



**NI 43-101 - La Guitarra Technical
Report
La Guitarra Silver Mine,
Temascaltepec,
Estado de México, México**

Submitted to:
Sierra Madre Gold and Silver Ltd.

Report Date: Effective Date:
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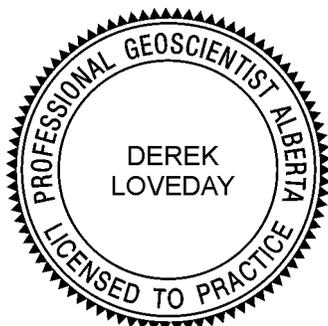
CERTIFICATE OF QUALIFICATIONS

I, Derek J. Loveday, P.Geo., do hereby certify that:

1. I am currently employed as a Project Manager by Stantec Services Inc., 2890 East Cottonwood Parkway Suite 300, Salt Lake City UT 84121-7283.
2. I graduated with a Bachelor of Science Honours Degree in Geology from Rhodes University, Grahamstown, South Africa in 1992.
3. I am a licensed Professional Geoscientist in the Province of Alberta, Canada, #159394. I am registered with the South African Council for Natural Scientific Professions (SACNASP) as a Geological Scientist #400022/03.
4. I have worked as a geologist for a total of thirty years since my graduation from university, both for mining and exploration companies and as a consultant specializing in resource evaluation for precious metals and industrial minerals. I have many years of experience with exploring, modelling and evaluation of precious and base metals deposits located in Africa, United States and México.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I meet the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for all Sections for the technical report titled: Technical Report La Guitarra Silver Mine, Temascaltepec, Estado de México, México (the “Technical Report”) dated November 4, 2022, Effective Date July 1, 2022.
7. I have had no prior involvement with the Property that is the subject of the Technical Report.
8. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. A site visit to the Property was completed by the Qualified Person from May 18-19, 2022.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
11. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Report, the omission to disclose which makes the Report misleading.
12. I am independent of Sierra Gold and Silver Ltd. and First Majestic Silver Corp., applying all of the tests in Section 1.5 of NI 43-101.

Dated November 4, 2022

“Original Signed and Sealed By Author”




Derek J. Loveday, P.Geo.
Project Manager



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List of Abbreviations

Ag	Silver
eAg	Silver equivalent grade
Au	Gold
C\$	Canadian dollars
US\$	United States dollars
kV	kilovolt
kVA	kilovolt amperes
MVA	mega-volt amperes
g/t	grams per tonne
US\$/t	United States dollars per tonne
kg/t	kilogram per tonne
g/l	grams per litre
3D	Three dimensional
CAD	Computer Aided Design
CCD	Counter Current Decantation
GIS	Geographic Information System
LHD	Load haul dump underground mining vehicle
SG	Specific Gravity
t/m ³	Tonnes per cubic meter
°C	Celsius
g	gram
kg	kilogram
lb	pound
oz	ounce (troy)
tonne	metric ton
ft	feet
in	inches
cm	centimeter
km	kilometers
m	meters



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mm	millimeters
Mtpa	million short tons per annum
yd	yard
ac	acre
ha	hectare
ft ²	square feet
m ²	square meter
m ³	cubic meter
Ma	million years ago
QA/QC	Quality assurance and quality control
ROM	Run of mine, feed to mill
tpd	tonnes per day
'000	thousands
SEMARNAT	Secretaría del Medio Ambiente y Recursos Naturales
Wt%	Weight percent
EIS	Environmental Impact Statement
MIA	Manifestacion de Impacto Ambiental



1 SUMMARY

This Technical Report was prepared by Stantec Consulting International LLC (Stantec) in compliance with the disclosure requirements of NI 43-101 to release technical information about the La Guitarra Silver Mine, its current operating conditions and historical estimates of Mineral Resources and Mineral Reserves.

The effective date of this Technical Report is July 1, 2022 which represents the cut-off date for the scientific and technical information used in the Report.

The La Guitarra Silver Mine (“the Property”) is owned and operated by La Guitarra Compañía Minera S.A. DE C.V. (La Guitarra Cia) which is an indirect wholly owned subsidiary of First Majestic Silver Corp. (“First Majestic”). On May 25, 2022, Sierra Madre Gold and Silver Ltd. (“Sierra Madre”) entered into a definitive share purchase agreement (the “Definitive Agreement”) with First Majestic, whereby Sierra Madre agreed to acquire the Property by purchasing all the shares of La Guitarra Cia from First Majestic (the “Transaction”). The consideration for the Transaction will be payable through the issuance to First Majestic of 69,063,076 common shares in the capital of Sierra Madre with a deemed value of US\$35,000,000.

The La Guitarra Silver Mine comprises three recent operating mines, La Guitarra, Coloso and Nazareno, which were placed into production in 1991, 2012 and 2016 respectively. The eastern portion of the Property contains historic mine Mina de Agua. Exploration projects within the property include El Rincón, Aquila, Veta Rica, Los Locos, and Animas. Other opportunities include reprocessing of mine tailings.

1.1 Site Inspection

Stantec representatives Clyde Peppin and Qualified Person, Derek Loveday (P.Geol), completed a site inspection of the Property May 18 and May 19, 2022. While onsite, Stantec conducted interviews with mining personnel responsible for the care and maintenance of the existing mine facilities at La Guitarra, Coloso and Nazaero, as well with geologists responsible for historic mapping and geologic modelling of various mineral vein deposits associated with the Property. Underground inspections were completed for the La Guitarra and Coloso mines and select drill core samples stored at La Guitarra Mine were inspected after being identified based in observations of the geologic models presented to Stantec by mine geologists.

1.2 Location and Concession Description

The La Guitarra Silver Mine, currently under care and maintenance, is located in the historic Temascaltepec mining district in the municipality of Temascaltepec, Estado de México, México, approximately 70 kilometres southwest of the city Toluca. The project site can be accessed by asphalt road from Temascaltepec (5 km), from Tejupilco (30 km) and from the major metropolitan



areas of Toluca (70 km) and México D.F. (130 km). The Property is comprised of 43 exploitation concessions covering 39,714 hectares (98,135 acres), which are operated and owned by La Guitarra Cia. Most of the mining concessions are located within the Municipality of Temascaltepec while some concessions extend to the municipalities of Valle de Bravo and San Simón de Guerrero. All 43 concessions are currently in good standing. Of the La Guitarra Cia concessions, the oldest were granted in 1983 and the most recent in 2007.

1.3 Permits

La Guitarra Cia has all necessary permits for current mining and processing operations, including an operating license, a water use permit, an Environmental Impact Authorization (“EIA”) for the La Guitarra, Coloso and Nazareno mines. La Guitarra Cia has exploration permits covering both mining areas and exploration project areas.

1.4 Current Option Agreements, Royalties and Encumbrances

A third party has a sliding scale Net Smelter Return (NSR) royalty. The third-party agreement calls for La Guitarra Cia to pay an NSR royalty of 1% to 3% based on the price of gold. This royalty is only payable after the production from these properties has an aggregate total of 175,000 equivalent ounces of gold, with the commencement date being August 1, 2004. All the production will be converted to equivalent ounces of gold. Also, First Majestic will have a 2% NSR royalty attached to La Guitarra Cia of which 1% can be bought back by Sierra Madre for US\$1 million.

La Guitarra Cia currently leases surface rights covering 62 hectares from the community of La Albarrada under a Temporary Occupation Agreement in effect for 15 years commencing January 1, 2012. The current areas of operations, the existing mill and most of the existing infrastructure are located within these 62 hectares. La Guitarra Cia leases 420 hectares of surface rights covering the Nazareno and Coloso areas of the property in effect for 22 years commencing December 10, 2015. La Guitarra Cia also owns 34 hectares of surface rights in the Municipality of San Simón de Guerrero, which cover part of the Santa Ana Vein at Mina da Agua.

1.5 Environmental and Social Considerations

An EIS (MIA) for mining operations in Tlacotal (Mina de Agua) was issued in 2015 by the Mexican environmental agency and is valid through April 2030. A request to increase the authorized volume of water use has also been submitted to the authorities.

To the extent known, there are no environmental or social issues that could materially impact the Company’s ability to conduct exploration and mining activities in the district. Geology

The Property is located almost at the intersection of the NW trending Sierra Madre Occidental province (SMO) and the southern edge of the E-W trending Faja Volcanica Transmexicana (FVTM). The NE trending Temascaltepec fault that bisects the property and separates the recently operating mines from the historic mines and exploration project in the east of the property.



The Property geology comprises five main units:

1. Guerrero Terrane (GT) low-grade metamorphic and sedimentary rocks. The GT hosts many of the veins southeast of Temascaltepec in the Mina de Agua and Rincón areas.
2. Balsas Formation conglomerates outcrop to the northwest of La Guitarra but it has not been recognized in the Mina de Agua and Rincón areas.
3. Granitic Stock, A biotite–K feldspar bearing stock of granite-quartzmonzonite composition This granite is the host to the NW trending silver-gold bearing epithermal veins of La Guitarra mine area.
4. SMO, andesite flows and rhyolite ignimbrites, tuffs, lithic tuffs and volcanic breccias of the SMO rest unconformably on top of the GT, the Balsas conglomerate and the granite-stock. Tuffs and volcanic breccias host mineralization at the Coloso and Nazareno areas.
5. FVTM, volcanic rocks partially cap all of the previous rocks and fill topographic depressions such as valleys and creeks.

1.6 Mineralization / Deposit Style

Vein mineralization in the La Guitarra property is classified as low-intermediate sulfidation epithermal. There are more than one hundred epithermal veins within the property in five main vein systems: Comales–Nazareno, Coloso (Jessica and Joya Larga veins), La Guitarra (NW, Central and SE zones), Mina de Agua and El Rincón. The vein systems at La Guitarra form a belt with an approximate width of 4 km that strikes NW – SE over 15 km. Individual veins pinch and swell and vary in width from tens of centimetres to more than twenty metres.

1.7 Exploration

Though modern-era mining in the Property was undertaken since 1990 by Compañía Minera Arauco and later (1993) by Luismin, the exploration methods and results from these two companies were not documented by subsequent owners Genco in their 2010 Technical report (Clark et al., 2015). and later First Majestic in their 2015 Technical Report (Beltran et al., 2015). While exploration results prior to Genco’s purchase of the Property in 2003 were reviewed by Genco, only modern-era exploration methods and results completed by Genco, Silvermex and First Majestic are summarised in this report. Relevant modern-era exploration includes:

Geophysical Surveys

3D induced polarization (IP) and magnetometry (mag) surveys were completed by Genco in 2003 by SJ Geophysics Ltd. (Krawinkel, 2003). Three areas were surveyed: Mina de Agua, La Guitarra and Nazareno. It is the Authors opinion that these early (2003) geophysical surveys together with subsequent exploration, notably drilling, could be used to help calibrate future geophysical surveys for more accurate results.



Drilling

Modern-era exploration drilling in the property was primarily diamond coring from surface and underground. Diamond core hole records include 448 surface holes (114,951m) and 748 underground holes (98,485 m). There are also 163 RC holes (21,991 m) and 49 direct push shelby tube holes (1,113 m). The shelby tube samples are limited to recent 2021-22 sampling of the tailings dump. Samples taken from these holes were sent to both private commercial laboratories and onsite/offsite company owned laborites. A QA/QC program was in place for the assay test results and most assay methods employed were fire assay for gold and silver.

Grade statistics from the tailing dam Shelby tube samples the tailings dam are shown in Table 1.1 below. Metallurgical testing of the Shelby tube samples in storage would be necessary to best determine the extent to which re-processing of tailings can accomplished at La Guitarra mine.

**Table 1.1
Tailings Dam Sample Statistics**

Grade (ppm)	Number	Minimum	Maximum	Average	Std Dev.
Silver (ag)	1,034	0.25	155.44	35.13	14.78
Gold (Au)	1,034	0.03	1.82	0.43	0.21
Lead (Pb)	1,034	37.00	1,278.00	228.97	131.37
Zinc (Zn)	1,034	27.00	15,314.00	710.38	914.05
Arsenic (As)	1,034	21.00	1,175.00	324.48	196.16

Underground Channel Sampling

Underground channel samples for mining/ore control as well as for resource-reserve determinations. The channel samples were assayed by the La Guitarra mine laboratory using primarily fire assay methods.

Surface Sampling Campaigns

Over the period 2010 to 2011 total 1,624 soil samples and 1,529 rock samples were taken. Soil samples were taken on a grid spacing of 100 m and rock samples were taken from surface exposures. In 2021 an additional 96 rock samples were taken and there were plans for another soil grid sampling campaign.

There has been no exploration activity undertaken by Sierra Madre as of the effective date of this report.

1.8 History

Mining in the Temascaltepec area where the Property is located started in the mid-1500s when the Spanish miners first arrived. Old tools, ancient buildings and historic mining shafts are found throughout the area. Early Spanish operations were focused in an area 4 kilometres southeast of La Guitarra in an area called Mina de Agua, where much softer rock made it easier to access the



underlying silver and gold. Mining was active until 1990 interrupted due to technological limitations, independence wars or local unrest.

Period 1990 to 2003

In 1990, Compañía Minera Arauco conducted exploration and development work on the Guitarra vein with an initial production rate of 30 tpd. In 1993, Luismin S.A. de C.V. (“Luismin”) acquired the property and began consolidating the Temascaltepec District. Luismin expanded the reserve base in La Guitarra Silver Mine and increased the milling capacity to 320 tpd.

Period 2003 to 2010 – Genco

In August of 2003, Genco Resources Ltd. (“Genco”) purchased the entire Temascaltepec Mining District and the La Guitarra Silver Mine from Luismin. Exploration was conducted by Genco to expand reserves and test mineralization. Gold and silver production was recorded from the underground mining operation at La Guitarra. Limited production was recorded from the Mina de Agua underground historic mine over this period.

Period 2010 to 2012 – Silvermex

In 2010, Silvermex Resources Inc. (“Silvermex”), a publicly traded company listed on the Toronto Stock Exchange (the “TSX”) gained control over all mineral concessions within the Temascaltepec District via a merger with Genco. Production continued from the Guitarra mine and the Coloso mine was brought into production. Highlights under Silvermex ownership included: steps to address acidic mine water discharge; economic parts of mine dumps were identified for reprocessing; the milling plant performance was improved to 350 tpd; tailings expansion was designed and permitting procedures begun; and exploration activity expanded resources in the Coloso and Nazareno mine areas.

Period 2012 to 2022 – First Majestic

On July 3, 2012, First Majestic completed a plan of arrangement under which First Majestic acquired all the issued and outstanding shares of Silvermex. In 2012 the company commenced a plan to expand the mining operations from 350 tpd to 520 tpd ROM. A spare ball mill from La Parrilla Silver Mine and some spare flotation tanks from the La Encantada Silver Mine were shipped to the La Guitarra Silver Mine. Exploration activities continued both within the Property and on the surrounding operating mines, along with other project areas to the east of the Property. First Majestic placed the La Guitarra Silver mine on care and maintenance in August of 2018.

Production from the Property from 1991 to 2018 is between 2.2million tonnes with average grade for gold at 2.62 g/t and silver at 220.86 g/t.

Sierra Madre entered into the Definitive Agreement with First Majestic to acquire ownership of the La Guitarra Silver Mine on May 25, 2022.



The Property is not presently producing and is under care and maintenance.

1.9 Mineral Processing and Metallurgical Testing

Kappes, Cassidy and Associates (KCA) conducted a series of metallurgical recovery and process design tests on La Guitarra ore samples from 2006 to 2008. The purpose of this program was to determine the viability of cyanide (NaCN) leach recovery of silver and gold. The results were applied to the design parameters for a 3,000 t/d NaCN processing plant with much of mill feed coming from a theoretical open pit operation. The KCA test work establish parameters for a CCD leaching facility with Merrill-Crowe recovery of silver and gold. The following design criteria was derived from this test work:

- Crushed ore feed – 80% -12.5mm
- Pulp feed grind size - 80% -200 mesh
- Leaching solution - 5 g/l NaCN
- Estimated NaCN Consumption – 2.3 kg/t
- Estimated Lime consumption – 0.5 kg/t
- Time under leach – 160 hours
- Tailings Deposition System – Dry Stack
- Silver recovery – 92%
- Gold recovery – 90%

Metallurgical testing at La Guitarra mine site was performed periodically and includes mineralogical investigation and metallurgical testing. First Majestic took monthly, short term (3 months) and long term composite metallurgical samples to compare actual recoveries from the mill to monitor performance. Mineralogical characterization tests were performed on polished thick sections. The main mineralogical species that are found in the ore are listed as follows in the order from major to minor in their relative proportion: Quartz (SiO₂), Pyrite (FeS₂), Marcasite (FeS₂), Pyrrhotite (FeS₂), Sphalerite (ZnFeS), Hematite (Fe₂O₃), Galena (PbS), Chalcopyrite (CuFeS₂), Arsenopyrite (FeAsS), Covellite (CuS), Pyrargyrite (Ag₃Sb₃S₃), Argentite (Ag₂S), Native Silver (Ag) and Native Gold (Au).

Sierra Madre has not completed mineral processing or mineralogical testing.

1.10 Mining Methods and Infrastructure

Only underground mining has been undertaken on the Property. Mining methods employed were generally overhead and horizontal cut and fill. No geotechnical challenges are anticipated in developing and mining at mining widths ranging from 1.5 to 5 meters with sublevel spacings ranging from 15 to 25 meters.

The existing processing plant is a flotation plant producing silver and gold ore concentrate. The process plant consists of crushing, grinding, flotation, concentrate thickening, concentrate



filtration and drying equipment, and a concentrate storage and loading area. The plant processed approximately 400 tpd when it was last operated. The stated capacity is 500 tpd when all ball mills are operating. A review study of the processing plant on the Property, undertaken by Del Real and Hernandez (2022) for Sierra Madre, identified the following work items that are deferred maintenance items that must be addressed before the plant could be restarted; replacement of chute liners, repair and reconfiguring of flotation cells and replacement of some pumps along with an upgrade to the concentrate filters.

In total there are between 2.0 to 2.6 million tonnes in the tailings facility. The remaining space without compromising the stability of the tailings facility is 90,000 tonnes. There is a fully permitted tailings design for a capacity of 5.8 million tonnes with 30 years of validation from 2019.

The primary source of power for the mine is from the Mexican national power grid, administered by Commission Federal de Electricidad (CFE), the Mexican utility entity. There is 12 MVA power available at 13.2 kV. The mine and mill operation are permitted by CONAGUA to consume up to 191,625,000 cubic metres of fresh water per year. This water is generally taken from the outflow from the San Rafael portal at La Guitarra mine and other permitted underground fresh water sources.

1.11 Historical Estimates

Historical resource and reserve estimates were produced when the Property was under the control of Genco (2003 to 2010) and First Majestic (2012 to 2022). The two most recent historic estimates that were produced by Clark and Thornton, (2010), effective August 2009, and Beltran et al. (2015), effective December 2014, are considered by the Author to best reflect the different approaches used by successive prior owners Genco and First Majestic, respectively.

The Author has not done sufficient work to classify these historical resource and reserve estimates as current mineral resources and the issuer is not treating the historical estimates as current mineral resources or mineral reserves. To make current these historical estimates the cutoff grade (COG) needs to be adjusted to reflect current commodity prices and relevant geological models need to be updated to include additional exploration completed between the effective date of these estimates and that of this report.

Genco 2009 Historic Estimates

Clark and Thornton (2010) separated resources estimates into underground and surface (open pit) mineable. Underground historic mineral resource estimates are listed in Table 1.2 and open pit historic mineral resource estimates are listed in Table 1.3. Underground and open pit historic mineral reserve estimates are listed in Table 1.4.



Table 1.2
Underground Historical Resource Estimates
at COG 135 g/t eAg, effective August 2009

Underground	Measured and Indicated (M&I)			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
La Guitarra	900	231	2.2	354
Mine de Agua	215	215	0.97	238
Coloso	306	306	3.31	605
Nazareno	491	491	0.27	249
Total M&I	1,912	1,912	1.74	354
Inferred UG Resources	10,000	305	1.95	414

Table 1.3
Open Pit Historical Resource Estimates
at COG 30 g/t eAg, effective August 2009

Open Pit	Measured and Indicated			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
Total M&I	10,719	70	0.7	110
Inferred UG Resources	3,187	66	0.89	115

Table 1.4
Underground and Open Pit Historical Reserve Estimates,
effective August 2009

Mining Method	Proven and Probable			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
Underground	2,185	209	1.46	291
Open Pit	6,824	81	0.75	123
Total Reserve	9,009	113	0.93	165

The geologic model used to generate the estimates presented in Table 1.2 and Table 1.3 were built from mineralized zone wireframes solids using a 45 g/t silver equivalent (eAg) cutoff and 20 g/t eAg cutoff when connecting higher-grade zones. Gold to silver ratio for eAg equivalent grade calculation was 56:1 and an economic pit shell was used to generate the open pit estimates. Underground estimates were generated using longitudinal sections.

The Author is of the opinion that the approach and methods used in the calculation of the historic estimates as outlined in Table 1.2, Table 1.3 and Table 1.4 and described by Clark and Thornton. (2010) are reasonable for the period in time the estimates were compiled. However, the historic estimates cannot be verified by the Author as the source model data was not available for review.



First Majestic 2014 Historic Estimates

Only underground mining was considered in the historic estimates documented in the 2015 Technical Report by Beltran et al. (2015) for First Majestic. Historic mineral resource estimates are listed in Table 1.5 and historic mineral reserve estimates are shown in Table 1.6.

**Table 1.5
Underground Historic Mineral Resource Estimates,
effective December 31, 2014**

Category	Mineral Type	Tonnes	Average Grade G/t			troy ounces ('000)	
		('000)	Ag	Au	eAg	Ag	eAg
Measured (M)	Sulphides	121	170	2.37	305	660	1,185
Indicated (I)	Sulphides	1,029	335	1.56	424	11,078	14,029
Total M&I	Sulphides	1,150	318	1.65	412	11,738	15,214
Inferred	Sulphides	739	197	1.23	267	4,674	6,343

(1) Mineral Resources have been classified in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.

(2) Cut-off grade considered for sulphides was 180 g/t Ag-Eq and is based on actual and budgeted operating and sustaining costs.

(3) Metallurgical recovery used was 85% for silver and 79% for gold.

(4) Metal payable used was 95% for silver and 95% for gold.

(5) Silver equivalent grade is estimated as

$eAg = Ag \text{ Grade} + (Au \text{ Grade} \times Au \text{ Recovery} \times Au \text{ Payable} \times Au \text{ Price}) / (Ag \text{ Recovery} \times Ag \text{ Payable} \times Ag \text{ Price})$.

(6) Tonnage is expressed in thousands of tonnes, metal content is expressed in thousands of ounces.

(7) Totals may not add up due to rounding.

(8) Measured and Indicated Mineral Resources are reported inclusive of Mineral Reserves.

(9) Mineral Resources include estimates for the La Guitarra, Nazareno and Mina de Agua areas prepared under supervision of Jesus M. Velador Beltran, QP of First Majestic, and estimates for the Coloso area prepared under supervision of Greg K. Kulla, P.Geo. of Amec Foster Wheeler.



Table 1.6
Underground Historic Mineral Reserve Estimates,
effective December 31, 2014

Category	Mineral Type	Tonnes	Average Grade G/t)			Ktroy ounces ('000)	
		('000)	Ag	Au	eAg	Ag	eAg
Proven (PN)	Sulphides	91	153	184	256	446	745
Probable (PB)	Sulphides	1,217	228	1	284	8,911	11,098
Total PN&PB	Sulphides	1,308	223	1.06	282	9,358	11,843

(1) Mineral Reserves have been classified in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.

(2) Cut-off grade considered for sulphides was 200 g/t Ag-Eq.

(3) Metallurgical recovery used was 85% for silver and 79% for gold.

(4) Metal payable used was 95% for silver and 95% for gold.

(5) Silver equivalent grade is estimated as:

$eAg = Ag \text{ Grade} + (Au \text{ Grade} \times Au \text{ Recovery} \times Au \text{ Payable} \times Au \text{ Price}) / (Ag \text{ Recovery} \times Ag \text{ Payable} \times Ag \text{ Price})$.

(6) Tonnage is expressed in thousands of tonnes, metal content is expressed in thousands of ounces.

(7) Totals may not add up due to rounding.

Historic mineral reserve estimates presented in Table 1.6 were only reported for the Coloso and La Guitarra mines. The eAg ounces reported from the Coloso mine represented 83% of the probable reserves and 77% of the total reserves. No proven reserves were reported from Coloso mine. Coloso mine estimates were generated from a block model using Leapfrog® modelling software. Estimates from remaining areas including La Guitarra mine, Nazareno mine and Mina de Agua historic mine were generated using Longitudinal sections.

The Author is of the opinion that the approach and methods used in the calculation of the historic estimates outlined in Table 1.5 and Table 1.6 as described by Beltran et al. (2015) were reasonable. However, the historic estimates cannot be verified by the Author as the source model data specific to above estimates was not available for review.

1.12 Conclusion and Interpretation

A site inspection of the overall mine facilities appeared to be well maintained and clean. Unpaved road connecting the Coloso and Nazareno mines were in very good condition and mine water lime treatment was observed to be working. Tailings dam at La Guitarra, which is near capacity, was on visual inspection found to be stable. Underground visits at La Guitarra and Coloso did not show any concerns with respect to adequacy of roof support and the hanging wall appeared to be stable. Areas visited underground were well ventilated and mine water drainage control appeared to be well managed. Discussion with the labor union representative did not identify any concerns and labor relations on the mine and local community appeared to be good.

Development opportunities in the immediate vicinity La Guitarra, Coloso and Nazareno mine properties include building geologic resource models from the current exploration and mining records to identify areas of remaining mineral resource both in situ and from the mine tailings.



Though there is potential for an open pit operation at La Guitarra, the QP is of the opinion that permitting a surface operation would meet resistance from the local community due to surface footprint of mining. However, there is potential for the introduction of cyanide (NaCN) leach recovery process as an alternative to the current flotation circuit.

Beyond the current mine areas there are several exploration opportunities mostly concentrated in the east of the Property (the Eastern District). Historical mining and early prospecting at Mina de Aqua, El Rincón, Aquila, Los Locos, Veta Rica, and Animas have potential to be developed as either an exploration target or mineral resource for silver and gold. At Mina de Aqua, there has been limited production by Genco in 2007/08 and there the opportunity to de-water and restart production from these historic workings. Recent mapping undertaken by First Majestic at the Aquila project in the south, not a part of the Eastern District, shows potential for silver-gold mineralization.

1.13 Risks and Uncertainties

The following risks and uncertainties have been identified:

- The reliability of the survey data from historic drill holes, sample sites and underground workings cannot be easily quantified as these sample sites are either overgrown with vegetation or currently inaccessible.
- Many historic sample assays have been completed by owner-operated laboratories.
- Sampling methods and approaches have varied over the history of the mine and this could impact the reliability of mineral resource estimates.
- Environmental liabilities exist in the form of:
 - Discharge of acid drainage water pumped from the underground mine workings that is being neutralized using limestone-filled gabions.
 - A tailings impoundment from the flotation processing plant produces an acid seepage, which is also passed through the limestone-filled gabions.
 - A mine waste rock dump located near the San Rafael portal and the La Guitarra mine. Some waste rock in the dump contains sulfides, which may produce acid mine drainage in the future although current levels are within tolerance.

Stantec is not aware of significant factors or risks that may materially restrict First Majestic from its right and ability to perform work on the Project, or which, upon completion of the Transaction, may materially restrict Sierra Madre from its right and ability to perform work on the Project.



1.14 Recommendations

The recommendations are presented as Phase 1 and Phase 2 work programs.

Phase 1 Work Program

For the Phase 1 work program four technical studies have been identified to prepare for the implementation of an infill exploration drilling and sampling program in Phase 2 and eventual restarting of mining operations. Required technical studies include a mineral resource estimate (MRE), metallurgical study on re-processing of tailings, design for a cyanide (CN) plant as an addition to or possible replacement of the current floatation plant. These technical studies will be summarized in a preliminary economic assessment (PEA) that will also outline a plan for restart of mining operations. Costs for the technical studies are outlined in Table 1.6 and include Sierra Madre personnel costs for oversight and administration during the completion of these technical studies that are expected to take approximately 6 months.

Table 1.6
Phase 1 Work Program

Technical Studies	US\$	C\$ ¹
MRE	200,000	256,000
Tailings Metallurgy	85,050	108,864
CN Plant Design	80,000	102,400
PEA	115,000	147,200
Total Technical Studies	480,050	614,464
*Personnel oversight (6 mo)	341,530	437,158
Contingency (20%)	164,316	210,324
Total Phase 1	985,896	1,261,947

¹US\$:C\$ 1.28

*Includes personnel for the ongoing care and maintenance of the plant and mines

Phase 2 Work Program

The completion of Phase 2 is contingent on the successful completion of Phase 1. For the Phase 2 work program the required permits will be obtained to implement an estimated 12,000 m core drilling program. Existing plant additions, as identified in the Phase 1 technician studies will be completed. The additions include a possible Merrell crow plant, CN leaching tanks or expansion of the flotation circuit and ball mill for increased throughput. Annual concession taxes are included in Phase 2 as well as Sierra Madre personnel costs for oversight and administration while Phase 2 is being implemented over a six- month period. Costs for Phase 2 are itemized in Table 1.7.



Table 1.7
Phase 2 Work Program

Activity	Drilling	Assay	Concession	US\$	C\$ ¹
	m (US\$/m)	No. (US\$/assay)	hectares (US\$/ha)		
Permitting	n/a	n/a	n/a	310,000	396,800
Core drilling	12,000 (100)	8,000 (50)	n/a	1,600,000	2,048,000
Plant additions	n/a	n/a	n/a	1,500,000	1,920,000
*Personnel oversight	n/a	n/a	n/a	341,530	437,158
Concession taxes**	n/a	n/a	39,715 (188.86)	750,057	960,074
Contingency (20%)	n/a	n/a	n/a	900,317	1,152,406
Total Phase 2	n/a	n/a	n/a	5,401,905	6,914,438

¹US\$:C\$ 1.28

* Includes personnel for ongoing care and maintenance of the plant and mines

** Full year



2 INTRODUCTION

The La Guitarra Silver Mine (“the Property”) is owned and operated by La Guitarra Compañía Minera S.A. DE C.V. (La Guitarra Cia) which is an indirect wholly owned subsidiary of First Majestic Silver Corp. (“First Majestic”). On May 25, 2022, Sierra Madre Gold and Silver Ltd. (“Sierra Madre”) entered into a definitive share purchase agreement (the “Definitive Agreement”) with First Majestic, whereby Sierra Madre agreed to acquire the Property by purchasing all the shares of La Guitarra Cia from First Majestic (the “Transaction”). The consideration for the Transaction will be payable through the issuance to First Majestic of 69,063,076 common shares in the capital of Sierra Madre with a deemed value of US\$35,000,000.

Sierra Madre is a publicly listed company incorporated in Canada with limited liability under the legislation of the Province of British Columbia. The Company is in the business of precious and base metal mine development, exploration, and acquisition of mineral properties with a focus on projects in México. The Company’s shares trade on the TSX Venture Exchange under the symbol “SM”.

The La Guitarra Silver Mine comprises three recent operating mines, La Guitarra, Coloso and Nazareno. The eastern portion of the project contains historic mine Mina de Agua. Other exploration projects within the property include El Rincón, Aquila, Veta Rica, Los Locos, and Animas. Other opportunities include reprocessing of mine tailings.

2.1 Terms of Reference

This Technical Report was prepared by Stantec Consulting International LLC (Stantec) in compliance with the disclosure requirements of NI 43-101 to release technical information about the La Guitarra Silver Mine, its current operating conditions and historical estimates of Mineral Resources and Mineral Reserves.

The effective date of this Technical Report is July 1, 2022 which represents the cut-off date for the scientific and technical information used in the Report.

2.2 Information Sources

For the purposes of the Technical Report, all information, data, and figures contained or used in its integration have been provided by First Majestic, unless otherwise stated. Also see Section 27 of this Technical Report for references.

The majority of this report is a summary of the following two previously filed technical reports:

- Beltran J.M.V., Kulla G., Jaimes M.E.V., and Reyes R.M., 2015: First Majestic Silver Corp., La Guitarra Silver Mine, Temascaltepec, México, NI 43-101 Technical Report on Mineral



Resource and Mineral Reserve Update. Effective date March 15th, 2015. (Beltran et al., 2015).

- Clark G.R. and Thornton J.C., 2010: La Guitarra Mine Technical Report, Temascaltepec, México. Prepared for Genco Resources Ltd. TSX: GGC. (Clark and Thornton. 2010).

2.3 Qualified Person and Site Inspection

Stantec representatives Clyde Peppin and Qualified Person, Derek Loveday (P.Geo), completed a site inspection of the Property May 18 and May 19, 2022. While onsite, Stantec conducted interviews with mining personnel responsible for the care and maintenance of the existing mine facilities at La Guitarra, Coloso and Nazaero, as well with geologists responsible for historic mapping and geologic modelling of various mineral vein deposits associated with the Property. Underground inspections were completed for the La Guitarra and Coloso mines and select drill core samples stored at La Guitarra Mine were inspected after being identified based in observations of the geologic models presented to Stantec by mine geologists.



3 RELIANCE ON OTHER EXPERTS

The Qualified Persons did not rely on a report, opinion, or statement of another expert who is not a qualified person, or on information provided by the issuer, concerning legal, political, environmental, or tax matters.



4 PROPERTY DESCRIPTION AND LOCATION

4.1 Description and Location

The La Guitarra Silver Mine, currently under care and maintenance, is located in the historic Temascaltepec mining district in the municipality of Temascaltepec, Estado de México, México, approximately 70 km southwest of the city Toluca (population 910,608, 2020 census) as shown in Figure 4-1. The La Guitarra Silver Mine collectively includes three recent, operating mines, La Guitarra, Coloso and Nazareno, one historic mine Mina de Agua and exploration projects El Rincón, Aquila, Los Locos, Veta Rica, and Animas plus an opportunity to reprocess old mine tailings. The locations of these mines and exploration projects are shown in Figure 4-2. The mine at La Guitarra shown in Figure 4-2 is where the processing plant, workshop, core storage and administrative offices are located.

The portal at the La Guitarra mine is located at approximately 100° 4'44.55"W Longitude and 19° 19' 3.26.06"W Latitude, at an elevation of approximately 2,000 m. The processing plant is located at 100° 4'41.23"W and 19° 3'23.97"N at an elevation of 1,976 m. The portal at Coloso, used to access mineralized veins at Coloso and Nazareno, is located at: 100° 6'36.10"W and 19° 4'37.58"N at an elevation of 2,430 m. The project site can be accessed by asphalt road from Temascaltepec (5 km), from Tejupilco (30 km) and from the major metropolitan areas of Toluca (70 km) and México D.F. (130 km). Travel time from the international airport in México City ranges from 2.5 hours to 4 hours depending on traffic.

4.2 Mining Concessions

The Property is comprised of 43 exploitation concessions covering 39,714 hectares (98,135 acres), which are operated and owned by La Guitarra Cia. Most of the mining concessions are located within the Municipality of Temascaltepec while some concessions extend to the municipalities of Valle de Bravo and San Simón de Guerrero as shown in Figure 4-3.

In México, mining concessions are granted by the Economy Ministry, and these 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. According to Mr. Rafael Araujo, legal and technical representative for First Majestic (Perito Minero), all 43 concessions are currently in good standing. Of the La Guitarra Cia concessions, the oldest were granted in 1983 and the most recent in 2007. Table 4.1 shows a detailed list of the concessions with covered surface and current expiration dates.

4.3 Permits

La Guitarra Cia has all necessary permits for current mining and processing operations, including an operating license, a water use permit, an Environmental Impact Authorization (“EIA”) for the



La Guitarra, Coloso and Nazareno mines. La Guitarra Cia exploration permits within and surrounding the project areas and mines shown in Figure 4-2, are titled: Nazareno, Tlacotal, Trancas, La Guitarra NW, Temascaltepec and San Simon.

4.4 Royalties

A third party has a sliding scale NSR royalty which calls for La Guitarra Cia to pay an NSR royalty of 1% to 3% based on the price of gold. If the price of gold is at least US\$400 but less than US\$450 per ounce the royalty is 1%. If the price of gold is US\$450 but less than US\$500 the royalty is 2% and if the price of gold is US\$500 or higher the royalty is 3%. This royalty is only payable after the production from these properties has an aggregate total of 175,000 equivalent ounces of gold, with the commencement date being August 1, 2004. All of the production will be converted to equivalent ounces of gold. The amount of any other third-party royalty is payable on minerals mined, produced, or otherwise recovered from the properties, shall be deducted from the royalty payable regardless of whether that royalty is still in effect. Also, First Majestic will have a 2% NSR royalty attached to La Guitarra Cia of which 1% can be bought back by Sierra Madre for US\$1 million.

4.5 Surface Use and Disturbance Agreement

La Guitarra Cia currently leases surface rights covering 62 hectares from the community of La Albarrada under a Temporary Occupation Agreement in effect for 15 years commencing January 1, 2012. The current areas of operations, the existing mill and most of the existing infrastructure are located within these 62 hectares. La Guitarra Cia leases 420 hectares of surface rights covering the Nazareno and Coloso areas of the property in effect for 22 years commencing December 10, 2015. La Guitarra Cia also owns 34 hectares of surface rights in the Municipality of San Simon de Guerrero, which cover part of the Santa Ana Vein at Mina da Agua.

Negotiations with the community of Mina de Agua are being conducted to allow the Company to access the old Mina de Agua mine. Figure 4-4 shows the surface rights owned and leased by La Guitarra Cia. To expand operations in other areas, Sierra Madre may need to purchase additional surface rights or negotiate additional temporary occupation agreements.

4.6 Environmental Liabilities

An EIS (MIA) for mining operations in Tlacotal (Mina de Agua) was issued in 2015 by the Mexican environmental agency and is valid through April 2030. A request to increase the authorized volume of water use has also been submitted to the authorities.

Exposure to environmental liabilities exists in the form of:

- Discharge of acid drainage water pumped from the underground mine workings. At present this flow is discharged after being passed through a retaining facility, which is



built into the drainage area below the La Guitarra and Coloso mine portals and utilizes limestone-filled gabions to neutralize the acidic underground mine water.

- There is a tailings impoundment containing between 2.00 and 2.66 million tonnes of tailings from the flotation processing plant. The tailings impoundment produces an acid seepage, which is also passed through the limestone-filled gabions.
- A mine waste rock dump located near the San Rafael portal and the La Guitarra mine. Some waste rock in the dump contains sulfides, which may produce acid mine drainage in the future although current levels are within tolerance.

To the extent known, there are no environmental or social issues that could materially impact the Company's ability to conduct exploration and mining activities in the district; on this respect, the Company relies on its relationship with the local communities, labour unions, and the government regulators, which are presently businesslike and amicable.

4.7 Other Significant Factors and Risks

Stantec is not aware of significant factors or risks that may materially restrict First Majestic from its right and ability to perform work on the Project, or which, upon completion of the Transaction, may materially restrict Sierra Madre from its right and ability to perform work on the Project.



File: V:\2330\Resource\1. La Guitarra\GIS\MXD\Fig_4_1_Project_Location_Map.mxd



Legend

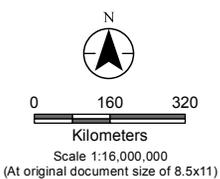
- La Guitarra Property Boundary
- Mexico States

- Notes**
1. Coordinate System: WGS 1984 UTM Zone 14N
 2. Data Source: ESRI data and World Topographic Map ArcGIS Online basemap.



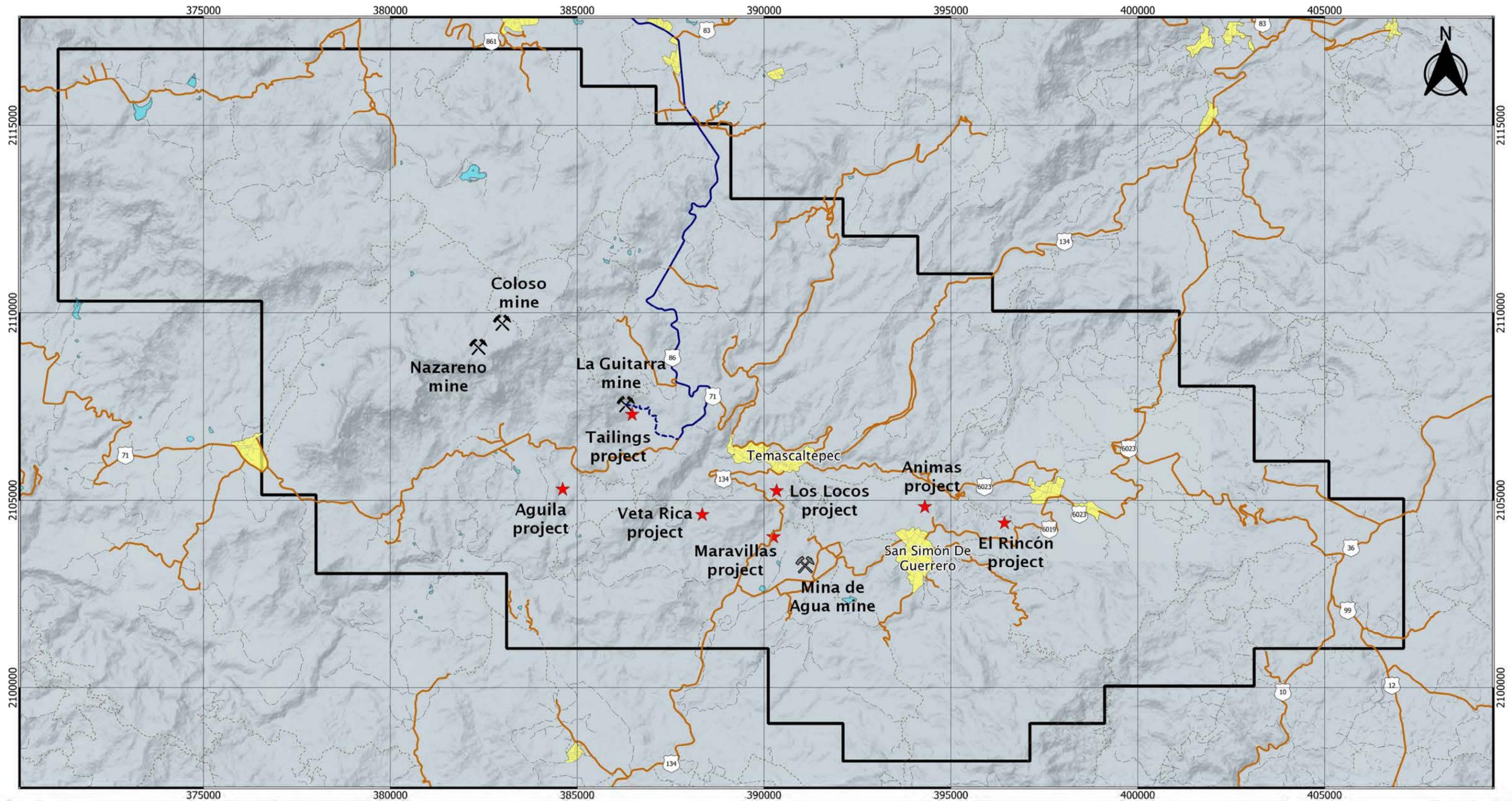
TECHNICAL REPORT LA GUITARRA PROPERTY

Property Location Map
State of Mexico, Mexico



DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 4-1



SIERRA MADRE
Gold & Silver

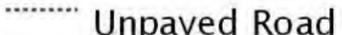
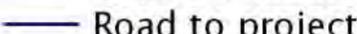
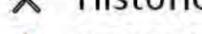
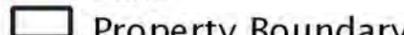
TECHNICAL REPORT LA GUITARRA PROPERTY
La Guitarra Property Mines and Exploration Areas
State of Mexico, Mexico

U.S. Geological Survey, 1:50,000 scale, 1998
© 2007 Stantec, Inc. All rights reserved. This report is the property of Stantec, Inc. and is not to be distributed outside the project area without the written consent of Stantec, Inc.

DREW BY: UZH
REVIEWD BY: GKL
DATE: 04/07/22

Figure 4-2

Legend

 Paved Road	 Town
 Unpaved Road	 Mines under care and maintenance
 Road to project	 Historic mine -limited production 2007/8
 Lake	 Project
 Property Boundary	



Stantec

Kilometers

0 2.5 5 km

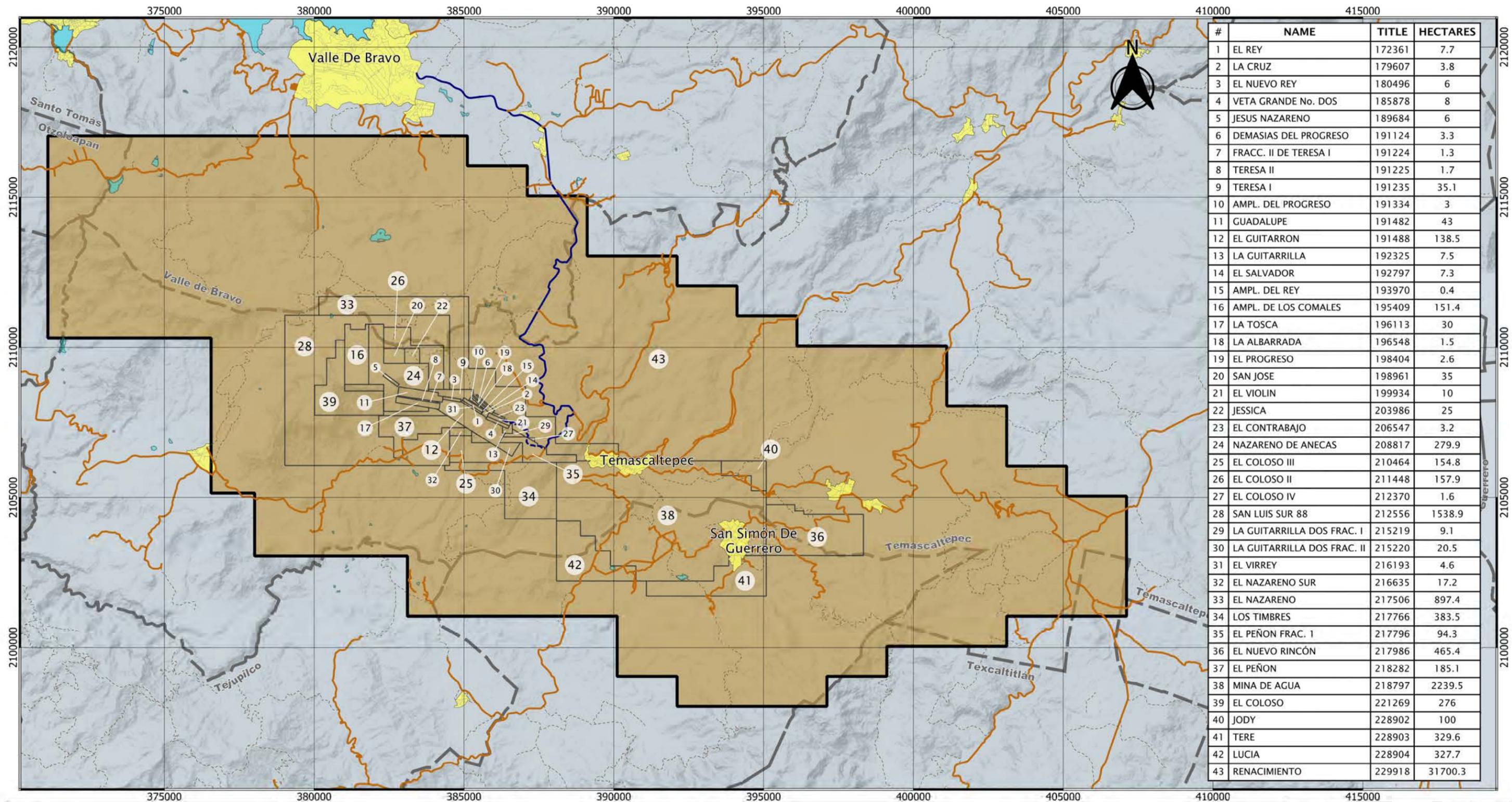
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Table 4.1
Summary of Mining Concession

NAME	TITLE	HECTARES	FROM	TO
1 EL REY	172361	7.6746	15/12/1983	14/12/2033
2 LA CRUZ	179607	3.7811	11/12/1986	01/12/2036
3 EL NUEVO REY	180496	6.0000	13/07/1987	13/07/2037
4 VETA GRANDE No. DOS	185878	8.0000	14/12/1989	14/12/2039
5 JESÚS NAZARENO	189684	6.0000	05/12/1990	14/12/2040
6 DEMASIAS DEL PROGRESO	191124	3.3472	29/04/1991	28/04/2041
7 FRACC. II DE TERESA I	191224	1.3325	19/12/1991	18/12/2041
8 TERESA II	191225	1.6874	19/12/1991	18/12/2041
9 TERESA I	191235	35.0969	19/12/1991	18/12/2041
10 AMPLIACION DEL PROGRESO	191334	3.0171	19/12/1991	18/12/2041
11 GUADALUPE	191482	43.0000	19/12/1991	18/12/2041
12 EL GUITARRON	191488	138.4904	19/12/1991	18/12/2041
13 LA GUITARRILLA	192325	7.5403	19/12/1991	18/12/2041
14 EL SALVADOR	192797	7.3149	19/12/1991	18/12/2041
15 AMPLIACION DEL REY	193970	0.3533	20/12/1991	19/12/2041
16 AMPL. DE LOS COMALES	195409	151.4325	14/09/1992	29/12/2033
17 LA TOSCA	196113	30.0000	23/09/1992	22/09/2042
18 LA ALBARRADA	196548	1.5419	23/07/1993	22/07/2043
19 EL PROGRESO	198404	2.5698	26/11/1993	25/11/2043
20 SAN JOSÉ	198961	35.0000	11/02/1994	10/02/2044
21 EL VIOLIN	199934	10.0000	17/06/1994	16/06/2044
22 JESSICA	203986	25.0000	26/11/1996	25/11/2046
23 EL CONTRABAJO	206547	3.1967	23/01/1998	22/01/2048
24 NAZARENO DE ANECAS	208817	279.8508	15/12/1998	14/12/2048
25 EL COLOSO III	210464	154.7519	08/10/1999	07/10/2049
26 EL COLOSO II	211448	157.9183	23/05/2000	22/05/2050
27 EL COLOSO IV	212370	1.6048	04/10/2000	04/10/2050
28 SAN LUIS SUR 88	212556	1,538.9474	31/10/2000	30/10/2050
29 LA GUITARRILLA DOS FRAC.I	215219	9.0992	14/02/2002	13/02/2052
30 LA GUITARRILLA DOS FRAC.II	215220	20.4517	14/02/2002	13/02/2052
31 EL VIRREY	216193	4.6048	12/04/2002	12/04/2052
32 EL NAZARENO SUR	216635	17.1998	17/05/2002	16/05/2052
33 EL NAZARENO	217506	897.3527	16/07/2002	16/07/2052
34 LOS TIMBRES	217766	383.5042	13/08/2002	12/08/2052
35 EL PEÑON FRAC. 1	217796	94.3021	23/08/2002	23/08/2052
36 EL NUEVO RINCÓN	217986	465.4087	18/09/2002	17/09/2052
37 EL PEÑON	218282	185.0801	17/10/2002	16/10/2052
38 MINA DE AGUA	218797	2,239.4495	17/01/2003	16/01/2053
39 EL COLOSO	221269	276.0000	14/01/2004	13/01/2054
40 JODY	228902	100.0000	16/02/2007	15/02/2057
41 TERE	228903	329.5814	16/02/2007	15/02/2057
42 LUCIA	228904	327.5000	16/02/2007	15/02/2057
43 RENACIMIENTO	229918	31,700.2962	28/06/2007	27/06/2057
TOTAL HECTARES		39,714.2802		





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TECHNICAL REPORT LA GUITARRA PROPERTY
La Guitarra Property Concessions Map
State of Mexico, Mexico

DREW BY: UZH
REVIEWD BY: GKL
DATE: 04/07/22

Figure 4-3

Legend

- Paved Road
- Unpaved Road
- Road to project
- Lake
- Town
- Concession boundary
- La Guitarra property limits
- Property Boundary
- Municipal boundary

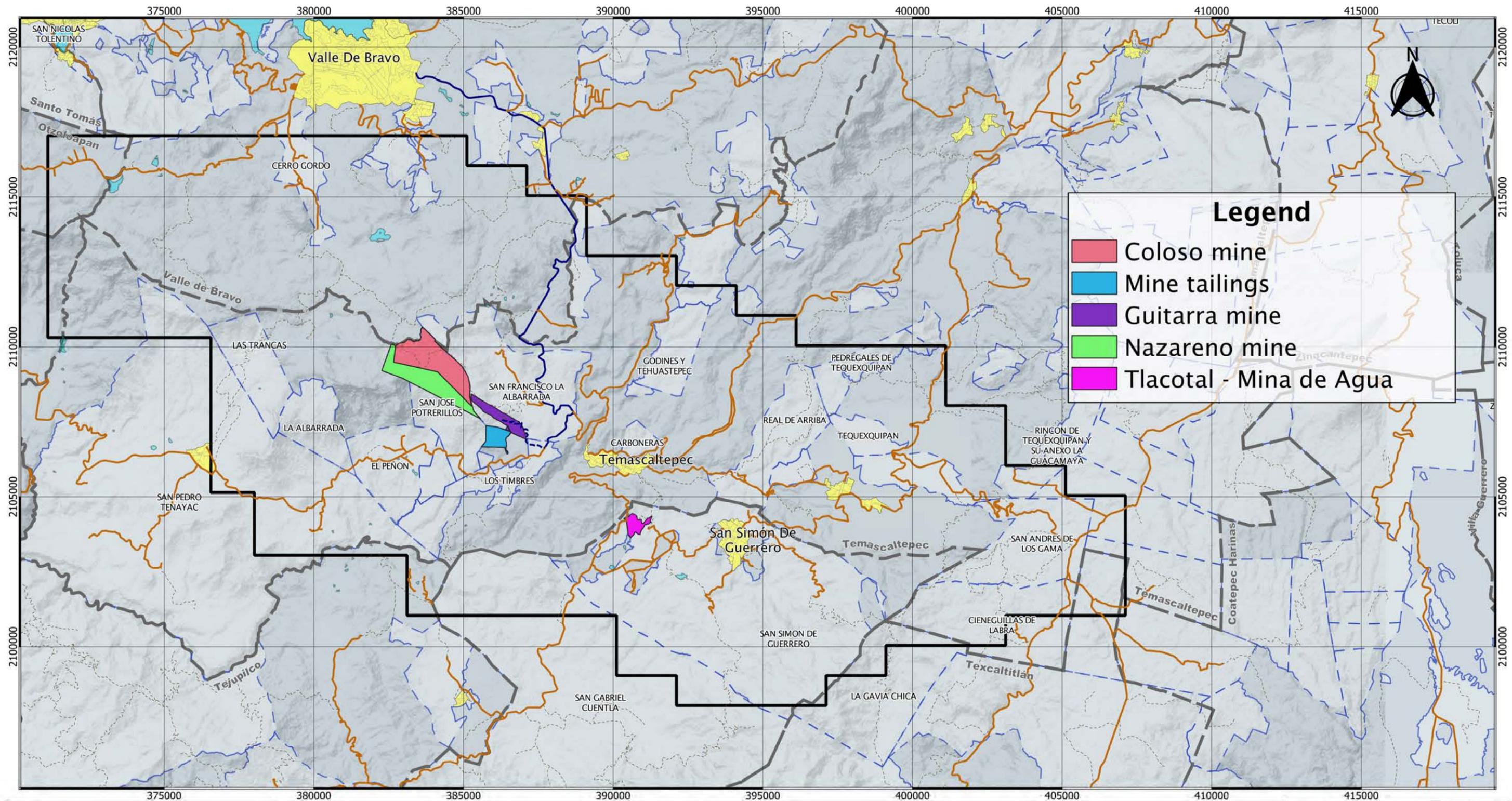
Stantec

Kilometers

0 2.5 5 km

Scale 1:125 000





SIERRA MADRE
Gold & Silver

TECHNICAL REPORT LA GUITARRA PROPERTY
La Guitarra Property Surface Rights Map
State of Mexico, Mexico

1. Coordinate system: UTM 18Q UTM zone 18Q
2. Data Source: Aerial Photography, GPS, and other available data

DREW BY: UZH
REVIEWD BY: GKL/LFS
DATE: 04/07/22

Legend

- Paved Road
- Unpaved Road
- Road to project
- Lake
- Town
- Municipal boundary
- Ejido boundary
- Property Boundary

Stantec

Kilometers

0 2.5 5 km

Scale 1:125 000

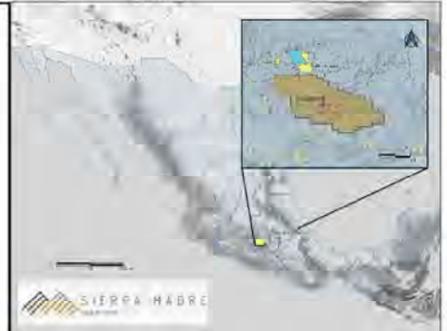


Figure 4-4

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Location and Accessibility

The Property is located at Temascaltepec, México. The Guitarra mine offices, the headquarters of all operations, is at approximately 100° 4'41.21"W and 19° 3'25.07"N at an elevation of approximately 1,990 m.

The project headquarters where the mine offices and processing plant are located can be accessed by asphalt road from Temascaltepec (5 km), from Tejupilco (30 km) and from the major metropolitan areas of Toluca (70 km) and México D.F. (130 km). Travel time from the international airport in México City ranges from 2.5 hours to 4 hours depending on traffic.

5.2 Climate

The climate in La Guitarra Mine is moderate in temperature and very humid. The average annual temperature is about 18°C. The warm month average is approximately 28°C and the cold month average is approximately 8°C. The majority of the approximately 1,200 mm of rain falls during the summer months from June to September. The climate allows for uninterrupted mining.

5.3 Topography

The mine and the plant facilities at La Guitarra are in hilly terrain. The elevation at the plant is approximately 2,000 m. The topographic relief in the area is 500 m. Much of the area is forest covered with pine trees being less than 260 cm in diameter. In some areas, the underbrush is dense and difficult to pass through. The stream valleys have broad, relatively flat flood plains that are used for agriculture.

5.4 Local Resources

There are numerous small communities in the area. There is an adequate supply of unskilled labor as well as a good supply of mine oriented and trained people. A large majority of the workforce at La Guitarra are permanent residents of the Temascaltepec Region. There are many farms and cattle ranches in the region. As well as the normal agricultural pursuits, the area is known for its trout farming. The forests are logged for the lumber and the pine tree sap is collected for the chemical industry.

Tourism is an important industry with the local resorts catering to people from México City. The beautiful scenery due to the forested nature and the numerous ponds in the area as well as the cooler climate make it attractive for tourists. A tourist attraction to the area is the gathering of the Monarch Butterflies in the fall after they have migrated from Canada and the USA.



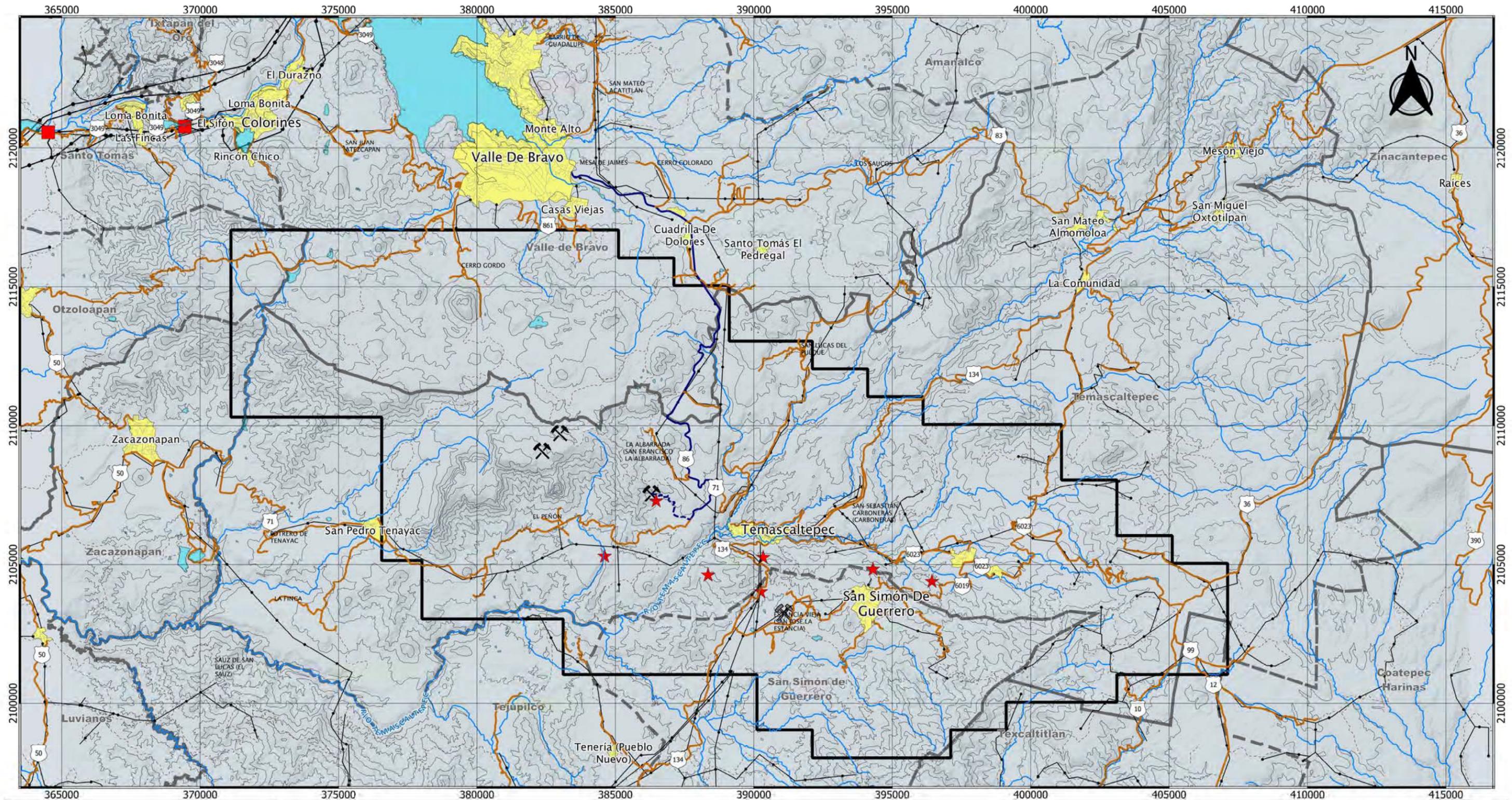
5.5 Infrastructure

The infrastructure at La Guitarra currently consists of a flotation mill, offices, warehouses, repair shops, drill core facilities, and an analytical laboratory.

The various locations at the mine site are joined together in a computer network. Cellular phone service at the mine site is reliable. Local and long-distance telephone service is available at La Guitarra using the national carrier, TELMEX. In addition, the various areas and departments of the mine site are connected to a local area network, providing both data and voice connectivity.

Power is from the Federal Power Commission's national grid. Water is supplied from the mine workings and surface streams. The mine holds the right to take 192,000 m³ of water per annum from local water sources.





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TECHNICAL REPORT LA GUITARRA PROPERTY

Infrastructure Map

State of Mexico, Mexico

DREW BY: UZH
REVIEWED BY: GKL/LFS
DATE: 08/07/22

Legend

- Paved Road
- - - Unpaved Road
- Road to project
- Rivers
- Lake
- ~ Topography Contours
- Power Station
- Powerlines
- Town
- Municipal boundary
- ⊗ Mines under care and maintenance
- ⊗ Historic mine
- ★ Project

Stantec

Kilometers

0 2.5 5 km

Scale 1:135 000

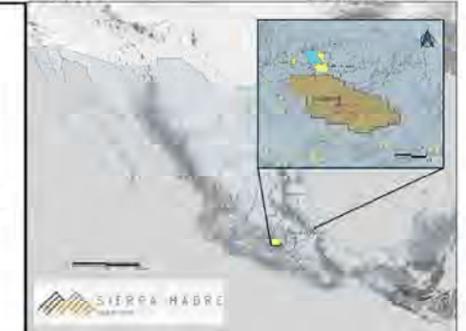


Figure 5-1

6 HISTORY

6.1 Mining in Temascaltepec Through 1990

Mining in the Temascaltepec area started in the mid-1500s when the Spanish miners first arrived. Old tools, ancient buildings and historic mining shafts are found throughout the area. Early Spanish operations were focused in an area 4 km southeast of La Guitarra in an area called Mina de Agua, where much softer rock made it easier to access the underlying silver and gold. Production in the Temascaltepec District has been ongoing since the 1550s. The Guitarra mine was also discovered and exploited at this time.

In the 18th century, the Mina de Agua mine and surrounding areas were one of México's largest silver producers, generating approximately 10% of the country's total mineral wealth. The mine was well known for its very high, or 'bonanza'-type, grades of silver and gold, and historical records from the period refer to several kilograms of silver per tonne and several tens of grams of gold per tonne. Historical documents indicate that the production was valued more than \$100 per tonne, when prices were approximately \$15 per ounce for gold and \$1 per ounce for silver. One of these areas at the Cinco Senores shaft was abandoned due to flooding while mining of bonanza grade ore. Two efforts were made to finance the recovery of this mine; one in 1831 by London mine financiers and another in 1907 by financiers from France. Both efforts were thwarted by financial crises in those respective countries and the mine remains closed to this day.

Mining in the Temascaltepec District came to a halt in the early 19th century for two primary reasons: technology was unable to handle the underground flooding that occurred in several mining shafts and the 1810 War of Independence in México caused political upheaval in the Temascaltepec District.

Temascaltepec remained mostly idle from 1810 until the early 20th century when the American Rincón Mining Company began significant mining and smelting operations at Rincón, in the southeast portion of the Temascaltepec District. This operation continued until the mid-1930s and when it closed because of Labor unrest. Over the life of the Rincón mine the Temascaltepec District was the third largest silver producer in México.

6.2 Modern Mining After 1990

Period 1990 to 2003

Modern mining resumed in 1990 when the Compañía Minera Arauco returned to where the Spaniards were purported to have begun, as early as 1555, conducting exploration and development work on the Guitarra vein with an initial production rate of 30 tpd.



In 1993, Luismin S.A. de C.V. (“Luismin”) acquired the property and began consolidating the Temascaltepec District. Luismin expanded the reserve base in La Guitarra Silver Mine and increased the milling capacity to 320 tpd.

Period 2003 to 2010 - Genco

In August of 2003, Genco Resources Ltd. (“Genco”) purchased the entire Temascaltepec Mining District and the La Guitarra Silver Mine from Luismin. During the last few years that Luismin operated the mine, insufficient reinvestment was made to maintain or increase the Reserve base and thus the mining rate slowly began to decrease.

Between 2003 and 2008 Genco undertook three drilling campaigns, the largest of which was between 2006 and 2008. Surface drilling was conducted to expand reserves and test mineralization in the Mina de Agua, Nazareno and Coloso Mine areas. In the Guitarra mine area both surface and underground drilling took place to test a previously unexplored section of the Guitarra vein and define bulk tonnage deposits in and adjacent to the existing Guitarra mine workings. Limited underground production was understood to have taken place from Mine de Agua over the 2007 to 2008 period, though exact tonnes produced is not known. Genco was forced to halt all mining and milling operations in September of 2008 due to an illegal blockading at the entrance to all mining operations. The illegal occupiers denied Genco personnel access to the mine and facilities causing the lower levels of the mine to flood.

Period 2010 to 2012 - Silvermex

In 2010, Silvermex Resources Inc. (“Silvermex”), a publicly traded company listed on the Toronto Stock Exchange (the “TSX”) gained control over all mineral concessions within the Temascaltepec District via a merger with Genco. Production continued from the Guitarra mine and the Coloso mine was brought into production. Under Silvermex ownership, immediate steps were taken to mitigate the flow of acidic mine discharge and acidic water resulting from contact with waste rock at historic mine openings. A small thickener and lime treatment system were installed that resulted in achieving water quality standards stipulated by the SEMARNAT permits. The mine was dewatered below the main La Guitarra elevation, the San Rafael vein was developed at La Guitarra mine and production was started from two significant ore shoots. Additional areas of economic mineralization were identified and mined on the La Guitarra Vein between the La Cruz area and the La Guitarra San Rafael portal. Economic parts of the mine dumps above La Guitarra were identified for reprocessing. Modest improvements to the La Guitarra Mill were made permitting continuous operation to achieve over 350 tpd. A tailings expansion was designed and permitting procedures begun. District wide exploration consisting of mapping, sampling, and drilling; both confirmed and expanded resources in the Coloso and Nazareno mine areas.



Period 2012 to 2022 – First Majestic

On July 3, 2012, First Majestic completed a plan of arrangement under which First Majestic acquired all the issued and outstanding shares of Silvermex, whose primary asset was the La Guitarra Silver Mine located in México State, México. Shareholders of Silvermex received 0.0355 First Majestic shares and C\$0.0001 for each share of Silvermex, with First Majestic issuing a total of 9,451,654 First Majestic shares and paying C\$26,623 in cash. Total value of the transaction was approximately C\$175.4 million (First Majestic News Release, 2012). The transaction was implemented by way of a plan of arrangement under the Business Corporations Act (British Columbia).

When First Majestic took over the Property in 2012 the company commenced a plan to expand the mining operations from 350 tpd to 520 tpd ROM. Underground development in late 2012 was expanded and a spare ball mill from La Parrilla Silver Mine and some spare flotation tanks from the La Encantada Silver Mine were shipped to the La Guitarra Silver Mine. Construction of the foundations commenced in the third quarter of 2012 and all equipment for this expansion arrived on site in the fourth quarter of 2012. This expansion was completed in May 2013.

First Majestic placed the La Guitarra Silver mine on care and maintenance in August of 2018. First Majestic made the following statement in a news release dated July 16, 2018. The decision to place the operation under care and maintenance was due to reallocation of capital and resources to projects that have better economics and internal rates of return for First Majestic. First Majestic did, however, continue with current permitting activities and remediation programs to prepare the operation for a potential reopening in the future.

On May 25, 2022, Sierra Madre entered into the Definitive Agreement with First Majestic, whereby Sierra Madre agreed to acquire the Property by purchasing all the shares of La Guitarra Cia from First Majestic.

6.3 Modern Mining Production Statistics

Production records from 1991 are listed in Table 6.1 below.



Table 6.1
Production Records

La Guitarra Silver Mine production since 1991.				
Year	Operator	Tonnes	Au g/t	Ag g/t
1991	LuisMin	2,574	3.23	465.96
1992	LuisMin	9,927	6.72	345.19
1993	LuisMin	8,206	5.20	320.28
1994	LuisMin	25,055	3.58	256.30
1995	LuisMin	65,410	3.20	321.00
1996	LuisMin	94,375	3.63	285.74
1997	LuisMin	107,305	4.35	298.53
1998	LuisMin	106,598	3.89	331.11
1999	LuisMin	105,136	3.60	298.14
2000	LuisMin	113,809	3.29	254.62
2001	LuisMin	101,548	3.92	226.84
2002	LuisMin	79,679	3.58	208.88
2003	LuisMin/Genco	41,387	3.09	252.61
2004	Genco	41,947	3.66	274.46
2005	Genco	45,922	5.55	327.42
2006	Genco	53,873	3.11	343.37
2007	Genco	59,342	3.21	192.69
2008	Genco	67,629	1.47	176.26
2009*				
2010	Genco/Silvermex	40,033	1.13	131.99
2011	Silvermex	81,153	1.86	180.26
2012	Silvermex/First Majestic	114,455	1.26	203.58
2013	First Majestic	171,662	1.41	152.35
2014	First Majestic	186,881	1.32	126.66
2015	First Majestic	158,518	1.60	201.35
2016	First Majestic	155,696	2.19	227.91
2017	First Majestic	89,957	1.83	196.38
2018	First Majestic	79,959	1.67	172.50
TOTAL		2,208,037	2.62	220.86

*Illegal blockade of mine began in Sept 2008 and the mine and mill were reopened in April 2010

6.4 Exploration

Though modern-era mining in the Property was undertaken since 1990 by Compañía Minera Arauco and later (1993) by Luismin, the exploration methods and results from these two companies were not documented by subsequent owners Genco in their 2010 Technical report (Clark et al., 2015). Later First Majestic in their 2015 Technical Report (Beltran et al., 2015). While exploration results prior to Genco’s purchase of the Property in 2003 were reviewed by



Genco, only modern-era exploration methods and results completed by Genco, Silvermex and First Majestic are summarised in this report.

Exploration undertaken by Genco, Silvermex and First Majestic include: geophysical surveys, drilling, channel sampling, surface mapping and sampling.

6.4.1 Geophysical Surveys

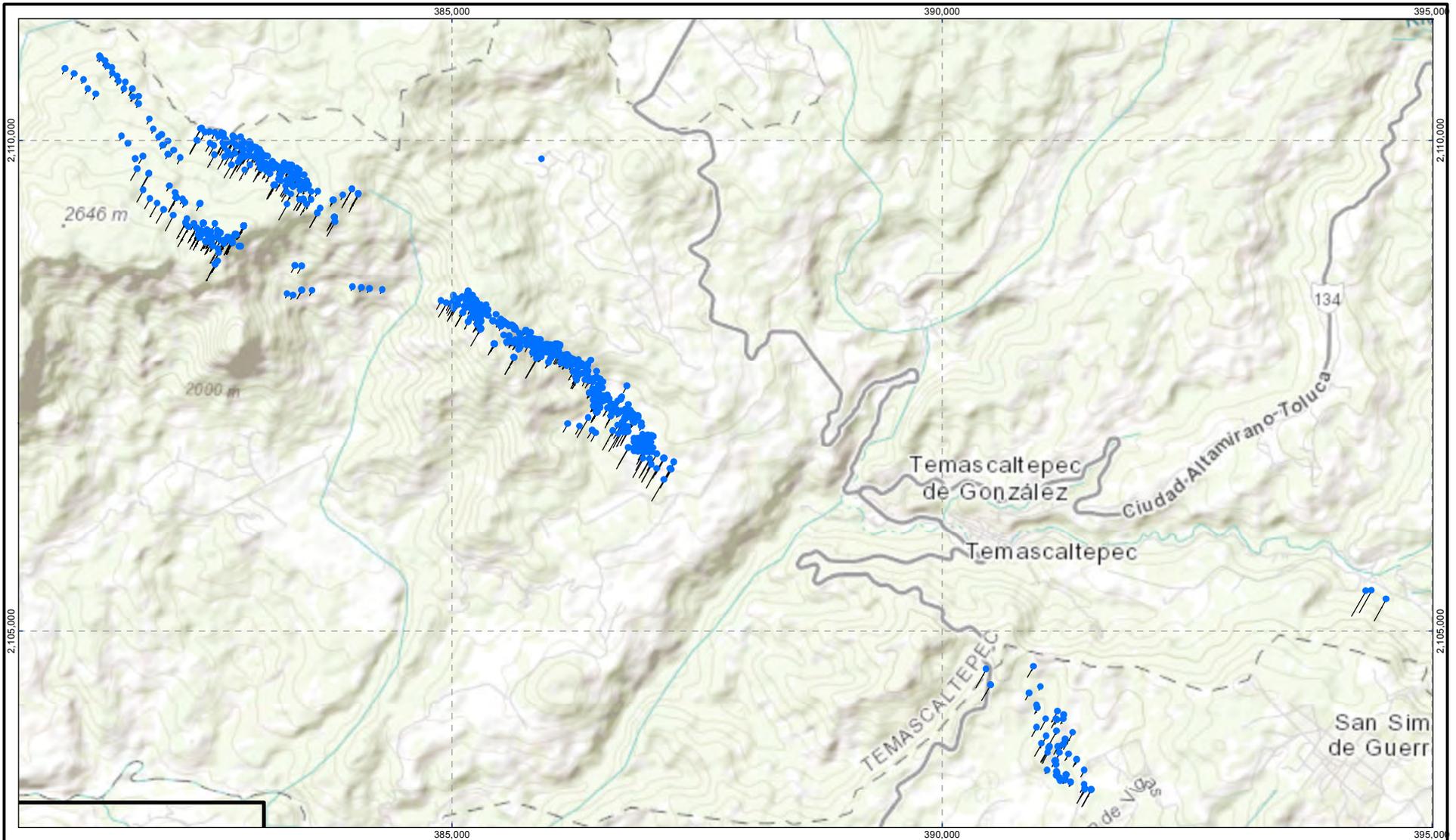
3D induced polarization (IP) and magnetometry (mag) surveys were completed by Genco in 2003 by SJ Geophysics Ltd. (Krawinkel, 2003). Three areas were surveyed: Mina de Agua, La Guitarra and Nazareno. The Mina de Agua and La Gutarra surveys were identical in size at with 6 lines at 1,000 m long, 100 m apart at 45 degrees azimuth. The Nazareno survey covered 9 lines 600 m long, 50 m apart at 30 degrees azimuth. Survey results from Mina de Agua showed little variation and perhaps one large discrete body. The range of vales for resistivity and mag were small and did not suggest discrete rock units. Results for La Guitarra showed a significant linear structure through the middle of the grid identified as the San Rafael vein. Shorter strike length veins were also recognised in the north of the survey area that were understood to be know veins coming from mine areas. At Nazerino five northwest orientated linear features were identified with varying signal strength.

The above geophysical surveys were undertaken shortly after Genco's purchase of the Property in 2003, and since these surveys there has been significant additional exploration undertaken that has more accurately defined the size and extent of mineralization on the Property. It is the Author's opinion that these early (2003) geophysical surveys together with subsequent exploration results, notably drilling, could be used to help calibrate future geophysical surveys for more accurate results.

6.4.2 Drilling

Exploration drilling records exist starting from Genco's ownership of the Property in 2003. Table 6.2 lists the number, year, type and meters of exploration drilling undertaken on the Property from information provided by First Majestic. The location of the drillholes is shown in Figure 6-1. The core diameters used for drilling at La Guitarra 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 (Beltran et al., 2015).



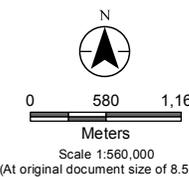
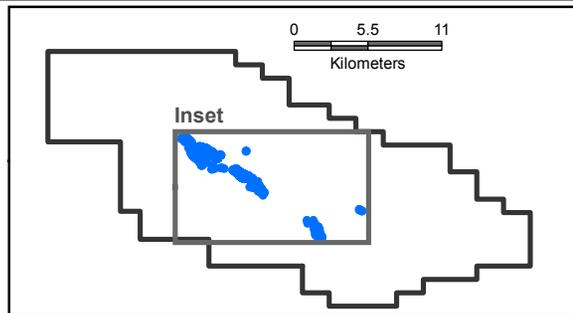


Legend

- Drillhole collars
- Drillhole trace
- ▭ Property Boundary

Notes

1. Coordinate System: WGS 1984 UTM Zone 14N
2. Data Source: World Topographic Map, ESRI ArcGIS Online basemap.



TECHNICAL REPORT LA GUITARRA PROPERTY

Drillhole Location Map

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 6-1

Table 6.2
First Majestic and Genco Exploration Drilling Records

Year	Surface						Underground		Total	
	Diamond Core		RC Chip		Shelby Tube		Diamond Core			
	No.	(m)	No.	(m)	No.	(m)	No.	(m)	No.	(m)
2003	8	765					8	185	16	950
2006	84	19,111	30	1,947			3	355	117	21,413
2007	71	20,277	94	13,149			49	3,517	214	36,943
2008	41	15,551	39	6,896			37	1,777	117	24,223
2009							3	70	3	70
2010							21	613	21	613
2011	45	7,646					74	5,629	119	13,275
2012	116	20,596					220	27,462	336	48,058
2013	16	7,702					79	7,936	95	15,638
2014	7	1,837					50	4,531	57	6,367
2015							50	2,505	50	2,505
2016	14	4,178					71	18,042	85	22,219
2017	26	9,884					64	18,591	90	28,475
2018	20	7,404					19	7,284	39	14,688
2020					11	266			11	266
2021					38	848			38	848
Total	448	114,951	163	21,991	49	1,113	748	98,495	1408	236,550

Totals may vary due to rounding

According to the 2010 Technical Report by Clarke et al. (2010), under Genco’s ownership (2003 to 2010) drillholes were down hole surveyed and professional surveyors were used to measure collar coordinates. Prior to 2010, a Sokia total station was used by Genco according to Beltran et al., 2015. From 2010 to 2015, drillhole collars were surveyed by the First Majestic’s engineering department at La Guitarra mine using a Leica total station. Collar data was downloaded from the total station and then uploaded into a mine server. Collected information includes X, Y, Z coordinates, azimuth and dip angle. A certificate was also prepared, stored, and shared in the mine server since 2012 (Beltran et al., 2015). The Author has no information on the collar survey methods from 2015 to 2021 but has no reason to believe that collar survey data collection methods would have been materially different.

According to Beltran et al. (2015) between 2008 and 2012 downhole surveying at La Guitarra for the exploration of Jessica – Joya Larga and Comales – Nazareno was done by the drilling contractor at 50 m intervals or less using a Reflex tool. Downhole surveying from July 2012 to December 2013 was performed using a Reflex tool and a PeeWee tool was used in 2014. Downhole surveys were collected at 50 m intervals or less in infill and exploration holes between July 2012 and December 2014. Downhole surveying was not done for short and small diameter delineation holes. Between



2008 and February 2014, the downhole surveys were reported handwritten in paper along with the daily drilling reports turned in by the drillers. Digital reporting was implemented in March 2014. Corrections have been made for magnetic declination. The Author has no information downhole survey collection methods since the 2015 Technical Report by Beltran et al. (2015) but has no reason to believe the downhole survey data since 2015 is incorrect.

Drill hole logging and sampling intervals as described by Genco (Clarke et al., 2010) and First Majestic (Beltran, et al, 2015) are reasonable. Drill hole logs are handwritten and later digitized for recording in an electronic database. Data collected includes RQD, quantitative and qualitative data on joints and fractures and rock hardness. The data was initially recorded in hard copy format and then transcribed into electronic spreadsheets for estimation of rock quality. Core is also photographed. Typical core recoveries in host rock and quartz veins are over 95% whereas in brittle fault structures the recoveries can be in the range of 20% to 50%.

Core sample lengths vary in accordance with the type of mineralization and aligned with vein width. Samples of 1.5 m are used for mineralization in stockworks, veinlets and disseminations with strong alteration. Samples of 3 m to 5 m lengths are used for rock without alteration. The reverse circulation holes are normally sampled every 1.5 m down the hole with some holes are sampled every 1 m down the hole (Clarke, 2010). Core samples are stored at the La Guitarra mine core shed. Core boxes are labelled with appropriate depth intervals and labelled wooden blocks were used to separate each run. Core was split for sampling or quartered for duplicates using a mechanical saw located at the core shed.

Shelby tube samples from direct push holes (Table 6.2) were used to assess the potential for reworking the tailings dam at La Guitarra mine. Results from the tailings dam drilling program are discussed in report section 6.4.6.

6.4.3 Drillhole Sample Preparation, Analysis and Security

The following is a summary of the laboratory preparation, analysis and security procedures as outlined in the 2015 Technical Report by Beltran et al. (2015).

Period 2003 to 2010 - Genco

In 2008, Genco implemented a quality control system that included the insertion of blanks, duplicates and reference material in the sample stream. To check the assay results, the La Guitarra laboratory inserted 3% of laboratory check samples. A program to send samples to external laboratories for analysis checks was under the direction of La Guitarra's Superintendent of Geology. One half of the sawn core was sent to the mine site lab for preparation, after the initial preparation, crushed and pulverized samples were split into two, one half sent to the mine lab and the other half to ALS Chemex ("ALS"), a commercial laboratory. The check samples sent to ALS were either crushed lab' rejects or ground pulp rejects. The samples were sent to Hermosillo where they were pulverized in the ALS lab, and then the prepared pulps were sent to ALS lab in



Vancouver to be fire assayed. All sample rejects and pulps were returned to the mine for storage after analysis.

According to Beltran et al. (2015) the sample handling, storage and shipping procedures carried out by Genco followed industry standards at that time. However, some of the earlier drill-hole samples with analytical procedures that were not well documented have since been mined out.

Period 2011 to 2012 - Silvermex

Core samples were sent via bonded courier to the sample processing laboratories of either ALS in Guadalajara, Jalisco, México or Inspectorate in Hermosillo, Sonora, México (Beltran et al., 2015). All of the samples were securely sealed and Chain of Custody documents accompanied all shipments. The analytical results from these samples were received by authorized Silvermex and La Guitarra personnel using secure digital transfer transmissions, and these results were restricted to qualified Silvermex personnel prior to their publication.

According to Beltran et al. (2015) the sample preparation, analysis and security of the 2011 and 2012 drilling campaign met the industry standard at the time.

Period 2013 to 2022 – First Majestic

Over the period 2013 to 2014, core samples were sent to SGS laboratories in Durango México. Quality control measures at the time included insertion of standards in the sample stream at a rate of 5% of total samples. Field duplicates and blind duplicates were inserted at a rate of 4% of total samples. A First Majestic internal report (2018) summarised the QA/QC procedures from 257 drillholes completed at Coloso, Nazareno and La Guitarra mines over the period 2015 to 2018. The report documented the QA/QC procedures for 201 underground and 56 surface core samples of which 11,162 samples were taken. In all, 723 duplicate were inserted at a percentage of 6.48%, 784 CDN (cdnlabs.com) certified standards were inserted at a percentage of 7.02%, 737 blanks were inserted at a percentage rate of 6.60%. Theses insertion rates exceed industry standards. Analyses were undertaken at three laboratories: La Guitarra mine and Central laboratories, controlled by First Majestic; and SGS, an independent commercial laboratory. The Author is of the opinion that the First Majestic laboratory procedures met and later (post-2015) exceeded standard industry practise at the time.

A summary of the drillhole samples records by year, sample type and analytical method are outlined in Table 6.3.



Table 6.3

Drillhole Sampling History and Analysis Methods

Year	No.	Method Au	Method Ag
2003	121	Fire assay	Fire assay
2006	5,799	Fire assay	Fire assay
2007	12,079	Fire assay	Fire assay
2008	3,853	Fire assay	Fire assay
2011	230	AR-AAS	Fire assay
	1,665	Fire assay	Fire assay
	82	ICP	Fire assay
2012	687	AR-AAS	Fire assay
	29	No assay	Fire assay
	3,802	Fire assay	Fire assay
	1	ICP	Fire assay
2013	152	AR-AAS	Fire assay
	36	Fire assay	No assay
	548	Fire assay	Fire assay
2014	642	AR-AAS	Fire assay
	51	Fire assay	No assay
	446	Fire assay	Fire assay
2015	81	AR-AAS	AR-AAS
	1,026	Fire assay	Fire assay
2016	1,882	AR-AAS	AR-AAS
	2,435	AR-AAS	Fire assay
	19	Fire assay	AR-AAS
	72	Fire assay	Fire assay
2017	1	AR-AAS	No assay
	1	No assay	AR-AAS
	3,814	AR-AAS	AR-AAS
	77	Fire assay	AR-AAS
2018	2,436	AR-AAS	AR-AAS
	15	Fire assay	AR-AAS
2020	246	AR-AAS	AR-AAS
2021	788	AR-AAS	AR-AAS
Total	43,116		



6.4.4 Underground Channel Samples

Genco (2003 to 2010) and First Majestic used channel samples for mining control as well as for resource-reserve determinations, however it is understood that channel sampling was not used by First Majestic for their resource-reserve determinations at Coloso mine. The channel samples were assayed by the La Guitarra mine laboratory using primarily fire assay methods. The La Guitarra’s laboratory is not a certified laboratory; however, the laboratory follows the standard protocols for sample preparation used by First Majestic’s Central Lab, which was in the process of obtaining the ISO 9001 certification in 2015 (Beltran, 2015). The sample preparation and details of analytical methods at the La Guitarra mine laboratory are outlined in Beltran et al. (2015) and in the opinion of the Author were industry standard.

6.4.5 Surface Sampling Campaigns

Exploration records show that over the period 2010 to 2011 there were soil and rock sampling campaigns. Soil samples were taken on a grid spacing of 100 m and rock samples were taken from surface exposures. In total 1,624 soil samples and 1,529 rock samples were taken. In 2021 an additional 96 rock samples were taken and there were plans for another soil grid sampling campaign. Figure 6-2 and Figure 6-3 shows the locations of the 2010 to 2011 and 2021 sample locations and grades for silver and gold respectively. More works needs to be done assessing the results of these surface sampling campaigns.

6.4.6 Tailings Dam Sampling Campaign

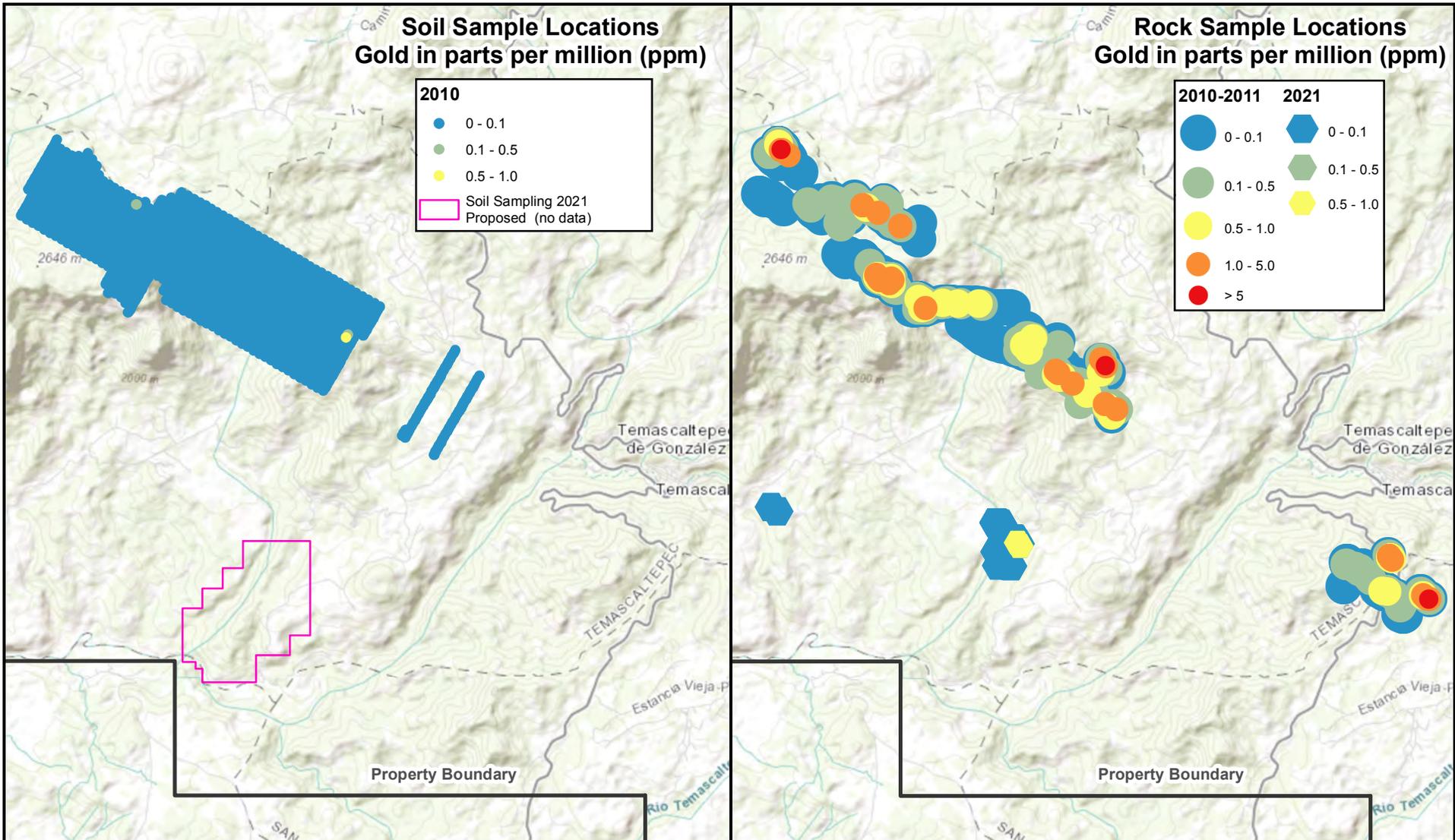
First Majestic collected 1,034 Shelby tube tailings samples from 49 direct push holes collared from the top of the tailings dam. Samples were taken at 1 m regular intervals down each hole. Maximum hole depths ranged from 11.5 m to 26.0 m and average depth of 22.7 m. The tailings samples were analyzed at First Majestic’s laboratory in Durango and the sample pulps and rejects are stored at First Majestic’s Parrilla mine. Sample grade statistics from the tailing are shown in Table 6.4 below. First Majestic has built a block model from the tailings drillhole data to assess the potential for the mine tailings to provide additional precious and base metal resources. The author has not reviewed the block model and is of the opinion that metallurgical testing of the Shelby tube samples in storage would be necessary to best determine the extent to which re-processing of tailings can accomplished at La Guitarra mine.

Table 6.4
Tailings Dam Sample Statistics

Grade (ppm)	Number	Minimum	Maximum	Average	Std Dev.
Silver (ag)	1,034	0.25	155.44	35.13	14.78
Gold (Au)	1,034	0.03	1.82	0.43	0.21
Lead (Pb)	1,034	37.00	1,278.00	228.97	131.37
Zinc (Zn)	1,034	27.00	15,314.00	710.38	914.05
Arsenic (As)	1,034	21.00	1,175.00	324.48	196.16



File: V:\2330\Resource\1. La Guitarra\GIS\MXD\Fig_6_3_Gold.mxd



<p>Legend</p> <p> Property Boundary</p>	<p>0 5.5 11 Kilometers</p>	<p>Stantec</p>	<p>SIERRA MADRE Gold & Silver</p>
<p>Notes</p> <ol style="list-style-type: none"> 1. Coordinate System: WGS 1984 UTM Zone 14N 2. Data Source: ESRI ArcGIS Online basemap, World Topographic Map. 3. Sample data from First Majestic Silver Corp. 	<p>0 825 1,650 Meters Scale 1:560,000 (At original document size of 8.5x11)</p>		<p>TECHNICAL REPORT LA GUITARRA PROPERTY</p> <p>Soil and Rock Sample Locations Gold (Au) Grades</p>
			<p>DRAWN BY: J.K. CHK'D BY: D.L. Date: 22 06 29</p>

Figure 6-3

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

6.5 Historic Mineral Resource and Reserve Estimates

Historical resource and reserve estimates were produced when the Property was under the control of Genco (2003 to 2010) and First Majestic (2012 to 2022). Historical estimates while under Genco’s control are documented in four technical reports: Clark (2006), Clark (2007), Clark (2008) and Clark et al. (2010). The four historic estimates generally follow the same approach and reflect available information, mining assumptions and revenue assumptions at the time. The two most recent historic estimates that were produced by Clark and Thornton (2010), effective August 2009, and Beltran et al. (2015), effective December 2014, are considered by the Author to best reflect the different approaches used by successive prior owners Genco and First Majestic respectively. These estimates are discussed below.

6.5.1 Genco 2009 Historic Estimates

Clark and Thornton (2010) separated resources estimates into underground and surface (open pit) mineable. Underground historic mineral resource estimates are listed in Table 6.5 and open pit historic mineral resource estimates are listed in Table 6.6 as shown in the 2010 Technical Report summary. Underground and open pit historic mineral reserve estimates are listed in Table 6.7 as shown in the 2010 Technical Report summary.

The Author has not done sufficient work to classify these historical resource and reserve estimates as current mineral resources and the issuer is not treating the historical estimates as current mineral resources or mineral reserves. To make current these historical estimates the cutoff grade (COG) needs to be adjusted to reflect current commodity prices and relevant geological models need to be updated to include additional exploration completed between August 2009 and the effective date of this report.

Table 6.5
Underground Historical Resource Estimates
at COG 135 g/t eAg, effective August 2009

Underground	Measured and Indicated (M&I)			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
La Guitarra	900	231	2.2	354
Mine de Agua	215	215	0.97	238
Coloso	306	306	3.31	605
Nazareno	491	491	0.27	249
Total M&I	1,912	1,912	1.74	354
Inferred UG Resources	10,000	305	1.95	414



Table 6.6
Open Pit Historical Resource Estimates
at COG 30 g/t eAg, effective August 2009

Open Pit	Measured and Indicated			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
Total M&I	10,719	70	0.7	110
Inferred UG Resources	3,187	66	0.89	115

Table 6.7
Underground and Open Pit Historical Reserve Estimates,
effective August 2009

Mining Method	Proven and Probable			
	Tonnes ('000)	Ag g/t	Au g/t	eAg g/t
Underground	2,185	209	1.46	291
Open Pit	6,824	81	0.75	123
Total Reserve	9,009	113	0.93	165

The geologic model used to generate the estimates presented in Table 6.5 and Table 6.6 was built from mineralized zone wireframes solids using a 45 g/t silver equivalent (eAg) cutoff and 20 g/t eAg cutoff when connecting higher-grade zones. Gold to silver ratio for eAg equivalent grade calculation was 56:1. Wireframe solids were also built for historically mined out areas. For the open pit resource estimate a 3D block model was coded from the wireframe solids and grades estimates into the blocks from sample composites. For underground resource estimates longitudinal sections through the target deposit wireframes were used. Outlier restrictions in the input data for surface resource estimates were limited to 700 g/t Ag and 10 g/t Au and for underground resources high grade assay results were limited to 1,500 g/t Ag and 15 g/t Au. These high grades were further restricted in the surface resource estimate to within a maximum of 15 m of the interpolation ellipsoid.

Surface resources were reported from an economic pit shell developed from the 3D block model (blocks 10m long x 3m wide x 3m) in height with variable slope ranging from 36 degrees near surface to 60 degrees maximum. Gold and silver recovery from the underground reserve was estimated to be 96% and 93% respectively, no loss due to mining from the surface reserve was estimated. The anticipated metallurgical recovery for gold was 90% and silver was 92%. For underground mining, the minimum horizontal mining width for the steeply dipping structures underground was 0.8 m. Seegmiller International provided geotechnical advice and Kappes, Cassidy and Associates (KCA) advised on processing costs and recoveries. The tonnage factor used



to convert the volume of the blocks to tonnes is 2.5 t/m³. This tonnage factor was determined by a series of tests that were done by KCA.

The Author is of the opinion that the approach and methods used in the calculation of the historic estimates as outlined in Table 6.5, Table 6.6 and Table 6.7 and described by Clark and Thornton. (2010) are reasonable for the period in time the estimates were compiled. However, the historic estimates cannot be verified by the Author as the source model data was not available for review.

6.5.2 First Majestic 2014 Historic Estimates

Only underground mining was considered in the historic estimates documented in the 2015 Technical Report by Beltran et al. (2015) for First Majestic. Historic mineral resource estimates are listed in Table 6.8 and historic mineral reserve estimates are shown in Table 6.9, as shown in the 2015 Technical Report summary. The Author has not done sufficient work to classify these historical resource and reserve estimates as current mineral resources and the issuer is not treating the historical estimates as current mineral resources or mineral reserves. To make current these historical estimates the cutoff grade (COG) needs to be adjusted to reflect current commodity prices and relevant geological models need to be updated to include additional exploration completed between December 2014 and the effective date of this report.

Table 6.8
Underground Historic Mineral Resource Estimates,
effective December 31, 2014

Category	Mineral Type	Tonnes	Average Grade G/t)			troy ounces ('000)	
		('000)	Ag	Au	eAg	Ag	eAg
Measured (M)	Sulphides	121	170	2.37	305	660	1,185
Indicated (I)	Sulphides	1,029	335	1.56	424	11,078	14,029
Total M&I	Sulphides	1,150	318	1.65	412	11,738	15,214
Inferred	Sulphides	739	197	1.23	267	4,674	6,343

- (1) Mineral Resources have been classified in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.
- (2) Cut-off grade considered for sulphides was 180 g/t Ag-Eq.
- (3) Metallurgical recovery used was 85% for silver and 79% for gold.
- (4) Metal payable used was 95% for silver and 95% for gold.
- (5) Silver equivalent grade is estimated as:

$$eAg = Ag \text{ Grade} + (Au \text{ Grade} \times Au \text{ Recovery} \times Au \text{ Payable} \times Au \text{ Price}) / (Ag \text{ Recovery} \times Ag \text{ Payable} \times Ag \text{ Price}).$$
- (6) Tonnage is expressed in thousands of tonnes, metal content is expressed in thousands of ounces.
- (7) Totals may not add up due to rounding.
- (8) Measured and Indicated Mineral Resources are reported inclusive of Mineral Reserves.
- (9) Mineral Resources include estimates for the La Guitarra, Nazareno and Mina de Agua areas prepared under supervision of Jesus M. Velador Beltran, QP of First Majestic, and estimates for the Coloso area prepared under supervision of Greg K. Kulla, P.Geo. of Amec Foster Wheeler.



Table 6.9
Underground Historic Mineral Reserve Estimates,
effective December 31, 2014

Category	Mineral Type	Tonnes	Average Grade G/t)			troy ounces ('000)	
		('000)	Ag	Au	eAg	Ag	eAg
Proven (PN)	Sulphides	91	153	184	256	446	745
Probable (PB)	Sulphides	1,217	228	1	284	8,911	11,098
Total PN&PB	Sulphides	1,308	223	1.06	282	9,358	11,843

(1) Mineral Reserves have been classified in accordance with the CIM Definition Standards on Mineral Resources and Mineral Reserves, whose definitions are incorporated by reference into NI 43-101.

(2) Cut-off grade considered for sulphides was 200 g/t Ag-Eq

(3) Metallurgical recovery used was 85% for silver and 79% for gold.

(4) Metal payable used was 95% for silver and 95% for gold.

(5) Silver equivalent grade is estimated as:

$eAg = Ag \text{ Grade} + (Au \text{ Grade} \times Au \text{ Recovery} \times Au \text{ Payable} \times Au \text{ Price}) / (Ag \text{ Recovery} \times Ag \text{ Payable} \times Ag \text{ Price})$.

(6) Tonnage is expressed in thousands of tonnes, metal content is expressed in thousands of ounces.

(7) Totals may not add up due to rounding.

Historic mineral reserve estimates presented in Table 6.9 were only reported for the Coloso and La Guitarra mines. The eAg ounces reported from the Coloso mine represented 83% of the probable reserves and 77% of the total reserves. No proven reserves were reported from Coloso mine.

Methods used to derive the historic mineral resource estimates shown in Table 6.8 varied depending on deposit location and are discussed briefly below.

Coloso Deposit

Three-dimensional wireframe models were constructed using lithological and assay information from 127 diamond drill holes. Leapfrog® modelling software was used to prepare wireframe models of the Jessica and Joya Larga veins. High grade wireframes were created at nominal 150 eAg g/t (Ag + Au x 57.03). Low grade wireframes enclosing the high-grade domains were prepared at a nominal 30 eAg g/t. Block models for the mineral resource estimate were constructed and initialized inside 3D wireframe interpretations of the mineralization using Vulcan® software. Block Ag and Au grades were estimated using inverse distance to the power 3 (ID3) using multiple passes and grade trend orientated search ellipses. Source assay intervals prior to estimation were composited down the hole to a fixed length of 0.5 m. Separate grade capping was applied for high-grade zones (2,300 g/t Ag and 10 g/t Au) and low-grade zones (150 g/t and 2g/t). Block model grade estimates were validated by visual inspection, swath plots and comparison with global estimates using nearest neighbour search. Selectivity analysis i.e. checks for change of support on smoothing did not identify any concerns according to Beltran et al. (2015).



Criteria used to identify Inferred mineral resources included a minimum of two drillholes, distance to the closest composite less than 47 m and distance to the second closest composite less than 66 m. All other estimated blocks were assigned an Inferred classification up to a maximum range of the search ellipse grade trend that varied 3 m across strike to a maximum 300 m.

La Guitarra, Nazareno, Mina de Agua Deposits

Mineral Resources for La Guitarra, Nazareno and Mina de Agua deposits have been estimated by Beltran et al. (2015) using chip and channel samples across mineralized veins, recent diamond drillholes and underground mapping. The historic estimates were based on a similar longitudinal section (polygonal) method used by Clarke et al. (2010). Cross and longitudinal sections are drawn using drillhole data, mine maps and channel samples. Polygons of Measured Resources are projected vertically (up and down) 12.5 m or less away from mine levels that have channel sample lines. Indicated Resources are projected a maximum of 12.5 m away from mine levels with channel sample lines, drillhole intercepts or from the limit of the measured resources polygon. Inferred resources are projected 50 m or less from drillhole intercepts or polygons of indicated resources. In some cases, in the Guitarra vein polygons, inferred resources are projected up to 100 m away from drillhole intercepts or polygons of indicated resources.

CAD software was used to digitize the resource classified polygon on longitudinal section. Within each polygon, the area, average width, volume and weighted mean grade was determined using spreadsheet calculations. Capping of outlier grades is done before calculation of the weighted mean grades by selecting the 95% percentile from cumulative frequency histograms for the Ag-Au grade. Capping is done per sample before compositing by length of channel line of drillhole intercept. Tonnage is calculated using an SG of 2.5 t/m³. An SG of 2.5 has been used for La Guitarra veins since 1993; estimated SG for 29 mineralized samples from Coloso using the water immersion method reported minimum SG of 2.19, maximum SG of 2.97 and mean of 2.42. (Beltran et al., 2015).

Resource Cutoff Grade Calculations

An overhand cut-and-fill underground mining method using a selective mining shape of approximately 0.5 m wide by 5 m long by 5 m high was assumed by First Majestic in the calculation of a cutoff grade. A 180 g/t eAg (Ag + Au x 57.03) cutoff grade was applied to the historic mineral resource estimates based on operating costs, metallurgical recovery, and metal pricing assumptions.

Resource to Reserve Modifying Factors

The First Majestic historic mineral reserve estimates are inclusive of resources and are limited to only the Coloso mine and the La Guitarra mine. The following resource to reserve modifying factors were used:



- **Dilution** - Based on historical records and reconciliation practices in La Guitarra mine, dilution in La Guitarra mine is estimated at 20%. Based on historical records, in La Guitarra mine the grade of the diluting material is estimated at 10% of the grade of the corresponding minable block. In the Coloso mine, the grade of the diluting material is taken from the grade contained in the corresponding block of the estimated block model except for low-grade zones where the diluting material grade is considered zero. Dilution was estimated at 20% after applying a minimum width constraint of 1.5 m.
- **Mining Recovery** - Based on historical records at La Guitarra mine, mining losses for La Guitarra and Coloso mines were estimated at 5% of the mineable blocks for Measured or Indicated Mineral Resources.
- **Cutoff Grade** – Reserve cutoff grade estimates included the following main components: metal prices, metallurgical recoveries, smelting and refining terms, operating costs, and geometric constraints. Metallurgical recovery was estimated at 85% based on the plant performance for the period of August to November 2014 when the plant processing a blend of ROM material from the La Guitarra mine and the Coloso mine.

The Author is of the opinion that the approach and methods used in the calculation of the historic estimates outlined in Table 6.8 and Table 6.9 as described by Beltran et al. (2015) were reasonable. However, the historic estimates cannot be verified by the Author as the source model data specific to above estimates was not available for review.

6.6 Mineral Processing and Metallurgical Testing

Records for historic metallurgical testing are limited two primary sources: Clark and Thornton (2010) covering the Genco ownership period 2003 to 2010, and Beltran et al. (2015) covering a significant portion of the First Majestic's ownership from 2013 to 2022.

A review study of the La Guitarra plant undertaken by Del Real and Hernandez (2022) for Sierra Madre in May 2022. The results of this study are summarised in Section 17 of the report.

6.7 Genco Metallurgical Testing

KCA conducted a series of metallurgical recovery and process design tests on La Guitarra ore samples from 2006 to 2008. The purpose of this program was to determine the viability of cyanide (NaCN) leach recovery of silver and gold. The results were applied to the design parameters for a 3,000 t/d NaCN processing plant with much of mill feed coming from a theoretical open pit operation.

Samples used in the KCA test work came from drill core, active stopes, development headings, mill feed and surface exposures. Samples were obtained from mineralized vein systems throughout the Property.



6.7.1 NaCN Leaching Studies

Initial cyanide leach tests were conducted on 59 samples. Column and bottle roll tests were conducted at variable crush and grind sizes and NaCN concentrations. Metallurgical sample descriptions and their locations are listed in Table 6.10 below.



TECHNICAL REPORT – La Guitarra Silver Mine, Temascaltepec, México

**Table 6.10
Metallurgical Sample Descriptions and Locations**

KCA Test No.	Sample Description	Main Mining Area Location
35192 A	Run of Mill	La Guitarra Mill
35652 A	Creston Area	Creston Open Pit
36217 A	GMS-32	Unknown
36217 B	GMS-33	Unknown
36276 A	November Sample Plant	La Guitarra Mill
36315 A	December Sample Plant	La Guitarra Mill
36315 B	Santa Ana	Underground Mina de Agua Area-Santa Ana Vein
36191 A	Concentrate	La Guitarra Mill
36514 A	Mill Sample, 25 Eng.-07	La Guitarra Mill
36515 B	Reb 800, 001.	Underground La Guitarra Area-San Rafael
36515 C	Reb 800, 002.	Underground La Guitarra Area-San Rafael
36515 D	Reb 850II, 003.	Underground La Guitarra Area-San Rafael
36516 A	Reb 850II, 004.	Underground La Guitarra Area-San Rafael
36516 B	GDH-5 Core	Drilling La Guitarra Area-San Rafael
36516 C	GDH-7, -9, -12 Core Comp.	Drilling La Guitarra Area-San Rafael
36516 D	GDH-13 & 14 Core Comp.	Drilling La Guitarra Area-San Rafael
36517 A	GDH-32, -33, -34, -50 Core Comp.	Drilling Mina de Agua Area-Santa Ana Vein
36588 A	Santa Ana Ramp	Underground Mina de Agua Area-Santa Ana Vein
36568	Santa Ana Ramp, minus 6.3 mm	Underground Mina de Agua Area-Santa Ana Vein
36571	Santa Ana Ramp minus 3.35 mm	Underground Mina de Agua Area-Santa Ana Vein
36588 B	Terrero Amelia	Surface Bulk sample-La Guitarra Area-San Francisco
36574	Terrero Amelia, minus 6.3 mm	Surface Bulk sample-La Guitarra Area-San Francisco
36577	Terrero Amelia, minus 3.35 mm	Surface Bulk sample-La Guitarra Area-San Francisco
36588 C	GDH-86, 4.0 - 82.5 meters	Drilling La Guitarra Area-Los Angeles
36580	GDH-86, 4.0 - 82.5 meters, minus 6.3 mm	Drilling La Guitarra Area-Los Angeles
36583	GDH-86, 4.0 - 82.5 meters, minus 6.3 mm	Drilling La Guitarra Area-Los Angeles
36846 A	22661, Santa Ana Vein, Pilar en rebaje	Underground Mina de Agua Area-Santa Ana Vein
36846 B	22662, Santa Ana Vein, Pilar en rebaje	Underground Mina de Agua Area-Santa Ana Vein
36846 C	22663, Santa Ana Vein, Superficie	Surface Bulk sample-Mina de Agua Area-Santa Ana vein
36846 D	22664, Santa Ana Vein, Superficie	Surface Bulk sample-Mina de Agua Area-Santa Ana vein
36738	22661, Santa Ana Vein, Pilar en rebaje	Underground Mina de Agua Area-Santa Ana Vein
36741	22662, Santa Ana Vein, Pilar en rebaje	Underground Mina de Agua Area-Santa Ana Vein
36744	22663, Santa Ana Vein, Superficie	Surface Bulk sample-Mina de Agua Area-Santa Ana vein
36747	22664, Santa Ana Vein, Superficie	Surface Bulk sample-Mina de Agua Area-Santa Ana vein
36847 A	29951 La Guitarra Vein, San Rafael, 845 (1) SE	Underground La Guitarra Area-San Rafael
36847 B	29952 La Guitarra Vein, San Rafael, 845 (1) SE	Underground La Guitarra Area-San Rafael



Table 6.10 (Cont'd)

KCA Test No.	Sample Description	Main Mining Area Location
36847 C	29953 La Guitarra Vein, San Rafael, 856 SE	Underground La Guitarra Area-San Rafael
36847 D	29954 La Guitarra Vein, San Rafael, 856 SE	Underground La Guitarra Area-San Rafael
36847 E	35335 La Guitarra, Los Angeles	Underground La Guitarra Area-Los Angeles
36750	29951 La Guitarra Vein, San Rafael, 845 (1) SE	Underground La Guitarra Area-San Rafael
36753	29952 La Guitarra Vein, San Rafael, 845 (1) SE	Underground La Guitarra Area-San Rafael
36756	29953 La Guitarra Vein, San Rafael, 856 SE	Underground La Guitarra Area-San Rafael
36759	29954 La Guitarra Vein, San Rafael, 856 SE	Underground La Guitarra Area-San Rafael
36762	35335 La Guitarra, Los Angeles	Underground La Guitarra Area-Los Angeles
39479 A	MMC-1 - Coloso Vein Jessica	Colosos Area
39479 B	MMC-2 - Coloso Vein Jessica	Colosos Area
39478 C	Naz-1 – Nazareno	Nazareno Area
39479 A	Naz-2 – Nazareno	Nazareno Area
39479 B	GRH-141 Composite – Nazareno	Nazareno Area
39479 C	GRH-142 Composite – Nazareno	Nazareno Area
39479 D	GRH-145 Composite – Nazareno	Nazareno Area

Column leach test returned recoveries ranging from 46% to 77% for silver and 31% to 98% for gold. Crush sizes were between 2.07mm and 9.97mm. Bottle roll tests produced recoveries ranging from 62% to 99% for silver and 60% to 99% for gold. Grind size for all bottle roll tests was 80% -200 mesh. Based on these results, KCA and Genco selected conventional leaching for further test work.

6.7.2 Master Composite Tests

A master composite was made from 25 of the above samples to approximate a blended mill feed for additional test work. Samples for the composite were derived from the Guitarra mine area with 15% of the sample coming from Mina de Aqua. The master composite graded 1.64 g/t gold and 354.54 g/t silver.

Multiple 120-hour bottle roll tests were undertaken on splits of the master composite at grind sizes of 80% passing 100, 150, 200, 270 and 325 mesh to obtain data on recovery versus grind size. These tests used NaCN concentrations of 2, 5 and 10 grams per liter (g/l) at each grind size. Two 1 g/l leach tests were conducted at a grind size of -200 mesh. Size screen analysis were undertaken on some of the leached tails to provide additional data on the sensitivity of grind size to recovery.

Silver recovery was found to be highly dependent on both grind size and NaCN concentrations. Silver recoveries in individual tests ranged from a low of 69% at -100 mesh to 96% at -325 mesh. Leaching solutions containing 2, 5 and 10 g/l NaCN averaged 75%, 92% and 94% silver recovery,



respectively. Three samples with grind sizes of -200, -270 and -325 mesh were leached for 7 days using a 5 g/l NaCN solution. All three extracted 95% of the contained silver.

Gold recovery was found to be relatively insensitive to NaCN solution concentrations, averaging 91% at all NaCN levels. Recoveries at grind sizes between -150 and -350 mesh showed little variation.

NaCN consumption in the KCA bottle roll tests averaged 2.45, 3.7 and 4.59 kg/t for the 2, 5, and 10 g/l tests, respectively. The 7-day, 5 g/l NaCN tests had an average NaCN consumption of 2.53.

Three tests were run at a 5 g/l with addition of lime at 0.5 kg/l. This lowered the NaCN consumption to 2.2 versus 2.45 kg/t. Three tests were run with the addition of lead nitrate with a negligible effect on silver recovery.

Three aerated tests at 5 g/l NaCN were run to see if recoveries could be enhanced. Silver recoveries increased to 97% while gold recoveries were not affected. NaCN consumption increased significantly to 8.9 kg/t. It was recommended that tests be run utilizing aeration prior to the addition of NaCN to the leaching solution to determine if its consumption could be reduced.

6.7.3 Comminution Test Work

Test work was completed to determine the Bond work index on samples from the Amelia waste dump and the Los Angeles portion of the Guitarra Mine. The Bond ball mill work index was calculated to be 17.6 kWh/t. Abrasion test on material from the Santa Ana vein at Mina de Aqua averaged 0.61.

It should be noted that the existing plant and comminution circuit has 21 years of operating history. Crushing and grind data from this operating period should be used in determining crushing and grinding costs in any future economic evaluations.

6.7.4 Slurry Rheology and Settling Rate Testing

Pocock Industrial Inc. (Pocock) performed pulp rheology tests on cyanide leached samples at various flocculent doses and feed solid concentrations on -200 and -325 mesh samples. A high clay content sample was also tested as a worst-case scenario.

The rheology tests showed a decreasing viscosity with higher shear rate, classifying them as pseudoplastic fluids. Maximum thickener underflow percent solids concentrations were then estimated from these tests:

- 80% passing 200 mesh – 62 to 65 percent solids by weight
- 80% passing 325 mesh – 61 to 64 percent solids by weight
- High clay sample – 57 to 60 percent solids by weight



Based on the above, KCA calculated design parameters of 55 weight percent (Wt%) solid of the slurry from the grinding thickener to the CCD circuit, and a 60 Wt% solid in the CCD circuit was appropriate.

Dynamic and Static settling test were also completed with the following results at a 15% solids feed:

- -200 mesh - 3.00 – 4.25 m³/m² hr @ 30 to 40 gpt flocculent addition
- -325 mesh - 3.00 – 4.00 m³/m² hr @ 40 to 50 gpt flocculent addition
- High clay sample - 3.00 – 4.00 m³/m² hr @ 20 to 30 gpt flocculent addition

Based on this work KCA recommended a high-rate thickener circuit as opposed to a conventional thickener.

6.7.5 Tailing Filtration Tests

Pocock completed both vacuum and pressure filtration tests on -200 and -325 mesh leached tailings samples. Vacuum filtration tests produced a final cake with a solution content of 22 to 26%. Pressure filtration tests produced a final cake with solution contents of 15% to 20%.

Based on this test work pressure filtration is the best option as it minimizes NaCN losses and reduces makeup water needs. Design parameters for a pressure filter system was estimated at 0.897 m³/t for -200 mesh tailings. Pressure filter sizing for the high clay sample was 0.884 m³/t. Although not tested Pocock also recommended the addition of 10 g/t flocculent prior to filtration.

6.7.6 Design and Engineering Criteria

The above test work was used by KCA to establish parameters for a CCD leaching facility with Merrill-Crowe recovery of silver and gold. The following design criteria was derived from this test work:

- Crushed ore feed – 80% -12.5mm
- Pulp feed grind size - 80% -200 mesh
- Leaching solution - 5 g/l NaCN
- Estimated NaCN Consumption – 2.3 kg/t
- Estimated Lime consumption – 0.5 kg/t
- Time under leach – 160 hours
- Tailings Deposition System – Dry Stack
- Silver recovery – 92%
- Gold recovery – 90%



6.7.7 Coloso and Nazareno Deposit Testing Results

Most of the process test work under the control of Genco focused on samples from the La Guitarra mine area. The Coloso and Nazareno mines were important centers for past production. Table 6.11 and Table 6.12 summarised the NaCN leach test results from these two mine sights for silver and gold respectively.

Table 6.11
Coloso-Nazareno Silver NaCN Leach Test Results

Sample Provenance	Calculated Head	Extracted	Avg. Tails	Extracted	NaCN	Leach	NaCN Consumption	Ca(OH) ₂
	Ag g/t	Ag g/t	Ag g/t	Ag %	g/l	Days	kg/MT	kg/MT
MMC-1 - Coloso Vein Jessica	636.9	524.2	112.6	0.82	2	5	1.49	1
MMC-2 - Coloso Vein Jessica	567.7	502.9	64.8	0.89	2	5	2.61	1
Naz-1 - Nazareno	399.6	377.6	21.9	0.95	2	5	0.88	1
Naz-2 - Nazareno	202.7	184.7	18	0.91	2	5	0.81	1
GRH-141 Composite - Nazareno	378.2	338.8	39.4	0.9	2	5	1.78	1
GRH-142 Composite - Nazareno	130.7	116.9	13.9	0.89	2	5	6.57	2
GRH-145 Composite - Nazareno	230.8	216.9	13.9	0.94	2	5	1.64	1

Table 6.12
Coloso-Nazareno Silver Nacn Leach Test Results

Sample Provenance	Calculated Head	Extracted	Avg. Tails	Extracted	NaCN	Leach	NaCN Consumption	Ca(OH) ₂
	Au g/t	Au g/t	Au g/t	Au %	g/l	Days	kg/MT	kg/MT
MMC-1 - Coloso Vein Jessica	9.59	8.62	0.97	0.82	2	5	1.49	1
MMC-2 - Coloso Vein Jessica	5.54	4.41	1.13	0.9	2	5	2.61	1
Naz-1 - Nazareno	<0.10	0.04	<0.10	0.8	2	5	0.88	1
Naz-2 - Nazareno	<0.10	<0.01	<0.10	---	2	5	0.81	1
GRH-141 Composite - Nazareno	<0.10	<0.01	<0.10	---	2	5	1.78	1
GRH-142 Composite - Nazareno	2.71	2	0.7	0.74	2	5	6.57	2
GRH-145 Composite - Nazareno	<0.10	<0.01	<0.10	---	2	5	1.64	1

6.8 First Majestic Metallurgical Testing

Metallurgical testing at La Guitarra mine site was performed periodically and includes mineralogical investigation and metallurgical testing.

6.8.1 Mineralogical Investigations

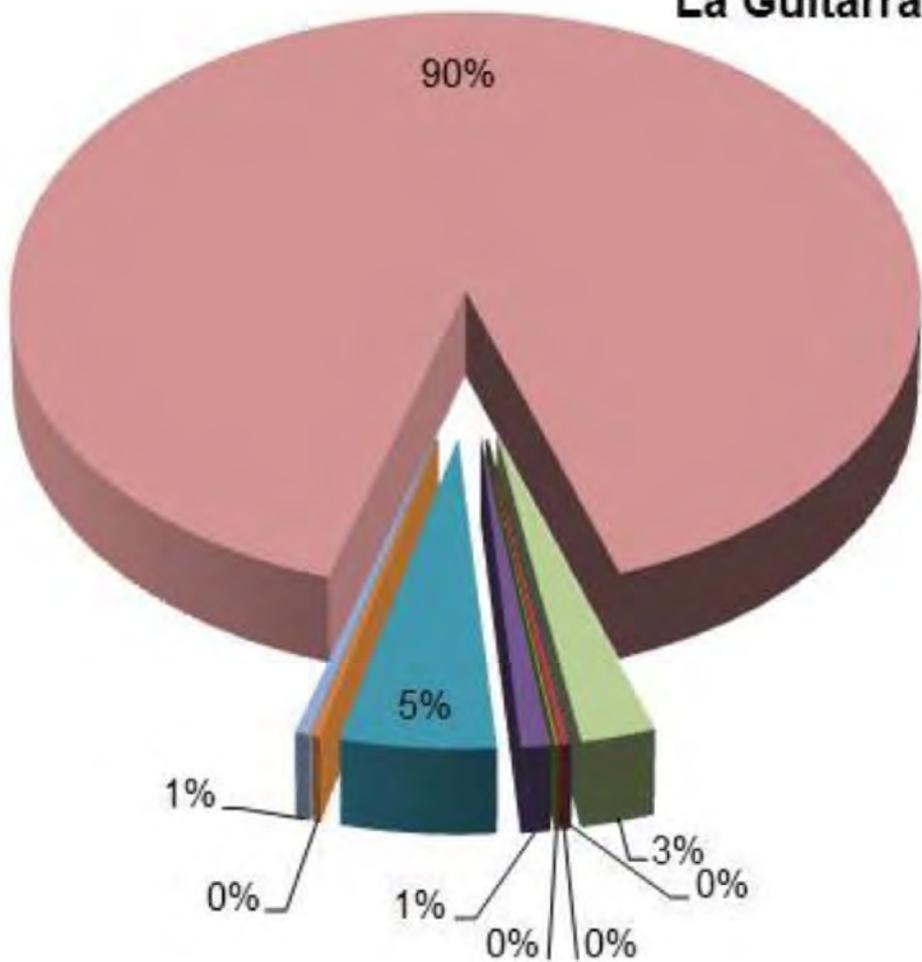
Mineralogical characterization tests were performed on polished thick sections. In total 21 samples were analysed in two institutions, five samples were analysed by CM5 Consultores



Metalurgicos in San Luis Potosi, México between 2012 and 2013. CM5 utilised a petrographic microscope to analyse the polished thick sections. The other 16 samples were analysed at the San Luis Potosi University's Metallurgical Institute in 2013; this Institute utilized a scanning electron microscope to analyse the polished samples. The results indicate that the ore minerals are predominantly composed of sulphides. The main mineralogical species that are found in the ore are listed as follows in the order from major to minor in their relative proportion: Quartz (SiO_2), Pyrite (FeS_2), Marcasite (FeS_2), Pyrrhotite (FeS_2), Sphalerite (ZnFeS), Hematite (Fe_2O_3), Galena (PbS), Chalcopyrite (CuFeS_2), Arsenopyrite (FeAsS), Covellite (CuS), Pyrargyrite (AgSbS_3), Argentite (AgS), Native Silver (Ag) and Native Gold (Au). Mineral distribution is graphically illustrated in Figure 6.4.



La Guitarra Minerals



- Ag Minerals (Argentite/Pyrrargyrite/Native Ag)
- Galena
- Cu Minerals (Chalcopyrite/Covellite)
- Sphalerite
- Fe Sulphides (Pyrite/Pyrrhothite/Marcasite)
- Arsenopyrite
- Hematite
- Quartz
- Others

File: V:\2330Resource\1. La Guitarra\GIS\MXD\Fig_6_4_ThinSection.mxd



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Mineralogical Distribution from Polished Thin Sections

Notes
1. Data Source: Beltran et al., 2015.

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 6-4

6.8.2 Metallurgical Sampling

Metallurgical samples were separated into three categories: monthly composites samples, short term (3 month) and long term mining samples.

Monthly Composite Samples

When the La Guitarra mine was in production a composite sample comprising feed per shift, based on the milled tonnage of each shift, was prepared on site for the production month. The composite samples were then sent to First Majestic's La Parrilla Central Lab for metallurgical testing. Bench scale metallurgical recovery from these composite samples were used to compare actual recoveries from the mill to monitor performance. Since December 2012, First Majestic had also been running tests to estimate the Bond Ball Work Index (BWi) from composite samples. The average BWi for the monthly composites for this period was 15.8 kWh/t between December 2012 to December 2015 (Beltran, et al., 2015).

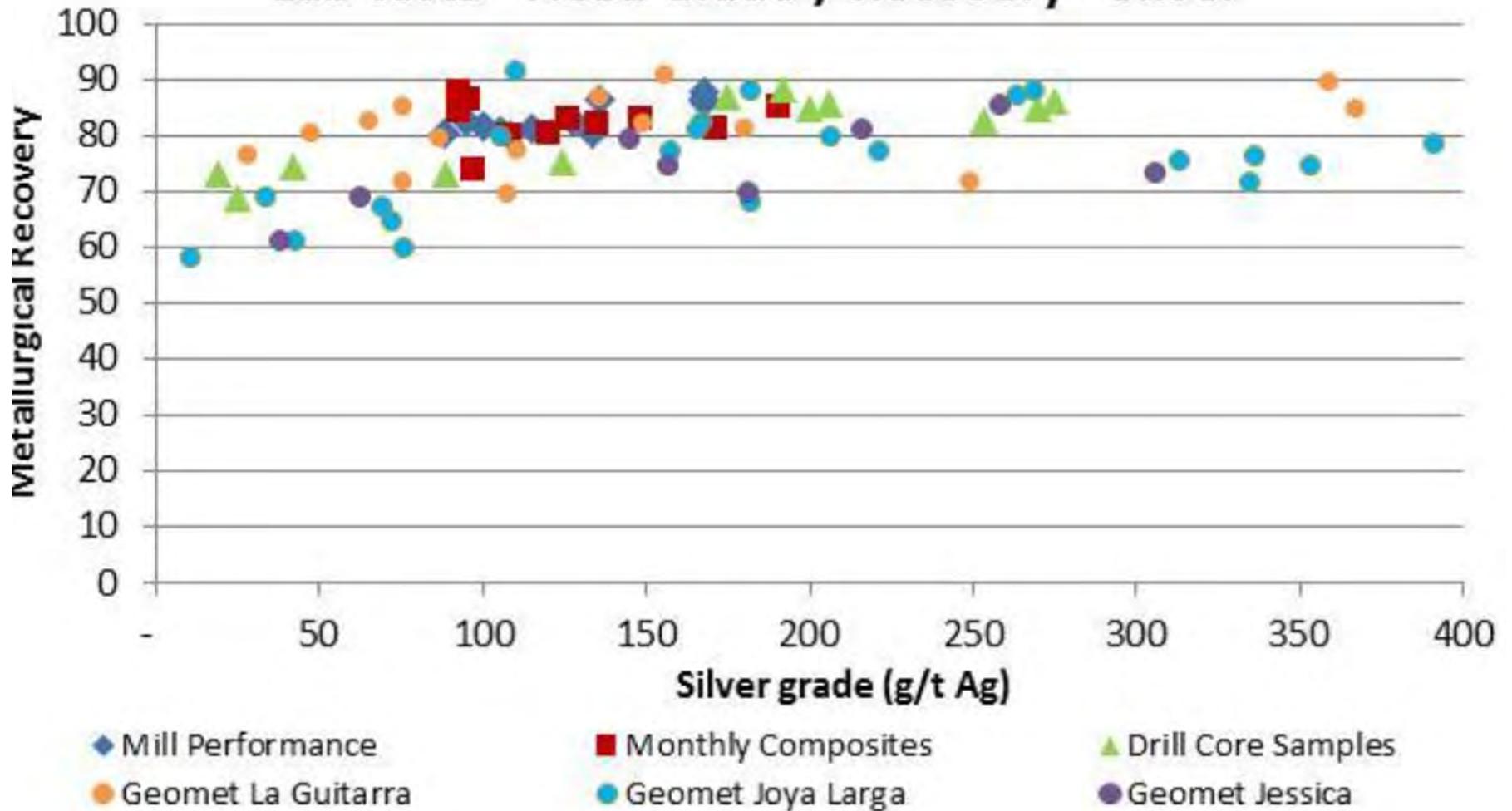
Short-Term and Long-Term Mining Samples

First Majestic staff geologist maintained a database of samples from planned mine areas over a 3-month rolling mine plan. These samples were sent to the La Parrilla Central Lab for testing to predict short-term (three-month) metallurgical performance of the mill. For long-term planning coarse rejects were collected from drill core samples representing different geological domains.

Figure 6-5 and Figure 6-6 shows gold and silver recovery respectively from the mill, monthly and short-term samples taken over the period September 2014 and February 2015.



Lab Tests - Head Grade / Recovery - Silver



TECHNICAL REPORT LA GUITARRA PROPERTY

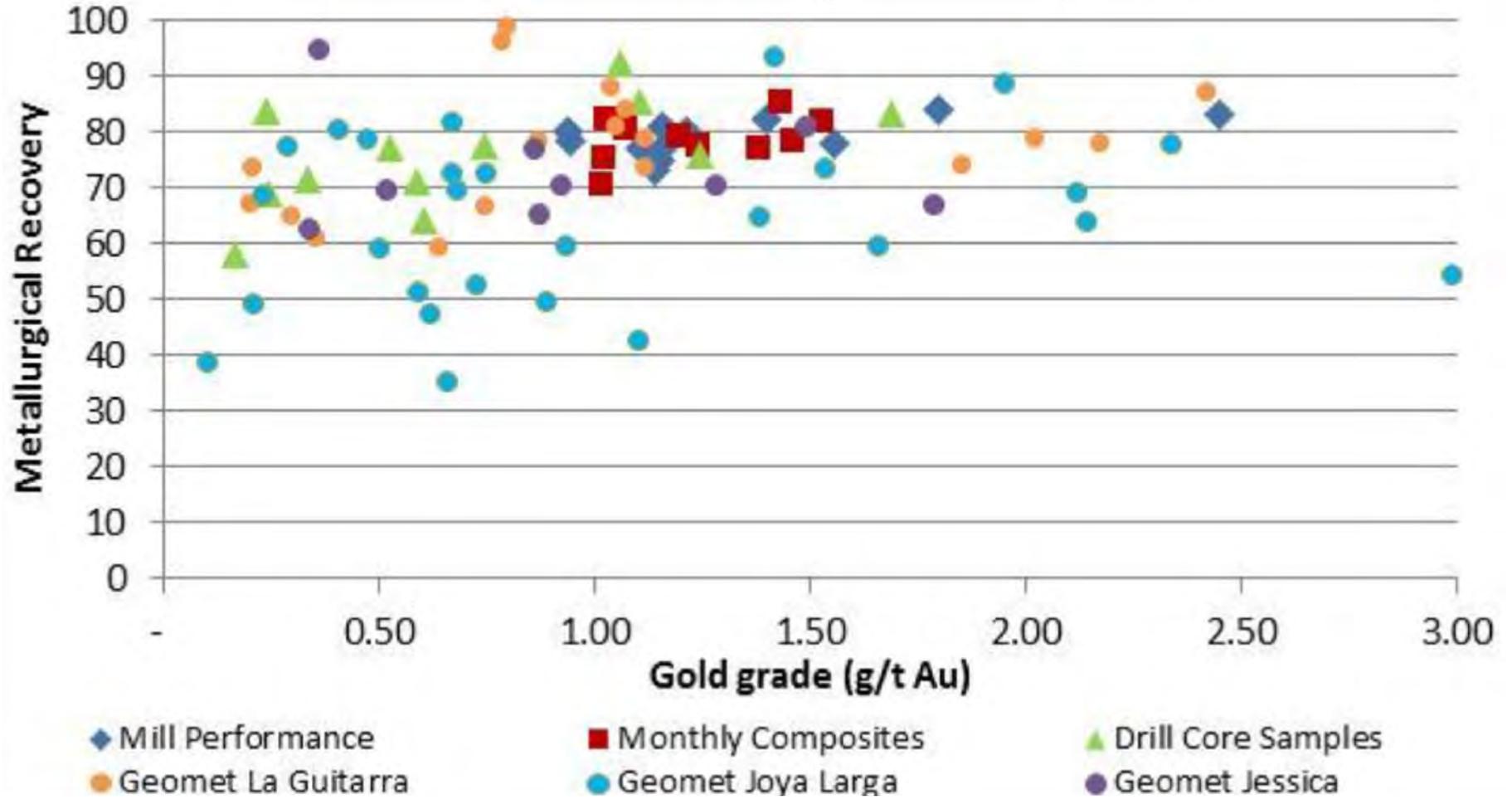
Silver Recovery versus Grade

- Notes**
1. Data Source: Beltran et al., 2015.
 2. Data collected between September 2014 and February 2015.

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 6-5

Lab Tests - Head Grade / Recovery - Gold



TECHNICAL REPORT LA GUITARRA PROPERTY

Gold Recovery versus Grade

Notes

- 1. Data Source: Beltran et al., 2015.
- 2. Data collected between September 2014 and February 2015.

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 6-6

7 GEOLOGIC SETTING AND MINERALIZATION

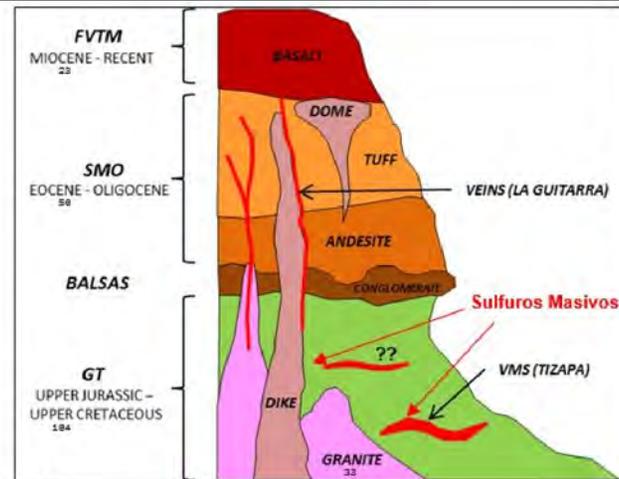
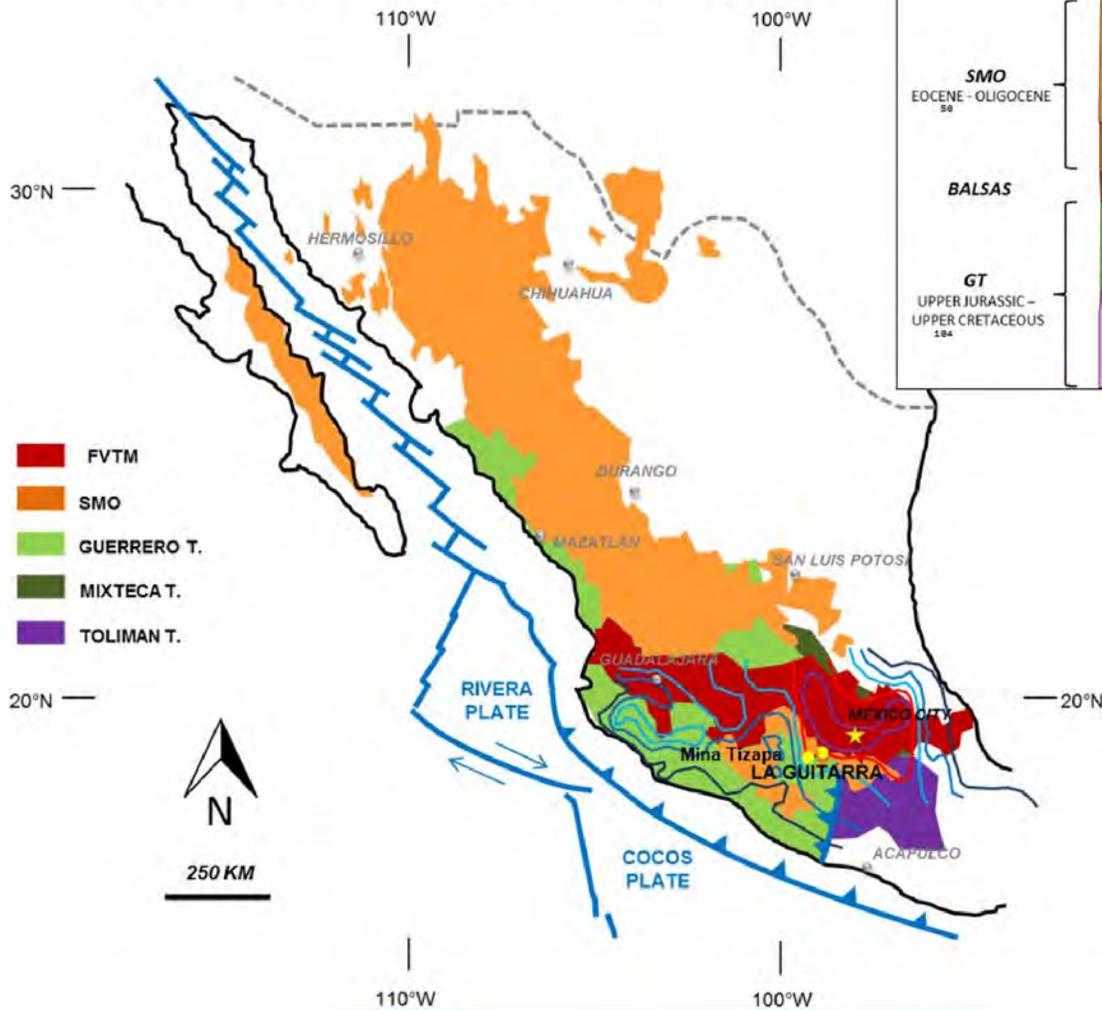
This section is summarized or modified from Beltran et al. (2015) unless otherwise indicated.

7.1 Regional Geology

The La Guitarra mine is located almost at the intersection of the NW trending Sierra Madre Occidental province (SMO) and the southern edge of the E-W trending Faja Volcanica Transmexicana (FVTM) as shown in (Figure 7-1). The SMO province 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. 24–20 Ma), and grouped into the “Upper Volcanic Supergroup”; (4) transitional basaltic-andesitic lavas; and (5) postsubduction volcanism consisting of alkaline basalts and ignimbrites (Ferrari et al., 2007). The FVTM, is a closely E-W trending volcanic arc related to the subduction of the Rivera and Cocos plates under North America and consists of basalts and andesites (Figure 7-1). The basalt and andesite flows were erupted from volcanic centers related to faulting such as the NE trending Temascaltepec fault that bisects the property and parallels the Temascaltepec River. The SMO and the FVTM partially cap the Guerrero Terrane (GT). The GT is a composite terrane that was accreted to western México in the Late Cretaceous during the Laramide Orogeny; it is submarine volcanic arc, characterized by volcanic and sedimentary sequences.



LA GUITARRA GEOLOGY



- FVTM
- SMO
- GUERRERO T.
- MIXTECA T.
- TOLIMAN T.

File: V:\2330\Resource\1. La Guitarra\GIS\MXD\Fig_7_1_Physio.mxd

Legend

FVTM Faja Volcanica Transmexicana
 GT Guerrero Terrane
 SMO Sierra Madre Occidental

Notes
 1. Data Source: Beltran et al., 2015, modified from Bryan et al., 2008 and Campa and Coney, 1983.



TECHNICAL REPORT LA GUITARRA PROPERTY

Major Physiographic Provinces and Stratigraphy

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 Date: 22 06 29

Figure 7-1

7.2 Property Geology and Stratigraphy

The Property surface geology is shown in Figure 7-2 and the major stratigraphic units are described as follows:

7.2.1 GT

The GT comprises low-grade metamorphic and sedimentary rocks (schist, slates, phyllites, black shales and siltstones) of the Taxco Group, and is part of the Tierra Caliente Complex (Camprubí et al., 2001). The GT is Early Cretaceous in age (Campa et al. 2012). Outcrops of the GT in La Guitarra property occur to the southeast at Mina de Agua and El Rincón areas of the Temascaltepec fault and GT rocks have been detected by diamond drilling at the northwest of La Guitarra mine and at Coloso. The GT hosts many of the veins southeast of Temascaltepec in the Mina de Agua and Rincón areas. The metamorphic and sedimentary rocks outcropping southeast of the Temascaltepec fault are typically thin bedded and weathered to a tan or reddish (hematite - jarosite) color due to oxidation of syngenetic pyrite. The bedding is well defined in most outcrops but less so in areas where veining and hydrothermal alteration is more intense. Due to its tectonic setting and history the GT not only hosts epithermal deposits such as La Guitarra, but also Volcanogenic Massive Sulfide (VMS) and Sedimentary Exhalative (SedEx) deposits eg. Tizapa, a VMS deposit, is located only 16.5 km WSW from La Guitarra mine.

7.2.2 Balsas Formation

Resting on top of the GT it is the Balsas Formation, a conglomerate that is correlative with other conglomerates in México such as those in Guanajuato, Zacatecas and Fresnillo. These conglomerates were deposited as a result of uplift and concomitant erosion during the Laramide orogeny. The Balsas Formation was sparsely and discordantly deposited on top of the GT during the Eocene (Camprubí et al., 2001). The Balsas Formation outcrops to the northwest of La Guitarra but it has not been recognized in the Mina de Agua and Rincón areas.

Southeast of the Temascaltepec fault the GT is partially capped and intruded by the volcanic rocks of the SMO, FVTM and a granitic stock respectively. Northwest of the Temascaltepec fault the GT and Balsas formations are almost totally covered by the volcanic rocks and intruded by stocks, felsic dikes and subaerial domes (Figure 7-2).

7.2.3 Granitic Stock

A biotite–K feldspar bearing stock of granite-quartzmonzonite composition along with quartz bearing porphyritic dikes and domes intruded the older GT and Balsas formation during the Eocene and Oligocene. This stock has a massive structure with coarse-equigranular texture and contains K feldspar, quartz, plagioclase feldspar, biotite and hornblende in that order of abundance. This granite is the host to the NW trending silver-gold bearing epithermal veins of La Guitarra area. Additionally, in some areas the granite is intruded by the porphyritic dykes that often follow the same structures that host the veins. The intrusion has not been dated at La Guitarra but an outcrop of presumably the same granite that is located 4.5 km SW from the



Guitarra mine yielded a K-Ar age (biotite) of 46.6 +/- 1.2 Ma (Chavez-Aguirre and Mendoza-Flores, 1998).

7.2.4 SMO

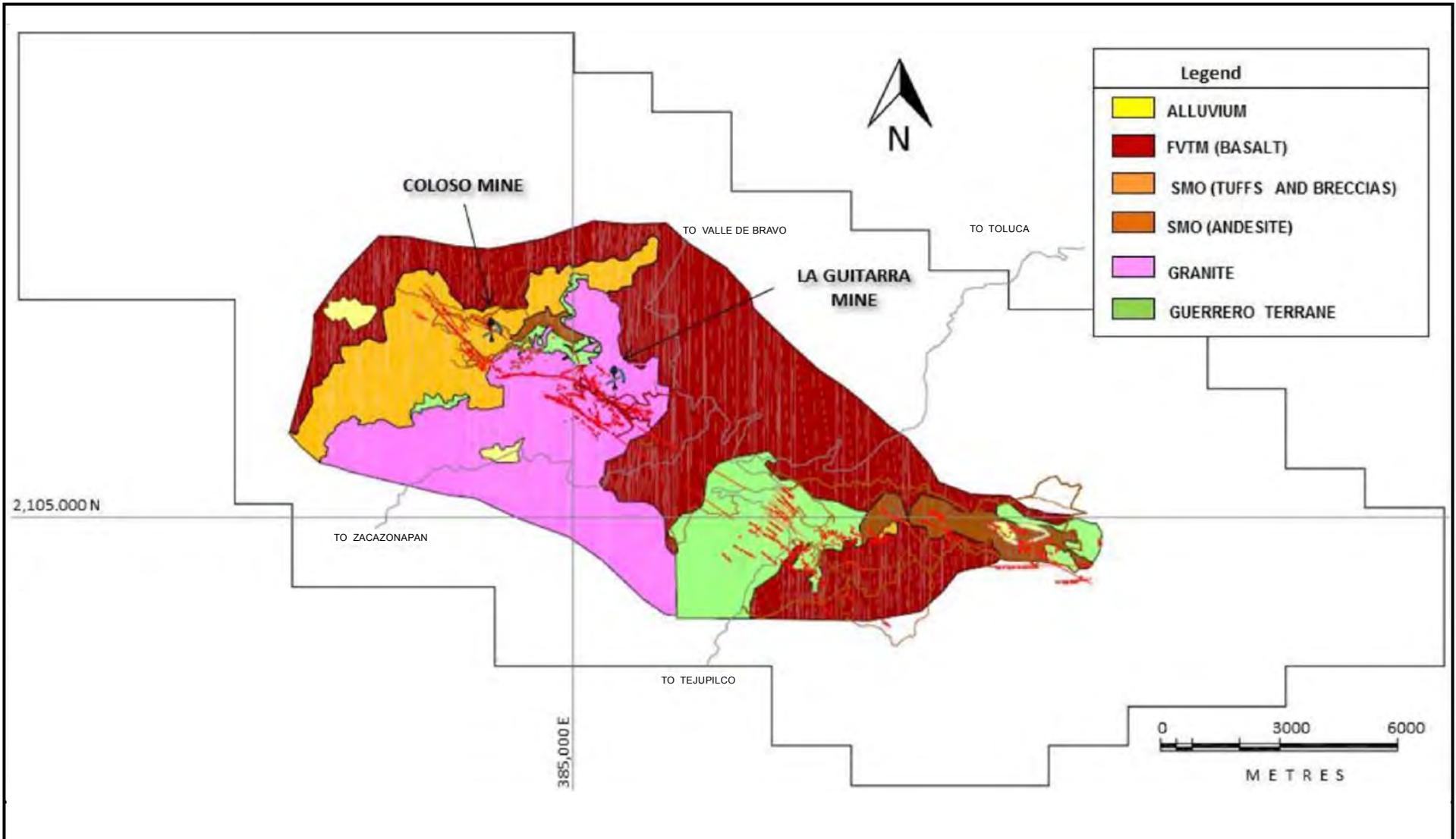
Andesite flows and rhyolite ignimbrites, tuffs, lithic tuffs and volcanic breccias of the SMO rest unconformably on top of the GT, the Balsas conglomerate, and the granite-stock. Andesites representing the base of the SMO are more clearly exposed SE of the Temascaltepec fault. Several veins nearby San Simon and Real de Arriba villages are hosted or partially hosted by andesite. At the La Guitarra area, the andesite package has a maximum thickness of 300 m, according to García-Rodríguez (1982). Ignimbrites, tuffs, lithic tuffs and volcanic breccias of rhyolite composition lie on top of the andesites. The thickness of the rhyolite package is estimated to be 350 m. Tuffs and volcanic breccias host mineralization at the Coloso and Nazareno areas.

7.2.5 FVTM

Miocene to Recent age basalts and andesites of the FVTM are the youngest rocks in the region, no dates for these rocks are reported around the area. The volcanic rocks of the FVTM partially cap all of the previous rocks and fill topographic depressions such as valleys and creeks. The basalts and andesites were erupted from volcanic centers associated with N and NE trending faults such as the Temascaltepec fault. Locally the basalts form two units; 1) a massive and relatively fresh flow unit and; 2) a mainly tuffaceous unit that is heavily weathered and forms rounded buff to reddish tinged outcrops. This tuff unit is aerially the most extensive and appears to overlie the less-weathered flow basalts.



File: V:\2330\Resource\1. La Guitarra\GIS\MXD\Fig_7_2_SurfaceGeo.mxd



Legend

FVTM Faja Volcanica Transmexicana
SMO Sierra Madre Occidental

Notes

1. Data Source: Beltran et al., 2015.



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**Surface
Geology Map**

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CHK'D BY: D.L.
Date: 22 06 29

Figure 7-2

7.3 Property Structural Geology

The Property is located in between a geophysical unconformity proposed by Ferrari et al. (2011) and the interpreted terrain boundary of Campa and Coney (1983). Sutures or crustal scale faults associated with the geophysical unconformities and terrain boundaries control the localization of the mineral deposits. A structural and remote sensing analysis carried out by Starling in 2005, recognized five deformation events at La Guitarra:

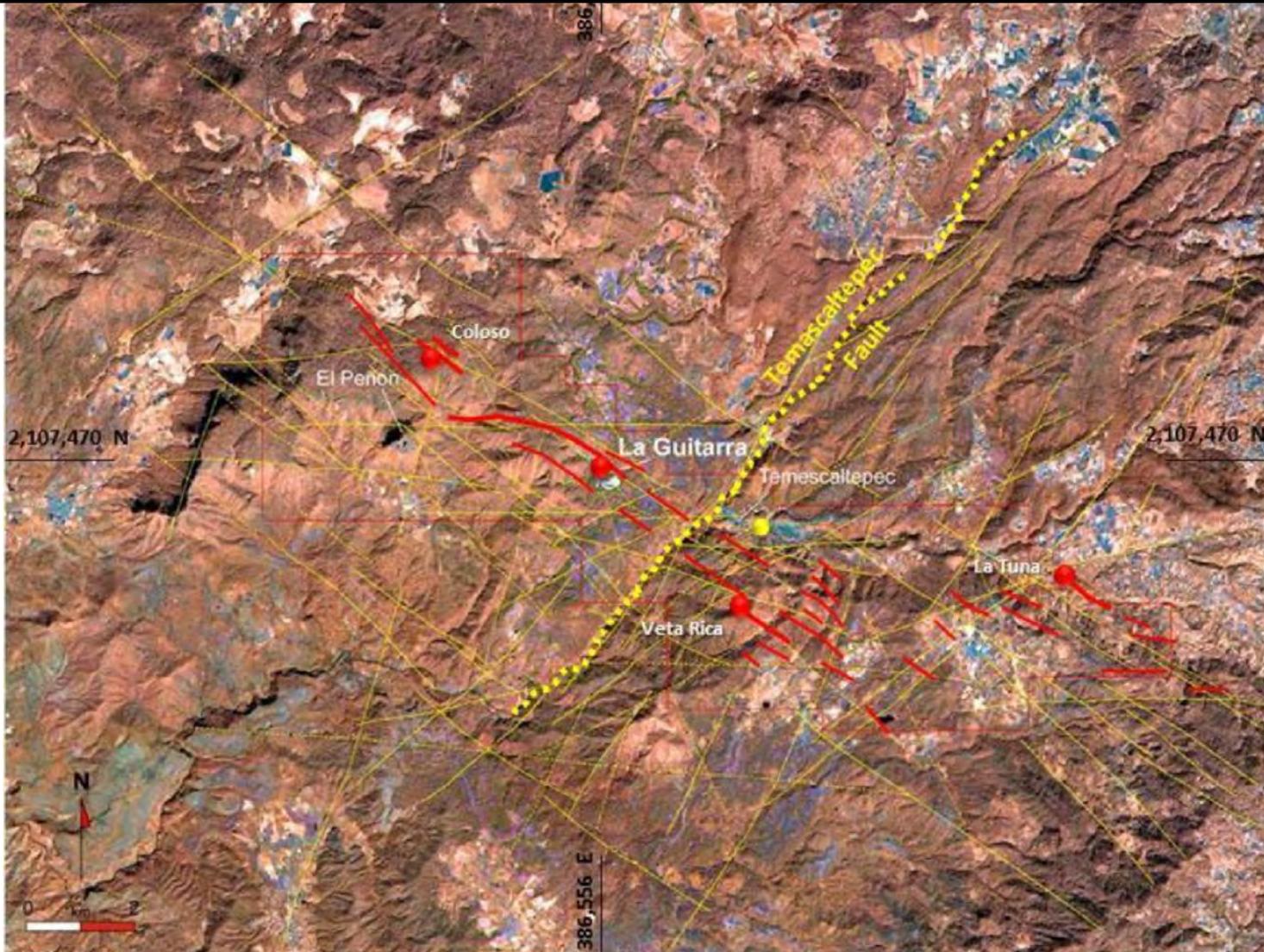
1. Early Laramide ENE to NE compression (D1) resulting in the main stage of fold-thrust contractional deformation affecting the GT;
2. Later Laramide NNE to N-S compression (D2) affecting the GT;
3. Early post-Laramide N-S to NNE extension (D3) affecting the GT and granite;
4. Main stage early Basin and Range NE to ENE extension (D4) affecting the GT, granite and SMO volcanic rocks, and
5. Recent (<12 Ma) to present day WNW extension (D5) associated with the dextral movement of the San Andreas fault system and the drift of the Baja California peninsula to the NW and affecting the GT, granite, SMO rocks and FVTM basalts and andesites.

According to Starling (2005), the emplacement and localization of intrusions in the region like the granite stock that occurs in the La Guitarra area may have been controlled by D1 NW fault zones that during D2 deformation were reactivated as dextral transpressional structures with dilatant jogs.

The most important effect of the Laramide deformation in the La Guitarra granite was the development of a series of major WNW-trending faults across the district. These structures are clearly evident from satellite imagery and were the main fluid channels for the epithermal fluids that formed the veins at La Guitarra (Figure 7.3). The N-S to NNE extension D3 event is present at La Guitarra also controls several intermediate-sulphidation epithermal and Carbonate Replacement (CRD) deposits in the Mexican Altiplano such as Fresnillo, Guanajuato, Velardeña and Naica. This phase of extension may have originated as a phase of relaxation following late-Laramide N-S to NNE compression or as a late back-arc extensional component of D2 deformation (Starling, 2005).

The Basin and Range type, D4 deformation event, is most likely post mineralization and is best represented by the Temascaltepec fault which according to Beltran et al. (2015) probably uplifted and exposed, to deeper erosion levels, the veins located at Mina de Agua and El Rincón but this hypothesis would need to be tested with geochemical and fluid inclusions work. The recent D5 deformation event (post mineralization) is evidenced in some exposures of the FVTM units that are locally tilted towards the east.





Legend

- Northwest Vein Structures
- - - - Temascaltepec Fault

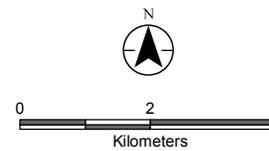
Notes

1. Data Source: Beltran et al., 2015.



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**Aster Satellite
Image Interpretation**



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CHK'D BY: D.L.
Date: 22 06 29

Figure 7-3

7.4 Property Mineralization

Vein mineralization in the La Guitarra property is classified as low-intermediate sulfidation epithermal that is discussed further in Section 8. There are more than one hundred epithermal veins within the property in five main vein systems: Comales–Nazareno, Coloso (Jessica and Joya Larga veins), La Guitarra (NW, Central and SE zones), Mina de Agua and El Rincón. The vein systems at La Guitarra form a belt with an approximate width of 4 km that strikes NW – SE in excess of 15 km. Individual veins pinch and swell and vary in width from tens of centimeters to more than twenty meters. Economic zones, widths usually between 1 and 4 m, are embedded in quartz (vein structure) having widths exceeding 20 m (e.g. Guitarra vein). The ore shoots or economic zones can either be localized in the hanging wall or the foot wall of the vein structure.

Gangue mineralogy consists of banded quartz, amethyst quartz, colloform chalcedony, fine-grained crystalline quartz, calcite, fluorite, pyrite, marcasite, barite, anhydrite, illite – smectite, adularia and alunite. Anhydrite and alunite veins are observed mostly filling narrow fractures. The ore mineralogy consists of proustite – pyrargyrite solid solution, electrum, acanthite, polybasite, sphalerite, galena and chalcopyrite. Secondary minerals such as malachite and smithsonite – hydrozincite (calamines) have been observed in some of the veins at Mina de Agua.

According to Camprubí et al. (2006), the vein stratigraphy of the La Guitarra deposit can be grouped in three mineralization stages: Stage I is dominated by a base-metal sulfide association whereas stages II and III contain most of the precious-metal assemblages. Relative mineral abundance in each mineralization stage shows an increase on the content of Ag–Au bearing phases with time (Camprubí et al., 2006). Stage II is the most important in volume and contains the main mineralization. Base-metal sulfides precipitated early in all mineralization stages, their relative content increases with depth at any stage (Camprubí et al., 2006).

The main textures observed in the veins are coarse banding, fine banding, colloform, bladed quartz, and breccia textures. Fine banding, colloform banding (particularly dark bands containing fine grain sulfides) and bladed quartz textures have been observed to correlate with higher silver and gold concentrations. Colloform banding (chalcedony) and bladed textures are commonly associated with boiling, and boiling is an important mechanism for deposition of precious metals in the epithermal environment. The breccias usually contain angular quartz clasts that range in size from a few millimeters to tens of centimeters and are supported by a silicified matrix or cemented by quartz or quartz and marcasite. According to Beltreal et al. (2015), the spatial association, orientation, mineralogy as well as gas chemistry and microthermometry analysis suggest that the veins along the property may have had a common source.



7.4.1 Vein Systems

Beltran et al. (2015) has grouped the mineralized veins into five vein systems: Comales-Nazerono, Coloso, Guitarra, Mine de Agua, and El Rincón. Figure 7-4 shows the general location of these vein systems.

Comales-Nazereno System

The Comales – Nazareno system is located to the NW of the property and runs NW-SE for approximately 3.7 km. The system contains the Comales vein to the NW and the Nazareno, Nazareno del Alto and three more vein splays to the SE; the structures are hosted by SMO tuffs, breccias and granite.

Coloso System

The Jessica – Joya Larga veins in the Coloso system, strike NW – SE and have a recognized length of approximately 2 km based on mapping and diamond drilling. The vertical extent of mineralization is known to a depth of 420 m. Both veins are hosted by SMO tuffs and volcanic breccias although GT has been intercepted with deeper holes. Jessica dips to the SW and Joya Larga dips to the NE which indicates that both veins should intercept at depth although this possibility has not been explored with drilling. Several vein splays have been recognized in the system, being the most explored are the Jessica FW, Jessica HW and Joya Larga HW; usually the vein splays are narrower than the main veins (1 m in average). There is possibility for additional splays and the exploration potential remains open laterally and at depth.

Guitarra Vein System

The Guitarra vein system consists of the W – E trending Guitarra NW and the NW – SE trending Guitarra Centro and Guitarra SE. These veins dip at angles between 70° and 90° to the SE. The Guitarra NW is recognized as a single vein in part due to soil coverage and little exploration, whereas the Guitarra Central and Guitarra SE consist of the main vein and several splays at the hanging wall and the footwall. The entire system has a recognized length of approximately 3.5 km and several ore shoots have been mined along approximately 2.4 km, mostly at Guitarra Centro. La Guitarra SE, Guitarra Central and the explored portion the Guitarra NW are hosted by granite. The known vertical extent of mineralization from surface to the deepest diamond drill-hole intersection is 700 m.

Mine de Agua and El Rincón Systems

The Mina de Agua and El Rincón (project) systems located SE from the Temascaltepec fault are considered mid to long term exploration prospects. The main recognized veins at Mina de Agua are Veta Rica, Santa Ana, Maravillas, Animas and Sayas and the main recognized veins at El Rincón are Marmajas, San Luis and Nuevo Descubrimiento. The veins in the Mina de Agua and El Rincón

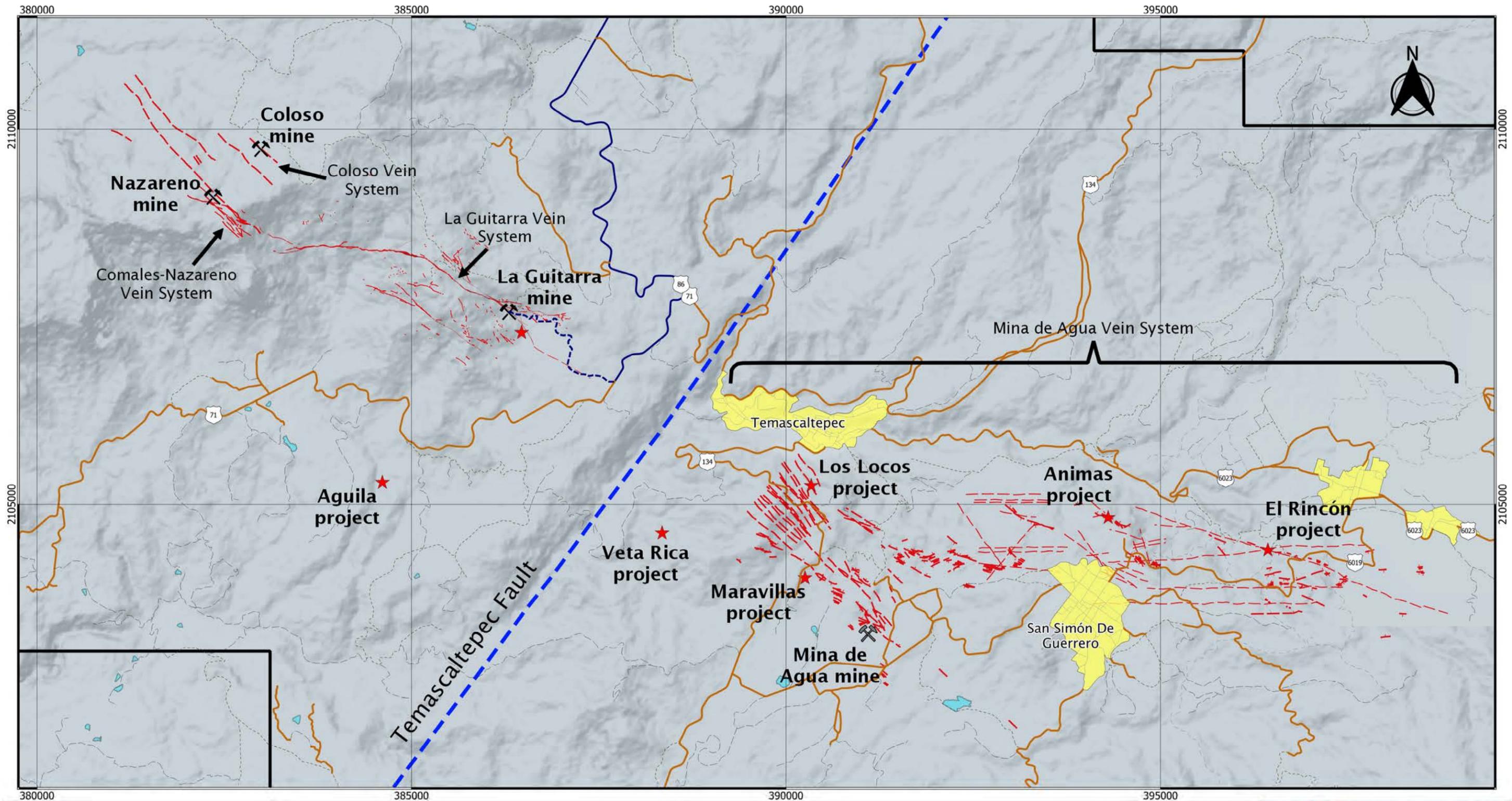


systems have recognized lengths of 100 m to 800 m and widths of tens of centimeters to two - three meters. The veins trend NW and dip either NE or SW at angles between 70° and 90°. Mineralization at Mina de Agua and El Rincón is hosted by GT.

7.4.2 Hydrothermal Alteration

The following descriptions of alteration mineralogy and processes are mostly based on field and core observations done in the Guitarra and Coloso vein systems. In the La Guitarra mine area many parts of the granite are altered, mainly comprising high-level silicification and argillic alteration. Hydrothermal alteration at the Coloso mine has been mainly observed in drill core and underground developments. The host tuff and breccia of the Jessica and Joya Larga veins is usually strongly silicified for a few meters to tens of meters away from the vein. Away from the silicified envelope the host rock bears argillic and advanced argillic alteration, evidenced by the presence of smectite, illite-smectite, kaolinite, alunite and anhydrite. Alunite, kaolinite and anhydrite were observed filling fractures mostly at shallow elevations in some of the drill-holes. The alunite, kaolinite and anhydrite veins are most likely related to down-draping steam-heated meteoric waters which are common in many IS deposits in México such as Fresnillo. Propylitic alteration is the most distal alteration assemblage from the vein and consists of chlorite alteration with disseminated pyrite and calcite veining. Alteration within the veins is usually seen as strong silicification and illite, illite-smectite. Supergene alteration develops mainly jarosite, goethite, hematite and sulfur.





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Gold & Silver

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Vein Systems
State of Mexico, Mexico

DREW BY: UZH
REVIEWD BY: GKL/LFS
DATE: 08/07/22

Figure 7-4

- Paved Road
- Unpaved Road
- Road to project
- Lake
- Town
- Property Boundary

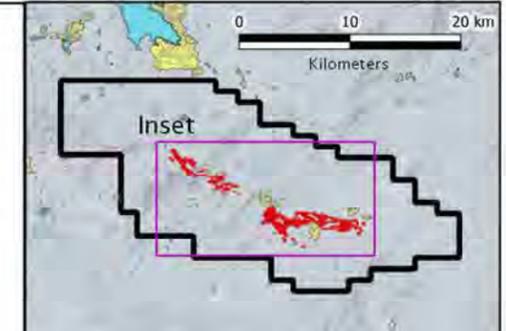
- Legend**
- Fault
 - Vein
 - Mines under care and maintenance
 - Historic mine - limited production 2007/8
 - Project

Stantec

Kilometers

0 1 2 km

Scale 1:50 000



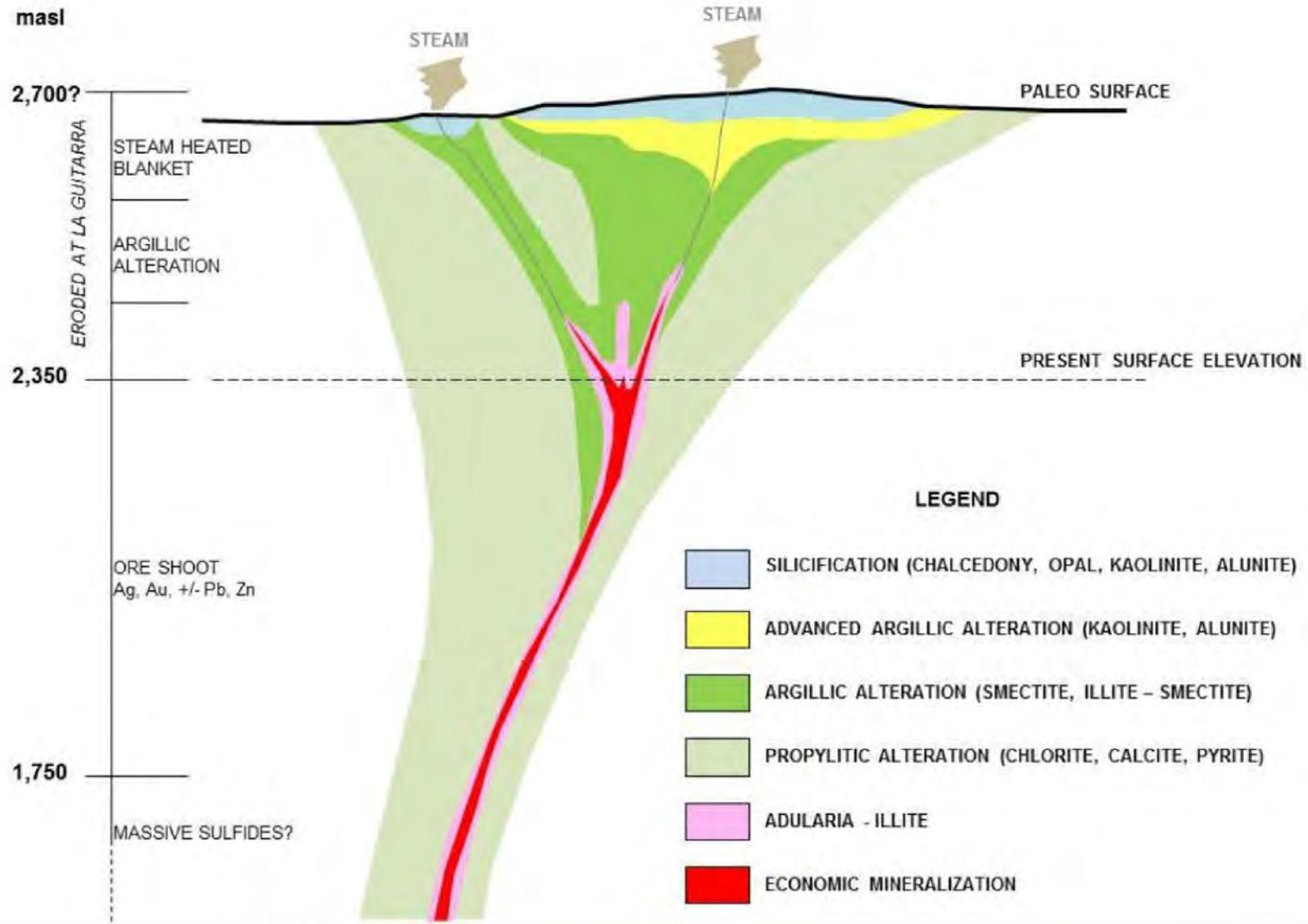
8 DEPOSIT TYPES

This section is summarized or modified from Beltran et al. (2015) unless otherwise indicated.

Vein deposits at La Guitarra have physiochemical and mineralogical characteristics of a low-intermediate sulphidation epithermal type and fit the vein deposit model proposed by Buchanan (1981) (Figure 8-1). Epithermal deposits form at shallow depths in volcanic-hydrothermal and geothermal environments. They define a spectrum with two end members, low and high sulfidation (Hedenquist et al., 1998). Figure 8-2 shows the genetic model for epithermal deposits proposed by Hedenquist et al., (1998). IS epithermal deposits form part of the epithermal spectrum and their genesis is complex due to the involvement of fluids with meteoric or magmatic origin during their formation and due to the fluid evolution. 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; Benton, 1991; Norman et al., 1997; Simmons, 1991; Albinson et al., 2001; Camprubí et al., 2006; Camprubí and Albinson, 2007; Velador, 2010). Camprubí et al. (2006) resolved that magmatic, crustal meteoric and surficial meteoric fluids were involved in the formation of epithermal veins at La Guitarra. Camprubí's conclusion was based on gas chemistry data from fluid inclusion study combined with the study of oxygen and hydrogen stable isotope data.



File: V:\2330\Resource\1. La Guitarra\GIS\MXD\Fig_8_1_Deposit_Model.mxd



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Deposit Model for Mexican Epithermal Veins

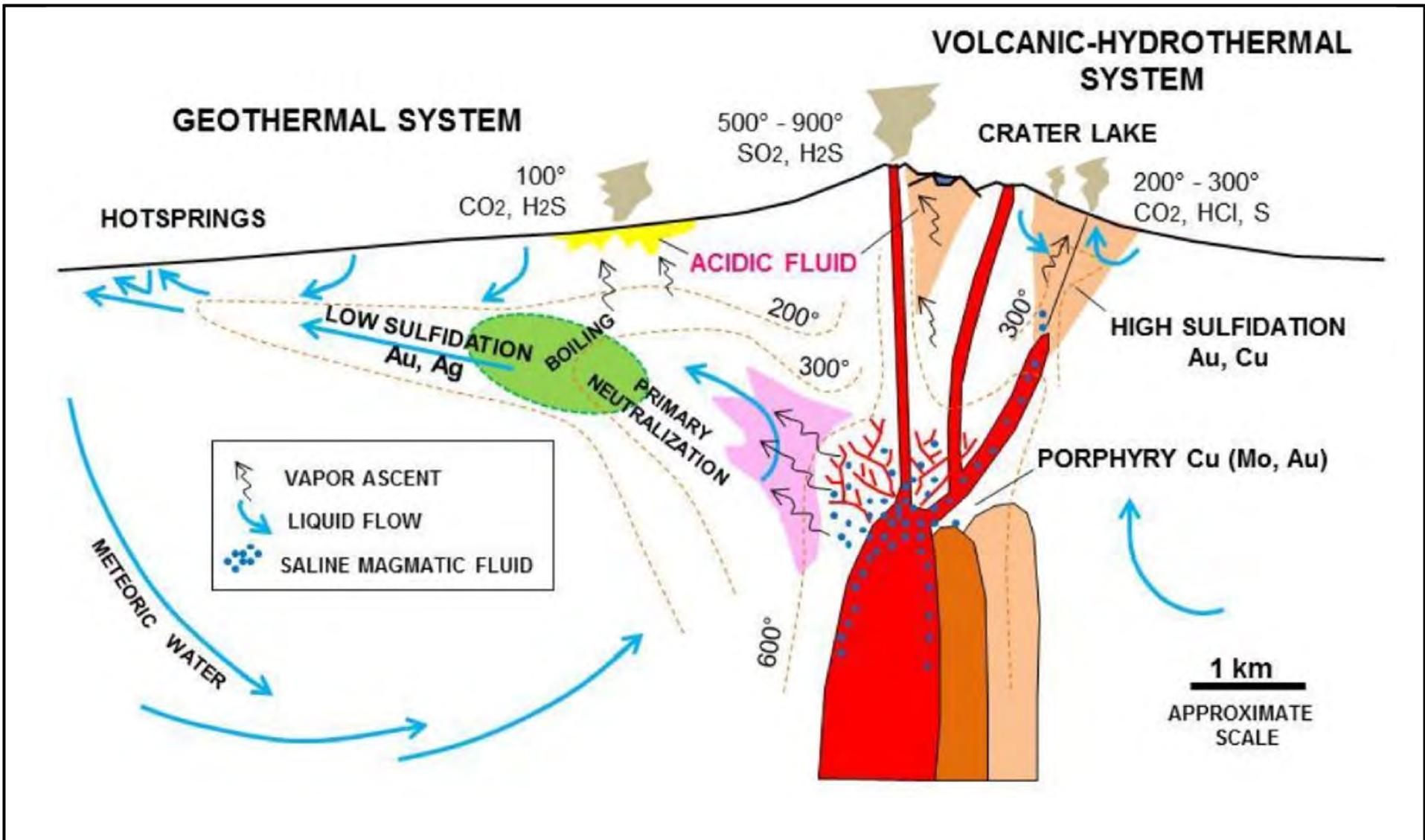
Notes

1. Data Source: Beltran et al., 2015, adapted from Buchanan, 1981.

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 8-1

File: V:\2330Resource\1. La Guitarra\GIS\MXD\Fig_8_2_Gen_Model.mxd



Legend

 Green ellipse represents the approximate environment for the La Guitarra veins.

Notes

1. Data Source: Beltran et al., 2015, as proposed by Hedenquist, 1998.



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Genetic Model for Epithermal Deposits

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CHK'D BY: D.L.
Date: 22 06 29

Figure 8-2

9 EXPLORATION

Sierra Madre has not conducted any new exploration work. Work to date by the company on the project includes compilation of data supplied by First Majestic and Sierra Madre.



10 DRILLING

Sierra Madre has not completed drilling on the Property to date.



11 SAMPLE PREPARATION, ANALYSES & SECURITY

Sierra Madre did not complete additional sampling or analyses.



12 DATA VERIFICATION

Data verification undertaken by the author and QP has included a site inspection of the Property and review of the exploration database provided by First Majestic.

12.1 Site Inspection

Stantec representatives Clyde Peppin and Qualified Person, Derek Loveday (P.Geol), completed a site inspection of the Property May 18 and May 19, 2022. While onsite, Stantec conducted interviews with mining personnel responsible for the care and maintenance of the existing mine facilities at La Guitarra and Coloso, as well with geologists responsible for historic mapping and geologic modelling of the various mineral deposits associated with the Property. Underground inspections were completed for the La Guitarra and Coloso mines and select drill core samples stored at La Guitarra Mine were inspected after being selected based in observations of the geologic models presented to Stantec by mine geologists.

Figure 12-1 shows photographs taken from underground at La Guitarra mine showing mineralized breccia veins at the entrance to mining stopes. Also shown in Figure 12-2 are drill core photos taken of vein mineralization at Nazareno mine showing banded quartz and coliform texture, common in epithermal veins as well as argentite and other sulphides. Mineralized vein penetrations were observed from stored split core samples from two holes:

- Hole CO16-7
 - Coloso Mine Selena vein (147.4 m to 147.8 m) (142 ppm Ag, 0.056 ppm Au)
 - Coloso Mine Jessica vein (221.2 m to 223.7 m) (63 to 685 ppm Ag, 0.529 to 5.13 ppm Au)
- Hole NAS17-14
 - Nazareno Mine Nazareno A vein (259.4 m to 261.6 m) (136 to 791 ppm Ag, 0.109 to 0.269 ppm Au)

The holes and intercepts were selected based in observations of the Coloso and Nazareno mine Leapfrog® software generated geological models that were presented to the QP during the site inspections. The observed drill core intervals listed above showed clear signs of mineralization with sulphides clearly presented in the brecciated quartz gangue showing textures consistent with epithermal-type vein mineralization. Measurements recorded in the drill hole database and the geologic model were consistent with observations of the split core samples. The drill core boxes were observed to be appropriately labelled with hole ID and depth intervals. Core runs were separated by labelled wood blocks as is standard practise. Core recovery in the few selected



intervals was good. The core and sample pulp/reject storage facility had controlled access and was adequately protected from the elements.

Figure 12-2 shows photographs taken from the La Guitarra mine facilities. The mine facilities overall appeared to be well maintained and clean. Unpaved road connecting the Coloso and Nazareno mines were in very good condition and mine water lime treatment was observed to be working. Tailings dam at La Guitarra, which is at capacity, was on visual inspection found to be stable. Underground visits at La Guitarra and Coloso did not show any concerns with respect to adequacy of roof support and the hanging wall appeared to be stable. Areas visited underground were well ventilated and mine water drainage control appeared to be well managed. Discussion with the labor union representative did not identify any concerns and labor relations on the mine and local community appeared to be good.

12.2 Exploration Data and Geologic Model Reviews

Provided exploration database records showed drillhole records to be appropriately organised into collar survey, downhole survey, alteration type, core recovery, RQD measurements, mineralogy, structural measurements, vein-ID, and laboratory assay. These data were available as comma delimited format. Information on drilling data and assay date as well as location and detailed core descriptions were noted in the drill hole database. Similarly, surface rock, channel sample and soil sample data are also available in comma delimited format as well as in Arc GIS format. A QA/QC sampling program was in place as described in Section 6 and assay records of sample blanks, duplicates and standards were available. Checks on overlapping intervals and outliers in the drill hole records did not identify any concerns.

Geologic model specific to historic mineral resource estimates outlined in Section 6 of the report were not available for review. Working geologic models were available as of the effective date of this report for the Coloso, Nazareno and the Tailings Dam but technical reports outlining the modeling procedure for these working models were not available. The QP did however, go through the Coloso and Nazareno models during the site inspection with First Majestic personnel. The as described overall modeling approach, application of orientated search ellipses derived from semi-variogram models and min-max number of composite samples in the estimations, were appropriate for the style of mineralization. The vein wireframes and block model grades appear to honor the drill hole lithology and grade data respectively. The working tailing dam model, built from recent Shelby tube samples test results in 2021 was not reviewed by the QP while onsite.

12.3 QP Opinion on Adequacy

Inspection of exploration data was found to be adequate for the purposes of geologic modeling and reporting of mineral resources on the Property.

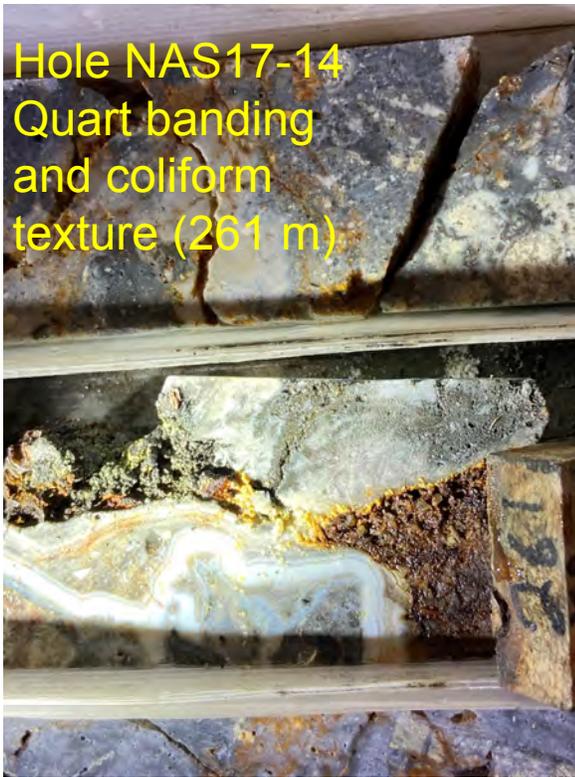




Underground
Acanthite in
quartz



Underground
Mineralized
Breccia



Hole NAS17-14
Quartz banding
and coliform
texture (261 m)



Hole NAS17-14
Acanthite and
other sulphides
(261 m)



TECHNICAL REPORT LA GUITARRA PROPERTY

Site Inspection Photographs

Underground and Drill Core

Notes
1. Data Source: D. Loveday, 2022.

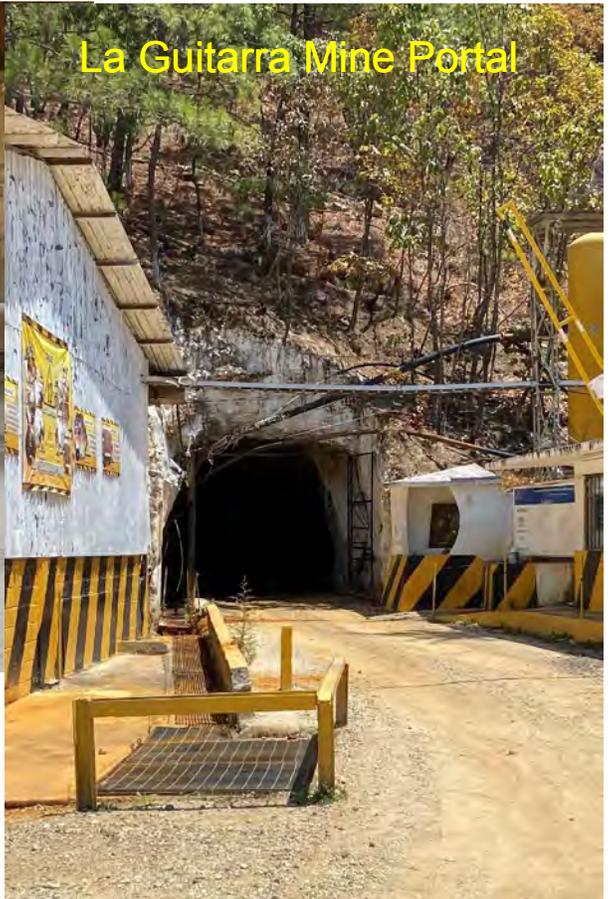
DRAWN BY: J.K.
CHKD BY: D.L.
Date: 22 07 07

Figure 12-1

Process Plant filter press and kiln



La Guitarra Mine Portal



La Guitarra tailings dam



Process plant flotation cells



File: \\us0305-pp\ss01\work\group\2330\Resourcel\ La Guitarra\GIS\MXD\Fig_12_2_SiteInspectionPhotos.mxd



TECHNICAL REPORT LA GUITARRA PROPERTY

Site Inspection Photographs

Mine Infrastructure

Notes

- 1. Data Source: D. Loveday, 2022.

DRAWN BY: J.K.
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Date: 22 07 07

Figure 12-2

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Sierra Madre has not completed mineral processing or mineralogical testing. A review study of the La Guitarra plant undertaken by Del Real and Hernandez (2022) for Sierra Madre in May 2022. The results of this study are summarised in Section 17 of the report.



14 MINERAL RESOURCE ESTIMATES

This Technical Report does not include an estimate of resources.



15 MINERAL RESERVE ESTIMATES

This Technical Report does not include an estimate of reserves.



16 MINING METHODS

The Property is not presently producing and is under care and maintenance.

Mining methods employed during Luismin, Genco, Silvermex and First Majestic operation of the La Guitarra were generally overhead and horizontal cut and fill. Mucking of the ore was done with small LHD's suitable for the stope widths mined. When the vein widths permitted, jumbos were used in long hole stoping but, generally, the widths were less than two meters and mining was done with hand-held stopers and/or jacklegs. Unmineralized or low-grade rock was used for back fill.

In cases where the vein width exceeded 3 m, sublevel long hole stoping was utilized. These wide zones are generally found on the La Guitarra Vein above the San Rafael Vein, or main La Guitarra, Level. A top cut and bottom cut drift was driven on the vein to define the hanging and foot wall limits of the vein at two elevations generally 20 m from sill to sill, leaving a 15 m pillar between the two sublevels. A raise was driven between the sublevels to serve as the initial open space to blast towards. Then, long holes from the upper level to the lower level were drilled, loaded with explosives and blasted. The broken rock was removed with a remote control LHD, loaded into trucks and hauled to the Coarse Ore stockpile on surface.

In the Coloso mine, the tuff wall rock is relatively soft but, sufficiently unfractured and stable enough to permit an open stoping method. A conventional shrink stoping method was employed. An initial drift on the vein was driven with jacklegs and/or jumbos and LHD's. Parallel to the drift on vein, a production drift was driven to leave approximately a 4 m pillar between the drift on vein and the production drift. Cross cuts at 8 m centers were driven from the production drift to the drift on vein. These cross cuts later served as draw points.

Hand-held stopers were used to drill holes in the back of the initial drift on vein and blasted. The blasted rock was leveled off by LHD's to leave approximately a 2 m space from the broken rock to the new back and the stope was drilled again and the drill holes were loaded. Before blasting, rock was extracted by LHDs from each of the draw points so there was approximately 3 m between the drilled vein and the top of the broken ore. When the stope was blasted, the level of the broken rock was usually about the correct elevation to permit efficient drilling of the next cut. This process of drilling, withdrawing broken rock and blasting was repeated until the vertical boundaries of the mineralization was reached or until stoping reached an upper level. LHD's then withdrew all the broken rock in the stope.

To provide access for miners to the working face of the stope, a timber raise was advanced with timbers securely positioned from footwall to hanging wall and a wooden wall built to contain the broken rock and create a ladderway at both ends of the stoping block.



TECHNICAL REPORT – La Guitarra Silver Mine, Temascaltepec, México

First Majestic began investigating the potential of using tailings from either existing tailings facilities or mill processing as backfill in future mining.

The potential mining areas Stantec were presented for consideration during the site inspection would likely be mined using sub level long hole with delayed tailings or development rock for back fill. No geotechnical challenges are anticipated in developing and mining at generally achievable mining widths could range from 1.5 to 5 m with sublevel spacings ranging from 15 to 25 m.

Historical production records can be found in Section 6.



17 RECOVERY METHODS

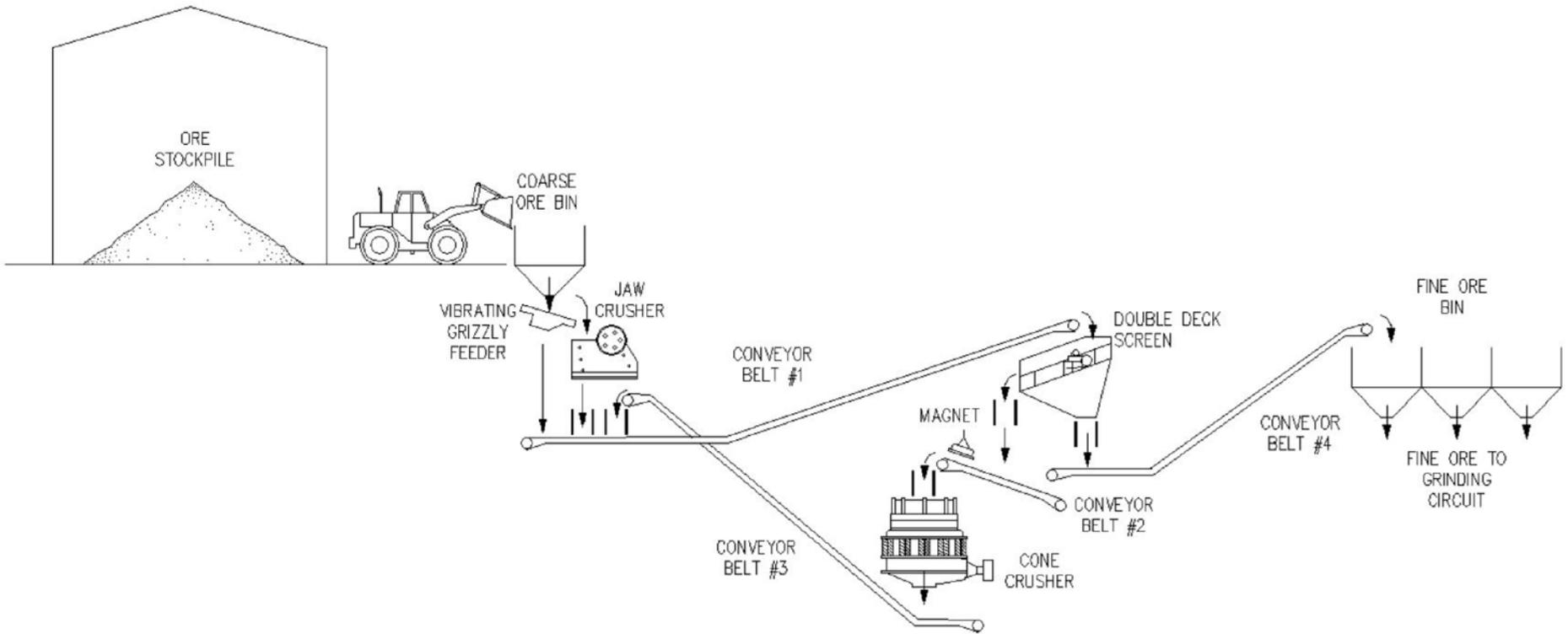
The Property is not presently producing and is under care and maintenance.

The existing processing plant is a flotation plant producing silver and gold ore concentrate. The plant was processing about 400 tpd when it was last operated. The stated capacity is 500 tpd when all ball mills are operating. The following is a summary of the current plant arrangement after a review study of the La Guitarra plant undertaken by Del Real and Hernandez (2022) for Sierra Madre in May 2022.

17.1 Crushing

The process plant crushing circuit flow sheet is shown in Figure 17-1. Underground ore is stockpiled under roof in a three-stockpile arrangement. A front loader with known bucket volume feeds from the stockpiles to a grizzly with 10" x 10" (25cm x 25 cm) openings over a coarse ore bin with an estimated capacity of 100 tonnes made of 3 concrete walls, and one wall covered with steel plates. Oversize must be broken by hand-held sledgehammer. Ore is fed from the Coarse Ore Bin to the crushing plant with a 40 HP 10"x 38" primary jaw crusher in closed circuit with a double deck vibrating screen and a 100 HP 3 ft short head cone crusher.





TECHNICAL REPORT LA GUITARRA PROPERTY

Process Plant Crushing Circuit Flow Sheet

Notes

1. Data Source: Del Real and Hernandez, 2022.

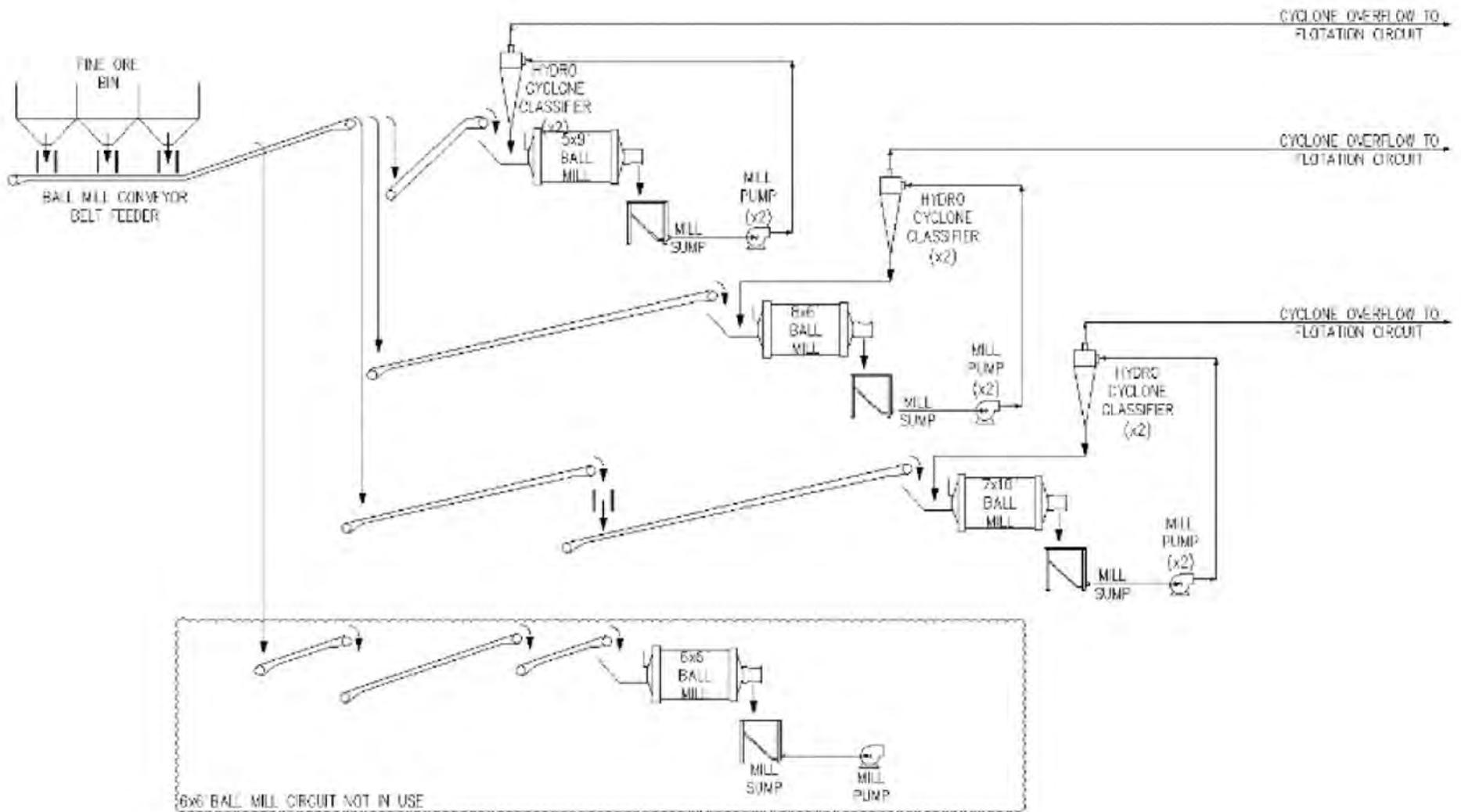
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CHK'D BY: D.L.
Date: 22 06 29

Figure 17-1

17.2 Grinding

The process plant crushing grinding circuit flow sheet is shown in figure 17-2. Grinding circuit ore is fed from the Fine Ore bin to four ball mills operating in parallel. These ball mills are: ball mill 5x9 ft, ball mill 8x6 ft, ball mill 7x10 ft, and ball mill 6x6 ft. Each ball mill discharges into its own sump where the discharge is pumped through a cyclone with the oversize returned to the ball mill feed and the undersized to a flotation conditioning tank. Since 2016, the 6X6 ft ball mill has not been operational because of uneven wear on the ring and pinion gears. Unavailability of this one mill reduces the plant's capacity to about 400 tbd until it is repaired.





TECHNICAL REPORT LA GUITARRA PROPERTY

**Process Plant Grinding
Circuit Flow Sheet**

Notes

1. Data Source: Del Real and Hernandez, 2022.

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Date: 22 06 29

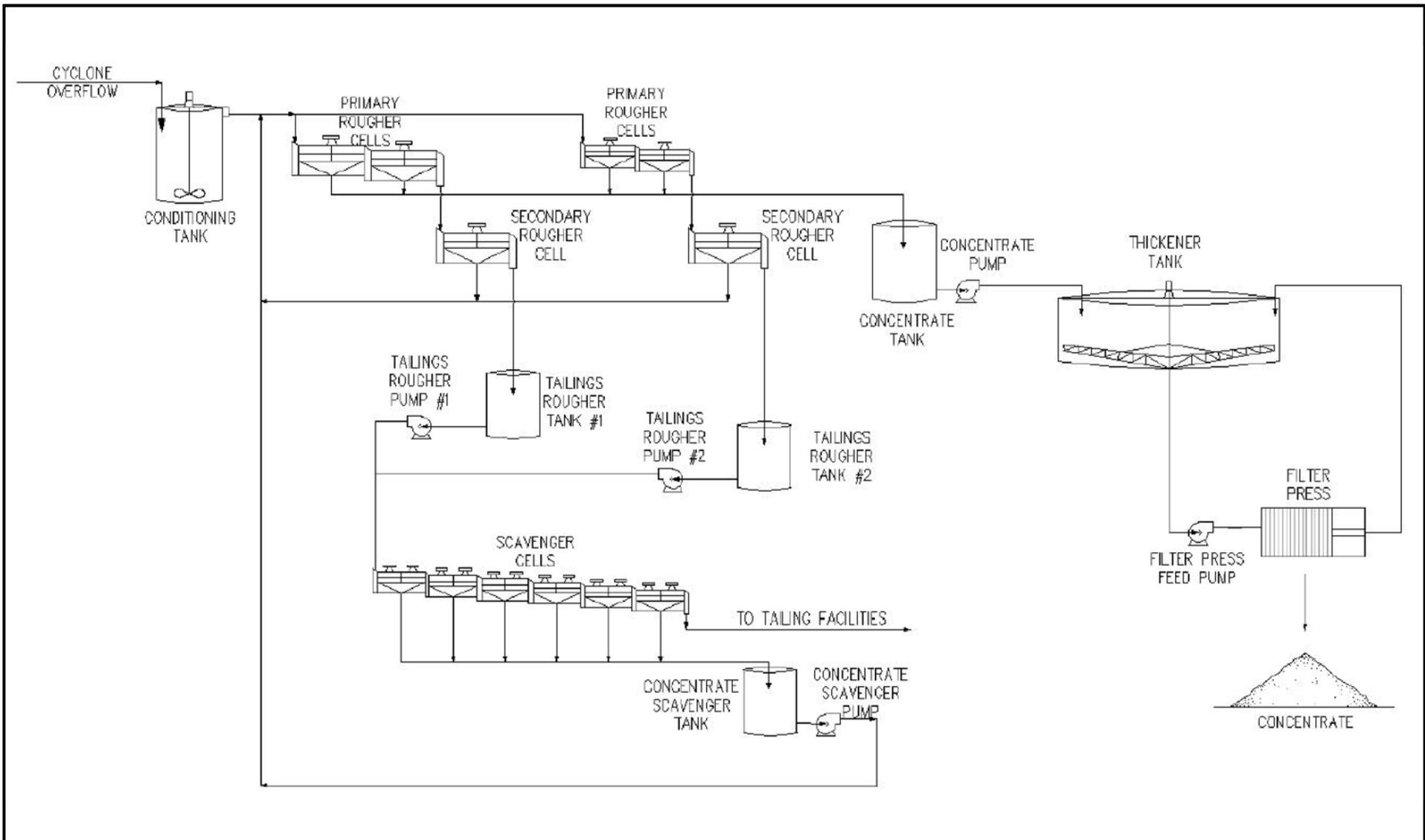
Figure 17-2

17.3 Flotation and Concentrate Dewatering

The process plant flotation circuit flow sheet is shown in figure 17-3. The plant has installed 4 cells of 300 ft³, 2 cells of 150 ft³ and 12 cells of 100 ft³. The arrangement with roughers, scavengers and cleaners has been varied many times throughout the operation's life. The 12 100 ft³ cells are at least 30 years old and require extensive maintenance.

Tailings from the flotation circuit report to a pump box to be pumped to the tailings facility. Concentrates are pumped to a 5,000 ft³ concentrate thickener. Underflow from the concentrate thickener is pumped to one of two plate and frame filter presses. The filter presses were unable to achieve the moisture content required by the tailings broker(s) so a portion of the concentrate was dried in a rotary kiln. The product from the kiln was then blended with the filter cake from the filter press then shipped by truck to Manzanillo.





TECHNICAL REPORT LA GUITARRA PROPERTY

**Process Plant Flotation
Circuit Flow Sheet**

Notes
1. Data Source: Del Real and Hernandez, 2022.

DRAWN BY: J.K.
CHK'D BY: D.L.
Date: 22 06 29

Figure 17-3

17.4 Tailing Facility

There are between 2.00 and 2.66 million tonnes in the tailings facility. The remaining space without compromising the stability of the tailings facility is 90,000 tonnes. There is a fully permitted tailings design for a capacity of 5.8 million tonnes with 30 years of validation from 2019.

17.5 Replacement and Maintenance Items

Del Real and Hernandez (2022) review identified several work items that are deferred maintenance items that must be addressed before the plant could be restarted. This includes replacement of chute liners, repair and reconfiguring of flotation cells and replacement of some pumps along with an upgrade to the concentrate filters.



18 PROJECT INFRASTRUCTURE

The Property is not presently producing and is under care and maintenance.

General infrastructure surrounding the property is described Section 4 of the report. The following provides more information on project specific infrastructure.

Access to La Guitarra is by a three km gravel road which starts from the paved highway connecting the town of Temascaltepec with the city of Zacazonapan. Temascaltepec, the nearest town, has a population of approximately 3,000 people. Most of the La Guitarra mine employees and contractors are habitants of the Temascaltepec municipality which has a population of approximately 33,000 people. Entrance to the operating areas of La Guitarra is controlled by a security gate at the end of the above-mentioned gravel road. Immediately upon entering the security gate are the Human Resources offices and a cafeteria with capacity to provide meals for approximately 50 people at one time. Coloso Mine is located some 5 km NE of the La Guitarra Plant. The road to Coloso passes through the village of Albarrada.

18.1 Mine Facilities

There are two main portals to access the mines: The San Rafael mine portal is the main access La Guitarra mine. There are two additional portals providing ventilation and secondary means of egress from the workings accessed through the San Rafael Portal. The Coloso Mine and portal is located approximately 5 km to the North East from the La Guitarra facilities.

At the San Rafael Portal there is a maintenance shop, analytical laboratory, warehouse, offices, drill core storage and core logging sheds, power substations and power lines.

At the Coloso Mine there are basic facilities necessary for operation. A security gate and guard to control access, a small office and change room, portal to access the underground mine via 4.5X5.0 m ramp with 12% grade. Power available is 1,500 kVA delivered at 13.2 kV. A surface substation steps power down to 4,160 V for transmission to mine load centers on surface and underground.

At Coloso a three-compartment settling pond accepts the 2,100 m³ to 3,000 m³ water per day pumped from the underground mine. Discharge water from the settling pond flows down the arroyo and supplies water to a number of orchards and farms. The pH of the water is slightly acidic so, small amounts of lime is added to raise the pH to permitted levels. A similar mine water treatment facility is located at La Guitarra mine.

18.2 Processing Facilities

The process plant consists of crushing, grinding, flotation, concentrate thickening, concentrate filtration and drying equipment, and a concentrate storage and loading area. The processing building also includes offices and a reagent preparation area. Other processing facilities include the tailings impoundment facility, an analytical and metallurgical lab. The analytical and



metallurgical lab, at the time of the Stantec visit was not intact. All sample preparation, and most analytical equipment were no longer in the laboratory building.

18.3 Administrative facilities

Adjacent to the Processing Plant is a building for general administrative offices with conference areas, computer network facilities and telephone with access to Telmex land line system. Cellular telephone service is weak.

18.4 Power

The primary source of power for the mine is from the Mexican national power grid, administered by Comision Federal de Electricidad (CFE), the Mexican utility entity. There is 12 MVA power available at 13.2 kV. The La Guitarra processing plant has 13.2kV/480V transformers totalling 3.5 MVA. The San Rafael Portal facilities have one 1.25 MVA transformer for compressors and another 1.0 MVA transformer servicing the equipment shop and other surface facilities including the offices. Another transformer of 500 kVA services the main vent fan, pumping from below the San Rafael Level, water treatment facility and Human Resources offices and cafeteria. Coloso is supplied with 1.5 MVA of available power at 13.2 kV via a 4.6 km surface line.

18.5 Water

The mine and mill operation are permitted by CONAGUA to consume up to 191,625,000 cubic m of fresh water per year. This water is generally taken from the outflow from the San Rafael portal and other underground fresh water sources.

Mine water at both the La Guitarra and Coloso-Nazareno mine complex is acid generating and need to be treated lime to meet permit requirements before mine water can be recycled in the plant or discharged. Since there is no current production from the mines, treated mine water is discharged into the local drainage. At the Coloso mine an average volume of 2,100 m³/day is extracted and treated in the dry season, while in the rainy season the treated water volume may exceed 3,000 m³/day. At the Guitarra mine around 1,200 m³/day is treated and in the rainy season the treated water volume may reach 2,000 m³/day (First Majestic Presentation, 2022).



19 MARKETS AND CONTRACTS

There is no information for this section of the Technical Report as the Property is not presently producing. During the LuisMin and Genco operating periods concentrate was taken to the San Martin Mine, 250 km north of Guadalajara, México, where it was cyanide leached, producing a dore product. First Majestic elected to sell concentrates to brokers such as Trafigura and Glencore to be blended with copper concentrates from other mines.



20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

Permits are in place enabling restart of operations as well as construction and operation of a new tailings storage facility utilizing dry stack deposition of tails. Table 20.1 lists the applicable permits and their expiration dates. There are no on-going Environmental studies.

Current reclamation activities are limited to planting of trees, maintenance of diversion channels and other water control structures. Community support for the operation to resume production is strong. Without the income and tax base in the Temascaltepec area, critical community services such as banking medical clinics and emergency medical services have been negatively impacted. Many of the workers formerly employed at La Guitarra have taken jobs out of the area and have expressed interest in returning to work close to their homes and families.



TECHNICAL REPORT – La Guitarra Silver Mine, Temascaltepec, México

Table 20.1
La Guitarra Silver Mine Current Permit Status

Major permits issued to La Guitarra	Number	Authority	Date Granted	Validity Period
Environmental License	SEMAR/NAT/SGPARN/F0530/3897	SEMARNAT	Sep. 2003	Indefinite
Environmental Impact Authorization for Mining and Metallurgical activities, including Tailings Management Facilities and Waste Rock Management Facilities for the La Guitarra Silver Mine site	DFMARNAT/3124/2012	SEMARNAT	Aug. 2012	20 years operation
Environmental Impact Authorization for the Extension of Infrastructure to the Coloso Area	DFMARNAT/5289/2012	SEMARNAT	Dec. 2012	Expires Dec. 2022
Authorization for industrial land use in Coloso For mine and ventilation raise	DFMARNAT/ 5286/2012 & /4765/2017 & 1755/2022	SEMARNAT	Dec. 2012	Expires April 2027
Authorization of Land Use in Federal Zones	04MEX109110/18EDDL12	CONAGUA	Dec. 2012	Expires Sept 2023
Concession title for use of 191, 625 m ³ of discharge water from workings for use in the processing or other industrial uses (agua laboreal).	5MEX101984/18FNGE97	CONAGUA	Mar. 1997 Last renewal was Mar. 2017	Expires Mar. 2027
Concession title for water discharge	04MEX150031/18FDDL11	CONAGUA	Jul. 2011	10 years
Authorization for Purchase, Use and Storage of Explosives for Mining Activities	3840-Mexico	SEDENA	Jan. 2014	Expires Jan 2023, yearly renewals
Tailings Facility # 4 (Deposito de Jales (DJ) #4) permit to construct and operate	DFMARNAT/4598/2019	SEMARNAT	Aug. 2019	30 Years
Permit to Place Paste Fill within mineworkings: Plan de Manejo de Residuos Minero – Metalúrgicos No. 15-PMM-I-0236-2022	15-PMM-I-0236-2022	SEMARNAT	Jun. 2022	unknown



21 CAPITAL AND OPERATING COSTS

There is no information for this section of the Technical Report as the Property is not presently producing.



22 ECONOMIC ANALYSIS

There is no information for this section of the Technical Report as the Property is not presently producing.



23 ADJACENT PROPERTIES

There are no adjacent properties from which exploration and or mining activities would provide a better understanding of the Coloso, Nazareno, La Guitarra, or Mina de Agua areas.



24 OTHER RELEVANT DATA AND INFORMATION

All relevant information is included in this report.



25 INTERPRETATION AND CONCLUSIONS

The La Guitarra Silver Mine, currently under care and maintenance, is located in the historic Temascaltepec mining district (the “Temascaltepec District”) in the municipality of Temascaltepec, Estado de México, México. Collectively the Property includes three recent, operating mines, La Guitarra, Coloso and Nazareno, one historic mine Mina de Agua and exploration projects El Rincón, Aquila, Los Locos, Veta Rica, and Animas plus an opportunity to reprocess old mine tailings. The target of historic mining and exploration is the silver and gold mineralization contained within vein deposits that have characteristics of a low-intermediate sulphidation epithermal type. There are more than one hundred epithermal veins within the property in five main vein systems: Comales–Nazareno, Coloso (Jessica and Joya Larga veins), La Guitarra (NW, Central and SE zones), Mina de Agua and El Rincón. The vein systems at La Guitarra form a belt with an approximate width of 4 km that strikes NW – SE over a distance greater than 15 km. Individual veins vary in width from tens of centimeters to more than twenty meters.

Exploration of the mineralized veins has been undertaken using a combination of surface mapping supported by 3D induced polarization (IP) and magnetometry (mag) surveys, soil sampling, grab sampling, drilling and channel sampling. Available drillhole records include: 448 diamond core holes (114,951m), 163 RC holes (21,991m) and 49 shelby tube holes (1,113 m). Drillhole samples were assayed using mostly fire assay methods at ALS and SGS, both independent laboratories as well as at First Majestic’s Central Laboratory and at the La Giuitarra mine laboratory. Underground channel samples were assayed at the La Giuitarra mine laboratory. Drilling records are appropriately organized into collar survey, downhole survey, alteration type, core recovery, RQD measurements, mineralogy, structural measurements, vein-ID, and laboratory assay. These data were available as comma delimited format. A QA/QC sampling program was in place since 2008 with appropriate application of sample blanks, duplicates and certified standards.

The Property currently contains mine infrastructure to supporting a 500 tpd ROM underground mining operation from the La Guitarra, Coloso and Nazareno mine sites. Generally underground mining on the Property has been of the overhand and horizontal cut and fill type with ROM ore transported via unpaved roads to the processing plant located at the La Guitarra mine site. Generally achievable vein mining widths that range from 1.5 to 5 m and sublevel spacings ranging from 15 to 25 m. The existing processing plant is a flotation plant producing silver and gold ore concentrate. First Majestic (Beltran et al., 2015) reported the existing plant metallurgical recovery as 85% for silver and 79% for gold. Del Real and Hernandez (2022) review of the process plant identified several work items that are deferred maintenance items that must be addressed notably replacement of chute liners, repair and reconfiguring of flotation cells and replacement of some pumps along with an upgrade to the concentrate filters.

In total there are between 2.00 and 2.66 million tonnes in the tailings facility located at La Guitarra mine. The remaining space without compromising the stability of the tailings facility is 90,000



tonnes. There is a fully permitted tailings design for a capacity of 5.8 million tonnes with 30 years of validation from 2019. As part of the care and maintenance requirements, mine water is pumped from the underground mine workings at La Guitarra and Coloso; and treated with lime to maintain water quality standards stipulated by the SEMARNAT permits. Currently treated water is discharged from the mine into the local drainage where it is understood to be used for irrigation purposes downstream. A review of the mine and exploration permits did not identify any concerns of material impact to future development of the Property.

A site inspection of the overall mine facilities appeared to be well maintained and clean. Unpaved road connecting the Coloso and Nazareno mines were in very good condition and mine water lime treatment was observed to be working. Tailings dam at La Guitarra, which is near capacity, was on visual inspection found to be stable. Underground visits at La Guitarra and Coloso did not show any concerns with respect to adequacy of roof support and the hangingwall appeared to be stable. Areas visited underground were well ventilated and mine water drainage control appeared to be well managed. Discussion with the labor union representative did not identify any concerns and labor relations on the mine and local community appeared to be good.

Development opportunities in the immediate vicinity La Guitarra, Coloso and Nazareno mine properties include building geologic resource models from the current exploration and mining records to identify areas of remaining mineral resource both in situ and from the mine tailings. Genco in their 2010 technical report (Clarke et al., 2010), conducted metallurgical testing to determine the viability of cyanide (NaCN) leach recovery of silver and gold to establish design parameters for a 3,000 t/d NaCN processing plant with much of mill feed coming from a theoretical open pit operation. Though there is potential for an open pit operation at La Guitarra, the QP is of the opinion that permitting a surface operation would meet resistance from the local community due to surface footprint of mining. However, there is potential for the introduction of cyanide (NaCN) leach recovery process as an alternative to the current flotation circuit.

Beyond the current mine areas there are several exploration opportunities mostly concentrated in the east of the Property (the Eastern District). Historical mining and early prospecting at Mina de Aqua, El Rincón, Aquila, Los Locos, Veta Rica, and Animas have potential to be developed as either an exploration target or mineral resource for silver and gold. At Mina de Aqua, there has been limited production by Genco in 2007/08 and there the opportunity to de-water and restart production from these historic workings. Recent mapping undertaken by First Majestic at the Aquila project, shown in Figure 4-2, and not a part of the Eastern District, shows potential for silver-gold mineralization.

25.1 Risks and Uncertainties

The following risks and uncertainties have been identified:



TECHNICAL REPORT – La Guitarra Silver Mine, Temascaltepec, México

- The reliability of the survey data from historic drill holes, sample sites and underground workings cannot be easily quantified as these sample sites are either overgrown with vegetation or currently inaccessible.
- Many historic sample assays have been completed by owner-operated laboratories.
- Sampling methods and approaches have varied over the history of the mine and this could impact the reliability of mineral resource estimates.
- Environmental liabilities exist in the form of:
 - Discharge of acid drainage water pumped from the underground mine workings that is being neutralized using limestone-filled gabions.
 - A tailings impoundment from the flotation processing plant produces an acid seepage, which is also passed through the limestone-filled gabions.
 - A mine waste rock dump located near the San Rafael portal and the La Guitarra mine. Some waste rock in the dump contains sulfides, which may produce acid mine drainage in the future although current levels are within tolerance.

To the extent known, there are no environmental or social issues that could materially impact the Company's ability to conduct exploration and mining activities in the district. Stantec is not aware of significant factors or risks that may materially restrict First Majestic from its right and ability to perform work on the Project, or which, upon completion of the Transaction, may materially restrict Sierra Madre from its right and ability to perform work on the Project.



26 RECOMMENDATIONS

The recommendations are presented as Phase 1 and Phase 2 work programs.

26.1 Phase 1 Work Program

For the Phase 1 work program four technical studies have been identified to prepare for the implementation of an infill exploration drilling and sampling program in Phase 2 and eventual restarting of mining operations. Required technical studies include a mineral resource estimate (MRE), metallurgical study on re-processing of tailings, design for a cyanide (CN) plant as an addition to or possible replacement of the current floatation plant. These technical studies will be summarized in a preliminary economic assessment (PEA) that will also outline a plan for restart of mining operations. Costs for the technical studies are outlined in Table 25.1 and include Sierra Madre personnel costs for oversight and administration during the completion of these technical studies that are expected to take approximately 6 months.

Table 25.1 Phase 1 Work Program

Technical Studies	US\$	C\$ ¹
MRE	200,000	256,000
Tailings Metallurgy	85,050	108,864
CN Plant Design	80,000	102,400
PEA	115,000	147,200
Total Technical Studies	480,050	614,464
*Personnel oversight (6 mo)	341,530	437,158
Contingency (20%)	164,316	210,324
Total Phase 1	985,896	1,261,947

¹US\$:C\$ 1.28

*Includes personnel for ongoing care and maintenance of the plant and mines

26.2 Phase 2 Work Program

The completion of Phase 2 is contingent on the successful completion of Phase 1. For the Phase 2 work program the required permits will be obtained to implement an estimated 12,000 m core drilling program. Existing plant additions, as identified in the Phase 1 technician studies will be completed. The additions include a possible Merrell crow plant, CN leaching tanks or expansion of the flotation circuit and ball mill for increased throughput. Annual concession taxes are included in Phase 2 as well as Sierra Madre personnel costs for oversight and administration while Phase 2 is being implemented over a six- month period. Costs for Phase 1 are itemized in Table 25.1.



Table 25.2 Phase 2 Work Program

Activity	Drilling	Assay	Concession	US\$	C\$ ¹
	m (US\$/m)	No. (US\$/assay)	hectares (US\$/ha)		
Permitting	n/a	n/a	n/a	310,000	396,800
Core drilling	12,000 (100)	8,000 (50)	n/a	1,600,000	2,048,000
Plant additions	n/a	n/a	n/a	1,500,000	1,920,000
*Personnel oversight	n/a	n/a	n/a	341,530	437,158
Concession taxes**	n/a	n/a	39,715 (188.86)	750,057	960,074
Contingency (20%)	n/a	n/a	n/a	900,317	1,152,406
Total Phase 2	n/a	n/a	n/a	5,401,905	6,914,438

¹US\$:C\$ 1.28

*Includes personnel for ongoing care and maintenance of the plant and mines

**Full year



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