative Difference Cumulative Frequency (ARDCF) charts with silver and gold results were prepared to evaluate correlation and laboratory precision.

Target thresholds for acceptable precision are:

- 90% of pulp duplicate pairs having absolute relative differences less than 10;
- 90% of coarse reject duplicate pairs having absolute relative differences less than 20; and
- 90% of field duplicate pairs having absolute relative differences less than 30.

Scatter plots with 10°, 20° and 30° failure-limit lines for each type of duplicate were used to assess grade correlation.

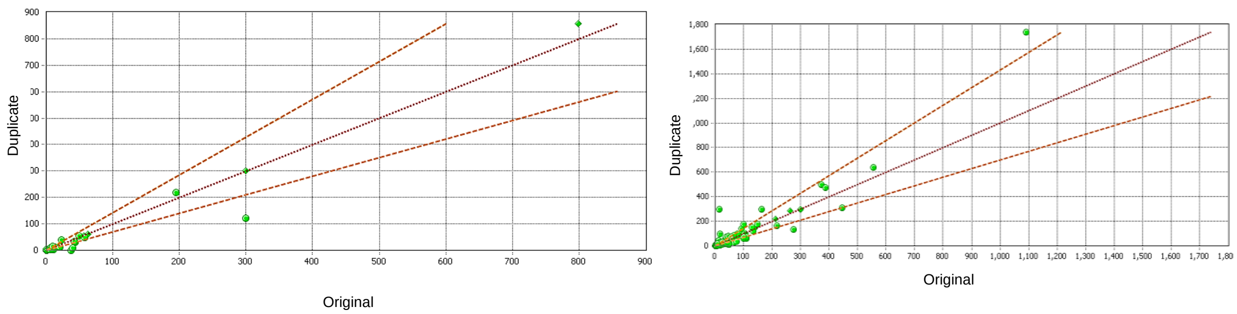
The ARDCF and scatter plot charts indicate poor precision and poor-to-moderate correlation for field duplicates with silver and gold results from the Central Laboratory and from SGS. The poor correlation and low precision in both laboratories is most likely attributable to natural deposit heterogeneity.

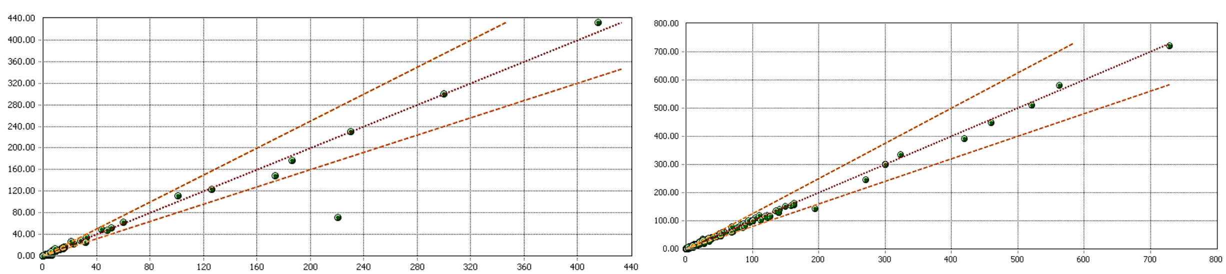
Acceptable precision and good correlation were obtained for coarse duplicates from silver and gold results from SGS and from the Central Laboratory, while pulp duplicate results from both laboratories achieved lower precision but good correlation.

During the precision assessment, pair results with significant absolute differences were identified and investigated for transcription errors, or errors in the analysis. The errors identified were corrected in the database. Figure 11-1 shows scatter plots with silver results from duplicate pairs and failure limits.

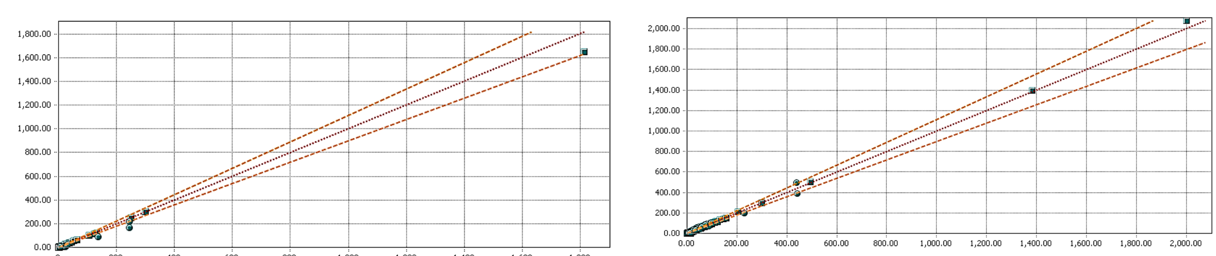
Figure 11-1: Duplicate Samples with Silver Results (2016–2017)

SGS





Original Vs Pulp Duplicate for Ag ppm



Note: Figure prepared by FMS, 2017.

11.4.3 Assessment of Laboratory Accuracy

Both in-house FMS Standard Reference Materials (SRMs) and commercially-prepared Certified Reference Materials (CRMs) have been used to assess laboratory accuracy for silver and gold.

Accuracy was assessed in terms of bias of the mean returned values relative to the expected value and percentage of failures. Standard sample results were plotted in date-sequenced performance charts to investigate for outliers/failures, defined as results that were above or below three times the expected standard deviation. During the accuracy assessment, apparent errors, such as sample swaps, were identified and corrected.

Standard results from the Central Laboratory and SGS are summarized in Tables 11-6 and 11-7, respectively. For a majority of the standard results, biases are considered to be acceptable. However, a consistent low bias for gold is observed for the Central Laboratory.

Failures results for silver from both laboratories are considered to be acceptable (average of approximately 5%); however, a high percentage of gold failures (around 30% average) from the Central Laboratory reflects an analytical accuracy issue for gold with the Central Laboratory. Figure 11-2 shows the standards results for CDN-ME-1408 for gold and silver respectively as examples of the failure rates.

FMS has taken measures to address the assay accuracy issues that were identified at the Central Laboratory.

No batch re-assays were performed, and the original batch assay results were accepted into the database. Any impact on the resource estimate as a result of the gold assays from the Central Laboratory would be localized, and is likely to result in a conservative estimate of the gold grades in those areas.

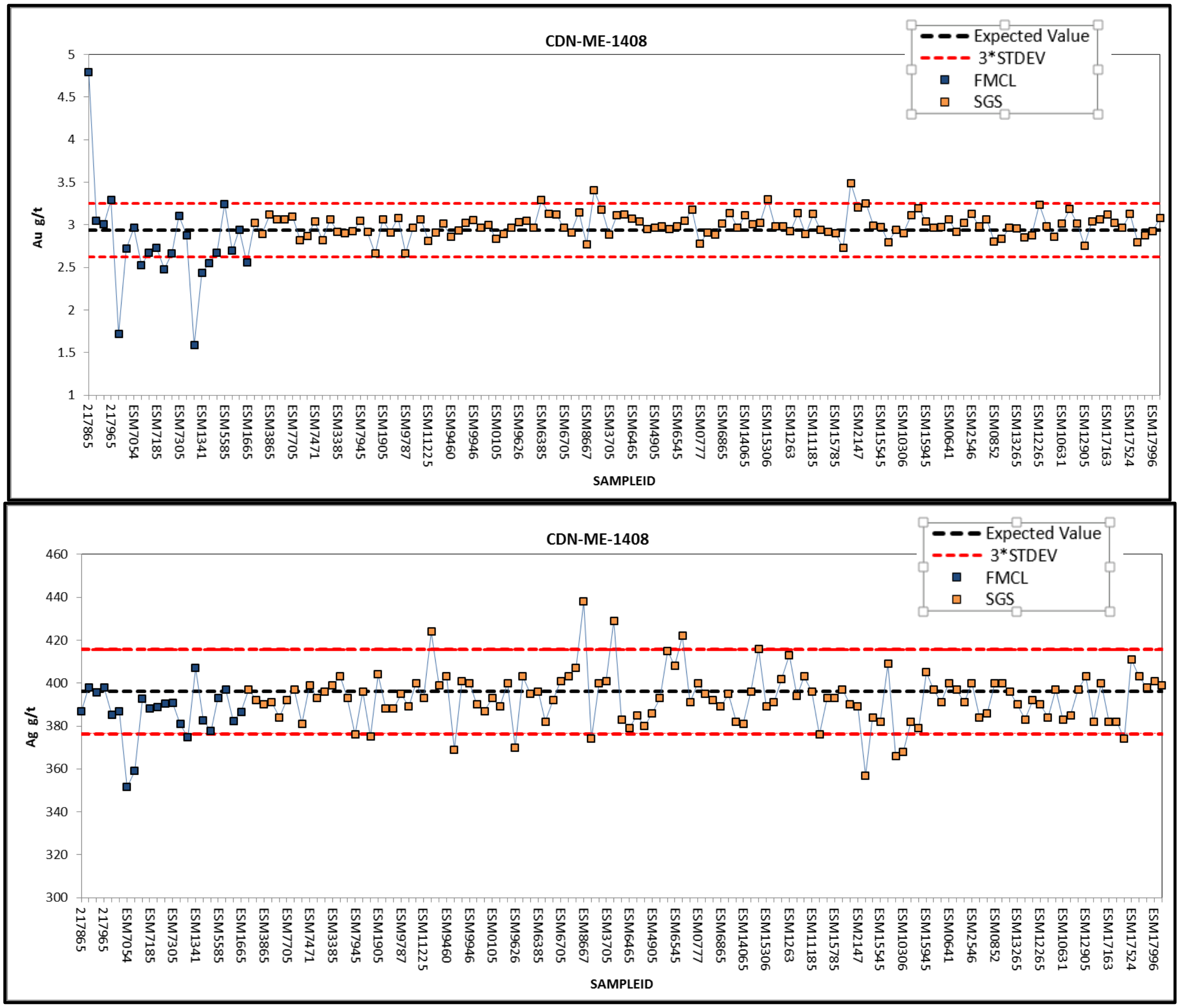
Table 11-6: Central Laboratory Standard Results Summary Table

Standard	Method	Element	No. Vals.	Outliers	Exp. Val.	Exp. Stdv.	Low Limit	Upper Limit	Calc. Mean	Bias of Mean
CDN-ME-1303	AAS	Ag	23	3	152	5	137	167	146	-4%
	AAS	Au	23	10	0.92	0.05	0.77	1.07	0.97	5%
CDN-ME-1407	AAS	Ag	27	3	239	6	227	263	239	-2%
	AAS	Au	27	14	2.12	0.07	1.89	2.34	2.0	-6%
CDN-ME-1408	FA-GRAV	Ag	22	3	396	6.5	376	415	386	-2%
	AAS	Au	22	9	2.94	0.10	2.62	3.25	2.75	-5%
SRM_Alta_LEOX_14	FA-GRAV	Ag	18	2	649	30	559	739	610	-6%
SRM_Media_LEOX_14	AAS	Ag	21	0	160	9	133	187	162	2%
SRM_CUTOFF_LEOX_14	AAS	Ag	57	1	118	7	97	139	111	6%
SRM_BAJA_LEOX_14	AAS	Ag	21	1	69	5	54	84	64	-7%

Table 11-7: SGS Standard Results Summary Table

Standard	Method	Element	No. Vals.	Outliers	Exp. Val.	Exp. Stdv	Low Limit	Upper Limit	Calc. Mean	Bias of Mean
CDN-ME-1303	AAS	Ag	77	1	152	5	137	167	148	-3%
	AAS	Au	77	7	0.92	0.05	0.77	1.07	0.97	5%
CDN-ME-1407	AAS	Ag	125	11	245	6	227	263	248.6	1%
	AAS	Au	125	4	2.12	0.07	1.89	2.345	2.1	1%
CDN-ME-1408	FA-GRAV	Ag	121	15	396	6.5	376	415	392	-1%
	AAS	Au	121	4	2.94	0.10	2.62	3.25	3	3%
SRM_Media_LEOX_14	AAS	Ag	61	1	160	9	133	187	158	-1%
SRM_CUTOFF_LEOX_14	AAS	Ag	176	2	118	7	97	139	123	5%

Figure 11-2: CDN-ME-1408 Gold and Silver Standards Charts



Note: Figure prepared by FMS, 2017.

11.4.4 Assessment of Laboratory Contamination

Pulp and coarse blank reference materials (blanks) were used to assess contamination during sample preparation and analysis for silver and gold at the Central Laboratory and SGS.

Coarse materials were obtained from industrial silica gravel prepared by Quimico Global in Durango, Mexico, and pulp materials were obtained from industrial silica sand used in the processing plant at FMS's La Encantada mine. Table 11-8 shows the blank reference materials inserted by the geologists at the San Martín mine.

Table 11-8: Blank Reference Materials

Standard ID	Origin	Size	Blank Type
SRM_Fino_LEQZ_14	Industrial Silica	Unknown	Pulp
Blk Grueso-QZ	Industrial Silica Gravel	9.5-25 mm	Coarse

The assessment of blanks was made using date-sequence performance charts from pulp and coarse blanks. The failure threshold limits for each element are twice the lower detection limit reported by the laboratory. The number of outliers and the error rate for each type of blank is shown in Table 11-9.

Table 11-9: Blank Outliers and Error Rates

Type	Blank	Element	Central Laboratory			SGS		
			Samples	Failures	Failure Rate	Samples	Failures	Failure Rate
Coarse	Blk Grueso-Qz	Ag	80	8	10%	272	17	6%
	Blk Grueso-Qz	Au	80	12	15%	272	26	10%
Pulp	SRM_Fino_LEQZ_14	Ag	83	8	10%	273	6	2%
	SRM_Fino_LEQZ_14	Au	83	13	16%	273	19	6%

Several apparent failures were determined to be sample switches and were corrected in the database, however, a significant number of failures still occur at both Central Laboratory and SGS.

These failures have not yet been fully investigated, but it appears that there is some contamination occurring in both laboratories. Results show that the contamination of samples from the Central Laboratory is higher than at SGS.

No batch re-assays were performed, and the original batch assay results were accepted into the database.

The QP recommends that an evaluation be undertaken to determine the underlying causes of carryover contamination during sample preparation and analysis at both laboratories and that the laboratories undertake remediation of any issues identified. In addition, consideration should be given to sourcing different blank materials.

11.4.5 Check Samples

Check samples are used to assess for potential accuracy biases between primary and secondary laboratories. During the 2016 sampling campaigns, coarse reject and pulps from the Central Laboratory and SGS were submitted to BVML for check assay. Quality control samples such as pulp duplicates, coarse and pulp blanks and standards were inserted into the check samples submitted to BVML.

Reduced Major Axis (RMA) analysis was used to calculate the bias coefficient. Typical thresholds are considered to be “good” if the absolute bias is less than 5%, “questionable” if bias is between 5% and 10%, and “unacceptable” if bias is more than 10%. Bias is calculated in terms of the RMA regression line slope. The RMA line also indicates the quality of the data based on the dispersion about the RMA line and correlation coefficient. Paired silver results with a relative difference above 50 g/t and paired gold results with a relative difference above 1 g/t were identified as outliers and were excluded when reporting final biases.

The RMA chart for paired Central Laboratory and BVML silver and gold pulp checks samples (after removing outliers) indicated an acceptable 2% positive bias for Central Laboratory silver results and a 13% (unacceptable) positive bias for gold results relative to BMVL results. The chart for silver and gold paired data from coarse checks showed 13% (unacceptable) and 5% (good) positive biases, respectively, relative to BVML silver and gold results.

The RMA chart for all paired SGS and BVML coarse check silver results (after removing outliers) indicated a 1% negative bias (acceptable) for SGS results relative to BVML results. The RMA chart for all paired SGS and BVML gold results (after removing outliers) indicated a 4% positive bias (acceptable). The RMA chart for all paired SGS and BVML pulp check silver results (after removing outliers) indicated a 1% positive bias (acceptable) for SGS results relative to BVML results. The RMA chart for all paired SGS and BVML gold results (after removing outliers) indicated a 5% positive bias (acceptable).

A summary of the RMA results is presented in Table 11-10. The QP notes that a portion of the bias shown may be due to the primary and secondary laboratories using different analytical methods for the selected elements.

Table 11-10: Summary Data for RMA Results

	Ag				Au			
	Pulp Checks		Coarse Checks		Pulp Checks		Coarse Checks	
	FMCL	SGS	FMCL	SGS	FMCL	SGS	FMCL	SGS
Pairs	293	284	293	178	293	284	145	200
Outliers	1	0	13	35	13	3	4	4
STDEV X	427.19	233.88	0.65	146.62	0.65	1.92	0.64	0.94
STDEV Y	437.29	231.67	0.57	147.72	0.57	1.82	0.61	0.98
Mean X	190.67	83.15	0.30	105.17	0.30	0.38	0.28	0.18
Mean y	202.27	83.90	0.27	108.58	0.27	0.36	0.26	0.19
Slope (m)	1.02	0.99	0.87	1.01	0.87	0.95	0.95	1.04
b	7.09	1.53	0.01	2.62	0.01	0.01	-0.01	0.00
Bias	***-2%***	***1%***	***13%***	***-1%***	***13%***	***5%***	***5%***	***-4%***
Error m	0.01	0.00	0.014	0.01	0.014	0.01	0.020	0.005
Error b	3.89	0.62	0.010	1.58	0.010	0.011	0.014	0.005
Sx^2= Dispersion	8.23	0.43	0.047	1.61	0.047	0.018	0.040	0.004
Sy^2 Dispersion	8.42	0.42	0.041	1.62	0.041	0.017	0.038	0.004
Sd (Dispersion RMA)	0.57	0.04	0.081	0.19	0.081	0.018	0.070	0.006

11.5 Databases

The San Martín resource database is stored in a terminal server situated in Monterrey, Mexico. The drill-hole database is in Microsoft Structured Query Language (SQL). The SQL database is based on the Maxwell GeoServices database scheme and contains drilling and channel data.

Historical core and chip data prior to 2016 is kept in paper format, and in AutoCAD and Excel files. From 2016 to present, core logging data from drilling campaigns has been captured directly using LogChief™, and imported and validated in DataShed™. Early core logging data, previously captured in Excel, was also imported and validated in DataShed™. LogChief™ and DataShed™ are core logging and database management software provided by Maxwell GeoServices. Current chip assay data for ore control is kept in AutoCAD and Excel files. FMS will continue transferring these data into the SQL database.

Electronic and paper core logs contain core intervals for main lithology, veins, structures, minerals and alteration, Rock Quality Designation (RQD), core recovery and density data. Paper copies of core logs, driller's reports, sample tags, density, and assay certificates are filed at the San Martín mine. Assay results from the San Martín laboratory, Central Laboratory, SGS and BVML laboratories are received in electronic formats via email, and copies of the certificates are also obtained from their secured websites.

11.6 Security

11.6.1 Sample Security

Drill core samples are stored in a secure core processing and storage warehouse at the San Martín mine prior to their shipment to the sample processing laboratories. All of the samples are securely sealed, and chain of custody documents are issued for all shipments. Samples are taken to the laboratories by company trucks that are driven by FMS personnel.

The analytical results from these samples are received by authorized FMS personnel using secure digital transfer transmissions, and these results are restricted to qualified FMS personnel prior to their publication.

11.6.2 Storage

Upon completion of the drilling programs, the diamond drill core is securely stored and catalogued in the core storage facility at the San Martín mine site.

After analysis, pulp and coarse reject samples are kept for seven days in a secured area at the Central Laboratory. The San Martín mine laboratory keeps pulp and coarse rejects for eight days. SGS and BVML keeps the samples for 90 days.

FMS personnel take pulps and rejects to a secure storage facility at Villa Union, Durango, Mexico. All grade control samples are kept for 60 days in a core storage area at the San Martín mine and then recycled in the cyanidation circuit at the San Martín mine.

11.7 Comments on Section 11

In the opinion of the QP, the quality of the analytical drill hole and channel sampling used presented some accuracy issues but is sufficiently reliable to support mineral resource estimation. Sample collection, preparation, analysis, and security were generally performed in accordance with exploration best practices and industry standards as follows:

- At the start of 2016, FMS made a decision to re-log and re-sample the drill holes that intersect the main structures in San Martín. A total of 151 of the 196 holes that support Mineral Resource estimation were re-logged using standardized lithological codes and re-sampled and assayed, applying current industry standards practices for sample preparation and security, QA/QC and analysis;
- Sample collection and preparation protocols that support mineral resource estimation have been in line with industry-standard methods;
- Drill core samples were analysed by an independent certified laboratory (SGS) and the non-independent Central Laboratory using industry-standard methods for gold and silver analyses;
- Drill hole and channels sampling programs have included the insertion of an adequate number of QA/QC materials;
- The majority of the drill core assay results used in the Mineral Resource estimates were analysed in SGS (approximately 70%) and the quality control assessment does not show any material issues in terms of accuracy, precision and contamination;
- Approximately 30% of the drill core assay results used were analysed in the Central Laboratory. The QA/QC program results indicated a potential contamination issue at the Central Laboratory in some samples. The QP recommends that an evaluation is undertaken to determine the underlying causes of carryover contamination during sample preparation and analysis and that the laboratory undertakes remediation of any issues identified;
- Silver assay results from the Central Laboratory achieved acceptable accuracy. However, gold results show problems with respect to analytical accuracy with a significant amount of failures and low bias. FMS has taken steps to correct this issue. The Central Laboratory should be monitored on an ongoing basis to ensure that results are of good quality;
- No batch re-assays were performed, and the original batch assay results were accepted into the database. Any impact on the resource estimate as a result of the gold assays from the Central Laboratory would be localized and is likely to result in a conservative estimate of the gold grades in those areas;

- Current sample storage procedures and storage areas are consistent with current industry standards;
- Data are currently captured electronically, entered in databases, and validated through a series of built-in and manual validation routines;
- The between-laboratories bias for SGS and BVML is acceptable for check silver and gold results; and
- The bias between the primary Central Laboratory and check laboratory BVML should be reviewed and further investigated. In the QP's opinion, a portion of the bias may be due to differences in analytical methods between the laboratories. It is recommended that FMS selects compatible analytical methods for check analysis.

It is the QP's opinion that it is acceptable to use production samples, together with drill hole data, for the resource estimates for the Other Veins (see Section 14.2).

12 DATA VERIFICATION

12.1 Internal Data Verification

Verification of drill-hole and channel data used in the Resource Estimation consisted of:

- Verification for transcription errors;
- Verification of collar and channel locations;
- Downhole survey deviations;
- Verification of downhole lithology and sample intervals; and
- Conducting site visits to check core, sample security and location.

A total of 196 drill-hole collars and 114 channel sample locations were checked for data entry errors by comparing collar locations reported in the survey certificates issued by the Engineering and Planning department. Some transcription errors were found and fixed in this check. FMS staff carried out a comparison of the collar elevations recorded in the database and projected elevation of the drill collars on a topographic surface. This comparison showed that some collar elevations did not reasonably reflect the topographic surface model, especially in areas of steep topography. A new topographical model was commissioned that would use more data at a higher level of accuracy, but was unavailable at the time of reporting. FMS regards the surface collar positions to be acceptable for use, with the constraint that any estimates using data from surface drilling would not have sufficient certainty in location to be categorized as Measured Mineral Resources.

Collar positions for underground drill-holes were compared to underground development in three-dimensions (3D). Where database collar positions were found to fall outside of a physically possible location, the collar co-ordinates were found to have transcription errors that were subsequently fixed.

All downhole survey records were checked for anomalous measurements that could cause unusual kinks or bends in the drill-holes. Azimuths from the unusual kinks were checked for transcription errors. All transcriptions errors were corrected in the database. Anomalous measurements were flagged and excluded.

FMS carried out a 5% transcription errors check on all drill-hole logging and sample intervals by comparing the intervals recorded in the database with the original logs, core photos and sample tags. The selected intervals were also verified against the existing core. No errors were found in this verification.

FMS carried out a random 5% verification of all assay results records in the resource database for the elements gold, silver, lead, and zinc, and 10% of silver and gold results above the cut-off grade. Sample numbers and results were verified against electronic copies and final laboratory certificates in PDF from Central Laboratory, SGS and BVML. No errors were found in this comparison.

Density results were verified by inserting control samples such as duplicates, checks, and standards during density determinations. Scatter plots were created to detect sampling and measuring errors during this procedure. All sample intervals and density values were verified for transcription errors. Errors detected during the quality control procedures and verification were directly corrected in the database.

12.2 Comments on Section 12

Collar coordinates, downhole surveys, lithology, sample and intervals, densities and assay results from drill-holes and channel data used to support the resource estimation were verified. A surface topographical model is recommended to obtain for future collar verifications.

In the opinion of the QP, and based on the results on the database verification performed by FMS, collar coordinates, downhole surveys, lithology, densities and assay data from the drilling and sampling campaigns, as well as previous drilling campaigns that were re-logged and re-sampled, are considered sufficiently free of error and adequate to support Mineral Resource estimation. The collected data adequately reflects deposit dimensions, true widths of the mineralization, and deposit styles from the San Martín mine.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Background

Metal production at San Martín is performed in a dynamic cyanidation circuit coupled with a Merrill-Crowe plant that produces doré bars. The grinding circuit is designed to generate a fine feed (85% -200 mesh) to the cyanidation tanks at a nominal rate of 1,300 tpd, although throughput for the period 2015-2017 has been an average of 850 tpd due to mine production constraints.

The metallurgical analysis discussed in this Report is primarily based on plant operational data. This is because laboratory work was considered to be of lesser priority, as emphasis was given to tailor the plant to the real run-of-mine mill feed.

To determine the metallurgical performance of the different ore types that feed the plant, stope samples collected from mining faces as well as monthly plant composites are regularly sent for assay to FMS's Central Laboratory. There are no metallurgical reports issued by external commercial laboratories. Since 2012, all testwork has been performed at the Central Laboratory. The testwork results are internally circulated via email on a regular basis, no formal reports are available. Table 13-1 shows a summary of the results from 2012 to 2017.

Table 13-1: Summary of Metallurgical Testwork Results

Date	Test Description	Sample Type	Head Grade (g/t)		Processing Conditions				Recovery (%)	
			Ag	Au	Grind -200M	Solids (%)	NaCN (ppm)	Time (hrs)	Ag	Au
Sep 2012	NaCN leaching	Stope composite	275	NA	70%	43	1500	96	85.8	NA
Jun 2013	NaCN leaching	Stope composite	270	NA	70%	43	1000	72	83.2	NA
Apr 2013	NaCN leaching	Monthly	146	NA	70%	43	1000	72	78.5	NA
May 2013	NaCN leaching	Monthly	191	NA	70%	43	1000	72	82.4	NA
Aug 2013	NaCN leaching	Monthly	174	NA	70%	43	1000	72	74.0	NA
Sep 2012	NaCN leaching	Monthly	154	NA	70%	43	1000	72	80.8	NA
Oct 2013	NaCN leaching	Monthly	179	NA	70%	43	1000	72	83.4	NA
Nov 2013	NaCN leaching	Monthly	198	NA	70%	43	1000	72	89.1	NA
Dec 2013	NaCN leaching	Monthly	166	NA	70%	43	1000	72	81.0	NA
Apr 2014	NaCN leaching	Monthly	198	0.37	80%	43	1000	72	70.6	90.7
May 2014	NaCN leaching	Monthly	245	0.28	80%	43	1000	72	73.0	89.1
Jun 2014	NaCN leaching	Monthly	254	0.36	80%	43	1000	72	77.9	88.8
Aug 2014	NaCN leaching	Monthly	322	0.58	80%	43	1000	72	71.1	95.7
Sep 2014	NaCN leaching	Monthly	316	NA	80%	43	1000	72	69.8	NA
Oct 2014	NaCN leaching	Monthly	254	0.5	80%	43	1000	72	69.5	98.0

Nov 2014	NaCN leaching	Monthly	257	0.57	80%	43	1000	72	63.8	92.1
Dec 2014	NaCN leaching	Monthly	307	0.58	80%	43	1000	72	75.5	93.1
Jan 2015	NaCN leaching	Monthly	256	0.75	80%	43	1000	120	69.5	94.0
Feb 2015	NaCN leaching	Monthly	329	0.64	80%	43	1000	120	70.7	90.7
Mar 2015	NaCN leaching	Monthly	282	0.57	80%	43	1000	120	69.1	91.3
May 2015	NaCN leaching	Monthly	291	0.46	80%	43	1000	120	77.3	97.8
Jun 2015	NaCN leaching	Monthly	302	0.61	80%	43	1000	120	73.8	87.7
Jul 2015	NaCN leaching	Monthly	278	0.73	80%	43	1000	120	76.8	84.1
Aug 2015	NaCN leaching	Monthly	229	0.48	80%	43	1000	120	74.5	91.7
Oct 2015	NaCN leaching	Monthly	278	0.73	80%	43	1000	120	76.8	84.1
Nov 2015	NaCN leaching	Monthly	271	0.43	80%	43	1000	120	74.9	88.5
Dec 2015	NaCN leaching	Monthly	245	0.29	80%	43	1000	120	76.7	93.2
Jan 2016	NaCN leaching	Monthly	255	0.53	85%	43	1200	120	76.9	90.6
Jan 2016	O_2 injection	Monthly	255	0.53	85%	43	1200	120	80.9	94.3
Feb 2016	NaCN leaching	Monthly	193	0.28	85%	43	1200	120	78.1	90.7
Feb 2016	O_2 injection	Monthly	193	0.28	85%	43	1200	120	80.5	94.3
Mar 2016	NaCN leaching	Monthly	220	0.77	85%	43	1200	120	75.9	92.2
Mar 2016	O_2 injection	Monthly	220	0.77	85%	43	1200	120	78.6	93.6
Apr 2016	NaCN leaching	Monthly	210	0.42	85%	43	1200	120	83.3	97.6
Apr 2016	O_2 injection	Monthly	210	0.42	85%	43	1200	120	86.7	97.7
May 2016	NaCN leaching	Monthly	230	0.46	85%	43	1200	120	84.4	95.4
May 2016	O_2 injection	Monthly	230	0.46	85%	43	1200	120	87.8	95.7
Jun 2016	NaCN leaching	Monthly	215	0.46	85%	43	1200	120	82.3	93.5
Jun 2016	O_2 injection	Monthly	215	0.46	85%	43	1200	120	85.6	95.7
Jul 2016	NaCN leaching	Monthly	200	0.40	85%	43	1200	120	81.0	92.5
Jul 2016	O_2 injection	Monthly	200	0.40	85%	43	1200	120	85.0	97.5
Aug 2016	NaCN leaching	Monthly	244	0.41	85%	43	1200	120	81.6	87.8
Aug 2016	O_2 injection	Monthly	244	0.41	85%	43	1200	120	83.2	97.5
Sep 2016	NaCN leaching	Monthly	223	0.37	85%	43	1200	120	81.2	97.3
Sep 2016	O_2 injection	Monthly	223	0.37	85%	43	1200	120	85.3	96.8
Oct 2016	NaCN leaching	Monthly	238	0.31	85%	43	1200	120	82.8	96.8
Oct 2016	O_2 injection	Monthly	238	0.31	85%	43	1200	120	85.3	96.8
Nov 2016	NaCN leaching	Monthly	235	0.41	85%	43	1200	120	78.7	87.9
Nov 2016	O_2 injection	Monthly	235	0.41	85%	43	1200	120	80.4	95.0
Dec 2016	NaCN leaching	Monthly	248	0.46	85%	43	1200	120	78.7	87.9
Dec 2016	O_2 injection	Monthly	248	0.46	85%	43	1200	120	83.8	95.7
Jan 2017	NaCN leaching	Monthly	222	0.29	85%	43	1200	120	77.9	86.2
Jan 2017	O_2 injection	Monthly	222	0.29	85%	43	1200	120	80.2	90.3
Feb 2017	NaCN leaching	Monthly	220	1.02	85%	43	1200	120	81.1	91.0

Feb 2017	O_2 injection	Monthly	220	1.02	85%	43	1200	120	83.4	93.0
Mar 2017	O_2 injection	Monthly	193	0.91	85%	43	1200	120	82.4	94.6
Apr 2017	O_2 injection	Monthly	209	0.69	85%	43	1200	120	83.7	94.2
May 2017	O_2 injection	Monthly	231	1.18	85%	43	1200	120	87.0	95.7

As can be seen from the table, most of the testwork has been performed on monthly plant feed composite samples. Test variables include: leaching time (in hours), grind fineness (% passing 200 mesh), cyanide (NaCN) concentration, and the injection of pure oxygen (O_2; as contrasted with the conventional addition of air). Processing conditions were chosen to replicate those used at the plant at the time the test was performed.

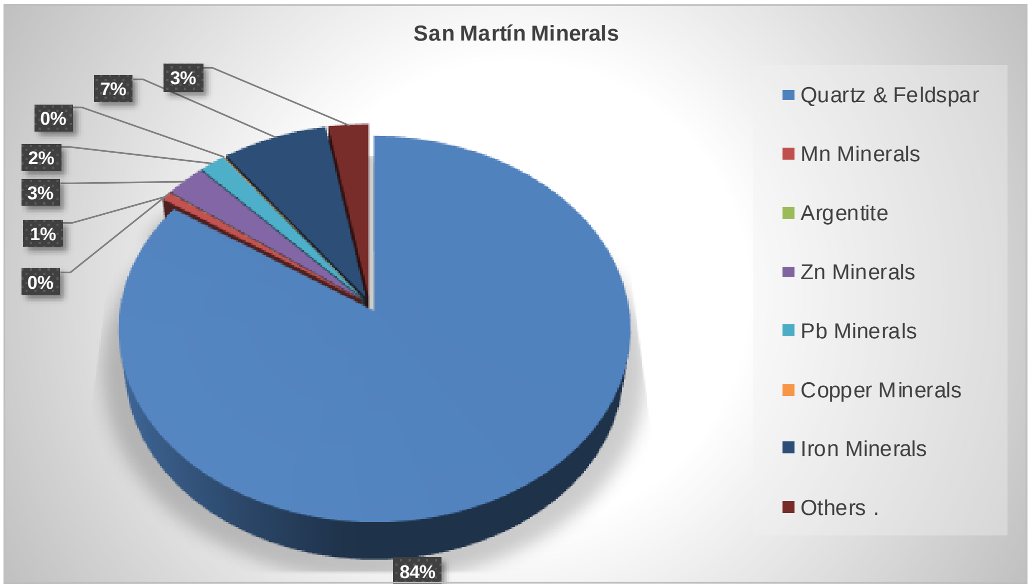
Two test variables of key importance are grind fineness and the injection of pure O_2. The data shows a continuous effort to improve metallurgical recoveries by increasing mineral liberation, i.e., finer grind. Between 2013 and 2014, the fraction of particles finer than 75µ (200 mesh) was 70%, and has gradually increased to 85%.

Since January 2016, the focus has been to study the effect of injecting pure O_2 to increase the leaching kinetics and thus improve recovery. Upon close inspection of the data in Table 13-1, it seems that the injection of pure O_2 increases metal recovery; however, the variability of the results suggests that ore type is also playing a significant role.

13.2 Mineralogy

Typical minerals in the ore include: quartz, feldspar, quenselite ($PbMnO_2(OH)$), johannsenite ($(Ca(Mn,Fe)Si_2O_6)$, pyrolusite (MnO_2), argentite (Ag_2S), zincite (ZnO; >95%), small amounts of sphalerite and marmatite ((Zn,Fe)S; <5%), boulangerite ($Pb_5Sb_4S_{11}$), cerussite ($PbCO_3$), lead arsenates, chalcopyrite ($CuFeS_2$), iron oxides (>95%) and small amounts of pyrite (FeS_2). A typical mineral distribution is shown in Figure 13-1.

Figure 13-1: Typical Mineral Occurrences at San Martín



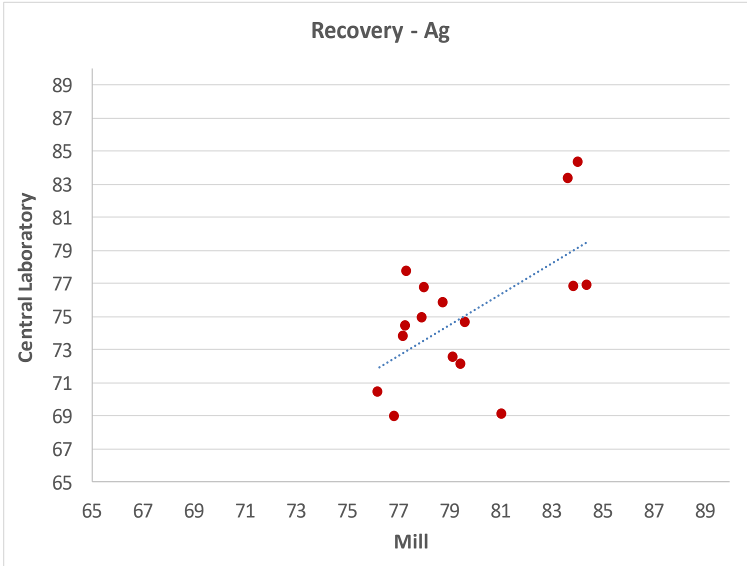
Note: Figure prepared by FMS, 2017.

13.3 Monthly Composites

Composite samples representing one month of plant feed are collected and prepared onsite and then sent to the Central Laboratory. One objective is to determine the relationship between the metallurgical performance at the laboratory and at the full-scale operation using a set of standard (typical) plant conditions. The second objective is to forecast the plant metallurgical response of future ore types. Figure 13-2 shows a comparison between laboratory and plant results in terms of silver recovery.

The comparison shows that the plant consistently recovers more silver than the laboratory tests would indicate. However, the difference is reasonable (approximately 4%) and can be corrected. The comparison in terms of gold is shown in Figure 13-3. Contrary to the case of silver, gold recovery in the laboratory tends to be higher than in the plant (approximately 4%). In spite of these minor differences, and because the deviation is consistent, the laboratory results are considered adequate to forecast plant performance.

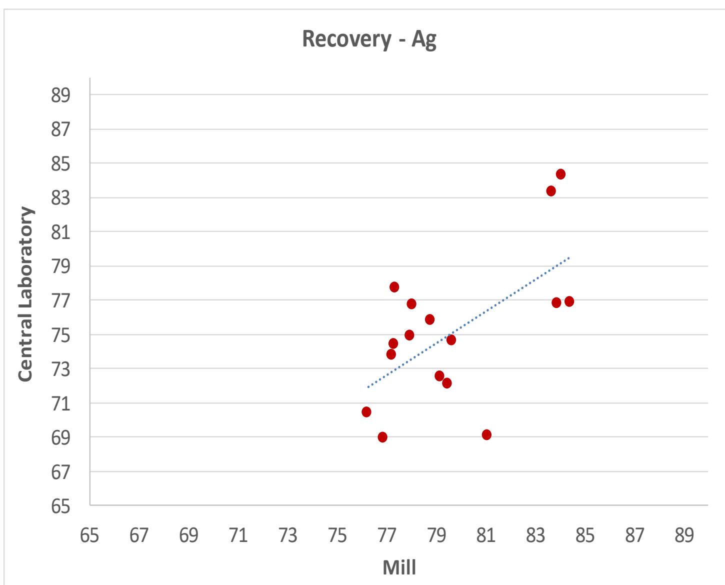
Figure 13-2: Comparison between Laboratory and Plant Silver Recoveries



Notes:

1) Figure prepared by FMS, 2017.
2) Data covers the period between 2015 and 2016.

Figure 13-3: Comparison between Laboratory and Plant Gold Recoveries



Notes:

1) Figure prepared by FMS, 2017.
2) Data covers the period between 2015 and 2016.

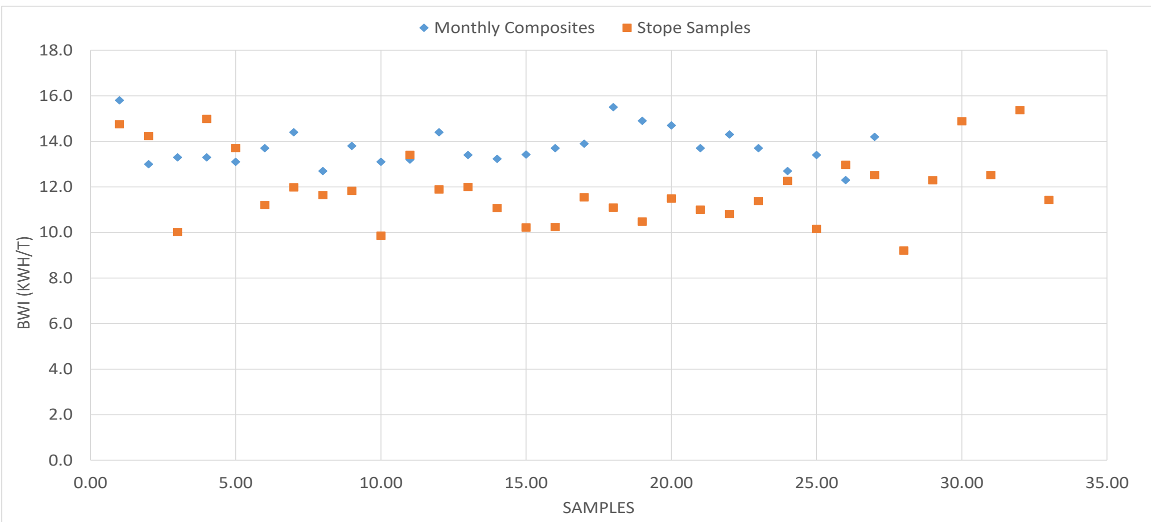
13.4 Quarterly Composites

The geology department at San Martín collects samples from the mining faces that are available to feed the plant during the next three months. These samples are sent to the Central Laboratory for metallurgical testwork. The results serve as an input to develop the Three-Month Rolling (3MR) production plan, as the sample origins (geological domains) are known.

13.5 Grindability

Since February 2013, monthly and quarterly samples are sent to the Central Laboratory to perform grindability tests by means of the Bond Ball Mill Work Index (BWi) method. To date, BWi grindability tests have been conducted on more than 25 monthly composites and more than 30 stope samples. The results are given in Figure 13-4.

Figure 13-4: Bond Grindability Data on Monthly Composites and Stope Samples



Notes:

1) Figure prepared by FMS, 2017.
2) Data covers the period between 2014 and 2016.

The data shows that monthly composites are generally harder than the stope samples, possibly reflecting an inherent sample collection inconsistency. Therefore, currently, metallurgical interpretation relies on the monthly composites (plant feed), as they are considered more representative than the stope samples which are collected from the mining faces.

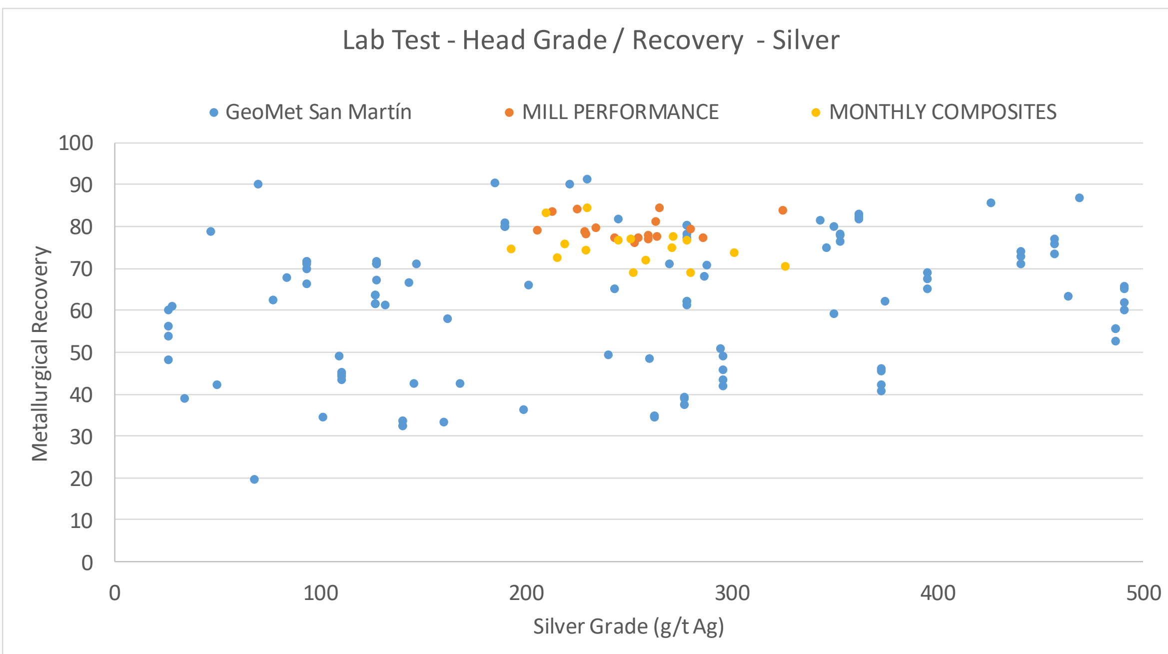
For the monthly composites, the data shows that BWi varies from 12 to 16 kWh/t with an average of approximately 14 kWh/t, which suggests moderately hard ore.

13.6 Metallurgical Recovery

Besides performing laboratory tests using standard plant conditions, metallurgical investigation is conducted on monthly composites to systematically evaluate the effect of key processing variables. The objective of this ongoing program is to explore ways to improve silver and gold recoveries, and to assist operations in diagnosing production issues. Study variables include: grind particle size, cyanide dosage, retention time, reagent type, and oxidizing agents such as pure oxygen and lead nitrate, etc.

Figure 13-5 shows a summary of silver metallurgical recoveries for monthly and quarterly samples in terms of head grade. For reference, the figure also includes plant data representing one month of operation. The figure shows that, within the typical feed grade range (200-300 g/t), silver recovery at the plant varies moderately between 76% and 87% (average = 84%). Laboratory results on monthly composites show higher variation and lower silver recoveries compared to the plant (average = 75%), which is consistent with Figure 13-2.

Figure 13-5: Silver Recovery in Terms of Head Grade



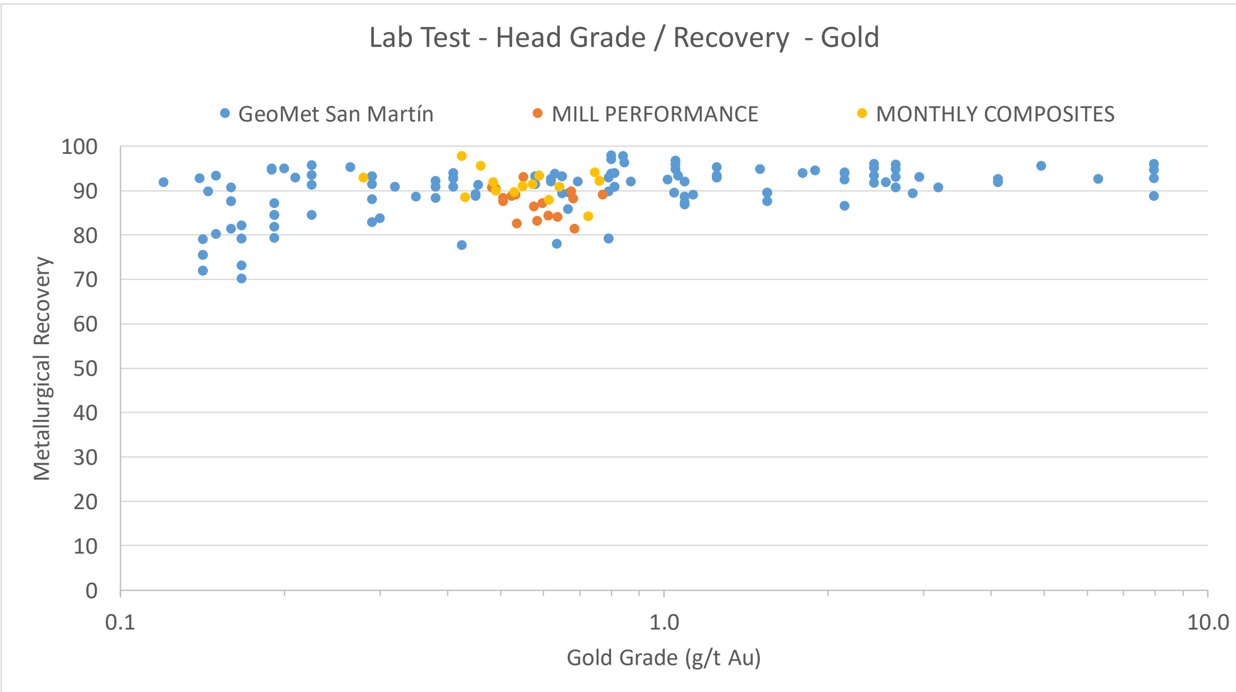
Note: Figure prepared by FMS, 2017.

Because the data obtained from stope samples show significant variability, the figure indicates that ore type and geological domain have a controlling effect on metallurgical performance. Therefore, to control silver recovery, the key is to maintain an adequate blend of ore types feeding the plant.

Figure 13-6 shows a summary of gold metallurgical recoveries in terms of head grade. It can be seen that mill feed grade typically varies between 0.4 and 0.8 g/t on a monthly basis and, within that range, the recovery is high and consistent. In general, gold recovery increases with increasing head grade; however, the variation is moderate. It can be reasonably assumed that for head grades > 0.3 g/t, gold recovery is close to 92%.

The life of mine plan assumes that the metallurgical recovery for silver will average 84%, and the metallurgical recovery for gold will average 92%.

Figure 13-6: Gold Recovery in Terms of Head Grade



Note: Figure prepared by FMS, 2017.

13.7 Metallurgical Variability

Since the data in Figures 13-5 and 13-6 (and, in general, all the data in this section) originate from material collected from the plant feed and mine production faces, the samples tested are considered representative of the various types and styles of mineralization and the mineral deposit as a whole.

13.8 Deleterious Elements

There are no known deleterious elements in the doré produced at San Martín. Since 2013, and under current agreements with the smelter, there has been no penalty incurred related to deleterious elements that would increase smelting and refining costs.

13.9 Metallurgical Research

Sulphide minerals such as argentite, pyrite and arsenopyrite, as well as oxide minerals such as ZnO and a variety of iron oxides, are known to inhibit leaching kinetics and consume high dosages of cyanide and oxygen. Consequently, efforts have been undertaken to study the effect on leaching kinetics of oxidizing agents such as lead nitrate and pure oxygen to replace air addition. Although laboratory results show some promise, the analysis here (Figure 13-5) indicates that ore type and geological domain play a significant role on metallurgical performance.

14 MINERAL RESOURCE ESTIMATES

Mineral Resource Estimation at the San Martín Mine was performed on a vein system consisting of thirteen vein zones.

Three vein zones were estimated by Entech under supervision of FMS:

- Intermedia Zone - Inclusive of La Intermedia, Intermedia 2, Intermedia 3, Intermedia 4 and Intermedia 6;
- Pitayo Zone - Inclusive of La Guitarrona, La Pitayo and La Reina; and
- Hedionda Zone - Inclusive of Hedionda 1 and Hedionda 2.

Four vein zones were estimated by FMS using three-dimensional (3D) estimation methodologies:

- Rosario Zone - Inclusive of Rosario and Bajo Rosario;
- La Veladora;
- La Lima; and
- Huichola Norte Zone – Huichola Norte 2, Huichola Norte 3 and Huichola Norte 4.

Six vein zones were estimated by FMS utilizing two-dimensional (2D) estimation.

- Zuloaga;
- La Esperanza;
- Veta 420;
- Dique 690;
- La Blanca; and
- Desprendimiento 7000.

Five estimation methodologies were used within the estimation process to address both the varying geological and mineralization characteristics. For reporting purposes, the veins have been grouped as follows:

- Section 14.1: Mineral Resources for Intermedia, Pitayo, Hedionda, Rosario, La Veladora, La Lima and Huichola Norte Zones; and
- Section 14.2: Mineral Resources for Other Veins (Zuloaga, La Esperanza, Veta 420, Dique 690, La Blanca, Desprendimiento 7000).

14.1 Mineral Resources for Intermedia, Pitayo, Hedionda, Rosario, La Lima, La Veladora and Huichola Norte Zones

14.1.1 Introduction

The Mineral Resource estimate for the Intermedia, Pitayo, and Hedionda (IPH), Rosario, La Veladora, La Lima and Huichola Norte (RVLH) vein zones (also combined as IPHRVLH) was estimated with reference to the 2003 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "Estimation of Mineral Resource and Mineral Reserves Best Practices" guidelines (2003 CIM Guidelines), and the 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves (2014 CIM Definition Standards).

The resource estimation is based on the current drill hole database (including channel samples), underground level mapping, and digitized data for underground drifts and stopes. The geological modelling was completed in Leapfrog Geo 4.0. Compositing, interpolation, model validation, depletion and classification were undertaken in GEOVIA SurpacTM 6.7. Exploratory Data Analysis (EDA) was undertaken in Geovariances Isatis TM 2016.1 and Snowden Supervisor TM v8.7.

The IPHRVLH Mineral Resource evaluation methodology involved the following processes:

- Drill hole database 3D spatial validation and assay, collar, and survey crosschecks against hard copy logs;
- Interpretation of 3D vein mineralization solids within multiple vein systems;
- Interpretation of 3D geological solids representing dominant host lithologies and the late stage of barren intrusive dykes;
- Exploratory data analysis of waste and mineralized raw sample and subsequent composite data;
- Block model grade estimation for silver and gold using Ordinary Kriging (OK) and Inverse Distance Weighted (IDW) methodologies, depending on available data density;
- Coding of block models for mine depletion and density; and
- Classification and risk assessment.

14.1.2 Database Summary

All available data, including drill holes, channels samples, levels mapping and drill core photos, was used for modelling the geological solids; however, only a subset of data from the 2016 -2017 re-logging and re-assaying program as well as new drilling data collected during this period, was used for the Mineral Resource estimation. The database close-out date is April 29, 2017. Table 14-1 presents a summary of the data used for resource estimation.

Validation steps were undertaken on assay data to ensure all results were within expected ranges and numbering of background values was consistent.

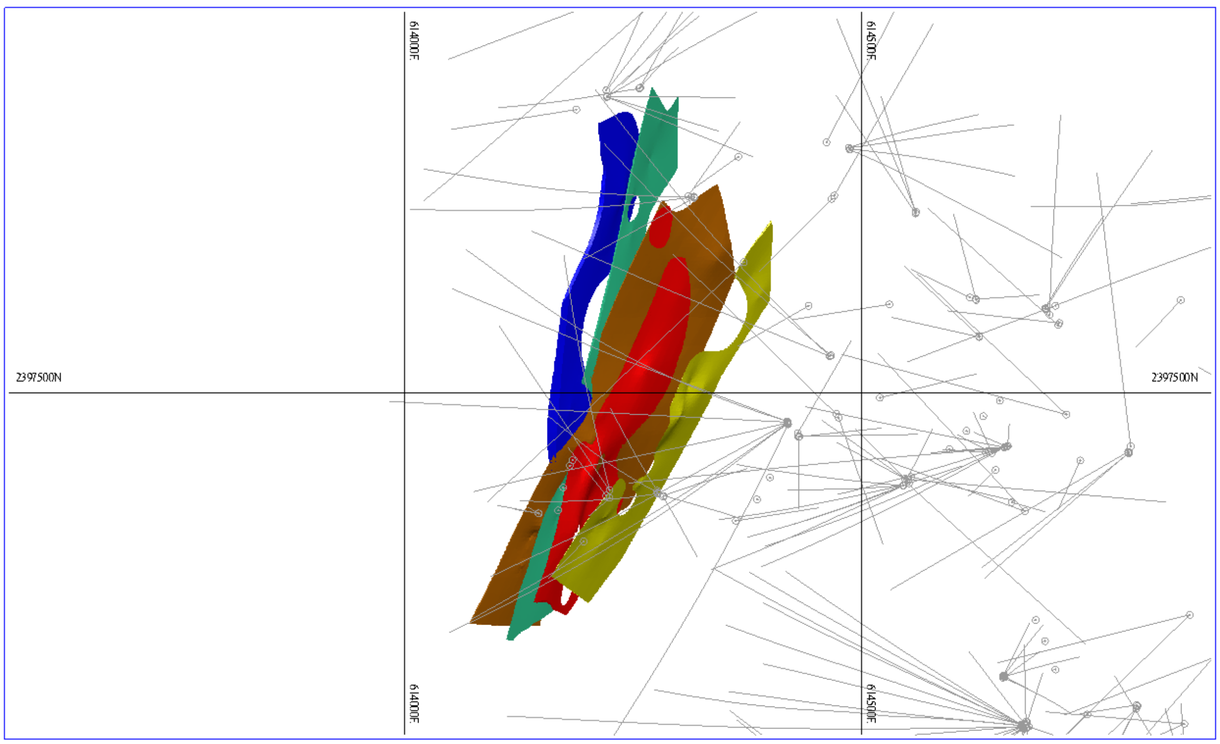
Table 14-1: Summary of Data Used for Resource Estimation

Data Type	Count
Diamond Drill Holes	196
Underground Channel samples	24

14.1.3 Geological Model

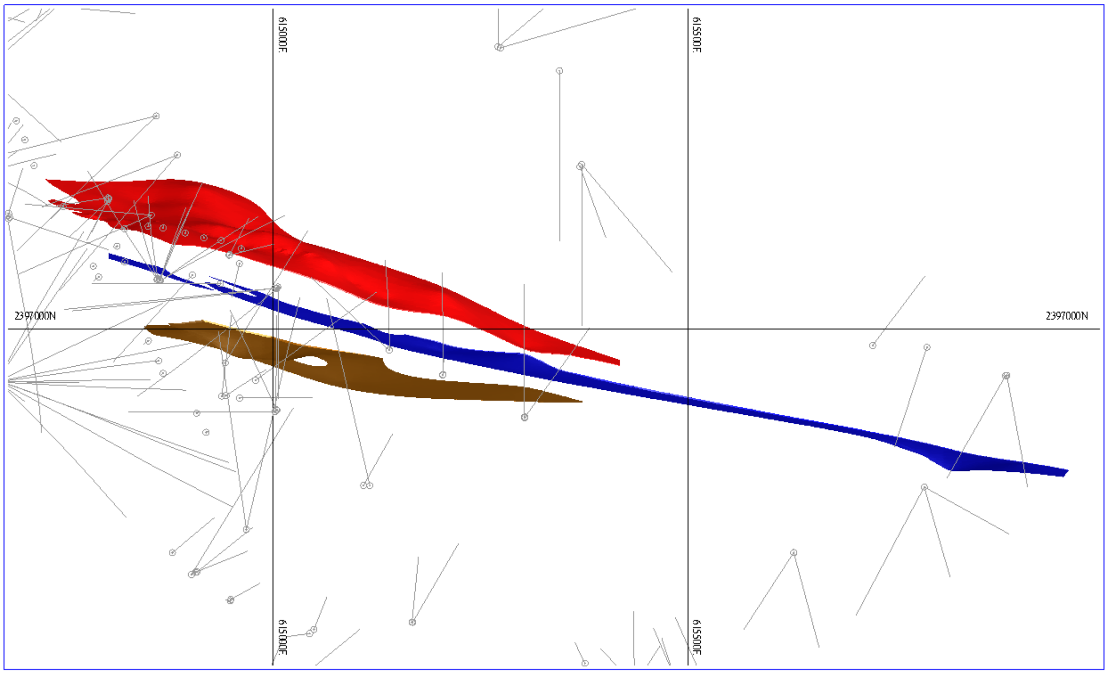
The hanging-wall and foot-wall limits of the veins were delineated from drill hole geological logs and drill core photo review, together with associated sample assay values. Geological mapping from underground mining levels was used to further constrain the geological modelling. Figures 14-1 to 14-7 show the modelled solids for IPHRVLH, respectively.

Figure 14-1: Geological Model for Intermedia Zone



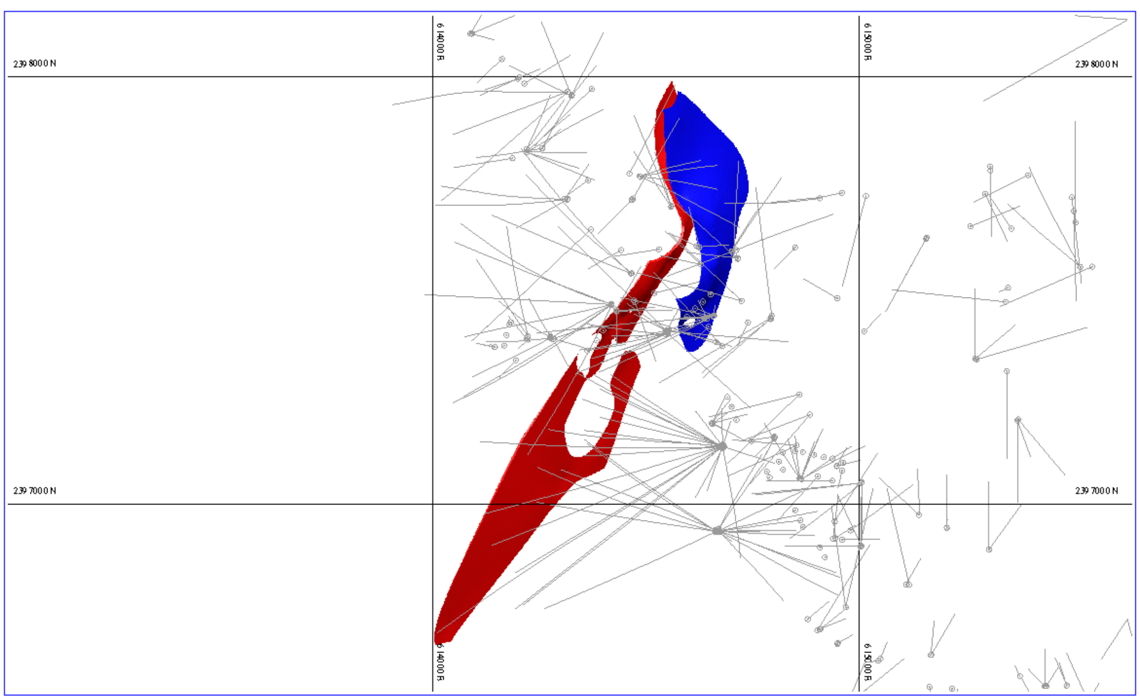
Note: Figure prepared by Entech, 2017. Plan view showing La Intermedia vein (brown) Intermedia 2 (red), Intermedia 3 (aqua), Intermedia 4 (yellow) and Intermedia 6 (blue). Drill hole traces in grey. Full projection of all levels, north is up. 500 m x 500 m grid.

Figure 14-2: Geological Model for Pitayo Zone



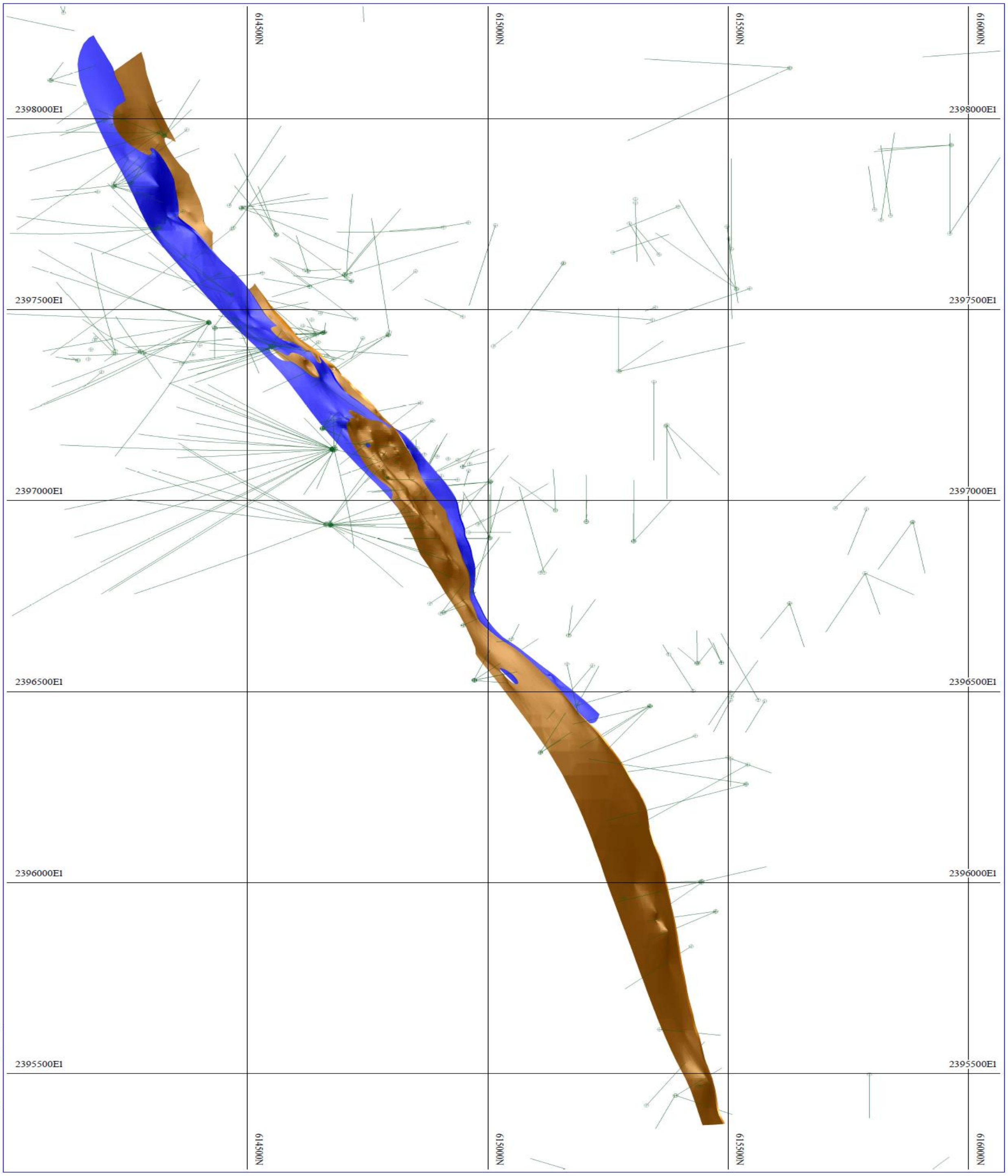
Note: Figure prepared by Entech, 2017. Plan View Showing La Guitarrona Vein (red), La Pitayo Vein (blue) and La Reina Vein (brown). Drill hole traces in grey. Full projection of all levels, north is up. 500 m x 500 m grid.

Figure 14-3: Geological Model for Hedionda Zone



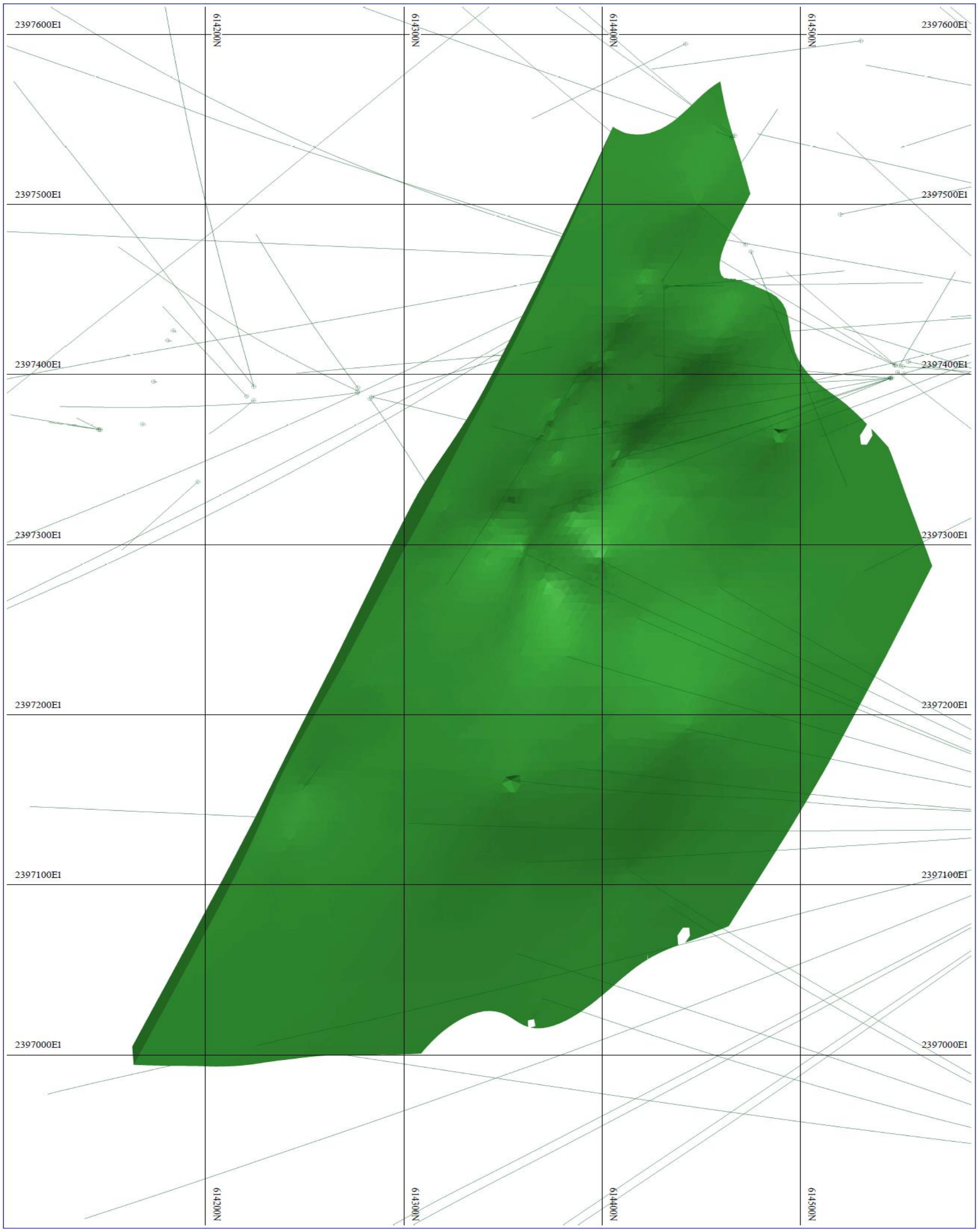
Note: Figure prepared by Entech, 2017. Plan view showing Hedionda 1 vein (blue) and Hedionda 2 vein (red). Drill hole traces in grey. Full projection of all levels, north is up. 1000 m x 1000 m grid.

Figure 14-4: Geological Model for Rosario Zone



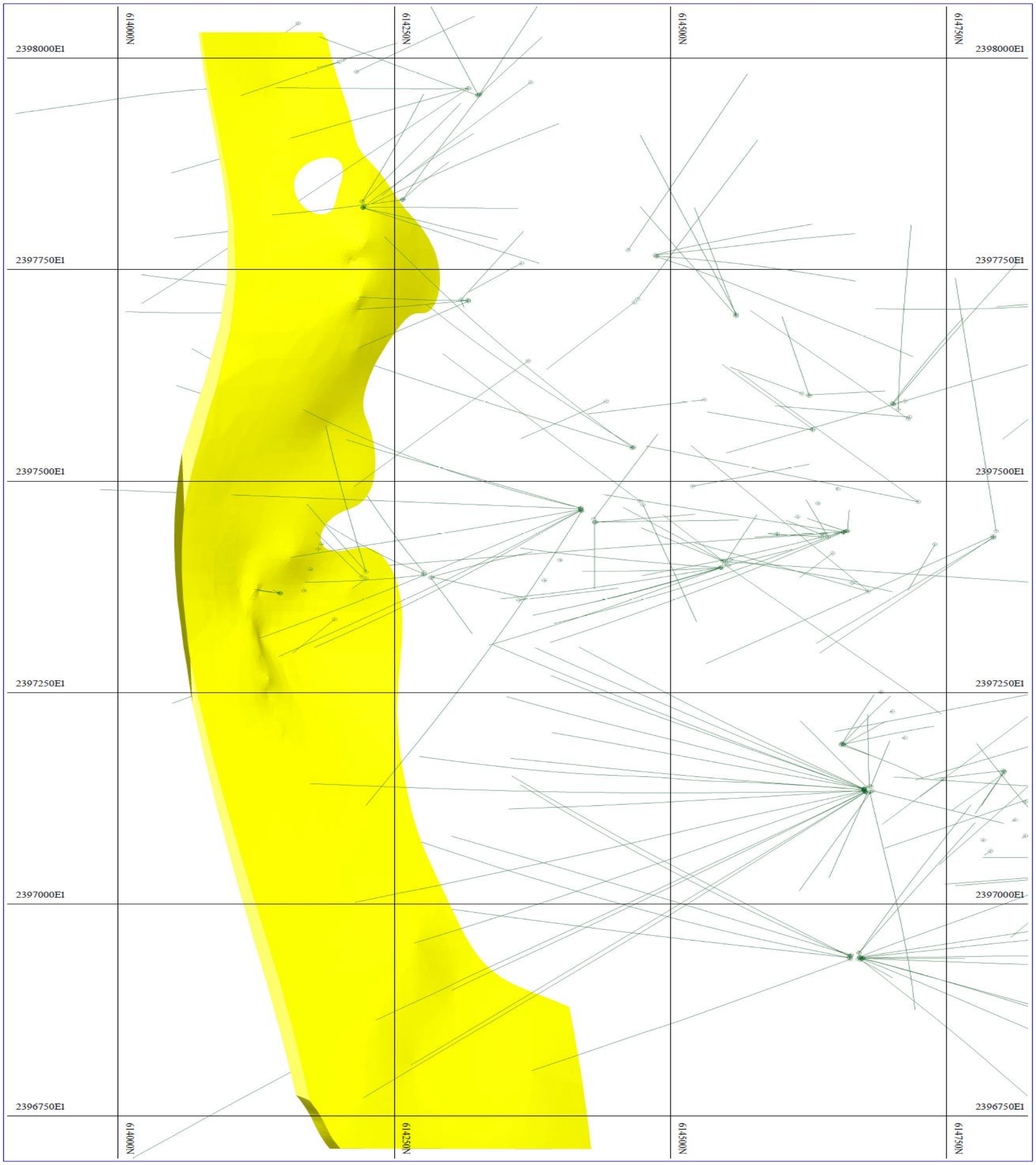
Note: Plan view showing Rosario vein (brown) and Bajo Rosario vein (blue). Drill hole traces in green. Full projection of all levels, north is up. 500 m x 500 m grid.

Figure 14-5: Geological Model for La Veladora Zone



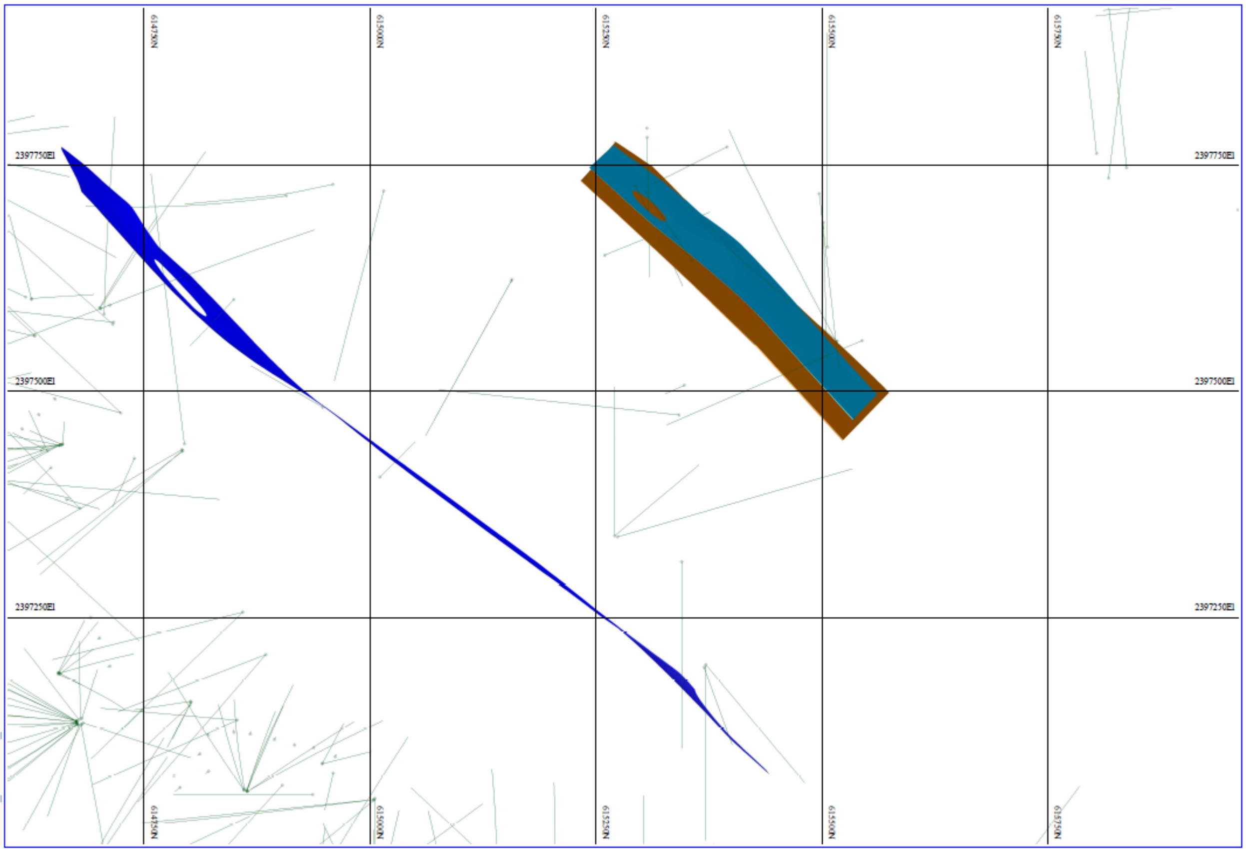
Note: Plan view showing La Veladora vein (green). Drill hole traces in green. Full projection of all levels, north is up. 100 m x 100 m grid.

Figure 14-6: Geological Model for La Lima Zone



Note: Plan view showing La Lima vein (yellow). Drill hole traces in green. Full projection of all levels, north is up. 250 m x 250 m grid.

Figure 14-7: Geological Model for Huichola Norte Zone



Note: Plan view showing Huichola 2 vein (blue), Huichola 3 vein (light blue) and Huichola 4 vein (brown). Drill hole traces in green. Full projection of all levels, north is up. 250 m x 250 m grid.

14.1.4 Assay Sample Values and Compositing

Exploratory Data Analysis

All available drilling and channel intercepts within the veins were flagged with a code stored in a database table. This table was used for both sample and composite data extraction of silver and gold.

Data were split into core and channel samples and assessed for bias.

Review of the core versus channel data indicated that:

- Channel sample data are subject to a grade-clustering bias, due to the limited production areas sampled and batch sampling approach;
- Core sample data was widely spaced with limited coincident core and channel sampled areas;
- Core spacing was widely spaced within all vein systems; and
- The channel sample methodology represented a half-core extraction with a power saw across the roof of the drives and was undertaken using equipment and procedures to approximate a core intercept and reduce the sample bias inherent with chip channel sampling.

Both core and channel composite data were used for estimation purposes.

Mineralization Composite

Sample length analysis of IPH zones indicated a large variance in intercept sample size with many instances of single domain intercepts of 0.25 m to 14.7 m in length and a mean of 2.09 m to 2.86 m. The variable sample lengths were addressed with a 2D compositing and interpolation approach using the true width. This was considered appropriate in instances where mining selectivity across the domain is unlikely. An additive accumulation variable was calculated using the following formula:

Accumulation Variable "Accum" = True Width x Intercept Composite Grade Value

Sample length analysis of RVLH zones indicated a lower variance in sample size within the domain of between of 0.15 m to 6.1 m in length and a mean of 0.59 m to 0.94 m. The sample lengths were composited downhole to 1 m widths and a minimum of 20% of the sample to be included. Intervals of < 0.2 m (residuals) were not used in estimation.

Mineralized Waste Composite

IPH mineralized waste intercept intervals were composited downhole to 2 m best fit lengths with a minimum of 0.4 m to be included. Intervals of less than 0.4 m (residuals) were length-weighted and added into the preceding composite. Where an isolated intercept of < 0.4 m was not able to be added into a neighbouring composite, it was removed from the data set. These instances represented less than 0.1% of total waste composite data.

RVLH mineralized waste intercept interval sample lengths were composited downhole to 1 m widths and a minimum of 20% of sample to be included. Intervals of < 0.2 m (residuals) were not used in estimation.

Domaining Analysis and Statistics

Statistical analysis included a review of the domains for homogeneity. Statistical and visual analyses were performed to validate the overall domain controls on mineralization and to ensure further domaining was not required. To assess the global, unbiased characteristics of the composite sample values for silver and gold within the geological domains, the data were declustered by a cell declustering method. Each composite was assigned a weight proportional to the volume it could represent.

14.1.5 Outlier Evaluation

A combination of histograms, log-transformed probability plots, and percentile analysis was used to identify population outliers for the composites as well as for the "Uncut Accumulation" and "Uncut Intercept" composites for all variables. After the spatial location of these outliers was examined, a metal sensitivity analysis was undertaken before appropriate capping values were applied to composite files.

All applied capping values were individually reviewed for each domain to ensure the reduction in metal was statistically appropriate and locally relevant (Table 14-2).

Table 14-2: Applied Capping Values for Silver and Gold

Vein	Applied Cap	Number Capped	Uncapped		Capped	
			Mean	CV	Mean	CV
Ag						
La Intermedia			112	0.8		
Intermedia 2			218	1.1		
Intermedia 3			120	1.2		
Intermedia 4			128	1.2		
Intermedia 6			103	0.8		
La Guitarrona			87	1.2		
La Pitayo	700	1	120	1.7	109	1.4
La Reina			90	0.5		
Hedionda 1			204	1.1		
Hedionda 2	500	1	157	1.1	144	0.9
Rosario	1500	6	193	2.1	179	1.5
Bajo Rosario			109	1.3		
La Veladora	850	7	267	2.3	175	1.4
La Lima	475	3	106	1.6	95	1.2
Huichola Norte (all veins)	1000	2	172	2.9	130	1.7
Au						
La Intermedia			0.05	1.1		
Intermedia 2			0.07	1.46		
Intermedia 3			0.04	1.04		
Intermedia 4			0.11	0.81		
Intermedia 6			0.06	0.98		
La Guitarrona			0.53	1.36		
La Pitayo	8	1	10.63	2.8	1.47	1.79
La Reina			0.82	1.07		
Hedionda 1			0.37	1.06		
Hedionda 2	1.6	1	0.33	2.56	0.22	1.87
Rosario	2.5	8	0.45	3.15	0.34	1.69
Bajo Rosario	2.5	3	0.27	2.19	0.25	1.83
La Veladora	1	6	0.22	2.7	0.15	1.9
La Lima	0.3	1	0.04	1.48	0.03	1.62
Huichola Norte (all veins)	4	1	1.35	6.69	0.44	1.86

Top cuts for dilution/waste were assessed and applied as per Table 14-3.

Table 14-3: Applied Capping Values for Silver, Gold, Dilution / Waste Composites

Waste Dilution Zone	Ag_Cap	Au_Cap
IPH	170	0.41
Rosario	140	1.4
La Veladora	-	-
La Lima	-	-
Huichola	75	0.37

14.1.6 Variography

Geostatistical modelling in the 2D space of the top-cut accumulated composites was undertaken within the IPH vein systems, while geostatistical modelling was conducted in 3D space on top-cut composites that were not accumulated within the RVLH vein system.

No robust semi-variograms were observed for the IPH vein system due to the limited number of composite data. For the RVLH vein system, the semi-variogram modelling process involved the following:

- Calculating and modelling downhole semi-variogram for the investigation of the nugget effect;
- Evaluating the experimental variograms of silver and gold Gaussian transformed composites, within the plane of mineralization and at varying lags, to identify variogram stability and directions of continuity;
- Variogram modeling of selected directions; and
- Back-transforming the Gaussian models and fitting them to raw cut composite data prior to kriging neighbourhood analysis and use in OK interpolation.

All analysis was done in conjunction with:

- Validation of findings against the geological mineralization model;
- Observations made by FMS geologists regarding the continuity of the deposit; and
- Spatial analysis of composite data, coloured by grade thresholds to highlight mineralization trends.

Table 14-4 shows the summary of the variography analyses.

Table 14-4: RVLH Variogram Parameters

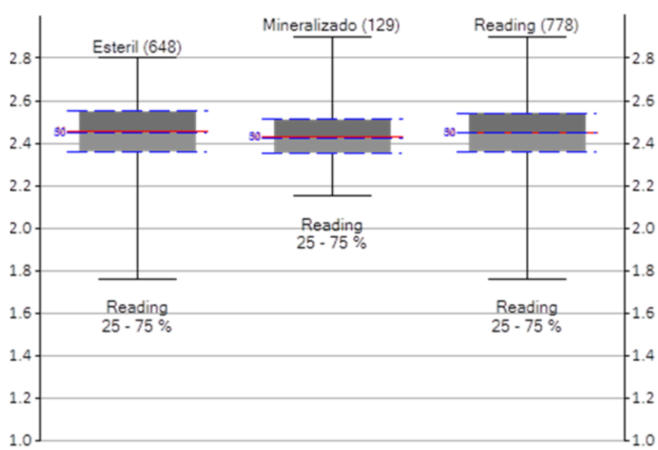
Variogram	Nugget C0	C1	C2	Type	Rotation (°)			Range 1st Structure (m)			Range 2nd Structure (m)		
					Z	X	Y	Major	Semi-Major	Minor	Major	Semi-Major	Minor
Ag													
Rosario	0.19	0.57	0.24	OK	320	0	75	100	100	20	157	113	40
Bajo Rosario	0.10	0.54	0.36	OK	324	10	70	74	20	20	307	54	40
Veladora	0.19	0.5	0.31	OK	23	-55	0	77	105	20	119	89	40
La Lima	0.16	0.39	0.45	OK	10	0	-50	150	166	20	200	190	40
Huichola Norte	Not modelled												
IPH Zones	Not modelled												
Au													
Rosario	0.19	0.55	0.26	OK	332	10	80	89	60	20	124	84	40
Bajo Rosario	0.11	0.32	0.57	OK	324	10	70	89	67	20	339	78	40
Veladora	0.19	0.3	0.51	OK	23	0	-55	23	98	20	112	112	40
La Lima	0.24	0.59	0.17	OK	350	23	-46	167	185	20	193	193	40
Huichola Norte	Not modelled												
IPH Zones	Not modelled												

14.1.7 Specific Gravity

FMS conducted Specific Gravity (SG) testing using the wax-coated water displacement method on 787 drill core samples. The samples were collected both from the veins and from the surrounding waste rocks, and the values ranged from 1.76 to 2.90. A total of 656 drill core samples were identified as waste with values between 1.76 and 2.8 (average of 2.45). A total of 132 drill core samples were identified as mineralized with values between 2.15 and 2.9 (average of 2.43). No capping was undertaken.

All blocks were assigned a global SG of 2.44. Figure 14-8 shows a box-and-whisker plot for SG results.

Figure 14-8: Specific Gravity Box-and-Whisker Plot



Note: Figure prepared by FMS, 2017.

14.1.8 Resource Estimation Methodology

Interpolation of silver and gold within the IPH domains was undertaken using a 2D compositing and estimation approach. The assumption of homogeneity, and thus stationarity, within the IPH domains was tested and not met due to sample density and resulting limited composite information. The lack of robust semi-variogram outcomes indicates that an increased drill density is required to allow for evaluation of domain stationarity. IDW estimation methodology was used within the IPH estimate to allow for interpolation where limited composite data and unstable variogram models were not able to capture the spatial continuity required for OK interpolation.

The 2D block model was used for interpolation, validation, and back-calculation of the block silver and gold grades, and was followed by a transformation of the block centroids into 3D space. All 2D block estimates were based on interpolation into 10 m x 10 m x 1 m parent cells with no sub-cells. Block discretization points were set to 5(Y) x 5(X) x 1(Z) points.

Interpolation of silver and gold within the RVLH domains was undertaken using a 3D compositing and estimation approach. The OK method was used for all domains except Huichola Norte where an IDW estimation methodology was used to allow for interpolation where limited composite data and unstable variogram models were not able to capture the spatial continuity required for OK. In the La Veladora domain, variogram models were relatively unstable and search parameters from the Rosario domain were used as a proxy as the veins have similar characteristics.

The Rosario, La Veladora, and La Lima block estimates were interpolated into 15 m x 1 m x 15 m parent cells with no sub-cells. Block discretization points were set to 5(Y) x 1(X) x 5(Z). Huichola Norte blocks were 5 m x 0.5 m x 5 m parent cells with no sub-cells. Block discretization points were set to 5(Y) x 1(X) x 5(Z). All block models are partial percentage models, rotated where required to appropriately represent veins and waste volumes, and to be suitable for the purpose of Mineral Reserve evaluation and mine planning.

Mineralized Vein Interpolation

For IPH domains, the 2D accumulated and top-cut silver, gold and vein true width variables were independently interpolated into a 2D block model and then estimated with Inverse Distance Weighted to the third power (IDW^3) using GEOVIA Surpac™. Accumulated variables and true width were estimated with identical search and estimation parameters, resulting in identical weights being applied within estimation neighbourhoods, enabling appropriate post-processing back-calculation of an estimated grade.

For the RVL domains, top-cut silver and gold were independently interpolated using GEOVIA Surpac™ into a 3D block model with OK. The Huichola Norte domains were estimated using IDW^3.

Search neighbourhood parameters (Tables 14.-5 and 14-6), were applied to the entire composite file for each respective domain.

Waste Interpolation

The downhole composites of silver and gold waste domains were estimated with IDW^3 for the IPH and Huichola Norte veins using an ellipse of similar orientation and anisotropy as nearby mineralized ore domains. For the IPH blocks that were not estimated, a background value of 0.5 g/t for silver and 0.01 g/t for gold was applied.

For the Rosario, La Veladora, and La Lima domains, the downhole composites of silver and gold mineralized waste domains were estimated with OK using ellipse and anisotropy parameters determined for each mineralized waste domain.

Search Strategies

Kriging neighbourhood analysis (La Intermedia domain) was undertaken using Geovariances Isatis™ software to optimise search neighbourhoods with a focus on generating a robust block estimate, whilst minimising estimation error and conditional bias. A series of estimation quality tests were undertaken within the La Intermedia domain on poor-to-well-informed blocks within the 2D block model. Similarly, kriging neighbourhood analysis of RVL domains using Snowden Supervisor™ software was also undertaken with the same objectives. Table 14-5 to Table 14-6 summarize the search strategy by domain.

Table 14-5: Search Neighbourhood Parameters - IPH 2D Estimation

Vein Zone	Domain	Metal Variable		Search Pass	Surpac Rotations (2D)			Search Ellipse Radius			No of Samples		Search Type	Method
					Bearing	Plunge	Dip	x (m)	y (m)	z (m)	Min	Max		
Intermedia	1	Ag	Ag Accumulation	1	000	0	0	130	130	130	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	2		Ag Accumulation	1	000	0	0	150	150	150	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	3		Ag Accumulation	1	000	0	0	100	100	100	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	4		Ag Accumulation	1	000	0	0	100	100	100	1	4	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	6		Ag Accumulation	1	000	0	0	100	100	100	1	4	Ellipsoidal	IDW3
			Ag TW		000	0	0							
Pitayo	7		Ag Accumulation	1	000	0	0	150	150	150	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	8		Ag Cut Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	9		Ag Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
Hedionda	11		Ag Accumulation	1	000	0	0	150	150	150	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
	12		Ag Cut Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Ag TW		000	0	0							
Intermedia	1	Au	Au Accumulation	1	000	0	0	130	130	130	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	2		Au Accumulation	1	000	0	0	160	160	160	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	3		Au Accumulation	1	000	0	0	130	130	130	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	4		Au Accumulation	1	000	0	0	100	100	100	1	4	Ellipsoidal	IDW3
			Au TW		000	0	0							
	6		Au Accumulation	1	000	0	0	100	100	100	1	4	Ellipsoidal	IDW3
			Au TW		000	0	0							
Pitayo	7		Au Accumulation	1	000	0	0	150	150	150	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	8		Au Cut Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	9		Au Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
Hedionda	11		Au Accumulation	1	000	0	0	150	150	150	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							
	12		Au Accumulation	1	000	0	0	200	200	200	2	8	Ellipsoidal	IDW3
			Au TW		000	0	0							

Table 14-6: Search Neighbourhood Parameters - RVL 3D Estimation

Zone	Domain	Metal	Estimation Method	Pass	Nugget C_0	C_1	a1	C_1	a2	Search Ellipse Rotation (°) (ZXY LRL) Axis 1 (L)	Axis 2 (R)	Axis 3 (L)	Ranges(m) X	Y	Z	Min. No. Comp	Max. No. Comp	Max. Comp. /Hole
Rosario	Rosario	Ag	OK	1	0.19	0.57	100	0.24	157	320	0	75	16	80	80	5	8	2
				2									31	157	121	5	7	2
				3									76	380	292	3	6	2
		Au		1	0.19	0.55	89	0.26	124	332	10	80	12	62	42	5	8	2
				2									25	124	84	5	7	2
				3									76	380	257	1	3	2
	Bajo Rosario	Ag		1	0.1	0.54	74	0.36	307	323.5	9.5	69.5	16	80	22	5	8	2
				2									54	307	54	5	7	2
				3									84	480	84	3	6	2
		Au		1	0.11	0.32	89	0.57	339	323.5	9.5	69.5	16	80	60	5	8	2
				2									67	335	77	5	7	2
				3									96	480	110	3	6	2
	Dilution Shell	Ag		1	0.1	0.35	79	0.55	126	150	0	-60	28	63	80	5	8	2
				2									58	126	116	5	7	2
				3									138	300	276	3	6	2
		Au		1	0.2	0.54	91	0.26	155	323.5	19.5	79.5	16	80	50	5	8	2
				2									155	155	155	5	7	2
				3									300	300	300	3	6	2
La Veladora	La Veladora	Ag	OK	1	0.19	0.5	77	0.31	89	23	0	-55	6	60	60	5	8	2
				2									12	120	120	5	7	2
				3									20	200	200	3	4	2
		Au		1	0.19	0.3	23	0.51	112	23	0	-55	11	112	112	5	8	2
				2									18	180	180	3	6	2
				3									40	400	400	1	3	2
	Dilution Shell	Ag		1	0.3	0.36	101	0.34	110	23	0	-55	6	60	60	5	8	2
				2									18	180	180	5	7	2
				3									28	280	280	3	4	2
		Au		1	0.22	0.43	28	0.35	69	23	0	-55	7	69	69	5	8	2
				2									18	180	180	5	7	2
				3									28	280	280	3	4	2
La Lima	La Lima	Ag	OK	1	0.16	0.39	150	0.45	200	10	0	-50	20	100	111	5	8	2
				2									40	200	190	5	7	2
				3									66	330	313	3	6	2
		Au		1	0.24	0.59	167	0.17	193	349.5	22.5	-46	20	100	111	5	8	2
				2									40	200	190	5	7	2
				3									66	330	313	3	6	2
	Dilution Shell	Ag		1	0.07	0.3	127	0.63	200	3	18.5	-69	20	100	111	5	8	2
				2									40	200	190	5	7	2
				3									80	400	380	3	6	2
		Au		1	0.1	0.45	158	0.45	168	3	18.5	-69	20	100	111	5	8	2
				2									34	168	160	5	7	2
				3									80	400	380	3	6	2
Huichola Norte	Vein 2 and associated Dilution Shell	Ag, Au	ID3	1						310	0	5	33.3	100	100	4	7	2
				2									100	300	300	3	6	2
				3									366.7	1100	1100	1	3	2
	Vein 3			1						315	0	13	33.3	100	100	4	7	2
				2									100	300	300	3	6	2
				3									200	600	600	1	3	2
	Vein 4			1						315	0	20	33.3	100	100	4	7	2
				2									100	300	300	3	6	2
				3									200	600	600	1	3	2
	Dilution Shell-Vein 3 and 4			1						315	0	16	33.3	100	100	4	7	2
				2									100	300	300	3	6	2
				3									200	600	600	1	3	2

14.1.9 Model Validation

Validation of the estimated block grades for IPHRVLH was completed for each of the metals estimated in each of the domains. The resource block model was validated by:

- Visual comparison of composite grades against the block grades;
- Statistical comparison of global declustered composite grade against estimated grade; and
- Swath plots along the long section axis of the domains, comparing declustered composite grades, estimated grades, number of composites, and tonnage estimated.

Visual Validation

Estimated grades were compared to the composite grades by visual inspection in plan, long and cross-section views with the model block grades considered comparable to composite values and a fair representation of the supporting composite data.

Global and Local Bias

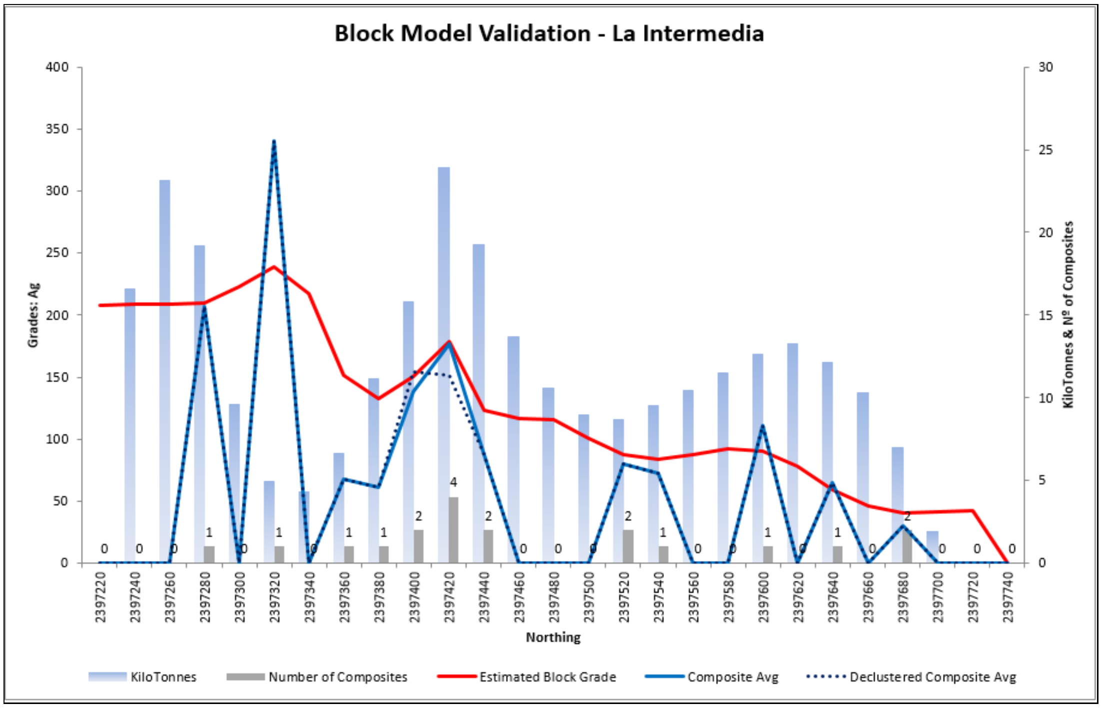
Estimated silver means are on average 15% below declustered composite mean (Table 14-7). Some specific domains present higher differences between estimation and composite grades (25-65%) due to the limited number of informing data.

Table 14-7: Estimated Silver Grades and Declustered Silver Means

MVD	Estimation Method	Number of Composites	Declustered Mean	Estimated Mean	% Variance
La Intermedia	IDW[3]	19	111.94	116.1	4%
Intermedia 2		11	217.97	161.9	-26%
Intermedia 3		13	119.9	88.6	-26%
Intermedia 4		7	127.93	113	-12%
Intermedia 6		5	102.85	35.6	-65%
La Guitarrona		22	87.23	87.36	0%
La Pitayo		13	108.86	108.64	0%
La Reina		6	90.17	77.77	-14%
Hedionda 1		14	204.06	224.37	10%
Hedionda 2		23	143.91	118.69	-18%
Huichola Norte		18	76.554	69	-10%
Rosario	OK	371	186.666	129.02	-31%
Bajo Rosario		197	109.893	99.98	-9%
La Lima		131	101.555	103.3	2%
La Veladora		125	241.47	166.26	-31%

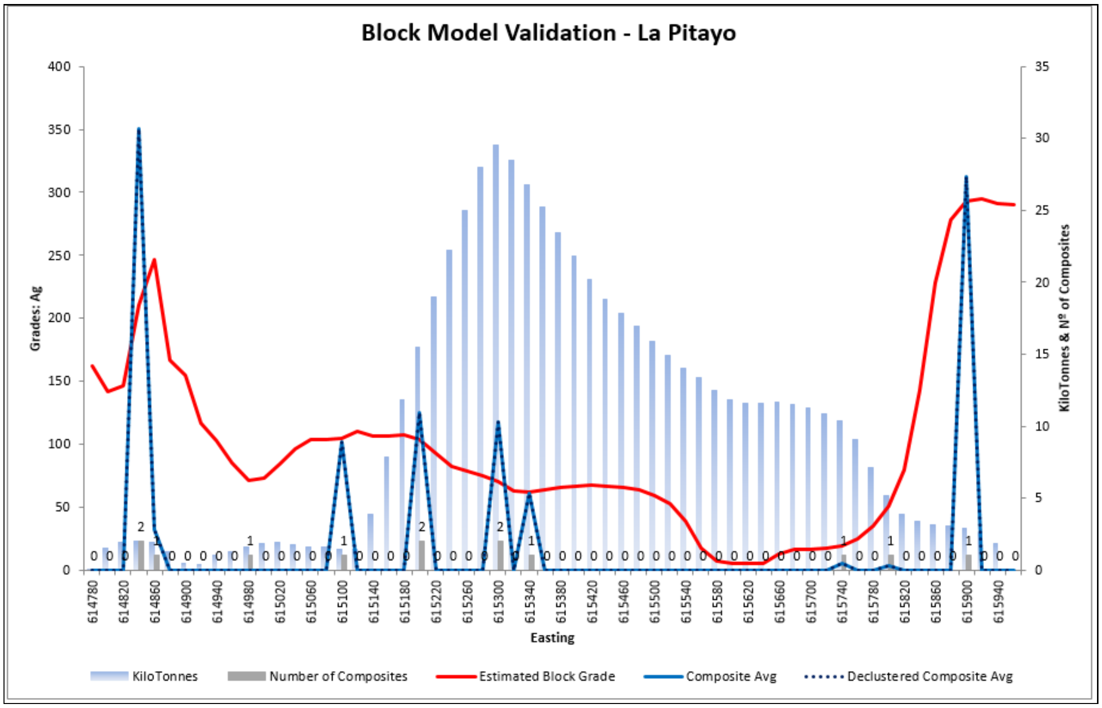
The swath plot validations indicated that the interpolation appropriately reflects the variations in declustered composite grades. Examples of silver swath plots for the largest domains, by volume, and for each vein zone, are presented in Figures 14-9 to 14-15.

Figure 14-9: Swath Plot La Intermedia Domain Silver ppm - by Northing



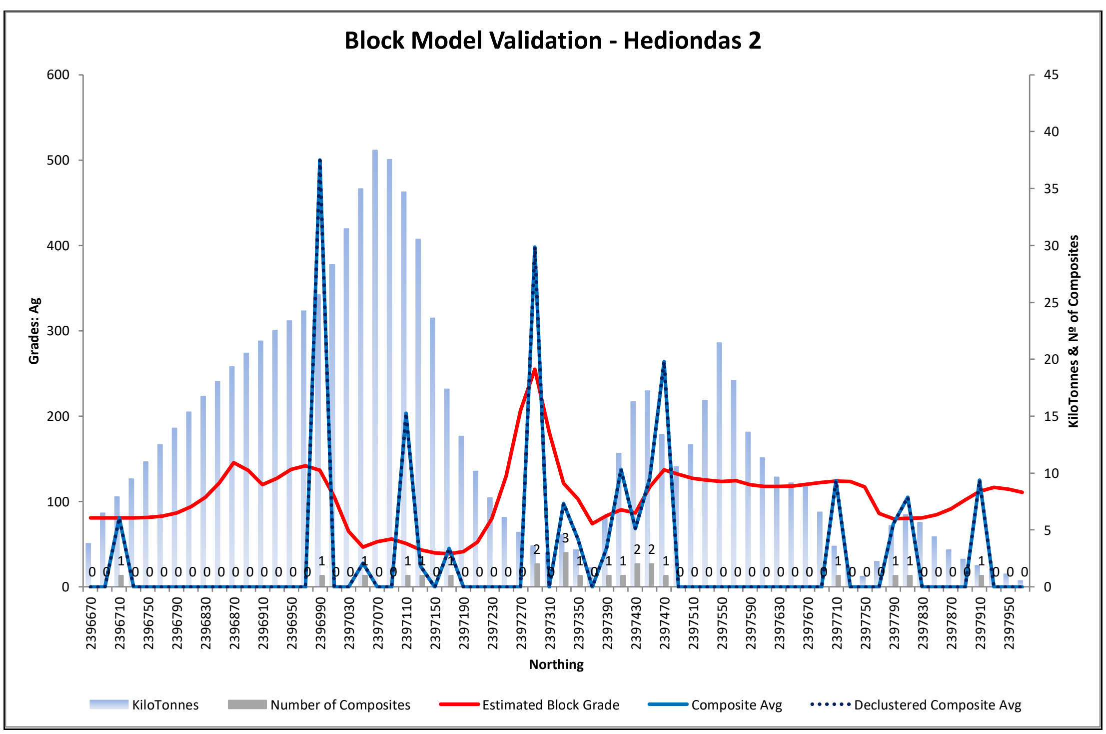
Source: Entech, 2017.

Figure 14-10: Swath Plot La Pitayo Domain Silver ppm - by Northing



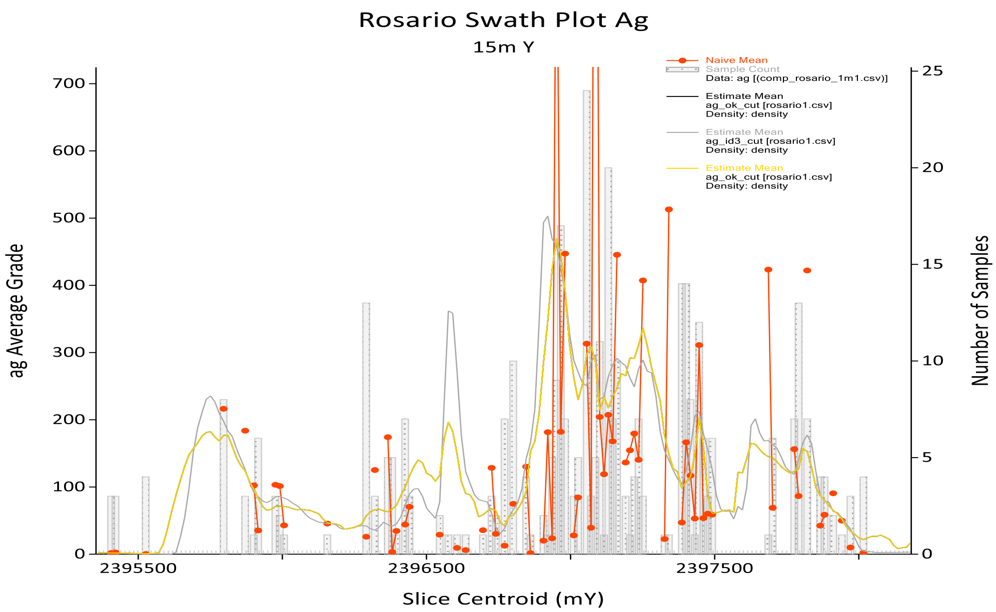
Source: Entech, 2017.

Figure 14-11: Swath Plot Hedionda 2 Domain Silver ppm - by Northing



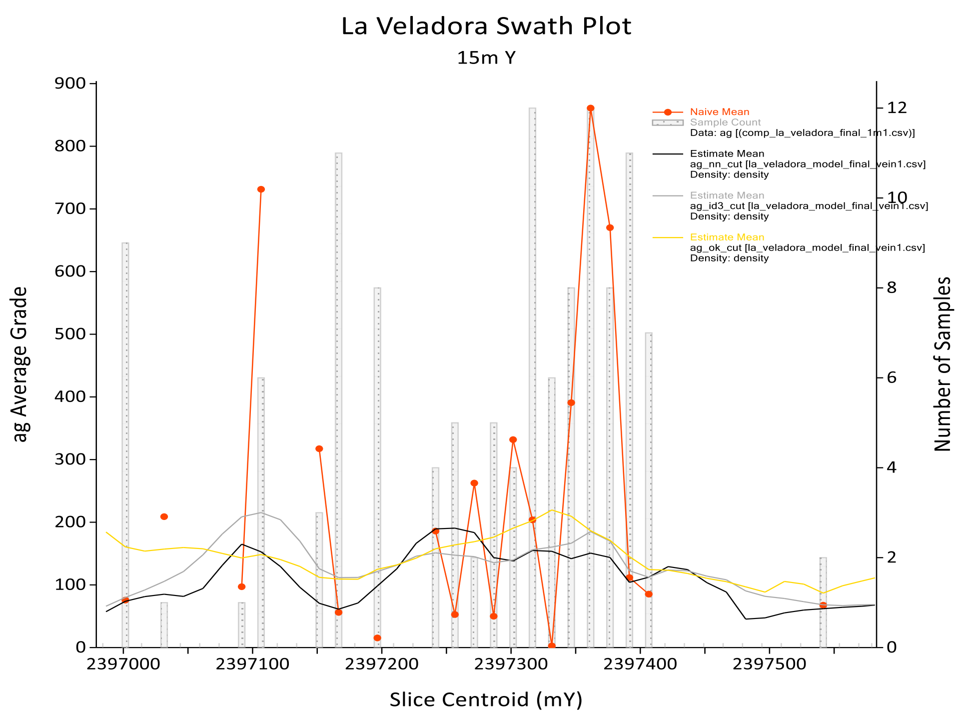
Source: Entech, 2017.

Figure 14-12: Swath Plot Rosario Domain Silver ppm - by Northing



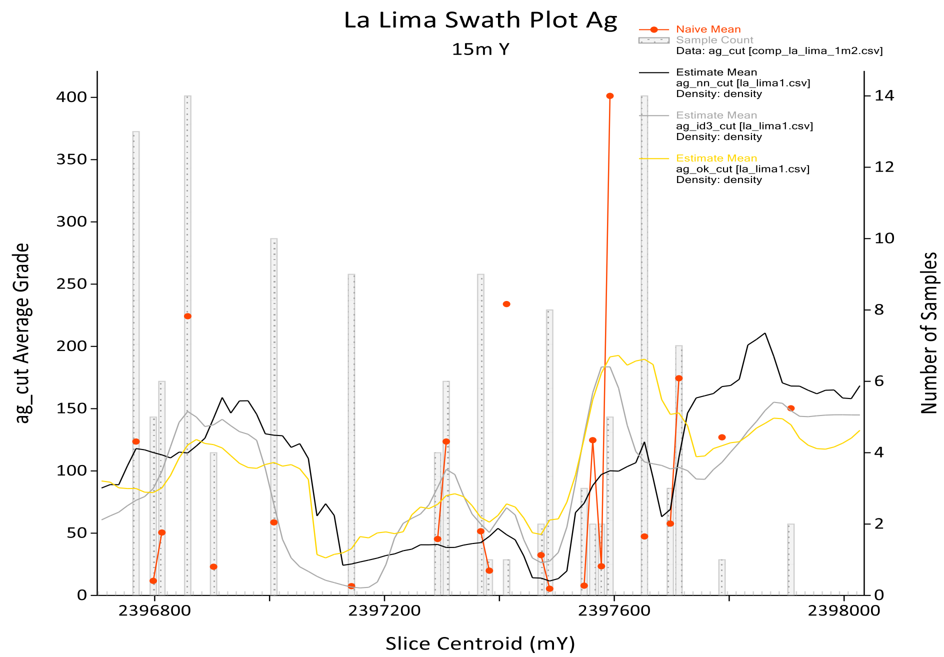
Source: FMS, 2017.

Figure 14-13: Swath Plot La Veladora Domain Silver ppm - by Northing



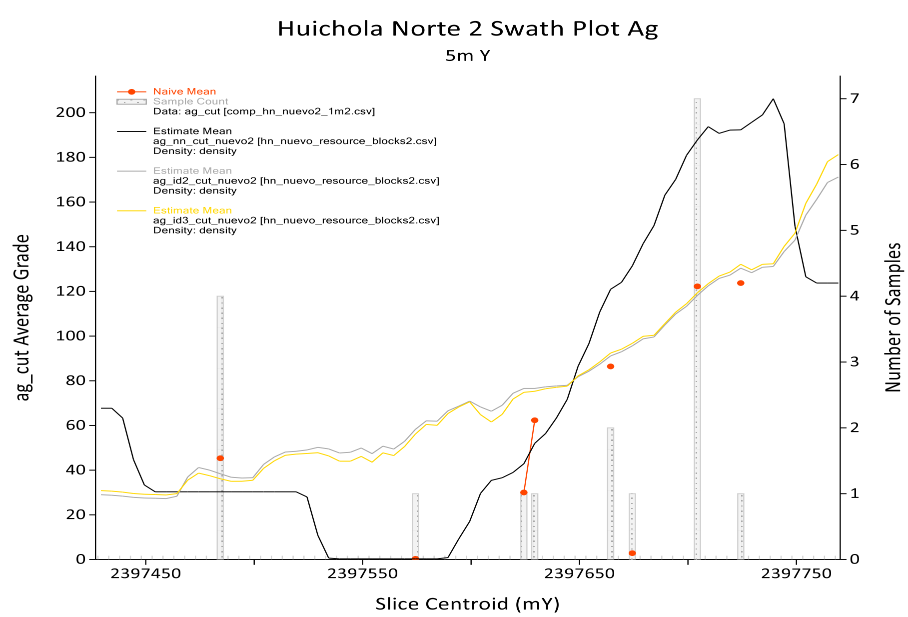
Source: FMS, 2017.

Figure 14-14: Swath Plot La Lima Domain Silver ppm - by Northing



Source: FMS, 2017.

Figure 14-15: Swath Plot Huichola Norte 2 Domain Silver ppm - by Northing



Source: FMS, 2017.

14.1.10 Mineral Resource Classification

Mineral Resources were classified as Measured, Indicated, or Inferred.

A range of criteria was considered when addressing the suitability of the classification boundaries to the Mineral Resource estimate for the IPHRVLH. These criteria included:

- Geological continuity and volume models;
- Drill spacing and drill data quality;
- Recent mining activity;
- Modelling technique; and
- Estimation properties, including search strategy, number of composites and average distance of composites from blocks.

In general, drilling, surveying, sampling, analytical methods, and controls are appropriate for the style of deposit under consideration.

Measured Mineral Resources were defined when the grade continuity was confirmed by recent production drives, identified by FMS as areas where:

- The geological confidence for volume and grade definition was high from recent mining activity, within 25 m or less; and
- There was a high confidence level in, and understanding of, the geology and controls on mineralization.

Indicated Mineral Resources were defined where a high level of geological confidence in the geometry, continuity, and grade was demonstrated, and were identified as areas where:

- There was good support from drilling - averaging a nominal 50 m or less between drill hole +/- mining activity intercepts along strike and down dip spacing; and
- The estimation quality was considered reasonable, as delineated by a number of minimum composites (number of composites informing the block estimate) greater or equal to 4.

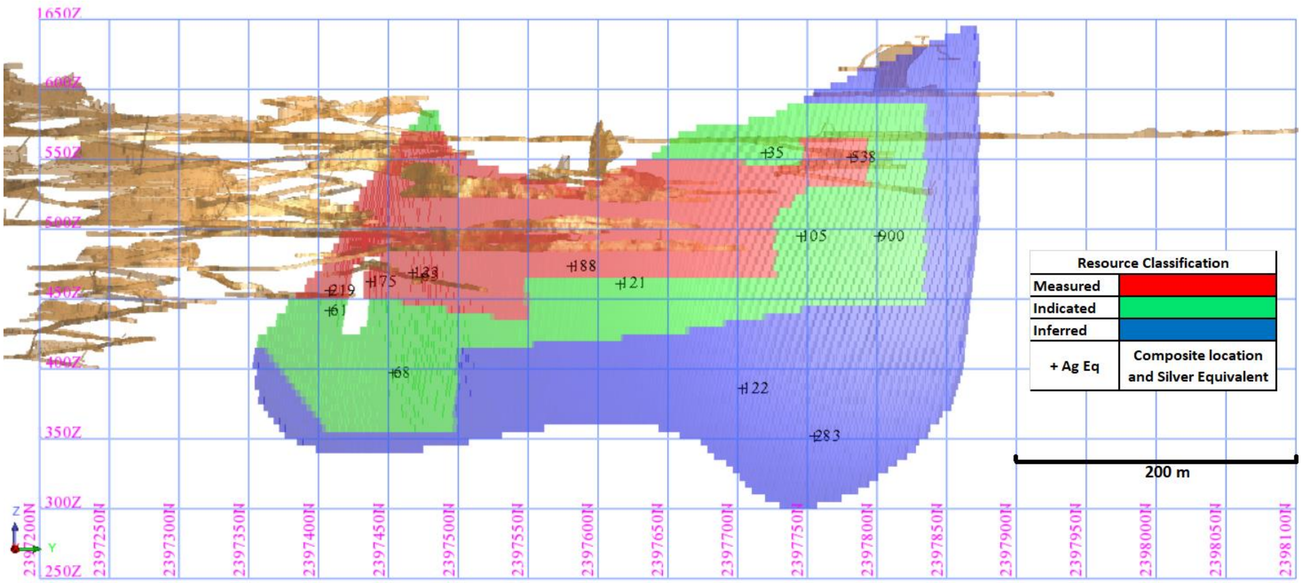
Inferred Mineral Resources were defined where a low level of confidence in the geometry, continuity, and grade was demonstrated, and were identified as areas where:

- The drill spacing averaged a nominal 75 m x 75 m along strike/down dip spacing (with some examples of up to 100 m x 100 m) or where drilling was within 80 m of the block estimate; and/or
- The estimation quality was low, as delineated by a number of minimum composites (number of composites informing the block estimate) greater or equal to 2, or greater or equal to 1 for gold

in the Rosario, La Veladora and Huichola Norte domains.

Figure 14-16 is an example of the resource classification in the Hedionda vein.

Figure 14-16: Longitudinal Section of the Hedionda Vein Coloured by Resource Class



14.1.11 Mineral Resource Statement

The Mineral Resources for the IPHRVLH deposits are reported for all classification classes using the following considerations:

- Metal prices considered were $19.00 /oz Ag, $1,300.00 /oz Au;
- Cut-off grade for IPHRVLH of 150 g/t Ag-Eq is based on actual and budgeted operating and sustaining costs;
- Metallurgical recovery used for oxide minerals was 83% for Ag and 87% for Au;
- Metal payable used was 99.90% for Ag, and 99.85% for Au in doré produced from oxide minerals; and
- Ag-Eq grade is estimated as: Ag-Eq = Ag Grade + Au Grade x [(Au Recovery x Au Payable x Au Price) / (Ag Recovery x Ag Payable x Ag Price)].

Alternatively, the Ag-Eq can be calculated using the following factor:

Ag-Eq (g/t) = Ag (g/t) + Au (g/t) x 72.2

Table 14-8: Measured and Indicated Mineral Resource Statement IPHRVLH, as at December 31, 2016

Zone	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario Zone	Measured	Oxides							
	Indicated	Oxides	817	249	0.51	286	6,542	13.50	7,527
	Total Measured + Indicated	Oxides	817	249	0.51	286	6,542	13.50	7,527
La Lima	Measured	Oxides	1	171	0.20	185	4	0.01	5
	Indicated	Oxides	300	219	0.06	223	2,119	0.58	2,161
	Total Measured + Indicated	Oxides	301	219	0.06	223	2,123	0.58	2,166
La Veladora	Measured	Oxides	79	276	0.28	296	701	0.71	752
	Indicated	Oxides	160	189	0.22	205	971	1.15	1,055
	Total Measured + Indicated	Oxides	239	218	0.24	235	1,672	1.86	1,808
Huichola Norte Zone	Measured	Oxides							
	Indicated	Oxides	25	177	0.70	228	144	0.57	185
	Total Measured + Indicated	Oxides	25	177	0.70	228	144	0.57	185
Intermedia Zone	Measured	Oxides	35	234	0.05	238	261	0.06	266
	Indicated	Oxides	99	231	0.04	234	734	0.13	743
	Total Measured + Indicated	Oxides	133	232	0.04	235	995	0.18	1,008
Pitayo Zone	Measured	Oxides	51	169	0.79	226	280	1.30	375
	Indicated	Oxides	80	128	1.30	222	328	3.33	571
	Total Measured + Indicated	Oxides	131	144	1.10	223	608	4.64	946
Hedionda	Measured	Oxides	94	267	0.43	298	810	1.29	904
	Indicated	Oxides	215	513	0.92	579	3,551	6.39	4,017
	Total Measured + Indicated	Oxides	309	438	0.77	494	4,361	7.68	4,921
Total San Martín	***Measured***	*Oxides*	***260***	***246***	***0.40***	***275***	***2,054***	***3.37***	***2,297***
	Indicated	*Oxides*	***1,696***	***264***	***0.47***	***297***	***14,378***	***25.50***	***16,219***
	Total Measured + Indicated	***Oxides***	***1,955***	***261***	***0.46***	***294***	***16,427***	***28.84***	***18,509***

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH were prepared by FMS. The Qualified Person for the estimate is Phillip J Spurgeon, P.Geo., an employee of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves, and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t Ag-Eq. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.9% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

Table 14-9: San Martín Inferred Mineral Resource Statement IPHRVLH, as at December 31, 2016

Zone	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario	Inferred	Oxides	470	202	0.09	208	3,052	1.36	3,151
Bajo Rosario			363	250	0.36	276	2,918	4.20	3,221
La Lima			719	197	0.05	201	4,554	1.16	4,637
La Veladora			409	213	0.06	217	2,801	0.79	2,858
Huichola Norte 2			19	167	0.67	215	102	0.41	132
Huichola Norte 3			27	443	0.68	492	385	0.59	427
Huichola Norte 4			21	246	0.11	254	166	0.07	171
Intermedia			17	207	0.02	208	113	0.01	114
Intermedia 2			9	206	0.04	209	60	0.01	60
Intermedia 3			1	256	0.11	264	8	0.00	8
La Guitarrona			13	65	1.68	186	27	0.70	78
La Pitayo			246	80	2.45	257	633	19.38	2,032
La Reina			10	95	1.03	169	31	0.33	54
Hedionda 1			190	519	0.94	587	3,170	5.74	3,585
Hedionda 2			55	252	0.45	284	446	0.80	503
Total Inferred	*Inferred*	*Oxides*	*2,569*	*224*	*0.43*	*255*	*18,465*	*35.55*	*21,032*

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH were prepared by FMS. The Qualified Person for the estimate is Phillip J Spurgeon, P.Geo., an employee of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves, and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t Ag-Eq. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.90% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

14.1.12 Sensitivity of the Block Model to Selection of Cut-Off Grade

Mineral Resources can be sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the block model quantities and grade estimates are presented at different cut-off grades for the Mineral Resources (Tables 14-10 to 14-16).

Table 14-10: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for Intermedia Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured	> 195	28	240	0.43	384	217	0.4	347
	> 175	32	236	0.43	379	243	0.4	388
	> 150	35	232	0.43	371	259	0.5	415
	> 125	38	230	0.43	369	280	0.5	449
	> 100	41	225	0.43	360	296	0.6	475
Indicated	> 195	84	231	0.31	383	625	0.8	1,037
	> 175	91	225	0.31	374	659	0.9	1,095
	> 150	99	222	0.31	369	704	1.0	1,169
	> 125	116	219	0.3	364	813	1.1	1,351
	> 100	138	216	0.3	359	962	1.3	1,599
Inferred	> 195	23	262	0.41	443	192	0.3	325
	> 175	25	260	0.4	438	212	0.3	357
	> 150	27	254	0.41	428	219	0.4	368
	> 125	38	251	0.41	422	308	0.5	518
	> 100	61	240	0.41	406	471	0.8	796

Note: Base case highlighted.

Table 14-11: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for Pitayo Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured	> 195	28	215	0.79	273	194	0.7	245
	> 175	37	195	0.78	251	232	0.9	299
	> 150	51	169	0.79	227	280	1.3	375
	> 125	64	153	0.77	210	317	1.6	433
	> 100	74	144	0.72	196	342	1.7	467
Indicated	> 195	57	145	1.35	244	266	2.5	447
	> 175	66	136	1.37	236	289	2.9	501
	> 150	80	128	1.3	223	328	3.3	571
	> 125	107	117	1.15	201	403	4.0	692
	> 100	133	111	0.99	183	476	4.2	786
Inferred	> 195	232	80	2.52	264	600	18.8	1,972
	> 175	250	80	2.45	259	639	19.7	2,080
	> 150	269	80	2.36	252	690	20.4	2,181
	> 125	287	80	2.26	245	736	20.8	2,258
	> 100	299	80	2.19	239.47	764	21.1	2,303

Note: Base case is highlighted.

Table 14-12: Grade and Tonnage Table for Various Ag-Eg Cut-Off Grades for Grades for Hedionda Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured	> 195	65	322	0.46	355	675	1.0	746
	> 175	75	300	0.46	333	723	1.1	803
	> 150	94	267	0.43	298	809	1.3	904
	> 125	181	197	0.32	221	1,149	1.9	1,288
	> 100	215	182	0.3	204	1,257	2.1	1,409
Indicated	> 195	204	534	0.96	604	3,497	6.3	3,956
	> 175	206	529	0.95	598	3,512	6.3	3,972
	> 150	215	513	0.92	581	3,551	6.4	4,017
	> 125	266	437	0.79	495	3,744	6.8	4,240
	> 100	298	401	0.73	454	3,847	7.0	4,358
Inferred	> 195	231	477	0.86	540	3,543	6.4	4,010
	> 175	238	468	0.84	529	3,582	6.4	4,053
	> 150	245	459	0.83	520	3,612	6.5	4,086
	> 125	256	444	0.8	503	3,657	6.6	4,136
	> 100	286	408	0.73	462	3,754	6.7	4,245

Note: Base case is highlighted.

Table 14-13: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for Grades for Rosario Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Indicated	> 200	544	304	0.55	344	5320	10	6019
	>175	664	277	0.53	316	5909	11	6739
	> 150	817	249	0.51	287	6542	13	7533
	> 125	1016	222	0.48	258	7260	16	8415
	> 100	1343	190	0.43	222	8225	19	9576
Inferred	> 200	569	251	0.22	267	4590	4	4890
	>175	694	239	0.20	254	5341	5	5672
	> 150	833	223	0.21	238	5981	6	6386
	> 125	1037	203	0.21	219	6775	7	7301
	> 100	1467	173	0.20	188	8140	10	8843

Note: Base case is highlighted.

Table 14-14: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for La Veladora Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured	> 200	65	301	0.30	323	625	1	671
	>175	73	287	0.29	308	670	1	720
	> 150	79	276	0.28	297	700	1	752
	> 125	85	266	0.27	285	726	1	780
	> 100	98	244	0.25	262	769	1	827
Indicated	> 200	64	236	0.26	255	490	1	529
	>175	103	212	0.24	230	701	1	760
	> 150	160	189	0.22	206	971	1	1055
	> 125	262	163	0.21	179	1374	2	1504
	> 100	373	144	0.20	159	1732	2	1904
Inferred	> 200	275	233	0.04	235	2059	0	2081
	>175	359	221	0.06	225	2547	1	2597
	> 150	409	213	0.06	217	2801	1	2857
	> 125	472	203	0.06	207	3074	1	3140
	> 100	549	189	0.06	194	3341	1	3415

Note: Base case is highlighted.

Table 14-15: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for Grades for La Lima Zone

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Measured	> 200	0	195	0.22	211	2	0	2
	>175	1	186	0.22	202	3	0	3
	> 150	1	170	0.19	185	4	0	5
	> 125	6	133	0.12	142	24	0	26
	> 100	11	122	0.07	127	44	0	46
Indicated	> 200	156	267	0.06	271	1333	0	1355
	>175	209	246	0.06	250	1651	0	1680
	> 150	300	219	0.06	224	2119	1	2158
	> 125	438	192	0.05	196	2710	1	2763
	> 100	574	173	0.05	177	3187	1	3261
Inferred	> 200	287	244	0.07	249	2254	1	2299
	>175	399	227	0.06	231	2909	1	2965
	> 150	719	197	0.05	201	4556	1	4647
	> 125	1210	170	0.05	174	6630	2	6782
	> 100	1608	156	0.05	159	8040	3	8232

Note: Base case is highlighted.

Table 14-16: Grade and Tonnage Table for Various Ag-Eq Cut-Off Grades for Grades for Huichola Norte

Classification	Cut-Off (Ag-Eq g/t)	k Tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Indicated	> 200	14	220	0.88	284	96	0	125
	>175	15	214	0.86	276	102	0	132
	> 150	25	177	0.7	228	144	1	185
	> 125	31	165	0.64	212	165	1	212
	> 100	36	154	0.6	198	179	1	230
Inferred	> 200	51	354	0.55	394	575	1	640
	>175	56	336	0.52	374	604	1	672
	> 150	67	303	0.5	339	652	1	730
	> 125	76	281	0.47	315	685	1	769
	> 100	88	254	0.44	286	722	1	815

Note: Base case is highlighted.

14.2 Mineral Resources for Other Veins (Zuloaga, La Esperanza, Veta 420, Dique 690, La Blanca, Desprendimiento 7000)

Mineral Resource estimation of minor veins at San Martín was undertaken using a polygonal method supported by chip samples across mineralization and diamond drill holes and underground mapping carried out between January 2007 and the effective date of this Report. The polygonal method was used to construct longitudinal sections of vein structures.

Polygons of Indicated Mineral Resources are projected vertically (up and down) 45 m from mine levels informed by chip samples. Indicated Mineral Resources are projected 25 m around drill hole intercepts where there is continuity of mineralization, as indicated by drilling information or by mine levels with sample lines reporting potentially economic grades. Inferred Mineral Resources are projected up to 50 m from drill hole intercepts or polygons of Indicated Mineral Resources. In most cases, Inferred Mineral Resources are projected 20 m beyond Indicated Mineral Resources.

Drill hole spacing varies generally from 15 to 75 m in zones of Indicated Mineral Resources, whereas chip sample lines are spaced between 1.5 and 3.0 m in those mine levels with Indicated Mineral Resources.

The December 31, 2016, Mineral Resource estimate does not report Measured Mineral Resources.

Figures 14-17 to 14-26 show longitudinal sections for Zuloaga (A, B, C, D and E), La Esperanza, Veta 420, Dique 690, La Blanca, and Desprendimiento 7000. Once the polygons for Measured, Indicated and Inferred Mineral Resources are drawn on longitudinal sections (using BRISCAD Pro V12 © software), the area, average width, volume, and weighted mean grade are calculated for every polygon.

Grade caps are defined by analysing cumulative frequency histograms; the grade at the 95th percentile is selected. Capping is done per sample before compositing by length of channel line or drill hole intercept. Tonnage is calculated using the calculated volume and an average SG of 2.44.

Figure 14-17: Longitudinal Section of Zuloaga Vein (A)

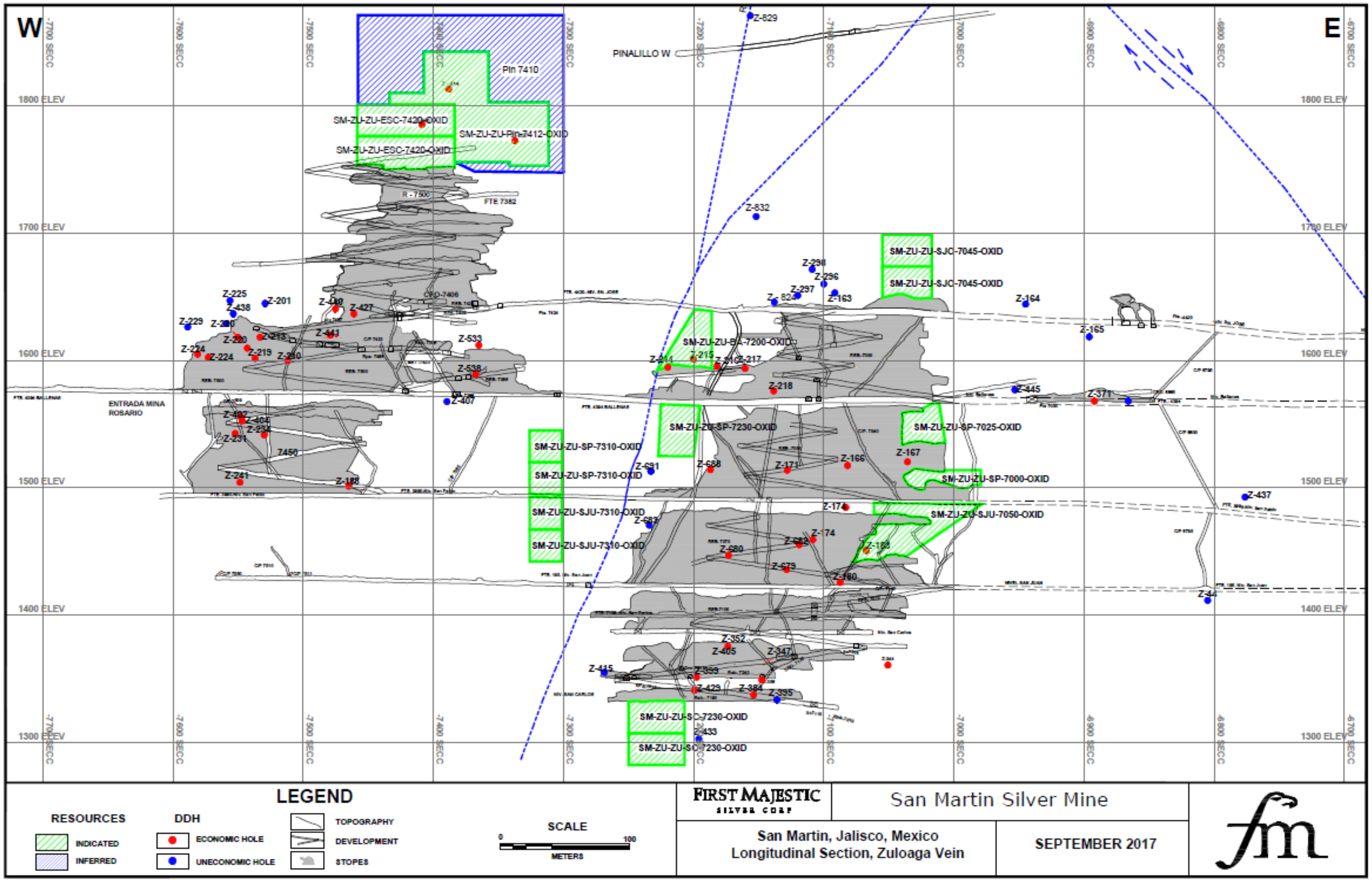


Figure 14-18: Longitudinal Section of Zuloaga Vein (B)

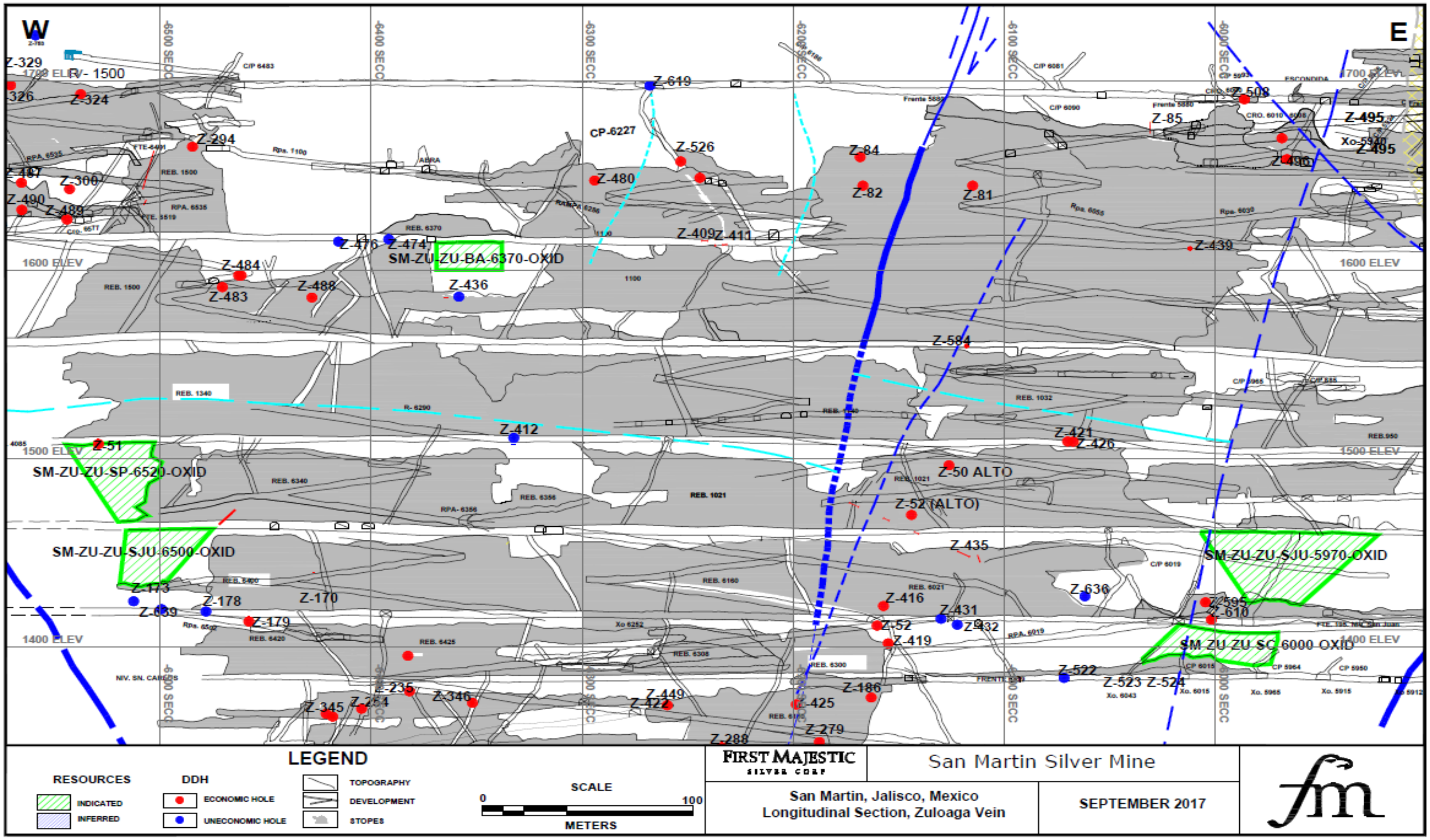


Figure 14-19: Longitudinal Section of Zuloaga Vein (C)

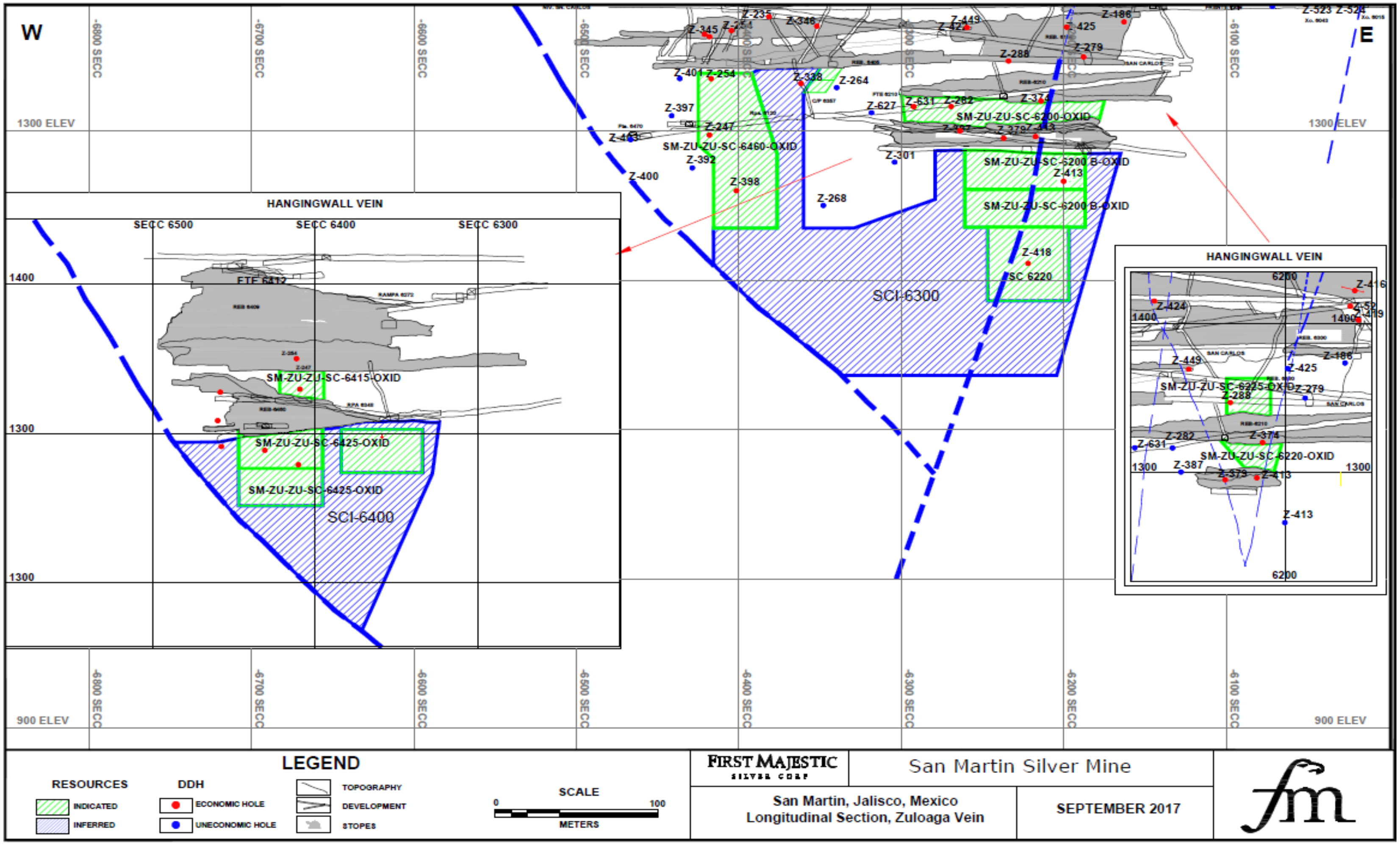


Figure 14-20: Longitudinal Section of Zuloaga Vein (D)

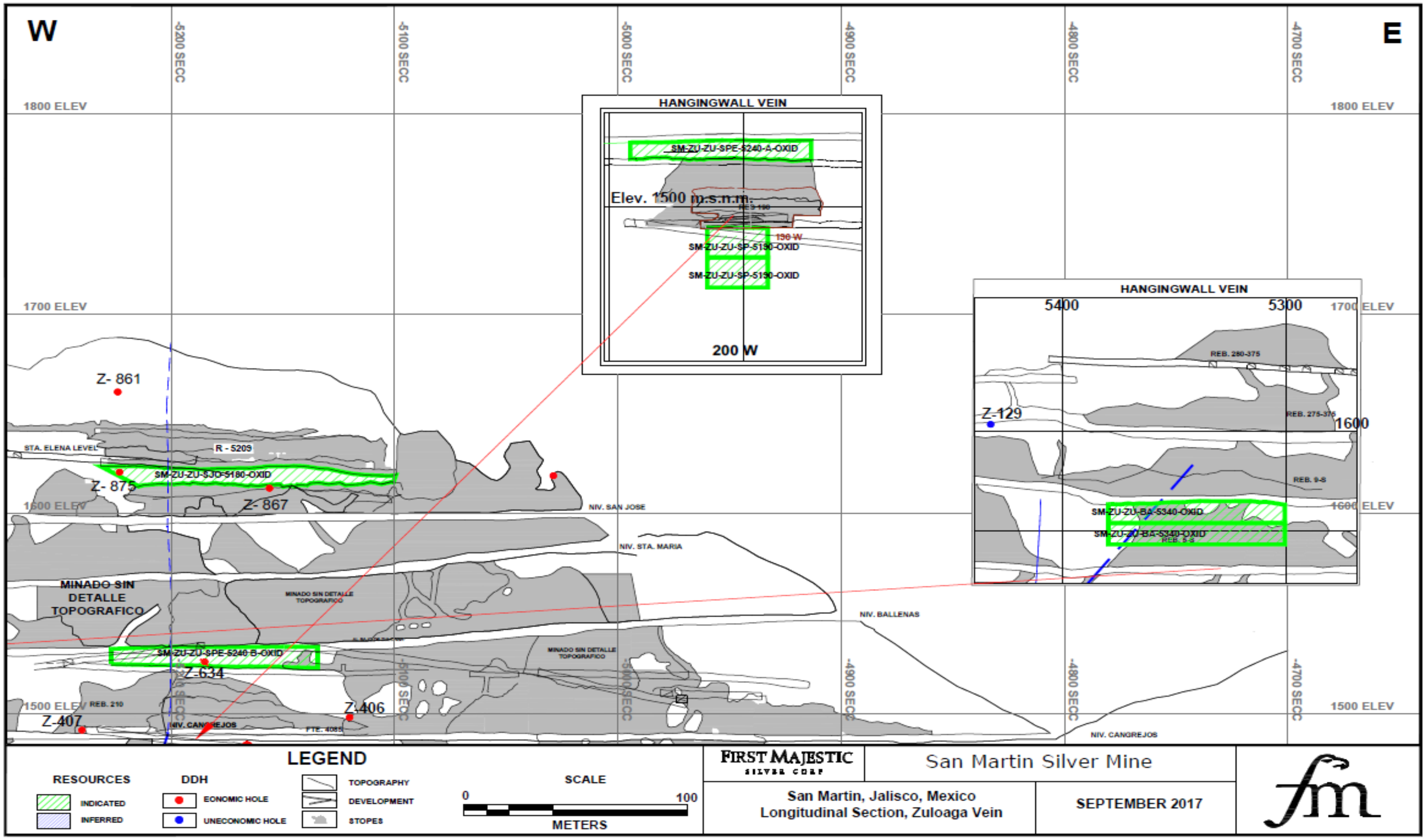


Figure 14-21: Longitudinal Section of Zuloaga Vein (E)

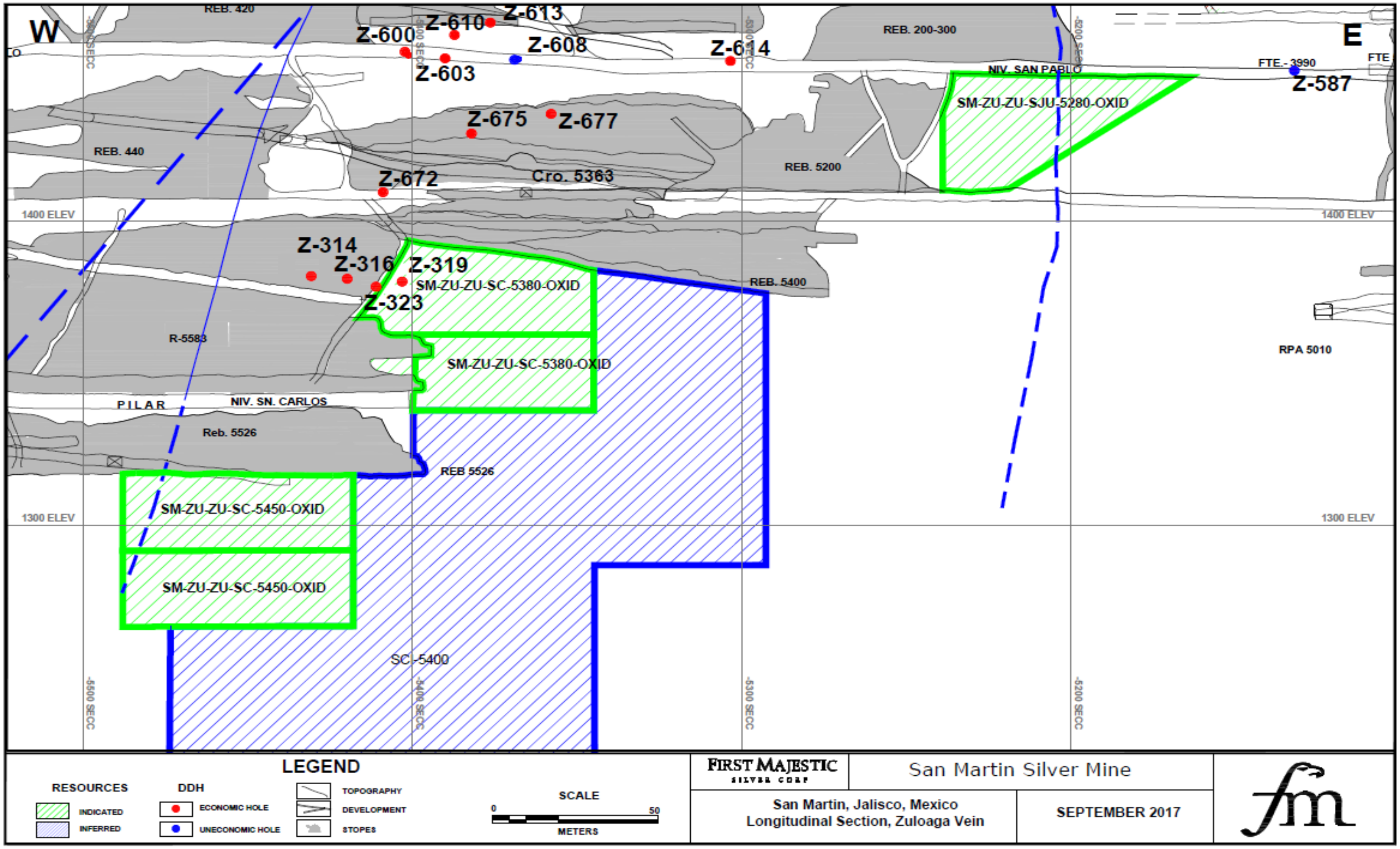


Figure 14-22: Longitudinal Section of La Esperanza Vein

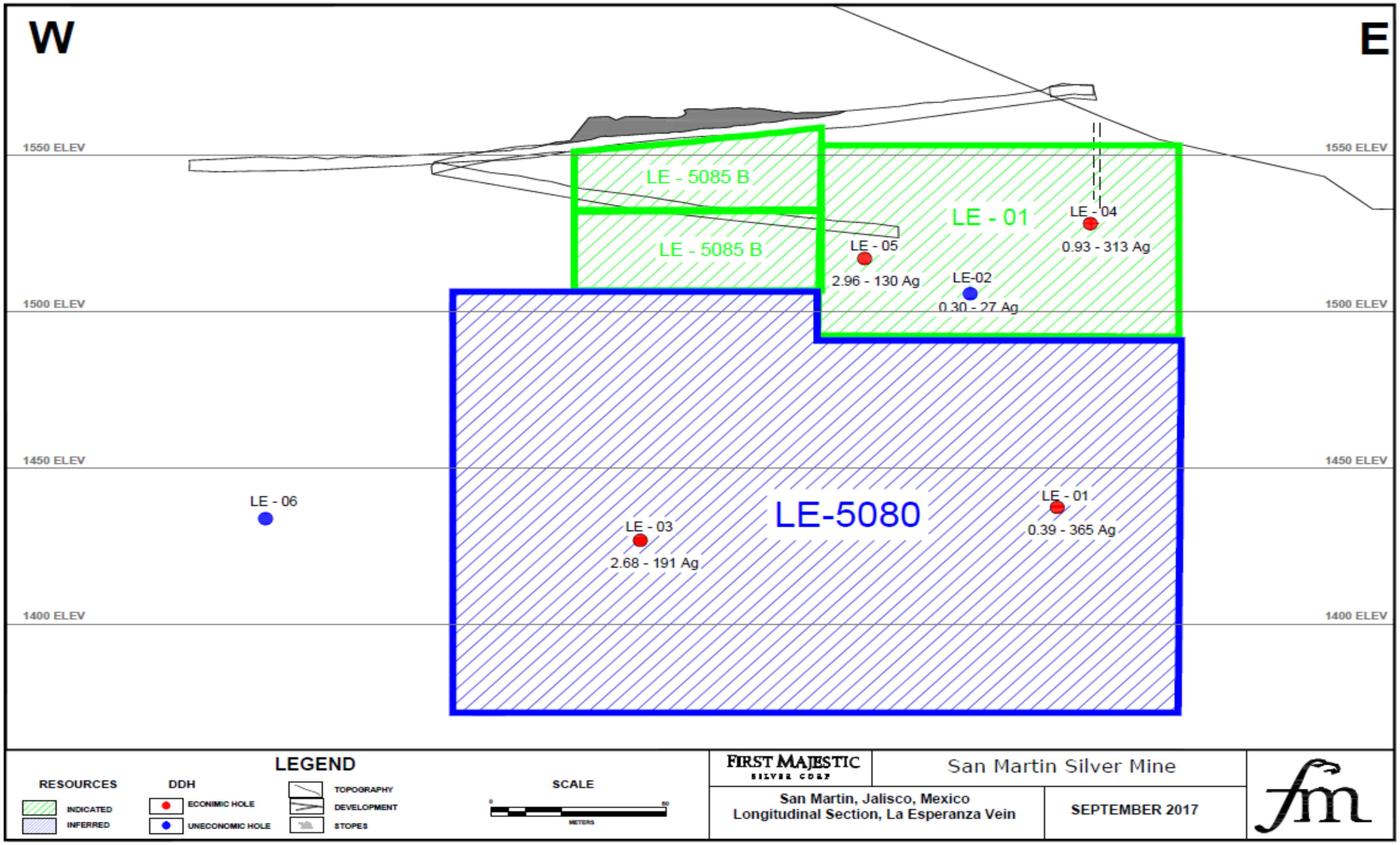


Figure 14-23: Longitudinal Section of 420 Vein

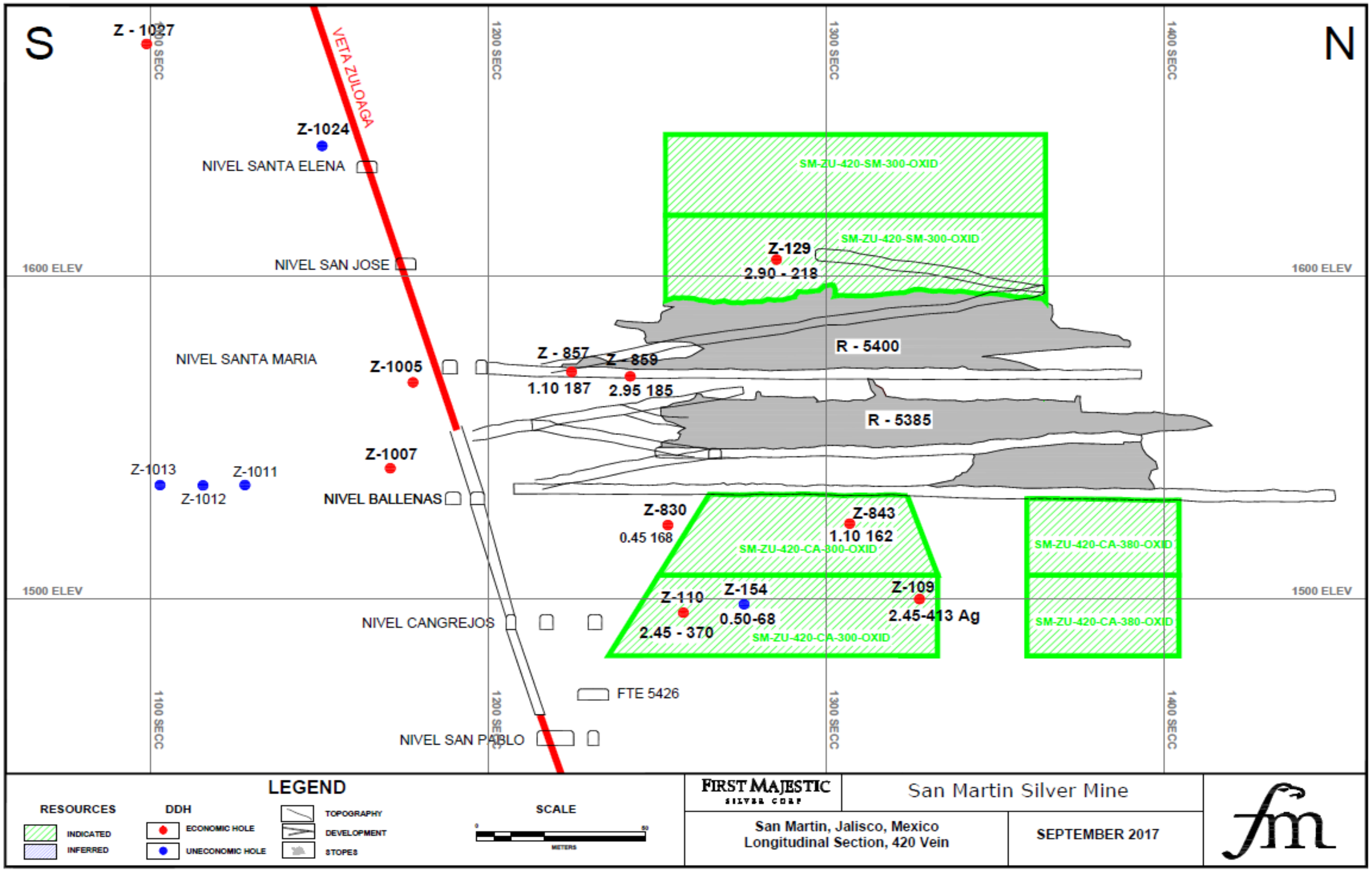


Figure 14-24: Longitudinal Section of 690 Vein

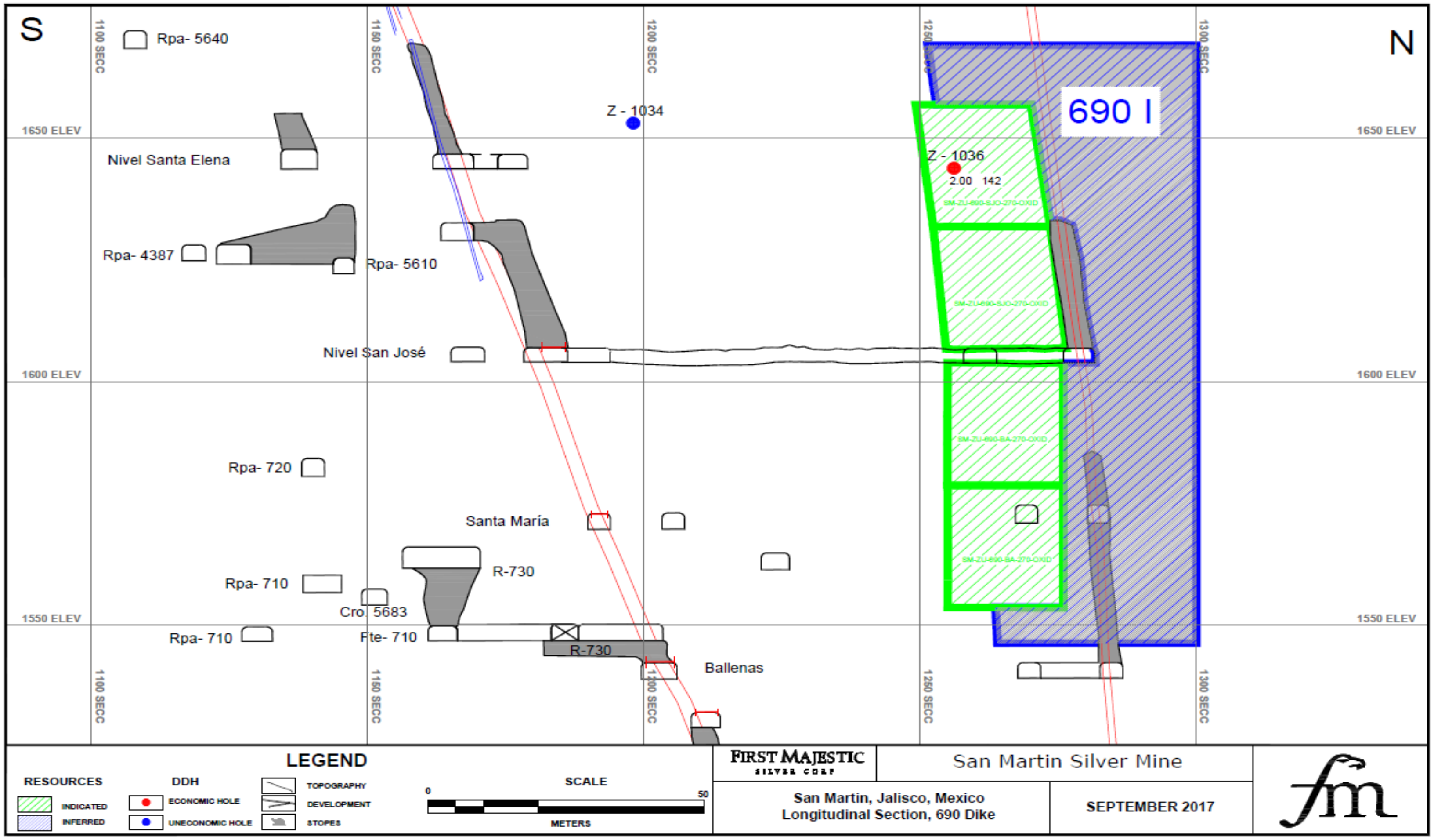


Figure 14-25: Longitudinal Section of La Blanca Vein

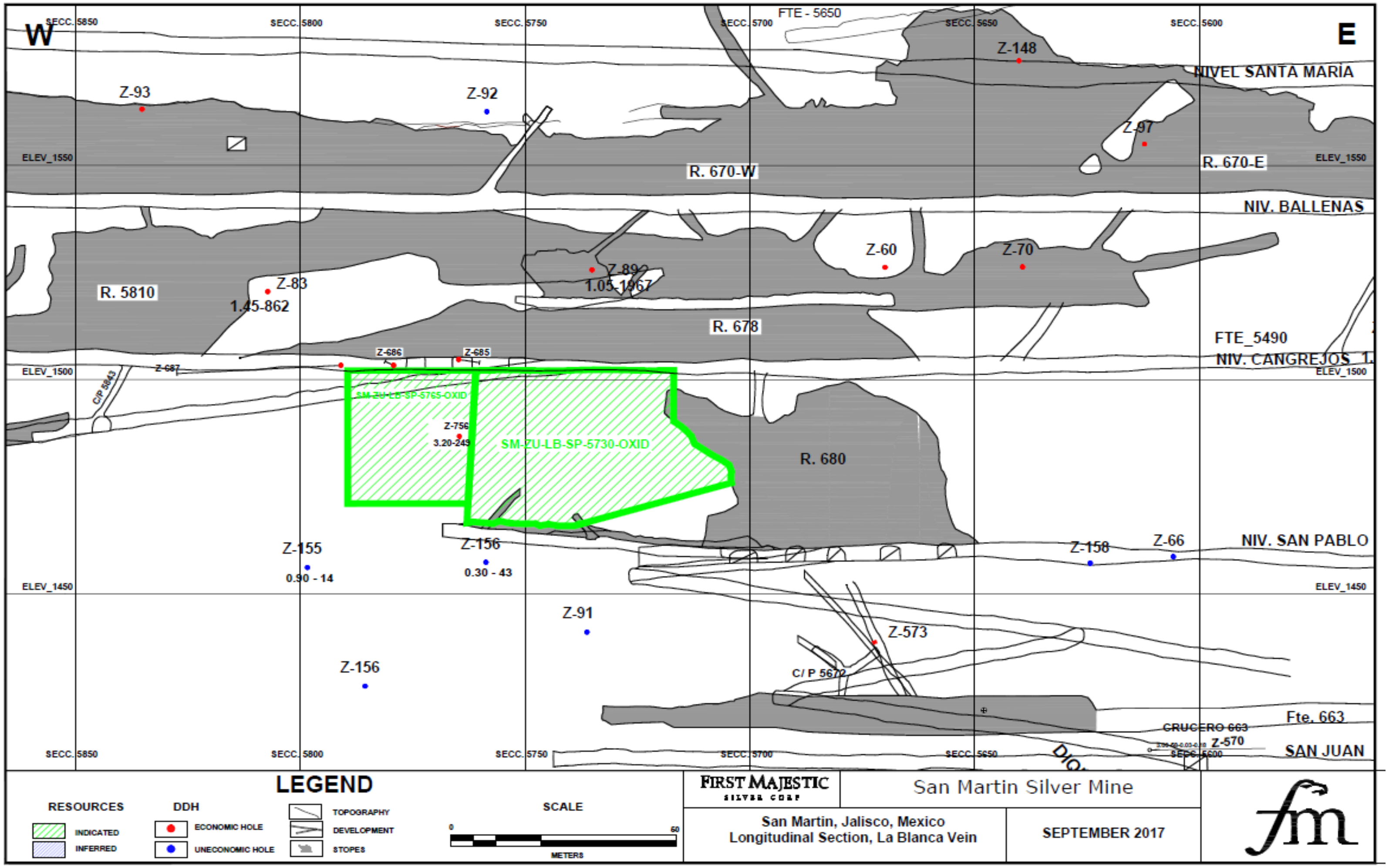
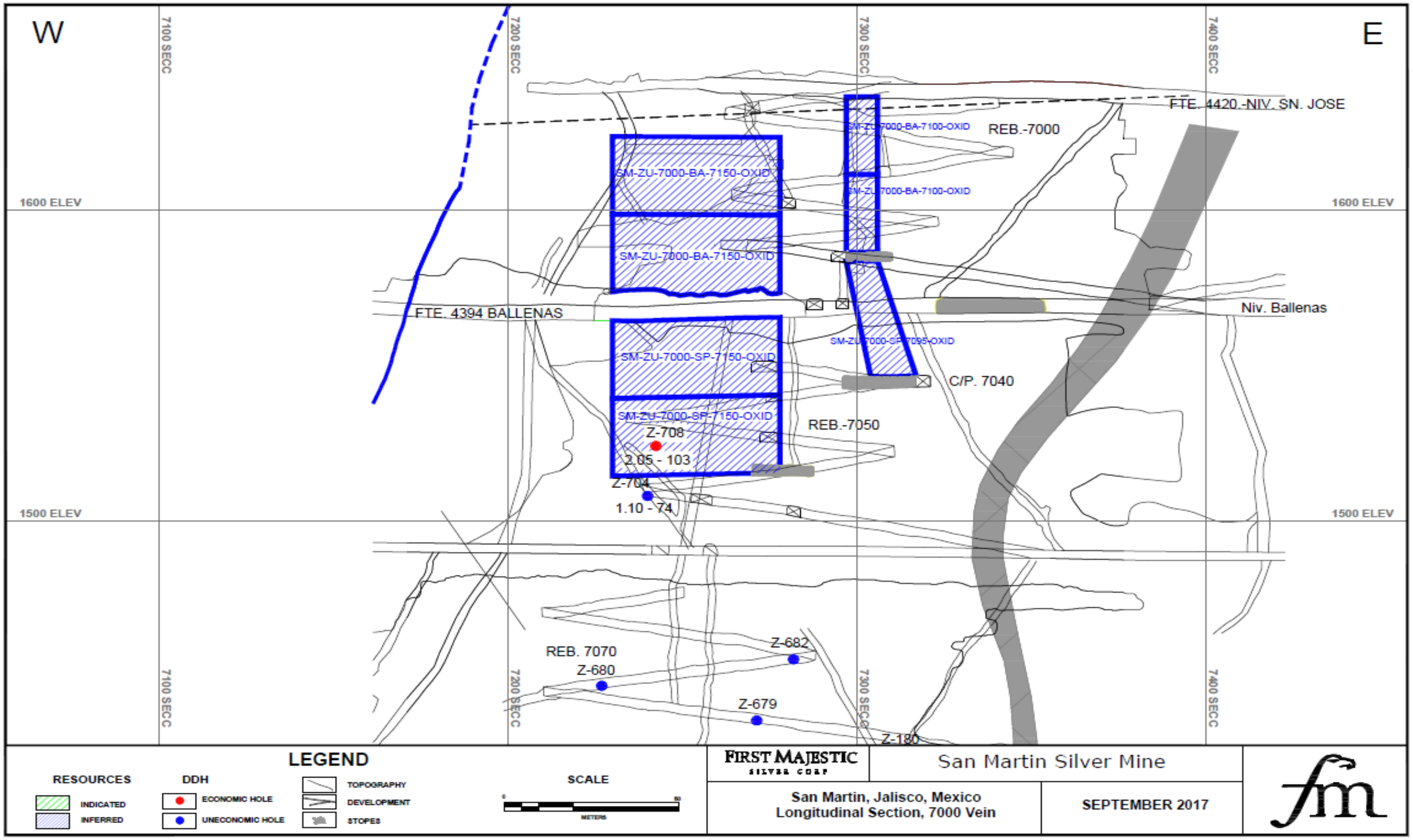


Figure 14-26: Longitudinal Section of Desprendimiento 7000 Vein



14.2.1 Mineral Resource Statement

Mineral Resources are reported per the following considerations:

- Metal price used was \$19.00 /oz Ag;
- The cut-off grade of 150 g/t Ag is based on actual and budgeted operating and sustaining costs;
- Metallurgical recovery used for all material was 83% for Ag; and
- Metal payable used was 99.9% for Ag.

Table 14-17: Indicated Mineral Resource Statement, Other Deposits, as at December 31, 2016

Vein Zone	Mineral Type	Category	k Tonnes	Ag	Ag (k Oz)
Zuloaga	Oxides	Indicated	354	257	2,929
La Blanca	Oxides	Indicated	14	205	94
Veta 420	Oxides	Indicated	35	271	305
La Esperanza	Oxides	Indicated	31	266	266
Dique 690	Oxides	Indicated	5	286	48
Total Indicated			*440*	*258*	*3,642*

Notes:

1. Mineral Resources were prepared by FMS. The Qualified Person for the estimate is Jesús M. Velador Beltrán, MMSA, QP, an employee of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31st, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above silver grade of 150 g/t. Assumptions for silver include metal prices of \$19.00 /oz; metallurgical recoveries of 83% and metal payability of 99.9%.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

Table 14-18: Inferred Mineral Resource Statement, Other Deposits, as at December 31, 2016

Vein Zone	Mineral Type	Category	k Tonnes	Ag	Ag (k Oz)
Zuloaga	Oxides	Inferred	410	224	2,950
Desprendimiento 7000	Oxides	Inferred	15	305	145
La Esperanza	Oxides	Inferred	111	266	952
Dique 690	Oxides	Inferred	8	286	75
Total Inferred			*546*	*236*	*4,141*

Notes:

1. Mineral Resources were prepared by FMS. The Qualified Person for the estimate is Jesús M. Velador Beltrán, MMSA, QP, an employee of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31st, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above silver grade of 150 g/t. Assumptions for silver include metal prices of \$19.00 /oz; metallurgical recoveries of 83% and metal payability of 99.9%.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

14.3 Consolidated Mineral Resource Statement

Mineral Resources are reported per the following considerations:

- Metal prices considered were $19.00 /oz Ag and $1,300 /oz Au;
- The cut-off grade for IPHRVLH of 150 g/t Ag-Eq and for Other Veins is 150 g/t Ag; both based on actual and budgeted operating and sustaining costs;
- Metallurgical recovery used for oxide minerals was 83% for Ag and 87% for Au;
- Metal payable used was 99.9% for Ag, and 99.85% for Au in concentrates produced from oxide minerals; and
- Ag-Eq grade is estimated as: Ag-Eq = Ag Grade + Au Grade x [(Au Recovery x Au Payable x Au Price) / (Ag Recovery x Ag Payable x Ag Price)].

Alternatively, the Ag-Eq can be calculated using the following factor:

Ag-Eq (g/t) = Ag (g/t) + Au (g/t) * 72.2

The Mineral Resources may be impacted by additional infill and exploration drilling that may identify additional mineralization or cause changes to the current domain shapes and geological assumptions. The Mineral Resources may also be affected by subsequent assessments of mining, processing, environment, permitting, taxation, socio-economics, and other factors.

Table 14-19: San Martín Consolidated Mineral Resource Statement, as at December 31, 2016

Zone	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario Zone	Measured								
	Indicated	Oxides	817	249	0.51	286	6,541	13.40	7,508
	Total Measured + Indicated	Oxides	817	249	0.51	286	6,541	13.40	7,508
La Lima	Measured	Oxides	1	171	0.20	185	5	0.01	6
	Indicated	Oxides	300	219	0.06	223	2,112	0.58	2,154
	Total Measured + Indicated	Oxides	301	219	0.06	223	2,119	0.58	2,161
La Veladora	Measured	Oxides	79	276	0.28	296	701	0.71	752
	Indicated	Oxides	160	189	0.22	205	972	1.13	1,054
	Total Measured + Indicated	Oxides	239	218	0.24	235	1,675	1.84	1,808
Huichola Norte Zone	Measured								
	Indicated	Oxides	25	177	0.70	228	142	0.56	183
	Total Measured + Indicated	Oxides	25	177	0.70	228	142	0.56	183
Intermedia Zone	Measured	Oxides	35	234	0.05	238	263	0.06	267
	Indicated	Oxides	99	231	0.04	234	735	0.13	744
	Total Measured + Indicated	Oxides	133	232	0.04	235	992	0.17	1,004
Pitayo Zone	Measured	Oxides	51	169	0.79	226	277	1.30	371
	Indicated	Oxides	80	128	1.30	222	329	3.34	571
	Total Measured + Indicated	Oxides	131	144	1.10	223	606	4.63	941
Hedionda	Measured	Oxides	94	267	0.43	298	807	1.30	901
	Indicated	Oxides	215	513	0.92	579	3,546	6.36	4,005
	Total Measured + Indicated	Oxides	309	438	0.77	494	4,351	7.65	4,904
Other Veins	Measured								
	Indicated	Oxides	440	258	0.00	258	3,650	0.00	3,650
	Total Measured + Indicated	Oxides	440	258	0.00	258	3,650	0.00	3,650
Total San Martín	**Measured**	**Oxides**	**260**	**246**	**0.40**	**275**	**2,054**	**3.37**	**2,297**
	Indicated	**Oxides**	**2,136**	**263**	**0.37**	**290**	**18,028**	**25.50**	**19,869**
	Total Measured + Indicated	***Oxides***	***2,396***	***261***	***0.38***	***288***	***20,081***	***28.87***	***22,166***

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH and Other Veins were prepared by FMS. The Qualified Person for the IPHRVLH estimate is Phillip J Spurgeon, P.Geo., and the Qualified Person for the Other Veins is Jesús M. Velador Beltrán, MMSA, both employees of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t for IPHRVLH and above silver grade of 150 g/t for Other Veins. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.9% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

Table 14-20: Consolidated Inferred Mineral Resource San Martín, as at December 31, 2016

Vein	Category	Mineral Type	k tonnes	Grade			Contained Metal		
				Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario	Inferred	Oxides	470	202	0.09	209	3,052	1.36	3,151
Bajo Rosario		Oxides	363	250	0.36	277	2,918	4.20	3,221
La Lima		Oxides	719	197	0.05	201	4,554	1.16	4,637
La Veladora		Oxides	409	213	0.06	217	2,801	0.79	2,858
Huichola Norte 2		Oxides	19	167	0.67	216	102	0.41	132
Huichola Norte 3		Oxides	27	443	0.68	493	385	0.59	427
Huichola Norte 4		Oxides	21	246	0.11	254	166	0.07	171
Intermedia		Oxides	17	207	0.02	209	113	0.01	114
Intermedia 2		Oxides	9	206	0.04	209	60	0.01	60
Intermedia 3		Oxides	1	256	0.11	265	8	0.00	8
La Guitarrona		Oxides	13	65	1.68	188	27	0.70	78
La Pitayo		Oxides	246	80	2.45	259	633	19.38	2,032
La Reina		Oxides	10	95	1.03	170	31	0.33	54
Hedionda 1		Oxides	190	519	0.94	587	3,170	5.74	3,585
Hedionda 2		Oxides	55	252	0.45	285	446	0.80	503
Zuloaga		Oxides	410	224		224	2,953		2,953
Desprendimiento 7000		Oxides	15	305		305	147		147
La Esperanza		Oxides	111	266		266	949		949
Dique 690		Oxides	8	286		286	74		74
Total		***Oxides***	***3,113***	***226***	***0.36***	***251***	***22,588***	***35.55***	***25,155***

Notes:

1. Mineral Resources for IPH were prepared by Entech. Mineral Resources for RVLH and Other Veins were prepared by FMS. The Qualified Person for the IPHRVLH estimate is Phillip J Spurgeon, P.Geo., and the Qualified Person for the Other Veins is Jesús M. Velador Beltrán, MMSA, both employees of FMS.
2. Mineral Resources are reported inclusive of Mineral Reserves and have an effective date of December 31, 2016. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Resources are reported above a silver-equivalent grade of 150 g/t for IPHRVLH and above silver grade of 150 g/t for Other Veins. Silver equivalent grade is estimated as: Ag-Eq = Ag (g/t) + Au (g/t) * 72.2. Assumptions include metal prices of $19.00 /oz Ag and $1,300 /oz Au; metallurgical recoveries of 83% for Ag and 87% for Au; and metal payability of 99.9% for Ag and 99.85% for Au.
4. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

15 MINERAL RESERVE ESTIMATES

15.1 Initial Cut-Off Grade

A silver equivalent (Ag-Eq) cut-off grade (COG) was estimated to complete San Martín's initial mine design and initiate the process of underground mine optimisation. This was developed using the following inputs:

- Commodity price and exchange rate assumptions;
- Current processing plant recoveries for silver and gold;
- Current mining costs;
- Processing, surface haulage, general and administration costs; and
- Treatment and refining costs through current contracts with smelting and refining companies.

The all-in-sustaining mining cost for San Martín was $92.00/t for 2016, which includes sustaining development and sustaining capital. A COG estimate based on the actual 2016 financial numbers was generated for the cut-and-fill mining method as presented in Table 15-1.

A multiple-COG approach was used for stope optimization, as this allows the operation to benefit from the opportunity of extracting lower-grade material. Otherwise, this material may be left behind and the opportunity lost. Lower COGs can be used when the operation has already invested in development and mining does not need to cover these costs. Similarly, when lower-grade mineralization is mined to access higher-grade material, if the low-grade material can cover the incremental haulage, processing, treatment, and overhead costs, then it will be sent to the processing plant rather than the waste storage facility.

There were three COGs used:

- Fully Costed Cut-Off Grade (FCOG) – a grade of material in which recoverable value pays for all associated costs, including but not limited to development, stoping, processing, treatment, and all administration costs. For high-level assessments, FMS allows for some capital in the determination (sustaining capital);
- Incremental Cut-Off Grade (ICOG) – a grade of material in which recoverable value pays for stoping, processing, treatment, and administration (if the material adds to mine life). Development and sustaining capital are excluded under the premise that these costs have already been absorbed by material deemed economic by the consideration of the FCOG; and
- Marginal Cut-Off Grade (MCOG) – a grade of material in which recoverable value pays for the incremental haulage cost between the waste dump and the processing facility, processing costs (variable component) and administration costs (if mine life is extended).

Table 15-1: Initial Cut-Off Grade Applied to All Mining Locations

Component	Unit	Value	Recovery	Payability
Silver	USD / oz.	18.00	84.3%	99.90%
Gold	USD / oz.	1,250.00	92.8%	99.85%
Component				**Au**
Ag Equivalent Ratio	Ag-Eq.			77
Operating Costs		**Total Costs**	**Stoping Costs**	**Transport & Processing**
Direct Stoping Costs				
Stoping – Cut-and-Fill (100% stoping)	*$ / t ore*	21.00	21.00	
Other Direct Costs				
*Sill Development, Including Exploration Development^*	*$ / t ore*	10.00		
Processing and Surface Haulage	*$ / t ore*	23.50	23.50	23.50
Treatment, Transport, Refining and Penalties	*$ / t ore*	3.00	3.00	3.00
Indirect Operating Mining Costs				
Diesel, Equipment, Utilities	*$ / t ore*	10.00	10.00	5.00
Labour, Contract Labour	*$ / t ore*	10.00	10.00	
General Mining Services	*$ / t ore*	5.00	5.00	
Geology	*$ / t ore*	0.50	0.50	
General and Administration	*$ / t ore*	7.00	7.00	5.00
Taxes, Profit Share, Safety, Corporate Allocation Costs	*$ / t ore*	2.00	2.00	2.00
Total	*$ / t ore*	*92.00*	*82.00*	*38.50*
Cut-Off Grade		**Full Cost**	**Incremental Cost**	**Marginal Cost**
Cut-and-Fill*	**g/t Ag-Eq**	**195**	**175**	**80**

^ Includes some portion of capital expense. Estimate of percentage of deposit is suited to selected mining method.
* Rounded to nearest 5 g/t Ag-Eq.

15.2 Dilution and Ore Loss

Dilution is waste material that enters the ore stream and often has two negative impacts: increase in costs (mining, processing, treatment and increasing the storage of tailings) and increase in ore loss (through processing and impacting on mining recoveries). There are multiple sources of dilution which can be classified within the following two categories:

- Planned dilution; and
- Unplanned dilution.

Planned dilution is additional waste that is mined concurrently with the target mineralized material to allow the mineralized material to be recovered, ultimately leading to an overall lower grade being mined.

Alternative evaluations between selective and less productive methods that require less waste to be mined versus bulk methods that are more productive and mine more waste is planned to be completed in 2018.

Unplanned dilution is waste material that finds its way into the ore stream. Some examples of sources of unplanned dilution are provided below:

- Over-break during mining;
- Mucking of waste (or backfill / road base material) during the mucking of mineralized rock;
- Dumping of waste material at the ore stockpile (run of mine) at the processing facility; and
- Dumping of waste into ore passes, leading to a mixing of mineralized rock and waste rock.

Table 15-2 shows the unplanned dilution and mining recovery used sorted by mining method and by mine.

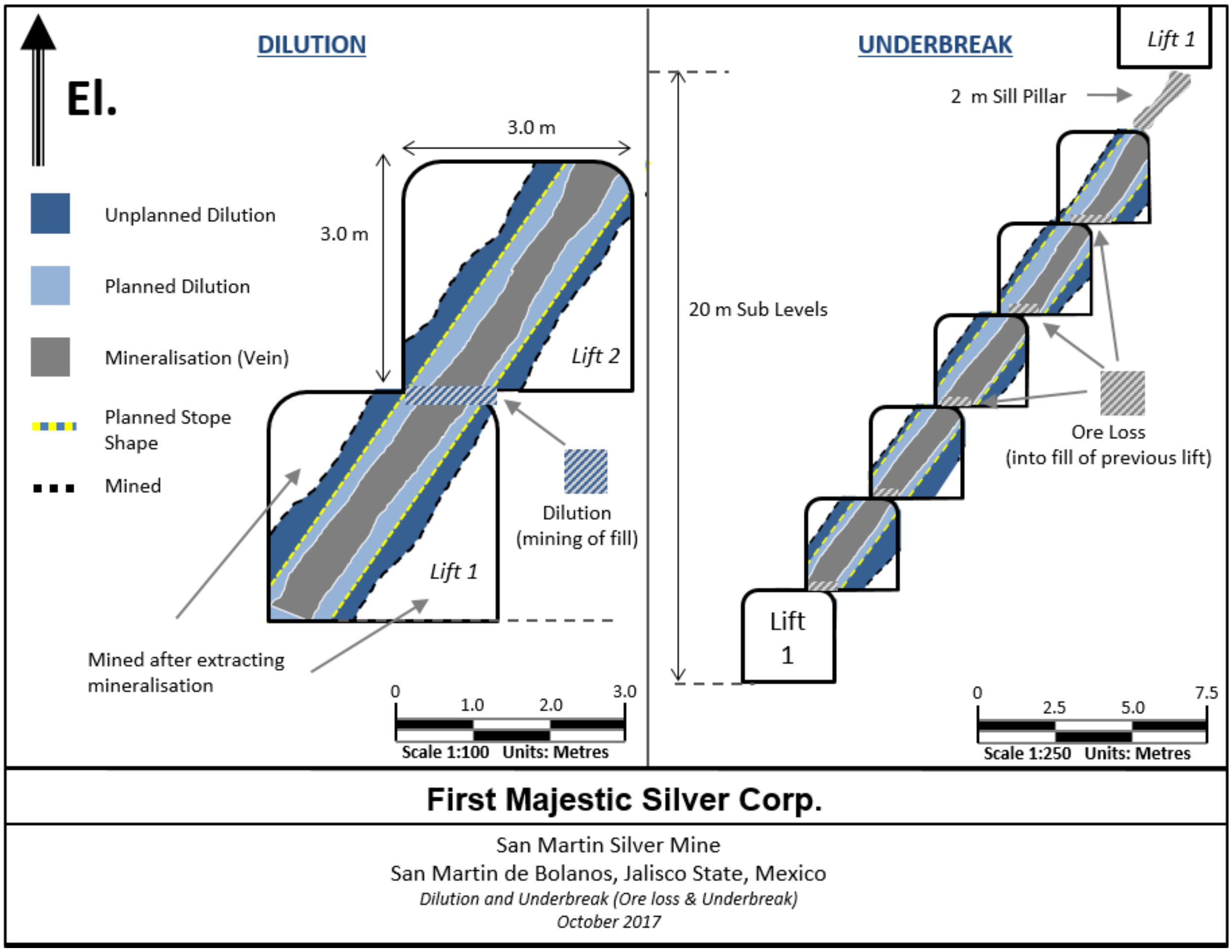
Table 15-2: Dilution and Recovery Parameters

Mine	Mining Method	Unplanned Dilution	Mining Recovery
All Mines	Cut-and-Fill	5%	95%
	Development	5%	95%

Ore loss has a significant impact on the mining business, with a reduction of revenue through the loss of mineralized material. Ore loss can occur in a variety of different ways such as poor blasting, poor stope recovery, and ground conditions impacting access to the mineralized material. Ore loss occurs in most operations, and an allowance for a reduction in revenue is prudent for budgeting and assessing profitability.

An example of dilution and ore loss via underbreak (poor blasting practices) is illustrated in Figure 15-1. Note that underbreak in waste is an economic benefit; however, it reflects that the operation is not achieving the target mining shape.

Figure 15-1: Schematic Example of Dilution and Underbreak



Note: Figure prepared by Entech, 2017.

15.3 Final Underground Cut-Off Grade

Following completion of the mine designs and initial schedules, the various COGs were revised based on the detailed financial model. Even when the resulting mining costs estimates were lower than the estimates included in the initial COG, the higher COGs shown in Table 15.1 were used to estimate Mineral Reserves in order to maintain profit margins.

15.4 Economic Constraints

The COG was used as the main economic constraint and was derived from a Net Smelter Return (NSR) model prepared with the parameters described earlier. For this purpose, the silver and gold grades were expressed in terms of Ag-Eq. The Ag-Eq grade formula used was:

Ag-Eq Grade = Ag Grade + Au Grade * [(Au Recovery * Au Payable * Au Price)] / (Ag Recovery * Ag Payable * Ag Price)

The resulting COGs for estimating Mineral Reserves are specified in Table 15-1.

15.5 Geometric Constraints

Mineable zones were first determined by the initial COG and classification criteria. Stopes were then optimized based on selected mining methods and minimum stope widths. The stope design methodology is discussed in Section 16.4.

15.6 Mineral Reserve Estimates

Mineral Reserves are based on Measured and Indicated Mineral Resource estimates after applying modifying factors gathered from actual operations data as well as from estimates that follow industry best practices.

Modifying factors for mining were applied on a stope-by-stope evaluation, and have been determined suitable for conversion to Mineral Reserves. To convert from Mineral Resources to Mineral Reserves, the resource blocks were interrogated by applying economic criteria as well as geometric constraints based on the mining method envisioned. Mineable blocks or stopes were defined by following this process.

The San Martín Mineral Reserve estimate is provided in Table 15-3. Factors that could affect the Mineral Reserves include changes to the following assumptions:

- Unplanned dilution;
- Mining recovery;
- Geotechnical conditions;
- Equipment productivities;
- Metallurgical recoveries;
- Metal prices and exchange rates;
- Mill throughput capacities;
- Operating costs; and
- Capital costs.

Table 15-3: Mineral Reserve Statement as at December 31, 2016

Zone	Category	k tonnes	Grade			Contained Metal		
			Ag (g/t)	Au (g/t)	Ag-Eq (g/t)	Ag (k Oz)	Au (k Oz)	Ag-Eq (k Oz)
Rosario Zone	Proven	0	0	0.00	0	0	0.00	0
	Probable	753	178	0.42	210	4,303	10.18	5,081
	Total (PP)	753	178	0.42	210	4,303	10.18	5,081
La Lima	Proven	2	159	0.06	164	12	0.00	12
	Probable	216	159	0.06	164	1,106	0.40	1,136
	Total (PP)	218	159	0.06	164	1,118	0.40	1,148
Veladora	Proven	79	162	0.19	176	412	0.49	449
	Probable	248	158	0.18	172	1,260	1.44	1,370
	Total (PP)	328	159	0.18	173	1,672	1.93	1,820
Huichola Norte Zone	Proven	0	0	0.00	0	0	0.00	-
	Probable	20	166	0.65	215	107	0.42	139
	Total (PP)	20	166	0.65	215	107	0.42	139
Intermedia Zone	Proven	21	214	0.04	217	143	0.03	145
	Probable	150	182	0.03	184	873	0.16	886
	Total (PP)	170	186	0.03	188	1,017	0.19	1,031
Pitayo Zone	Proven	0	0	0.00	0	0	0.00	-
	Probable	64	108	0.89	176	222	1.85	364
	Total (PP)	64	108	0.89	176	222	1.85	364
Hedionda	Proven	58	400	0.78	459	750	1.47	862
	Probable	204	392	0.76	451	2,568	5.00	2,950
	Total (PP)	262	394	0.77	453	3,317	6.47	3,812
Zuloaga and other Minor Veins	Proven	0	0	0.00	0	0	0.00	-
	Probable	465	219	0.00	219	3,274	0.00	3,274
	Total (PP)	465	219	0.00	219	3,274	0.00	3,274
Total SAN MARTÍN	**Proven**	**161**	**255**	**0.38**	**284**	**1,317**	**1.98**	**1,469**
	Probable	**2,119**	**201**	**0.29**	**223**	**13,712**	**19.45**	**15,200**
	Total (PP)	**2,280**	**205**	**0.29**	**227**	**15,029**	**21.43**	**16,668**

Notes:

1. The Qualified Person for the Mineral Reserve estimate is Ramón Mendoza Reyes, a FMS employee. Mineral Reserves have an effective date of December 31, 2016.
2. Mineral Reserves are defined using multiple, variable cut-off grades, then stope designs are optimized based on cut-and-fill (resue) using waste-rock fill.
3. The Ag-Eq grade formula used was Ag-Eq Grade = Ag Grade + Au Grade * (Au Recovery * Au Payable * Au Price) / (Ag Recovery * Ag Payable * Ag Price).
4. Key assumptions and parameters include: Metal price of US$18.00/oz Ag, US$1,250/oz Au; metallurgical recoveries of 84.3% for Ag, 92.8% for Au; metal payabilities of 99.9% for Ag, 99.85% for Au; direct mining costs of US$21.00/t, mill feed, process and treatment costs of US$26.50/t mill feed and general and administration (indirect costs) of US$34.50/t. Ore loss of 5% and unplanned dilution is 5%. Mineable shapes were used as geometric constraints.
5. Numbers have been rounded as required by reporting guidelines. Totals may not sum due to rounding.

16 MINING METHODS

16.1 Hydrogeological Considerations

San Martín mines veins and deposits that are hosted on the side of a mountain range. Access to the workings is through adits developed horizontally, followed by ascendant and descendent ramps developed in waste.

All workings in San Martín are located above the water table, and no evidence of water bodies have been found during exploration.

There are water inflows in the workings close to surface, mainly during the rainy season, but these inflows are managed with small pneumatic pumps and 20-30 HP electrical pumps.

No geohydrological studies have been carried out in San Martín by FMS, and there is no evidence of such studies being performed by previous operators.

16.2 Geotechnical Considerations

Geotechnical studies have been carried out in San Martín, mainly covering the geotechnical characterization of the different structures present in the deposit, including the host rock. The objective has been to determine the design parameters for the excavations, as well as the requirements for ground support considering the cut-and-fill mining method in use. Such characterizations are based on field mappings carried out at different levels of the mine: Rosario, Hedionda, Huichola and Mina del Agua, in conjunction with the integration of information from exploration drill holes where geotechnical logging was performed.

16.2.1 Rock-Mass Characterization

Determination of rock quality for the main geological domains is carried out using the rock tunneling quality Index methodology (Q) (Barton et.al., 1974) and the rock mass rating (RMR) index approach (Bieniawski et.al., 1979). For this, the information gathered from field geotechnical mapping and the exploration drill hole data is integrated. The methodology carried out consists of collecting data for each of the structures and lithologies recognized in the unit, in each of its different areas. Q and RMR indices for the main geological domains were derived.

As a result of this characterization, different domains or geotechnical units were categorized by their geomechanical behavior. Within the domains recognized in San Martín, two lithological units were defined: the first one corresponding to the host rock and the second to the mineralized structures (veins).

The expected value as well as representative ranges are indicated in Table 16-1.

Table 16-1: Typical Q and RMR Values for the Main Geological Domains in San Martín

Vein or Domain	Q			RMR		
	Expected Value	Maximum	Minimum	Expected Value	Maximum	Minimum
Waste rock (Tuff)	1.98	4.50	1.25	46	58	43
Hedionda vein	0.69	0.44	0.17	37	51	29
Intermedia vein	1.12	1.44	0.75	45	47	41
Rosario vein	0.63	1.25	0.17	39	46	28
La Veladora vein	0.79	1.40	0.38	41	47	35

The similar geomechanical behavior for some of these domains allows for grouping them into two classification types applicable to most areas of the San Martín mine: Poor and Very Poor, thus forming a geological-geotechnical model that allows for defining the type of support required (Table 16-2).

- Geotechnical Unit 1 corresponds to the waste rock which consists primarily of andesitic and rhyolitic tuffs of moderate to high fracturing, generating preformed blocks and areas of wedging by unfavorable orientation of structures, depending on the degree of alteration. The resistance for this unit is estimated at a range of UCS 70 - 120 MPa and its Q and RMR ratings classify this unit as a rock of Regular to Poor quality; its predominant failure mode is gravitational and slip.

- Geotechnical Unit 2 contains all mineralized structures since their geotechnical behavior is very similar. These are oxidized veins with clays and gouge fillings. Based on the Q and RMR index and an estimated hardness in the order of 20 - 30 MPa (UCS), these units are classified as rock with Poor to Very Poor quality. The failure mode corresponds to progressive shedding due to the poor quality of rock and the decompression of the fill materials.

Table 16-2: San Martín Geotechnical Units

Geotechnical Unit		Q Index	Rock Quality	Instability Mechanisms	Max. Width Without Support
UNIT 1	Country rock zone, andesitic and rhyolitic tuffs of fine crystals, moderate to strong fracture formed by blocks and wedges, zones of alteration limited by faults.	1.25 to 4.5	Poor	Probability of roof falling blocks by blasting effect. Probability of roof falling wedge by gravity. Probability of blocks separation from of the panel by decompression of rock and weathering.	4.2
UNIT 2	Vein zone. Mineral of oxides embedded in matrix limo-sandy, with moderate clay content. Contact wall with fillings of gouge.	0.4 to 1.2	Very poor	Probability of blocks detachment from the roof by gravity. Probability of gradual detachment due to poor rock mass quality. Probability blocks sliding of the panel by presence of failure.	2.6

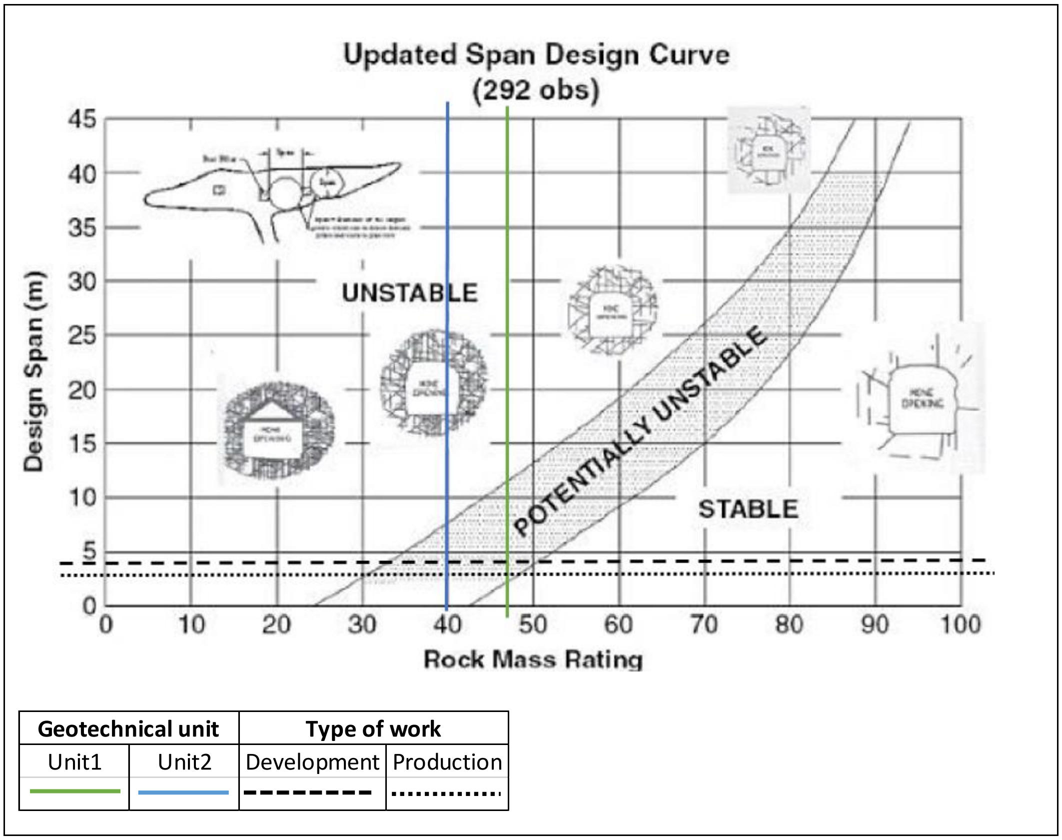
16.2.2 Mine Design Parameters

Taking into consideration the geotechnical characterization of the domains, it is possible to provide design parameter guidelines for development and production workings. Due to the configuration of the deposit and the conditions of the mineralized zones, it is assumed that all production will be developed based on cut-and-fill practices. It is assumed that the infrastructure in waste will have a 4 x 4.5 m opening and the entries in the ore zones will have a 3 x 3 m opening.

Based on the resulting domains and maximum permissible widths, both units would be located in a potentially unstable transition zone (Figure 16-1). However, Unit 1 does not require systematic support, only support at intersections where the span increases, and the exposed area is larger, hence installation of 2.4-m-long bolts is considered acceptable. For Unit 2, it is considered necessary to integrate systematic ground support with the mining cycle, this support corresponds to 2" shotcrete reinforced with fiber to avoid the weathering of clay materials and to have control over the progressive detachment. In the case of intersections, placement of 1.8 m long bolts is added as secondary support.

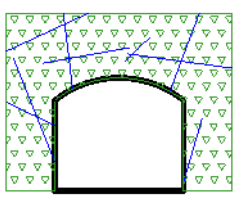
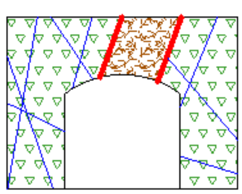
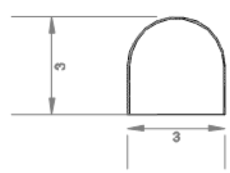
Table 16-3 summarizes the ground support standards for San Martín.

Figure 16-1: Stability Curve for San Martín Domains



Note: Figure prepared by FMS, 2017 (modified from Lang et al, 1994).

Table 16-3: San Martín Ground Support Standards

Unit	Tunnel Section		Development		Intersections
UNIT 1 (WASTE)	4 x 4.5 m		No support		Anchor bolt 2.4 m grid 2 x 2 m
UNIT 2 (ORE)	3 x 3 m		Shotcrete 2" reinforced with fiber		Shotcrete 2" reinforced with fiber + anchor bolt 1.8 m grid 1.5 x 1.5 m

16.3 Planned Mining Methods

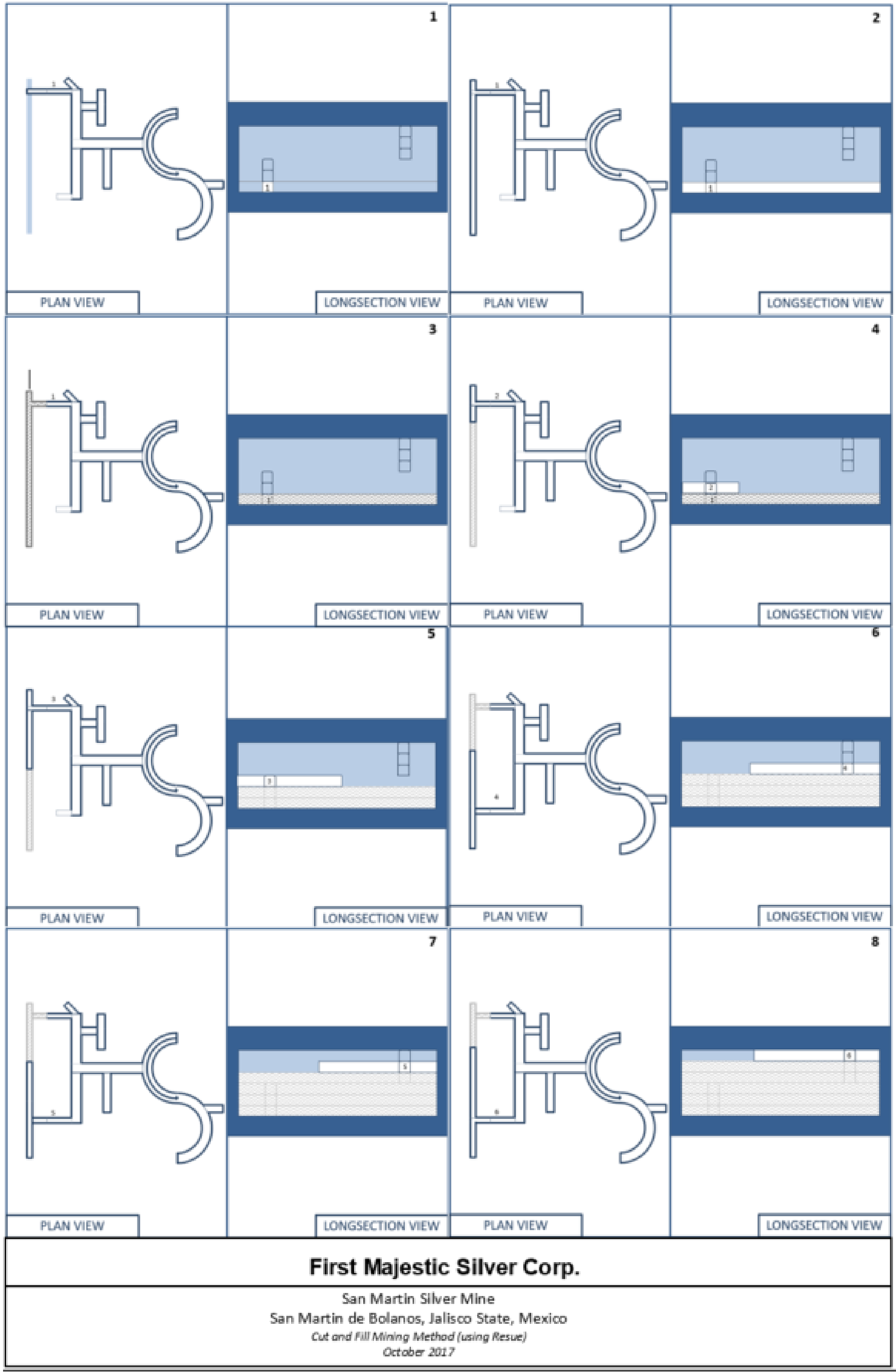
San Martín currently uses cut-and-fill mining (using resue) to extract the mineralization. A combination of jumbo and conventional (hand-held pneumatic) drills are used, and the type of drill used depends on mining widths and availability of the jumbos.

16.3.1 Cut-and-Fill (Resue)

Cut-and-fill mining has been extensively used at San Martín. Resue mining is a selective mining technique which employs two-pass blasting, where on the first blast, either the mineralization or the waste portion is blasted and mucked, then the remainder is mucked following a second blast. The decision of whether to mine the mineralization or the waste first depends on the geometry of the waste and ore portions and whether the ore can be blasted without incurring too much dilution or ore loss. Typically, at San Martín, the ore is blasted and mucked out with smaller loaders and then the waste portion is mucked.

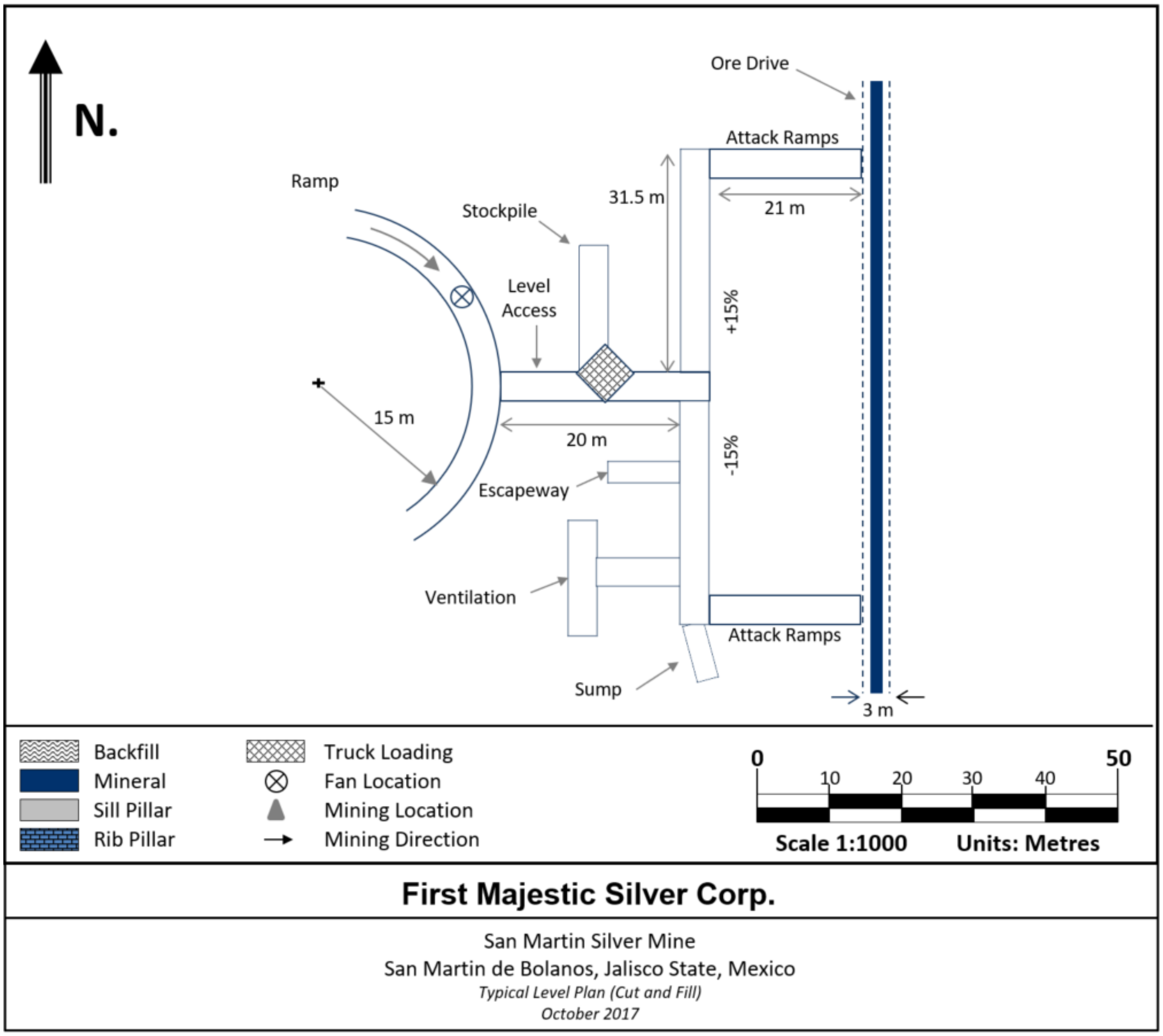
Cut-and-fill mining is mined from bottom-up (i.e., overhand) and the fill is uncemented waste-rock. Sill pillars (2 m) are left between mining horizons and are generally located in lower-grade or very narrow sections of the deposit. Under current practice, the ramp is located outside the mineralization, and a foot-wall access is mined at an incline and parallel to the mineralization to provide multiple access points at varying elevations. After completing a lift, the accesses can be used for storage of muck or locating mine infrastructure (dewatering pumps, sub stations, etc.) as the mine progresses deeper. This method is illustrated in Figure 16-2 and Figure 16-3. A limited practice at San Martín locates the access ramp in mineralization; this practice reduces the need to develop in waste, but increases the potential for sterilisation and has a lower productivity; this practice will be phased out in the near future.

Figure 16-2: Schematic of Cut-and-Fill Stoping with Rock Fill



Note: Figure prepared by Entech, 2017.

Figure 16-3: San Martín Typical Level Layout (Plan View) for Cut-and-Fill



Note: Figure prepared by Entech, 2017.

16.4 Underground Mining

16.4.1 Mining Method Selection

San Martín is an established operation that has been using cut-and-fill (with resue) successfully. Based on existing mining costs, a COG was calculated and then applied to the mineralization to identify potentially economic areas for mining. Varying COGs were used to focus development and then lower COGs were used to identify opportunistic lower-grade mineralization that can be sent for processing for profit (refer to discussion in Section 15). This material is typically mineralization that is mined to access higher-grade mineralization.

The following three COGs were applied to cut-and-fill stoping:

- FCOG – 195 g/t Ag equivalent;
- ICOG – 175 g/t Ag equivalent; and
- MCOG – 80 g/t Ag equivalent.

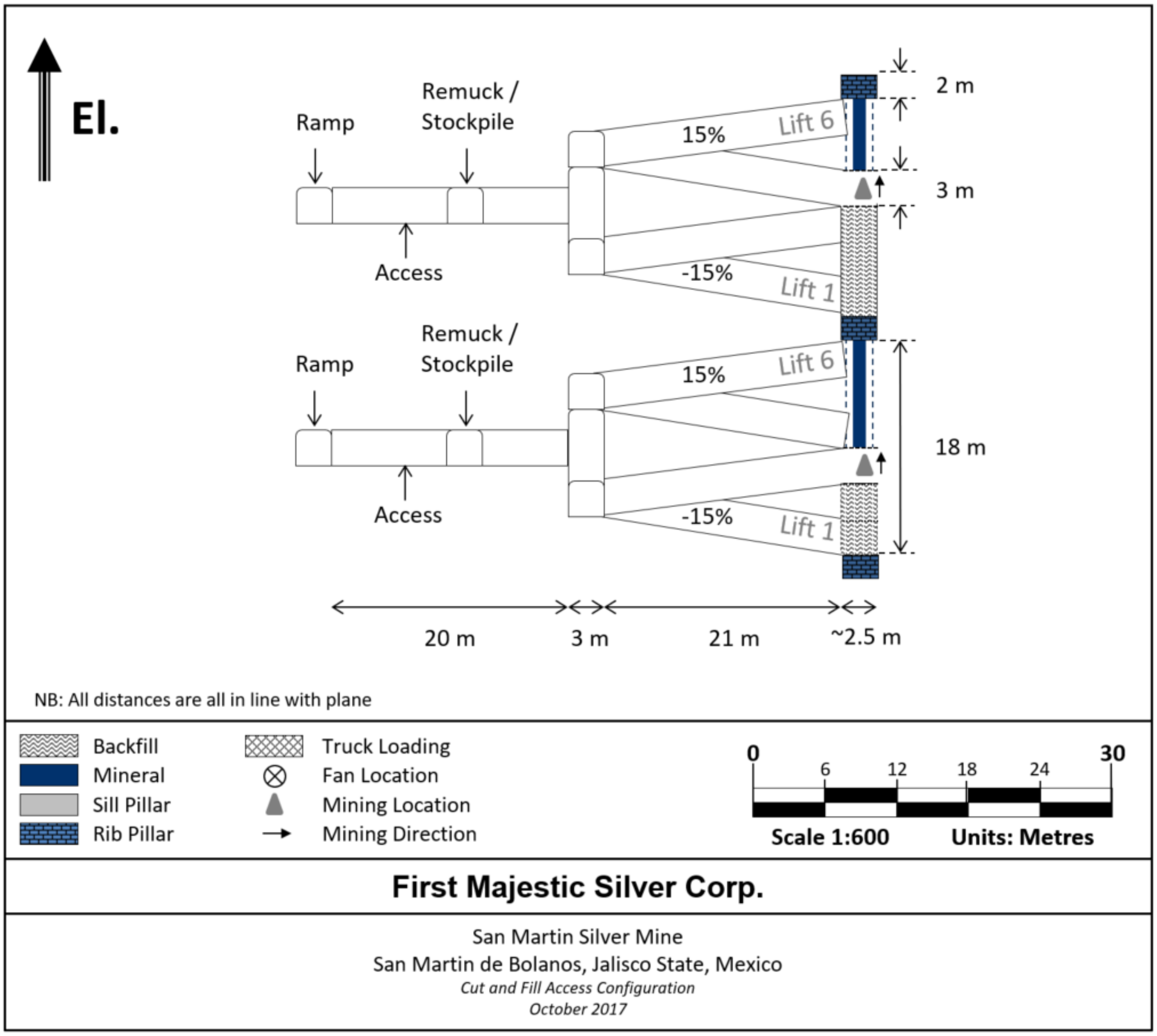
Once the mining locations were identified, stope design was followed by development design using GEOVIA Surpac™. The design component was then imported into mining planning software for sequencing and scheduling (GEOVIA MineSched™).

16.4.2 Stope Design Methodology

The current minimum mining width used at site for cut-and-fill mining is 0.8 m, and 2.5 m for equipment access. After the resue portion is mined (typically the mineralization), additional waste is mined to allow for equipment access. Mined waste either reports to the surface waste storage facility or is used as fill for subsequent lifts. When mineralization that is greater than 2.5 m in width is mined, no additional waste is mined. Each drift is mined 3 m high where six drifts are mined to extract 18 m of a 20 m high panel.

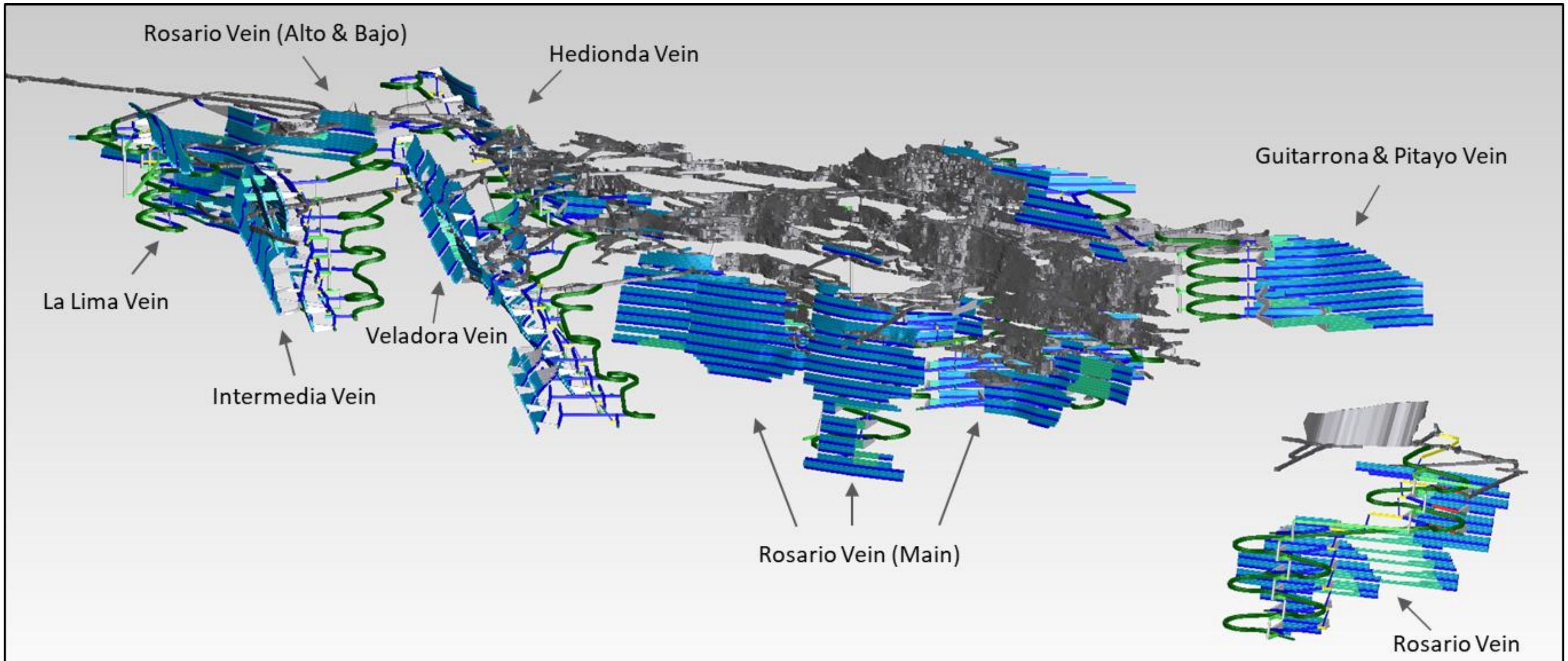
The configuration of the development with respect to the mineralization is shown in Figure 16-4 and the proposed design is shown in Figure 16-5.

Figure 16-4: Schematic (Section View) of Cut-and-Fill Stoping with Rock Fill



Note: Figure prepared by Entech, 2017.

Figure 16-5: Schematic (Isometric View) of the Proposed Designs for San Martín



First Majestic Silver Corp.

San Martin Silver Mine
San Martin de Bolanos, Jalisco State, Mexico
Proposed Designs for San Martin
October 2017

Note: Figure prepared by Entech 2017

16.4.3 Ore Dilution and Loss

The dilution and recovery factors that were applied for mining activities at San Martín are presented in Table 16-4.

Table 16-4: San Martín Dilution and Recovery Parameters

Category	Cut-and-Fill	Development
Unplanned Dilution	5%	5%
Mining Recovery	95%	95%

16.4.4 Development

Updated designs incorporate a minimum stand-off distance of 20 m to locate the ramp away from mineralization. This distance will minimise any damage to the ramp due to ground stress changes and blasting from stope extraction. This stand-off distance will also allow sufficient space between the ramp and the orebody for the excavation of the level accesses, stockpiles and sumps.

The primary ramp will be mined with an arched profile and excavated to a width of 4.5 m and a height of 4.0 m. This profile allows sufficient room to accommodate current underground fleets as well as secondary ventilation ducting and service piping. Other planned development includes the following:

- Access drifts;
- Sills (development on mineralization);
- Operating waste development (sills mining material below cut-off);
- Sumps;
- Escapeways and accesses to the escapeways;
- Return airways and accesses to the return airways;
- Stockpiles; and
- Ore passes and the access to the ore passes, where required.

The various development profiles are shown in Table 16-5.

Table 16-5: Development Profiles

Development Type	Width (m)	Height (m)
Ramps (Primary Haulage)	4.5	4.0
Ramp (Attack)	3.0	3.0
Ramp Secondary	4.0	4.0
Access	3.0	3.0
Stockpile	3.0	3.0
Return Air Accesses	3.0	3.0
Escapeway Access	2.5	2.5
Sump	2.5	2.5
Ore Drifts – C&F	2.5*	3
Escapeways	1.5	1.5
Return Airways	3.0	3.5

* After completing round

16.4.5 Mine Schedule

San Martín has well-established productivities which were applied in the mine schedule. For development, the monthly productivity, including the time taken to drill, blast, muck, and support each round, is presented in Table 16-6.

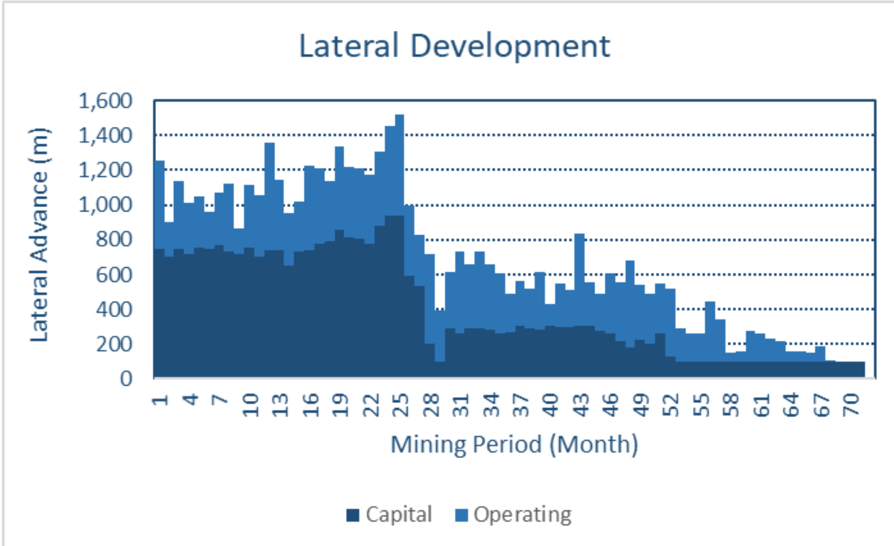
Table 16-6: Typical Development Productivity

Available Headings	Method of Development	Units	Rate Per Heading
1 – 3 Headings	Jumbo	m / month	150
> 3 Headings	Jumbo	m / month	240
Single heading – ore development	Hand held / jackleg	m / month	135

The mine plan uses development rates and productivities based on the existing fleet. The San Martín team has identified an opportunity to improve production through the addition of a jumbo and additional trucking; this opportunity will be further assessed in 2018. All production was converted to an equivalent advance.

The estimated capital and operating development proposed for San Martín is estimated at 43,900 metres over the LOM, and the monthly requirements are shown in Figure 16-6.

Figure 16-6: San Martín Underground Capital and Operating Lateral Development



Note: Figure prepared by Entech, 2017.

Vertical Development

Vertical development will primarily be completed by conventional mining techniques up to a size of 1.5 m by 1.5 m. Large diameter raises will be excavated either by a raisebore machine (contract) or by longhole raising. For scheduling, a development rate of 3 m per day has been applied to all vertical development.

Longhole Drilling

San Martín does possess a longhole drill that is used for occasional vertical development or installation of service holes. As some of the veins are amenable to longhole stoping, it is expected that this drill will be used more often, and if longhole stoping can be successfully implemented, an additional drill may be required.

Material Movement

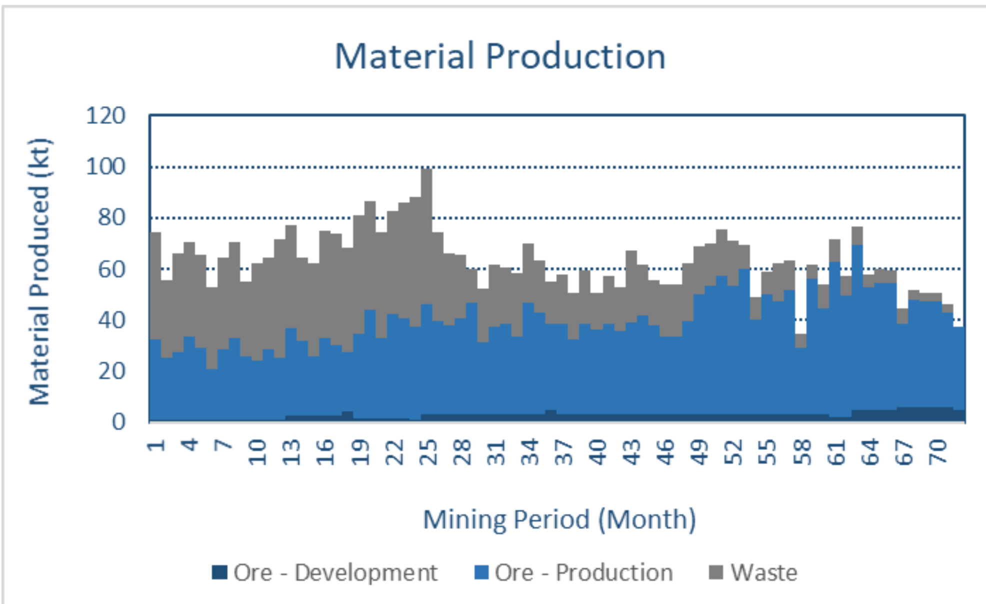
The existing load-and-haul fleet currently handles up to 900 tpd (27 kt per month), with additional haulage requirements met by the onsite contractor through the provision of additional haulage trucks. The current load-and-haul fleet for San Martín is shown Table 16-7.

Table 16-7: San Martín Load-and-Haul Fleet

Equipment Type	Size (yd^3)	Quantity
LHD	1	1
LHD	2	4
LHD	3.5	6
Truck	11	6

As the mine continues to develop further from the main portal, additional haulage equipment may be required. The overall material production profile for San Martín is presented in Figure 16-7.

Figure 16-7: San Martín Material Production



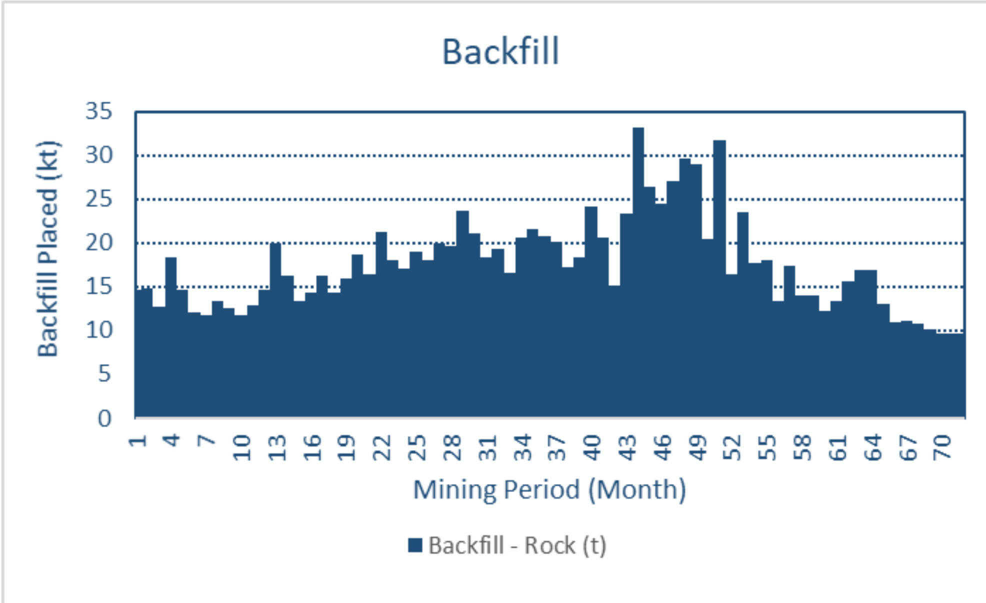
Note: Figure prepared by Entech, 2017.

Backfill

Where necessary, all future production voids will be backfilled. As the operation uses sill pillars to separate active mining blocks, the backfill is uncemented waste rock. There may be an opportunity to employ the use of cemented backfill to replace mineralised sill pillars; however, the current plan is to continue with the existing method. All backfill will be placed with stope loaders (either 2.0 or 3.5 yd^3) depending on availability and actual mined width.

Total backfill requirements for San Martín are presented in Figure 16-8.

Figure 16-8: San Martín Backfill Requirements



Note: Figure prepared by Entech, 2017.

16.4.6 Underground Mine Physicals Summary

The mine plan is based on Measured and Indicated Mineral Resources. Inferred material was set to waste. The current mine plan for San Martín is to be completed over the next six years. The mining physicals for the mine plan are presented in Table 16-8.

Table 16-8: Mining Physicals - San Martín Mine

Type	Units	Total	2017	2018	2019	2020	2021	2022
Physicals								
Lateral (Ramp, Access)	m	23,965	7,438	7,697	3,596	2,592	1,542	1,100
Lateral (Ore Sills, Operating Waste)	m	106,232	18,234	24,150	24,911	21,649	14,026	3,261
All Other Lateral Development	m	4,722	1,406	1,802	705	736	73	
Total Lateral Development	m	134,918	27,079	33,650	29,211	24,976	15,641	4,361
Vertical Development	m	2,776	487	1,383	464	345	97	
Waste Movement								
Backfill	kt	1,232	189	219	237	271	224	93
Waste	kt	1,607	417	478	292	226	138	56

If mineralization that is currently classified as inferred can be upgraded to higher confidence categories and eventually converted to Mineral Reserves, there is potential that the mine life can be extended.

16.4.7 Underground Infrastructure and Services

Portals

There are several portals used to access the various veins at San Martín, as shown in Figure 16-9.

Figure 16-9: Mine Portals at San Martín

Note: Figure prepared by Entech, 2017.

Primary Ventilation

The ventilation system at the San Martín Mine is undergoing an upgrade. FMS is planning to install a new ventilation raise from surface to an existing drive near the Hedionda vein. This raise will act as an exhaust (pull system) which will draw fresh air into the mine via the main portal and discharge to surface. Through a series of ventilation raises, the ventilation circuit will continue to be extended to the lower levels, with auxiliary ventilation forcing fresh air from the ramp to the active headings.

The ventilation circuit was imported into Ventsim™, an industry-standard software used in ventilation modelling, to model the flows predicted for the mine. The estimated primary ventilation demand was calculated based on a factor of 0.6 m^3/s of fresh air per kW and is shown in Table 16-9.

Table 16-9: San Martín Mine Ventilation Demand Estimate

Equipment Type	Model	Power Output (kW)	Max. Units	Airflow Required per Unit (m3/s)	Utilisation	Total Airflow Required (m3/s)^
Jumbo Development Drill	Single Boom	55	2	3.3	0.25	2
Longhole Production Drill		0	1	2.0	0.25	1
Truck	11 yd^3 - Rigid Axle	330	2	19.8	0.75	47
LHD	1 yd^3	75	1	3.3	0.75	3
LHD	2 yd^3	75	4	3.3	0.75	14
LHD	3.5 yd^3	150	6	6.75	0.75	41
Light Vehicle and Ancillary		125	2	7.5	0.25	4
Production Contingency*			1	20	1	20
Leakage (15%)						20
Airflow Required (m^3/s)						***150***

* An allowance for a potential production increase is included in the ventilation design.

^ Rounded to the nearest m^3/s

Equipment is spread over several workplaces and ventilation systems. Two Ventsim™ schematics of two ventilation circuits are presented in Figure 16-10 and Figure 16-11. An additional 15% has been allowed for leakage and included in the minimum requirements. An extension of the primary ventilation system is in progress with the proposed plan to mine a 3-m diameter raisebore to the Hedionda vein system.

Additional raises will be required to service the distal vein systems (Intermedia, La Lima, etc.) and is currently being optimized by operations.

Figure 16-10: San Martín Hedionda Ventilation Model

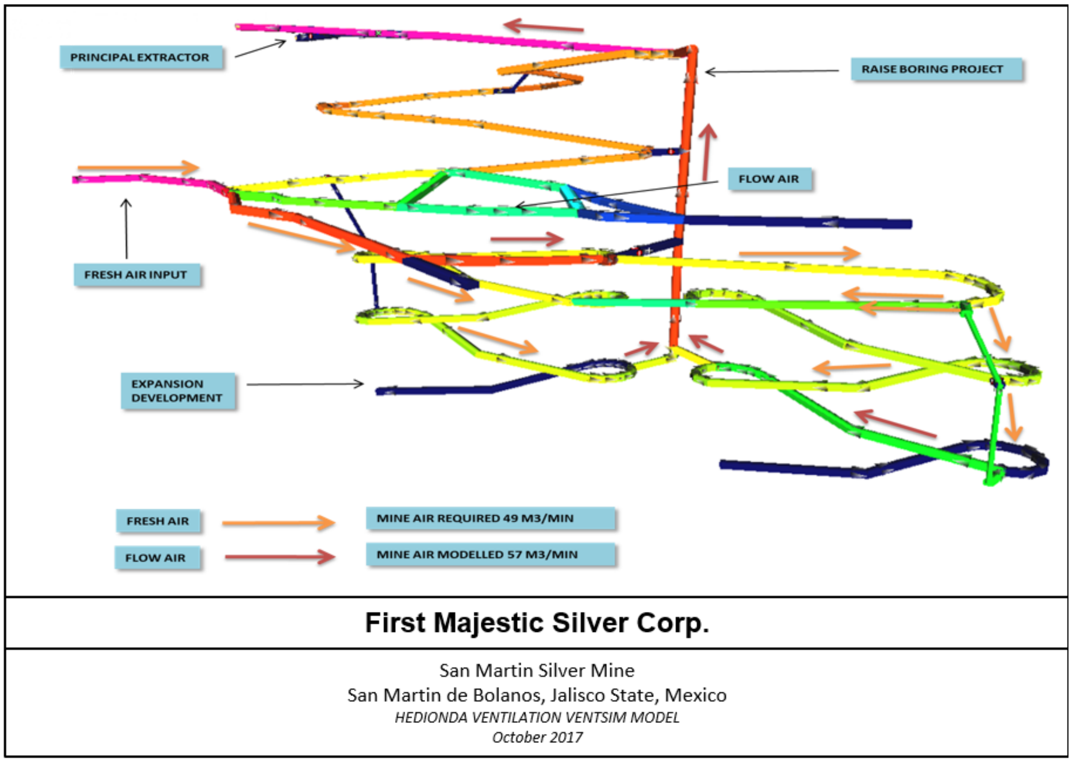
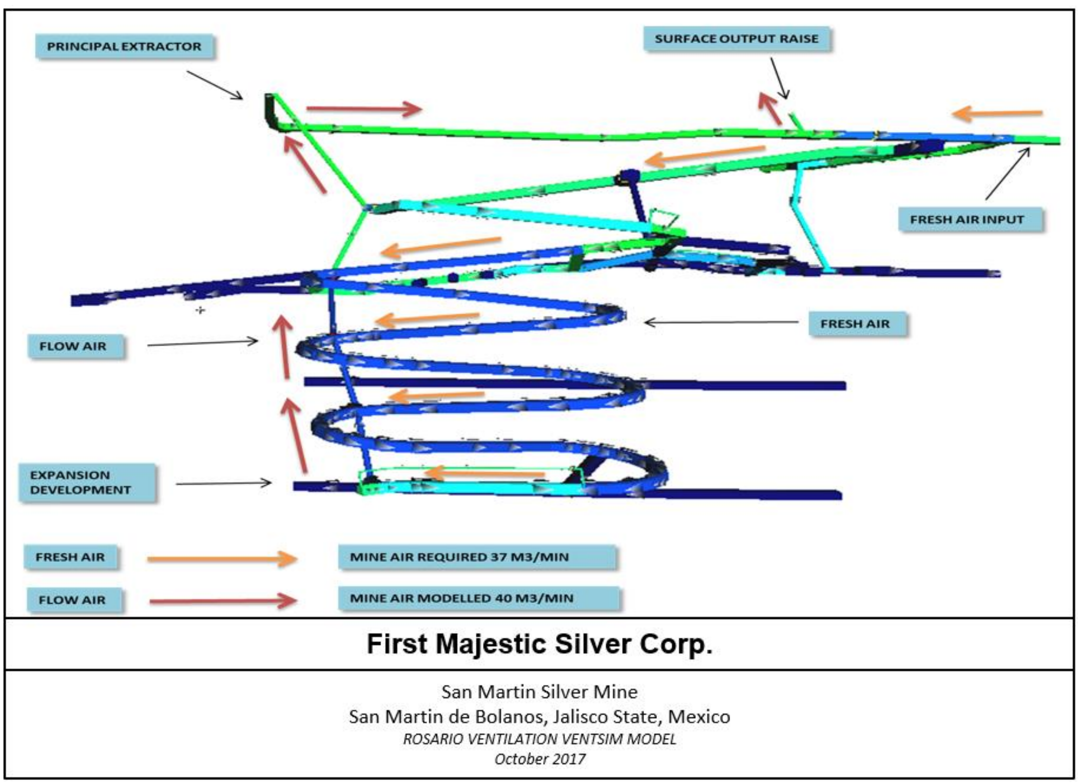


Figure 16-11: San Martín Rosario Ventilation Model



Auxiliary Ventilation

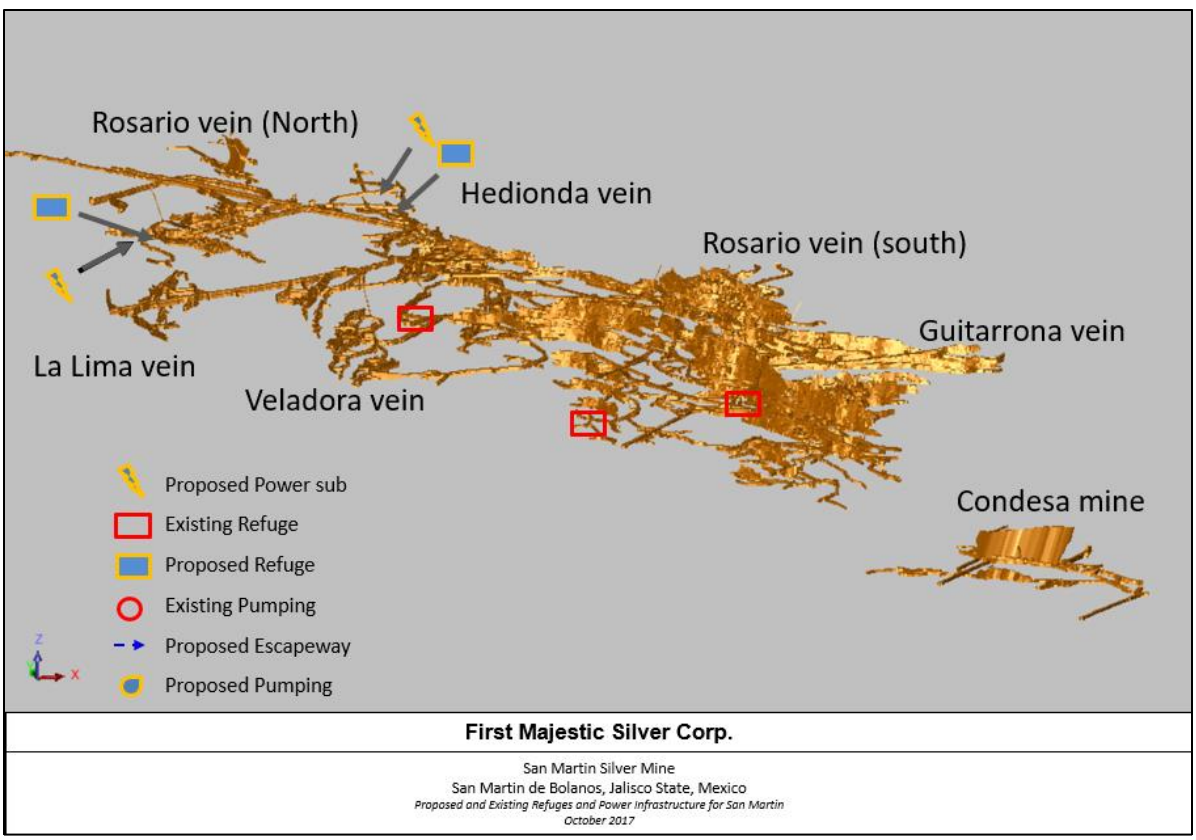
Auxiliary fans will be required to deliver the required airflow to the working areas. At site, a range of auxiliary fans are used (typical sizes include 22, 37, 45 and 75 kW) to provide fresh air to the active headings. The typical configuration will be a 45-kW fan with 1,067-mm-diameter ducting to deliver approximately 5–8 m^3/s of airflow to the workplace.

Secondary Means of Egress and Refuge Chambers

Additional refuge chambers will be required to provide safe refuge for mining personnel when required. All refuge chambers will be fitted with drinking water and breathing air sufficient for a minimum of 36 hrs of refuge. A raise fitted with a ladderway will interconnect the planned levels to provide a second means of egress (escape route) for mining personnel. This will allow for egress from the mine if the main access ramp becomes inaccessible.

Figure 16-12 shows the planned and existing refuge chambers and the proposed substations for future power reticulation.

Figure 16-12: San Martín Existing and Proposed Mine Infrastructure



Note: Figure prepared by Entech, 2017.

Water Management

The San Martín mine is situated in a mountainous area and is above the water table. Water generated from drilling operations and groundwater from rainfall events is managed through a series of small (5-8 kW) pumps. In general, the operation is considered a dry mine with minor pumping requirements.

Electrical Power

Electrical power will be supplied by the site power station located at the processing facility. The underground mining operation is estimated to require approximately 1.4 MW of power during peak production and under peak load. Table 16-10 presents the estimated power (installed) without the consideration of diversity and utilisation factors. Additional capital has been allocated to estimate and plan for future power requirements for the San Martín mine.

Table 16-10: San Martín - Estimated Power Consumption Underground

Equipment	Power Rating (kW)	Quantity	Installed Power (kW)
Sump / Face Pumps	various	5	61
Primary Fan^	75	1	75
Auxiliary Fans*	various	11	270
Drills – Longhole/Development*	75	2	150
Surface Compressors and Pumps	various	7	850
Total Installed Power (Excludes Diversity and Utilisation Factors)			***1,408***

^ Primary fan load to increase * Contractor may supply diesel / pneumatic drill

** Average configuration

16.5 Production Schedule

The combined San Martín mining operations are projected to operate for a total of six years. The annual mining schedule is shown in Table 16-11.

Table 16-11: San Martín LOM Production Schedule

Type	Units	Total	2017 *	2018	2019	2020	2021	2022
Production								
Development	kt	**218**	12	26	38	42	42	59
Production – Cut-and-Fill	kt	**2,062**	269	325	385	379	382	322
Total	kt	**2,280**	**281**	**351**	**423**	**421**	**424**	**381**
Average Grades								
Ag	g/t	**205**	260	245	222	184	167	173
Au	g/t	**0.29**	0.48	0.46	0.36	0.28	0.19	0.06
Ag-Eq	g/t	**227**	268	293	249	206	186	183

* 2017 is forecast only.

17 RECOVERY METHODS

The ore is transported above ground approximately 14 km from the underground mine to the processing plant located on the east side of the community of San Martín de Bolaños and the Bolaños River. The plant facilities are fenced around the perimeter, and plant access is controlled from a guardhouse located at the edge of the La Joya road). The plant facilities also host the mine administrative functions, and include general offices, human resources, controller, supply chain, planning, geology, exploration, IT, laboratory, environment, safety, beneficiation plant, warehouse, electrical, mechanical and automotive maintenance, employee dining and some employee housing.

17.1 Processing Plant

Gold and silver are extracted at the processing plant which operates 24/7, normally processing 860 tpd. The plant has a name plate capacity of 1,300 tpd, which provides ample operational flexibility.

The processing plant comprises several areas: crushing, grinding, leaching, tailings dam, Merrill-Crowe circuit (auto jet and precipitation), and refinery. A project is currently underway to build a new tailings filter dry stack tailings area expected to be commissioned before the end of 2017.

Since 2013, the processing plant has experienced various operational changes, upgrades to maintenance systems and renovation of key equipment. Some of the changes include:

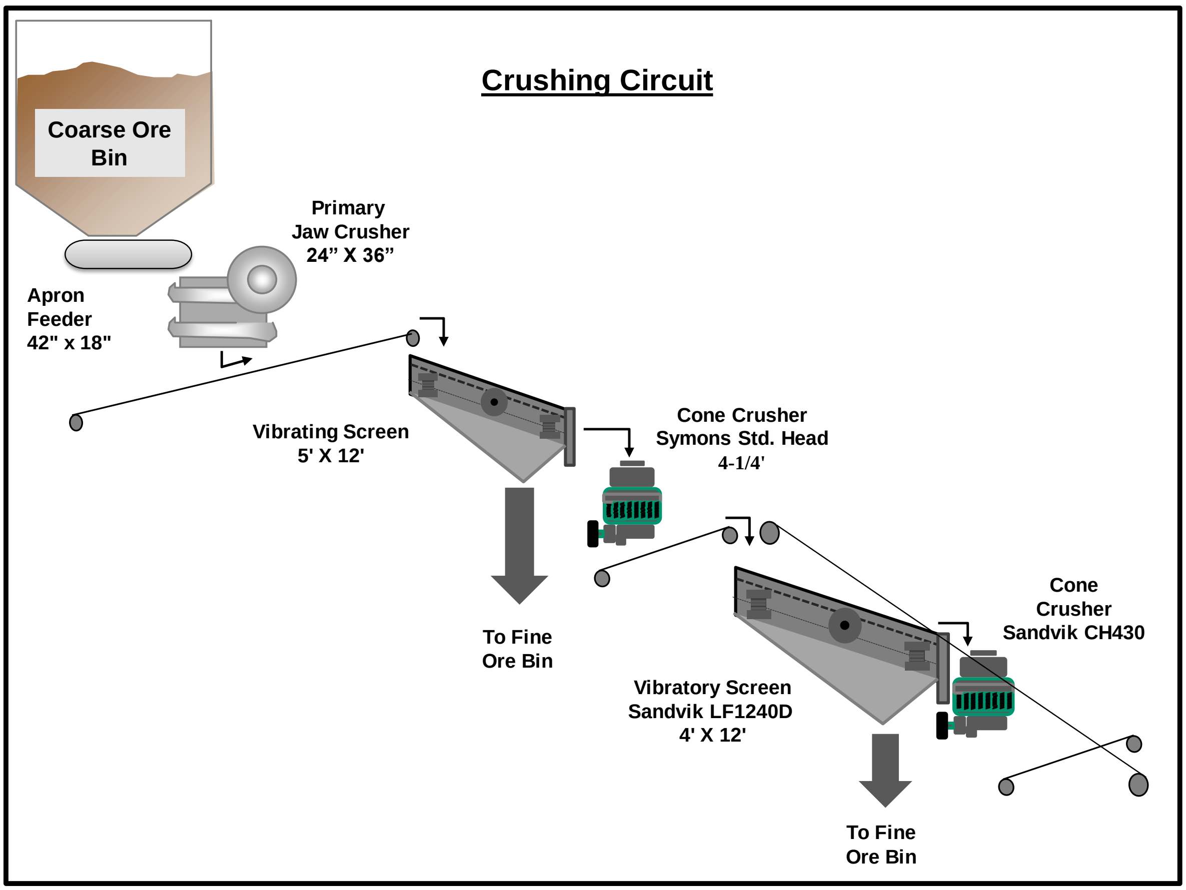
- A new crushing system comprising a Sandvik CH430 crusher and two LF1240D screens;
- Reconfiguration of the ball mills to operate as a two-stage grinding circuit capable of generating a fine feed to the cyanidation tanks;
- Replacement of the propeller mechanisms in the cyanidation tanks along with a retrofit to improve air injection;
- Development of maintenance procedures for all the agitators and washers to control oxidation of metal surfaces;
- The acquisition of a 12-m^3 auto-jet to provide steady pumping of clean pregnant solution;
- Installation of a vertical pump in the precipitation area; and
- Comprehensive renovation of the refinery area including: repair of precipitate containment dike, a new electronic dryer system and refurbishment of induction furnaces.

17.1.1 Crushing

The crushing area normally operates 18 hours per day, allowing six hours a day for maintenance and housekeeping tasks. Run of Mine (ROM) ore is transported to the crushing area where it is stockpiled in a yard near the primary (jaw) crusher. With the help of a front-end loader, ore is fed through a chute into the primary (24” x 36”) crusher, which is capable of handling a maximum rock size of 14”. The crushing circuit is equipped with a stationary hydraulic hammer to break oversized ROM material when present.

The primary crusher reduces the ore to 4" top size. Particles finer than 3/8” in the primary crusher discharge stream are separated in a vibrating screen (Sandvik LF1240D) and then sent to a fine ore bin (final crushing circuit product). The plus 3/8” material is processed in a secondary (4.5’ Symons) cone crusher where ore is reduced to 5/8". Particles finer than 3/8” in the secondary crusher discharge stream are separated in a second vibratory screen (Sandvik LF1240D) and then sent to the fine ore bin. The plus 3/8” material in the secondary crusher discharge stream is processed in a tertiary cone crusher (Sandvik CH430) which operates in closed circuit, as shown in Figure 17.1.

Figure 17-1: Crushing Circuit at FM San Martín



Note: Figure prepared by FMS, 2017.

17.1.2 Grinding

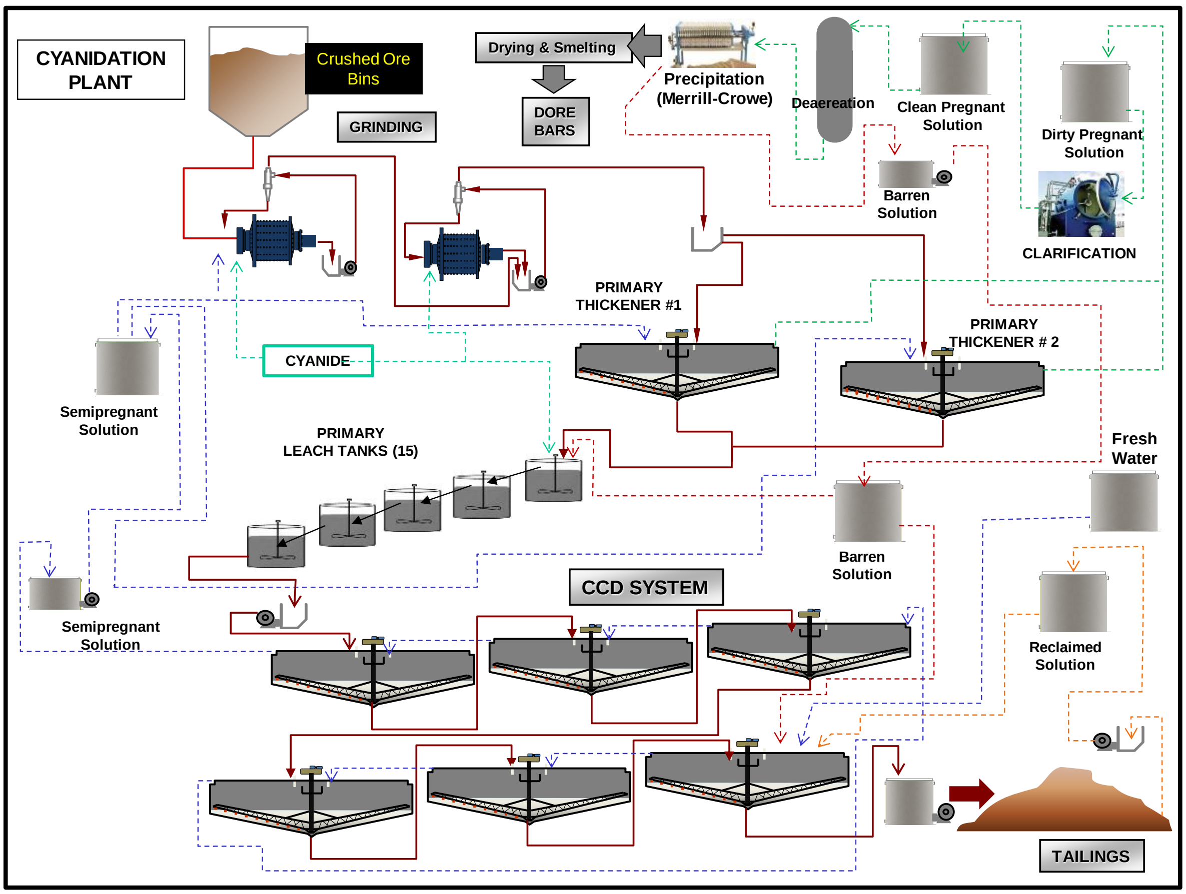
The grinding circuit comprises three balls mills (10’ x 10’, 9’ x 12’ and 9’ x 9’) operating in closed circuit with hydrocyclones. To promote metal extraction, semi-pregnant solution containing 1,000 ppm of sodium cyanide is added to the grinding circuit.

The three mills are primary mills; however, only mill #1 (10’ x 10’) and mill #2 (9’ x 12’) are currently in operation as the installed capacity of these two mills is sufficient to process the typical tonnage of 860 tpd. A key feature of the grinding circuit is that mill #1 and #2 can operate as primary and secondary (grind–regrind) mills. This provides the capacity to achieve very fine (85% passing 200 mesh) feed to the leaching circuit, significantly improving metal recovery due to the higher particle liberation.

17.1.3 Leaching

The leaching circuit consists of two 50’ diameter primary thickeners (one in operation and one in standby) which are fed with the product from the grinding circuit and with semi-pregnant solution, as shown in Figure 17.2. The dirty pregnant solution in the primary thickeners is sent to the Merrill-Crowe plant, while solids are agglomerated and settled with the help of flocculants and limewater.

Figure 17-2: San Martín Leaching Circuit



Note: Figure prepared by FMS, 2017.

The thickened solids are pumped to the first agitated tank, and from there by gravity into 14 additional tanks in series (15 in total). The nominal residence time in the tanks is 120 hours. Leaching takes place in the presence of cyanide and air. Typical conditions in the leaching tanks are: 43–45% solids, at least 7 ppm oxygen concentration, pH of 10–11, and sodium cyanide at a concentration of 900–1,100 ppm. From the last agitator, the pulp is sent to the Counter-Current Decantation (CCD) circuit.

17.1.4 Counter Current Decantation

The CCD circuit consists of six thickeners, with thickener #6 installed at the highest elevation and #1 at the lowest. It is worth noting that Flocculant and limewater may be added when needed to increase the efficiency of sedimentation and clarification. The pulp from the last agitated tank (#15) is sent by gravity to thickener #1, from this to #2, and so on until reaching #6, after which the remaining pulp is sent to the tailings dam.

Barren solution is added to thickener #6 and then by gravity to thickener # 5, and so on until reaching thickener #1 (i.e., in counter current relative to the flow of pulp). This process enriches the barren solution, and it becomes semi-pregnant. This semi-pregnant solution is fed to the mills and to the primary thickeners, as mentioned above.

There are two tailing dams currently in operation. These dams are fed with the discarded material from thickener #6. With the aid of a hydrocyclone, the pulp is separated into coarse and fine particle fractions. The coarse material forms the lip of the dam, and fines are deposited close to the center of the dam from where solution is recycled.

17.1.5 Merrill-Crowe

The Merrill-Crowe plant comprises two sub-areas: auto jets and precipitation. The plant is fed with a clean pregnant solution coming from the primary thickeners; this passes through the auto jet filters for clarification, lowering the turbidity from 30 ntu to below 5 ntu. Once filtered, the solution passes to the deoxygenation towers (2 towers that work in parallel), where the oxygen is withdrawn from the solution with a vacuum pump and zinc powder is added to precipitate the gold and silver. The solutions are then pumped through filters-presses where the gold and silver are recovered in the form of a precipitate. There are three presses which work alternately, operating at maximum two per day to achieve the required pumping rate of for recovery of values 7,200 m^3 per day, while the other press remains in standby.

17.1.6 Refinery

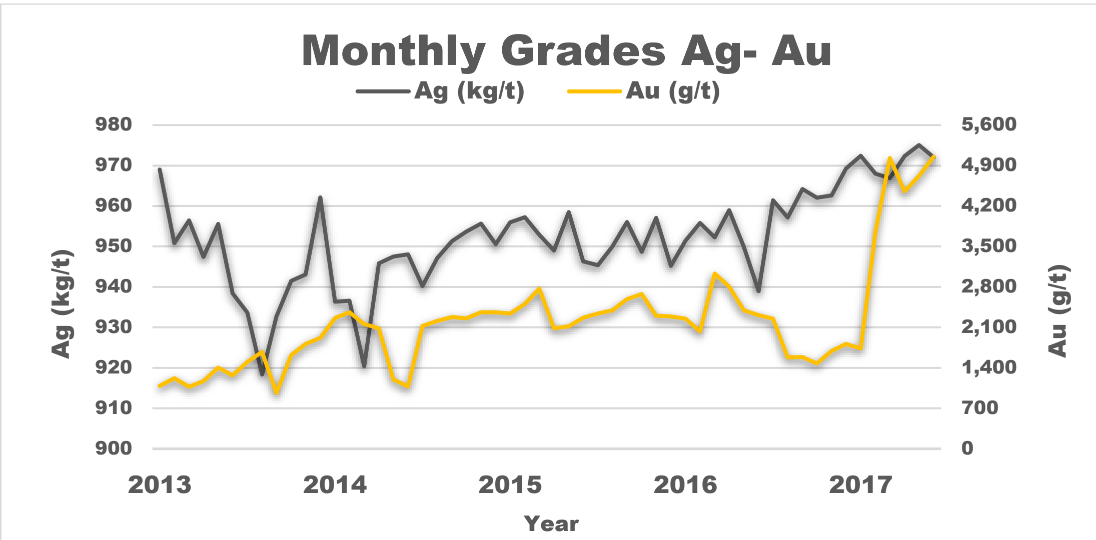
In the refinery, the zinc precipitate is treated with an acid solution to eliminate zinc and other metals. It is then dried in an electrical dryer prior to melting. A mixture of borax, sodium carbonate, silica and coal is used as flux. Once the precipitate has been mixed with the reagents, it is deposited in one of two induction furnaces (two furnaces provide sufficient time for maintenance). The precipitate is melted into the induction furnaces at temperatures close to 1,200°C. The material is poured into doré bars. The quality of the doré bars average more than 90% Ag and 9% Au.

The bars are delivered to various refineries based on annual tendering, for final refining to deliver a product of 99.99% Ag ounces and 99.9% Au ounces. Since 2013, there has been no penalty related to deleterious elements as per the current commercial terms.

17.2 Metal Production

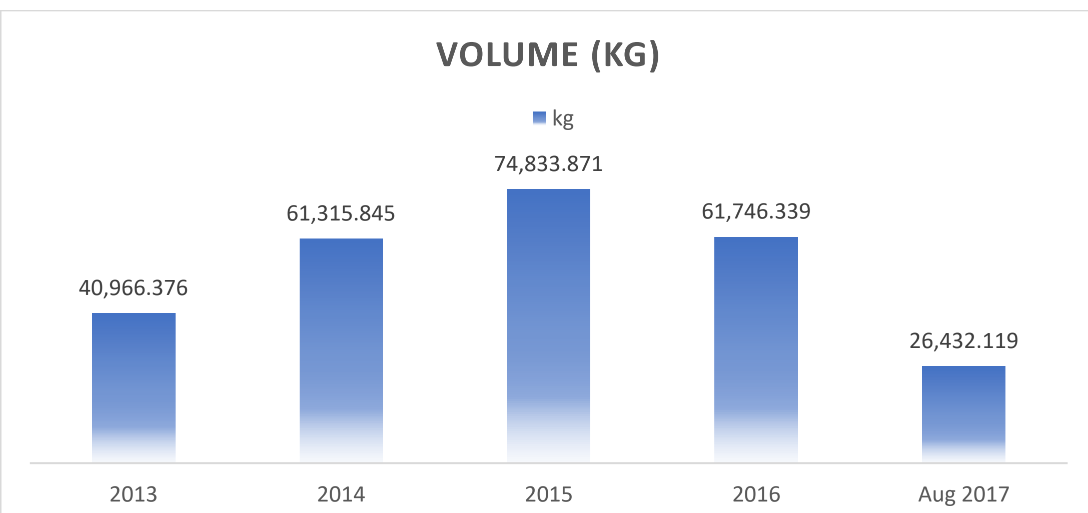
Figure 17-3 shows historical grades of doré indicating continuous increase in quality. Figure 17-4 shows annual production of doré since 2013.

Figure 17-3: Historical Doré Grades at FM San Martín



Note: Figure prepared by FMS, 2017.

Figure 17-4: Historical Doré Production at FM San Martín



Note: Figure prepared by FMS, 2017.

In 2017 to date, the average recoveries for silver and gold are 84.3% and 93.1%, respectively. Continuous improvement initiatives are currently underway, including the evaluation of adding pure oxygen to increase leaching kinetics and the installation of tailings filters to improve solution recycling and waste materials management.

17.3 Processing Plant Equipment

Table 17.1 shows a list of the available plant processing equipment at FM San Martín.

Table 17-1: List of Available Equipment

Equipment	Amount
AGITATOR TANK	15
AUTO JET FILTER	4
BALL MILL	3
CIANIDE INJECTION TANK	1
CLEAN PREGNANT SOLUTION TANK	1
COMPRESSOR	4
CONVEYOR BELT	9
DESOXYGENER TANK	2
DICALITE TANK	1
DIRTY PREGNANT SOLUTION TANK	1
ELECTRICAL CONTROL CABINETS	1
ELECTROMAGNET	1
ELECTRONIC DRYER	1
ELECTRONIC DRYER	1
EMC TRANSFORMER	1
EMC TRANSFORMER	1
FILTER PRESS	3
GEARMOTOR	28
GOULD PUMP	44
HYDRAULIC HAMMER	1
IMEM TRANSFORMER	1
INDUCTOTHERM FURNACE	2
JAW CRUSHER	1
MICRO-TECH WEIGHER	1
MILL DEMAG HOIST	1
OTHER ENGINES	34
OTHER PUMPS	15
PLATE FEEDER 20 HP 42" X 18'	1
RHEEM AIR CONDITIONED	1
SANDIK CRUSHER	1
SCREEN- SANDVIK	2
SCRUBBER	1
STERILE SOLUTION TANK	1
SUMMERSIBLE PUMP	2
SYMONS CRUSHER	1
THICKENER	8
THICKENER MECHANISM	6
VACUUM PUMP	3
WEG ENGINE	51
ZINC DOSIFIER	3

17.4 Energy, Water and Process Materials Requirements

17.4.1 Water Requirements

The water consumed by the operation and administrative facilities is approximately 35,600 m^3 per month, which approximates to a historic average usage of 427,000 m^3 per year. To date in 2017, water consumption has been lower than the historic average.

During July, August and September 2017, the consumption of fresh water is considerably reduced because of the rainy season: rain water is recovered and used in the process.

17.4.2 Energy Requirements

The processing plant consumes 2,000 MWh of electricity per month, which annually equals to approximately 24,000 MWh.

17.4.3 Reagents and Consumables

Materials and consumables used in the process include: sodium cyanide, flocculant, lime, zinc powder, diatomaceous earth, forged balls, pentahydrate borax, sodium nitrate, silica sand, sodium carbonate, and other materials in small amounts such as sodium sulfide, sodium hypochlorite and hydrochloric acid.

Consumption of key reagent materials is as follows:

- Sodium Cyanide: 1.9 – 2.1 kg/t
- Flocculant: 0.05 kg/t
- Lime: 3 – 5 kg/t
- Zinc Powder: 0.18 – 0.2 kg/t

18 INFRASTRUCTURE

As an operating mine, the infrastructure at San Martín is fully developed to support current mining and processing activities.

18.1 Roads and Access

Information on roads and accessibility is presented in Section 5.1.

18.2 Power and Electrical

The San Martín mine and plant are connected to the national power grid through a substation located about 20 km to the north, at the Bolaños mine. Power is supplied to the mine at 33 kVa and 60 cycles. Two 1,000-volt transformers supply power to the process plant. Diesel generators are located at the plant for emergency and stand-by power in case of power interruptions. Air compressors are located at the plant to supply low-pressure air to the leach tanks.

San Martín's average annual power consumption is 30 MW. Emergency power supply is provided by diesel generators to some of the critical equipment such as ventilation fans, laboratory equipment, data servers and offices.

18.3 Water Supply and Management

The water source for the processing plant is the Bolaños River, which has a permanent flow, except in extreme drought conditions, such as the one that occurred during the 2012 summer season. The Company has constructed a 13-km-long pipeline from the regional mountains as a back-up water supply to mitigate the effects of future drought. The two main uses of fresh water are for production and exploration drilling and make-up water for processing. Processing water is recycled at a rate of approximately 18% of the water requirements for the leaching process.

In 2016, FMS started the installation of two filter-presses for tailings; this system will allow the recycling of more than 80% of the processing water and reduce water consumption. The filter-press system is expected to be completed in the fourth quarter of 2017.

Current flows from underground pumping stations are limited to infiltrations from rain water during the wet season. All mine adits and stopes are operating well above the water table.

Potable water is sourced from municipal wells, and is pumped and stored in San Martín's tanks for distribution within the facilities.

18.4 Mine Facilities

There are two mines that make up the San Martín operation: the Zuloaga mine and the Rosario mine. Each mine has several adits that provide access to the mineralized zones at different elevations on the mountain slope. Figure 18-1 shows the general location of the two mines.

Existing underground workshop facilities in the Rosario mine include: a washing bay, a lube station and several repair stations for mobile equipment. The Zuloaga mine has limited activity due to depletion.

The existing surface mining infrastructure includes the processing plant, repair workshops, an analytical laboratory, temporary ore stockpiles, a tailings storage facility, water management and diversion structures, offices, a drill core and logging shack, power substations and power lines.

Figure 18-2 shows an image of the San Martín processing and main infrastructure and Figure 18-3 is an infrastructure map of the Rosario and Zuloaga mines.

Figure 18-1: General Infrastructure Map

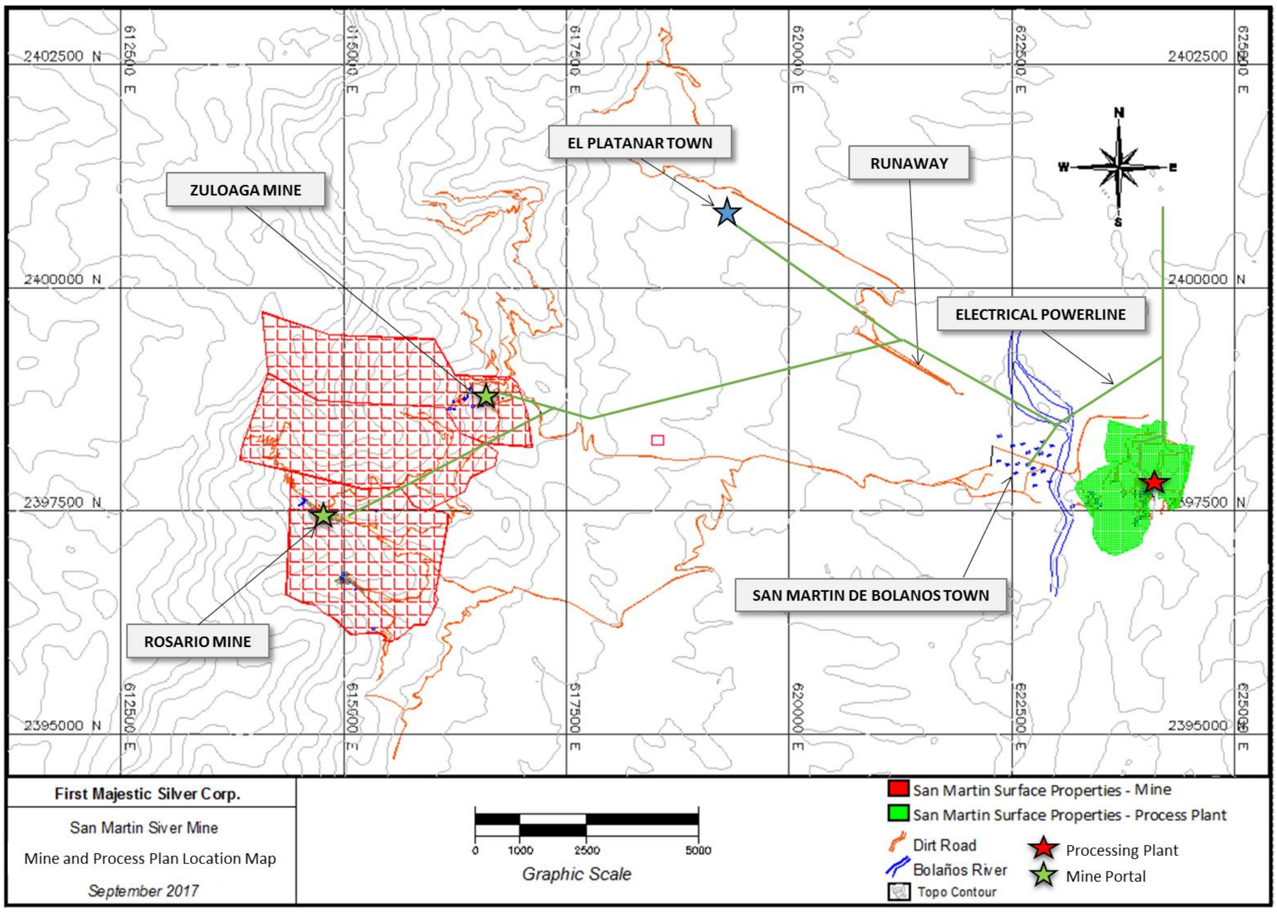
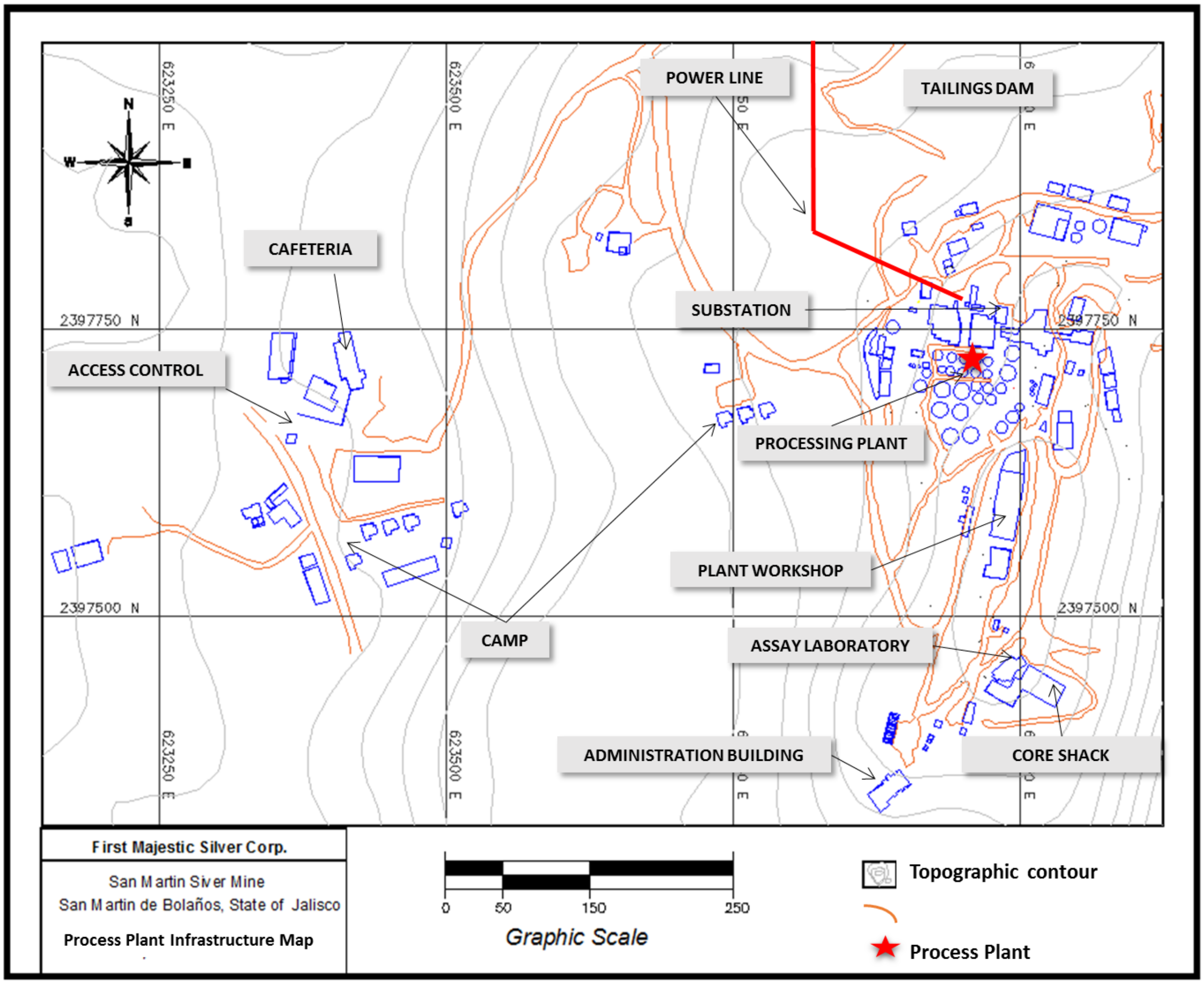
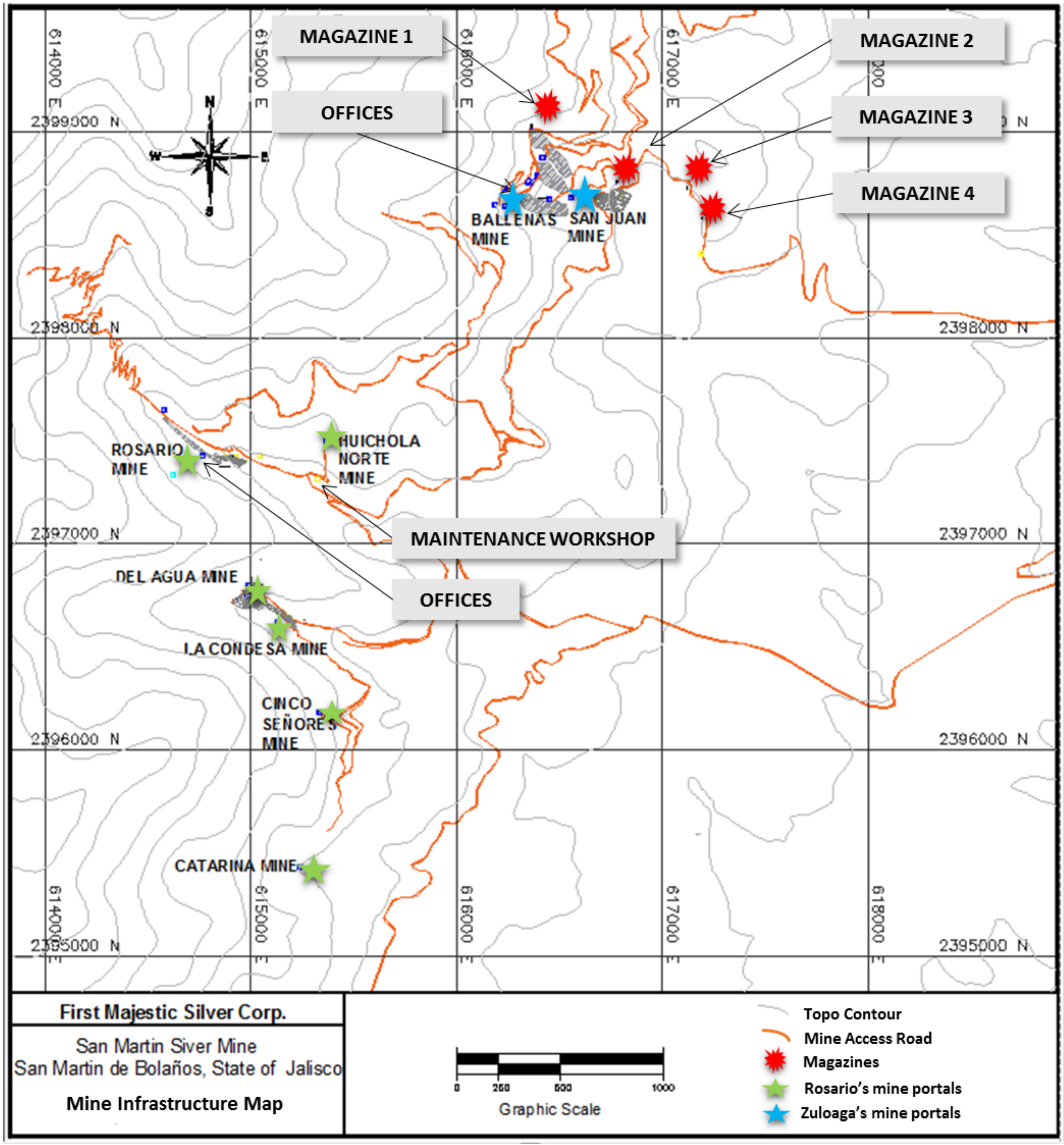


Figure 18-2: Process Plant Infrastructure Map



Note Figure prepared by FMS, 2017.

Figure 18-3: Rosario and Zuloaga Mines Infrastructure Map



Note Figure prepared by FMS, 2017.

18.5 Stockpiles

Short-term plant feed storage stockpiles are located in proximity to the processing plant. These stockpiles have the capacity to hold approximately 10,000 tonnes. As of September 2017, the stockpiles hold less than 5,000 tonnes of plant feed.

18.6 Waste Storage Facilities

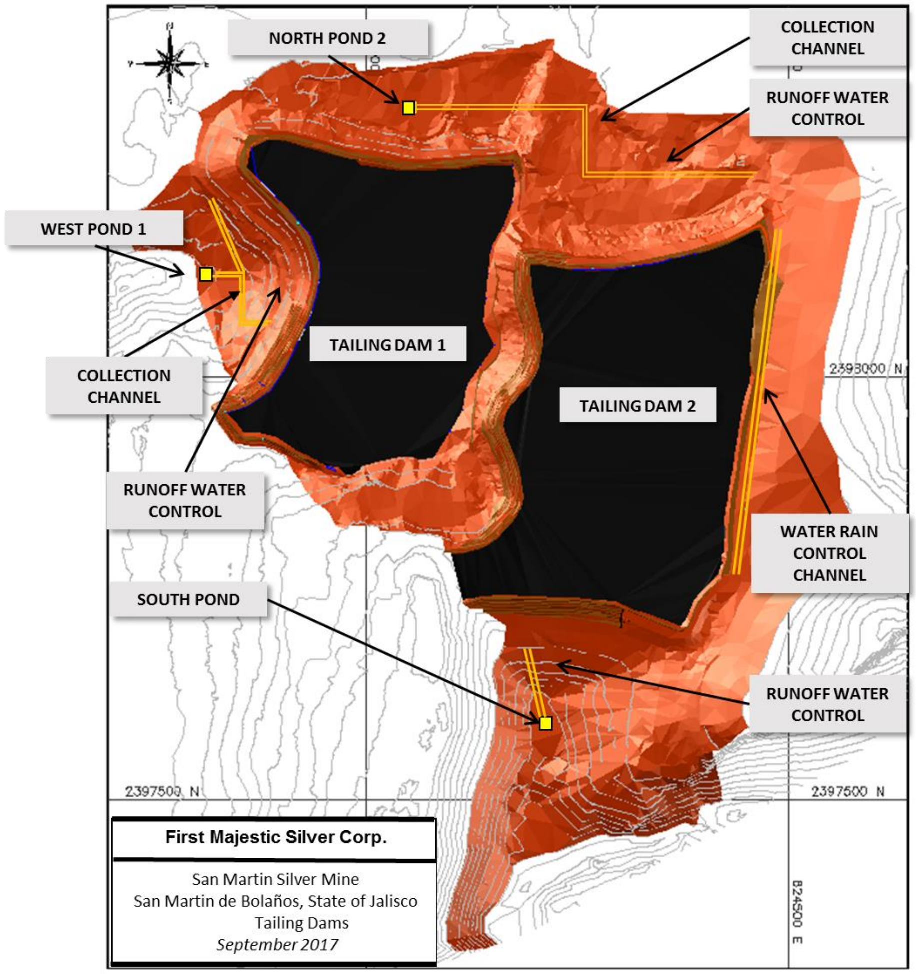
Waste storage facilities are limited to surface dumps outside each of the mines. These facilities hold waste rock generated from underground development. Since the underground mining method used is primarily cut-and-fill, only a limited amount of waste is stored on the surface, and could eventually be a source of backfill for the mined stopes at depth. Current waste storage facilities have sufficient capacity to store the excess waste from underground development for the Life of Mine (LOM) plan.

18.7 Tailings Storage Facility

San Martín is currently operating one Tailings Storage Facility (TSF). The TSF was designed to hold 7.5 million tonnes of conventional wet tailings in 2 benches, 22 levels for a total height of 28 m. The current used capacity is estimated at 7.2 million tonnes. San Martín's TSF is expected to reach maximum capacity by the end of 2022.

A tailings filter-press system is under construction in San Martín. Filtered paste tailings are expected to be produced by the end of the fourth quarter of 2017. Filtered paste tailings will be mixed with waste rock and used initially to reinforce the outer walls of the TSF for the first 17 months, afterwards the pasted tailings will be stored as dry stack in an area close to the processing plant. The LOM plan considers that the pasted tailings will be stored above the current TSF. Figure 18-4 shows the San Martín Tailings facility plan view.

Figure 18-4: San Martín Tailings Storage Facility



The design of the San Martín TSF includes the following elements:

- Adjacent soil deposit to hold the recovered soil for future use during reclamation;
- Supporting buttress in front of the first bench constructed with graded rock material compacted to 95% compaction factor and a boulder rock buttress built in the downstream face of the deposit;
- Each bench crown is designed to have drainage of 1% slope towards the northwest face to allow for proper rainfall water drainage;
- Rainfall collection and diversion channels around the perimeter of the facility diverting to containment ponds equipped with a pumping system to return water to the process plant; and
- Ramp on the southeast side of the deposit to access each of the benches, including drainage slopes and water collection ditch.

The TSF is designed with a static stability factor of 1.6, considering filtered tailings with average moisture of 18.5% are deposited. The dynamic stability analysis resulted in a safety factor of 1.2 which is considered adequate for the low-seismicity zone of Bolaños.

Conventional tailings are currently transported from the processing plant to the TSF by pumping after the thickening. The coarse portion of the tailings are classified using a cyclone system deposited in the form of berms; the fines portion of the tailings are conventionally deposited as beaches using spigots.

Starting in the 4th quarter of 2017, filtered tailings will be transported from the filter plant to the storage facility using front-end loaders and conventional haul trucks. The tailings will be then be spread, leveled and compacted using a track dozer.

Reclamation of the TSF considers placement of a 30-cm layer of organic soil on top of each bench and sloped face to allow for vegetation growth.

18.8 Camps and Accommodations

The location of the San Martín plant and mines in the vicinity of the San Martín de Bolaños town reduces the need to provide dedicated camp facilities for employees and contractors. The majority of the mine personnel lives in the town, within walking distance of the plant. A minor portion of the workforce lives in surrounding towns and commutes each day.

Basic facilities such as restaurants, a medical clinic, telephone and postal services are available in the town of San Martín de Bolaños and in most of the major population communities within the region.

18.9 Logistics

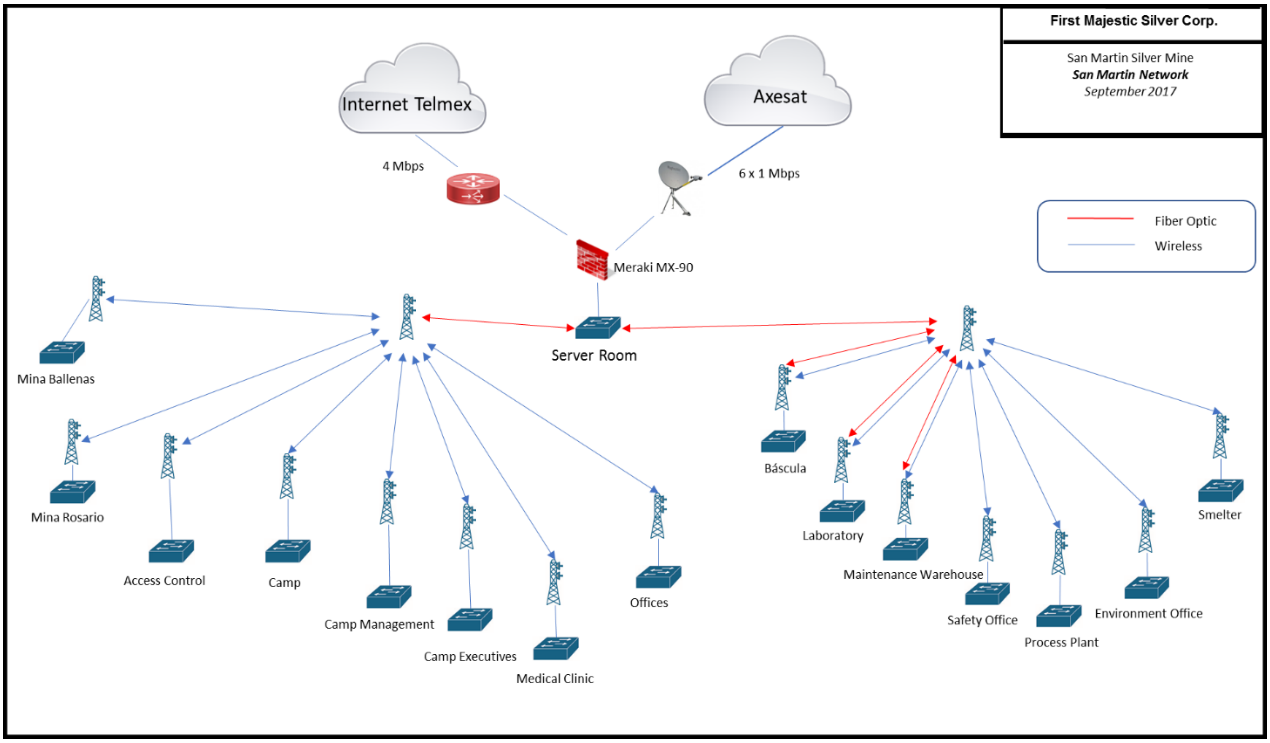
San Martín is well connected by state and federal roads to major cities such as Guadalajara, Zacatecas and Durango, making logistics for materials supply a matter of standard scheduling and warehousing.

18.10 Communications

The communications system for the San Martín mine includes a dedicated internet access of 4 Mb as the primary connection stream to the FMS data center in Monterrey, Mexico. A secondary internet link is used as a redundant connection configured to ensure that there is at least one connection to the Internet up at all times, thereby allowing the critical system to work continuously.

San Martín’s network (Figure 18-5) includes a total of 106 end-users’ computers and 1 Windows server running as Hyper-V. This server contains 5 virtualized servers and a NAS (Network Attached Storage) with 10TB capacity. The local network includes a 5.2 GHz wireless connection and, in some instances, uses a fiber optic connection of 1GB speed. The network infrastructure is managed using CISCO Meraki technology.

Figure 18-5: San Martín's Network Map



18.11 Comments on Section 18

The San Martín mine is located in a reasonably well-developed municipality with most of the basic services required to support the mine and plant operations available.

The mine has all required infrastructure in place to support operations and the LOM plan.

The tailings storage facility maximum capacity is expected to be reached in 2021. A filter-press system is under construction and is expected to be operational in the 4th quarter of 2017. The required capital to complete the filter-press system is funded within FMS's 2017 operational budget. Additional storage capacity is required to hold the tonnage contained in the LOM plan. A preliminary design considers an area between the processing plant and the tailings deposits. This area is sufficient to hold compacted filtered paste tailings generated from the production contained in the LOM plan.

19 MARKET CONSIDERATIONS AND CONTRACTS

The end product from the San Martín facilities comes in form of silver doré bars. The physical silver doré bars, usually containing greater than 95% silver with some gold and other impurities, are delivered to one of three refineries where doré bars are refined to commercially marketable 99.9% pure silver bars.

19.1 Market Considerations

Silver is considered a global and liquid commodity. As a precious metal, it is desirable as jewellery and for investment purposes, and it is also an important industrial commodity. Silver has a unique combination of characteristics including durability, malleability, ductility, conductivity, reflectivity, and anti-bacterial properties, which makes it valuable in numerous industrial applications including circuit boards, electrical wiring, superconductors, brazing and soldering, mirror and window coatings, electroplating, chemical catalysts, pharmaceuticals, filtration systems, solar panels, batteries, televisions, household appliances, and automobiles.

Silver is predominantly traded on the London Bullion Market Association (LBMA) and Comex in New York. The LBMA is the global hub of over-the-counter trading in silver, and is the metal’s main physical market.

19.2 Commodity Price Guidance

The LBMA silver price is an electronic auction platform on which the sale and purchase price of silver is negotiated, The CME Group provides this platform and Thomson Reuters are responsible for the administration and governance of the LBMA silver price. Silver is quoted in US dollars per troy ounce.

FMS has corporately established a standard procedure to determine the medium and long-term metal price guidance for silver and gold.

This procedure considers the consensus of future metal prices forecasts from credible sources, including major Canadian and global banks, projections from financial analysts specializing in the mining and metals industry, and metal prices forecasts used by other peer mining companies in public disclosures.

Based on the above information, a recommendation as to acceptable consensus pricing is put forward by FMS’s QP to the company executives and a decision is made to set the metal prices guidance for Mineral Resource and Mineral Reserve estimates. This guidance is updated at least annually, or on an as-required basis. Metal prices used for Mineral Resource and Mineral Reserve estimates are listed in Table 19-1.

Table 19-1: Metal Prices Used for Mineral Resource and Mineral Reserve Estimates

Metal Price	Units	Resource Estimation	Reserves Estimation and Mine Plan
Silver	$/oz Ag	19.00	18.00
Gold	$/oz Au	1,300	1,250

Foreign exchange rates used in the cost estimates and in the Life of Mine (LOM) model were USD:CAD 1.30 and USD:MXN 18.70.

19.3 Product and Sales Contracts

Silver and gold produced at San Martín is sold by FMS using a small number of international metal brokers who act as intermediaries between FMS and the LBMA. FMS delivers its production to a number of refineries, and once they have refined the silver to commercial grade, the refineries then transfer the silver to the physical market for consumption. FMS transfers risk at the time it delivers its doré from the processing plant to armoured car services under contract to the refineries. FMS normally receives 95% of the value of its sales of doré on delivery to the refinery, dependant on the timing of sales with the metals broker, with final settlements upon outturn of the refined metals, less processing costs.

Contracts with refining companies as well as metals brokers and traders are tendered annually and re-negotiated as required. FMS continually reviews its cost structures and relationships with refining companies and metal traders in order to maintain the most competitive pricing possible, while not remaining completely dependent on any single refiner or trader.

In addition to these commercial sales, FMS also markets a small portion of its silver production in the form of coins and silver bullion products to retail purchasers directly over its corporate e-commerce web site. Less than 1% of FMS production was sold in retail transactions during 2016.

19.4 Deleterious Elements

San Martín silver doré bars are very pure, based on past performance, no relevant impurities have been recorded in San Martín silver doré bars. Considering the characteristics of the ore, and the processing and concentration practice, it is reasonably expected that San Martín silver doré bars will not carry impurities over the LOM production planned that could be materially penalized at the refineries.

19.5 Other Contracts

As a normal course of business, San Martín has contracts in place for some of the services required for the mining and processing activities. All these contracts are agreed upon one-year or multi-year terms and, in the opinion of the QP, these contracts and commercial terms are in line with industry norms for such contracts.

Table 19-2 lists the major contracts in place at the Report effective date for San Martín.

Table 19-2: Main Service Contracts

Service	Contractor / Supplier
Underground mine development	Pascual Haro Perales
Underground mine development	Omar Rene Haro
Ore freight	Colaw, S.C. de P. de R.L.
Shotcrete placement in underground excavations	Alfredo Tovar
Exploration diamond drilling	Versa Perforaciones, S.A de C.V.
Doré freight	Republic Metals Corp.
Industrial security services	Seguridad Privada para la Industria Minera, S.A. de C.V.
General construction	Jose Daniel Fuentes Fragoso

19.6 Comments on Section 19

Selling costs, including freight, insurance and representation, as well as refining charges, payable terms, deductions, and penalties terms for San Martín silver doré bars, have been reviewed by the QP and found to be in line with similar commercial conditions in Mexico. All these costs have been incorporated into the long-term financial analysis.

The QP considers that the likelihood of securing ongoing contracts for silver doré bars sales is a reasonable assumption; however, in downturn market conditions, there can be no certainty that San Martín will always be able to do so or what terms will be available at the time.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

The San Martín area has been the focus of mining activities for over a century, and there are historic environmental disturbances associated with these activities. FMS has been leading an effort to inventory and register affected areas, and is currently liaising with the different regulatory bodies and stakeholders in an effort to integrate mitigation and reclamation initiatives.

20.1 Baseline Studies

Environmental and social baseline studies were performed in order to characterize existing conditions and to support the preparation of Risk Assessment and Accident Prevention Programs for the operation.

20.1.1 Surface Hydrology

Table 20-1 summarizes the surface hydrological studies completed.

Table 20-1: Summary of Surface Hydrology Studies

Study Name	Date	Company	Study Scope	Main Results
Risk assessment for mining operations	May 2013	Soluciones de Ingeniería y Calidad Ambiental, S.A. de C.V.	Identify existing surface water quality sources and determine their current uses.	Water quality in the project area has been previously impacted by the following aspects: • Inadequate handling of urban solids waste. • Pollution of the Bolaños River from direct discharge of graywater without proper treatment. • Uncontrolled pollutant discharges along the banks of the Bolaños River
Hydrological study for San Martín tailings dam	2014	GP Ingeniería	Generate design parameters for drainage control infrastructure.	RH12-A Lerma-Santiago River area - drainage is ephemeral with limited development of channels and riverbeds

20.1.2 Surface Water Geochemistry

Surface water geochemistry studies are currently underway. Results of these studies will be incorporated into the overall site remediation/reclamation plan.

20.1.3 Hydrogeology

Mining operations in San Martín are located in the mountain range west of the Bolaños River and are currently operating well above the water table. No hydrological studies have been conducted in the area to date.

20.1.4 Soil

Soil studies are in progress. Results of these studies will be incorporated into the updated site remediation/reclamation plan.

20.1.5 Air Quality

Air quality study results are provided in Table 20-2.

Table 20-2: Air Quality Studies

Study Name	Date	Company	Study Scope	Main Results
Perimeter particle study	August 2016	Profesionalismo Ecológico S.A. de C.V.	Particle perimeter monitoring (access control gate, tailings dams, Chivas de Oro stream, road connecting tailings dams with community)	Results are within the maximum limits permitted by the Mexican regulation: NOM-025-SSA1-1993. No impacts on operations or mine plans were identified.
Emissions from fixed sources	August 2016	Profesionalismo Ecológico S.A. de C.V.	Monitoring of fixed sources (smelter and laboratory) to determine total particles and combustion gases	Results are within the maximum limits permitted by the Mexican regulation: NOM-043-SEMARNAT-1993. No impacts on operations or mine plans were identified.

20.1.6 Noise

Table 20-3 summarizes the noise impact studies completed to date.

Table 20-3: Noise Impact Studies

Study Name	Date	Company	Study Scope	Main Results
Perimeter noise study	August 2016	Profesionalismo Ecológico SA de CV	Perimeter noise monitoring: access control gate, several access points in the town, access road to the tailings dams, tailings dams 1 and 2, process plant, and access road	The results are within the maximum limits permitted by the Mexican regulation: NOM-081-SEMARNAT-1994. No impacts on operations or mine plans were identified.

20.1.7 Flora and Fauna

Results of the completed flora and fauna surveys are provided in Table 20-4.

Table 20-4: Flora and Fauna Studies

Study Name	Date	Company	Study Scope	Main Results
Risk assessment for mining operations	May 2013	Soluciones de Ingeniería y Calidad Ambiental, S.A. de C.V.	Compile an inventory of flora and fauna for the risk assessment study	No species at risk were found within the project area in accordance with the Mexican regulation: NOM-059-SEMARNAT-2010.

20.1.8 Historical and Cultural Aspects

Table 20-5: Historical and Cultural Studies

Study Name	Date	Company	Study Scope	Main Results
Social baseline	October 2016	O Trade	Identify the social and economic conditions of the community of San Martín de Bolaños, Jalisco	The education levels of the population of San Martín de Bolaños were identified. Most of the non-literate population were elderly adults or Wixarika indigenous peoples living in the region. Vulnerable groups were identified.

20.2 Tailings Handling and Disposal

Currently, tailings handling and disposal is undertaken in accordance with the applicable Mexican regulations. Annual tailings characterization studies indicate that the tailings to date are not Potentially Acid Generating (PAG), or will result in Metals Leaching (ML). Stability analysis are performed periodically as indicated below:

- Stability analysis and remaining life assessment for Tailings Dam 1, completed by GP Ingeniería in 2014;
- Stability analysis and remaining life assessment for Tailings Dam 2, completed by GP Ingeniería during 2014; and
- Stability analysis and remaining life assessment for Tailings Dams 1 and 2 undertaken by Servicios a la Minería (SMART) in 2016.

FMS is completing the installation of a tailings filtering plant that will allow for the generation of dry-stack tailings, thereby reducing the risk associated with wet tailings storage and increasing the amount of process water that can be recycled and reducing the impact to the environment. Completion of this project is expected in the fourth quarter of 2017.

20.3 Waste Material Handling and Disposal

There are nine Waste Rock Storage Facilities (WRSFs) in the San Martín mine area: San Pablo, San Juan, Cangrejos, Mina de Agua 1 and 2, Ballenas, Huichola 1 and 2, and Condesa. Not all of the WRSFs are covered by authorizations or Environmental Impact Assessments (EIAs), because some of the facilities pre-date FMS control of the underlying concessions and surface lands or were constructed by previous operators. Inventory and permitting-related initiatives implemented by FMS will be incorporated into the overall remediation/reclamation plan currently being compiled.

Annual waste rock characterization studies indicate that the waste rock to date is not PAG or ML.

20.4 Mine Effluent Management

The San Martín operation generates mine-dewatering effluents from some of the mines. Registration with the National Water Commission (CONAGUA) is still to be obtained for the use and transfer of surplus ground-water.

20.5 Process Water Management

The water used in the processing plant is sourced from the Bolaños River. CONAGUA has granted FMS a permit for use. Water consumption is measured, recorded, and notified to CONAGUA. Corresponding water usage rates are paid. All process water is recycled in a closed circuit, so there are no process water discharges.

20.6 Hazardous Waste Management

The management of hazardous waste within the San Martín operations is carried out in accordance with the provisions of the applicable Mexican official standards. FMS is registered with SEMARNAT for waste management and waste handling. San Martín has adequate handling, labeling and temporary storage protocols in place to meet Mexican requirements. FMS contracts companies authorized by SEMARNAT for waste transportation and final disposal.

Areas that must be monitored for environmental purposes at San Martín are summarized in Table 20-6.

Table 20-6: Environmental Management Areas

Item	Entity responsible
Subsidence. Two subsidence events have been identified, Pinolea, and La Escondida. Both events are associated with historical mining operations pre-dating FMS's involvement in the mines.	SEMARNAT - PROFEPA

20.7 Monitoring

Table 20-7 summarizes monitoring activities currently undertaken.

Table 20-7: Environmental Monitoring Activities

Element	Frequency	Monitoring Activities
Water	Quarterly	Monitoring of waste water discharge by a certified independent laboratory
Air	Annual	Monitoring of fixed emissions sources (smelter and laboratory) to determine total particles and combustion gases emissions Particle perimeter monitoring (access gate, tailings dams, Chivas de Oro stream, road from the tailings dam to the community)
Waste rock and tailings	Annual	Characterization of tailings and waste rock in terms of ARD and ML Evidence from periodic monitoring shows that the waste rock and tailings is not PAG and will not cause ML.
Perimeter noise	Annual	Perimeter noise monitoring

The following is a description of the principal obligations relating to environmental matters for San Martín.

- Yearly operation licence (COA): Report presented annually containing environmental information on the operation of the mine, including water, air, waste discharge, materials, and production;
- Dangerous waste declaration: Official document that controls the operation of dangerous waste from the mining installation to the site where it will be disposed (final disposal site);
- Quarterly payment for water use;
- Quarterly payment for water disposal; and
- Monitoring plan for water, air, waste and noise: These are carried out in accordance with regulatory requirements.

FMS has developed and is implementing an Environmental Management System (EMS) with the following characteristics.

The EMS applies to all FMS operations, processes and products. The EMS is based on the requirements of ISO 14001:2015 and the requirements to obtain a Certificate of Clean Industry, issued by SEMARNAT, through the Federal Attorney for Environmental Protection (PROFEPA).

FMS establishes, documents, implements, maintains, and continually improves its EMS based on ISO 14001:2015 as follows:

- Identifies the processes required for the EMS and its application throughout the organization;
- Determines the succession and interaction of these processes;
- Determines the criteria and necessary methods to ensure that the operation and control of these processes are effective;
- Ensures the availability of resources and necessary information to support the operation and monitoring of these processes;
- Monitors, measures, and analyses these processes; and
- Applies the necessary actions to achieve the planned results and the continuous improvement of these processes.

20.8 Permits

San Martín is an operating mine, as such it holds all major environmental permits and licenses required by the Mexican authorities to carry out mineral extracting activities in the mining complex. Table 20-8 contains a list of the major permits issued to San Martín. FMS is working with Mexican regulatory authorities to address areas with pre-existing environmental legacy issues from historical operators. Certain areas in the Ballenas, Rosario and Mina de Agua mining complex are in the permitting process shown in Table 20-9.

Table 20-8: Major Permits Issued

Permit	Number	Authority	Status	Date Granted	Validity Period
Environmental number	MPIMJ1407611	SEMARNAT	Current	-	Indefinite
Environmental license	14/LU-117/11/06	SEMARNAT	Current	May 10th, 2013	Indefinite
Groundwater use permit	08JAL104892/12FPOC 09	CONAGUA	Current	August 13th, 1996	40 years
Federal wastewater discharge permit	08JAL150009/12EMOC 11	CONAGUA	Current	March 5th, 2013	10 years
Municipality wastewater discharge permit	N/A	Municipality	Current	October 2016	One year
Hazardous wastes registration	BOO.E.21.1.-2470/2008	SEMARNAT	Current	October 2008	Indefinite
Mining wastes management plan	DGGIMAR.710/011204	SEMARNAT	Pending	February 2015	NA
Risk assessment	DGGIMAR.710/008137	SEMARNAT	Current	October 2013	Indefinite
Accident prevention program	DGGIMAR.710/008137	SEMARNAT	Current	October 2013	Indefinite
Clean industry certification	PFPA/1/1S.3/ 0497/2015	PROFEPA	Current	August 2015	2 years

Table 20-9: Permits in Process

Permit	Number	Authority	Status	Expected Granting Date
Clean industry certification	PFPA/1/1S.3/ 0497/2015	PROFEPA	Review	2018

20.9 Closure Plan

The closure plan is intended to comply with policies and terms included in the obligations denominated as "Asset Retirement Obligations" (ARO), in particular, those related to the works and activities to be carried out in closure preparation and post-closure. The San Martín closure plan includes the following concepts: post-operation activities, closure of facilities, reclamation of certain areas, monitoring and site abandonment.

One of the purposes of the plan is to quantify the budget required to support and complete the closing works and mitigation activities relevant to soil quality, surface water, groundwater, and wildlife in the area of influence of the infrastructure used for the mining and processing activities.

The estimation of restoration and closing costs was carried out using the Standardized Reclamation Cost Estimator (SRCE) model. The SRCE model contains best practices for estimating the remediation and restoration costs of areas impacted by industrial processes. FMS adapted the model to reflect current regulations in Mexico, and estimates were escalated for inflation. Table 20-10 shows the estimated closure costs as of December 2016.

Table 20-10: Closure Cost Estimate

Facility	Brief Description	SRCE 2016 Model
WRSFss	Ripping/scarifying, grading, cover placement and topsoil placement	$37,000
Tailings dams	Embankment regrading, tailings surface grading, cover placement, topsoil placement and revegetation	$548,000
Roads	Ripping/scarifying, grading, cover placement and revegetation	$174,000
Underground openings	Portals and declines plugging, shaft backfill/cover and shaft capping	$28,000
Equipment removal	Equipment removal	$598,000
Process ponds	Backfilling, growth media placement, revegetation, liner cutting and folding costs	$9,000
Buildings and foundation demolition	Buildings demolition, walls demolition and concrete slabs demolition	$233,000
	Growth media placement, cover placement and ripping/scarifying costs	$181,000
	Revegetation cost	$30,000
Yards	Regrading, cover placement, revegetation, ripping/scarifying and growth media placement costs	$8,000
Waste disposal	Hazardous materials, solid waste - off site, solid waste - on site and contaminated soils	$16,000
Miscellaneous costs	Removal of rip-rap, rock lining, substations/transformers, power lines, culverts and buried pipes, fences, surface pipe and other removal items	$210,000
Reclamation, monitoring and maintenance	Erosion maintenance, revegetation maintenance, reclamation monitoring and water quality monitoring	$199,000
Solution/water management	Water treatment, forced evaporation, pumping and decontamination	$146,000
Other costs	Transport of discarded materials, purchase of topsoil, installation of piezometers, cleaning and decontamination of equipment	$481,000
Indirect costs	Contractors and contractor administration	$246,000
Total Closure Cost Estimate		***$3,145,000***

20.10 Corporate Social Responsibility

The mining unit maintains a close relationship with the local government and inhabitants. FMS manages this relationship through the Corporate Social Responsibility (CSR) department and its system for risk management and addressing any deleterious impacts the operation may have on the community.

CSR carries out face-to-face, in-kind, and sponsorship participation in the main cultural and social events of the year organized by the municipality. These include: Child´s Day, Mother’s Day, Father’s Day, and Christmas celebrations.

FMS continues to actively engage and assist the communities surrounding San Martín with targeted support such as sponsorship of senior citizens who live in nursing homes and helping ranches with water troughs and fencing for cattle. CSR personnel are also working in collaboration with the local health authorities to improve staffing and services at the two local medical clinics.

The Mexican government instituted a Mining Fund with funds from royalties imposed on mining companies. The fund is intended to support regional development in areas where there is mining activity. Allocation of funds begins with information provided by the Ministry of Economy that helps decide the proportion of the assets that each state and municipality should receive. San Martín also contributes to the development of public infrastructure in the municipality, through the Mining Fund. The following works have been carried out using fund moneys:

- Rehabilitation of Secondary School No. 159;
- Fencing for the school building; and
- Paving of streets.

Likewise, the following projects are underway or planned:

- Construction of a dining room in the Emeterio Jiménez kindergarten;
- Playground construction (Central);
- Dome construction in Technical High School # 159; and
- Playground construction (La Canchita).

As a result of FMS's efforts to date, the social operating license within the local communities has been maintained and strengthened.

21 CAPITAL AND OPERATING COSTS

21.1 Capital Costs

The San Martín mine has been under FMS operation since 2006. The sustaining capital expenditures are budgeted on an as-required basis, established on actual conditions at the mine and the processing plant infrastructure. The operation plans to incur sustaining and expansionary capital expenditures for various activities as the operations continues to grow.

Sustaining capital expenditures will mostly be allocated for on-going development, infill drilling, mine equipment rebuilding, major overhauls or replacements, plant maintenance and on-going refurbishing, and for tailings management facilities expansion as needed.

Currently, FMS is developing access to new mining blocks throughout San Martín. Various veins include: Veladora, La Lima, Guitarrona, Pitayo, Hedionda, Intermedia and extensions of the Rosario vein.

Estimated sustaining capital expenditures for the life of mine plan are assumed to average $9.1 million per annum, including infill exploration drilling. Capital costs summaries include a 5% contingency allocation.

The amount of exploration conducted to find new targets, with the objective of replacing and/or expanding the Mineral Resources/Mineral Reserves, will be dependent on the success of exploration and diamond drilling programs. Table 21-1 and Table 21-2 present the summary of the sustaining and expansionary capital expenditures estimated for San Martín. Sustaining capital is focusing on maintaining current operational capacities (plant and equipment) and expansionary capital is focussed on maintaining and expanding appropriate sources of mineralization.

Table 21-1: San Martín Mining Capital Costs Summary (Sustaining Capital)

Type	Units	Total	2017	2018	2019	2020	2021	2022
Mining Infrastructure	$US M	**$1.6**	$0.3	$0.5	$0.4	$0.2	$0.1	$0.0
Development and Exploration	$US M	**$21.4**	$6.2	$7.3	$3.2	$2.6	$1.3	$0.8
PPE* - Mine	$US M	**$4.9**	$1.0	$1.0	$1.0	$1.0	$1.0	$0.0
PPE* - Plant	$US M	**$0.9**	$0.2	$0.2	$0.2	$0.2	$0.2	$0.0
*Total Mining Capital Costs^*	*$US M*	*$29.78*	*$7.65*	*$9.39*	*$5.09*	*$4.14*	*$2.62*	*$0.89*

^Includes 5% capital contingency
**Property and Plant Expenditure*

Table 21-2: San Martín Mining Capital Costs Summary (Expansionary Capital)

Type	Units	Total	2017	2018	2019	2020	2021	2022
Development	$US M	$14.2	$2.8	$2.8	$2.8	$2.8	$2.8	$0.0
Property and Plant Expenditure	$US M	$13.5	$2.7	$2.7	$2.7	$2.7	$2.8	$0.0
*Total Mining Capital Costs^*	*$US M*	*$27.64*	*$5.49*	*$5.49*	*$5.49*	*$5.49*	*$5.66*	*$0.00*

^Includes 5% capital contingency

21.2 Operating Costs

San Martín has a well-established cost management system and a good understanding of the cost of operation. Although the cost inputs are based on site actuals (e.g., labour, various supplies, etc.) and contractor quotes, there will be variance from the estimates used for this Report and the actual costs. The total cost of mining is expected to be within +/- 15%. Overall, the cost estimation is of sufficient detail that, with the current experience at San Martín, Mineral Reserves can be declared.

A summary of the San Martín operating costs resulting from the LOM plan and the cost model used for assess economic viability is presented in Table 21-3. A summary of the annual operating expense is presented in Table 21-4. Operating costs summaries include a 5% contingency allocation.

Table 21-3: San Martín Final Costs used to Assess Economic Viability

Operating Costs		Total Costs	Stoping Costs	Transport & Processing
Direct Stoping Costs				
Stoping – Cut-and-Fill (100% stoping)	*$ / t ore*	18.8	18.8	
Other Direct Costs				
*Sill Development, Including Exploration Development^*	*$ / t ore*	9.00		
Processing and Surface Haulage	*$ / t ore*	21.80	21.80	21.80
Treatment, Transport, Refining and Penalties	*$ / t ore*	1.30	1.30	1.30
Indirect Operating Mining Costs				
Diesel, Equipment, Utilities	*$ / t ore*	4.70	4.70	4.70
Labour, Contract Labour	*$ / t ore*	4.30	4.30	
General Mining Services	*$ / t ore*	0.90	0.90	
Geology	*$ / t ore*	0.50	0.50	
General and Administration	*$ / t ore*	5.00	5.00	
Taxes, Profit Share, Safety, Corporate Allocation Costs	*$ / t ore*	5.50	5.50	5.50
Contingency (5%)	*$ / t ore*	2.90	2.90	2.90
Total	*$ / t ore*	*74.70*	*65.70*	*36.20*

^ Includes some portion of capital expense

* Rounded to nearest 5 g/t Ag-Eq

Table 21-4: San Martín Operating Cost Summary Annual Expense

Type	Units	Total	2017	2018	2019	2020	2021	2022
Mina San Martín								
Direct Mining Cost	$US M	$42.66	$8.14	$8.31	$8.58	$8.03	$6.77	$2.83
Indirect Mining Cost	$US M	$34.78	$6.00	$6.10	$6.25	$6.22	$5.62	$4.58
Treatment and Refinement	$US M	$52.36	$8.77	$8.85	$8.81	$8.72	$8.67	$8.53
Contingency	$US M	$6.49	$1.15	$1.16	$1.18	$1.15	$1.05	$0.80
Total Mining Costs		*$136.28*	*$24.06*	*$24.42*	*$24.83*	*$24.13*	*$22.11*	*$16.73*

22 ECONOMIC ANALYSIS

FMS is using the provision for producing issuers whereby producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production and where no material production expansion is planned.

Mineral Reserve declaration is supported by a positive cashflow.

23 ADJACENT PROPERTIES

This section is not relevant for this Technical Report.

24 OTHER RELEVANT DATA AND INFORMATION

This section is not relevant for this Technical Report.

25 INTERPRETATION AND CONCLUSIONS

The following interpretations and conclusions are a summary of the QP's opinions based on the information presented in this Report.

25.1 Mineral Tenure, Surface Rights and Agreements

Information provided by FMS legal experts supports that the mining tenure held is valid and is sufficient to support declaration of Mineral Resources and Mineral Reserves; San Martín has adequate mineral concession and surface rights to support mining operations over the planned underground Life of Mine (LOM) presented in this Report.

25.2 Geology and Mineralization

The current understanding of mineralization and alteration styles, as well as the structural and lithological controls on mineralization, is sufficient to support the Mineral Resource and Mineral Reserve estimations.

The San Martín mine area deposits are considered to be examples of low-sulfidation epithermal deposits. Similar mineralization styles and association with volcanic rocks of the Upper Volcanic Series are also known from other low-sulfidation deposits in Mexico. Additionally, structural-textural features such as hydrothermal breccias cemented by quartz-calcite, stockworks, and cymoid loops are also common in other low-sulfidation epithermal vein-type deposits.

25.3 Exploration, Drilling and Data Analysis

The exploration programs completed to date are appropriate for San Martín's mineralization style. Sampling methods (diamond drill hole and channel sampling) and data collection are acceptable given San Martín's deposit dimensions, mineralization true widths, and the style of the deposits. The programs are reflective of industry-standard practice and can be used in support of Mineral Resource and Mineral Reserve estimation.

Lithological, geotechnical, collar and downhole survey data collected are considered to be reliable. The Quality Assurance and Quality Control (QA/QC) program is adequate but needs further attention to the ongoing corrective actions in order to better address the issues seen in terms of precision, accuracy, and contamination.

The QA/QC program results indicate incidences of contamination with both Central Laboratory and SGS. The QP recommends that an evaluation be undertaken to determine the underlying causes of carryover contamination during sample preparation and analysis at both laboratories and that the laboratories undertake remediation of any issues identified. In addition, consideration should be given to sourcing different blank materials.

The QA/QC results also revealed several instances of gold failures from the Central Laboratory reflecting an analytical accuracy issue for gold with results from the Central Laboratory. FMS has taken measures to address the assay accuracy issues that were identified at the Central Laboratory.

No batch re-assays were performed, and the original batch assay results were accepted into the database. Any impact on the resource estimate as a result of the gold assays from the Central Laboratory would be localized and is likely to result in a conservative estimate of the gold grades in those areas.

25.4 Metallurgical Testwork

The metallurgical analysis discussed in this Report is primarily based on plant operational data. This is because laboratory work was considered to be of lesser priority, as emphasis was given to tailor the plant to the real run-of-mine mill feed.

Besides performing laboratory tests using standard plant conditions, metallurgical investigation is conducted on monthly composites to systematically evaluate the effect of key processing variables. The objective of this ongoing program is to explore ways to improve silver and gold recoveries, and to assist operations in diagnosing production issues. Study variables include: grind particle size, cyanide dosage, retention time, reagent type, and oxidizing agents such as pure oxygen and lead nitrate, etc.

The metallurgical recoveries considered in the LOM plan presented in this technical report and in the economic analysis were 84% for silver and 92% for gold.

25.5 Mineral Resource and Mineral Reserve Estimation

The Mineral Resource estimation process for the main deposits (Intermedia, Pitayo, Hedionda, Rosario, La Veladora, La Lima and Huichola Norte) at San Martín is in line with standard industry practices.

Other deposits were modeled using the polygonal method, which is still a regular practice in some small mines in Mexico. However, the QPs recommend that resource estimation practices be improved by using plans, sections, drilling data and channel samples to construct wireframe and block models.

Approximately 700 holes have been drilled in the San Martín mine area. However, a significant proportion of those drill holes are located in mined-out areas. The historical data have some issues, such as geological logging inconsistencies, collar topographic inconsistencies, questionable downhole surveys or lack of such surveys, and potentially unreliable sample preparation procedures or assay data. As a result, at the start of 2016, FMS made a decision to re-log and re-sample the drill holes that intersect the main structures in San Martín. A total of 151 of the 196 holes that support Mineral Resource estimation were re-logged using standardized lithological codes and re-sampled and assayed, applying current industry standards practices for sample preparation and security, QA/QC and analysis.

Factors which may affect the geological models and the preliminary stope designs used to constrain the Mineral Resources, include: commodity price assumptions; dilution assumptions; changes to geotechnical, mining, and metallurgical recovery assumptions; changes in interpretations of mineralization geometry and continuity of mineralization zones; and changes to assumptions made as to the continued ability to access the site, retain mineral and surface rights titles, maintain the operation within environmental and other regulatory permits, and retain the social licence to operate.

Mineral Reserves include considerations for dilution, mining widths, ore losses, mining extraction losses, appropriate underground mining methods, metallurgical recoveries, permitting and infrastructure requirements. Factors which may materially affect the Mineral Reserve estimates include: commodity price and exchange rate assumptions used; underground stability conditions; the ability to maintain constant underground access to all working areas; geological variability; and cost escalation.

25.6 Mine Plan

Mining operations can be conducted year-round. The underground mine plan presented in this Report was designed to deliver an achievable plant feed, based on the current knowledge of geological, geotechnical, hydrological, mining and processing conditions. Production forecasts are based on current equipment and plant productivities.

The current mine life to 2022 is achievable based on the projected annual production rate and the estimated Mineral Reserves. There is some upside if some or all of the Inferred Mineral Resources can be upgraded to higher confidence Mineral Resource categories.

25.7 Processing

The process plant is operational, and metal production is obtained from a dynamic cyanidation circuit coupled with a Merrill-Crowe plant that produces doré bars. The grinding circuit is designed at a nominal rate of 1300 tpd to generate a fine (85% – 200 mesh) feed to the cyanidation tanks and is currently operating at rate of 900 tpd.

25.8 Infrastructure Considerations

The San Martín mine is located in a reasonably well-developed municipality with most of the basic services required to support the mine and plant operations available.

The mine has all required infrastructure in place to support operations and the LOM plan.

A filter-press system is under construction and is expected to be operational in the fourth quarter of 2017. A preliminary design considers a storage area between the processing plant and the tailings deposit. Since the tailings storage facility's maximum capacity is expected to be reached in 2021, this area is not sufficient to hold compacted filtered paste tailings generated from the production contained in the LOM plan, therefore a new expansion will be required. An area to the south of the current tailings deposit has been secured and detailed design will be required.

25.9 Markets and Contracts

The end product from the San Martín facilities comes in form of silver doré bars. The physical silver doré bars, usually containing greater than 95% silver with some gold and other impurities, are delivered to one of three refineries where doré bars are refined to commercially marketable 99.9% pure silver bars. The terms contained within the existing sales contracts are typical and consistent with standard industry practices.

Selling costs, including freight, insurance and representation, as well as refining charges, payable terms, deductions, and penalties terms for San Martín silver doré bars, have been reviewed by the QP and found to be in line with similar commercial conditions in Mexico. All these costs have been incorporated into the long-term financial analysis.

The likelihood of securing ongoing contracts for concentrate sales is a reasonable assumption; however, in downturn market conditions, there can be no certainty that San Martín will always be able to do so or what terms will be available at the time.

25.10 Permitting, Environmental and Social Considerations

Permits held by San Martín are sufficient to ensure that mining activities are conducted within the regulatory framework required by the Mexican government and that Mineral Resources and Mineral Reserves can be declared.

FMS is working with Mexican regulatory authorities to address areas with pre-existing environmental legacy issues from historical operators. Certain areas in the Ballenas, Rosario and Mina de Agua mining complex are in this regularization process.

Closure provisions are appropriately considered in the mine plan and economic analysis.

25.11 Capital and Operating Cost Estimates

The capital and operating cost provisions for the LOM plan that supports Mineral Reserves have been reviewed. The basis for the estimates is appropriate to the known mineralization, mining and production schedules, marketing plans, and equipment replacement and maintenance requirements.

Capital cost estimates include appropriate sustaining estimates.

25.12 Economic Analysis

Under the assumptions used in this Report, San Martín has positive project economics for the LOM plan, which supports the Mineral Reserve statement.

26 RECOMMENDATIONS

26.1 Introduction

Recommendations have been separated into two phases. The Phase 1 recommendations are made in relation to exploration activities. Recommendations proposed in Phase 2 are suggestions for improvements in current operating procedures, and the program is not contingent on the results of Phase 1 work.

The total cost for the Phase 1 work is about $10.2 million. Phase 2 is estimated at about $4.1 million.

26.2 Phase 1 Work Program

The Phase 1 work program includes allocations for underground drilling, drill target generation, a fluid inclusion study and geophysical surveys.

26.2.1 Surface Geological Mapping

In order to generate additional drilling targets, a geological mapping program scale 1:5,000 over the whole property is recommended to be carried out. Detailed mapping for the areas of main interest at scale 1:2000 is also recommended. This program has an estimated cost of $250,000 to be deployed over a two-year period.

26.2.2 Fluid Inclusion Study

A fluid inclusion study on material from the Rosario vein is recommended in order to determine the most favorable elevation for ore shoot location. It is estimated that 20 samples will be required. The fluid inclusion study is estimated to cost about $20,000.

26.2.3 Geophysical Surveys

A high-resolution airborne magnetic survey is recommended over the entire property holdings in order to aid lithological and structural mapping as well as to identify magnetic anomalies that could assist in delineating potentially-mineralized targets. The estimated cost is $300,000.

26.2.4 Satellite image

A high-spectral resolution ASTER (Advanced Spaceborne Thermal Emission and Reflection Radiometer) satellite image is recommended to be obtained that covers the entire property holdings in support of alteration and structural mapping. The estimated cost is $30,000.

26.2.5 Drilling

Underground and surface drilling is recommended in order to identify new areas of mineralization and infill known mineralized areas so as to support Mineral Resource estimation. A total of 95,000 m of diamond drilling throughout the property over the next five years is recommended in order to explore chimney, breccia body and vein targets in the following areas.

Rosario and Lima

Expansionary drilling at the south of the Rosario and La Lima vein systems should be completed. Confidence in the grade estimates and resulting resource classification would be improved with these additional drill holes, and there may be potential to add to the resource base at depth. The proposed work program would include:

- 40,000m of drilling, core sampling and assaying $5,000,000; and
- Geological modelling and engineering studies $ 50,000.

Zuloaga

Expansionary drilling to the west of the old mine should be completed. Confidence in the grade estimates and resulting resource classification would be improved with these additional holes, and there may be potential to add to the resource base to the west under the volcanic outcrops. The proposed work program would include:

- 20,000m of drilling, core sampling and assaying $2,500,000; and
- Geological modelling and engineering studies $ 50,000.

Esperanza

The drilling program in La Esperanza should be continued in order to explore and delineate this vein laterally and at depth. Confidence in the grade estimates and resulting resource classification would be improved with these additional holes. The proposed work program would include:

- 15,000m of drilling, core sampling and assaying $1,900,000; and
- Geological modelling and engineering studies $ 50,000.

26.3 Phase 2 Work Program

The Phase 2 work program is designed to provide additional support to the mining operations. It is not dependent on the results of the first work phase, and can be conducted concurrently with Phase 1.

26.3.1 Surface Topographic Survey

The current topographic surface is incomplete and should be updated. It is recommended that a LIDAR (Light Detection and Ranging) survey be undertaken. The estimated cost is $40,000.

26.3.2 Metallurgical and Process

Fine Grinding Optimization Study

Over the last few years, San Martín has transitioned into an operation that successfully manages to produce a fine product (85% - 200 mesh) from the grinding circuit. This transition has been key to maintaining on-target metallurgical recoveries. Consistently producing a fine feed for the cyanidation tanks requires operating the grinding circuit in two stages (grind/re-grind) using ball mills. However, additional metallurgical improvements could be achieved by implementing grinding technologies specifically developed to generate fine material in a more efficient manner than can be achieved using ball mills (examples include Outotec's HIG mill, Metso's Vertimill, Glencore's IsaMill, etc.). A study into the implementation of these technologies at San Martín should be undertaken. The proposed work program would include:

- Testing and design $ 100,000; and
- Equipment and retrofitting $2,500,000.

Sulphide Characterization

Metallurgical performance appears to be highly dependent on ore type. It is well known that some ore domains contain a degree of sulphide mineral speciation. An ore characterization technique for the direct measurement of sulphide and total sulphur such as the LECO (combustion followed by infrared detection) analyzer should be implemented. This information could be used to better understand the effect of the various sulphide minerals in the ores on metallurgical recoveries. The cost for this type of investigation study is estimated at about $100,000.

26.3.3 Mineral Resource and Mineral Reserve Modelling

Database and QA/QC

It is recommended that failures identified during the QA/QC review be re-assayed. The estimated cost for re-assays is $10,000.

The source blank materials used in the QA/QC programs should be changed due to the anomalous grade material observed in the current blank materials from both Central Laboratory and SGS. The estimated cost to prepare and analyze new blanks sources is $15,000.

As part of day-to-day mining activities, San Martín staff should continue with the current QA/QC program for both drill holes and underground channels samples. Staff should thoroughly and regularly evaluate QAQC results for any ongoing issues, particularly with respect to analytical accuracy and contamination.

Resource Modeling

Mineral Resources for veins and the "other deposits" (Zuloaga, La Esperanza, Veta 420, Dique 690, La Blanca, and Desprendimiento 7000) have been estimated using a polygonal method. While resource estimation using the polygonal method is still a regular practice in some small mines in Mexico, these resource estimation practices at San Martín should be updated by using plans, sections, drilling data and channel samples to construct wireframe and block models for veins and other deposits in support of the next Mineral Resource estimate update. The proposed work program would include:

- Geological modelling and mine planning $150,000.

26.3.4 Mining

It is recommended that the following aspects be considered to further optimise and improve the operation.

Ventilation

Ventilation systems at the Rosario Mine should be upgraded to allow for exploration and development of mineralization potential at depth, and a ventilation audit should be conducted following the upgrades. The proposed work program would include:

- Consultancy services $ 50,000;
- Ventilation equipment $150,000; and
- Ventilation infrastructure $400,000.

Long-Hole Stoping Trial

A trial long-hole stoping evaluation should be conducted at the Rosario Mine to investigate a potential reduction in operating costs and potential increases in productivity. The proposed work program would include:

- Mine equipment $150,000; and
- Development and trial mining $150,000.

Installation of Refuge Chambers

Each mine should be equipped with self-contained refuge chambers and, staff should be trained in their use, including through operation rehearsals. The estimated cost to install additional refuge chambers in all three mines is $300,000.

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