S-K1300 SUMMARY TECHNICAL REPORT on the RESOURCES of the SILVER-ZINC SIERRA MOJADA PROJECT COAHUILA, MEXICO

NAD 27 Zone 13 Mexico

Latitude 27°24' North and Longitude 103°43' West (Centre of Project)

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This technical report, dated January 24, 2023 (the “Technical Report”), was prepared by Archer Cathro Ltd. (“AC”) and Mr. Timothy Barry for Silver Bull Resources Inc. (“Silver Bull” or “SBR”), in accordance with subpart 1300 of Regulation S-K (“S-K 1300”) promulgated under the Securities Act of 1933, as amended, for the updated mineral resources at the Sierra Mojada Project in Coahuila state, Mexico.

This Technical Report replaces the technical report for the mineral resources at the Sierra Mojada Project in Coahuila state, Mexico, dated October 30, 2018, prepared in accordance with NI-43-101 by Mr. Matthew Dumala of AC and Mr. Timothy Barry of Silver Bull. This Technical Report is inclusive of both the near surface silver mineralization that has been referred to as the “Shallow Silver Zone” (SSZ) and the historic “red” and “white” zinc zones that had been historically mined by underground methods. Since the previous report, significant work has been done on structural and geologic mapping, modeling of the deposit and follow-up on previous work recommendations.

The Sierra Mojada Project has been the subject of previous NI43-101 technical reports which disclosed mineral resource estimates for the Shallow Silver Zone and the Red Zinc Zone respectively:

- Archer Cathro Ltd. & Silver Bull Resources Inc. report, dated October 2018
- Tuun and AFK Mining resource report, dated May 2015
- JDS Preliminary Economic Assessment (PEA) in December 2013
- JDS resource report in April 2013
- SRK in July 2012 and November 2011
- John Nilsson (and Ronald Simpson) in April 2011
- Pincock Allen & Holt (PAH) in January 2010.

1.2 PROPERTY DESCRIPTION

The Sierra Mojada project is located in the northwestern part of Coahuila State, Mexico, close to the border with Chihuahua State. The project centre coordinates are 27°24’ North and longitude

103°43’ West. The project is adjacent to the towns of Esmeralda and Sierra Mojada and is about 250 km northeast of the city of Torreón. The project has excellent paved highway and rail access.

Silver Bull has 20 registered mining concessions for a total area of 9,530.4 hectares.

Silver Bull operates in Mexico through a wholly owned Mexican subsidiary, Minera Metalin S.A. de C.V. All minerals in Mexico are owned by the federal government and mineral rights are granted by soliciting mining concessions, which by law have priority over surface land use, but in practice the concessions owner must have an agreement with the surface owner.

1.3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Sierra Mojada project area is situated in the northwestern part of Coahuila State, Mexico at latitude, close to the border with Chihuahua State, south of the village of Esmeralda. It is accessible by paved roads from the city of Torreón, which lies about 250 km to the southwest. Most of the area adjacent to the project site is used for low yield cattle ranching, however; the southeastern boundary of the project abuts the Peñoles dolomite extraction and processing facility. The Peñoles quarrying facility contains associated waste piles and a 1 km long conveyor belt transporting crushed dolomitic carbonate aggregate of specific magnesium carbonate grade to the railroad spur for transportation to the Peñoles process plant known locally as Quimica del Rey.

A rail line utilized by Peñoles to transport material to its chemical plant extends west to La Esmeralda. The remains of an older section extend right up to old workings and a loading facility located south of La Mesa Blanca right in the center of the Sierra Mojada Camp. The spur line connects the main national line that connects Escalon and Monclova. Rail traffic to the east is through Frontera to the United States via Eagle Pass, Texas, or southward to Monterrey or the seaport at Altamira. Service to the west is available as well as to the western USA via El Paso, or to points south connected through Torreón. Although power levels are sufficient for current operations and exploration, any development of the project would potentially require additional power supplies to be sourced.

1.4 HISTORY

The Sierra Mojada project area is host to several mineralized zones varying from the ‘red zinc’ (hemimorphite-rich) manto; a ‘white zinc’ (smithsonite-rich) manto; and silver-lead rich zones. As reported in the AC and SVB October 2018 resource report:

"Silver and lead were first discovered by a foraging party in 1879, and mining to 1886 consisted of native silver, silver chloride, and lead carbonate ores. After 1886, silver-lead-zinc-copper sulphate ores within limestone and sandstone units were produced. No accurate production history has been found for historical mining during this period."

"Approximately 120 years ago, zinc silicate and zinc carbonate minerals (Zinc Manto Zone) were discovered underlying the silver-lead mineralized horizon. The zinc manto is predominantly zinc dominated, but with subordinate lead–rich manto and is principally situated in the footwall rocks of the Sierra Mojada Fault System. Since discovery and up to 1990; zinc, silver, and lead ores were mined from various mines along the strike of the deposit, including from the Sierra Mojada property. Ores mined from within these areas were hand sorted and the concentrate shipped mostly to smelters in the United States."

Metalline Mining Company (Metalline) entered into a Joint Exploration and Development Agreement with USMX in July 1996, involving USMX's Sierra Mojada concessions. In October 1999, Metalline entered into a joint venture with North Limited of Melbourne, Australia (now Rio Tinto). Exploration by North Limited consisted of underground channel samples in addition to surface RC and diamond drilling. North Limited withdrew from the joint venture in October 2000.

A joint venture agreement was made with Peñoles in November 2001. The agreement allowed Peñoles to acquire 60% of the project by completing a bankable Feasibility Study and making annual payments to Metalline.

During 2002, Peñoles conducted an underground exploration program consisting of driving raises through the oxide zinc manto, diamond drilling, continuation of the percussion drilling and channel sampling of the oxide zinc workings (stopes and drifts) previously started by Metalline in 1999, and continued by North in 2000 and Metalline during 2001.

In December 2003, the joint venture was terminated by mutual consent between Peñoles and Metalline. Since 2003, Metalline continued sampling numerous underground workings through channel and grab samples.

In April 2010, Metalline merged with Dome Ventures, retaining the name Metalline Mining Inc. Subsequently, in April 2011, the company changed its name to Silver Bull Resources. Silver Bull continued to diamond drill the project until February of 2013."

In June 2018, Silver Bull signed a Joint Venture option with South32 Limited to form a 70/30 joint venture on the Sierra Mojada Project. To maintain the option in good standing, South32 must contribute minimum exploration funding of US$10 million ("Initial Funding") during a 4 year option period with minimum aggregate exploration funding of US$3 million, US$6 million and US$8 million to be made by the end of years 1, 2 and 3 of the option period respectively. South32 may exercise its option to subscribe for 70% of the shares of Minera Metalin S.A. De C.V. ("Metalin"), the wholly owned subsidiary of Silver Bull which holds the claims in respect of the Project, by contributing $US100 million to Metalin for Project funding, less the amount of the Initial Funding contributed by South32 during the option period.

The option with South32 was terminated in September 2022 due to an ongoing blockade of the project.

1.5 GEOLOGY AND MINERALIZATION

Sierra Mojada is located in the Eastern Tectonic Zone of Mexico, which represents a passive plate margin relative to the Western Zone that abuts a convergent plate margin. The boundary between the Eastern and Western terrains is in Chihuahua State, just west of the Sierra Mojada project area. Within the Eastern Zone, the project is located in the Coahuila terrain, which consists of moderately metamorphosed flysch and un-metamorphosed andesitic volcanic rocks cut by granite and granodiorite intrusives of Permian to Triassic age. The district is located on passive margin type Cretaceous platform carbonate rocks of the Sabinas Basin, which have been structurally prepared from Jurassic through Tertiary time by the complex San Marcos fault system.

Along the San Marcos fault system are one or more mineralizing intrusions that are inferred from direct and indirect evidence in the district leading to the identification of the district as being a CRD (Carbonate Replacement Deposit). The district shows a complex history of hypogene sulphide mineralization followed by oxidation and supergene alteration of the mineral profile. Hydrothermal alteration follows a clear sequence of dolomitization, carbonate and silica alteration; followed by late carbonate, silica, argillic, and iron oxide alterations related to the oxidation-supergene events. Approximately 80% of the district mineralization is hosted by dolomite; the remainder is in limestone.

The alteration-mineralizing events have generated two types of mineralization in the Sierra Mojada district. The Shallow Silver Zone (SSZ) and the Base Metal Manto Zone (BMM). Mineralization in the Shallow Silver Zone is dominated by acanthite, the silver halide solid solution of bromargyritechlorargyrite, and tennantite. Silver occurs in early to late high-grade structures, karst breccias, low angle fault breccias, and mantos, and as disseminated replacements in porous hydrothermally altered dolomites.

The Base Metal mineralization is dominated by hemimorphite in the Red Zinc Zone and smithsonite in the White Zinc Zone. Mineralization primarily occurs as replacement of karst breccia and accessory faults that feed the breccia zones. Non-sulphide base metal mineralization is a result of oxidation and supergene enrichment of an original zone of semi-to massive pyrite-sphalerite-galena mineralization largely located in the lead zone manto mineralization.

The result is a silver-rich polymetallic zone of mineralization overlaying a large non-sulphide zinc-lead-copper resource, both forming a linear zone of manto shaped mineralization which is cross cut by mineralized structures.

1.6 EXPLORATION STATUS

Since the Archer Cathro and SVB October 2018 resource report, work has focused on sulphide mineralization that lies outside the resource defined by the 2015 Report. A joint venture option was signed with South32 Ltd. in June 2018 to explore the sulphide potential of the property at depth. The sulphide mineralization is thought to be of the same genesis as the oxide mineralization and is simply the "unoxidized" version of the mineralization originally emplaced at Sierra Mojada. However, because a different metallurgical process would almost certainly be required to beneficiate the sulphide mineralization, the new zone of sulphide mineralization recently identified at Sierra Mojada is not included in the resource outlined in this report.

1.7 SAMPLE PREPARATION, ANALYSES, SECURITY AND DATA VERIFICATION

During the time Mr. Barry has worked on the Sierra Mojada Project there has been no change in the methodology of sample preparation and chain-of-custody. In 2010, the onsite assay lab was decommissioned to eliminate any questions of sampling bias. As noted in Tuun and AFK May 2015 resource report:

"All analytical work used in the project has been performed in the ALS laboratory ("ALS") in Vancouver, BC, Canada. ALS is a leading independent provider of assaying and analytical testing services for mining and exploration companies. The laboratory is ISO 9001:2000 and ISO/IEC 1702S:2005 certified. SRK is of the opinion that the sample preparation, security and analysis meets or exceeds industry standards and is adequate to support a mineral resource estimate as

defined under NI 43- 101, but that better care should be taken in reviewing and analyzing the QA/QC.
SRK downloaded all available data from ALS and compared the digital database supplied by Silver Bull against original assay data provided by ALS. A total of 37,100 assays were checked against the digital database, which represents about 23% of the total assay population. While some discrepancies were observed, most of the errors were considered not material and most were easily explained. A few samples that did not agree with the assay certificates were not used for the resource estimate."

Mr. Barry has been direct e-mail copied of results from ALS-Chemex (now ALS-Global) with the assays and has had the opportunity to verify the assays against the loaded data. In addition, in 2011 IoGlobal Pty Ltd (based in Australia) provided data verification services to Silver Bull Resources.

For the B series 2012 holes and the T-series 2012 holes used for twinning of old holes and underground exploration.

The Qualified Person considers the database fit-for-purpose and is suitable for use in the estimation of Mineral Resources and was collected in line with industry best practice.

1.8 METALLURGICAL TESTING

Metallurgical testing of the mineralization at Sierra Mojada in the early years of Metalline Mining Co. work focused on the oxidized zinc mineralization. Poor recoveries and low metal prices persuaded Silver Bull to consider other technologies. The SART Process and its application to Sierra Mojada Project mineralization was also examined. Improved recoveries and the ability to recover/reduce cyanide consumption suggest improved economics that need to be further evaluated.

1.9 MINERAL RESOURCES

Classification has been done adhering to S-K 1300 Standards. A 10 m by 10 m by 10 m block model was created to encompass the deposit, grades were estimated into the block model in three passes using Ordinary Kriging (OK). Silver, copper, lead and zinc were estimated using uncapped composited 1.0m grades.

1.9.1 MINERAL RESOURCE

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase 'reasonable prospects for economic extraction' implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

1.9.2 MINERAL RESOURCE ESTIMATE

The silver and zinc resource at Sierra Mojada has been classified as "Measured", "Indicated" and "Inferred" and has been confined within an optimize Whittle pit shell to demonstrate reasonable prospects of economic extraction. The pit shell was generated using a silver price of US$18 per ounce and a zinc price of US$1.20 per pound. Metal prices were chosen to reflect five year averages. Mining costs (ore and waste) of US$1.50/tonne, processing costs of US$12.00/tonne (including G&A) to provide an overall NSR cutoff grade of $13.50 for the Global in-pit resource. An overall pit slope of 55° was used for the pit optimizations. Recoveries were assumed to be 75% for the silver and 41% for the zinc. Although reported, no value was assigned to the copper or lead. Historic mining voids were removed from the resource estimate. One small mineral license not under the control of Silver Bull is included within the open pit. The resource contained within this license is not reported.

The “Global Resource” is shown in Table 1

Table 1. Global Resource

CLASS	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	NSR ($/t)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs)	Zn (Mlbs)
Measured	52.0	39.2	0.04%	0.3%	4.0%	$44.3	65.5	45.9	379.1	4,589.3
Indicated	18.4	37.0	0.03%	0.2%	1. 9%	$27.3	21.9	10.8	87.0	764.6
Total M&I	70.4	38.6	0.04%	0.3%	3.4%	$39.8	87.4	56.8	466.1	5,353.9
Inferred	0.1	8.8	0.02%	0.2%	6.4%	$52.3	0.02	0.04	0.4	10.7

Notes:

1) S-K 1300 definitions were followed for the Mineral Resource.
2) The Mineral Resource is reported within a conceptual pit-shell using an NSR cut-off value of US$13.50/tonne.
3) Mineral resources are not reserves and do not demonstrate economic viability.
4) Tonnages are reported to the nearest 100,000 tonne. Grades are rounded to the nearest decimal place for Ag, Zn, & Pb and the nearest 2 decimal places for Cu
5) Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade, and contained metal.
6) Tonnage and grade are in metric units; contained Zn, Cu, & Pb are in imperial pounds.
7) Tonnages and grades are as reported directly from block model; with mined out areas removed.

1.9.3 ZINC AND SILVER ZONES WITHIN THE GLOBAL RESOURCE

The Global Resource encompasses two high grade zones of mineralization; locally named the zinc zone, and the silver zone and represents an overall average grade for the silver and zinc mineralization across the entire deposit. This average grade does not accurately reflect discrete, high grade zoning of the silver and zinc mineralization that occurs within the global resource and which are better defined using zinc and silver cutoff grades. The “sub” tables using a silver and zinc cutoff grade are shown below:

Table 2. "Zinc Zone" Pit-constrained Mineral Resource Estimate by Zinc Cut-Off

Category	Zn Cut-off (%)	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs)	Zn (Mlbs)
MEASURED	4	17.1	26.9	0.02%	0.4%	9.5%	14.8	8.6	162.3	3,578.5
	6	11.9	22.3	0.02%	0.4%	11.5%	8.5	4.7	106.4	3,019.7
	8	8.6	19.3	0.02%	0.4%	13.3%	5.3	2.9	69.9	2,505.1
	10	6.2	15.8	0.02%	0.3%	15.0%	3.1	2.1	43.6	2,030.0
	11	5.1	14.5	0.02%	0.3%	15.8%	2.4	1.7	34.0	1,794.8
	12	4.3	13.8	0.02%	0.3%	16.7%	1.9	1.4	27.6	1,586.5
	13	3.6	12.9	0.02%	0.3%	17.5%	1.5	1.2	21.2	1,381.2
	14	2.9	11.7	0.02%	0.2%	18.5%	1.1	1.0	15.3	1,170.8
INDICATED	4	2.5	22.2	0.03%	0.3%	7.7%	1.8	1.5	17.6	417.0
	6	1.6	20.4	0.03%	0.3%	9.2%	1.0	0.9	11.1	317.0
	8	0.8	18.7	0.02%	0.3%	11.4%	0.5	0.3	5.8	200.8
	10	0.4	19.2	0.02%	0.3%	13.7%	0.2	0.2	2.9	124.4
	11	0.3	19.5	0.02%	0.3%	15.0%	0.2	0.1	2.0	98.1
	12	0.2	19.6	0.02%	0.3%	15.9%	0.2	0.1	1.6	83.1
	13	0.2	19.8	0.02%	0.3%	16.4%	0.1	0.1	1.3	74.3
	14	0.2	21.9	0.02%	0.3%	16.9%	0.1	0.1	1.1	65.3
TOTAL M&I	6	13.5	22.0	0.02%	0.4%	11.2%	9.6	5.6	117.5	3,336.6
INFERRED	4	0.05	5.9	0.01%	0.2%	8.5%	0.01	0.01	0.2	9.97
	6	0.04	6.5	0.01%	0.2%	9.6%	0.01	0.01	0.2	8.60
	8	0.03	5.7	0.01%	0.2%	11.0%	0.00	0.01	0.1	6.34

Table 3. "Silver Zone" Pit-constrained Mineral Resource Estimate by Silver Cut-Off

Category	Ag Cut-off (%)	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs))	Zn (Mlbs)
MEASURED	25	21.0	83.6	0.08%	0.5%	2.6%	56.5	37.4	245.8	1,222.25
	35	15.9	101.2	0.10%	0.6%	2.5%	51.6	34.4	201.6	869.2
	45	12.5	117.7	0.11%	0.6%	2.5%	47.3	31.7	168.3	679.2
	50	11.2	126.6	0.12%	0.6%	2.5%	45.3	30.3	155.0	611.2
	55	10.1	134.2	0.13%	0.6%	2.5%	43.4	29.1	141.5	548.4
	60	9.1	142.3	0.14%	0.6%	2.5%	41.7	28.0	129.8	493.2
	65	8.3	149.7	0.15%	0.7%	2.5%	40.1	26.9	120.0	452.3
	70	7.5	158.4	0.15%	0.7%	2.5%	38.4	25.6	110.6	409.9
	75	6.9	166.5	0.16%	0.7%	2.4%	36.9	24.6	101.7	370.9
INDICATED	25	10.4	54.9	0.03%	0.2%	1.3%	18.4	7.9	53.2	288.1
	35	7.3	65.4	0.04%	0.2%	1.3%	15.4	6.6	40.0	208.2
	45	5.0	77.6	0.05%	0.3%	1.3%	12.4	5.2	27.4	142.4
	50	4.1	84.0	0.05%	0.3%	1.3%	11.1	4.4	23.2	119.5
	55	3.4	90.7	0.05%	0.3%	1.3%	9.9	3.6	19.8	98.1
	60	2.9	96.8	0.05%	0.3%	1.3%	8.9	2.9	17.0	83.0
	65	2.4	102.9	0.05%	0.3%	1.3%	8.0	2.5	14.0	68.8
	70	2.0	109.5	0.05%	0.3%	1.3%	7.2	2.2	11.8	56.6
	75	1.8	115.7	0.05%	0.3%	1.3%	6.5	1.8	10.0	49.8
TOTAL M&I	50	15.2	114.9	0.10%	0.5%	2.2%	56.3	34.7	178.2	730.7
INFERRED	25	0.01	28.8	0.07%	0.3%	1.6%	0.01	0.02	0.06	0.35
	35	0.00	0.0	0.00%	0.0%	0.0%	0.00	0.00	0.00	0.00
	45	0.00	0.0	0.00%	0.0%	0.0%	0.00	0.00	0.00	0.00

The Global Mineral Resources were estimated by Matthew Dumala P.Eng. of Archer Cathro Ltd. by Ordinary Kriging (OK) using Geovia GEMS^{TM} software in three passes using 10m x 10m x 10m blocks as the SMU size. The classification methodology used was that blocks meeting the criteria of Pass 1 would be flagged as Measured; Pass 2 – Indicated; and Pass 3 – Inferred.

Silver, copper, lead and zinc were estimated using Ordinary Kriging (OK) on uncapped composited 1.0m grades.

NSR values were assigned to blocks within the Mineral Resource and confined to a pit shell generated in Whittle. A $US13.50 NSR cutoff was selected for the global Mineral Resource. The Whittle pit and NSR calculations assumed a silver price of US$18.00/Troy ounce and a zinc price of US1.20/pound; recoveries of 75% and 41% respectively; pit slope angles of 55° overall; mining costs of US$1.50/tonne; and Ag & Zn processing costs of US$12.00/tonne.

The sub table breakdowns from the global resource was equated using a 50g/t cutoff grade for silver and 6% for Zinc.

1.10 INTERPRETATIONS, CONCLUSIONS AND RECOMMENDATIONS

For the next phase of work specifically on the oxide resource the authors recommend that Silver Bull Resources:

- Complete additional metallurgical test work on both the silver and the zinc to confirm recovery parameters.
- Consider a pilot-plant program to prove the viability of the selected process
- The next phase work program should include geotechnical drilling to confirm appropriate slope angles for future open pit design work.
- Continue underground diamond drill work for improved interpretation and modeling of domains.
- Detail power and water sources, requirements, and begin all permitting processes.
- Examine the potential of the silver and zinc zones as stand-alone minable resources.
- Conduct a Preliminary Economic Assessment (PEA).
- Continue to explore the property with an emphasis on targeting potential sulphide targets.

The authors estimate that the total cost for the next phase of work on the oxide resource is approximately US$2M.

1.11 OTHER RELEVANT DATA AND INFORMATION

Since September 30, 2019, the project has been under an illegal blockade and unable to access the project, by a mining co-operative called Minera Nortenos. The co-operative is demanding payment of a production royalty, even though no mine is in production. Despite favorable court rulings in Silver Bull's favor, the Mexican government has refused to do anything about the blockade, despite its illegal nature. Talks are on going with the co-operative, but to date no reasonable settlement has reached.

The illegal blockade, and the inability to access the project was directly responsible for South32 terminating its option agreement with the company on the Sierra Mojada project. A full summary is provided in Section 21 of this report.

2 INTRODUCTION

2.1 TERMS OF REFERENCE

This Technical Report dated January 24, 2023, was prepared by Archer, Cathro & Associates (1981) Limited ("AC") and Silver Bull Resources Inc ("SVB"). The contributing authors were Matthew Dumala from AC and Timothy Barry from SVB.

Mr. Barry is a Geologist and Chartered Professional of the Australasian Institute of Mining and Metallurgy (MAusIMM(CP) and has worked as the VP Exploration and now as President and CEO for Silver Bull on the Sierra Mojada project since the merger of Metalline Mining Inc. and Dome Ventures Inc. in 2010. He is responsible for Sections 1-8, 10, and 20-21.

Mr. Dumala, is a Professional Engineer, registered in British Columbia and works as a resource modeller for Archer, Cathro & Associates (1981) Limited ("Archer Cathro"). Archer Cathro is responsible for Sections 9 and 11.

The authors jointly shared responsibility for Sections 1-3 and 22. Sections 12-19 are not relevant to this report.

This Technical Report was prepared in compliance with the requirements of the Securities Exchange Commission S-K 1300 guidelines.

2.2 SCOPE OF WORK

The mineral resource estimate presented in this report replaces the NI43-101 mineral resource estimate from Mr. Dumala and Mr. Barry from October 24, 2018.

2.3 STATEMENT OF INDEPENDENCE

Mr Dumala is a qualified person for the purposes of a S-K 1300 and does not have any beneficial interest in the outcome of this technical assessment of the Sierra Mojada Deposit. His fee for completing this Report is based on his normal professional rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

Mr Barry is a qualified person for the purposes of a S-K 1300 and works as the President and CEO of Silver Bull is not independent of Silver Bull. He is an acceptable co-author this report based on section 5.3 of the S-K 1300 regulations outlining the requirements for an independent Technical Report.

2.4 SITE VISIT

Mr. Barry MAusIMM(CP) is a qualified person under the terms of S-K 1300, has spent a considerable amount of time at the Sierra Mojada site leading and managing all aspects, including, but not limited to, the planning and overseeing of drill campaigns, QA/QC implementation and collection, sites tours for visitors of the project between 2011 to present. His last visit to site was between 1 – 8 September 2019.

Mr Dumala oversaw the 2019 drill campaign at Sierra Mojada and was last at the site in August 2019.

2.5 UNITS AND CURRENCY

Unless otherwise stated all units used in this report are metric. Assay values are reported in grams per metric tonne (g/t) unless some other unit is specifically stated. The US$ is used throughout this report.

2.6 SOURCES OF INFORMATION

This report is based, in part, on internal Company technical reports, and maps, published government reports, Company letters and memoranda, and public information as listed in the References Section 24.0 at the conclusion of this Technical Report.

The Sierra Mojada Project has been the subject of a Preliminary Economic Assessment completed by JDS Energy and Mining Inc. (JDS) in December 2013 and five previous NI43-101 compliant technical reports completed by Tuun & AFK in May 2015, JDS in April 2013, SRK Consulting Inc. (SRK) in November 2011 and an update in July 2012, John Nilsson in April 2011 (authored by Ronald Simpson and John Nilsson), and Pincock Allen & Holt (PAH) I, January 2010.

The Authors have relied upon some of the previously disclosed reports along with newly collected information provided by Silver Bull Resources.

The Authors have not conducted detailed land status evaluations, and have relied upon previous qualified reports, public documents and statements by the Company regarding Property status and legal title to the Sierra Mojada Project.

2.7 UNITS OF MEASURE, CALCULATIONS & ABBREVIATIONS

A list of the main units, abbreviations and acronyms used throughout this report is presented in the tables below.

µm	Micron (micrometre)
Amp	Ampere
cm	Centimetre
g/t	Gram per tonne
hr	Hour
ha	Hectare
hp	Horsepower
kg	Kilogram
km	Kilometre
km^2	Square kilometer
KPa	Kilopascal
kt	Thousand tonnes
Kw	Kilowatt
KWh	Kilowatt hour
L	Litre
lb or lbs	Pound(s)
m	Metre
M	Million
m^2	Square metre
m^3	Cubic metre
min	Minute
mm	Millimetre
Mpa	Mega Pascal
mph	Miles per hour
Mtpa	Million tonnes per annum
Mt	Million tonnes
ºC	Degree Celsius
oz	Troy ounce
ppb	Parts per billion
ppm	Parts per million
s	Second
t	Metric tonne
tpd	Tonnes per day
tph	Tonnes per hour
V	Volt

W	Watt
wmt	Wet metric tonne

Abbreviations & Acronyms

% or pct	Percent
AAS	Atomic absorption spectrometer
Ag	Silver
Amsl	Above mean sea level
As	Arsenic
Au	Gold
C	Carbon
CAPEX	Capital Costs
CFE	Comision Federal de Electricidad
CIL	Carbon-in-leach
CIM	Canadian Institute of Mining
Elev	Elevation above sea level
GPS	Global positioning system
HG	High Grade
H:V	Horizontal to vertical
JDS	JDS Energy & Mining Inc.
LG	Low Grade
Ma	Million years ago
MMC	Metalline Mining Company
MXP	Mexican pesos
N,S,E,W	North, South, East, West
NPV	Net Present Value
NSR	Net Smelter Return
S-K 1300	National Instrument 43-101
OPEX	Operating costs
PA	Preliminary Assessment
PAX	Potassium Amyl Qanthate
Pb	Lead
PEA	Preliminary Economic Assessment
PFS	Prefeasibility Study
QA/QC	Quality Assurance/Quality Control
QMS	Quality Management System
RC	Reverse circulation
S	Sulfur
SEMARNAT	Secretaria de medio ambiente y recursos naturales
S.G.	Specific gravity
SBR	Silver Bull Resources Inc.
SRK	SRK Consulting Inc.
US$	US dollars
Whittle	Gemcom Whittle- Strategic Mine Planning TM

X,Y,Z	Cartesian Coordinates, also Easting, Northing and Elevation
Zn	Zinc

2.8 RELIANCE ON OTHER EXPERTS

Independent metallurgical consultant Mr. William J. Pennstrom Jr., M.A.; QPMMSA of Pennstrom Consulting Inc. was contracted by Silver Bull in 2013 and 2014 to review the metallurgical testing programs conducted. Mr. Pennstrom's work was provided to the Authors by Silver Bull and forms the basis of Section 13 – Mineral Processing and Metallurgical Testing. Responsibility for his work has been undertaken by Mr Timothy Barry, MAusIMM(CP), a Qualified Person. No additional metallurgical work has been conducted by Silver Bull since this time.

Although copies of the tenure documents, operating licenses, permits, and work contracts were reviewed, an independent verification of land title and tenure was not performed. The Authors have not verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties but has relied on Silver Bull's solicitor to have conducted the proper legal due diligence. Information on tenure and permits was obtained from Silver Bull.

Based on Silver Bull's legal opinion the current mining law in Mexico allows for the concession to be issued for 50 years. This law was made effective April 29, 2005 and concessions issued prior to this change in mining law will have the expiration date of the concession amended to reflect the 50-year period. The Authors have relied on representations and legal opinions provided by Silver Bull regarding the legal disposition of mining concessions.

The Authors have relied completely on Silver Bull regarding all information related to the environmental, political and tax information about the project.

3 PROPERTY DESCRIPTION AND LOCATION

3.1 LOCATION

The Sierra Mojada project is located in the northwestern part of Coahuila State, Mexico, close to the border with Chihuahua State (Figure 1). Access is by paved Highway from the city of Torreon about 250km southwest of the project. The project site is situated about one km south of the village of Esmeralda.

The Sierra Mojada Project abuts a major escarpment that forms the northern margin of the Sierra Mojada range. The average elevation at the site is 1,500masl and is at latitude 27°24' North and longitude 103°43' West. Silver Bull Resources employs the NAD 27 Zone 13 survey coordinate system on the project.

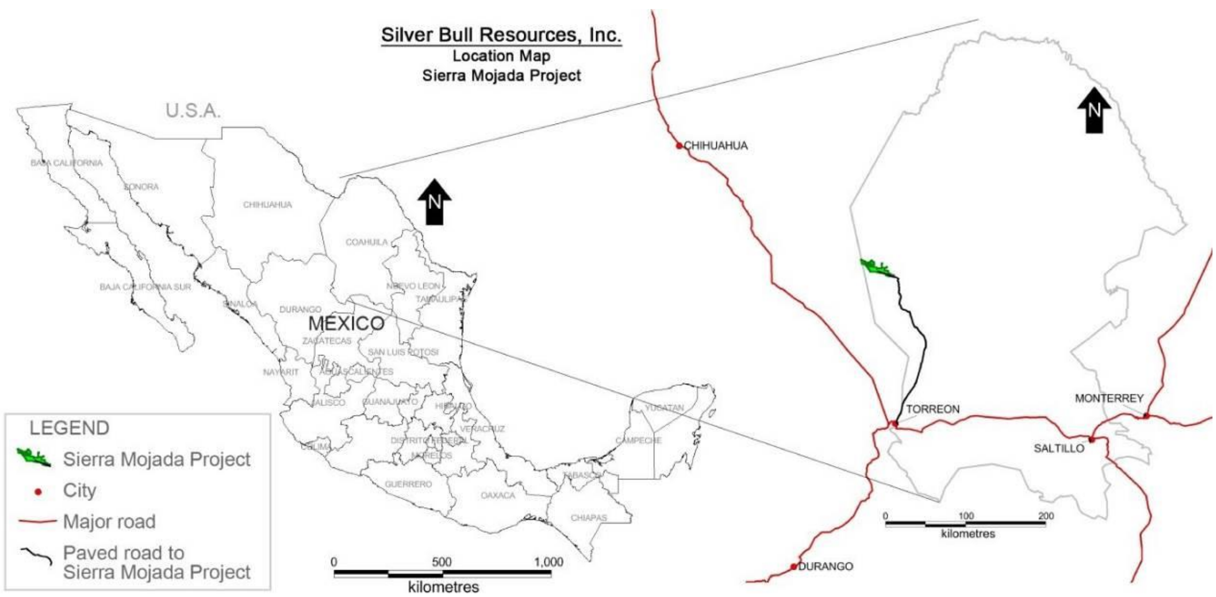


Figure 1. Property Location Map

3.2 MINERAL CONCESSIONS

Silver Bull operates in México through a wholly owned Mexican subsidiary; Minera Metalin S.A. de C.V. All minerals in Mexico are owned by the federal government and mineral rights are granted by soliciting mining concessions, which by law have priority over surface land use, but in practice the concessions owner must have an agreement with the surface owner. See Figures below for the location of the regional and deposit scale concessions.

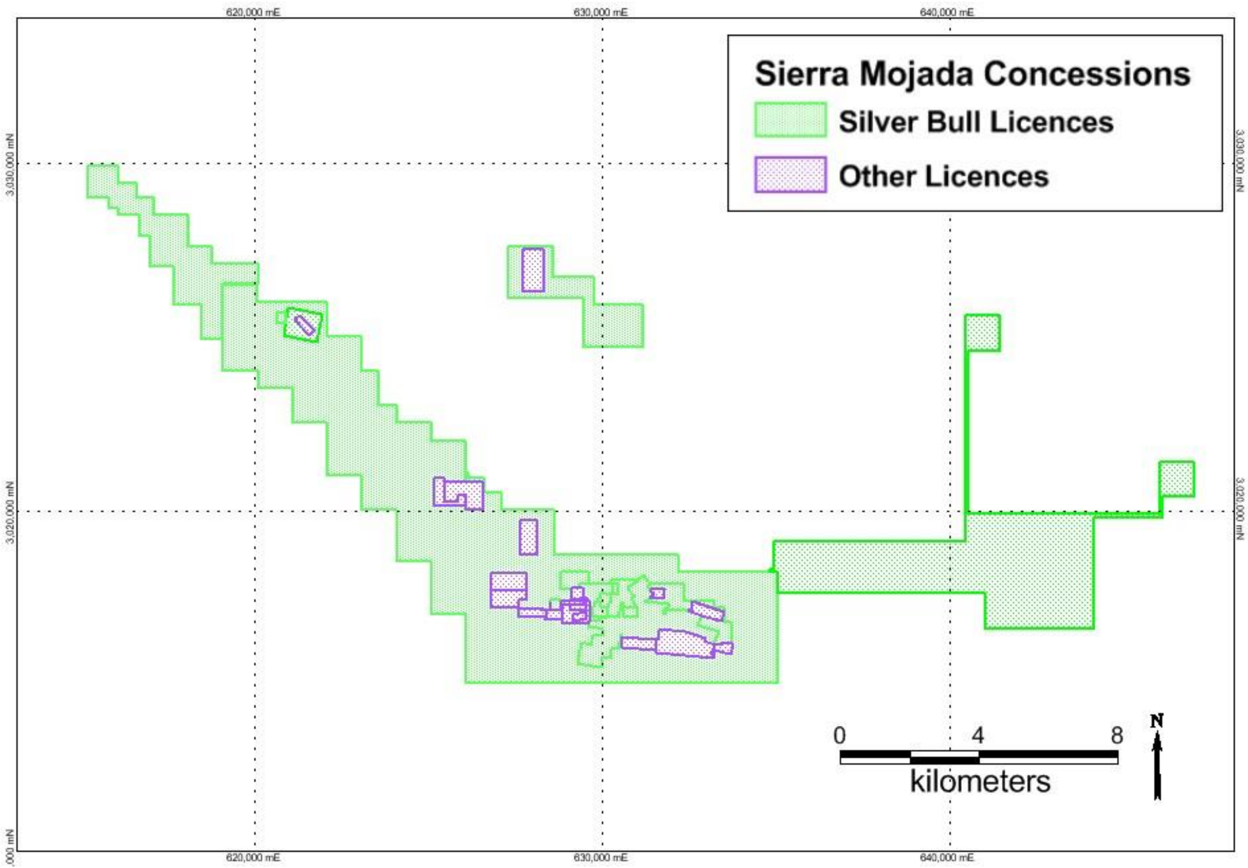


Figure 2. Sierra Mojada Mining Concession Map (provided by Silver Bull)

Figure 3. Mining Concessions in the immediate Sierra Mojada Project Resource Area (Provided by Silver Bull)

The mining concessions held by Silver Bull cover all the mineralized zones with the exception of one licence 10.47ha in size and as shown in Figure 3. Both the mineralization and Whittle Pit used to estimate this resource extend onto this licence, however none of the resource that falls on within this licence is included in this resource estimation.

The only mining operation currently active within the area is a small low tonnage dolomite quarry operated by Peñoles near Esmeralda. The quarry is to the south east of the Silver Bull mining concessions.

The table below shows the mining concessions currently held by Silver Bull. Total area for these licences excluding the “claim filed” concessions is 9,530.4 ha.

The “registered” concessions are 100% owned by a Silver Bull’s wholly owned Mexican subsidiary; Minera Metalin S.A. de C.V. (Minera Metalin). In the concessions with the “purchase option" status, Minera Metalin has a 100% interest, and the "claim filed" concessions will be 100% owned once granted by the Mexican authorities.

Table 4. List of Mining Concessions held by Silver Bull, 2022

	CONCESSION NAME	STATUS	TITLE NUMBER	Expiration Date (dd/mm/yyy)	AREA (Ha)
1	SIERRA MOJADA	Registered	235371	29/11/2043	4,818.49
2	SIERRA MOJADA Fraccion I	Registered	235372	29/11/2043	0.05
3	SIERRA MOJADA Fraccion II	Registered	235373	29/11/2043	0.01
4	SIERRA MOJADA Fraccion III	Registered	235374	29/11/2043	0.33
5	SIERRA MOJADA Fraccion IV	Registered	235375	29/11/2043	1.18
6	ESMERALDA	Registered	212169	21/09/2050	117.50
7	ESMERALDA I	Registered	238678	30/03/2050	95.53
8	ESMERALDA I Fraccion I	Registered	238679	30/03/2050	0.74
9	ESMERALDA I Fraccion II	Registered	238680	30/03/2050	0.03
10	LA BLANCA	Registered	220569	27/08/2053	33.50
11	FORTUNA	Registered	160461	20/08/2024	13.96
12	VULCANO	Registered	236714	24/08/2060	4.60
13	UNIFICACION MINEROS NORTEÑOS	Registered	169343	10/11/2031	336.79
14	LOS RAMONES	Registered	223093	14/10/2054	8.60
15	VOLCAN DOLORES	Registered	224873	15/06/2055	10.49
16	DORMIDOS	Registered	229323	9/04/2057	2,326.10
17	VETA RICA o LA INGLESA	Registered	236837	6/09/2060	10.99
18	OLYMPIA	Registered	195811	20/09/2042	8.97
19	COLA SOLA	Registered	238255	22/08/2061	1,735.00
20	ALOTE Fracc. VI	Claim Filed	239512	13/12/2061	7.54
					9,530.4 Ha

3.3 SURFACE AND PRIVATE PROPERTY RIGHTS

Approximately 70% of the area of interest is covered by surface rights that Silver Bull either has title to, or title is pending. Silver Bull is in discussions to acquire the surfaces rights for the remaining area. Under Mexican Law if mining right are held, these supersede surface rights, and a "Temporary Occupation" of ground can be obtained which guarantees access to ground to commence mining activity. All of Silver Bull's fixed assets, including offices and buildings are located on land owned by Silver Bull.

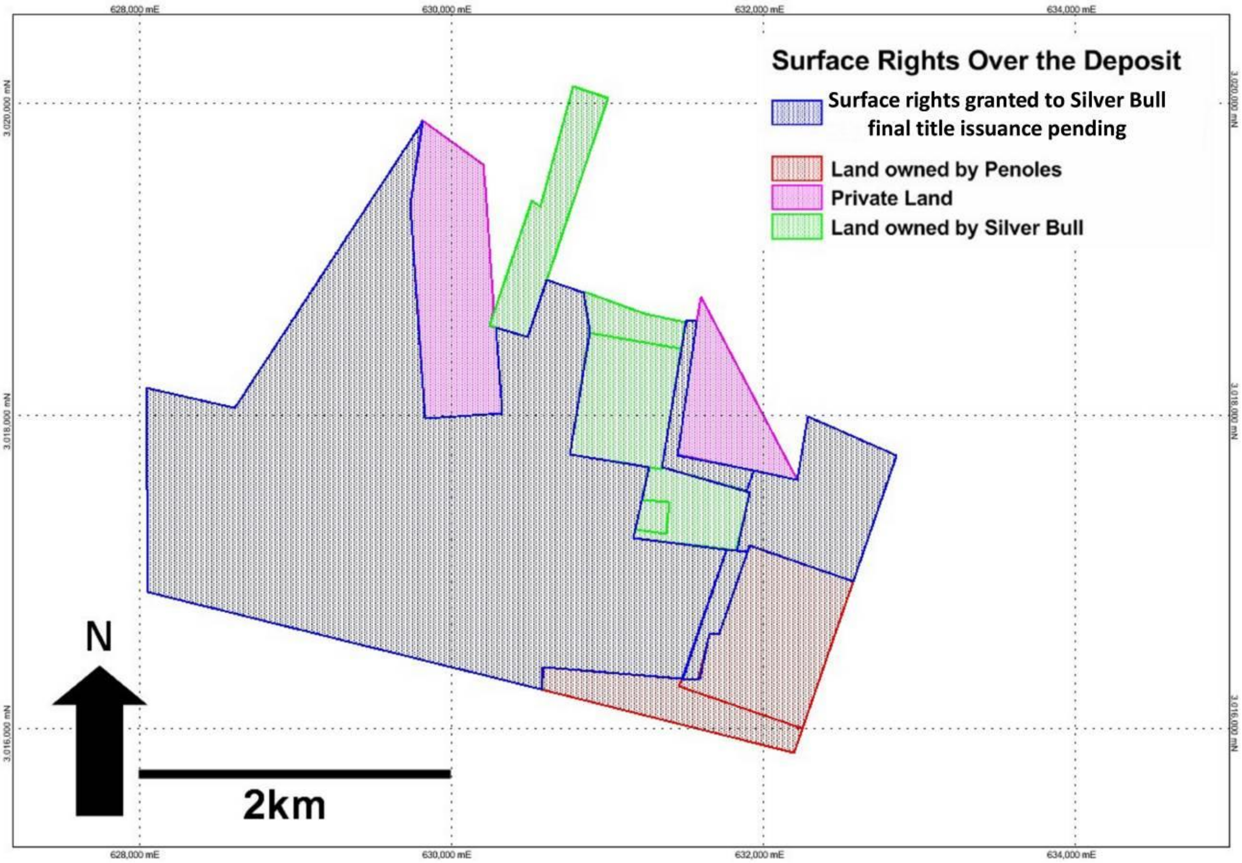


Figure 4. Surface Rights of Sierra Mojada

3.4 ROYALTIES

The mining concession is subject to royalty payments amounting to 2% of the mine's NSR capped at an amount of US$6.875M.

3.5 SECURITY

There is currently an illegal blockade on the project stopping access, In the interests of safety, Silver Bull has shut down all operations until a reasonable settlement has been reached with the group blocking the project.

There have been no drug, cartel or gang related security issues on the Sierra Mojada property. The project lies at the end of the pavement of Carretera Estatal 91 going north from Torreón in the western most part of Coahuila state. There are no local connections to the international border, which is 190 km straight-line distance to the closest point at Big Bend, Texas.

3.6 SIGNIFICANT ISSUES

There is currently an illegal blockade, stopping access to the project. Silver Bull

Surface rights at the eastern end of the deposit are not currently under Silver Bull's control. In order for the project to proceed Silver Bull will have to secure the surface property rights or acquire a Temporary Occupation to these areas.

4 ACCESSIBILTY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The climate is arid and warm. Rainfall is scarce but more prominent in summer, while temperatures are very hot by day and cool at night. The average annual temperature is 14 °C to 16 °C, with rainfall of 400 to 500mm per year.

The highest daily temperatures are generally recorded in May, with maximum temperatures being moderated somewhat by rainfall during June through October. Freezing occurs from time to time during the winter – particularly in January and February - although this occurs less than 20 days out of the year in most years. Occasionally there is snow as can be seen in Figure 5.

Winds are highly variable, but strong southerly winds coming down from the mountains are common. Streams are ephemeral and wells with acceptable water quality are tens to hundreds of meters deep. (Tuun & AFK 2015)

Figure 5. December 2006 - Snow at Sierra Mojada

Figure 6. Typical Landscape of Sierra Mojada Project

The project is located west of Sierra Madre Oriental on the Mexican Plateau. The terrain is generally flat, with prominent relief formations of up to 1,500m along the southern boundary of the project site as shown in the Figure 6.

The majority of the mineral concessions are located in areas at the base of the cliffs where there is moderate relief with numerous stream forming gullies that erode the surface alluvium. The area is high desert covered by scrub vegetation; comparable to the Basin and Range in Nevada. Mining operations are viable throughout the year (Tuun & AFK 2015).

4.1 LOCAL RESOURCES

While most of the area peripheral to the project site is used for cattle ranching, the village of La Esmeralda and the town of Sierra Mojada (about 4km west of the project camp) can provide local workforce and minor supplies. Both communities offer basic services and for the project and are linked by paved road.

Mina Dolomita, the Peñoles dolomite extraction and crushing facility is located at the southeastern boundary of the project. The mine contains waste piles and a 1km long conveyor belt that transports crushed dolomitic carbonate aggregate of specific magnesium carbonate grade to their railroad spur for bi-weekly transportation to the Peñoles Quimica Del Rey plant in Laguna Del Rey.

4.2 INFRASTRUCTURE

A rail line utilized by Peñoles to transport material to its chemical plant extends west to La Esmeralda. The remains of an older railroad section extend further to the west and would be easily accessible to old workings and a loading facility located south of La Mesa Blanca right in the center of the Sierra Mojada Camp (Figure 7). The spur line connects the main national line which connects Escalon and Monclova. Rail traffic to the east is through Frontera to the United States, via Eagle Pass, Texas, southward to Monterrey, or via the seaport at Altamira/Tampico. Service to the west is also available, as well as to the western USA via El Paso, or to points south connected through Torreón.

Although power levels are sufficient for current operations and exploration, any development of the project would potentially require additional power supplies to be sourced. The Comisión Federal de Electricidad (English: Federal Electricity Commission) is the Mexican state-owned electricity monopoly, widely known as CFE, which provides service to the area. High voltage (13,400 v) power is available to the vicinity of the head frames of the San Salvador shaft (500 KVA), the Encantada shaft (300 KVA), and the METALIN shop area (112.5 KVA). (JDS 2013).

The project has 5 registered water wells with Con-Agua, the Mexican Authority which controls water rights and distribution and allows for the company to take up 2.5 million cubic meters of water per annum for mining operations. There is a paved state highway to site, and a gas line 35km from the project at Quimica Del Rey.

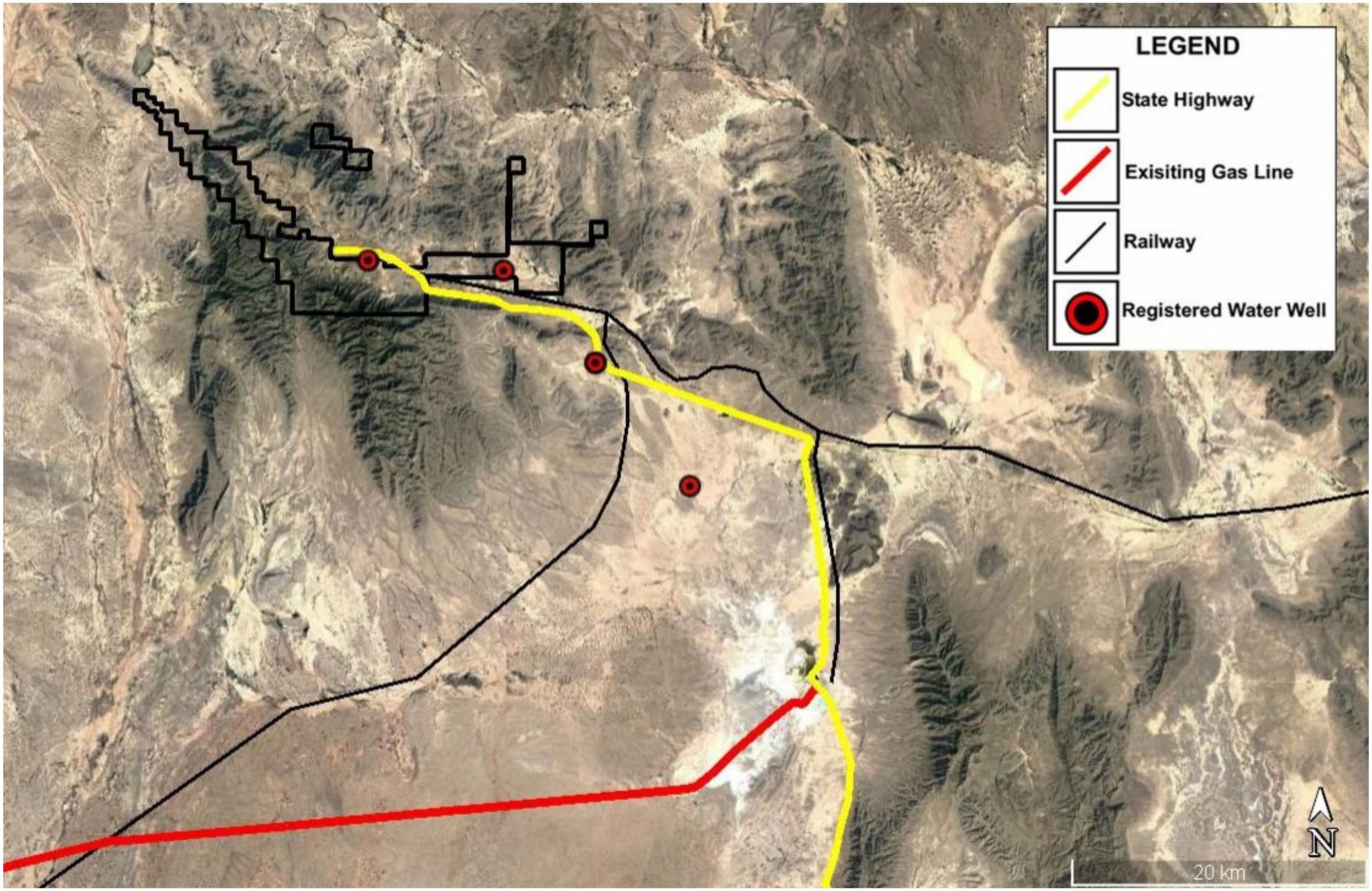


Figure 7. Local Infrastructure at Sierra Mojada (Silver Bull 2022)

5 HISTORY

The following historical summary has been extracted from previous technical reports and information provided by Silver Bull.

Silver and lead were first discovered by a foraging party in 1879, and mining to 1886 consisted of native silver, silver chloride, and lead carbonate ores. After 1886, silver-lead-zinc-copper sulphate ores within limestone and sandstone units were produced. No accurate production history has been found for historical mining during this period.

Figure 8. Historic Mining at Sierra Mojada

Approximately 90 years ago, zinc silicate and zinc carbonate minerals ("Zinc Manto Zone") were discovered underlying the silver-lead mineralized horizon. The Zinc Manto Zone is predominantly zinc dominated, but with subordinate Lead – rich manto and is principally situated in the footwall *rocks of the Sierra Mojada Fault System. Since discovery and up to 1990; zinc, silver, and lead ores were mined from various mines along the strike of the deposit including from the Sierra*

Mojada property. Ores mined from within these areas were hand sorted and the concentrate shipped mostly to smelters in the United States.

Activity during the period of 1956 to 1990 consisted of operations by the Mineros Norteños Cooperativa and operations by individual owners and operators of pre-existing mines. The Mineros Norteños operated the San Salvador, Encantada, Fronteriza, Esmeralda, and Parrena mines, and shipped oxide zinc ore to Zinc National's smelter in Monterrey, while copper and silver ore were shipped to smelters in Mexico and the United States.

The principal mines operated by individuals and lessors were the Veta Rica, Deonea, Juárez, Volcán I and II, Once, San Antonio, San José, San Buena, Monterrey, Vasquez III, Tiro K, El Indio and Poder de Dios. The individual operators were mainly local residents, such as the Farias, Espinoza, and Valdez families.

In the early 1990's, Kennecott Copper Corporation ("Kennecott") had a joint venture agreement involving USMX's Sierra Mojada concessions. Kennecott terminated the joint venture in approximately 1995.

Metalline entered into a Joint Exploration and Development Agreement with USMX in July 1996 involving USMX's Sierra Mojada concessions. In 1998, Metalline purchased the Sierra Mojada and the USMX concessions and the Joint Exploration and Development Agreement was terminated. Metalline also purchased the Esmeralda, Esmeralda I, Unificación Mineros Norteños, Volcán, La Blanca and Fortuna concessions, and conducted exploration for copper and silver mineralization from 1997 through 1999. During this period, exploration consisted of reverse circulation ("RC") drilling which intersected significant zinc mineralization.

In October of 1999, Metalline entered into a joint venture with North Limited of Melbourne, Australia (now Rio Tinto). Exploration by North Limited consisted of underground channel samples in addition to surface RC and diamond drilling. North Limited withdrew from the joint venture in October 2000.

A joint venture agreement was made with Peñoles in November 2001. The agreement allowed Peñoles to acquire 60% of the project by completing a bankable Feasibility Study and making annual payments to Metalline.

During 2002, Peñoles conducted an underground exploration program consisting of driving raises through the oxide Zinc Manto, diamond drilling, continuation of the percussion drilling, and *channel sampling of the oxide zinc workings (stopes and drifts) previously started by Metalline in 1999 and continued by North in 2000 and Metalline during 2001.*

The workings operated by the Norteños Cooperativa in the Zinc Manto allow access to the entire Zinc Manto in the San Salvador, Encantada, and Fronteriza mine operations. The objective of Peñoles`s 2002 program, in addition to evaluating the Zinc Manto mineralization, was to compare the quality and consistency of sampling methods. Peñoles developed diamond drill sites in the San Salvador and Encantada mines. It also developed raises through the vertical extent of the Zinc Manto. Bulk samples of raise muck and channel samples of the raise walls were collected at one meter intervals. Percussion and diamond drill holes were drilled parallel to the raises and also sampled at one meter intervals.

The Peñoles 2003 program continued the underground channel sampling and included percussion and diamond drilling from the surface. In addition to drilling the manto along its extent in the three mines, Peñoles conducted step out drilling to the east and west. Peñoles drilled holes on fences spaced 200 m apart east of the Fronteriza mine toward the Oriental mine, a distance of nearly 2 km. The holes were spaced 50 to 100 m in a north-south direction along the fences. To the west Peñoles followed up the North Limited drilling in the vicinity of the San Antonio mine, 2 km west, which confirmed and extended the mineralization.

In December 2003, the joint venture was terminated by mutual consent between Peñoles and Metalline. Peñoles had other projects it preferred to fund and Metalline was interested in reacquiring a 100% interest in the project. From 2003 to April 2010, Metalline continued sampling numerous underground workings through channel and grab samples as well as completing underground and surface drill holes exploring the zinc-silver mineralization.

Subsequent to the merger with Dome Ventures in April 2010 underground exploration of the Zinc Zone was terminated. Focus was switched to a surface diamond drill program exploring near surface low grade bulk tonnage silver-zinc mineralization or the same style of mineralization above and up-dip from the hemimorphite zinc mineralization. (JDS 2013)

5.1 PAST PRODUCTION

To date Silver Bull has estimated that over 150km of underground workings have been surveyed on the project. This represents approximately 4 million tonnes of development and 10 million short tons of silver, zinc, lead, and copper ores.

From 1897 to about 1905, small quantities of lead ore were smelted on site, and remnants of the smelter are still visible near the core logging facility (see Figure 9). At various times historically, zinc oxides ores were shipped to fertilizer plants in the U.S. and Mexico.

Estimates from 1931 put production along the mineralized trend, of which the Sierra Mojada property is a subset, at approximately 5 million short tons (all of the following will be short tons). That compares with Shaw, who in his 1922 AIME paper estimated that production to 1920 was 3 to 3.5 million tons of lead-silver ores; and 1.5 to 2 million tons of Ag and Cu-Ag ores. Based on fragmented records, anecdotal evidence and stope volumes, perhaps 900,000 tons of additional oxide zinc may have been mined from Red Zinc and White Zinc areas on the Sierra Mojada property. Significant production occurred between 1920 and 1950 from the district with the involvement of major international mining companies operating small daily tonnage mines during that period. (JDS 2013)

Mineros Norteños mined in both the red and white zinc zones until the late 1990's. Much of the material was converted to ZnO through the use of two on-site kilns (Figure 9). Estimates indicate that ~120 tonnes per day from each kiln was produced and shipped to Mexican plants such as Zinc Nacionale. The mining rate from the three active shafts was estimated at ~250t/d at a cutoff of 25% Zn. (pers comm Juan Manuel Lopez Ramirez 2018).

Figure 9. Sierra Mojada Historical Lead Smelting Kilns – September 2010. These were removed in 2013.

Most of the workings are accessed through vertical shafts although there are a few adits and open stopes also present. For safety reasons, shafts have been barricaded and locations surveyed. The head frames at San Salvador, Fronteriza and Centenario have been maintained and are used regularly.

Figure 10. Known Historic Mine Shafts

5.2 HISTORICAL RESOURCE ESTIMATES

While the area has hosted prolonged but small scale mining activity for over 100 years there is no existing reliable historical resource estimate for the various manto deposits.

Prior S-K 1300 compliant mineral resources have been prepared for the property; namely a mineral resource prepared by PAH in January 2010 covering the Shallow Silver Zone and the Zinc Manto Zone and a mineral resource estimate prepared by Simpson and Nilsson in April 2011 covering the Shallow Silver Zone only (Table 5). These estimates are documented in technical reports listed in the Reference section of this report and available on SEDAR. The estimates are reliable and relevant to the property. The Zinc Manto has been partially re-estimated by SRK, as such the PAH estimate for the Zinc Manto is no longer considered current and should not be relied upon. (JDS 2013)

Table 5. Summary of Previous Resource Estimates

Author	Zone	Class	Cut- off	Tonnes	Ag (g/t)	Zn (%)
PAH – 2010	Shallow Ag	Inferred	60 (g/t Ag)	28,422,000	149	2.67
PAH – 2010	Zn Manto	Inferred	6% Zn	20,405,000	23	10.59
Nilsson – 2011	Shallow Ag	Indicated	20 (g/t Ag)	9,235,000	56	ND
		Inferred	20 (g/t Ag)	15,258,000	50	ND
SRK – 2011	Shallow Ag	Indicated	15 (g/t Ag)	28,564,000	50	0.95
		Inferred	15 (g/t Ag)	9,248,000	44	0.42
SRK – 2012	Shallow Ag	Measured	15 (g/t Ag)	3,688,000	57	4.06
		Indicated	15 (g/t Ag)	45,175,000	45	0.67
		Inferred	15 (g/t Ag)	8,162,000	40	0.6
JDS – 2013	Shallow Ag	Indicated	25 (g/t Ag)	72,900,000	69.5	1.5
JDS – 2013 (PEA)	Shallow Ag	Indicated	25 (g/t Ag)	71,100,000	71.1	1.34
Tuun & AFK – 2015	Shallow Ag & Zinc	Measured	$13.50 NSR	36,500,000	48.5	4.6
		Indicated		22,200,000	51.6	2
		Inferred		500,000	44.7	4.7

The resources stated in the reports described in Table 5 are superseded by this report.

6 GEOLOGICAL SETTING, MINERALIZATION AND DEPOSIT

The Chapters 6.1 through 6.3 have information modified from Stockhausen (2012), King (2012), Gryger (2010), Hodder (2010), Thorson (2010), and McKee (1990) with the original references cited within; as well as internal investigations conducted by Silver Bull Resources. Chapters 6.4 through 6.5 have information taken or modified from Stockhausen (2012), Megaw (1988, 1996, 2007), SRK (2012) and PAH (2010), Underwood (2013 & 2014) and Israel (2013 & 2014); as well as internal investigations conducted by Silver Bull Resources.

6.1 REGIONAL GEOLOGY

The Sierra Mojada Project is located in the Eastern Zone, one of the three principal geologic zones of Mexico defined by age, tectonics, and lithologies. The other two zones are the Western Zone and the Trans Mexican Volcanic belt. The Eastern Zone represents a passive plate margin relative to the Western Zone which documents a convergent plate margin, and is composed of three major lithostratigraphic terrains; the Coahuila, Maya, and Sierra Madre. The boundary between the Eastern and Western terrains is in Chihuahua just west of the Sierra Mojada project area. Within the Eastern Zone, the project is located in the Coahuila terrain.

6.1.1 Coahuila Terrain

Basement rocks in the portion of the Coahuila terrain containing the Sierra Mojada district are Late Paleozoic in age. The Coahuila basement block is composed of moderately metamorphosed flysch and unmetamorphosed andesitic volcanic rocks, cut by granite and granodiorite intrusive rocks of Permian to Triassic age The Coahuila block is bounded to the northeast by the San Marcos fault system and to the south by the Torreón-Monterrey lineament, parallel to the Sonora-Mojave megashear (Figure 11).

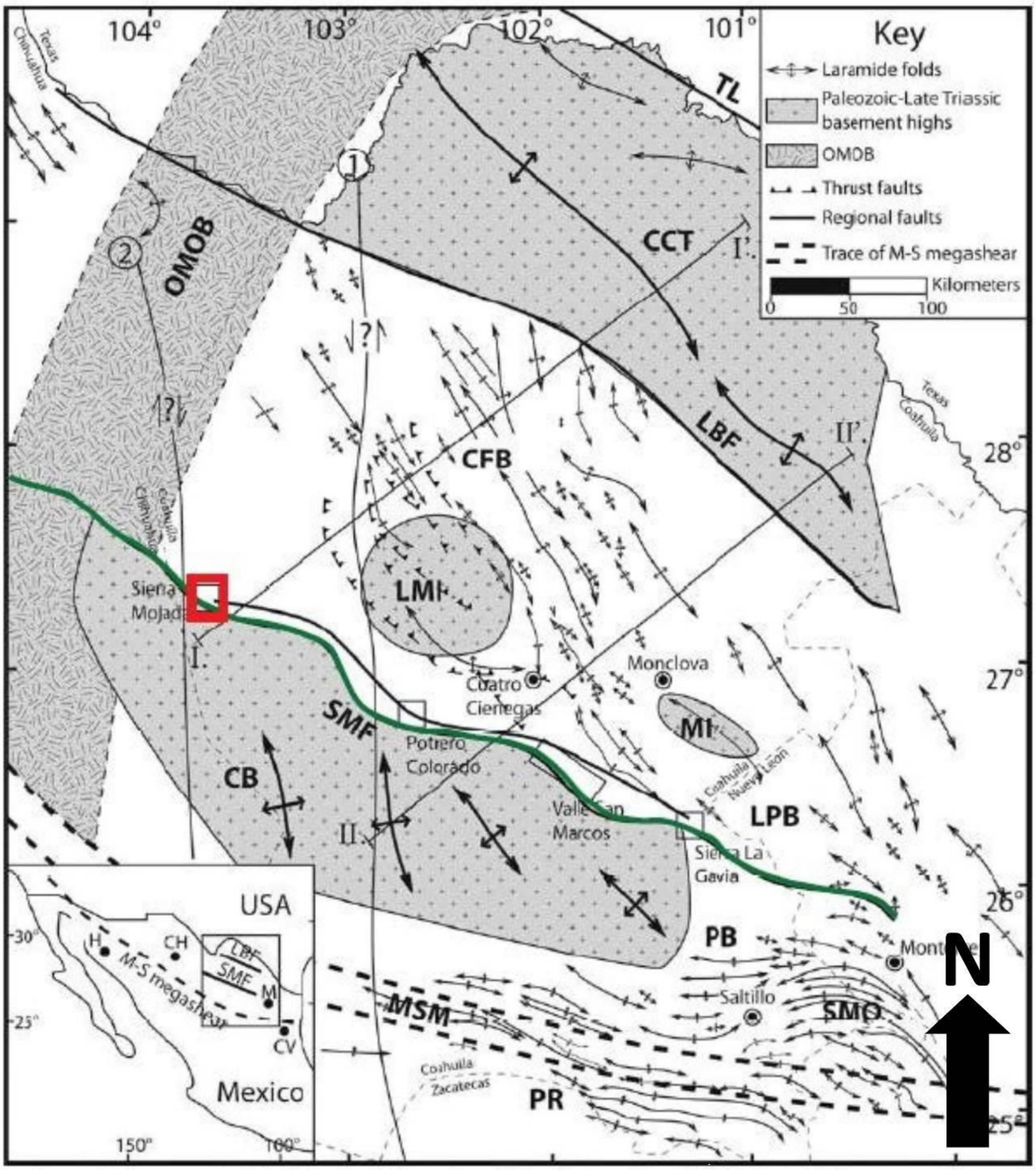


Figure 11. Major Tectonic Elements of Northeastern Mexico

Note: The Sierra Mojada project area is outlined in red, the San Marcos Fault Zone (SMF) in green. Major tectonic elements of northeastern Mexico show the regional sinistral shear couple between the San Marcos (SMF) and the Rio Bravo-La Babia (LBF) transcurrent fault zones; major components of the Mohave-Sonora megashear MSM). Also shown is the Coahuila block (CB), the La Mula Island (LMI), the Coahuila-Texas craton (CCT) and the Ouachita-Marathon Orogenic Belt (OMOB) which marks the boundary between the Western and Eastern litho-tectonic provinces in Mexico (Gryger 2010).

The basement rocks of the Coahuila block were cut by Permian to Triassic aged granitic and granodioritic intrusions. These intrusive units represent the roots of an island arc system produced south of the Ouachita-Marathon orogenic belt. Permian-Triassic intrusive rocks of similar composition to those found within the Coahuila block occur within the Sabinas basin along the La Mula and Monclava uplifts. The intrusive units likely acted as basement high within the basin during the Jurassic and Cretaceous. The Coahuila block was the source of siliciclastic detritus deposited along the Jurassic and Early Cretaceous in the Sabinas Basin following regional deformation along the San Marcos fault system (Figure 12).

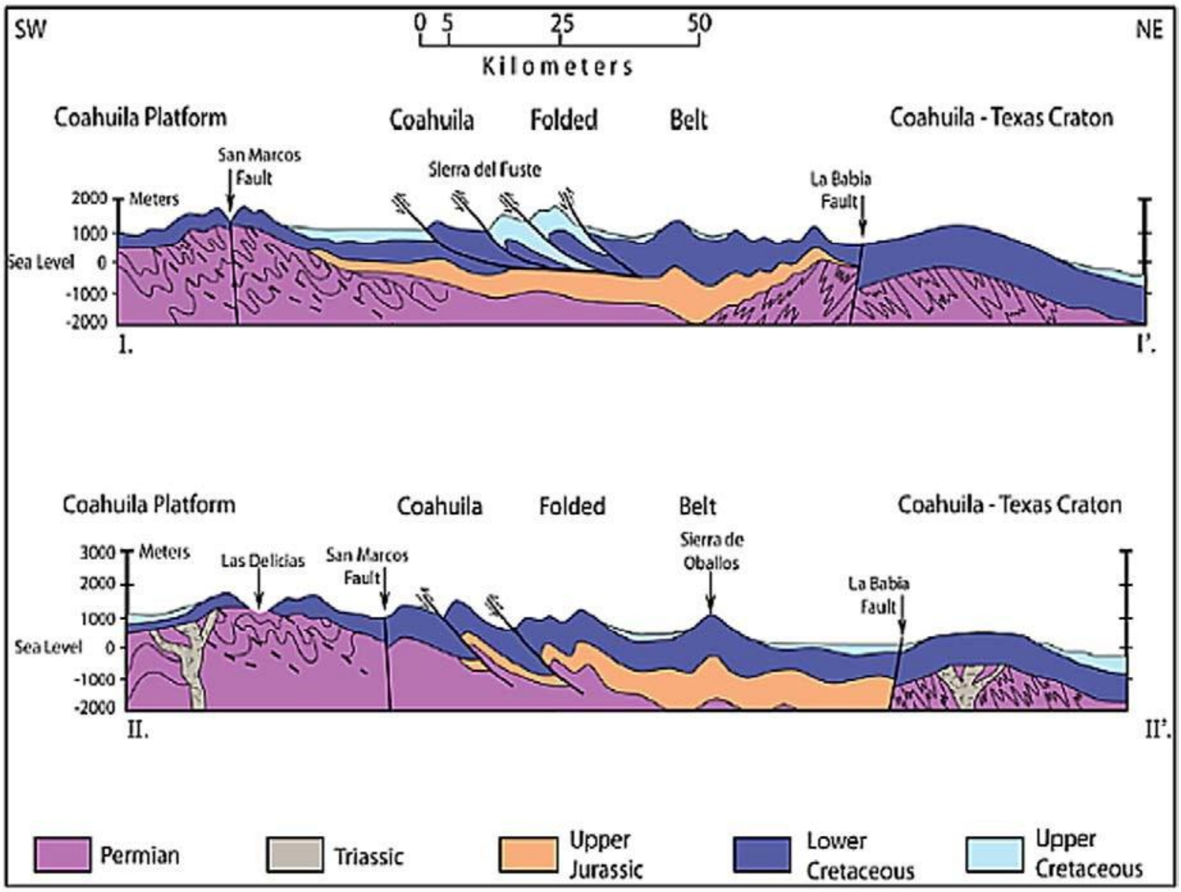


Figure 12. Cross Sections through the Sabina Basin

Note: Figure is showing Laramide folding and the position of the basin bounding faults; the San Marcos and La Babia systems (Gryger, 2010).

6.1.2 Sabinas Basin

The Sabinas basin formed during the Jurassic opening of the Gulf of Mexico and contains over 6,000 m of Jurassic to Cretaceous continental red-beds, evaporites, and carbonate rocks. The basin formed between the Coahuila block to the south and the Coahuila-Texas craton to the northeast. A post-rifting marine transgression resulted in deposition of extensive Middle Jurassic to Late Cretaceous carbonate rocks throughout the region. Although the orientations of sedimentary basins in northeastern Mexico were structurally controlled, basin-bounding structures were likely inactive during the time of carbonate deposition.

The Sabinas Basin is prolific in its production and potential of hydrocarbon, primarily natural gas, coal, and coal-bed methane. It is also the source of metal-bearing brines linked to lead-zinc, coppersilver, barite, strontium, and fluorine mineralization in SEDEX related mineral deposits; in skarn related mineral deposits and Laramide age intrusive rocks; and in CRD type replacement deposits. The potential for sulfur and potash remains speculative.

6.1.3 Regional Structure

The Coahuila region contains three major northwest-trending structures as presented in Figures 11 and 12:

- Mojave-Sonora megashear
- Torreón-Monterrey lineament
- San Marcos-Rio Bravo (Babia) shear couple

The Mojave-Sonora megashear was proposed by Silver and Anderson (1974) to explain an 800 km sinistral offset between basement rocks in northern Mexico and southern California. This shear zone is interpreted to have formed from a series of intracontinental transform faults that were active during the Late Triassic to Middle Jurassic.

The Torreón-Monterrey lineament is a west-northwest-trending structure that forms the southern boundary of the Coahuila basement block and is the southeastern extension of the Mojave-Sonora megashear. It displays regional scale left-lateral displacement of up to 400 km Movement along the Torreón-Monterrey lineament appears to have occurred primarily between the Middle Triassic and Late Jurassic.

The north-northwest striking San Marcos-Rio Bravo sinistral shear couple was active during the Jurassic, Early Cretaceous, and Tertiary and has a surface trace length of at least 1000km according to Flotte, et al 2008. This shear couple is responsible for a distinct system of conjugate normal faults in the region which strike north-south to north 70 degrees east.

The San Marcos fault component of this system exhibits a minimum of four recorded movements and begins with an early normal movement with later left-lateral strike-slip reverse movements beginning in the early Tertiary. Initial movement along the San Marcos fault has been attributed to deformation along the Torreón-Monterrey lineament and the Mojave-Sonora megashear together with subsequent isostatic adjustment due to crustal thickening during the Jurassic. The thrust component of the San Marcos fault is locally referred to as the Sierra Mojada thrust and the corresponding thrust movement on the Rio Bravo fault to the north is referred to as the Babia thrust zone. The San Marcos fault is northeast dipping and is believed to cut the entire crust while documented off sets are about 100m in the Sierra Mojada district, but variable region wide.

Movement along the San Marcos fault system resulted in the deposition of Cretaceous age continental redbed and carbonate units north of the fault. The redbed units include the San Marcos Formation and the Upper Conglomerate units. The carbonate units include the La Pena and Aurora Formation, all in the Sierra Mojada district. Reactivation of the San Marcos fault occurred during the Early Pliocene and resulted in a series of secondary faults with east-west to north-south orientations in western Coahuila and southeastern Chihuahua.

The deep seated San Marcos fault zone has also been the structural guide to Laramide – Pleistocene age igneous activity along its length including the Carmago volcanic field 100 km to the northwest of the Sierra Mojada district, the Quatro Cienegas thermal area 150 km to the southeast of the Sierra Mojada, as well as the igneous intrusions believed to be the source of the mineralization in the Sierra Mojada district.

The Seveir-Laramide orogeny marks a period of major mountain building along a northwest trending front throughout the North American continent. The timing of the Laramide orogeny varies across North America, but it is broadly attributed to the late Cretaceous to early Paleocene. In northeastern Mexico, the Laramide orogeny resulted in the reactivations of Early Mesozoic rift-related basement faults. Cretaceous strata situated on the Coahuila block experienced low intensity deformation forming a broad, southeast-plunging anticlinal dome. Laramide deformation also formed the Sierra Madre Oriental fold and thrust belt to the south of the Coahuila block and the Coahuila fold belt to the north of the Coahuila block in the Sabinas Basin

6.2 PROPERTY GEOLOGY

6.2.1 Sierra Mojada Stratigraphy

The rocks at Sierra Mojada record an Early Cretaceous transgression beginning with subaerial redbeds and near shore beach sandstones followed by carbonate rocks deposited in shoal, lagoonal, shelf, and platform environments. At Sierra Mojada, Lower Cretaceous rocks are overlain by younger redbed and breccia units as shown by Gryger in Figure 13, which separates the regional stratigraphy into the allochthonous and autochthonous blocks.

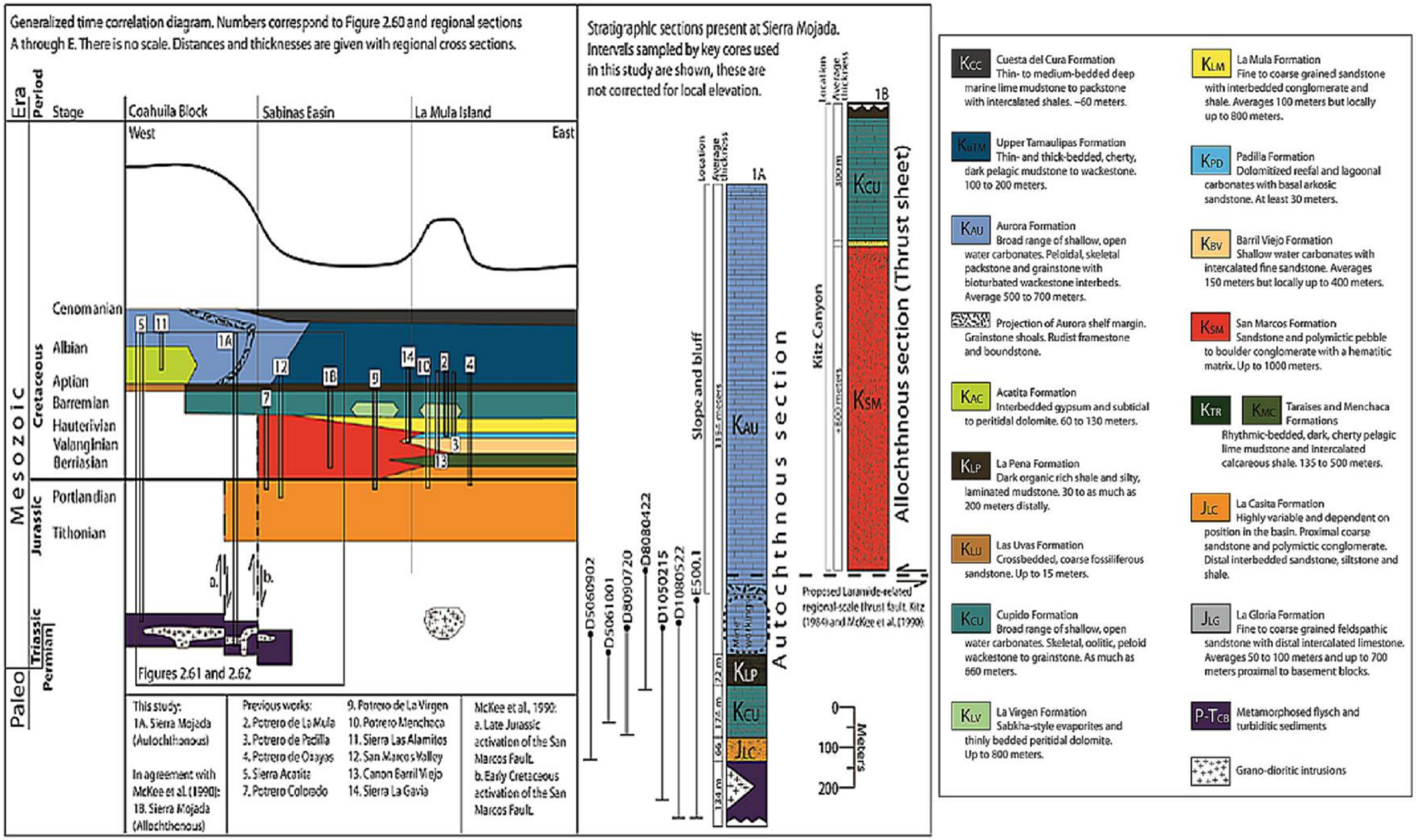


Figure 13. Time Correlation Diagram of the Sabinas Basin Stratigraphy

Stockhausen (2012) refined the local stratigraphy as employed on the Sierra Mojada Project in Figure 14 and renamed a distinct and local portion of what was historically called the Cretaceous San Marcos formation, as the Tertiary Upper Conglomerate.

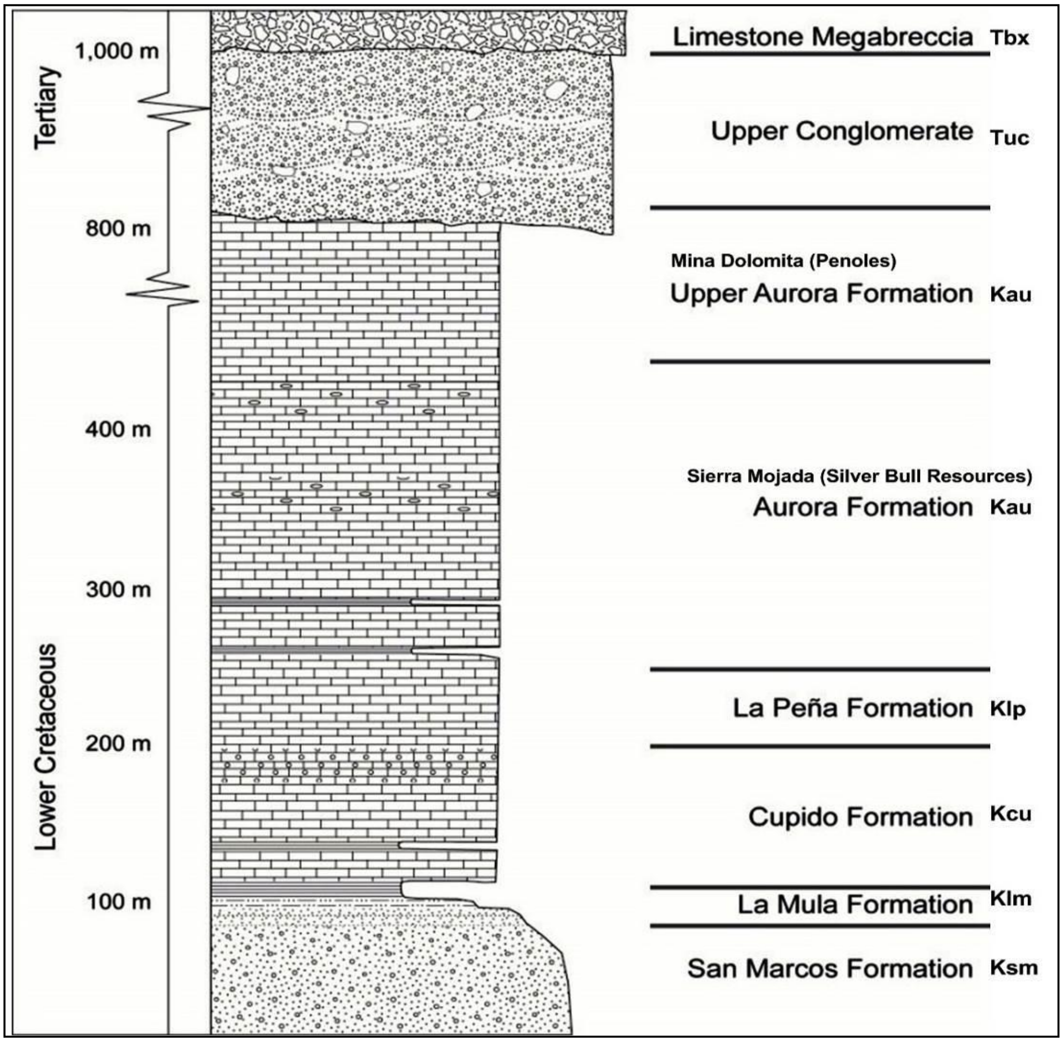


Figure 14. Stratigraphy on the Sierra Mojada Project by Stockhausen (2012)

Note: The stratigraphy as employed on the Sierra Mojada project by Stockhausen (2012) who conducted an independent investigation of the Upper Conglomerate unit. As noted in text, the Upper Aurora formation is often known as the Georgetown formation of the gulf coast, but the name has lost its usage in Mexico. The Upper Aurora is a diagenetic dolomite unit mined by Peñoles at Sierra Mojada for its magnesium content, and is locally referred to as the Peñoles dolomite and Mina Dolomita.

6.2.2 Allochthonous Stratigraphy

6.2.2.1 San Marcos Formation

The San Marcos Formation has been described throughout Coahuila and has been the focus of several investigations in the Sierra Mojada district as noted by Stockhausen (2012). Regionally within the Coahuila terrain, the San Marcos Formation is up to 1,000m thick with the thickest sections present north of the San Marcos fault which indicates that this fault was active during deposition of the unit. In the Sierra Mojada district, the San Marcos Formation has a thickness of approximately 70m in drill core. The unit consists of Lower Cretaceous alluvial strata composed of conglomerates containing andesitic volcanic pebbles within a siliceous matrix and several meter thick siltstone units (Figure 14).

6.2.2.2 La Mula Formation

The La Mula Formation occurs throughout northeastern Mexico and forms an unconformable surface above the San Marcos Formation. The La Mula is believed to represent a change from an alluvial depositional environment to a near shore beach environment. In the Sierra Mojada district the La Mula Formation is known as the Sierra Mojada Sandstone (Figure 14). It crops out within an overturned sequence south of the town of Sierra Mojada and consists of fine- to medium-grained, subrounded to rounded, well sorted quartz sandstone up to 25m in thickness. The siliciclastic rocks of the La Mula and San Marcos Formations have been historically targeted for sediment-hosted stratiform copper deposits by several companies.

6.2.2.3 Cupido Formation

The Cupido Formation is the lowest stratigraphic carbonate unit of Mesozoic age throughout much of northeastern Mexico. In the Sierra Mojada district the contact between the La Mula Formation and the overlying Cupido Formation is gradational and is approximately 90m thick. The basal portion of the unit contains medium grey colored skeletal grainstone and wackestone with local mudstones that display a moderate degree of bioturbation. These strata are thought to have been deposited in restricted lagoonal and peritidal environments. The upper portion of the Cupido Formation at Sierra Mojada contains brown-grey packstones and grainstones with some oolitic lenses suggestive of deposition in a high energy shoal depositional environment.

Note: Sabinas Basin stratigraphy with descriptions, separated into allochthonous and autochthonous blocks. Not all units are documented at Sierra Mojada (Gryger 2010).

6.2.2.4 Upper Conglomerate

The Tertiary age Upper Conglomerate unit is arguably the most controversial lithology in the district (Figure 14). Various companies and authors have referred to the unit as the Menchaca formation, Upper San Marcos formation, ferruginous breccia, limonite breccia, residual breccia, Ralph and “X”. On the project, the Upper Conglomerate is defined and logged separately from the generic ferruginous breccia (Fbx) which is described as an alteration facies under Figure 14. The unit is significant in that it is a major host rock to high grade silver-copper mineralization in the Sierra Mojada district, **(**Figure 15).

Figure 15. Ferruginous Breccia

Note: Ferruginous breccia above limestone and below San Marcos formation conglomerate (purple) from the Norteña area near the Encantada shaft (Thorson 2010).

Stockhausen (2012) and Thorson (2010) refer to the Upper Conglomerate as an unconformable surface and interpret the unit to be a local scale, surface karst feature. Observations underground though, show a consistent association with low angle faulting.

An alternative and most likely interpretation is that the Upper Conglomerate is in fact the San Marcos Formation that has been thrust over the top of the younger limestone sequence by low-angle thrust faults and has locally been mixed with younger sediments in stream beds and outwash plains.

6.2.2.5 Limestone Megabreccia

The Limestone Megabreccia is the youngest stratigraphic unit observed at Sierra Mojada (Figure 14). The unit is a clast-supported breccia composed of variably weathered, angular to subrounded, pebble to boulder sized clasts of Aurora Formation and Upper Aurora Formation limestone in a matrix of calcite with lesser quartz. The Limestone Megabreccia differs from the Cretaceous carbonate units in displaying highly variable orientations of the limestone clasts and abundant joints, but does not appear to be cut by faults. Unlike Quaternary alluvium in the district, the Limestone Megabreccia contains only limestone blocks, lacks well-rounded clasts, contains minor to no shale to silt matrix material, and has a much higher resistance to weathering. It is separated from the Upper Conglomerate by a detachment or low angle fault.

6.2.3 Autocthonous Stratigraphy

6.2.3.1 Coahuila Basement Complex

Within the Coahuila basement complex at Sierra Mojada, the project lies at the juxtaposition of three important litho-tectonic elements; the Permian-Triassic Coahuila basement block, the Cretaceous Sabinas Basin, and the San Marcos-Rio Bravo Triassic-Tertiary transcurrent fault zone and associated conjugate structures. The Rio Bravo fault zone is also known as the La Babia fault zone.

6.2.3.2 La Casita Formation

The La Casita formation is not known in the Sierra Mojada district, but is well-known in the regional stratigraphy.

6.2.3.3 Cupido Formation

The Cupido formation in the autochthonous block is the same lagoonal-peritidal facies as in the allochthonous block

6.2.3.4 La Peña Formation

The La Peña Formation overlies the Cupido Formation throughout northern Mexico. In the Sierra Mojada district the formation consists of a series of coarsening-upward cyclical limestone units. The base of each cycle is typically a dark grey to black colored carbonaceous mudstone. Tops of individual cycles generally are brownish grey packstone or wackstone with coarser-grained strata and often contain large fossils. The upper portion of the La Peña Formation is less fossiliferous and consists of thick beds of light grey packstone and wackestone. The total thickness of the La Peña Formation at Sierra Mojada is approximately 60m. The cyclical nature and relative abundance of argillaceous material in the La Peña Formation carbonate rocks at Sierra Mojada suggest that they were deposited in a lagoonal environment.

6.2.3.5 Aurora Formation

The overlying Aurora Formation is the principal host rock for the sulfide and oxide mineral deposits at Sierra Mojada (Figure 14). The Aurora Formation crops out along the cliffs at the southern boundary of the Sierra Mojada valley. Structural deformation of the Aurora Formation at Sierra Mojada has made it difficult to determine the total thickness of the unit and it is thermally metamorphosed in thin section throughout the district. However geological mapping and drill sections suggest it has a thickness of approximately 500m. The basal portion of the

Aurora Formation contains mostly grey to brown micritic mudstone and wackestone with some fine-grained fossil debris. The basal portion of the formation grades upwards to distinctly more fossiliferous, medium grey wackestone and grainstone with discontinuous intervals containing lobate chert nodules and minor mudstone. The Aurora Formation sequence is typical of open marine platform to shallow slope environments**.**

The Aurora Formation at Sierra Mojada is overlain by the Upper Aurora Formation. This unit contains fossiliferous grainstone and wackestone similar to much of the limestone in the Aurora Formation. The unit has previously been termed the Georgetown Formation in some reports (Hodder, 2001, internal report.). However, the Georgetown Formation is the stratigraphic equivalent to the Upper Aurora Formation along the Texas Gulf coast and this nomenclature is general not utilized in northeastern Mexico The Upper Aurora is regionally a diagenetic dolomite and is locally referred to as the Peñoles Dolomite due to the local open pit magnesia mine operated by Peñoles known as Mina Dolomita. There is no metallic mineralization know to be associated with this unit besides the magnesium.

6.3 SIERRA MOJADA STRUCTURE

The Sierra Mojada district is dominated by three sets of structures, each with a unique influence on the geology and mineralization of the project. These structures are related to the San Marcos-La Babia shear couple regionally and later basin-and-range extension (Figure 16) and locally present a structurally "dense" architecture which has had a profound influence in the amount and styles of mineralization present.

6.3.1 San Marcos Fault

The San Marcos fault zone is the oldest fault present in the district. The San Marcos, regionally, records at least four separate movements from the Jurassic to the early Tertiary. From Jurassic through early Cretaceous time, the San Marcos recorded three separate periods of normal movement, down-dip and stepping basin-ward towards the north. In the Sierra Mojada district, the San Marcos faults strike N78 West and dips at 65 degrees to the North. The northern most, and most recent step records a 100m down-drop.

During the Laramide Orogeny the San Marcos reactivated as a reverse fault, with left lateral-oblique slip movement from the northeast. Locally, this reverse movement is referred to as the Sierra Mojada thrust fault, due to the prominent exposures underground. Some observers have suggested that the low-angle structures represent a detachment surface. In the Sierra Mojada district, the reverse movement surface varies from 0 to 60 degrees to the north and "roles" in several locations, along with back thrusts dipping to the south. Offsets are from 6 to 45 meters.

The early normal faults related to the San Marcos system are thus over-ridden by the later reverse movements. This period of reverse movement was noted on the La Babia fault zone on the north side of the Sabinas Basin.

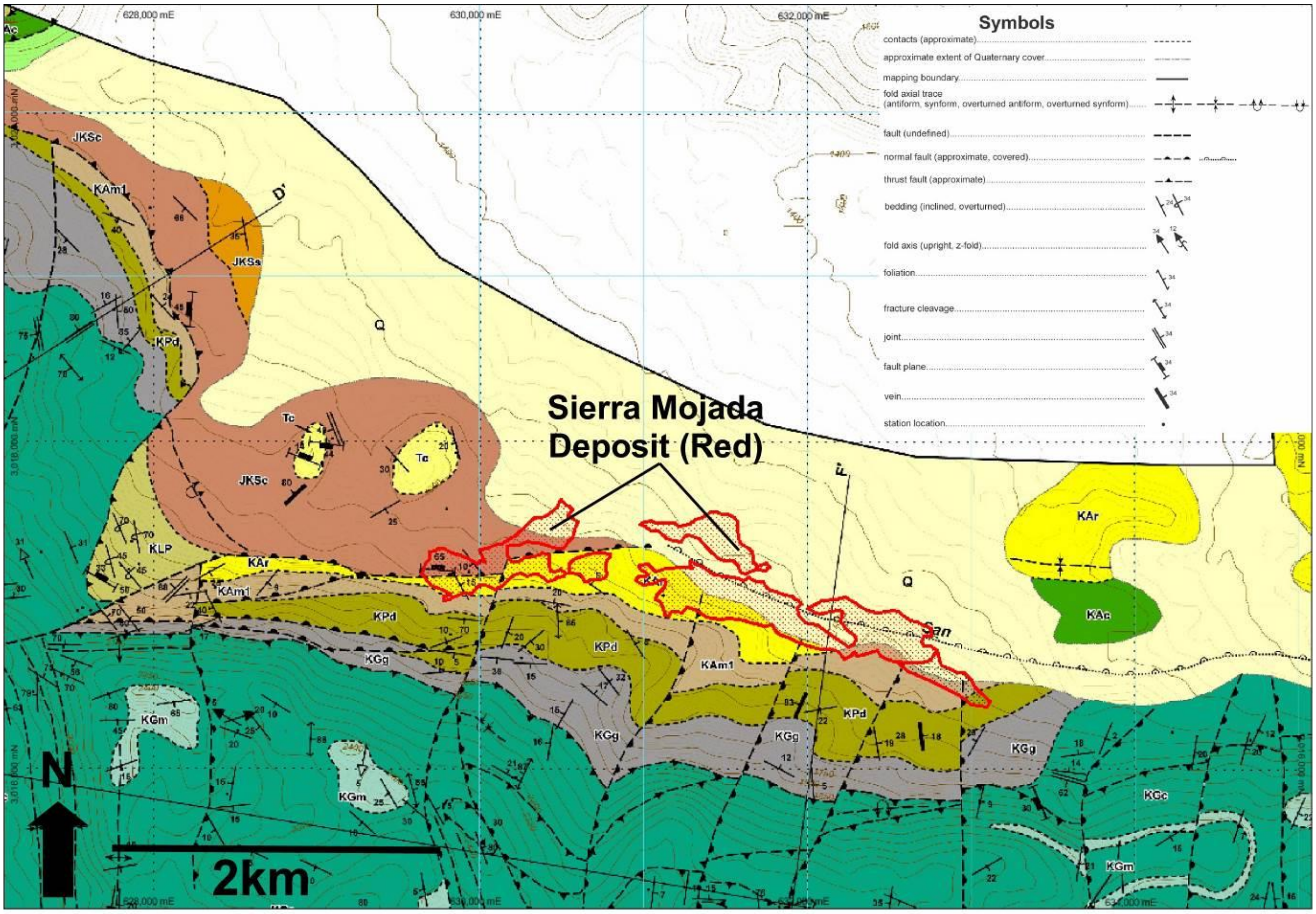
6.3.2 North East Structures

Cutting the San Marcos structures are a series of northeast trending structures exemplified by the Callavasas, Parreña, and Veta Rica faults, which are believed to be conjugate structures related to the San Marcos-La Babia shear couple. Throughout northern Mexico, northeast structures are associated with mineralization from depth and at Sierra Mojada these northeast structures are believed to be the original sources of hydrothermal mineralization in the district. The northeast structures a typically normal and high angle, dipping 90 to 65 degrees and down-dropped to the southeast. Off sets are not well documented due to later structural off sets and mineralization.

6.3.3 North-South Structures

The youngest structures in the district are normal high angle structures varying from 0 to 20 degrees strike, 90 to 55 degrees dip and are down-dropped to the east and west, forming a series of horst and graben structures across the district. These structures are believed to be related to basin-and-range movements and typically show offsets of 5 to 25 meters. The North-South structures are important at Sierra Mojada as they are a major inheritor of remobilized supergene and oxide mineralization and many of the historic workings trace these structures.

Figures 16 to 22 include a new and revised geologic map of the district (after Israel 2013 & 2014) with representative cross sections and long section through each of the three main portions of the mineralization.



TERTIARY

Q	unconsolidated colluvium, gravel, caliche

Upper Conglomerate

Tc	pebble to block (up to 10's of metres) sized fragments of Cretaceous carbonate stratigraphy; some mixing of lower and upper conglomerate at contact

CRETACEOUS

Georgetown Formation

KGm	fine to very, fine-grained micritic limestone; grey to light grey weathered, grey to beige fresh surface; occasional bioclastic layer composed of bivalve and gastropod shells; locally bioturbated; thinly bedded and laminated; locally developed dolomitic layers
KGc	fine to medium-grained, micrite to packstone limestone with chert nodules and horizons; light to dark grey weathered and fresh surface; chert varies from white to pinkish weathered and light grey to white fresh surface; amount of chert is variable from very abundant to locally almost absent; chert horizons up to 10 cm thick and laterally continuous for up to several metres; locally developed dolomitic layers; locally developed vugs ranging from less than 1cm up to 5 cm filled with coarse white quartz crystals
KGg	light to dark grey to brownish weathered and fresh, grainstone, packstone and boundstone; bedded with beds ranging from 5 cm up to 30 cm; locally dolomitic

Penoles dolomite

KPd	dark grey to brown weathered and fresh, bedded to massive dolomite; medium to coarse-grained with vugs of variable size; distinctive 1-2 metre thick vuggy, re-crystallized bioclastic layers

Aurora Formation

KAm1	light to dark grey weathered, grey to beige fresh surface, very fine-grained to fine-grained micritic limestone; massive to thinly bedded with wispy laminations; occasional bioclastic layer composed mainly of bivalve fragments; locally developed dolomitic layers
KAr	light to dark grey weathered and fresh fossiliferous limestone composed almost entirely of Rudist bivalves; outcrops have a hummocky appearance; bedding is rare or absent in most cases; bivalves range in size from less than 1cm to 30 cm
KAc	light to dark grey weathered and fresh surface, fine to medium-grained micritic to packstone limestone with chert nodules and horizons; chert is generally orange weathered and dark grey to brown/grey fresh; nodules range in size from less than 1cm up to 20 cm in length; horizons of chert can be up to 15 cm thick and laterally continous for several metres
KAm2	light to dark grey weathered, grey to beige fresh surface, very fine-grained to fine-grained micritic limestone; massive to thinly bedded with wispy laminations; occasional bioclastic layer composed mainly of bivalve fragments; locally developed dolomitic layers

La Pena Formation

KLP	dark to light grey shale interbedded with light grey calcareous mudstone; abundant bivalve and ammonite fossils; distinctive beige weathering

JURASSIC TO CRETACEOUS

San Marcos Formation

JKSc	rounded to sub-angular, pebble to boulder sized clasts of andesite, monzonite, syenite, feldspar porphyry and amphibolite within a red to maroon, fine to medium-grained arkosic matrix; ranges from clast to matrix supported
JKSs	orange to beige to maroon weathered, medium to coarse-grained arkosic sandstone and grey weathered coarse-grained lithic sandstone; cross-bedded to cross-laminated; pebble sized volcanic and plutonic rocks common;

Figure 16. Local Geology (Israel 2013-2014)

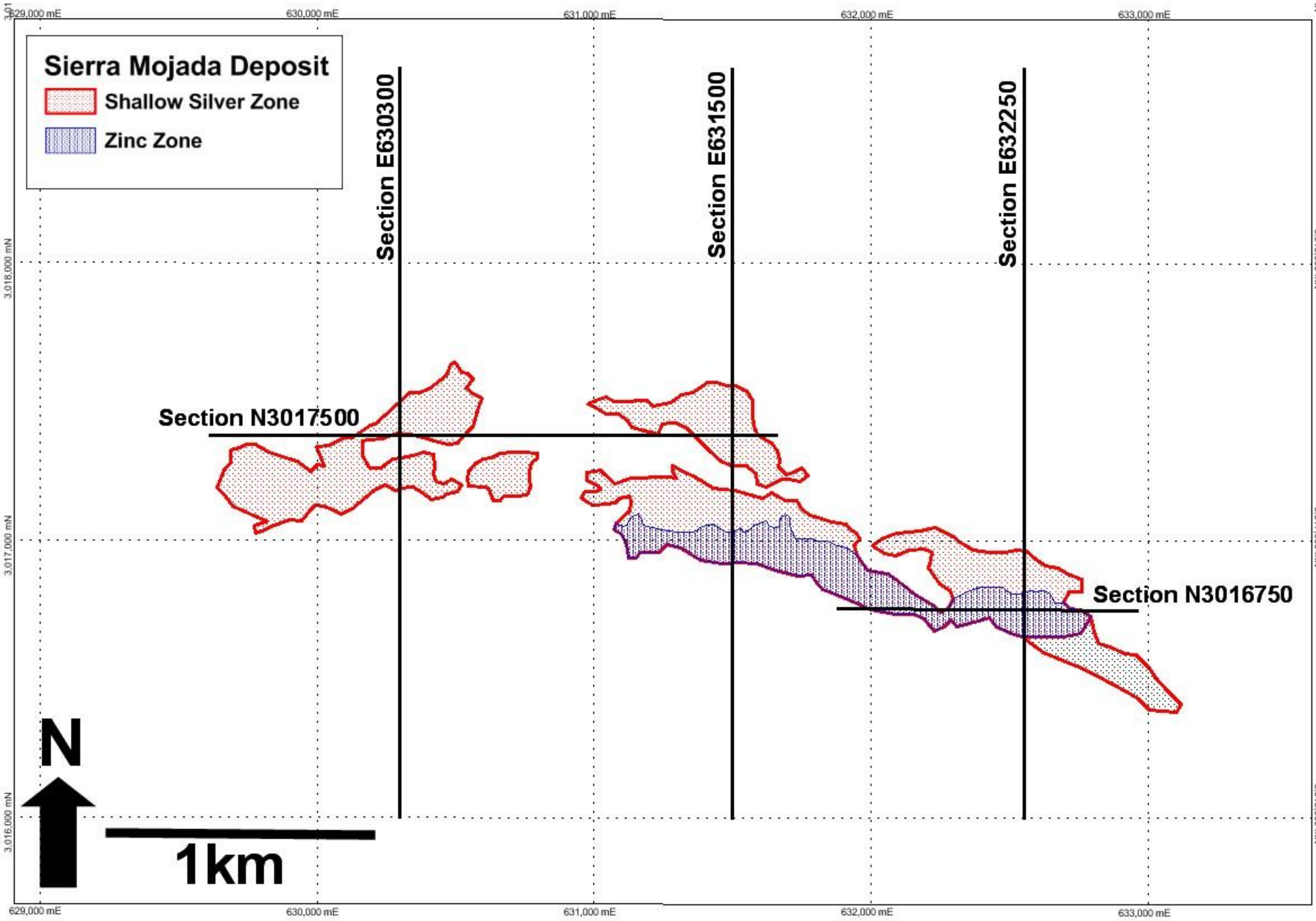


Figure 17. Sierra Mojada Deposit with locations of the cross section for the next 5 figures

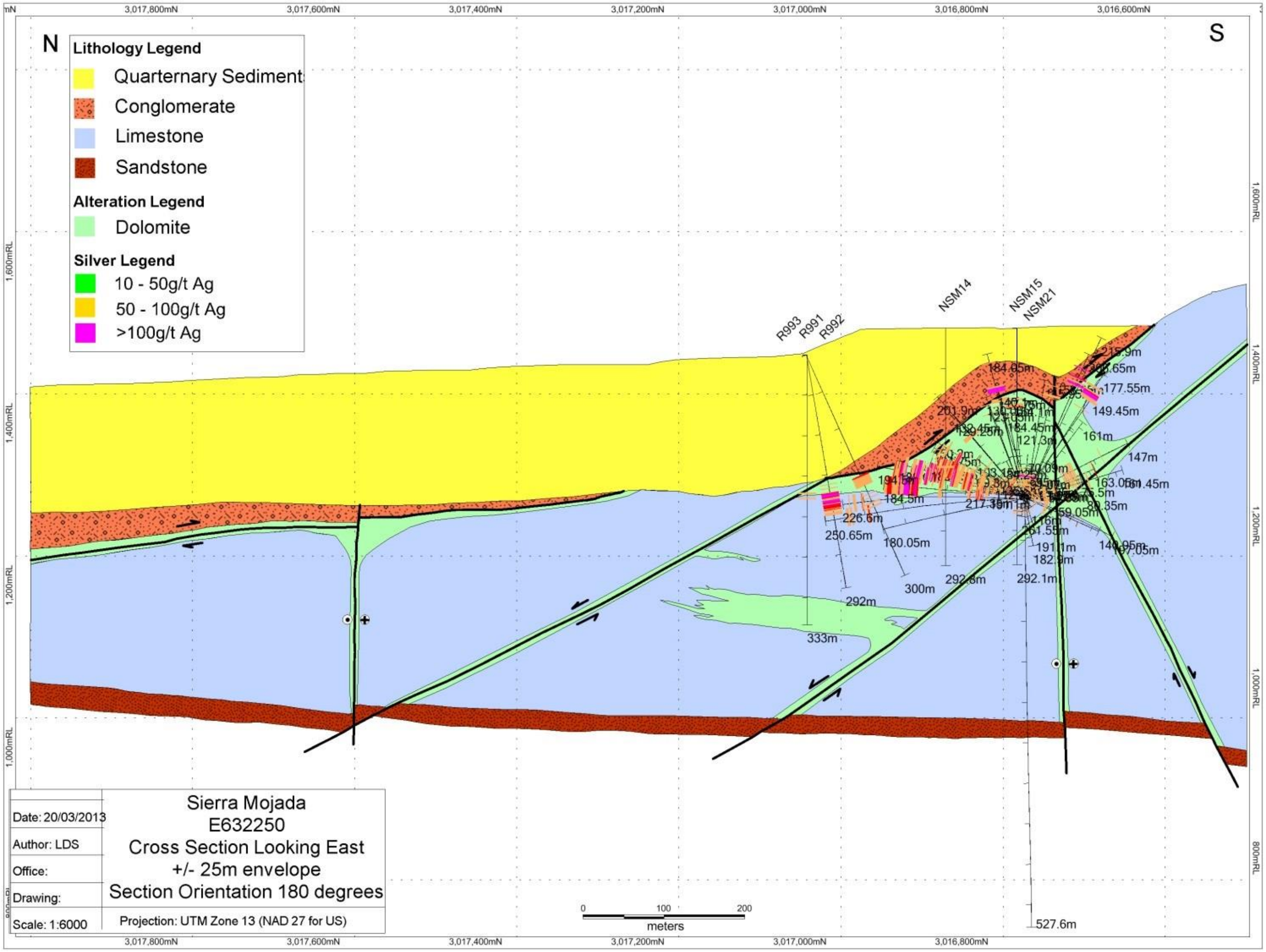


Figure 18. Cross Section 632250E through the Fronteriza Zone at Sierra Mojada looking East.

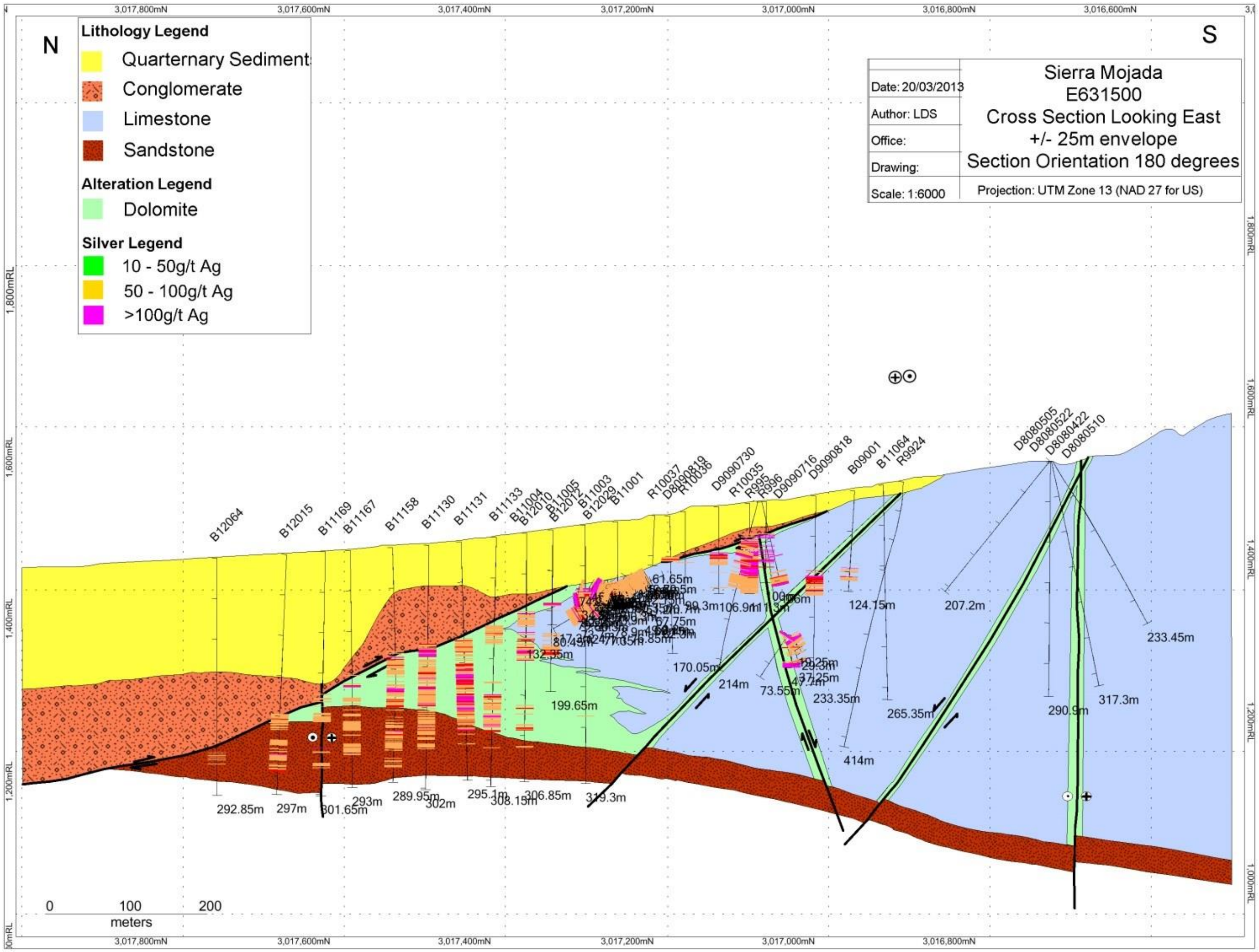


Figure 19. Cross Section 631500E through the Centenario Zone at Sierra Mojada looking East

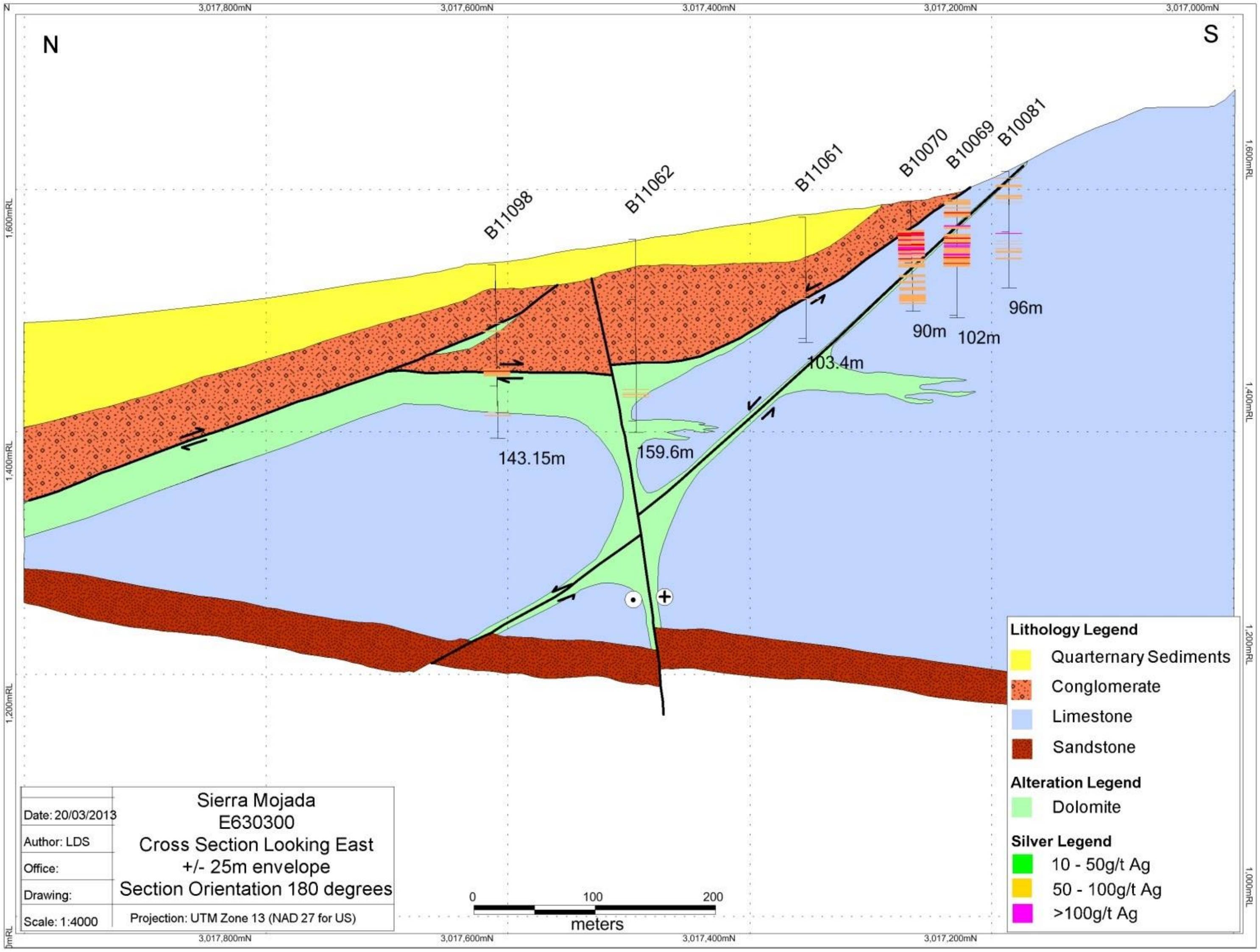


Figure 20. Cross Section 630300E through the West Zone at Sierra Mojada looking east.

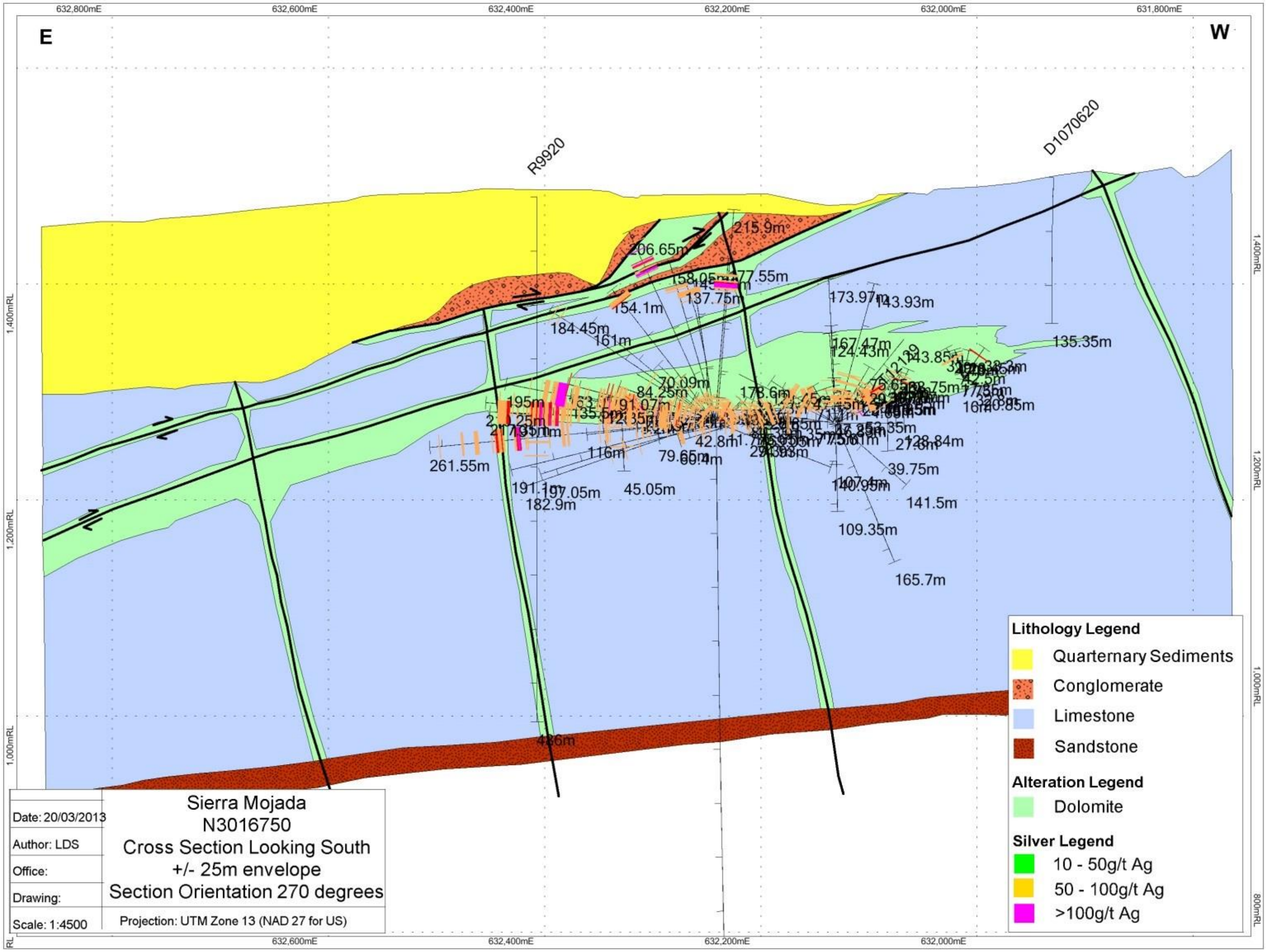


Figure 21. Long Section 3016750N through the Fronteriza Zone at Sierra Mojada looking south.

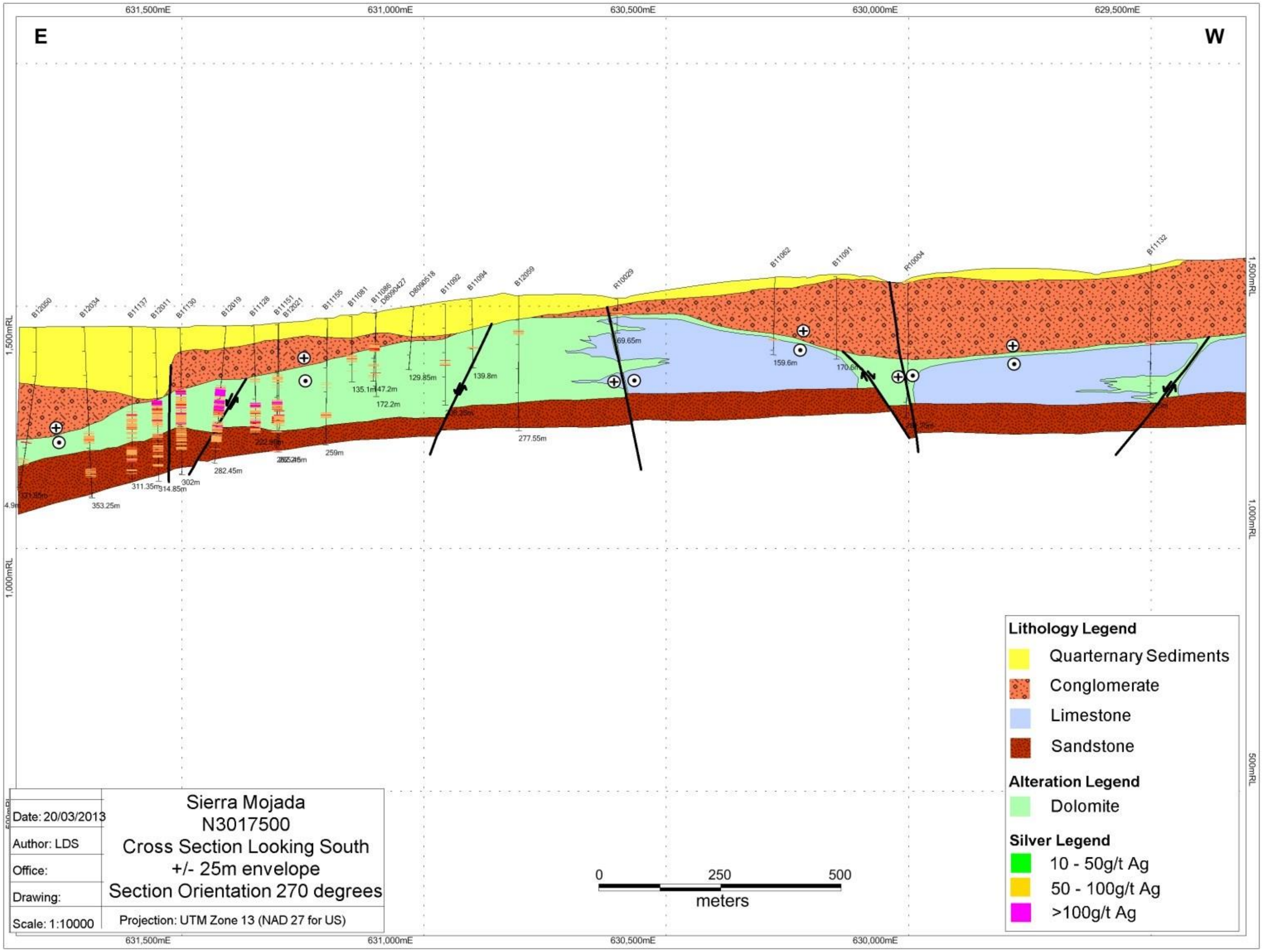


Figure 22. Long Section 3017500N through the West Zone at Sierra Mojada looking south.

6.4 HYDROTHERMAL & SUPERGENE ALTERATION

Diagenetic dolomite is well documented in the petroleum literature of northeastern Mexico, particularly in the Cretaceous section, and is of interest to petroleum and metals resource explorers due to the fact that the dolomitization process can increase the porosity of the unit by 15-20%. Against this backdrop, mineralization at Sierra Mojada is directly associated with extensive, hydrothermal dolomitization and moderate to strong silicification, both of which occurred prior to and during primary hypogene sulfide mineralization. The hydrothermal alteration observed at Sierra Mojada is typical of many high-temperature, carbonate-hosted Ag-Pb-Zn-(Cu) deposits in northern Mexico (Megaw et al., 1988). Stockhausen (2012) documents distinct zones of intense sericite alteration associated with sulfide mineralization. This has been interpreted to represent the distal expression of felsite intrusive activity.

6.4.1 Diagentic Dolomite

To the east of the Sierra Mojada district the carbonate section has been pervasively dolomitized, apparently along northeast-trending faults. This area is the site of the active Peñoles dolomite quarry. The Aurora Formation is also pervasively dolomitized in the western portion of the district, in the area of overturned section near the Sierra Mojada village. Diagenetic dolomitization represents the introduction of brines from adjacent evaporite-rich basins and is not known to carry base or precious metal mineralization but is believed to be part of the host rock preparation stage for later metals mineralization.

6.4.2 Epigenetic Dolomite

Irregular pods of completely hydrothermally altered dolomitized limestone surrounded by zones of partially diaigenetic dolomitized limestone occur in outcrop throughout the Sierra Mojada district. These dolomitized zones may be up to tens of meters thick and occur both along northeast trending faults and along the upper contact of the carbonate section with overlying Upper Conglomerate. The Sierra Mojada sulfide bodies occur primarily but not exclusively within dolomitized horizons. Hydrothermal dolomite represents the influx of higher temperature hydrothermal fluids prior to and during hypogene sulfide mineralization. At Sierra Mojada, hydrothermal dolomitization is expressed by a distinct tan to pink colored, fracture controlled alteration throughout the district.

6.4.3 Silicification

Two phases of silicification are noted at Sierra Mojada, an early pre-sulfide mineral phase, and a late syn- to post-sulfide mineral phase. The early phase affects carbonate rocks throughout the Sierra Mojada district, especially those within or adjacent to fault zones, and display varying degrees of silicification and jasperoid development. Limestone clasts in tectonic, dolomite, and karst breccias are frequently pervasively replaced by very fine-grained, light grey to dark blue, anhedral quartz, something noted in all petrographic work conducted on the project.

Early fine-grained silicified limestone is locally cut by later medium- to coarse-grained, subhedral quartz veins that occur along faults and at the contact with the Upper Conglomerate. This coarsegrained quartz is commonly associated with lead, zinc, silver, copper, and iron sulfide and oxide minerals and is spatially associated with zones containing iron- and magnesium-rich replacive carbonate minerals and sulfides or their oxidized products. Typically there is a decrease in silica content moving outward from the structures, something noted in the district dating back to 1901 (Chisholm 1901)

Silicification is not common within high-temperature, carbonate-hosted Ag-Pb-Zn-(Cu) deposits in northern Mexico and is only noted at the Charcas, Santa Eulalia, La Encantada, and Sierra Mojada deposits (Megaw et al., 1988).

6.4.4 Sericitization

Sericite is commonly present in the ferruginous breccia and within the Upper Conglomerate. Areas containing abundant sericite occur above northeast-trending faults near the historic Veta Rica workings and in the deeper working below the San Salvador and Fronteriza shaft areas. The formation of sericitized zones well-up into the Upper Conglomerate indicates that this alteration clearly post-dates the major period of sulfide mineralization at Sierra Mojada. Sericitization of the Upper Conglomerate and ferruginous breccia may represent continued movement of hydrothermal fluids, or a second phase of hydrothermal alteration, along and above major structural pathways.

Sericitization is relatively uncommon in the Mexican high-temperature, carbonate-hosted Ag-PbZn-(Cu) deposits. One of the few deposits with significant sericitization is Santa Eulalia where igneous rocks along mineralized faults are altered to massive sericite with arsenopyrite.

6.4.5 Carbonate Alteration

Two phases of carbonate alteration are noted at Sierra Mojada, and early pre-and syn-mineral phase and a late phase associated with ongoing supergene processes. The hydrothermal dolomite found throughout the district is cut by a later assemblage of ferroan to magnesian-rich replacement carbonate minerals, which occur along northeast-trending faults and at the upper contact of the carbonate section. This assemblage of ankerite, siderite, and magnesite locally cuts and replaces diagenetic dolomite and previously undolomitized limestone.

The carbonate minerals are fine-grained and are relatively similar in grain size to earlier diagenetic dolomite. They display pink to red colors at surface but have a pale grey color where unoxidized. These carbonate minerals also may be enriched in lead and strontium and commonly display abundant very fine-grained dendritic manganese oxide minerals. The iron- and magnesium-rich carbonate minerals are intergrown with iron and base metal sulfides and barite indicating they were precipitated during the initial mineralization event (Renaud and Pietrzak, 2010,). The red and pink carbonate minerals are commonly intergrown with iron-oxide and zinc-oxide minerals.

Late calcite veinlets occur throughout the Sierra Mojada district, but are most prevalent along the Sierra Mojada fault zone. The calcite veinlets are typically 1-20cm wide and cut carbonate rocks, the ferruginous breccia, and the Upper Conglomerate. The calcite in these veinlets is fine-grained, anhedral, and commonly intergrown with zinc-, lead-, and iron oxide minerals and acanthite; it may contain inclusions of barite (Renaud and Pietrzak, 2011). Coarse-grained calcite with normal to zincian compositions also locally replaces limestone, silicified limestone, dolomite, and iron- and magnesium-rich replacive carbonate rocks, as well as the matrix of the ferruginous breccia adjacent to zones containing late calcite veinlets. Calcite veinlets crosscut sericitized Upper Conglomerate rocks indicating that this alteration event occurred after sericitization. These calcite veinlets and replacive calcite zones were just recently formed and are interpreted to be ongoing supergene processes.

6.4.6 Argillic Alteration

Argillic alteration zones are found throughout the Sierra Mojada district at the contact between Cretaceous carbonate rocks and the Upper Conglomerate. These light grey and tan to tan-brown zones are clay-rich. Based on x-ray diffraction (XRD) analyses these zones are composed of kaolinite, illite, and halloysite in addition to fine-grained quartz, limonite, hematite, and calcite. Tan-brown intervals contain more abundant clay relative to the light grey colored, fine-grained quartz-rich material. The ferruginous breccia contains varying abundances of interstitial kaolinite and illite with minor halloysite surrounding quartz and carbonate rock clasts, however the timing of formation of the ferruginous breccia and clay is unclear (Renaud and Pietrzak, 2010).

6.4.7 Ferruginous Breccia

The Ferruginous Breccia is treated here as a distinct alteration facies even though in core logging it is treated as a separate lithology, due to its direct association with mineralization. The unit may actually be comprised of a mixture of Upper Conglomerate, Aurora Formation dolomite and limestone, karst breccia, and limonite breccia. Clasts of medium- to coarse-grained, sub-rounded limonite after sulfide contain elevated concentrations of silver and zinc. Clast shape suggests that they are detrital rather than representing in-situ sulfide precipitation. The presence of both sulfiderich and oxide-rich clasts indicates that the ferruginous breccia formed after both the hydrothermal event responsible for sulfide precipitation and supergene weathering of portions of the sulfide replacement bodies.

The base of the ferruginous breccia is commonly highly irregular. Ferruginous breccia also fills fractures extending downward approximately 7m into the carbonate sequence. These fractures may contain large, angular, cobble-sized limestone and replacive carbonate mineral clasts. Additionally, the ferruginous breccia contains silicified carbonate clasts indicating that this finegrained silicification event took place prior to karstification. The ferruginous breccia also occurs beneath fine-grained travertine in karst cavities within the limestone sequence. Thus, the ferruginous breccia appears to represent both a surficial deposit formed by chemical and mechanical weathering of carbonate rocks and karst-fill material (Thorson, 2010).

The ferruginous breccia is commonly overlain by the Upper Conglomerate. In some areas lenses of ferruginous breccia are interlayered with lenses of Upper Conglomerate suggesting these units formed synchronously. The ferruginous breccia has not been identified outside of the Sierra Mojada district.

The ferruginous breccia at Sierra Mojada is interpreted to represent surficial oxidation of exposed sulfide replacement bodies in the carbonate sequence as well as infill of karst cavities formed by both normal weathering and acid generated during sulfide oxidation.

Figure 23. Ferruginous Breccia

Note: Ferruginous breccia above limestone and below San Marcos formation conglomerate (purple) from the Norteña area near the Encantada shaft (Thorson 2010).

6.5 MINERALIZATION

Sierra Mojada consists of two important and diverse mineralizing models, accentuated by a locally dense structural architecture and are detailed in Chapter 8.0, Deposit Type:

- Development of a major Carbonate Replacement Deposit (CRD) of lead-zinc-silver (copper), distal to the source intrusion.
- The oxidation, supergene enrichment, and second oxidation of the original sulfide deposit leading to the mineralization of current interest and resource development.

There are essentially two overlapping mineralized sections to the Sierra Mojada district:

- The Silver Zone also known as the Shallow Silver Zone (SSZ), also known as the Polymetallic manto of historic reference.
- The Zinc Zone also known as the Base Metal Manto (BMM). The BMM is subdivided into three further zones for descriptive purpose; the Pb Manto (Carbonate Manto of historic reference), the Red Zinc Manto (Iron Oxide Manto of historic reference), and the White Zinc Manto.

6.5.1 Shallow Silver Zone (Silver Zone)

The Shallow Silver Zone (SSZ), outcrops on the surface on the west end of the district and dips under colluvial cover towards the east at about 10 degrees. The zone is ~3.3km in length, up to 1km in width, and 100 to 300m thick. The SSZ is hosted in breccias of the Tertiary Upper Conglomerate unit, the ferruginous breccia, and in reactive dolomite and limestone of the Cretaceous Aurora Formation. Significantly, mineralization is also controlled by the dense array of structures in the district. Due to these structural and lithologic controls, mineralization develops in four configurations:

- Stratiform mantos, primarily in reactive dolomite horizons and associated karst breccia features.
- High-grade (>100g/t) veins, primarily faults and chimneys related to the mixed structural architecture of low angle and high angle faults.
- Unconformity controlled breccia mineralization related to the Cretaceous-Tertiary weathering surface, although the unconformity demonstrates low-angle movement in many localities.
- Disseminated replacement mineralization between the mantos and structures.

6.5.2 Base Metal Mineralization (Zinc Zone)

Mineralization within the BMM begins with the Lead zone in the highest stratigraphic position, followed by the Red Zinc zone, and the White Zinc zone. BMM mineralization is primarily in manto configurations and each zone contains subordinate amounts of mineralization related to the other mantos described. All of the manto mineralization dips towards the east at 10 degrees and are controlled by dolomite and subordinate limestone host rocks within the middle Aurora Formation. The manto mineralization developed first from pyrite-sphalerite-galena semi-to massive sulfide mineralization followed by oxidation and supergene enrichment by the processes detailed by Megaw (2009), Borg (2009), and Reichert (2009).

6.5.2.1 Lead Zone

Discussion of the Lead zone is included to complete the geology and mineralization, as well as history of the project. Little of the Lead zone is included in the current resource calculation, but is considered a future underground exploration target for silver. Most supergene mineralization originated in the hypogene mineralization of the Lead zone mantos.

The Lead zone was the original mineral discovery in the Sierra Mojada district and sustained mining in the district for the first 20 years until its exhaustion in 1905. The manto was in what was historically known as the “Snake”, “Manto”, and “Scraggly” beds (Haywood and Tripplet, 1931) of the now defined middle Aurora Formation, and located stratigraphically above the Red Zinc zone. The Lead zone was mined continuously for 4km of strike length, 30 meters of width and up to 6m in height. The lead zone graded 15% lead, 12 ounces per ton of silver, and produced 3.5 million tons of ore (Shaw, 1922) from cerrusite-anglesite, chlorargyrite and native silver. Mineralization was centered on the northeast striking Parreña structure and was accessed through the Parreña tunnel located near the current core shack.

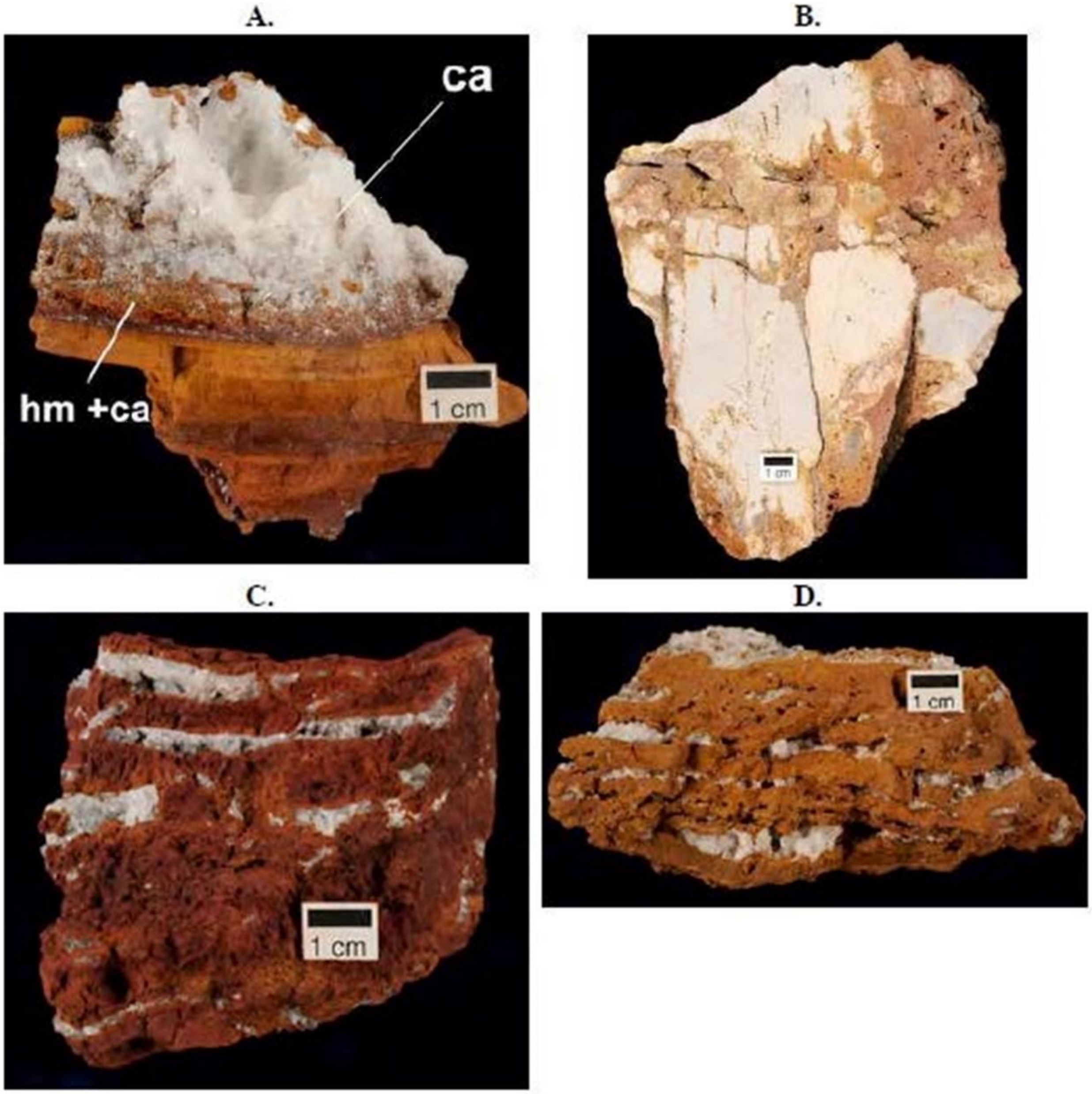
6.5.2.2 Red Zinc Zone

The Red Zinc zone is a continuous manto some 2,500m along strike, up to 200m wide, and up to 160 m thick. It averages about 80 m in thickness and about 130m in width. The mineralization follows reactive dolomite host rocks and karst fill breccia historically known as the “Santa Getrudia, Hallazgo, and North Encantada” (Haywood and Triplett, 1931) horizons in the middle Aurora Formation. The manto dips to the east at about 10 degrees following the dip of the local stratigraphy and is located in the footwall of the Sierra Mojada fault.

Mineralization consists of massive hemimorphite $(Zn_4Si_2)O_7(OH)_2{\cdot}H_2O)$, with subordinate amounts of smithsonite ($ZnCO_3$) and minor hydrozincite ($Zn_5(CO_3)_2(OH)_6$). The Red Zinc manto is admixed with strong iron-oxide with minor manganese oxide imparting a red color to the zone. Massive red zinc manto mineralization is surrounded by a halo of fault and fracture controlled red zinc a result of supergene processes, primarily but not restricted to the footwall.

The mineralization is vuggy and shows replacement of zebra textures as well as laminated cavefloor and soft-sediment deformation. Relic pyrite, galena, and sphalerite have been noted although the overall level of oxidation is strongly pervasive. The lead oxide platternite (PbO_2) is common. Massive Red Zinc zone mineralization typically grades approximately 20 to 30% Zn and approximately 55g/t Ag. Typical examples of the Red Zinc are shown in Figure 24.

The full extent of the Red Zinc zone remains to be completely delineated. Multiple Red Zinc zones are noted in the district and one, the Yolanda, is currently being exploited on a small scale by a local mining cooperative.



Photographs of **A.** Hemimorphite and calcite on laminated Fe-oxides. Sample SS11-2DS. **B.** Smithsonite ore intermixed with late calcite in fracture-fills. Sample SS8 (oriented). **C.** Hematitic Fe-oxides with white hemimorephite and calcite crystals. Sample EN1-3. **D.** Pore-filling hemimorphite and calcite cement in goethitic Fe-oxides. Sample SS4-4.

Figure 24. Typical Specimens of Red Zinc showing Composition Variation

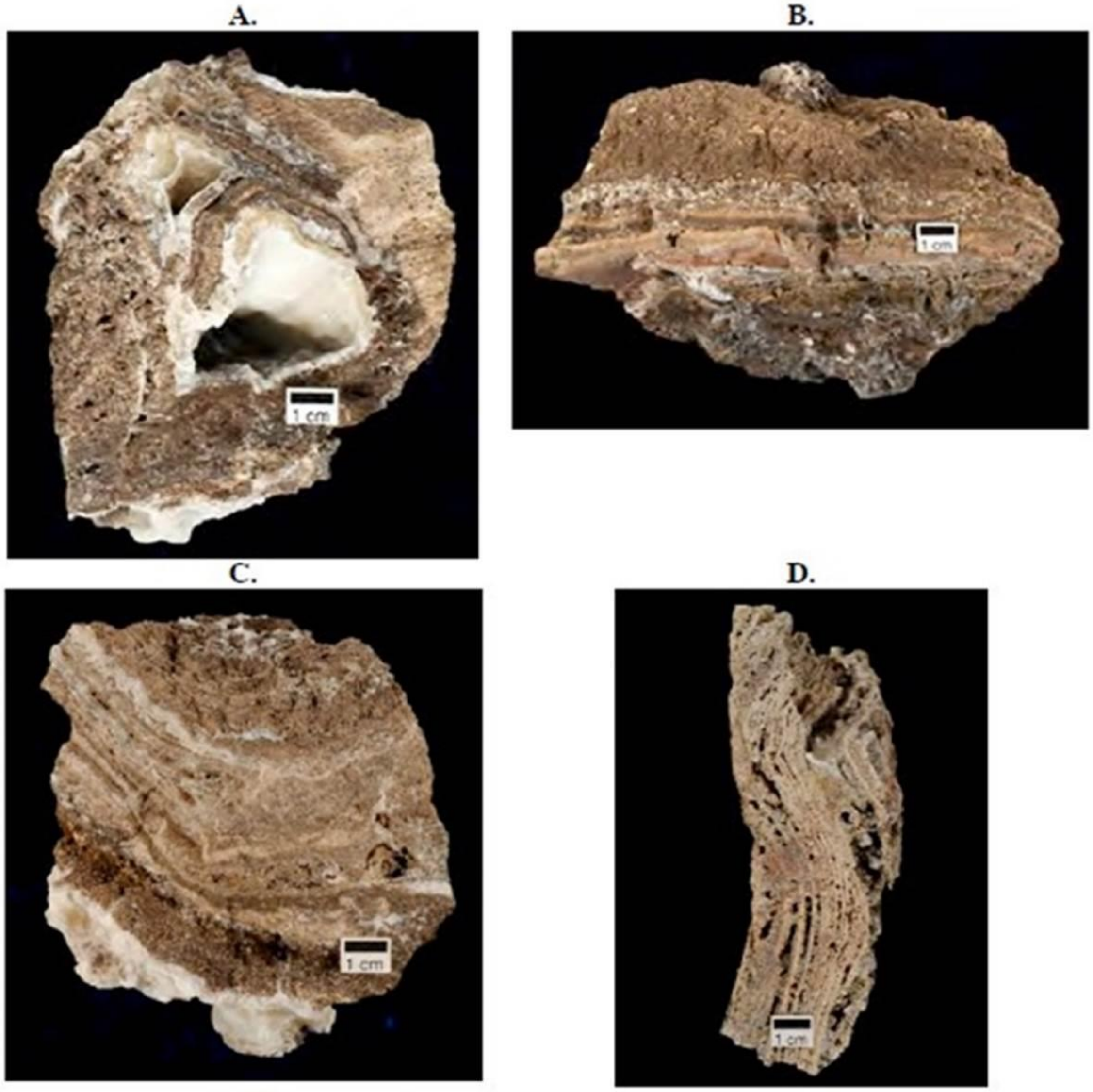
Note: Historically, the Red Zinc Manto was known as the Iron oxide Manto. From Hye In Ahn, 2010

6.5.2.3 White Zinc Zone

The White Zinc zone (smithsonite manto) lies underneath the Red Zinc zone and forms a series of mantos, chimneys, and filled structures. The zone consists of two bodies approximately 100-200 meters across each and up to 70m in thickness. The two bodies of mineralization are separated by the Campamento fault which has down-thrown the east body relative to the west body. The thickest section of the Red Zinc zone directly overlies the White Zinc zone at about the 631700E section where total zinc mineralization is in excess of 200m thick.

The mineralization follows reactive limestone and dolomite host rocks and karst fill breccia historically known as the “Trinidad” horizon (Haywood and Triplett, 1931) in the lower Aurora Formation. Mineralization shows classic karst cave-floor accumulation and soft sediment deformation. Mineralization also shows a very strong structural component occupying steeply dipping faults in the zone and the full extent of the White Zinc manto remains to be determined.

Mineralization in the White Zinc zone consists primarily of smithsonite with very minor overprinting hemimorphite, and is slightly higher in zinc grade than the Red Zinc zone. There is very little iron oxide and low levels of lead. Massive White Zinc zone mineralization grades approximately 25 to 40% Zn and grades approximately 3g/t Ag. Typical examples of the White Zinc are shown in Figure 25.



A. Botryoidal smithsonite and hemimorphite in vuggy cave fill. Sample SM08-22. **B.** Fragments and layers of Zn clay (pink to pale brown colors) cemented by Zn-bearing minerals and calcite. Sample SM08-28. **C.** Laminated Zn minerals and pendulant smithsonite at the bottom. Sample SM08-24. **D.** Vertically banded smithsonite ore consisting of pale brown Zn clays and pore-filling scalenohedral smithsonite followed by calcite cement. Sample SM08-02.

Figure 25. Typical Specimens of White Zinc showing Textural Variation.

Note: Historically, the White Zinc Manto was known as the Smithsonite Manto. From Hye In Ahn, 2010

6.6 DEPOSIT TYPE

Data and information are taken from Megaw (1988, 1996, and 2009), Sillitoe (2009), Reichert (2009), Borg 2009, Sanchez et al (2009).

The Sierra Mojada deposit lies on within three known mineral provinces:

- The eastern edge of what is termed the Mexican silver belt.
- The western edge of the MVT Province of NE Mexico and SW U.S.
- The middle of the northern Mexico CRD (Carbonate Replacement Deposits) belt.

The currently accepted model for hypogene mineralization in the Sierra Mojada district is a CRD relatively distal from an intrusive source as diagramed in the district schematic showing Figure 26.

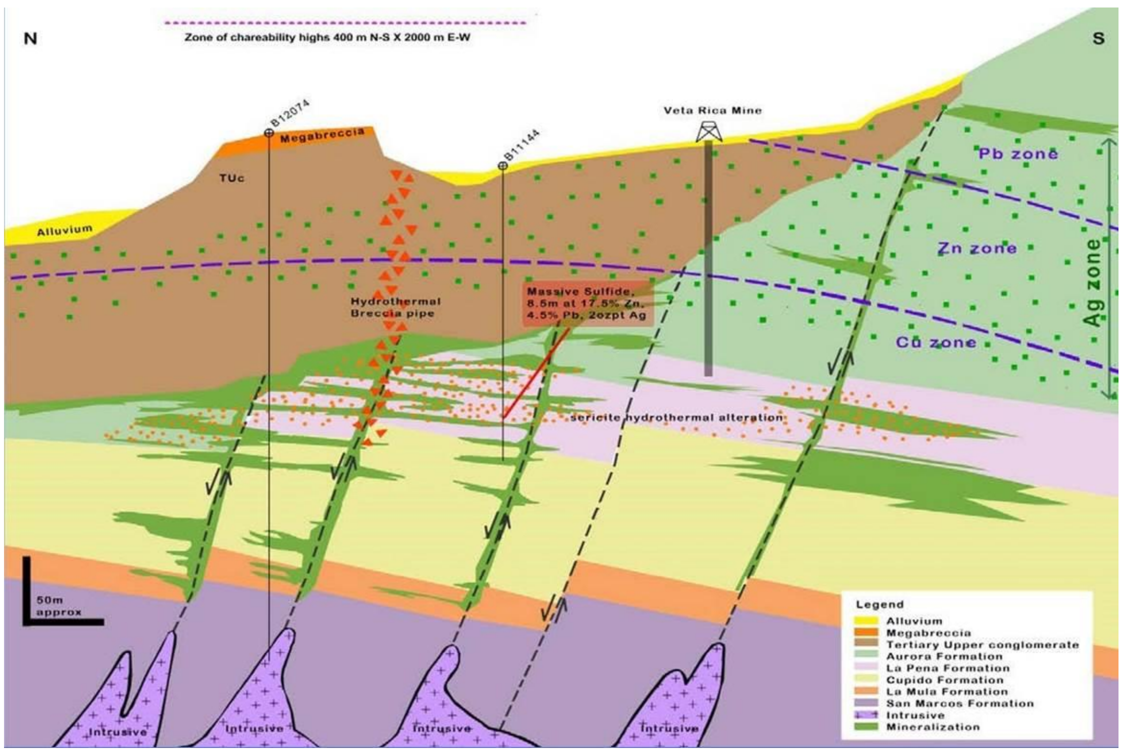


Figure 26. Schematic Drawing through the Western Portion of the Sierra Mojada Mining District.

Note: Schematic drawing through the western portion of the Sierra Mojada mining district showing critical elements of the CRD model as applied to exploration and development in the district.

6.7 SIERRA MOJADA POLYMETALLIC PB-ZN-AG-CU DISTRICT

Megaw (1988) classified Sierra Mojada as a CRD type of deposit and, following his classification system of CRD deposits in 1996, Sierra Mojada would be considered as a Type III CRD with no direct connection to an intrusive source. However, Megaw (1996) indicates that the major polymetallic Pb-Zn-Ag-Cu districts in northern Mexico show metal sourcing to be a mixture of basin brines and magmatic sources, and suggests that basin dewatering was a magmatic thermal driven event, as opposed to a strictly compressional event. Indeed, Sanchez, et al (2009) make a strong argument that Sierra Mojada is part of the NE Mexico MVT province.

Abundant direct and circumstantial evidence exists at Sierra Mojada, based on 2011 and 2012 exploration drilling, that intrusive rocks are present and were likely the thermal drivers of basin brine sourced mineralization into a district wide metal zonation. This evidence includes:

- The drill hole B12074 collared at the top of Mesa Blanca intersected 58m, from 432 to 490m depth, of felsite sills interleaved with metamorphosed dolomite, intense massive and stockwork silicification, and disseminated base metal sulfides.
- Breccia float in a zone 450m distance from the above drill site with angular chalcopyrite fragments, jasperoid, and mimetite ($Pb_5(AsO_4)_3Cl$) more indicative of a hydrothermal breccia pipe than the local mapped Upper Conglomerate unit. The pipe is located along the main strand of the San Marcos fault.
- Chargeability highs in a zone trending east from Mesa Blanca to the historic and west towards the Volcan mine area, a distance of 2km.
- A distinct zone of sulfide mineralization surrounding and extending north from the historic Veta Rica mine which includes chalcopyrite, tennantite, argentiferous galena, arsenopyrite, and sphalerite; implying a formation temperature >300°C.
- A center of strong sericite alteration coincident with the chargeability highs and sulfide mineralization around the Veta Rica-San Jose-Deonea historic mine areas. Additional strong sericite alteration is noted with chalcopyrite in the deepest portions of the San Salvador, Encantada, and Fronteriza workings along the strike of the San Marcos fault.

6.8 SULFIDE MINERALIZATION

Megaw (2009) describes the typical distal sulfide mineralization in CRD districts, and that observation is directly applicable to Sierra Mojada. The original sulfide mineralization at Sierra Mojada consisted of pyrite, galena, sphalerite, chalcopyrite, arsenopyrite, and tennantite; in a gangue of quartz, carbonates, barite, and likely some fluorite with minor celestine. It is believed that up to 30% of the original mineralization was gangue minerals at Sierra Mojada.

The hypogene sulfide mineralization was fed into reactive dolomite horizons and karst features in the Upper Conglomerate and Aurora Formations by the San Marcos and Northeast fault systems. On a district zoning scale, likely based on an intrusive thermal driver located in the Veta Rica-Mesa Blanca area, the lead manto was deposited furthest from the center, followed by the zinc mantos, with district copper mineralization centered in veins and mantos around the historic Veta Rica mine.

Silver zonation tends to begin in the copper zone and extent outward into the lead zones. The original hypogene silver mineralization was likely dominated by argentian varieties of galena, sphalerite, chalcocite, and tennantite; as well as acanthite-argentite. These minerals have all been documented by Renaud and Pietrzak (2011a and 2011b).

This style of district zoning has been noted CRD districts in Utah, Colorado, New Mexico, and Chihuahua and around numerous cordilleran porphyry districts. Due to the extreme oxidation of the Sierra Mojada sulfide mineralization, only minor remnants of galena, sphalerite, and pyrite have been noted in the zinc mantos, and geochemically immobile cerussite and anglesite are all that remain in the galena mineralization in the lead mantos. Silver sulfide minerals are still present when they have not oxidized to halides Figure 27.

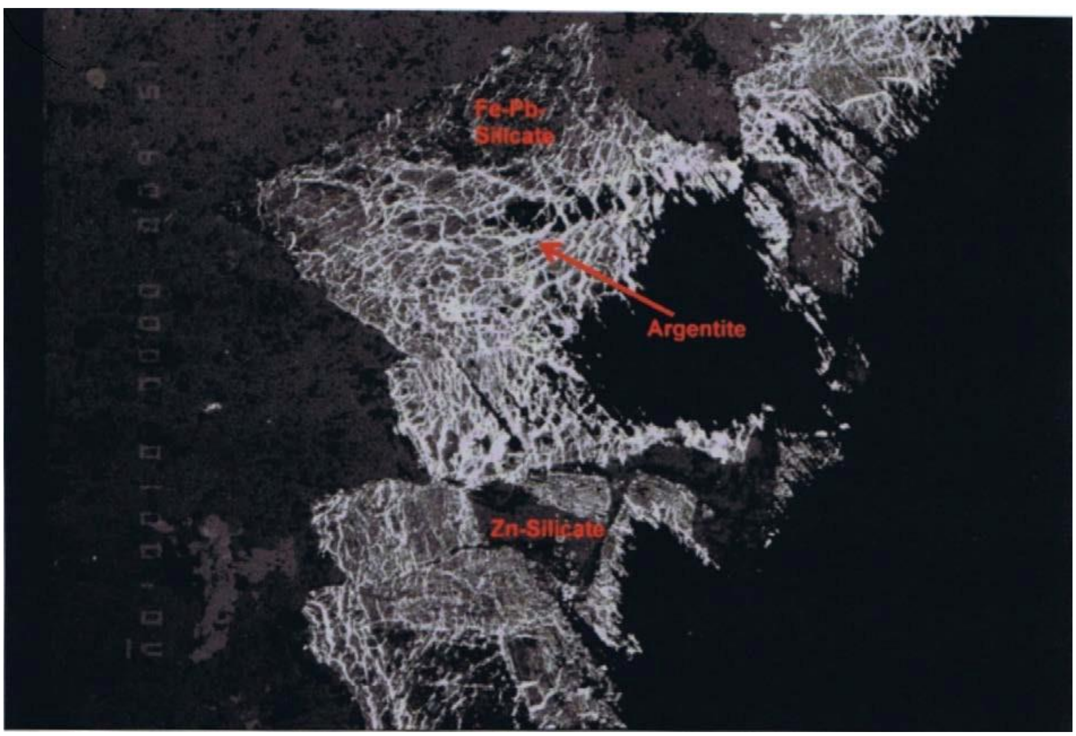


Figure 27. Iron-lead Silicate Mineral Crosscut by fracture filling silver.

Note: Iron-lead silicate mineral crosscut by anastomosing fractures filled with argentite (bright fractures) and enclosing fragments of zinc silicate. Renaud and Pietrzak (2011b).

6.9 OXIDE MINERALIZATION

Reichert (2009) describes the oxidation-supergene enrichment sequence on the sulfide-nonsulfide zinc deposits at Mehdi-Abad and Koladahrvazeh in Iran. The non-sulfide zinc mineralization in the Sierra Mojada district is directly analogous to the Iranian deposits, while the oxidation of the silver mineralization at Sierra Mojada requires a separate discussion. Figure 28 shows the oxidation and supergene enrichment (after Reichert 2009) as it pertains to Sierra Mojada.

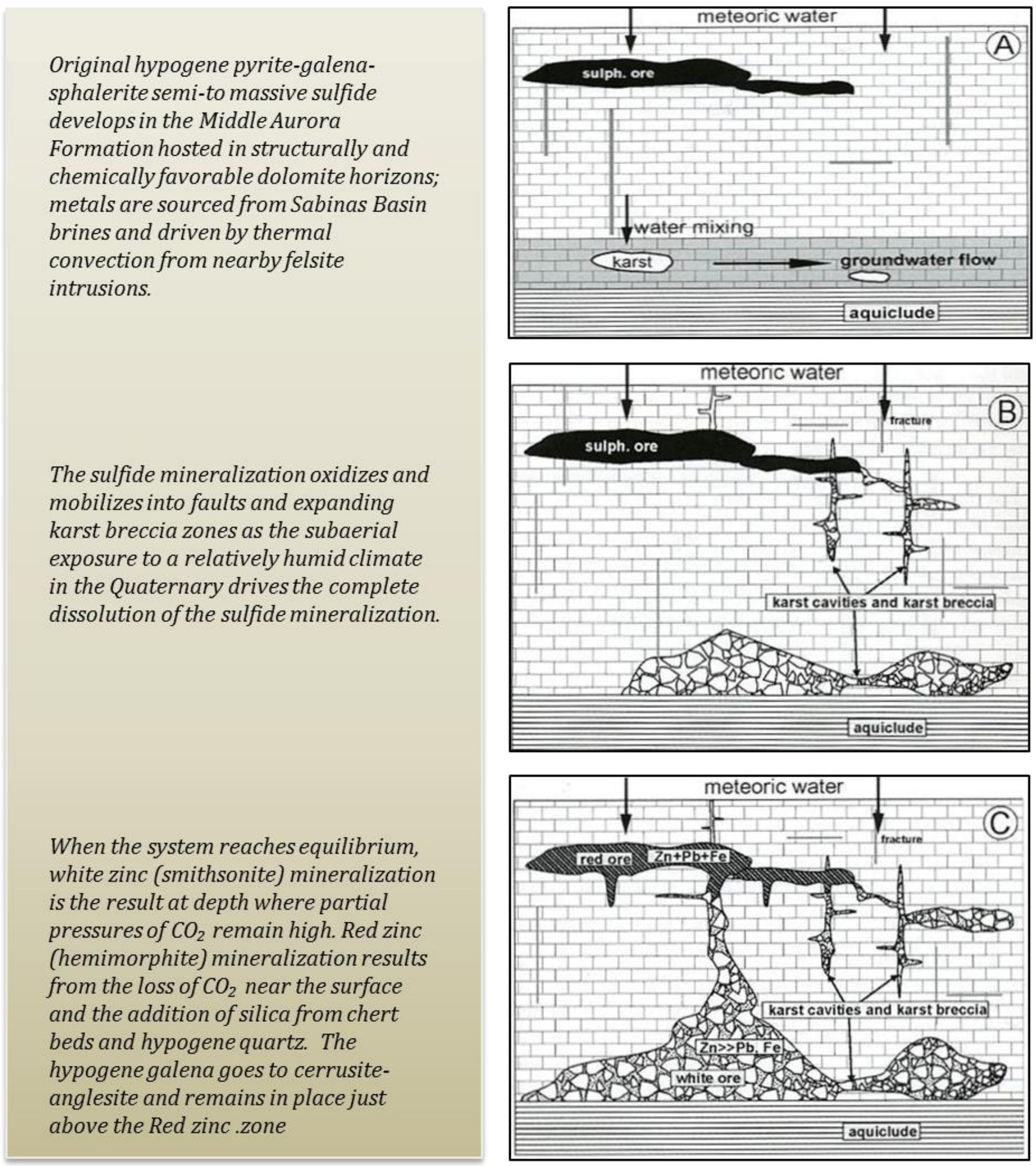


Figure 28. Development of the Red Zinc and White Zinc Zones.

Note: Development of the Red Zinc and White Zinc zones as a result of oxidation and supergene enrichment at Sierra Mojada. (Modified from Reichert, 2009).

Hypogene Pb-Zn-Ag-Cu sulfide mineral mineralization in the Sierra Mojada district underwent intense oxidation, followed by supergene enrichment, followed by a second oxidation event. The Late Tertiary to Quaternary events were accelerated by the intense structural development during a period of rapid climate change as the region went from a savanna climate in the Pliocene to the cool-wet climates of the Pleistocene to the hyperaridity of the Present. The non-sulfide zinc mineralization at Sierra Mojada would classify as about 70% direct replacement and 30% wallrock replacement, primarily in structures; according to Hitzman (2003).

Under oxidizing conditions in limestone-dolomite host rocks Sphalerite (ZnS) readily oxidizes to its carbonate equivalent, Smithsonite ($ZnCO_3$) under high partial pressure of CO_2. Upon relaxation of the partial pressures of CO_2, Smithsonite alters to hydrozincite ($Zn_5(CO_3)_2(OH)_6$ prior to the addition of silica leading to the formation of hemimorphite ($Zn_4Si_2O_7(OH)_2 \cdot H_2O$), the most stable form of nonsulfide zinc. Note that as sphalerite (64% Zn) converts to smithsonite (52% Zn) and finally to hemimorphite (54% Zn) and that the true supergene enrichment is in the conversion of smithsonite to hemimorphite. The abundance of iron in the sphalerite and the presence of iron-sulfur bacteria accelerate the process tremendously.

As detailed by Sillitoe (2007) supergene enrichment of silver sulfides is a relatively rare phenomenon. Instead, the silver sulfides of argentite-acanthite (Ag_2S) readily oxidize to silver halides (AgCl and AgBr) and native silver. Argentite-acanthite (87% Ag) converts to clorargyrite (75% Ag) and bromargyrite (57% Ag) leading to an “enrichment” by generating more grains of silver halide minerals, with the excess Ag taken up by the native form (Figure 29).

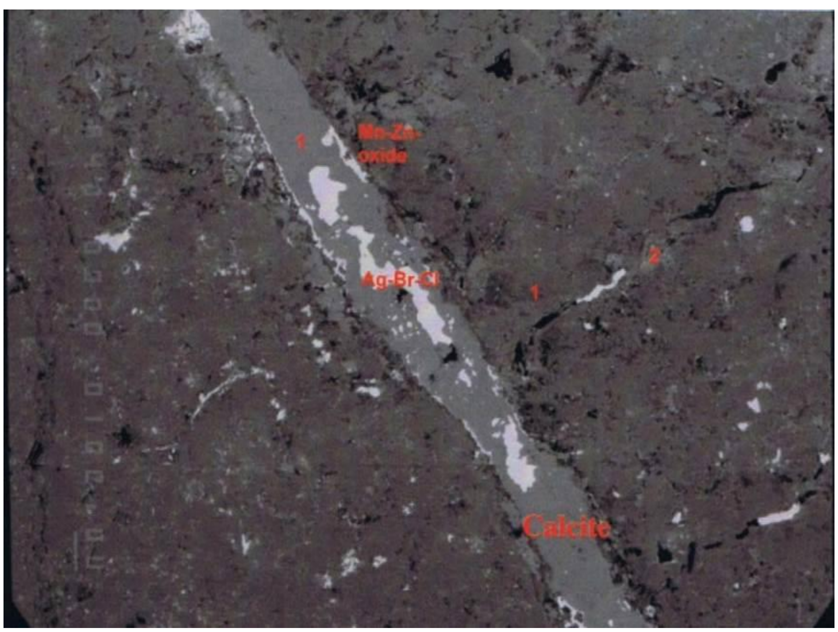


Figure 29. Late Stage Calcite Veins.

Note: Late stage calcite veins are remobilizing Ag-Br-Cl and is the transporting mechanism for late stage remobilization of silver-bearing phases into adjacent dolomite-rich areas. Renaud and Pietrzak (2011b).

7 EXPLORATION AND DRILLING

7.1 HISTORICAL

The mineralization in the Sierra Mojada area was discovered in 1879, and early exploration was conducted by prospecting the outcropping ore. By the 1920's, diamond drilling was widely used in the district and the subsurface exploration and development included workings and drifting on structures. Underground diamond core and long hole percussion drilling using relatively short, small diameter "B" size holes, was widely used beginning in the 1930s through the 1990's.

Modern exploration of the Sierra Mojada district began with the Kennecott efforts in the early 1990s which included stratigraphic tests by surface diamond drilling and geophysical techniques. Kennecott conducted extensive regional Controlled Source Audio Frequency Magneto Telluric (CSAMT) and Resistivity-Induced Polarization (IP) surveys to the north of the Sierra Mojada Range from Palomas Negras to El Oro in the east. These surveys were performed by Zonge Engineering of Tucson.

The Mexican government has flown aeromagnetic and radiometric surveys for much of northern Mexico, but the data yields only regional structure information and a few obvious intrusions. There is not an abundance of igneous rocks, other than deep crystalline (Jurassic to Triassic) basement, known in the area, but subtle signatures of younger diorite to felsite rocks can be detected, including the various mineralized types, that are expected to have high magnetic or radiometric susceptibility.

Beginning in 1996, Metalline Mining began to collect and compile the historic mine maps, drill core assays to develop new surface and underground mine maps and samples. Channel samples were extensively used to identify areas of interest, followed by long hole percussion drilling to extend samples away from old workings, and finally, underground and surface core drilling to extend the sampling further. Surface trenching of bulk metallurgical samples was undertaken in 2010.

7.2 NATURAL CONDITIONS

Bedrock exposures in the area are poor to excellent depending on slope and in areas that have been previously mined. As a result, geochemical methods have had mixed success as an exploration tool. High percent range background values for zinc and lead are common local to zinc-lead deposits, but gradients and vectors that lead to mineral concentrations are just now being recognized. Geochemical rock sampling of targeted stratigraphy in conjunction with structural analysis is the most important exploration and evaluation tool.

The hyperaridity of the area leads to mass physical dispersion rather than chemical dispersion of metals. Soil development is poor with little or no organic material and conventional soils and low level trace element geochemical surveys are not useful in the area. The amount of carbonate and iron-manganese inhibits migration of metallic ions in this environment.

7.3 SILVER BULL EXPLORATION 2011-2017

Silver Bull's exploration program can be broken into two areas:

- A Regional exploration effort on existing licenses and prospects.
- A near mine underground channel sampling to highlight areas of immediate potential resource expansion.

7.3.1 Regional and Prospect Evaluation

Silver Bull Resources has integrated an abundance of information, both public and private, in its' district and regional exploration efforts in Mexico. From the public side, the Mexican government's regional geophysical surveys in conjunction with its regional 1:250,000 scale stream sediment and geologic mapping surveys provide a usable base for prospect evaluation when used with targeted stratigraphy and structural analysis. In addition, Silver Bull has employed SRTM (Shuttle Radar Topography Mission) and Landsat ASTER images compiled by Sandra Perry of Perry Remote Sensing, Denver, Colorado, to develop remote sensed hydrothermal alteration models of select target areas. Silver Bull also flew a regional airborne EM (ZTEM) survey in 2011 to act as a base for regional license exploration.

In addition, Silver Bull engaged in a program of detailed structural analysis of the Sierra Mojada district as well as a detailed time, lithologic, and biostratigraphic compilation of the project area during 2014. Extensive use of petrography has aided considerably in the interpretation and paragenetic sequencing of mineralization. The use of outside specialists in this regard has been particularly useful in all aspects of the program. Table 7 outlines the prospects of interest to Silver Bull while Figures 32 shows the locations of the Sierra Mojada license with the associated license and prospect areas outlined in Table 7.

7.4 SOUTH32 JOINT VENTURE 2018-2019

ON June 4, 2018 announced it had signed a deal with South32 Limited granting it a 4-year option to form a 70/30 joint venture. Under the option, South32 had to contribute a minimum exploration funding of US$10 million ("Initial Funding") during a 4-year option period with minimum aggregate exploration funding of US$3 million, US$6 million and US$8 million to be made by the end of years 1, 2 and 3 of the option periods respectively. If South32 exercised its option to subscribe for 70% of the shares of Mexican subsidiary Minera Metalin S.A. De C.V. ("Metalin"), South32 would contribute an additional $US100 million to Metalin for Project funding

From June 2019 to September 2019 mapping, sampling, and then drilling where conducted exploring the wider area outside of the main deposit at Sierra Mojada. A total of 6,500m was drilled on prospects outside of the main deposit at Sierra Mojada. Although some narrow mineralized intercepts were hit, it was not deemed significant. A summary of the results from this drilling is shown in the table below. Locations of the drillholes are shown in Figures 30 & 31.

Table 6. Summary of the main drilling conducted under the South32 Joint Venture.

Hole_ID	Area	Hole Length (m)	From	To	Interval (m)	Ag G/T	Zn (%)	Pb (%)	Cu (%)	Comments
B19003	East End	620.85	No significant Results							
B19004	Palomas Negros	110.6	28.5	34.25	5.75		2.05			Sulphide
			46.43	47.1	0.87	30	7.78	1.8		Sulphide
B19005	Palomas Negros	185.7	52.1	53.7	1.6		4.26			Sulphide
			75.75	89	13.25	16	8.9	2.58		Sulphide - including 5.85m @ 11.7% Zn, 2.98% Pb, 24g/t Ag
B19006	Palomas Negros	518.7	129.85	130.7	0.85	195	7.25	1.2	0.13	Sulphide
B19007	Palomas Negros	242.5	No significant Results							
B19008	Palomas Negros	437.5	124.35	215.35	91	6.24	0.15			91 meter wide zone of anomalous mineralization - interpreted as a potental halo around a feeder structure
B19009	Palomas Negros	344.5	31.65	32.15	0.5	36.3	0.27	0.12	0.11	Oxide
			33.45	35.1	1.65	36.6	0.41	0.16	0.15	Oxide
B19010	El Coyote	251.8	No significant results							
B19011	El Coyote	318	No significant results							
B19012	El Coyote	315	No significant results							
B19013	Palomas Negros	413.8	137.8	143	5.2	149.4	4.67		0.87	Sulphide - including 1m @ 565g/t Ag, 2.14% Cu, 1.78% Zn
B19014	Palomas Negros	376.3	271.8	272.4	0.6	24.4	5.52	1.45		Oxide
B19015	San Francisco	743.2	No significant results							
B19016	San Francisco	491.6	No significant results							
B19017	West End	356.6	Unassayed due to blockade							
B19018	West End	407.6	Unassayed due to blockade							

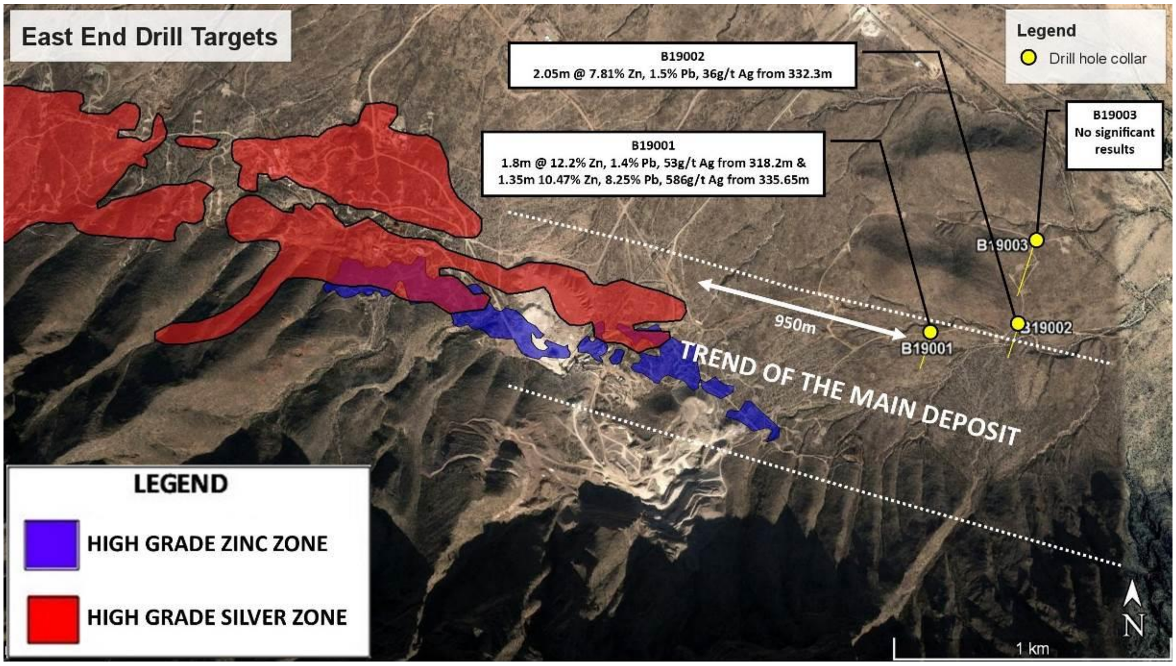


Figure 30. Drilling 950m east of the main deposit, testing mineralization at depth.

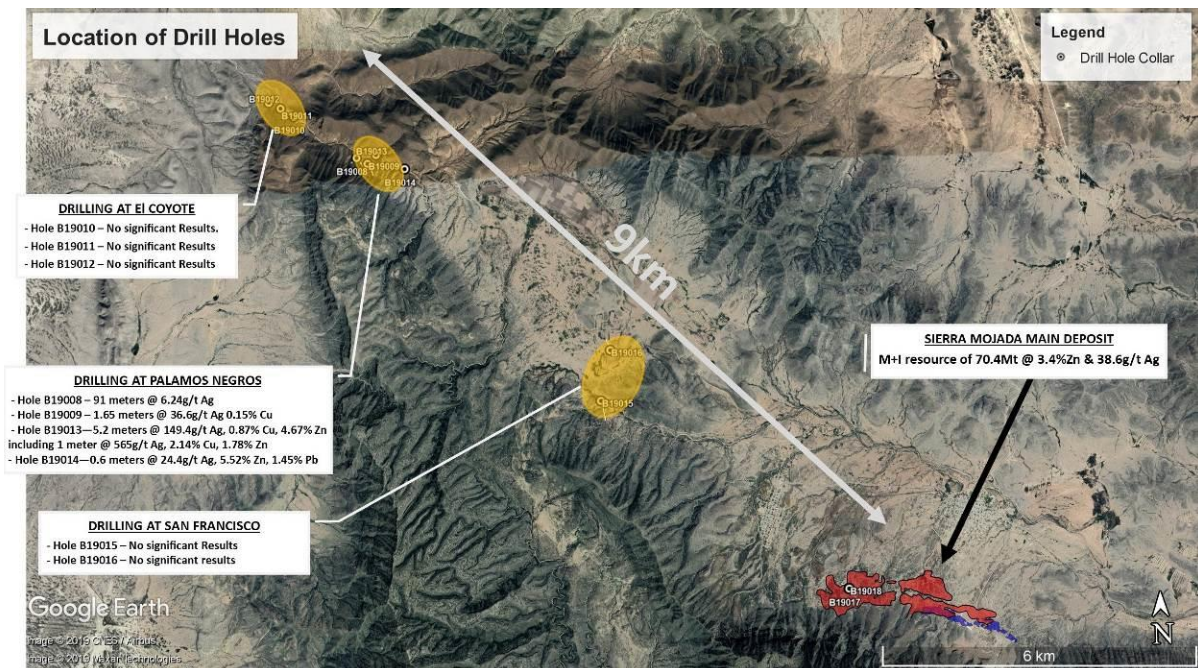


Figure 31. Regional exploration drilling locations and results along the Sierra Mojada trend.

On 1 September 2022, South32 terminated the option agreement with Silver Bull citing an inability to access the property due to an ongoing illegal blockade that started on 30 September 2019 by a group of locals demanding early payment of a production royalty. On one of the licences in that make up the licence package at Sierra Mojada. The illegal blockade remains in place at the time of writing this report.

Table 7. Summary of the main Regional Prospects at Sierra Mojada

Prospect	License	Location	Description	Metals	Target	Data to Date	Remarks
Sierra Mojada Ext. East	Sierra Mojada	Adjoining resource to the NW and SE for 30 km	Extensions along SM thrust NW and SE for 30 km	Ag-Zn-Pb	CRD-Skarn	18 surface dump/ outcrop samples	Anomalous (>10ppm) Ag w/ As+Mn+Zn+ , Ba pathfinder geochemistry.
Sierra Mojada Ext. West	Sierra Mojada	Direct extension of resource	Massive sulphide target down-dip from existing CRD mineralization	Ag-Zn-Pb-	CRD-Skarn	Two drill intercepts, historic production records	Surface IP completed, u/g exploration and sampling in progress.
Parreña	Sierra Mojada	Direct extension of resource	Manto target adjoining resource on south	Ag-Zn-Pb	CRD	U/g evaluation started,11	Needs additional u/g surveying, model development. Exploration on hold. Low priority target.
Dormidos	Sierra Mojada	8 km NW Esmeralda	Located along same NE structure as San Francisco	Ag-Zn-Pb	CRD-Skarn	113 dump/ oc/ ug samples	Anomalous Ag-Zn-Pb w/ pathfinder geochemistry. Exploration onhold at this time due to market conditions.
Cola Sola	Sierra Mojada	29 km WNW Esmeralda	Along NW extension SM fault	Ag-Au	CRD-Skarn	Mapping/sampling in-progress	Drill plan submitted, further exploration on hold at this time due to market conditions
San Francisco	Sierra Mojada	9 km WNW Esmeralda	Strong Cu porphyry indications	Ag-Zn-Pb-	CRD-Skarn	Mapped/sampled, drill tested 2011	Further exploration not planned at this time
Palomas Negras	Sierra Mojada	13 km WNW Esmeralda	Setting similar to Sierra Mojada	Ag-Zn-Pb-Au	CRD-Skarn	Mapped/sampled extensively	Exploration on hold at this time due to market conditions

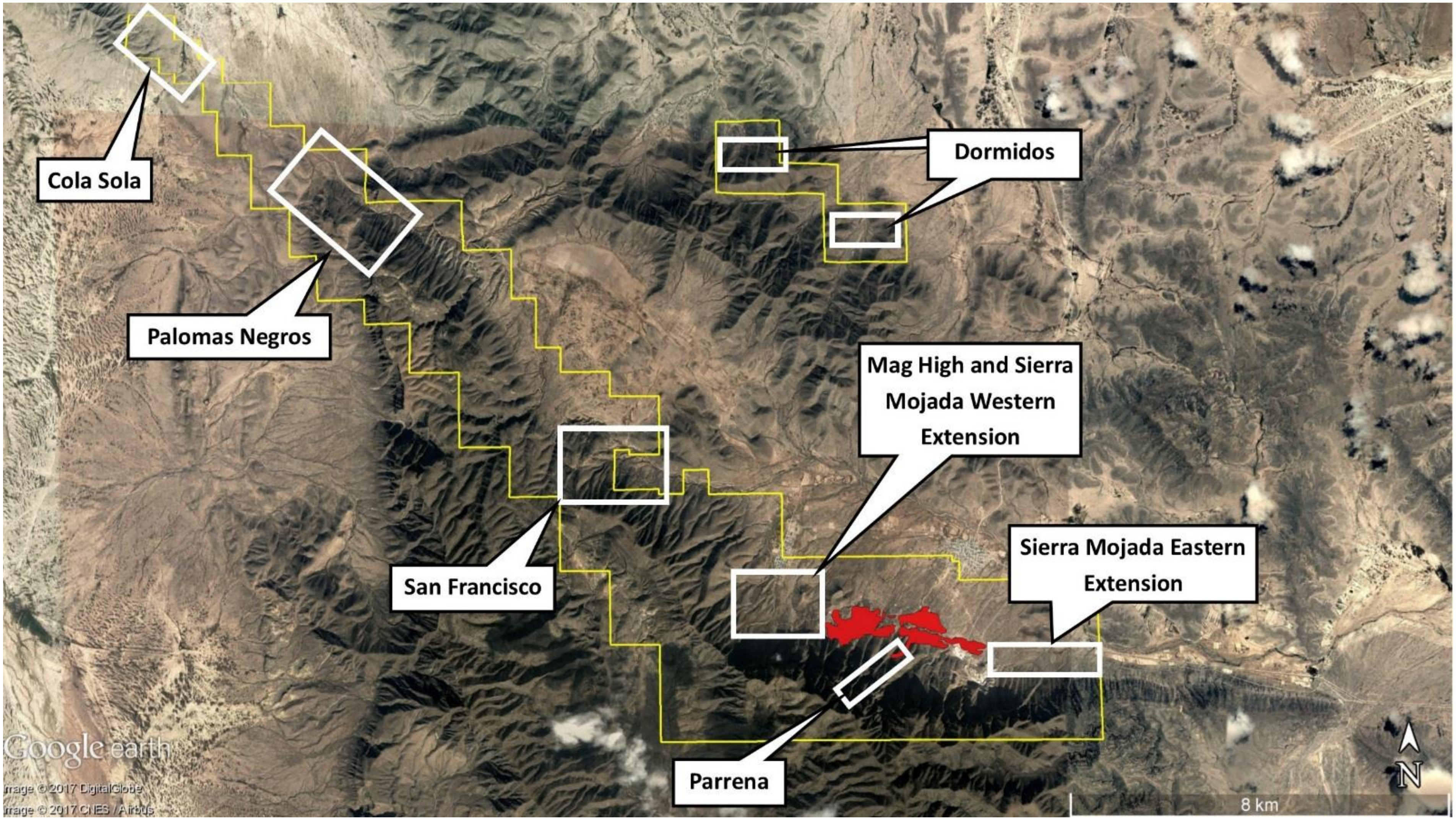


Figure 32. Regional Exploration Prospects in the immediate Sierra Mojada area.

7.4.1 Underground Channel Samples

Channel sampling has been a significant part of the underground exploration effort at Sierra Mojada. Channel samples are collected from the walls ("ribs") of underground workings by a supervising geologist who has selected the channel sample location, painted the position of the sample on the mine wall, and wrote the sample number on a sample sack that was suspended from a nail at the sample point. The sampler marks the approximate sample location on a mine map and reports the sample number of each sample on a daily sampling report. At the sample location, sampling crews spread a drop cloth, clean the face, and cut a sample about 2 cm deep and 10 to 20 cm wide. The sample was transferred to a large plastic sample sack and about 5 to 6 kilograms of sample are transported from the mine to the sample preparation area. Samples are typically 1-2 meters in length. Sample location, length and orientation are subsequently determined by the surveyor using tape and compass surveying tied to nearby pads located by first order surveying. After sampling, the sample locations are surveyed and entered into the database. To the best extent possible, a representative and proportionate volume of material is collected in each sample of the composite vein, fault, breccia and wallrock material.

Sample density for channels is considerably greater than for diamond core at 2 to 20 m spacing. There are approximately 13,000 channel samples in the site-wide sample database covering an area of 180 hectares. 9027 channel samples were used in modeling the resource.

Approximately 90% of all channel samples were collected prior to Silver Bull's involvement in the project and about five percent of the samples have been re-sampled for verification and approximately 70% of the locations have been verified. There are now 9027 usable channel samples in the database with associated QA/QC and surveyed locations. These have been useful in mapping out extensions to the main deposit.

7.5 EXPLORATION CONCLUSIONS

Silver Bull Resources has integrated an abundance of information at the deposit scale and district scale for its exploration efforts in Mexico. The Mexican government's regional geophysical surveys in conjunction with its regional 1:250,000 scale stream sediment and geologic mapping surveys provide a usable base for prospect evaluation when combined with targeted stratigraphy and structural analysis. A summary of the findings to date include:

- Petrography has aided considerably in the interpretation and paragenetic sequencing of mineralization.

- A detailed structural analysis of the Sierra Mojada district has shown the likely “plumbing system” for the mineralization in the area and delineated other areas with similar potential.

- Magnetic and Electro-magnetic geophysical surveys have aided greatly in helping delineate areas of high interest.

- Geological mapping and sampling in areas with historical workings show there is a favourable rock unit to host mineralization and also put constraints on the timing of mineralization.

- Alteration mapping coupled with the style of mineralization seen in the area suggests yet to be found buried intrusive rocks are the likely genesis of the mineralization.

7.6 DRILLING

Drilling is updated from SRK (2012), JDS (2013) and Tuun & AFK (2015). Throughout its history, the Sierra Mojada deposit has been drilled extensively by surface diamond core, underground diamond core, surface reverse circulation and underground long hole percussion drilling. There are now 5,382 drill holes in the database of which only 3,823 are suitable for resource calculations. Tables 8 and 9 document the extensive history of the drilling programs to the present. No new drilling results have been included since the JDS 2013 report for this resource estimation. The following text is taken from Tuun & AFK (2015).

7.7 HISTORIC DRILLING PRE-1999

Numerous drill holes exist in the Sierra Mojada project area for which locations and or assays are missing and for which few records exist. One drill hole though, B6, completed in 1900, is a 150 meter surface drill hole which has consistently been included in resource calculations. Kennecott Exploration drilled nine core holes in the area in 1995 (SM1 –SM9), for 3403.85 m. Only 2 of the holes are within the district and those did not carry significant assays. The local Norteños drilled 873 long holes between 1930 and 1950 for 22,435 m. These holes were drilled from numerous underground stations in radiating fan patterns. The drilling was concentrated on four separate areas along the trend of silver mineralization. Within these four areas, underground stations are typically spaced 20 m apart with average hole depths 25 m resulting in very dense drilling. Areal coverage of these long holes is approximately 9 hectares, and none of these drill holes is suitable for resource calculations. Many long-hole locations are recorded, with assays, but verification is not possible.

7.8 METALLINE MINING CORPORATION (MMC)

MMC purchased all of the available historic data from Peñoles in 2000, much of which is still in usable condition. This included early 1900s underground maps, drill hole folio dating from 1930 to 1950 and a few late 1980s reports. The drill hole folio included the 873 long holes.

7.8.1 MMC Drilling Campaign of 1999

Metalline drilled twenty-four holes from surface (R991 – R999) using reverse circulation for a total of 6,628 m. This drilling covers 28 hectares and intercepts the Red Zinc and Shallow Silver Zones. Approximately half of the holes were drilled vertically and the remaining holes were angled with inclinations ranging from vertical to 54°. These drill holes have been used in resource calculations since 2011.

7.8.2 MMC and North Limited Campaign of 2000

MMC entered a joint venture with North Limited of Australia in 2000. North drilled a string of 26 reverse circulation holes (NSM1 – NSM27) over a linear distance of approximately 3.5 km down the long axis of the known Red Zinc Manto for 6,783 m. All holes were drilled vertically. These drill holes have been used since 2011 in project resource calculations.

7.8.3 MMC Underground Drilling Campaign of 2001

MMC drilled 73 underground long holes for 1,068 meters in 2001 (L632500S45- L631855NE15). These holes were drilled from several underground stations in radiating fan patterns. This drilling is located at the western extent of the Red Zinc Manto. For reasons related to sample quality, these holes were not used for resource calculations until verification in 2012 by Silver Bull Resources.

Table 8. Drill Hole History Sierra Mojada Project 1900-2009

Drilling Campaign	Hole Series	# of Holes	Type	Surface/U.G.	Meters	Resource				Remarks
						JDS 2013	SRK 2012	Nilsson 2011	PAH 2010	
1900	B36	1	Surface		150	No	Yes	No	No	
Historic 1930-1950	Historic Long holes	873	Norteños	U.G	22,435	No	No	No	No	
	SMW1 - SMW6	6	Rotary	Surface	1572.25	No	No	No	No	May have been Water wells
Kennecott 1995	SM1 - SM9	9	HQ/NQ	Surface	3403.85	No	No	No	No	License wide, two holes near SM
MMC 1999	R991 - R999	24	RC	Surface	6,628	Yes	Yes	Yes	No	
North Ltd 2000	NSM1 - NSM27	26	RC	Surface	6,783	Yes	Yes	Yes	No	
MMC 2001	L631500S45 - L631855NE15	73	Long holes	U.G	1,067.60	Yes*	No	No	No	35 holes used in resource
	1500-1700N/S	32	Long holes			Yes*	No	No	No	32 holes used in resource
Peñoles/MMC	E900 - E1200, OT6,	39	Core	Surface	11,830	No	No	No	Yes	
2002-2003	W060704, KCC8									
	A0 - M6	37	Core	U.G.	2,557	No	No	No	Yes	
	E100-600,W400-	685(?)	Long hole	U.G.	10,729	Yes*	No	No	No	PAH noted 685 LH, only 618 valid
	W600, 0, 0-0 series					Yes	No	No	No	documented, 116 in-resource
Metalline (MMC)	D1080729 -	90	Core-HQ/NQ	Surface	13,060.75	Yes	Yes	Yes	Yes	
2004-2009	D9090818									
	B09001 - B09013	13	Core-HQ/NQ	Surface	2,171.15	Yes	Yes	Yes	No	
	D01040124 -	650	Core	U.G	65,052	Yes	Yes	Yes	Yes	
	D9080807									
	R060707 - R060926	8	RC	Surface	2,938	Yes	Yes	Yes	No	Water well and condemnation
	L040228136 -	2253	Long hole	U.G.	31,272	Yes	Yes	Yes	No	
	L406092503, L1-25									
	L209									

Table 9. Drill Hole History Sierra Mojada Project 2010-2013

Drilling Campaign	Hole Series	Hole #	Type	Surface/ U.G.	Meters	Resource				Remarks
						JDS 2013	SRK 2012	Nilsson 2011	PAH 2010	
MMC 2010	B10001 - 10099	101	Core-HQ/NQ	Surface	12,512	Yes	Yes*	Yes	No	B10001-B10071
	R0001 - R0048	48	RC	Surface	6,879	Yes	Yes*	Yes		R10001- R10034
Silver Bull 2010	R10001 - R10034	33	RC/HQ	Surface	5927.85	Yes	Yes	Yes	No	
2011	SF11001 - SF11013	10	Core-HQ/NQ	Surface	1,662.77	No	No	NA	NA	San Francisco Canyon
2011	B11001 - B11185	186	Core-HQ/NQ	Surface	33,221.90	Yes	Yes		NA	
2012	B12001 - B12083	80	Core-HQ/NQ	Surface	19,125.20	Yes	Yes	NA	NA	
2012	P12001 - P12012	13	Core-HQ/NQ	U.G.	4055	No	No	No	NA	Parreña Tunnel
2012	Termite T12001 - 12105	101	BQ Core	U.G.	3670.75	Yes	NA	Na	Na	Silver twin holes and/or exploratory holes
2012	Termite T12106 - T12207	105	BQ Core	U.G.	3467.46	Yes	NA	Na	Na	Zinc twin holes and/or exploratory holes

7.9 **MMC AND PEÑOLES JOINT VENTURE 2002-2003**

A joint venture agreement was made with Peñoles in November of 2001. Two different exploration teams from Peñoles spearheaded the drilling activities. One team focused on the eastern end of the deposit targeting the Red Zinc Manto in 2002 and 2003. This consisted of both diamond core and long hole drilling from underground and diamond core drilling from surface. The second team drilled core holes from surface targeting SSZ on at the western end of the property. The joint venture dissolved in late 2003.

7.9.1 Surface Diamond Core

The joint venture completed thirty-nine diamond core holes drilled from the surface for 11,830 m total. On the eastern end of the property 34 diamond core holes, generally labeled the E900 to E1200 series, were drilled on fences spaced 200 m apart east of the Fronteriza mine toward the Oriental mine, a distance of 1 km. The holes were spaced 50 to 100 m in a north-south direction along the fences.

The Peñoles program at the western end of the property followed up the North Limited drilling in the vicinity of the San Antonio mine, 2 km west, which confirmed and extended the silver mineralization. Five core holes were drilled from surface for about 1,300 m. The drill hole locations are irregularly spaced, and cover an area of approximately 7 hectares. The drill hole series are believed to be the W200 to W300 series, not to be confused with underground long holes with similar numbers.

7.9.2 Underground Diamond Core

Thirty-seven diamond core holes were drilled from underground for 2,557 m. These holes were drilled from several underground drilling stations in radiating fan patterns and are of the A0 to M6 series. Drilling stations are typically spaced 50 to 100 m apart in an irregular pattern. This drilling covered approximately 7 hectares, mostly over the Red Zinc mineralization.

7.9.3 Underground Long Hole

Primarily in 2002, 685 underground long holes were drilled for 10,729 m. These are generally labeled the E100 to E600 and W400 to W600 series. Typically, these holes are drilled from several underground stations in radiating fan patterns. Spacing of the underground stations is typically less than 20 m and hole lengths average 13 m resulting in very dense drilling. These holes intercept much of the Red Zinc Manto and SSZ mineralization east of Easting 630,700. The Silver Bull 2012-2013 twinning program has verified the reliability of the majority of these drill holes and the data was included in the JDS 2013 resource calculation.

7.10 MMC CAMPAIGN OF 2004 TO 2009

Upon the termination of the Peñoles joint venture, Metalline resumed district exploration with a very aggressive program of surface and underground core, underground long hole, and surface RC drilling primarily targeting the zinc resource.

7.10.1 Surface Diamond Core

MMC drilled 103 “N” size diamond drill holes from surface for 15,231 m from 2006 – 2009 (D1080729 – D9090818 and B09001 – B09013). The surface drilling was completed along fences oriented north-south with 100 m spacing and drill hole spacing varying from 50 m to 200 m. The main concentration of drilling covers approximately 20 hectares intercepting the SSZ just west of the Red Zinc Manto. Vertical dip is commonly used, however, and due to location restrictions, some holes are angled, drilled with dips up to 60 degrees.

MMC updated the surface drilling practices employed during the MMC and Peñoles drilling campaign of 2002 to 2003 and largely mitigated the core and sample recovery issues by employing sophisticated mud and bit selection, and employing a well-known contractor, Major Drilling de Mexico.

7.10.2 Underground Diamond Core

MMC drilled 650 underground diamond drill holes for 65,052 m (D01040124 – D9080807) in the 2004 – 2008 periods. These holes were drilled from several underground drilling stations in radiating fan patterns. Drilling stations are typically spaced 50 to 100 m apart in an irregular pattern. This drilling covers approximately 52 hectares intercepting most of the known Red Zinc Manto and Shallow Silver Zone mineralization east of Easting 631,200.

7.10.3 Surface Reverse Circulation

MMC drilled eight reverse circulation holes (R060707 – R060926) from the surface for 2,938 meters in 2006. These were water well and condemnation holes drilled in an irregular and widely spaced pattern testing areas east and north of the underground workings. Of these eight holes, only R060926 intercepted the known silver mineralization. For reasons related to sample quality, these holes were not used for grade interpolation.

7.10.4 Underground Long Hole

Twenty-two hundred fifty three underground long holes were drilled by Metalline Mining in 2004-2009 for 31,272 m. The drill hole series are variously numbered, typically prefixed with an "L". These holes were typically drilled from several underground stations in radiating fan patterns. Spacing of the underground stations was less than 50 meters and hole lengths average 17 meters, resulting in very dense drilling. The drill holes intercept much of the Red Zinc manto and Shallow Silver mineralization east of Easting 630,700.

7.11 MMC CAMPAIGN OF 2010

7.11.1Surface Diamond Core

In 2010, MMC completed 101 surface HQ/NQ drill holes (B10001 – B10099) for 12,512 m property wide. Drilling was undertaken using three Metalline-owned diamond drill rigs and three drill rigs operated by drilling contractors. Contract drilling was performed by two companies. Baja Drilling S.A. de C.V. used a skid- mounted Longyear 48 machine to complete three holes. However, most contract drilling was performed by Landdrill International México S.A. de C.V. with a skid-mounted HTM 225 machine.

The drilling was completed along fences oriented North-South with drill hole spacing of 40 to 200 m. The principal concentration of drilling covers an area of approximately 40 ha, and intercepts the SSZ just west of the Red Zinc Manto. Vertical inclinations were used in the majority of holes with some holes angled up to 60°.

7.11.2 Surface Reverse Circulation

In 2010, MMC also drilled 48 reverse circulation holes (R0001 –R0048) for 6,879 m. These were principally in-fill holes between core locations. Forty-eight RC pre- collar holes were drilled. Thirty-one of these holes were completed by core drilling. In areas of deep quaternary cover RC pre- collar holes were drilled either close to the base of QAL contact or close to the Upper Conglomerate lower contact. RC drilling was performed using a Th-100 Tandem truck mounted drill used by contractor Layne de Mexico S.A. de C.V. and a smaller truck mounted CDR drill, owned and operated by Metalline.

7.12 SILVER BULL CORE DRILLING CAMPAIGNS OF 2011-2013

Procedures described for Silver Bull are modified and updated from Nilsson 2011. Beginning in April of 2011, Silver Bull Resources assumed full control of the Sierra Mojada project and revamped all drilling, core handling, logging, and assay procedures. Drilling included surface and two underground campaigns. As part of their due diligence review of the Sierra Mojada project, Silver Bull drilled 33 RC/Core holes (R100001 – R10034) for 5,927.85 m.

7.12.1 Surface Diamond Core

Major Drilling de Mexico was the contractor employed to complete 186 HQ/NQ surface core holes in 2011 (B1101 – B11185) and 80 holes in early 2012 (B120001 – B12083) for a total of 52,347.1 m. Major employed a UDR 650 drill rig with a reversible head and compressor, which allowed RC drilling to pre-determined depths, switching to HQ core when entering mineralized stratigraphy.

7.12.2Underground Diamond Core

In early 2012, Silver Bull turned its attention toward underground drilling in the district and completed two underground drilling campaigns by year's end. The first was in early 2012 when Silver Bull completed 13 drill holes in the Parreña Tunnel for 4,055 m of core. The program provided significant information regarding local structures and stratigraphy but did not materially add to the resource. The Parreña Tunnel remains a significant exploration target but will require a significant amount of rehabilitation of the underground workings.

The second underground drilling program of 2012 was the long hole twinning program recommended by SRK in their 2012 resource statement. This program commenced in July 2012 and terminated on the Christmas break in mid-December 2012. The program targeted 105 drill holes for twinning and exploratory for 3,670.75 m of drilling in the Shallow Silver Zone, and 88 drill holes for 3,467.46 m in the Red and White Zinc mantos of the Base Metal Manto zone. The layout of the program is shown in Figure 33. Note that multiple holes were drilled from one setup or drill station.

A total of 207 termite holes were drilled; one (T12008) was not included in the resource estimation due to very poor recovery. The termite drill program is summarized in Table 10.

Table 10. Termite Drill Program

Type of Hole	Total		Silver		Zinc	
	Count	Meters	Count	Meters	Count	Meters
Twin Holes	122	3,445.45	53	1,590.95	69	1,854.50
Exploration Holes	84	3,202.58	46	1,834.98	38	1,367.60

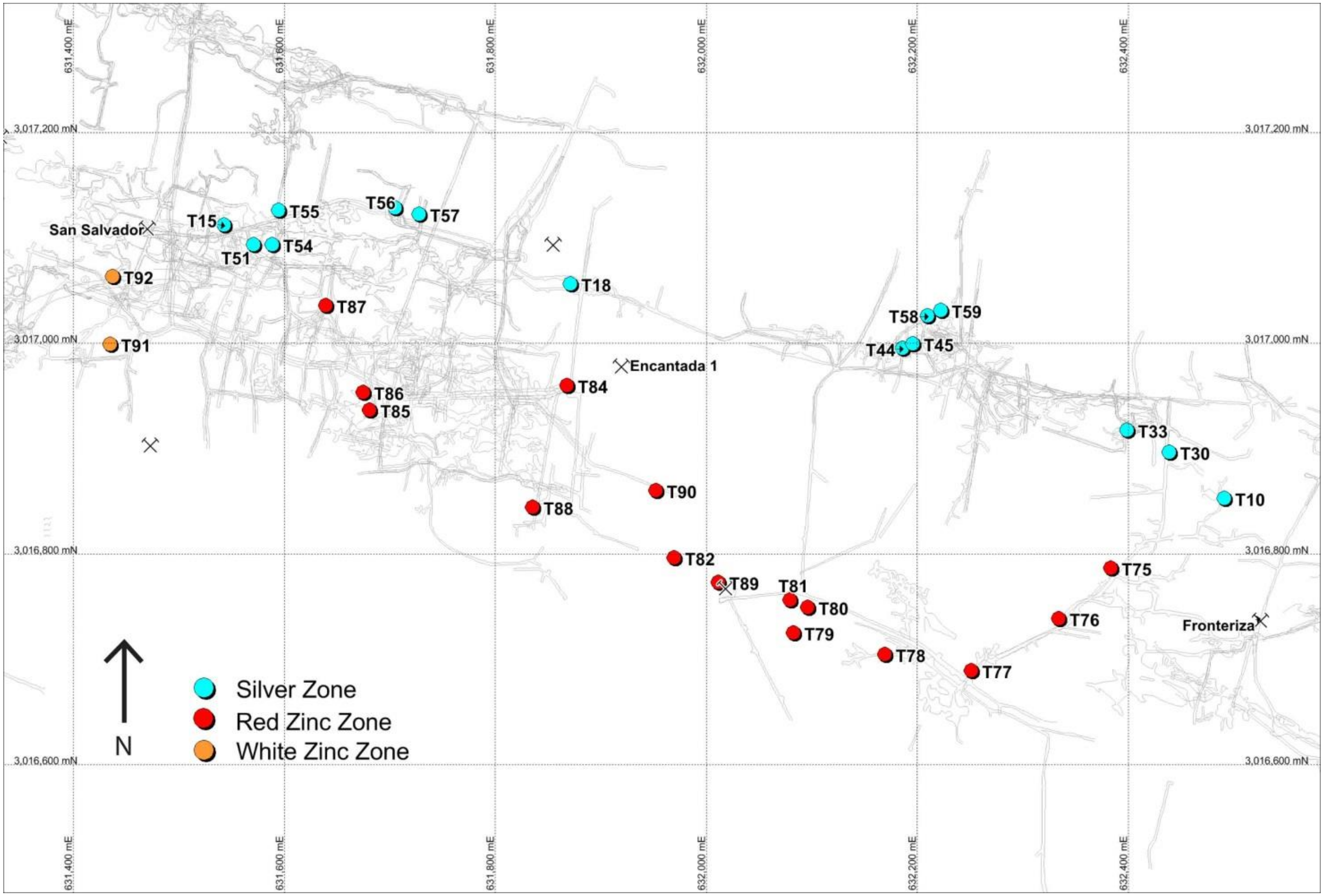


Figure 33. Layout of the 2012-2013 Drilling Program

The drilling was accomplished by Silver Bull Resources owned "termite" drills, which are small, hydraulic-electric core drills that are easily manoeuvred underground. The drill produces a "BQ" size drill hole and is capable of up-hole drilling. The maximum length of a drill hole is about 70 m, depending on ground conditions. Core recovery for the entire program was excellent considering the structural complexity of the deposit. Figure 34 demonstrates a typical underground drill station set-up.

Figure 34. Typical Set-Up of the Termite Drill during the Long Hole Twin Program, 2012-2013

7.13 SULPHIDE DRILLING 2017

An underground geological mapping and continuous underground channel sampling program in July and August 2017 identified a series of east-west trending high angle structure hosting sulphide mineralization below the oxide zone of mineralization. A 2,000 meter underground drill campaign targeted this area with considerable success. However due to the very different metallurgical process required to beneficiate the sulphide ore, none of this drilling from this campaign is included in the estimation of the oxide resource outlined in this report.

7.14 SILVER BULL CORE DRILLING AND SAMPLING PROCEDURES

Silver Bull Resources employs state of the art exploration procedures in all of its work at Sierra Mojada. All data is managed in Microsoft Excel or Access, with the Excel files imported directly into Geovia Software's GEM's® for 3D modeling. Data is also transformed to a visual format in MapInfo.

All survey data is imported into AutoCAD, and the information required for the resource estimation is transferred to GEMS. The following procedures apply equally to the surface core drilling programs as well as the underground core drilling programs.

7.14.1Collar and Downhole Surveys

Drill holes were laid out on an approximate 100 m x 50 m grid. Drillhole locations were marked in the field by the company surveyor or geologist. Drill pads were then prepared and final collar locations were marked by the surveyor.

When collar locations were located on gravel sites a concrete pad with iron-rod attachment points were constructed. For pads on bedrock, jacklegs were used to create anchor points for the drill rigs. Drill pads varied in size from 5 m x 5 m in size to 10 m x 20 m in dimension, depending on the type and number of holes planned from that site.

After drill holes were completed, steel pipes were inserted to mark the locations and concrete pads with drill hole numbers were poured to hold the pipes in place. The final drill hole locations were surveyed by the company surveyor using a total station survey instrument. Geologists approved the final collar surveys prior to entry into the database.

All drill holes were down hole surveyed using Reflex survey instruments. Surveys were done using an EZ-Shot single survey instrument. Some holes were surveyed with a Reflex EZ-Trac instrument. All Reflex results were recorded at the time of the survey. Surveys were performed by the driller, with a company representative present, either a geologist or drill supervisor.

7.15 Core Drilling, Handling, and Transportation

All coring by contractor was done with HQ or HQ3 core size, unless reduced to NQ size for operational reasons. Some holes with quaternary cover were predrilled using a tricone bit, drilling down to a level close to the base of the cover or solid ground, this varied from 3 – 30 m.

Core was removed from wire line core barrels at the drill rig and placed into waxed fiberboard core boxes. Core boxes were 60 cm in length with 4, 5 or 6 divisions depending on core size. The driller's recorded end of run depth, drilled interval and core recovery on blocks placed in core boxes. Where possible drillers also inserted an additional block indicating where the "no recovery zones" were located' and if the "no recovery zones" were due to a void (old working or open space). Hole numbers and core box numbers were written on the core boxes and lids. Core boxes were then tied up and at the end of the shift core boxes were transported by truck to the core logging facility. Core transportation from drill rig to the core logging facility was the responsibility of the driller.

7.15.1 Core Logging Procedures

When the core boxes were received at the core logging facility, the core was placed on logging tables where the core was cleaned to remove drilling muds and additives. A minimal amount of cleaning was performed on clay rich and poorly consolidated intervals. The core was reconstructed to ensure that the core was placed in the boxes correctly and so that there was structural continuity for logging and sampling.

After reconstruction, the cut line for core cutting/splitting was marked on the core. As far as possible, this line was placed perpendicular to the main structural orientation – as indicated by responsible logging geologist. Core was also marked with dashed lines on the non-sample side to indicate that it should remain in the box.

All core was photographed after cleaning and orientation, generally before the recovery and geotechnical logging. Core was photographed using an indoor, special lighting and fixed camera. All photographs included hole name, box number, box start and end depths and a scale bar. Photographs were downloaded onto a computer at the logging facility for review by geologist before sampling. This was done to ensure photos were of good quality with no errors. Digital core photos were renumbered by hole and box number and placed into drill hole specific folders.

Recovery and geotechnical logging, including RQD was then performed by trained personnel. Any doubts or questions on recovery and core orientation were reviewed by the responsible core logging geologist with all recoveries being compared to those indicated by the driller. In rare cases of discrepancy or core box errors that could not be corrected by the geologist, the responsible driller(s) were required to correct the problem. To assist with logging, down-hole depths were marked every meter.

Recovery and geotechnical information was recorded on a run-by-run (block-to-block) basis. Information was entered into a spreadsheet. Recovery was variable with "no recovery intervals" resulting from a variety of causes. Limestone rocks at Sierra Mojada contain many natural openings such as cavities and karst features, and in most areas of the Shallow Silver Zone, old workings are a common feature and these were represented by "no recovery intervals" as well as zones with backfill, which are harder to distinguish; and in clay, poorly consolidated karst breccia or rubble zones. In addition, the drill core has Niton™ thermal XRF measurements taken approximately every 20 cm as a guide to the beginning and ending of silver mineralization, which can be difficult to discern with the naked eye.

After inspection, mark-up, geotechnical logging, and photography, geological core-logging was performed. Core logging formats evolved considerably when Silver Bull assumed control of the project. Silver Bull employs a combination of initial manual graphic logging followed by digital logging and subsequent data entry. Lithology types, alteration, mineralization and structural features were recorded on a 1:100 scale.

7.15.2 Core Sampling

Core was marked for sampling by the geologist as part of the core logging procedure. Sample limits were marked on the core as well as the side of the core box. Sample intervals were also noted on cut sheets. Intervals and sample recoveries were entered directly into a spreadsheet, with cut sheets subsequently printed for core sawing. Samples were assigned a sample numbers based on hole number and a three or five digit sequential number; "no sample intervals" were also assigned a sample number and were included on the cut sheets.

Quality control samples consisting of blanks, core duplicates, and pulp standards were inserted in the sequential sample number sequence. Each sample number had the appropriate sample interval or control sample indicated on the cut sheet as well as the sample action to be taken for intervals of no recovery or contaminated material.

In addition to marking of samples for assay intervals, bulk density samples were selected during the logging process. The density samples were approximately 10 cm in length with density measurements taken before the core is split with the core cutter. Initially total of 3440 bulk density sample measurements were compiled by Silver Bull incorporating samples measured on site by the pycnometer method and verified by ALS, and by the Archimedes method and verified by SGS in Durango, Mexico. An additional 1,895 pycnometer density samples were taken in 2013 and 2014.

After logging and sample marking of the hole was completed, the core was split in half using a core cutter. Once the core was cut in half, specially trained samplers were used to sample the core. Based on the marking procedures, core was systematically sampled from the same side of the core, which has helped to reduce the possibility of sample bias. The samples were placed in numbered sample bags, in which flagging tape with the sample number was also placed in the bag and barcoded. Bagged samples were placed in numbered sacks with the content of each sack recorded for shipment to the external laboratory. Sample sacks were placed in a locked storage area prior to shipment. Sample storage and shipments were controlled by Silver Bull's QA/QC manager.

7.15.3 Data Entry

All logging and sampling data are entered into spreadsheets. Density, recovery, and geotechnical data were entered into master spreadsheets, from which individual drill hole data could be extracted. Data are entered by the logging geologists and then rechecked by a data verifier. This procedure was implemented to allow geologists to concentrate more time on geologic logging and sampling. Sample data were also entered into drill hole based spreadsheets. These were used to prepare cut- sheets for sampling. This data was prepared by the logging geologist.

Geological data were entered into the drill hole based spreadsheets. These data were prepared by the core logging geologist. Manual core logging with subsequent data entry into the Excel spreadsheet was implemented, with each of the logging geologists responsible for entering the data and passing the database to the database manager who reviewed the entries for errors and database coding compatibility. Once the data had been checked, the data were entered into the master database controlled by the database manager.

7.15.4 Sampling Security during Core Cutting

Once the samples were taken from the core, they were bagged, organized and labeled by one specific person, signed off, and then kept under lock and key until shipped for assaying to ensure no tampering had taken place.

After logging and sampling, the core boxes containing the split core were transported to the core storage facility, a locked, fenced, roofed structure. The core boxes were stored on commercially purchased core racks, with location identified on layout plans. The storage facilities were part of the security watchman's responsibilities, who are present 24 hours on site. The company has four secure core storage facilities on site.

All core and samples are retained on Silver Bull's property, except for samples sent to external laboratories for assaying. Access to the property is restricted by company security personnel and chain gated entries to the property. The core logging area always has company personnel present, in the form of core shed workers or company security personnel.

Coarse reject samples are stored in covered 200-litre steel drums in an outdoor storage area adjacent to the core shed. Sample pulps, grouped into boxes containing between 50 and 100 envelopes, are stored in the locked storage areas.

8 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The Authors note that no new data is being added to the resource estimation since the resource report by Tuun and AFK (2015) and there have been no changes to the sample preparation, analyses and security procedures utilized at the Sierra Mojada project, all of which have been described in detail in previous technical reports. That information is reproduced in the following sections.

8.1 SAMPLE PREPARATION

Prior to November 2003, all samples were shipped directly to ALS Chemex (ALS) for sample preparation and assay. After November 2003, samples were prepared to the pulp stage on site by MMC personnel. In 2007, MMC updated its laboratory equipment and sample preparation procedures following recommendations made by ALS. In 2010, Silver Bull abandoned the on-site sample preparation and began shipping samples to ALS for preparation and assay. (SRK 2012)

JDS personnel were present for the April 2010 due diligence site (Dome Ventures-MMC merger) and noted that there was a significant backlog of unprocessed samples stored at the site. Part of this was due to the inefficiencies of the onsite lab, and part a lack of funding. JDS recommended that the onsite lab be closed to eliminate any potential concerns regarding the QA/QC and assay validity.

With the closure of the onsite lab, efforts were made to ship them to a reliable and ISO-certified off site lab. A total of about 7,000 samples were shipped between August 2011 and April 2012 to ALS-Chemex Chihuahua. Many of the assay results were incorporated into the Nilsson and SRK resource estimates.

JDS was present for the closure, cleanup, and chemicals disposal of the onsite lab. Since that time, all sample preparation has been standard core-cutting, tagging and bagging for shipment offsite to the ALS-Chemex facility in Chihuahua. From there, pulps were shipped to the ALS-Global lab in Hermosillo for assaying. JDS has received copies of the assay files direct from ALS-Global labs since the introduction of the change, along with copies of the shipping files from Silver Bull site staff. (JDS 2013)

8.1.1 MMC-SILVER BULL SAMPLE PREPARATION PROCEDURES (2010-PRESENT)

Drill core is delivered by the drill contractor to the logging facility. The movement of the core, once delivered at the logging facility, is designed such that it is always in an easterly direction as it goes through each phase of the logging and sampling process, entering on the west side of the facility and leaving on the east side of the facility towards the sample storage area.

Initially, boxes are laid out in order on the logging tables by company staff. The meterage blocks inserted by the drill contractor are checked to ensure there are no errors. Drill core recovery between each of these blocks is calculated and recorded. Subsequently, the core is logged by a geologist who also marks the intervals to be sampled and prints out a "Sample Print Sheet", indicating sample numbers and the sample numbers for the QA/QC sample insertion. At this point, Niton® readings are taken in each sample interval and recorded.

Once logged, and with the sample intervals marked, the core boxes are then taken to the photograph, density, and bar coding room. Here, each core box is photographed in a staged facility that ensures identical lighting for each photograph. Density samples are taken (the samples to be taken are indicated by the geologist) and the bar codes for each sample are then printed.

Following the photography, the boxes are carried and stacked, ready for the core to be cut by a rock saw. Half core samples are taken according to the sample intervals marked by the geologist and, when required (as indicated by the QA/QC program), quarter core field duplicates are also cut.

Samples for assay are placed in thick plastic sample bags with the sample number written on them and a strip of flagging with the sample number written on it is inserted into the sample bag. The bags are then stapled firmly shut. The samples are then placed into rice sacks, eight samples per sack.

From the start of the year until June 30, 2011, samples were shipped two or three times a week once one tonne of sample material had accumulated. The shipment was done with company personnel and a company vehicle. As of July 1, 2011, sample shipment to the ALS preparation facility in Chihuahua has been subcontracted. The subcontractor is a company that Silver Bull has used for a number of years for other services and is regarded as trustworthy and reliable. Shipments are programmed weekly.

Once received by ALS, they check the shipment and confirm via e-mail whether the samples shipped coincide with what is registered on the shipment form and analysis submittal. (SRK 2012)

8.1.2 MMC SAMPLE PREPARATION PROCEDURES (2007-2010)

From 2007 to 2010, sample preparation was done at the Sierra Mojada property by MMC personnel. Samples were first dried in a clean drying pan. After the samples were thoroughly dried, the pan and samples were transferred to the on-site preparation facility. The samples passed through a Rhino crusher and then a secondary crusher resulting in material that has been crushed to greater than 70 % passing -10 mesh (-2 mm). The crushed samples were split in a Jones splitter multiple times to generate a 250 to 300 g crushed sub-samples. The crushed sub-samples were then transferred to a puck mill and milled for three minutes to attain a size specification of greater than 95 % passing a -150 mesh screen. The pulverized material was passed through a riffle splitter to generate two pulp sub-samples (one for analysis and one for reference). The pulp sub-samples were transferred to individual sample bags.

The methods utilised by MMC were standard and adequate for generating assay data for use in resource estimation. (SRK 2012)

8.1.3 MMC SAMPLE PREPARATION PROCEDURES (2003-2007)

All samples were weighed and their weight was recorded before processing. The entire samples were then crushed to nominal ¾-inch (in) sized samples using a Fraser & Chalmers jaw crusher. The crusher was cleaned after each sample using compressed air. Once first stage crushing was completed, the samples were then crushed to nominal ¼-in sized samples using a Roskamp rolls crusher. The rolls crusher was also cleaned with compressed air after each sample. All quality control was visual at both crushing stages and no testing for screen sizing was done at either stage. After the second crushing stage, the nominal ¼-in sample was split through a Jones type splitter to approximately 500 g, and placed in an aluminum pan, to be taken to the drying oven. Each pan was well labelled, with the contained sample number recorded on masking tape, attached to the pan.

Drying was conducted in a block building which has two propane space heaters, manufactured by Desa, Inc. The samples were placed upon drying racks, still in the aluminum pans, and a heater was activated. Once dry, the pans and contained samples were returned to the sample preparation area for pulverizing.

Pulverizing was conducted upon the ¼-in samples using one of four Bico disc pulverisers. The 500 g sample was pulverized to nominal 80 mesh, with visual and tactile inspection performed upon each sample after pulverizing to ensure that the nominal 80 mesh size was achieved. No screen size testing is done upon the pulverized samples on a regular basis. The pulverisers were cleaned with compressed air after each sample was processed. Once pulverising was completed, each

500 g sample was split into two sub-samples, with a maximum of 200 g kept for each sub sample. These two sub-samples were packaged in Kraft type envelopes; one 200 g sample was sent to the shipping area to be boxed and prepared for shipping to the ALS laboratory in Vancouver, BC, Canada. The remaining 200 g sample was stored in archive storage, as a reserve sample, should more analysis be required. All pulps were labelled with the sample number, which has all drill hole and interval data included, as well as the date the sample was drilled.

The sample preparation methods used from 2003 to 2007 are adequate for generating assay data for use in resource estimation. (SRK 2012)

Pincock, Allen Holt had reviewed the process and made several recommendations to improve reliability which ultimately led to their S-K 1300 compliant Technical Resource Report issued in January 2010. (JDS 2013)

8.1.4 MMC SAMPLE PREPARATION PROCEDURES (PRE-2003)

Prior to 2003, all sample preparations were carried out by ALS laboratory using the following procedures:

Coarse crushing of rock chip and drill samples to 70 % nominal -6 mm was used if the material received was too coarse for introduction into the pulverizing mill, and as a preliminary step before fine crushing of larger samples. Fine crushing of rock chip and drill samples to 70 % -2 mm or better. Samples were split sample using a riffle splitter. The split sample was pulverized using a "flying disk" or "ring and puck" style grinding mills. Unless otherwise indicated, all pulverizing material was at least 85 % pulverized to 75 micron (200 mesh) or better.

These sample preparation procedures are adequate for generating assay data to be used in resource estimation. (SRK 2012)

8.2 ANALYSES

(After Tuun & AFK 2015, JDS 2013 & SRK 2012)

8.2.1 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

8.2.1.1 Historical QA/QC Procedures

PAH reviewed the QA/QC procedures implemented throughout the life of the project and concluded that they were insufficient relative to current industry standards of practice. As a result of these inadequate procedures, PAH was not able to classify its January 2010 resource estimate for Sierra Mojada as anything higher than an inferred mineral resource.

To resolve this issue, MMC and PAH developed and executed a re-sampling and assaying program to estimate the type, frequency, and magnitude of assay sample errors in the historical drill hole database for the Sierra Mojada project. This plan was meant as a substitute of the QA/QC program that would resolve PAH's doubts about the validity of the Sierra Mojada assay data. Based on the execution of the program and a detailed review of the results, PAH concluded that the drill hole assay data for channel and core samples used in its January 2010 resource estimate were of sufficient quality to support measured and indicated resources. As a caveat, PAH notes that converting inferred resources to measured and indicated is contingent upon other factors not related to data quality (McMahon, 2010). SRK has reviewed the results of the additional sampling program carried out by PAH and concurs with their conclusions.

In 2010 a QA/QC program of certified standards, blanks and duplicates were instituted to monitor the integrity of all drilling assay results. Two sets of QA/QC procedures were used by Metalline since the time of a QA/QC review performed by PAH (McMahon, 2010) on pre-March 2008 drill hole assay data:

The first set of QAQC procedures was used for the submission of pulp samples for analysis by a certified laboratory. These pulps had previously been prepared and analyzed by the Metalline on-site laboratory facility as part of a pre-selection process. All samples for 2008 and 2009 drill campaigns and all 2010 drilled prior to August 2010 followed these procedures; and

The second set of QAQC procedures applies to samples sent directly to ALS for sample preparation and analysis. This procedure has been in place since August 2010 and includes drill holes submitted since this time. (SRK 2012)

8.2.1.2 Pulp Submissions QA/QC Procedures

After sample preparation all samples selected for certified laboratory analysis were located and placed in boxes ready for shipment. The same pulp envelope used for the original analysis was selected for submission to the external laboratory. Each sample box contained between 60 and 120 pulp samples, including control samples. The QA/QC control samples submitted in each box consisted of:

A minimum of three standard samples were submitted, normally at least one of each of the three certified standards prepared for Metalline Mining by CDN Laboratories;

At least one blank pulp sample and often two;

At least one, and generally two, field duplicate samples (¼ or ½ core samples) prepared but not analyzed by Metalline onsite during 2010. In general ¼ core samples were submitted so as to leave witness core in the core box, however in broken zones the complete remaining half core was selected for submission; and

At least one and generally two pulp duplicate samples, with splits made from the original pulp sample to be selected within the same box. (SRK 2012)

8.2.1.3 Core Submissions QA/QC Procedures

Control samples were inserted approximately every 10 core samples. In addition, after every 25 core samples the following additional samples were inserted: a minimum of one certified standard is included; a minimum of one field duplicate sample is included; and normally one blank sample is included and occasionally blanks are preferentially inserted in a mineralized sequence outside of the normal 25 sample range.

In November 2010, the system was modified slightly to ensure that controls samples were inserted at a standard interval of every 10 sample numbers. (SRK 2012)

This procedure is still in place for any future drilling.

8.2.1.4 Reference Standards

The Author (Reeves) noted that Metalline/Silver Bull staff inserted certified reference standards as a quality check on the laboratory accuracy. The reference standards were prepared by CDN Resource Laboratories Ltd. which specializes in preparing site specific certified standards. The three standards prepared are identified in the database as K10001, K10002 and K10003.

Reference Standard K10001

A total of 245 standards were inserted into the sample stream and only one was reported below the reference 2SDs. All samples were within three SDs of the reference mean (Figure 35). (JDS 2013)

Reference Standard K10002

A total of 223 samples of reference standard K10002 were used, with 9 samples outside of the standards report 2SD limits (Figure 36). Two that were just above 3SD will require follow-up checks by Silver Bull. The ALS-Chemex sample mean is also slightly higher than the reference mean by about 0.8 g/t Ag, but is not considered to have an impact on the resource estimation. (JDS 2013)

Reference Standard K10003

A total of 199 samples of reference standard K10003 inserted into the sample stream. It is clear from Figure 37 that the ALS-Chemex mean is about 3.5 g/t higher than the reference standard mean. Even with this offset, all but three samples fell within 3SD. Silver Bull Resources will need to follow up on the cause of the lab bias, which is quite consistent in this standard. (JDS 2013)

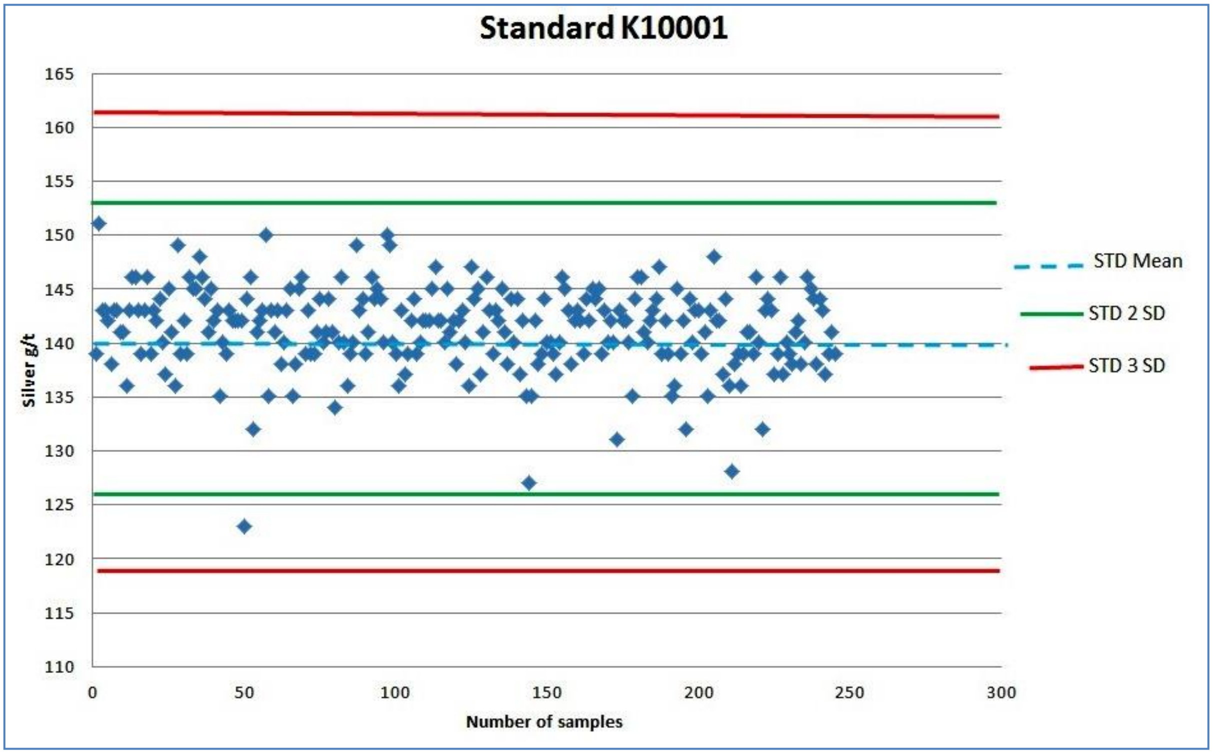


Figure 35. Graphical Performance of Standard K10001

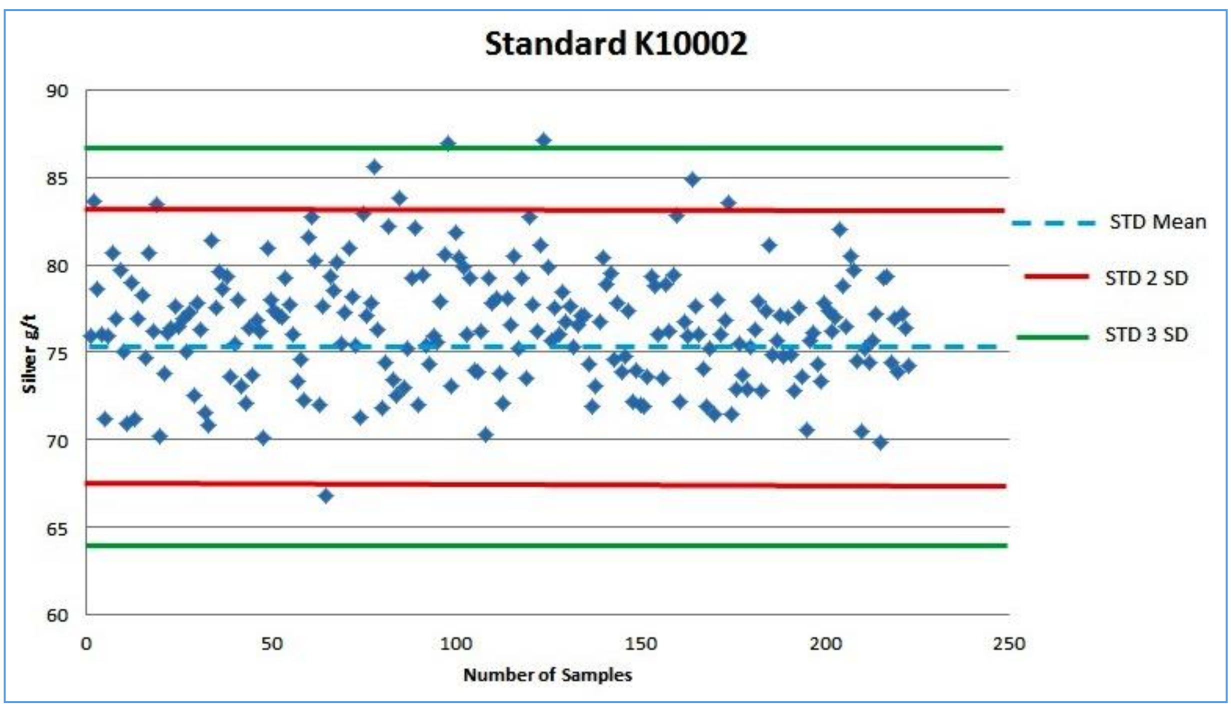


Figure 36. Graphical Representation of Standard K10002

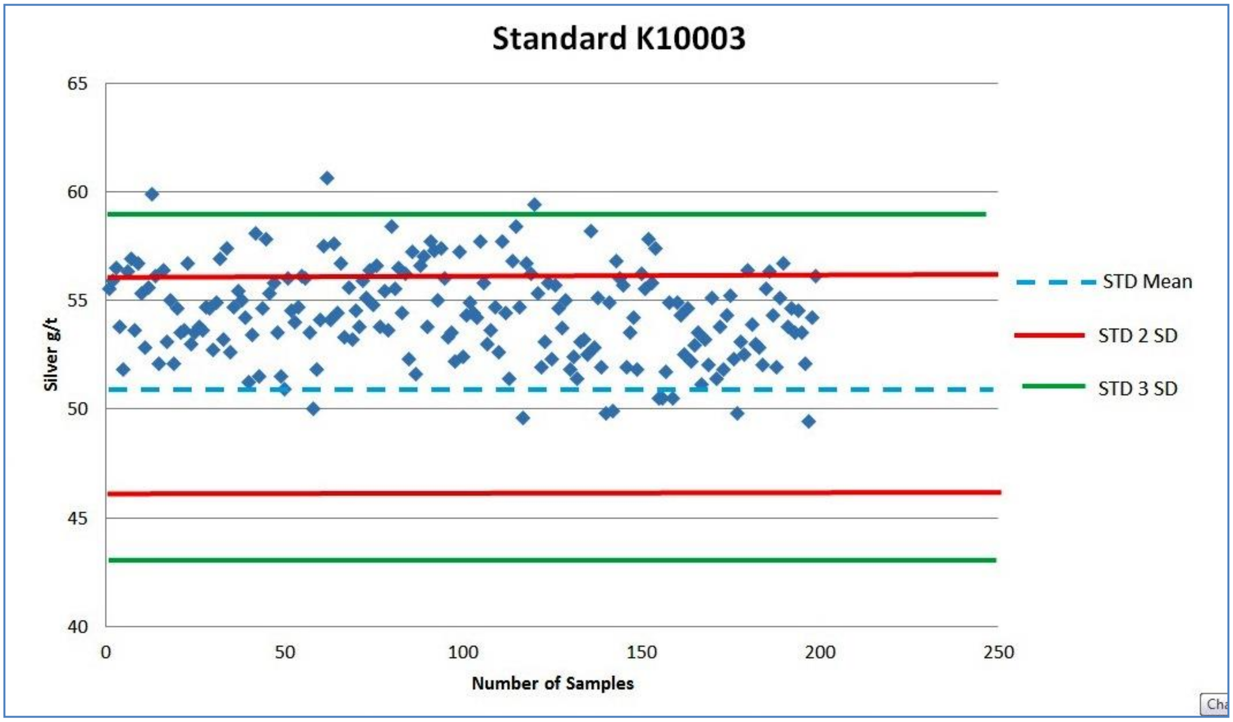


Figure 37. Graphical Representation of Standard K10003

8.2.1.5 Blanks Controls

Blank samples were used to check for laboratory sample preparation issues and accuracy. These samples consisted of material that contained low but not below detection limits grades of elements to be analyzed. Four types of blank sample material were used by Metalline:

Pulverized blank material obtained from either rock samples or crushed material from the Peñoles Dolomita mining operation. Pulverized blank samples were prepared and analyzed at the Metalline laboratory to confirm their blank nature;

Blank core samples were either ¼ or ½ core samples of barren or low grade intervals selected from old drill core;

Blank crushed samples were typically prepared form RC samples or blank rock samples, coarse rejects are generally used for this purpose; and

Blank rock samples were prepared from rock samples, with part of the original sample analyzed by the Metalline laboratory when it was operating, to confirm the blank nature of the material.

Discrepancies with blank samples were resolved by re-assaying pulps or coarse rejects or both if material is available as well as selected samples in the nearby sample intervals.

Coarse blank material for the 2011 and 2012 drill holes were inserted at a rate of one in 40 samples. The "blank" sample came from drill core intercepts from previous drill campaigns with low level or null concentrations of silver, zinc, lead and copper. The problem with this methodology is that there is not a consistent grade range for the "blank" material selected.

There also is a lingering doubt as to just how inert some of the selected "blank" material is. Five samples returned values above 5 ppm silver. Of those, two were mislabeled standards. From the period of July 7 to July 20, 2011, fourteen blanks retuned values greater than 3 g/t including three samples that returned values above 5 g/t that appear to indicate a problem with the assay preparation laboratory.

As of drill hole B11099 onwards a different blank sample has been used and will be consistently used going forward. The sample BLANCO-DOL comes from a nearby dolomite mine. (SRK 2012)

The Author (Reeves) reviewed the blanks used in the drill program subsequent to the last resource report and found that 538 blanks had been inserted into the sample stream. Of these, only nine samples returned greater than 0.6 g/t with one reaching 1.8 g/t Ag. The vast majority were at the detection limit of 0.1 g/t Ag (Figure 38).

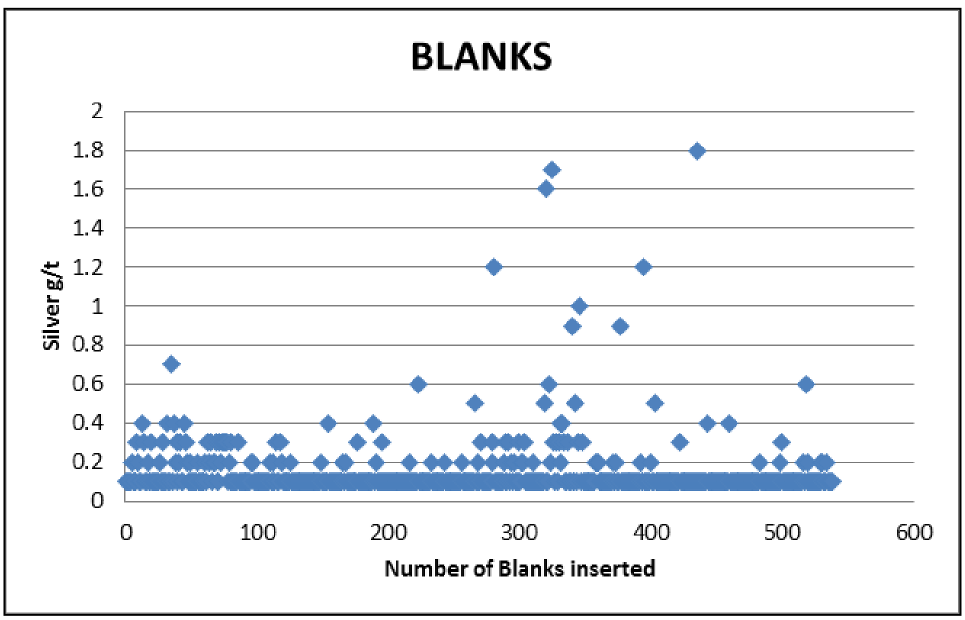


Figure 38. Blank Performance between July 2012 & December 2012

8.2.1.6 Duplicate Samples

Duplicates are used to check on sample homogeneity and laboratory precision. They were also used to detect issues associated with sample preparation. Silver Bull submitted both pulp and coarse duplicate samples. Duplicate samples were submitted with a different sample number to that used for the original sample. Discrepancies and inconsistencies with duplicate samples were resolved by re-assaying pulp, reject or both. (SRK 2012)

8.2.1.7 Pulp Duplicates

Pulp samples submitted to a second certified laboratory were also used as a test of precision and accuracy. Pulp duplicates were submitted with the pulp samples, previously analyzed by the Metalline laboratory. They were also submitted after results were been received from ALS as a check on laboratory precision. (SRK 2012)

No pulp duplicates were run since the last resource estimate.

8.2.1.8 Field Duplicates

(After JDS 2013) - Field duplicate samples are set at every 20th sample and are bracketed by either a blank or a standard.

Field duplicates are duplicate core samples taken from selected core. The initial ½ core was split into two ¼ core samples, one of which was submitted as the original sample and one of which was submitted as the duplicate sample.

A total of 928 field duplicate samples were taken as part of the QA/QC program for the 2012 drilling after the SRK 2012 Resource report. Of these, 124 samples assayed below detection limit of 0.2 g/t with another 490 reporting less than 5 g/t silver.

Silver and zinc results were analyzed for Relative Difference using the following formula:

$$\%\ \text{Diff} = \left| \frac{x_1 - x_2}{(x_1 + x_2)/2} \right| \times 100$$

Of the remaining 314 samples assaying greater than 5 g/t, 99 samples displayed a relative difference greater than 20% (Figure 39).

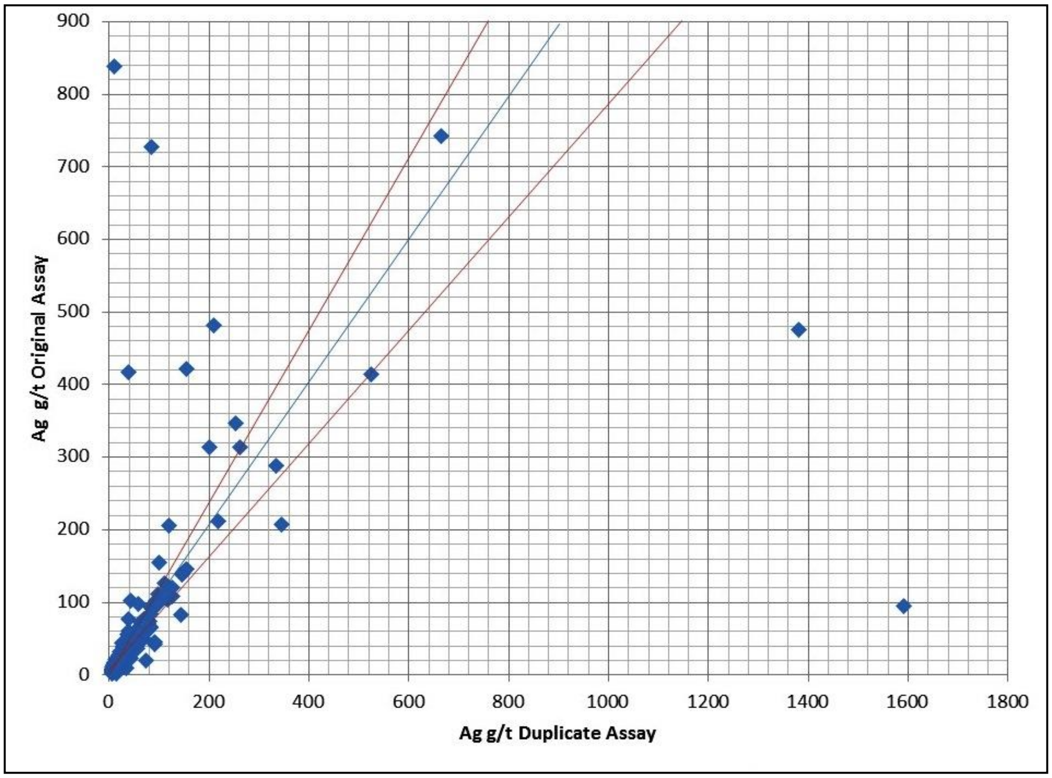


Figure 39. Silver Coarse Duplicate Assay Results with ± 20% Confidence Lines

The results of the duplicate samples are acceptable given that the silver mineralization is to some extent fracture controlled and nuggety in nature.

For zinc, of the 938 samples four samples were below detection limit in both instances., Out of the remaining nine hundred and thirty-four pairs, 232 samples showed a Relative Difference of >20%. The majority of those samples are below ~0.70% Zn (Figure 40).

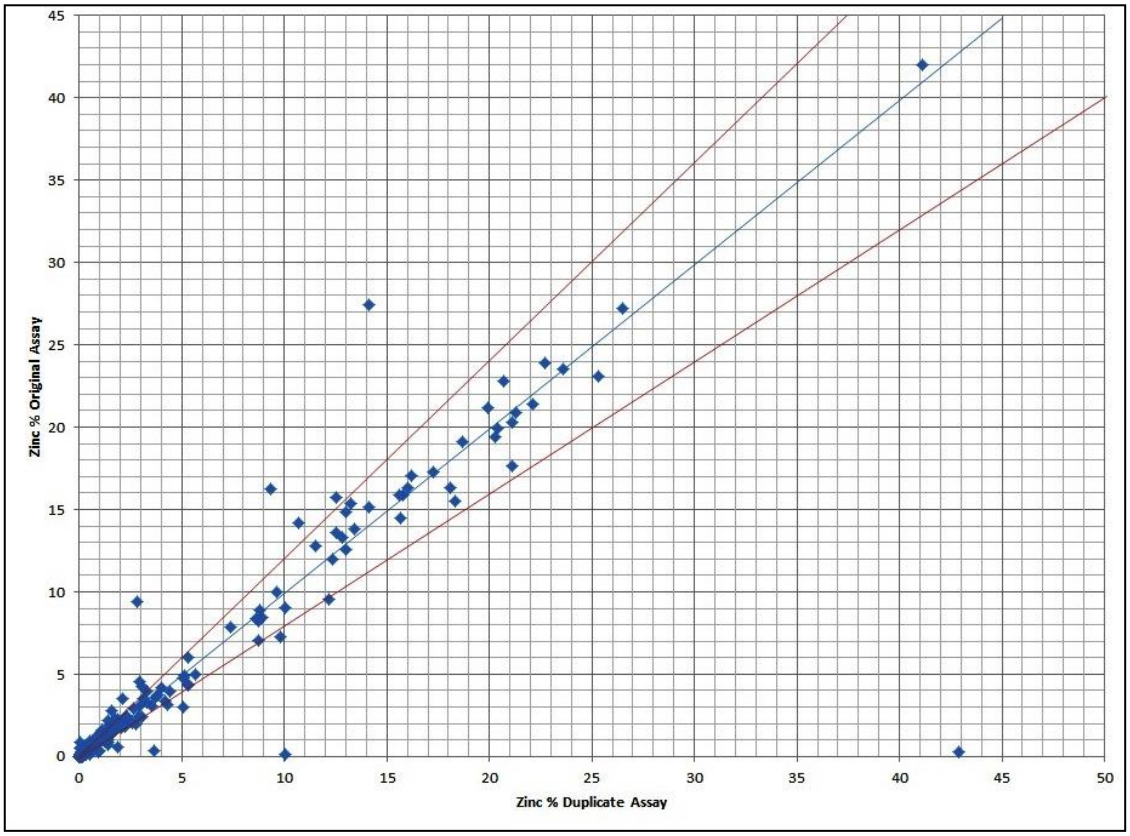


Figure 40. Zinc Field Duplicate Comparison

In summary, Silver Bull has had a Standard, Blank, or Field Duplicate QA/QC insertion rate of about every one in nine samples. The Authors are of the opinion that the sample preparation, security and analysis meets industry standards and is adequate to support a mineral resource estimate as defined under S-K 1300.

8.3 TERMITE HOLE COMPARISION

8.3.1 INTRODUCTION

In 2013 SRK was engaged by Silver Bull to carry out an analysis of the recently completed diamond drilling at the Sierra Mojada project. Specifically, SRK was asked to evaluate if the Termite drilling (TH) could better define and document the apparent bias that appears to exist between Long Holes (LH) and surface diamond drill holes (DH) on the property. The analysis was carried out on 206 TH and LH drilled in the same general area. The comparison was carried out by Dr. Gilles Arseneau and Mr. Michael Johnson of SRK. This section is taken from the summary memo provided by Silver Bull and previously reported by JDS (2013).

8.3.2 METHODOLOGY

The termite drill holes were all collared from underground platforms and are generally situated in areas with high concentration of LH. As was expected, comparing termite holes and long holes on an assay to assay basis was not very successful (Figure 41). While there was general agreement between the two types of drilling, significant differences existed at the one to two metre assay intervals.

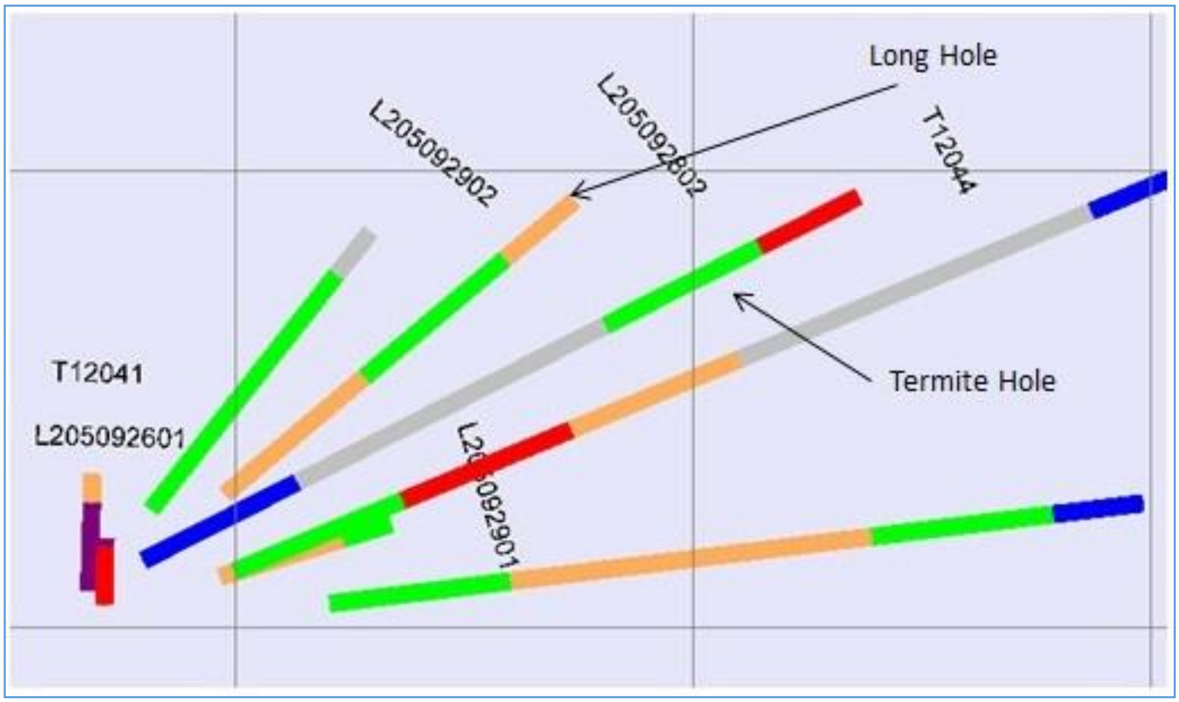


Figure 41. Sectional Comparison of Termite Hole & LH Assays

Note: Grid is 5 m x 5 m.

For this reason, SRK decided to compare the average grade of TH and LH over larger volumes starting with 5x5x5 m blocks, representing the block size used in the latest resource estimate. For this comparison, the grade of all capped composites that were within a block volume from both types of drill holes were averaged and compared on quartile/quartile (QQ) plots. The QQ comparison for zinc appeared to indicate that in general the distribution of LH assays is very similar to the distribution of LH assays (Figure 42).

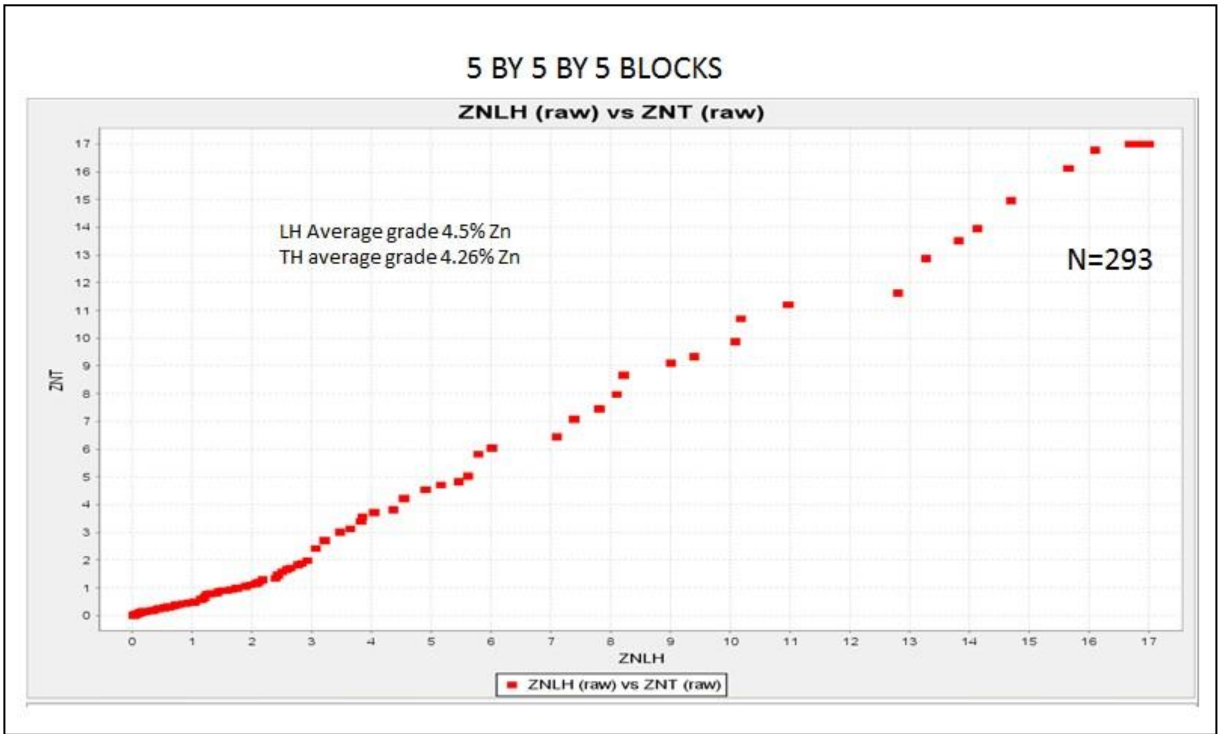


Figure 42. Comparison of Zinc for LH & TH

However, silver grades in the LH appeared to be generally higher than in the TH, by about 25% (Figure 43 on the following page).

SRK cautions that the comparison is based on a small number of blocks, less than 300, and that the differences noted between LH and TH could be an artifact of the data.

SRK also compared the LH and TH using different block sizes from 10x10x10 m to 20x20x10 m and 50x25x10 m. SRK noted that while the differences between LH and TH seemed to improve for silver the opposite was true for zinc. The apparent bias for silver dropped from 25% at a 5 m blocks to less than 10% for the 20x20x10 m blocks, however the zinc bias increased to about 30% for the 20x20x10 m blocks (Figure 44).

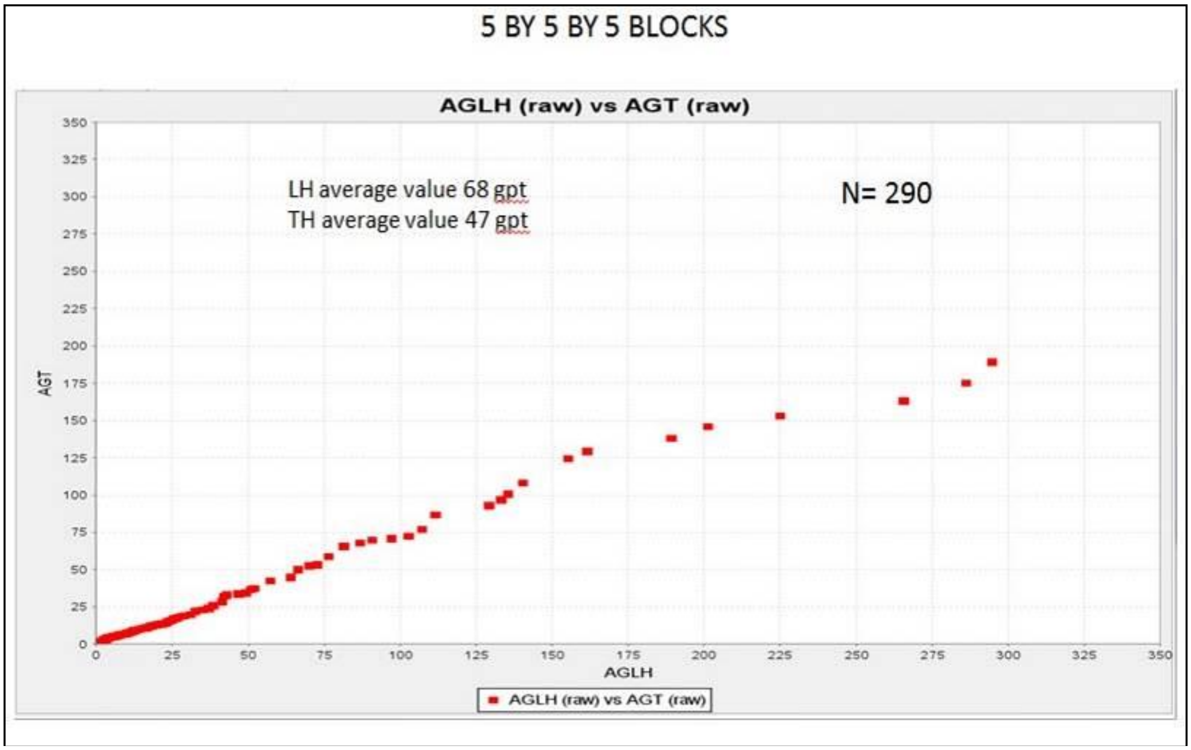


Figure 43. Comparison of Silver in LH versus TH in 5 m Blocks.

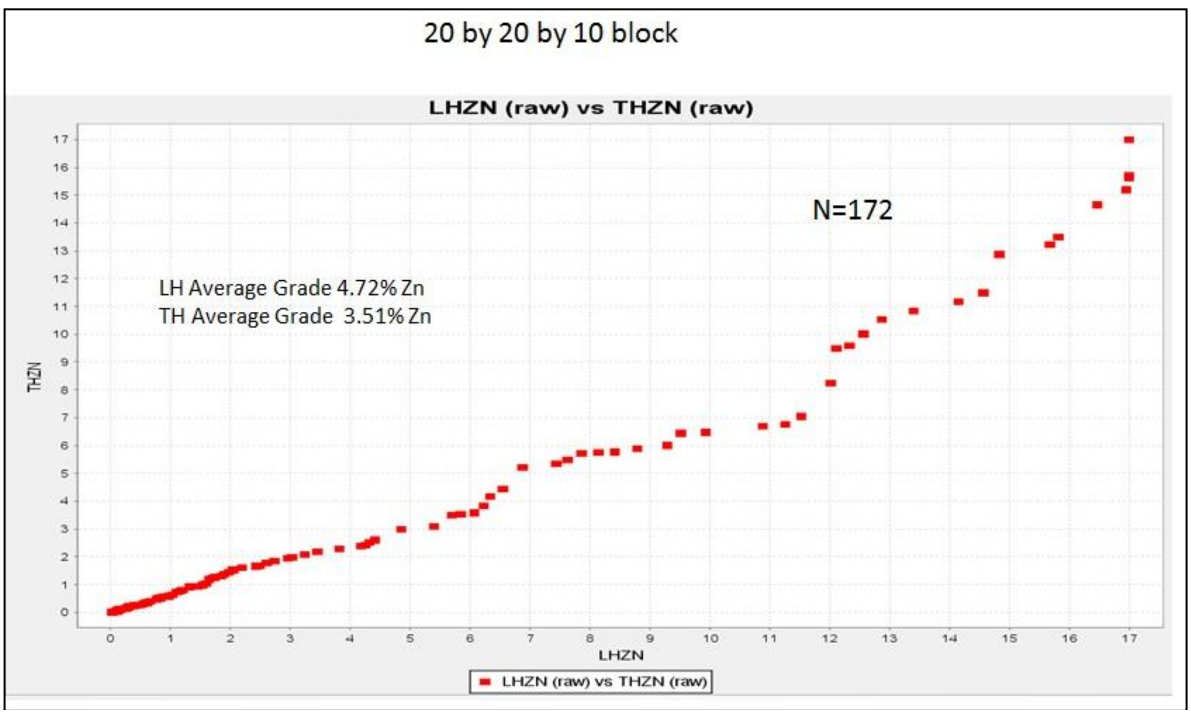


Figure 44. Comparison of Zinc in LH versus TH for 20x20x10 Blocks

Because of the difficulties with well-informed block-to-block comparisons and because of the small number of blocks available for comparison, SRK decided to estimate block grades using LH, TH and DH data and then compare only those blocks that had been estimated by the three types of data.

The blocks were estimated from a minimum of five and a maximum of 18 composites. The search was set to 90 m along strike, 70 m across strike and 50 m down dip. The estimation resulted in over 10,000 blocks being estimated by the three data types. As presented in the previous study, the block estimated silver grades from LH assays on the QQ plot were on average twice the block estimated silver grades from DH assays (Figure 45).

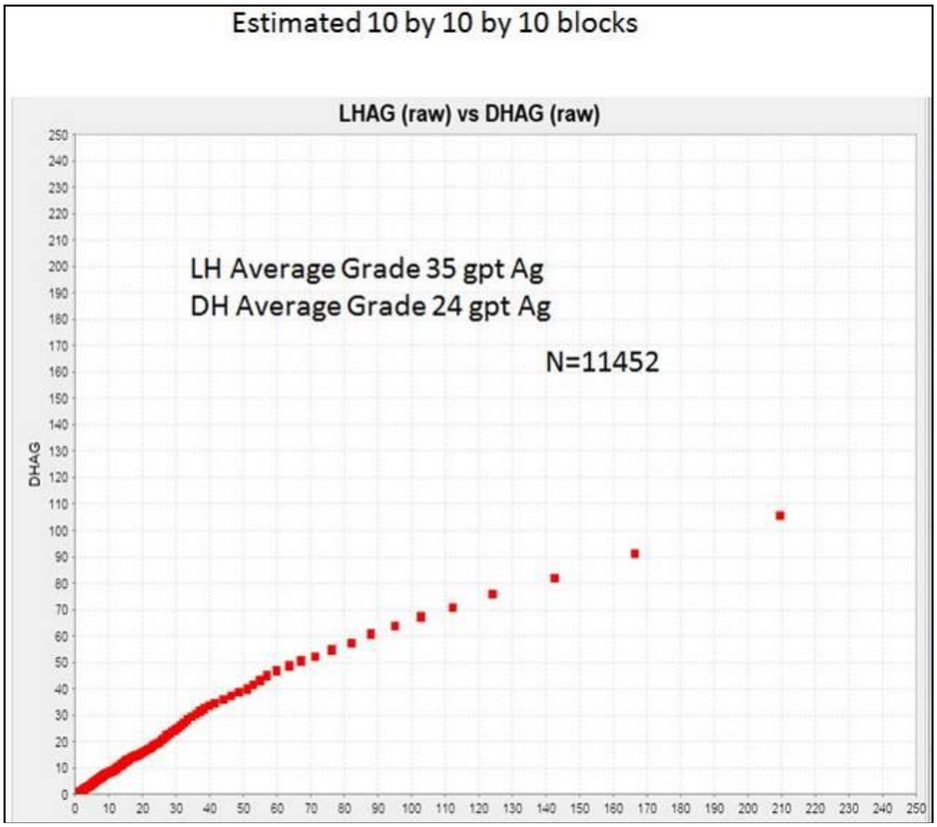


Figure 45. Comparison of Estimated LH & DH

However, the comparison of LH and TH estimated silver block grades showed a very good agreement for grades lower than 125 g/t Ag (Figure 46).

A comparison of estimated block grades for zinc from LH and TH assays showed a generally good agreement for grades lower than 6% (Figure 47).

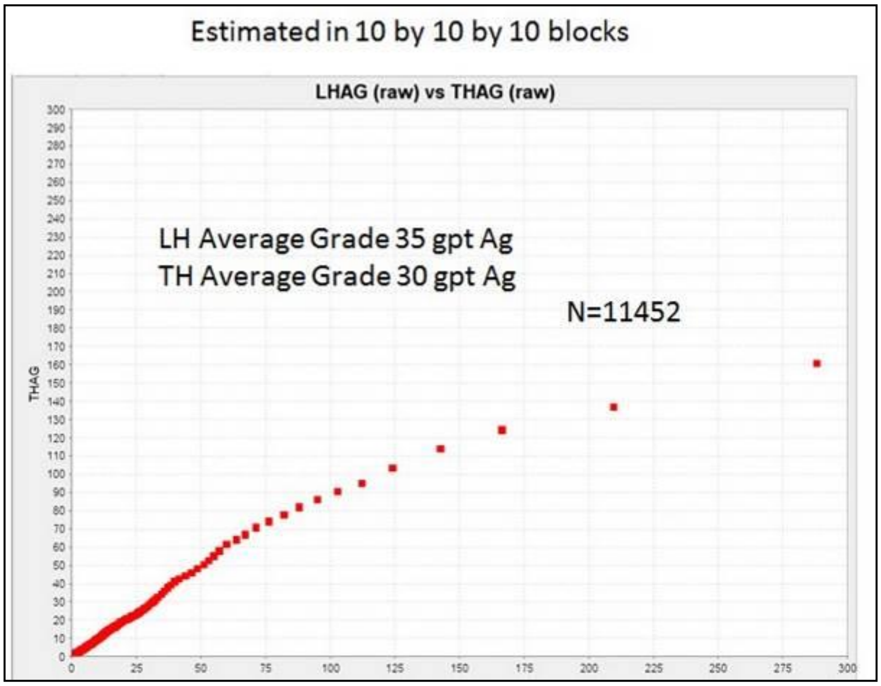


Figure 46. Comparison of LH & TH for Estimated Blocks, all Rock Codes

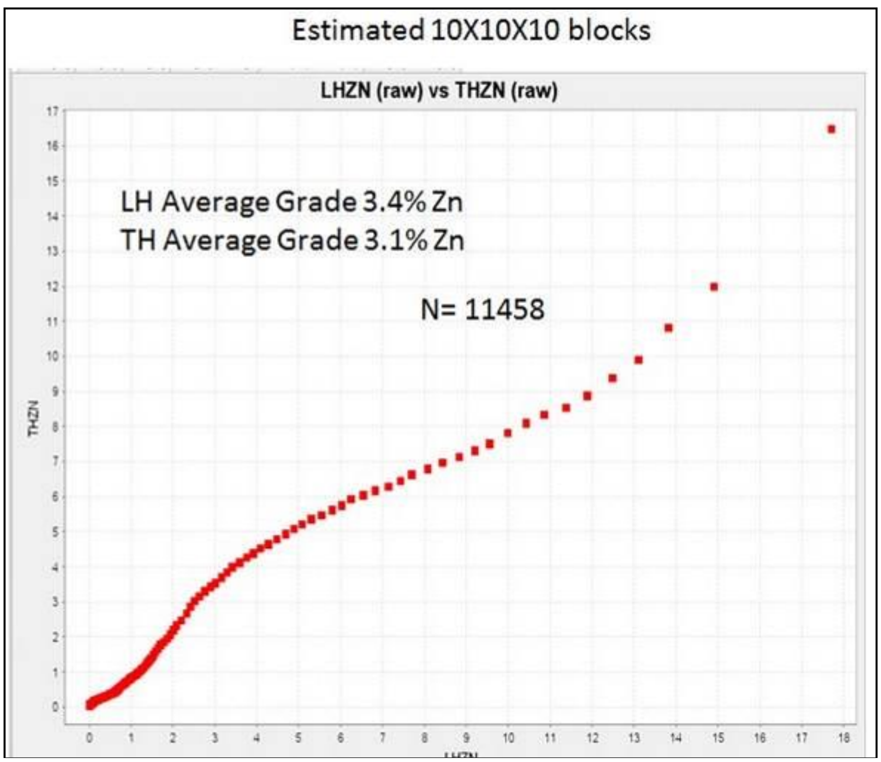


Figure 47. Comparison of LH & TH for Estimated Blocks, all Rock Codes.

To further evaluate the differences between LH and TH, SRK evaluated the two data types by individual rock codes. The results of the analyses indicate that the differences between LH and TH are not consistent over the entire Sierra Mojada mineralization. Silver in the TH seemed to be higher than in the LH for rock 50 (above 70 g/t) while the opposite is true for rock code 10. Correlations for silver were generally good for all rock types at lower grades (below 70 g/t).

Zinc in the TH correlates well with the LH for grades lower than 7% in rock codes 20 and 50 see Table 11.

Table 11. Summary of Correlation between LH & TH by Rock Codes

Metal	Rock Code	Comments
	10	Good correlation up to 100 g/t, restricted grades > 125 g/t to 20 m
	20	Very low Ag values, TH higher than LH, no adjustments (could upgrade LH)
	40	not reviewed
Ag	50	Good correlation to 60 g/t, TH are higher than LH over 70 g/t, no restriction
	10	Good correlation up to 8%, restricted grades > 8% to 20 m
Zn	20	Good correlation up to 7% , restricted grades > 7% to 20 m
	40	Insufficient data for valid comparison, LH much greater than TH
	50	Good correlation to 5%, restricted grades > 5% to 20 m

To evaluate the lateral extent of the high-grade zone explored by underground workings, SRK compared all LH and TH assays normalized to the drill collar (i.e., all assay data were averaged based on their distance from the collar at 2 m increments). Tables 12 and 13 show the LH and TH average grades at specified distance from the collar. As can be seen from the tables, LH silver grade drops by about 35% over the first 20 m of drilling and for the same distance TH silver grade drops by 60%. Similar decrease in grade is noted for zinc in rock code 20 (Table 12).

Table 12. Average Grade of all LH by Depth (Long Holes All Data)

Row Labels	Average of AGCAP	Average of ZNCAP	Count of AGCAP
0	43	3.81	1,770
2	41	3.30	1778
4	38	3.01	1,697
6	34	2.84	1,589
8	36	2.87	1,430
10	34	2.87	1,259
12	31	2.70	1,042
14	33	2.63	796
16	34	2.69	564
18	27	2.68	323
20	28	3.75	81
22	17	5.40	22
24	10	8.54	10
26	10	5.06	5
28	11	9.87	1
Grand Total	36.48	3.06	12,367

Table 13. Average Grade of all TH by Depth (Termite All Data)

Row Labels	Average of AGCAP	Average of ZNCAP	Count of AGCAP
0	65	6.30	197
2	56	5.25	189
4	41	4.58	186
6	42	4.29	185
8	32	4.15	169
10	38	3.52	164
12	44	3.10	150
14	46	3.11	137
16	44	3.45	129
18	31	2.93	114
20	25	2.45	100
22	43	2.48	85
24	31	2.29	78
26	37	2.69	67
28	44	2.55	57
30	58	2.68	49
32	54	2.22	43
34	50	3.25	36
36	39	3.44	30
38	73	3.77	25
40	37	2.61	26
42	41	1.04	19
44	30	2.57	12
46	42	1.85	8
48	28	1.15	8
50	34	0.68	7
52	69	3.37	5
54	33	1.14	5
56	81	1.32	4
58	11	1.27	2
60	12	1.81	2
62	11	1.74	2
64	9	3.39	2
66	12	4.53	2
68	10	0.20	1
70	12	0.06	1
72	6	0.04	1
74	11	0.15	1
76	13	0.16	1
Grand Total	44	3.71	2,299

Table 14. Grade Variation for Zinc in LH for Rock Code 20

Row Labels	Average of AGCAP	Average of ZNCAP	Count of AGCAP
0	5	7.02	326
2	5	6.26	321
4	4	5.70	309
6	6	5.23	290
8	5	5.05	250
10	5	5.56	218
12	6	5.40	175
14	4	5.77	115
16	5	6.06	84
18	5	5.15	51
20	4	3.27	16
22	9	12.76	2
24	10	15.81	2
28	11	9.87	1
Grand Total	5.02	5.81	2,160

The grade appears to drop faster in the TH than in the LH, this could be an indication of down hole contamination for the LH assays (higher grades near the drill collars are being slightly smeared down the hole or being over sampled) (Figure 48).

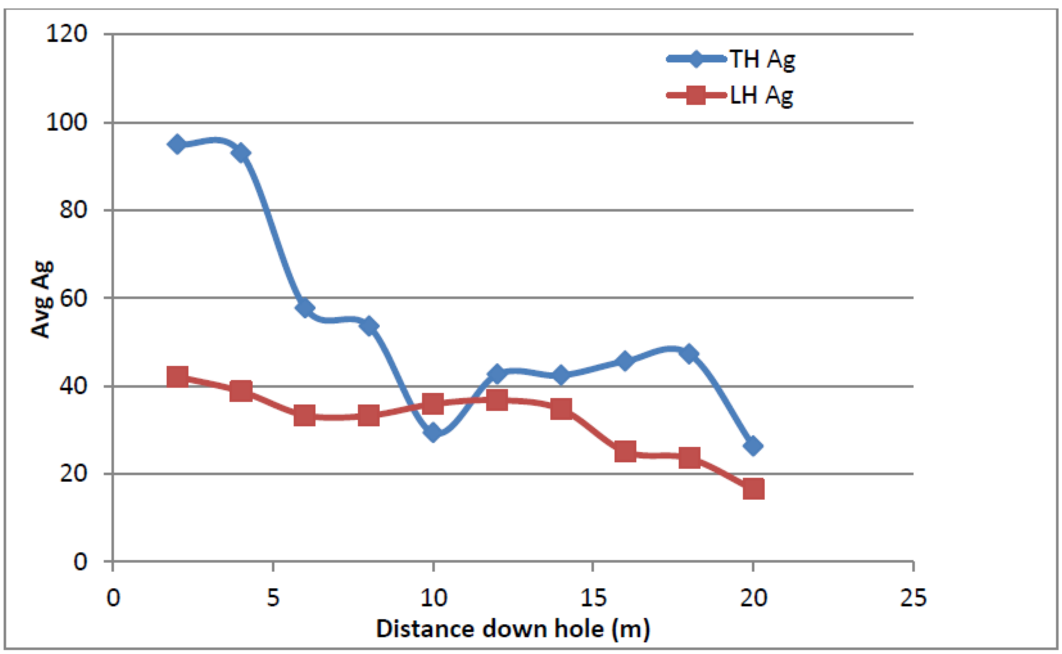


Figure 48. Graphical Representation of Downhole Grade Variation for Ag in rock code 10

8.3.3 TWIN HOLE PROGRAM CONCLUSIONS

Overall, the exercise indicates that the Long Hole silver assay data are somewhat biased on the high side for the higher grades when compared to assays from Termite holes. The bias seems to be restricted to grade above 70 g/t or 100 g/t depending on the domain or rock code compared. Zinc grades above 7% should be restricted to 20 m in rock codes 20 and 50.

SRK recommended that special care be taken when using LH data in resource estimation and that a restriction be placed on high grade in the long holes. Initial findings from the analysis of the variation of grade with depth of drilling indicate that the high grade drops relatively quickly within 20 m of collars. SRK recommended that estimates from the high grades in the underground long holes should be limited to roughly 20 m distance from underground workings.

9 DATA VERIFICATION

In addition to the data verification carried out by as part of the previous technical reports for Sierra Mojada, the QP has carried out a review and validation of the existing drill database and data collection procedures. No new drill holes have been added to the Mineral Resource database since the June 2015 technical report. The verification consisted of:

- Review of sampling and logging procedures
- Validation of the database
- Spot check assay certificate data with the database
- Review of QA/QC procedures
- Inspection of QA/QC results
- Review of the geological model
- Visual inspection of cross sections showing assay and lithological data overlaid onto the geological model

The QP considers the database fit-for-purpose and is suitable for use in the estimation of Mineral Resources and was collected in line with industry best practice.

9.1 DOWNHOLE SURVEYS

PAH's initial review of downhole survey information indicated several issues relating to improper interpretation and processing of the survey data. To mitigate these issues PAH and MMC compiled all available survey data. SRK reviewed the digital downhole data and noted some minor data entry errors with the Long Hole database. These errors are not considered to be material to the resource estimation because of the relative short length of the long holes, on average less than 15 m. (SRK 2012).

Prior to the 2015 Mineral Resource estimate, Silver Bull audited the database and any survey discrepancies were checked by the on-staff surveyor. The QP reviewed the existing downhole survey information and procedures.

9.2 ASSAY DATA

Original digital assay certificates were provided by Silver Bull and loaded into an SQL database by Archer Cathro. Individual assay results were compared to the assay results recorded in the drill database. No errors were detected that would impact the resource estimate.

9.3 CHANNEL SAMPLES, COLLARS & UNDERGROUND WORKINGS

There has been no additional survey work done on void delineation and this section summarizes the previous work. (Tuun & AFK 2015).

Three dimensional locations of channel samples ("CH"), underground drill holes and surveyed underground workings were supplied by Silver Bull. SRK imported these data into Gems® software, which has the capability of displaying such data in three dimensions.

The channel samples and underground drill hole collars were visually compared against the underground workings. A number of inconsistencies were noted. Namely, some channel samples and collars were located several meters away from the surveyed underground workings. This implies erroneous survey data for either the channel sample/collar location or the underground workings. These data were excluded from the dataset prior to estimation. In areas where channel samples had been collected but no underground workings seem to exists in the Silver Bull survey database, SRK generated wireframes to capture the additional mined out areas (Figure 59). (SRK, 2012)

The QP visually inspected the void solids provided by Silver Bull to ensure they adequately represent mined material. Channel samples and underground drill hole collars were compared to the void solids. The QP found no issues that would significantly impact the resource estimation process.

10 MINERAL PROCESSING AND METALLURGICAL TESTING

A summary of the metallurgical work conducted on the oxide mineralization by Silver Bull 2010 and 2013 is outlined below. Specifically, this chapter looks at the following:

- Summary and analysis of the program on the silver and zinc mineralization, and then the SART circuit at the back end.
- Incorporation of all results into two preliminary process flow diagrams, one for silver and one for zinc.

10.1 ORE TYPES

The metallurgical program conducted by Silver Bull between 2010 and 2013 looked at the silver and zinc zones separately in order to obtain an understanding of the process parameters for each ore type. The process flow sheets were developed to handle all of the silver ore types in one flow sheet, with a second flow sheet being developed to handle all of the zinc ore types. The goal was to allow a situation wherebyone of the flow sheets may be converted to the other flow sheet if a mine plan can be developed for first mining the silver mineralization which sits spatially on top of the zinc mineralization.

The mineralization at Sierra Mojada can be broken into a silver zone located at surface at the west end of the deposit, before dipping underground at an angle of 6 to 7 degrees towards the east, and a zinc zone which sits underneath the silver mineralization at the eastern end of the deposit (Figure 49).

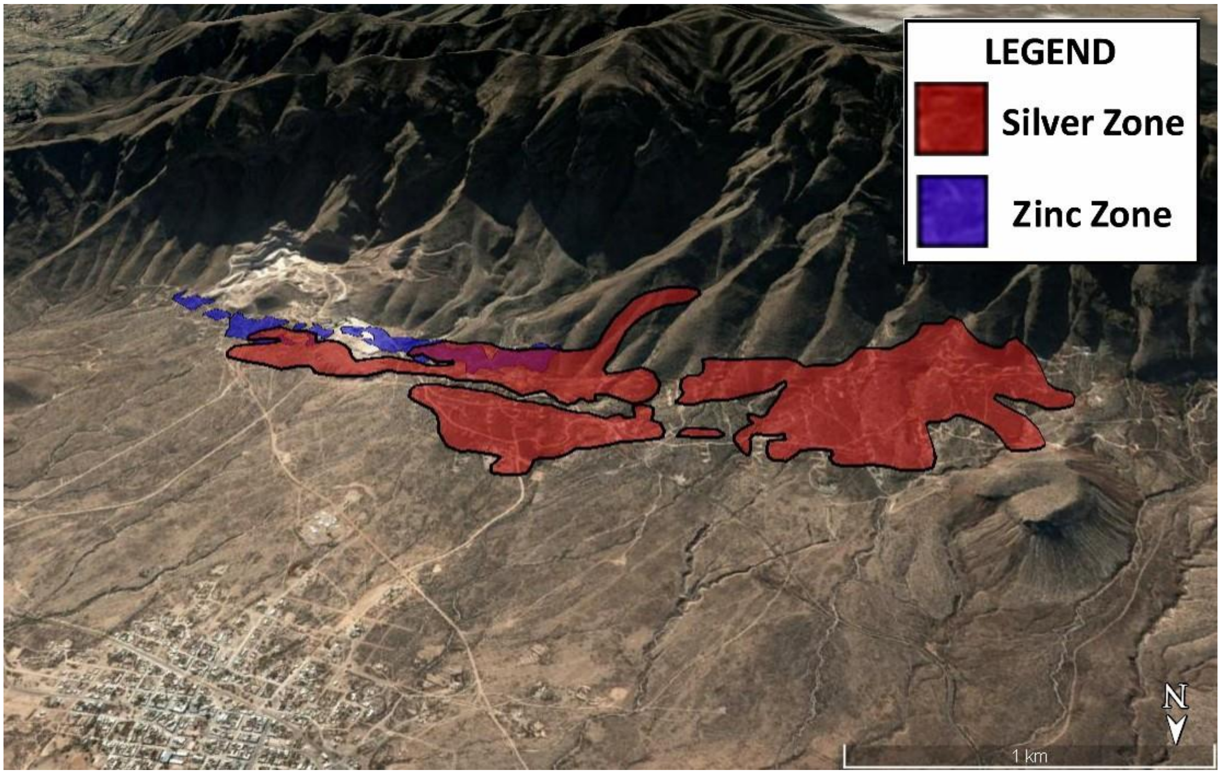


Figure 49. The location of the silver and zinc zones of mineralization

The silver zone can be broken down further into three distinct silver areas (see Figure 50).

- Shallow Silver Zone,
- Centenario Zone, and the
- Fronteriza Zone.

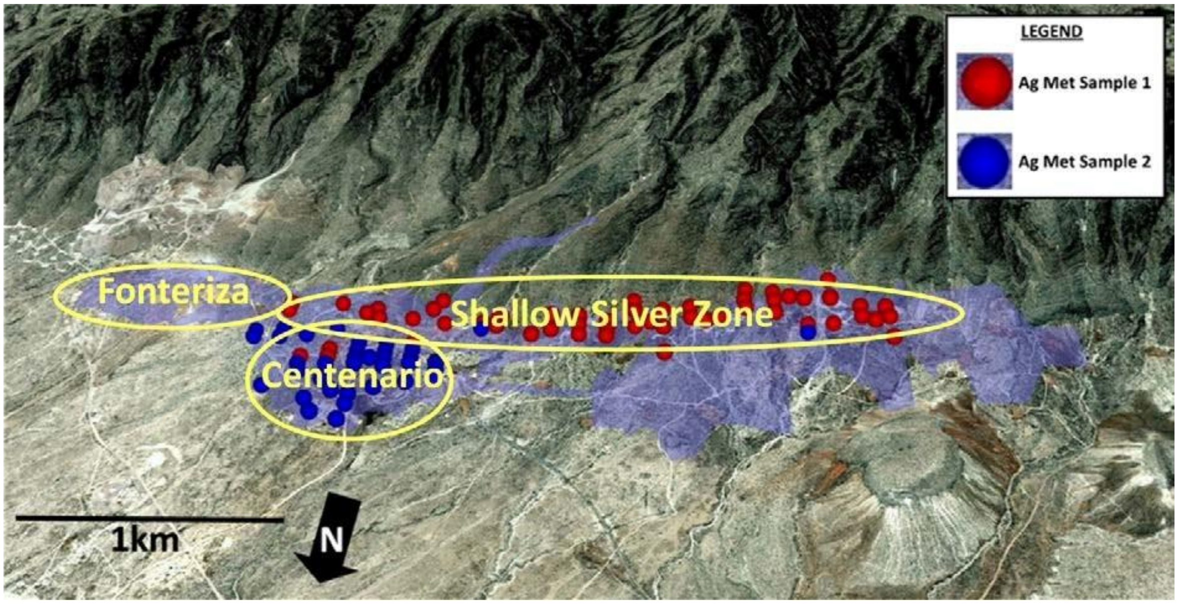


Figure 50. Silver metallurgical Sample Locations

The zinc zone can also be broken down into two distinct areas.

- Red Zinc zone and the
- White Zinc zone.

10.2 TEST WORK

Metallurgical test work at Sierra Mojada occurred over several phases between 2010 and the end of 2013 and was conducted at several mineral processing laboratories including: Mountain States Research and Development Intrernational Inc., and Kappes Cassidy & Associates Inc. for the silver mineralization, and Hazen Research Inc. and SGS Lakefield Ontario Inc. for the zinc mineralization. The test work on the SART process was conducted by BiotecQ Ltd. out of Vancouver and was performed on the pregnant solution recovered from the testwork completed at Hazen Research Inc.

10.2.1 MOUNTAIN STATES R&D – SILVER RECOVERY TESTS

The metallurgical test work related to the silver mineralization seen at Sierra Mojada mineralization in 2010 by Silver Bull at Mountain States Research and Development International, Inc. located southeast of Tucson, Arizona. Three samples were taken from a trench, which was excavated along the surface of the Shallow Silver deposit (see Figure 51).

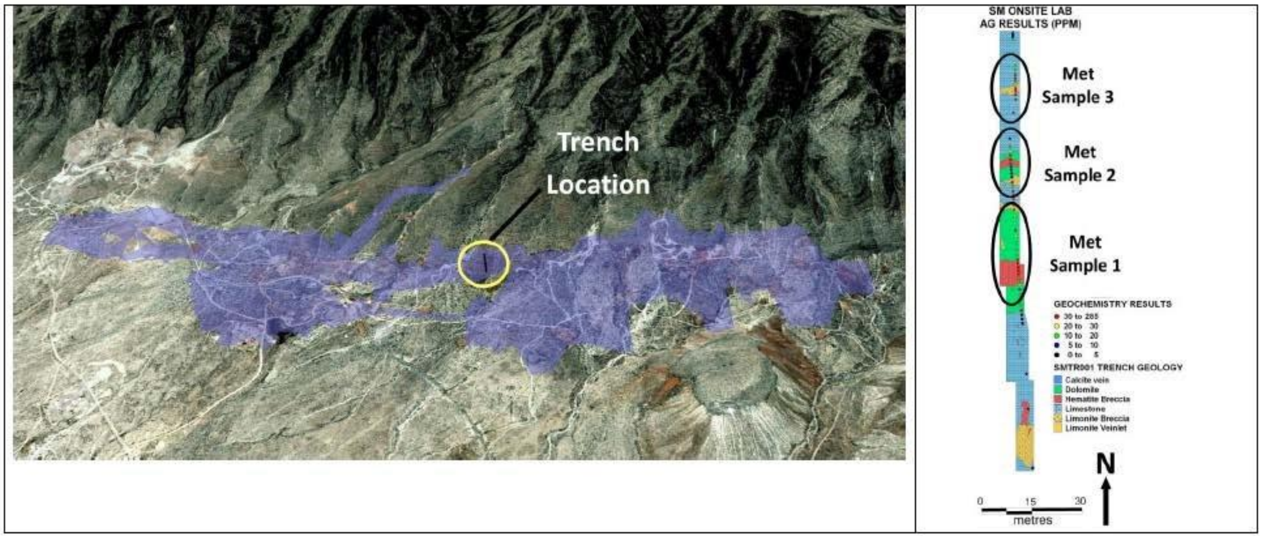


Figure 51. Location of the Trench Metallurgical Sample Taken in Early 2010.

The geology and sample location from the trench are shown in Figure 51. Of the three metallurgical samples taken only samples Met Sample 1 and Met Sample 3 were tested, no cyanidation test work was performed on Met Sample 2 due to high plumbo-jarosite content. Met Sample 1 was later composited into 'Compo1' and Met Sample 3 was composited into 'Compo2'.

Mountain States performed two series of tests on the Compo1 and Compo2 samples. The first series looked at a standard cyanide leach bottle roll test and compared grind size to silver recovery. The second series of tests looked at increasing cyanide concentrations in the leach solution versus the silver recovery. The test parameters and the results are shown in Tables 15 and 16, respectively.

Table 15. Mountain States Grind Size versus Silver Recovery Results.

Sample	Grind Size P80	Head Grade	Extracted Grade	Avg. Tails	Ag Extracted	Leach Time	Consumption NaCN	Addition $Ca(OH)_2$
ID	(um)	(Ag g/t)	(Ag g/t)	(Ag g/t)	%	(hrs)	kg/MT	kg/MT
Compo 1	37	55.9	38.4	17.5	66.0	120	1.38	1.00
Compo 1	53	55.9	36.1	19.8	62.7	120	1.14	1.00
Compo 1	100	55.9	33.5	22.4	57.8	120	0.82	1.00
Compo 1	230	55.9	34.3	21.6	57.9	120	0.72	1.00
Compo 1	2000	55.9	30.9	25	53.3	120	1.24	1.00
Compo 2	37	66.6	47.3	19.3	68.4	120	2.38	1.00
Compo 2	53	66.6	48.5	18.1	72.5	120	2.46	1.00
Compo 2	100	66.6	44.3	22.3	65.0	120	2.32	1.00
Compo 2	230	66.6	41	25.6	62.3	120	2.28	1.00
Compo 2	2000	66.6	37.6	29	52.4	120	2.62	1.00

Table 16. Mountain States Leach Solution Cyanide Concentration versus Silver Recovery Results.

Sample	Cyanide Concentration	Grind Size P80	Head Grade	Extracted Grade	Ag Extracted	Leach Time	Consumption NaCN	Addition Ca(OH)2
ID	NaCN, kg/MT	(um)	(Ag g/t)	(Ag g/t)	%	(hrs)	kg/MT	kg/MT
Compo 1	2	53	55.9	36.72	65.7	96	1.19	2.30
Compo 1	4	53	55.9	36.72	65.7	96	2.73	0.86
Compo 1	8	53	55.9	37.39	66.9	96	2.34	0.72
Compo 2	2	53	66.6	47.95	72.0	96	2.20	2.30
Compo 2	4	53	66.6	48.48	72.8	96	2.84	1.01
Compo 2	8	53	66.6	49.55	74.4	96	3.56	0.72

Based off the results of this first test program, a more detailed test program using the silver ores from the Shallow Silver Zone, Fontariza, and Centennario zones was developed. Five samples were collected and composites of each area made. The work conducted by Mountain States on this next phase is shown in Table 17 below.

Table 17. Silver Bull Silver Deposit KCA Metallurgical Test Program.

Sample Description	Test Conditions
Shallow Silver Zone (SSZ)	SB Sample 1
MASTER COMPO	Pre Roast Prior to Cyanide Leach
	1 sample x 2 roast conditions with 3 NaCN Concentrations
SSZ Sample Rejects	SB Sample 4
	4 Compos Tracking Pb
	P80 53 um, 1.0 gpl NaCN
	4 Compos Tracking Leach Time
	1.0 gpl &2.5 gpl NaCN, Lime to pH 10.5
	5 Diagnostic Leach Tests
	P80 53 um and 5.0 gpl NaCN, Lime to pH 10.5
Centenario	SB Sample 2
COMPO 4 & 9 of 10 COMPOS	Pre Roast Prior to Cyanide Leach
	2 samples x 2 roast conditions with 3 NaCN Concentrations
MASTER COMPO	3 grinds x 2 NaCN concentrations
Fronteriza	SB Sample 3
	Test grade vs Ag rec on 5 different grade samples
	Each sample tested @ 3 grind sizes and 2 NaCN concentrations
	Diagnostic leach tests on 5 different grade samples
North Shallow Silver Zone	SB Sample 5
NSSZ	Test grade vs Ag rec on 5 different grade samples
	Each sample tested @ 3 grind sizes and 2 NaCN concentrations p80 53 um

Following a dispute over the timing and delivery of results and cost overruns, Silver Bull ended the working relationship with Mountain States and took the composite samples that had been prepared to Kappess Cassidy & Associates for additional test work on the Silver Mineralization.

10.2.2 KAPPES CASSIDY AND ASSOCIATES

10.2.2.1 Silver Recovery Tests

Further test work on the silver ore at Sierra Mojada was conducted by Kappes, Cassidy and Associates (KCA), Reno, Nevada in 2011. Work has focused on cyanide leach recovery of the silver using “Bottle Roll” tests to simulate an agitation leach system common on many mine sites. Samples were composed of the composite samples prepared by Mountain States and supplemented with additional samples taken separately from drill core, mineralized outcrop, and trenches from the “Centenario”, “Fronteriza” and “Shallow Silver” Zones of the silver mineralization. These were crushed and mixed to create either a “composite” sample representative of each of the 3 zones, or a series of composite samples based on the silver grade for each of the three zones.

KCA began their test work by performing diagnostic leach test work on 5 composites from the Shallow Silver Zone and 5 composites on the Centenario Zone. Table 18 lists the results of this test work and Figure 52 shows the results graphically.

Table 18. Diagnostic Leach Test Work – Cumulative Silver Extraction.

KCA Sample No.	Head Average, gms Ag/MT	Diagnostic Leach Test Extractions - Extracted gms Ag/MT													
		Calc. Head Average, gms	Direct		Acetic Acid		Hydrochloric Acid		Nitric Acid		Heated Nitric Acid		Roast	Overall	
			NaCN Leach	CN Leach Ag % Rec	Acid W ash Solution	NaCN Leach	Acid Wash Solution	NaCN Leach	Acid W ash Solution	NaCN Leach	Acid Wash Solution	NaCN Leach	NaCN Leach	Cumulative Leach	Tails
64601	18.26	17.52	12.01	68.5%	0.91	1.49	0.00	1.51	0.64	0.52	0.00	0.29	0.11	18.15	0.05
64602	29.58	23.29	16.20	69.6%	2.04	0.82	0.00	1.53	0.63	1.46	0.35	0.07	0.09	23.88	0.10
64603	45.33	43.34	35.44	81.8%	1.76	0.87	0.00	2.18	0.63	1.54	0.50	0.19	0.12	44.04	0.12
64604	122.32	105.81	93.57	88.4%	2.06	1.19	0.11	2.64	1.14	3.80	0.18	0.51	0.26	106.34	0.35
64605	16.92	16.86	12.94	76.7%	0.54	0.78	0.10	0.33	0.55	0.32	0.63	0.61	0.02	17.58	0.05
64606	29.23	24.65	18.78	76.2%	0.65	1.59	0.10	1.53	0.42	0.39	0.80	0.25	0.04	25.30	0.11
64607	41.91	40.07	32.19	80.3%	0.52	2.46	0.11	2.23	0.78	0.32	1.32	0.07	0.03	40.82	0.06
64608	170.99	172.36	153.44	89.0%	3.62	5.97	0.25	4.25	0.86	1.36	2.19	0.07	0.09	173.00	0.24
64609	60.21	41.55	34.01	81.8%	1.03	2.03	0.25	1.69	0.55	0.70	0.71	0.07	0.22	42.06	0.31
64610	103.63	103.99	82.11	79.0%	2.37	4.31	0.15	5.92	0.72	6.47	1.44	0.33	0.05	104.65	0.12

Note: The extracted and tailings values from Roast Test were adjusted to reflect the original 500 gram feed weight

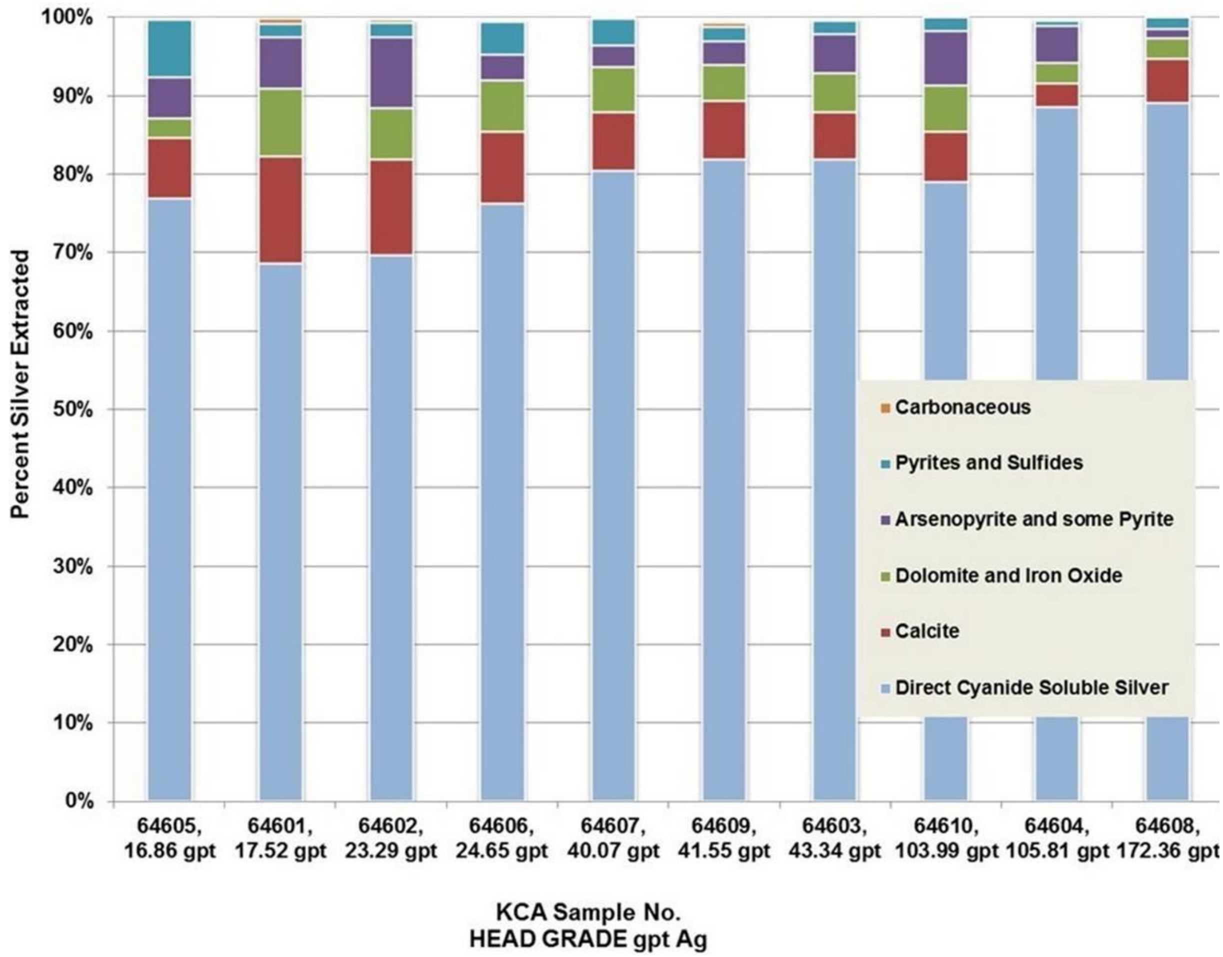


Figure 52. KCA Silver Zone Diagnostic Leach Test on the Shallow Silver and Centenario Zones

The results suggested silver mineralization is amenable to direct cyanide leaching.

The information from the diagnostic leach tests at various silver head grades also provided insight as to the relationship between silver recovery and silver head grade. Figure 53 shows a graphic display of this relationship.

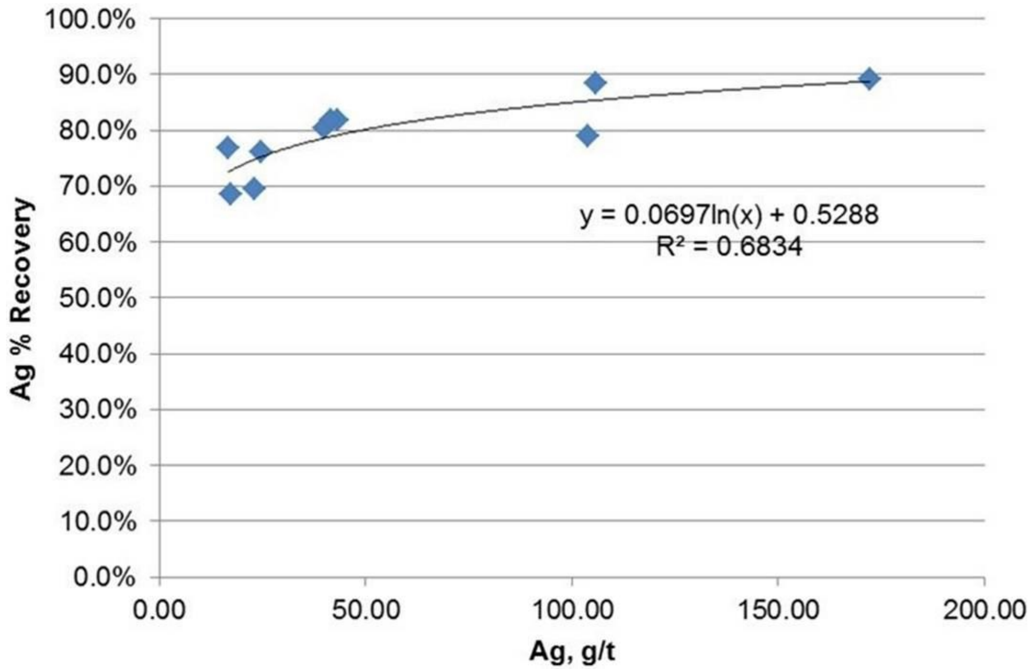


Figure 53. Shallow Silver Zone Diagnostic Leach Tests Ag Recovery vs. Ag Head Grade

Additional test work on the three silver zones at Sierra Mojada at KCA in 2012 was completed with work focusing on leach solution cyanide strength, pH, lead nitrate addition, grind size, and increased oxygen concentrations.

A summary of all the cyanide leach test work is shown in Table 19 below.

Table 19. Summary of Cyanide Bottle Roll Leach Test Results, Ag Recovery.

Location of Sample in Silver Zone	Calculated p80 Size micron	Head Average	Calculated Head	Avg. Tails	Ag Extracted	Consumption NaCN	Addition $Ca(OH)_2$
		gms Ag/MT	gms Ag/MT	gms Ag/MT	% Recovery	kg/MT	kg/MT
Shallow Silver Zone - Avg		58.6	65.2	21.3	67.5	3.50	0.66
Shallow Silver Zone - Max	49	50.2	75.0	16.9	77.0	5.03	0.50
Centenario Zone - Avg		80.4	76.8	26.6	74.3	2.97	1.19
Centenario Zone - Max	35	171.0	172.4	18.9	89.0	NA	NA
Fronteriza Zone - Avg		167.0	180.3	54.1	58.8	10.86	0.50
Fronteriza Zone - Max	46	464.1	530.0	82.7	84.0	17.13	0.50
Average of All Zones		**87.3**	**91.2**	**30.1**	**68.5**	**5.01**	**0.77**

Preliminary observations from the silver testwork include:

- Silver recoveries generally show an increase with higher grade.
- Silver recovery is somewhat grind size sensitive with finer grinds giving higher recoveries.
- Varying levels of cyanide consumption (NaCN) are attributed to variable amounts of zinc and copper in the samples.
- Current target for grind size is 40 microns.
- Current target for NaCN concentration is 5.0gpl in the leach solution, maintained.

Average silver recovery is expected to approach **75%** at a grind of 40 microns and a leach solution NaCN concentration of 5.0gpl

10.2.2.2 The SART circuit and Zinc Recoveries

In addition to the silver test work via cyanidation, work was completed in the first quarter of 2013 to confirm the Sulfidization, Acidification, Recycling and Thickening **(SART)** process and its application at the backend of the leaching circuit. The SART circuit allows for the recycling of the cyanide in the silver leaching circuit –lowering cyanide costs, as well as potentially recovering a portion of the zinc and copper observed in the Sierra Mojada silver deposits.

The following two tables provide a summary of the zinc and copper recoveries observed in the cyanide leach tests from the mineralization at Sierra Mojada.

Table 20. Summary of Cyanide Bottle Roll Leach Test Results, Zn Recovery

Sample Description	Target NaCN, gpL	Calculated Head	Avg. Tails	Zn Extracted
		Zn, mg/kg	Zn, mg/kg	%
Shallow Silver Zone, Core Composite	10	10,439	6,165	41
Centenario, Composite No. 4; >60 gms Ag/MT	10	2,717	2,150	21
Fronteriza, Composite No. 2; 50 to 100 gms Ag/MT	10	27,720	18,740	32

Table 21. Summary of Cyanide Bottle Roll Leach Test Results, Cu Recovery.

Sample Description	Target NaCN, gpL	Calculated Head	Avg. Tails	Cu Extracted
		Cu, mg/kg	Cu, mg/kg	%
Shallow Silver Zone, Core Composite	10	321	240	25
Centenario, Composite No. 4; >60 gms Ag/MT	10	938	405	57
Fronteriza, Composite No. 2; 50 to 100 gms Ag/MT	10	37	24	35

The SART process would produce a zinc sulfide concentrate and potentially a copper sulfide concentrate that would be suitable for sale to smelters and providing by-product credits to the project. KCA produced 40 liters of barren leach solution (pregnant leach solution with the silver removed with zinc dust) for testing at BioteQ in BC, Canada. The SART test work results are summarized in Table 22. The test work results showed that the 100% of the zinc in the barren Merrill Crowe solution can be recovered and a saleable zinc concentrate produced.

Table 22. Summary of the SART test work results completed by Bioteq.

Test #	Stage	pH	ORP	Acid Dose		Sulphide Dose		Zn Recovery	
-	(X of Y)	-	mV	g/L	%	g/L	%	%	mg
1	1 of 1	4	-197	16.27	117%	2.57	88%	100%	2535
3	1 of 1	3.29	-115	14.12	102%	2.62	90%	100%	2535

10.2.3 HAZEN TEST WORK – TREATMENT OF HIGH GRADE ZINC

Hazen Research in Golden, CO, was tasked with looking at the potential for using a pyrometallurgical technique for treating the zinc ores. A process for producing ZnO from steel plants and other metal manufacturing facilities waste by-products, known as the Waelz Kiln process, was tested at Hazen in 2012.

Hazen received composite samples from both the Red Zinc and White Zinc deposits at Sierra Mojada. This material was tested in one of Hazen's higher temperature kilns at temperatures between 1,100ºC and 1,300ºC. The process involves mixing into the ore a reducing material, such as carbon or coal, heating the ore mixture to the required temperature, fuming off the Zn, passing the fumed Zn gas to an oxygen atmosphere and cooling the gas, forming a ZnO precipitate.

In the Hazen test facility zinc fuming worked very well with zinc fumed from the ore at greater than 90 percent. However, difficulty in recovering the ZnO as the precipitate was evident as metal accounting for the tests were very poor. Zinc was found to precipitate on the test apparatus wherever the temperature was cool enough for the zinc to precipitate. Table 23 provides a summary of the results from the Hazen test program.

The Waelz Kiln concept was proven to work on the zinc ores. However, difficulties experienced by Hazen to capture the ZnO and difficulties in maintaining the kiln caused the program to be halted.

Table 23. Sierra Mojada Waelz Kiln Test Work Zinc Recovery and Accountability

Test #	Ore	Conditions	Feed Mass, g	Zn in Feed, g	Zn in Calcine, g	Zn in Product, g	Recovery (1-C/F), %	Recovery (P/F), %	Accountability ([C+P]/F), %
1	RZ	1100°C, 3:1 C:Zn	100	12.5	8.37	3.42	**33.0**	27.4	**94.33**
2	RZ	1200°C, 3:1 C:Zn	100	12.5	1.64	8.28	**86.9**	66.2	**79.31**
3	RZ	1300°C, 3:1 C:Zn	100	12.5	0.14	9.69	**98.9**	77.5	**78.60**
4	W Z	1100°C, 3:1 C:Zn	1000	186	1.78	124.44	**99.0**	66.9	**67.86**
5	W Z	1200°C, 3:1 C:Zn	1000	186	12.77	111.09	**93.1**	59.7	**66.59**
6A	RZ-S	1300°C, 3:1 C:Zn	1000	116	6.06	74.14	**94.8**	63.9	**69.14**
7	RZ	1200°C, 2:1 C:Zn	150	18.75	6.49	9.01	**65.4**	48.1	**82.68**
8	RZ	1200°C, 4:1 C:Zn	150	18.75	1.15	13.17	**93.9**	70.2	**76.33**
9	W Z	650°C	1000	186	179.19	N/A	**96.3**	N/A	**96.34**
10	W Z	950°C	1000	186	176.35	N/A	**94.8**	N/A	**94.81**
11	RZ	1300°C, 3:1 C:Zn	750	93.75			**100.0**	0.0	**0.00**
12	RZ	1200°C, 3:1 C:Zn	750	93.75	43.30	23.62	**53.8**	25.2	**71.38**
15	RZ-S	1300°C, 3:1 C:Zn	1000	116	17.81	63.82	**84.6**	55.0	**70.37**
16	RZ-S	1200°C, 3:1 C:Zn	750	87	9.87	64.49	**88.7**	74.1	**85.47**
17	RZ-S	1200°C, 2:1 C:Zn	750	87	24.39	20.05	**72.0**	23.0	**51.09**
18	RZ	1200°C, 2:1 C:Zn	750	93.75			**100.0**	0.0	**0.00**

10.2.4 SGS LAKEFIELD – SEPARATION OF RED & WHITE ZINC ORES

Mineral Services (SGS), in Lakefield, ON, was tasked with developing a physical separation scheme for the Red Zinc and White Zinc ores in 2012. Work focused on heavy media separation (HMS) and flotation recovery of the zinc minerals hemimorphite (Red Zinc) and smithsonite (White Zinc). Test work using bench scale heavy liquid separation and flotation tests were used to develop possible process parameters for a zinc HMS/flotation circuit. Samples had been taken from drill core and channel samples along the 1.5 kilometer strike length of the "Red Zinc Zone" and "White Zinc Zone" of the deposit. The samples were then crushed and mixed to form a composite sample representative of each of the material types present in the deposit.

The primary focus for the SGS test Work program were the zinc materials. They were also tasked with finding a method to produce a saleable zinc product from the Red Zinc and White Zinc materials. The SGS program was focused on using Heavy Media Separation and Flotation to produce a concentrate. The following tests and results have been obtained by SGS to date:

10.2.4.1 White Zinc Test work

- White Zinc (smithsonite) Heavy Media Separation and Flotation is effective and can obtain a 42% Zn Concentrate. The heavy media separation was very effective as roughly 53% of the zinc was recovered in the HMS alone into a concentrate that assayed over 45% Zn. Additional test work is needed to refine the heavy media and flotation recoveries.
- Flotation results for the White Zinc were also very good, with a best case 40% Zn concentrate being produced while recovering 96.5% of the zinc.
- Test Work Reagents and Results for the best case test on White Zinc Master Composite are shown below in Tables 23 and 24.
- Figure 54 shows the Zn recovery versus concentrate Zn grade for the White Zinc best case test.

Table 24. Flotation Reagent Suite White Zinc Master Composite.

Test No.	Objective	Sample	Grinding	Reagents Added, g/t				
				Na Silicate (Metso)	Hexameta-phosphate	Collector Blend: Armac C/Pine Oil/Kerosene (5, 0.5 , 0.5 g)	Na2S	PAX
Test 30	WZMC +38 um Fraction	WZMC COMPO	Stage Ground to -300 um	1050	250	700	5,244	300
Test 31	WZMC -38 um Fraction	WZMC COMPO	None, -38 um Fraction	1050	300	750	6,233	300

Table 25. White Zinc Master Composite HLS/Flotation Test Work Results

SGS Test Number Objective	Weight	Assay	Recovery
	%	% Zn	% Zn
F30-31 WZMC Combined	15.8	50.1	45.1
	23.2	48.4	64.1
	24.8	47.4	66.9
	28.2	45.8	73.8
	32.2	44.5	81.9
	35.7	42.9	87.3

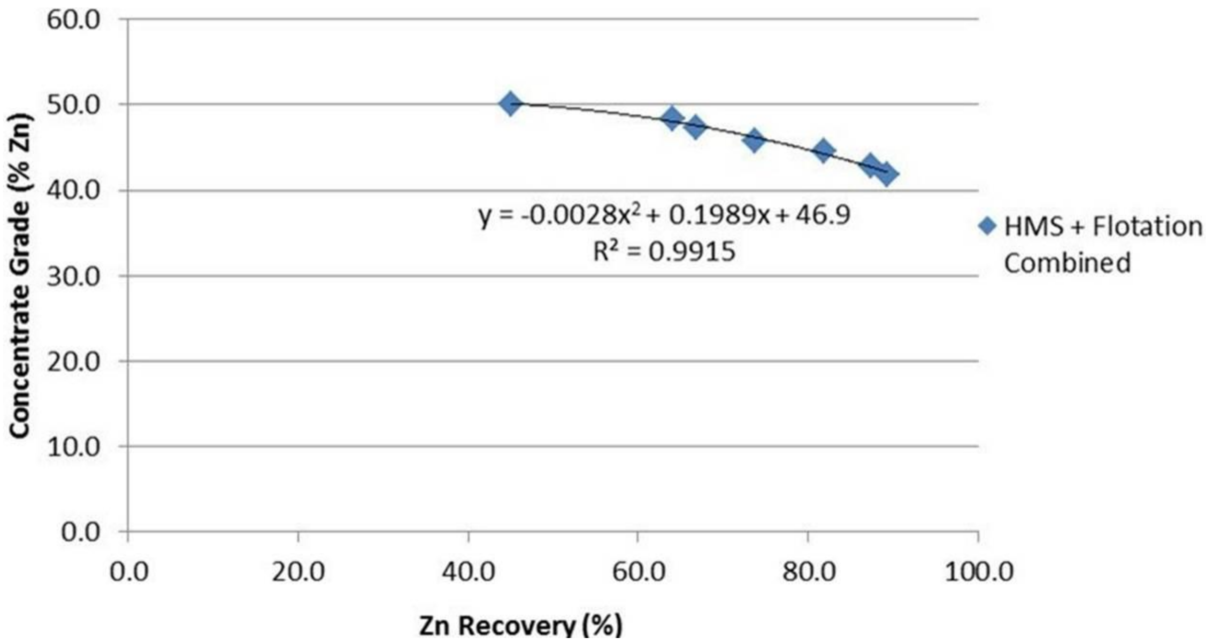


Figure 54. White Zinc (Smithsonite) Zn Recovery vs. Concentrate Zn Grade

10.2.4.2 Red Zinc Test work

Red Zinc (hemimorphite) Heavy Media Separation and Flotation has been shown to be a bit more complicated due to slimes (< 38 µm particle sizes) generation during grinding. Test work shows that the flotation of the + 38 µm material is good with 72.5% of the zinc recovering to a 30% Zn concentrate.

Red Zinc has a propensity to slime as the natural grain size of the material is very fine. As received material has been observed to have greater than 20% -38 µm material. HMS of this material was somewhat effective as roughly 57% of the zinc was recovered to a concentrate that was above 22% zinc. More test work on HMS of the Red Zinc material should be performed to see if concentration ratios can be improved or if cleaning stages can improve concentrate grades.

The slimes performed poorly in flotation test work with only 55% of the zinc reporting to a 22% Zn concentrate. In the SGS test work roughly 45% of the Red Zinc ore ended up in the slimes making slimes mitigation a major concern in future test work. Options to consider include:

- Stage grinding with screening in between to reduce the amount of fines generation.
- Utilizing fine bubble flotation cell technology developed specifically for fines/slimes flotation.
- Sodium silicate addition as an aid in slimes flotation.
- Flash flotation in the grinding circuit to float material prior to fines generation.

- Test Work Reagents and Results for the best case test on the Red Zinc High Silver Composite are shown below in Tables 26 and 27.
- Figure 55 shows the Zn recovery versus concentrate Zn grade for the Red Zinc best case test.

Table 26. Flotation Reagent Suite Red Zinc Master Composite

Test No.	Objective	Sample	Grinding	Reagents Added, g/t				
				Na Silicate (Metso)	Hexameta-phosphate	Collector Blend: Armac C/Pine Oil/Kerosene (5, 0.5 , 0.5g)	Na2S	PAX
Test 30	WZMC +38 um Fraction	WZMC COMPO	Stage Ground to -300 um	1050	250	700	5,244	300
Test 31	WZMC -38 um Fraction	WZMC COMPO	None, -38 um Fraction	1050	300	750	6,233	300

Table 27. Red Zinc High Silver Composite HLS/Flotation Test Work Results

SGS Test Number Objective	Weight	Assay	Recovery
	%	% Zn	% Zn
F42-43 RZHC Combined	12.1	38.9	45.0
	17.6	34.6	58.0
	18.3	34.0	58.3
	19.0	33.8	59.1
	19.6	33.0	59.4
	20.0	32.8	59.7
	20.7	32.5	59.9
	24.4	30.0	72.5
	30.7	27.7	81.1
	35.5	25.5	86.6
	38.0	24.4	88.4
	43.3	22.6	93.3
	45.4	21.8	94.2
	49.6	20.2	95.8

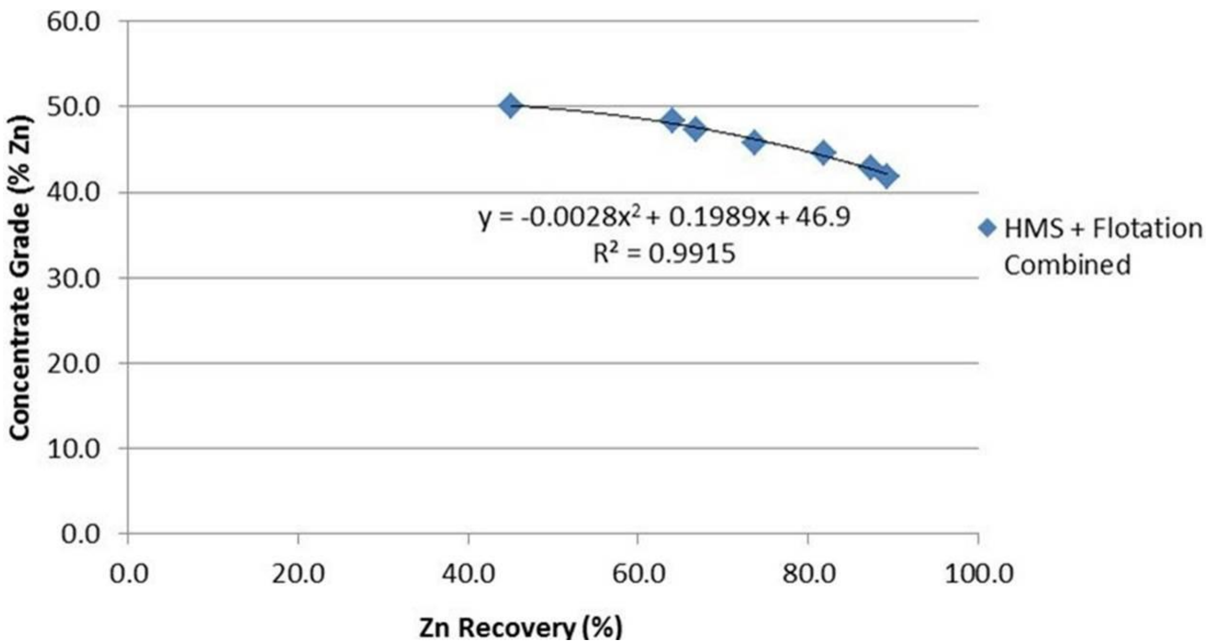


Figure 55. Red Zinc (Hemimorphite) Zn Recovery vs. Concentrate Zn Grade

The next step will be to run additional tests using Dense Media Separation (DMS) at small scale to generate a pre-concentrate. It is anticipated these tests will replace the HLS test work previously performed to better simulate an actual production flow sheet. The DMS concentrate should have fewer negative effects on downstream flotation. This test work will then need to be followed by test work to find a way to reject Fe bearing materials, which appears to be the main impurity in the final DMS concentrate.

Test work to improve slimes flotation will also need be performed using a Jameson or similar cell which utilizes fine bubble generation. Concentration of the Red Zinc in particular is expected to perform better in a fine bubble floatation machine such as a Jameson Cell, which is specifically designed to mitigate the sliming problem.

Based on current test work results the following conclusions about the zinc flotation can be made:

- White Zinc performs very well in a standard flotation scheme. A zinc recovery of 87% at a concentrate grade of 43% zinc can be achieved.
- Red Zinc is more difficult to float than the White Zinc due to the sliming characteristics of the Hemimorphite mineral.
- Red Zinc test work to date can produce a 30% zinc concentrate at a zinc recovery of 72.5%.

10.3 ORE PROCESSING

The Sierra Mojada Project will require two distinct flow sheets and process facilities for the silver ores and the zinc ores. The silver ores will utilize cyanide leach technology and the zinc ores will utilize Heavy Media Separation and Flotation. Some of the unit operations can be used in both facilities, such as crushing and grinding. A discussion on how the equipment can be utilized for both process scenarios will be discussed at the end of this section.

Since the silver and zinc ore processing facilities are somewhat distinct, they are discussed separately in this report.

10.3.1 SILVER ORE PROCESSING

A simple flow diagram has been developed and is shown in the following Figure 56.

It is envisioned that the silver ores at Sierra Mojada will require a crushing and grinding circuit to produce a particle size P80 of 53 microns to maximize silver recovery and project economics. Following grinding, a cyanide leach and CCD circuit will be utilized with the pregnant leach solutions reporting to a Merrill Crowe silver recovery plant. Once the silver has been recovered, cyanide recovery, as well as, zinc and copper recovery will take place in a SART facility. Tailings from the leach circuit will be detoxified in a cyanide destruct circuit before reporting to a tailings storage facility.

Water will be reclaimed from the tailings storage facility for reuse.

Products produced will include silver doré, and a zinc sulfide precipitate.

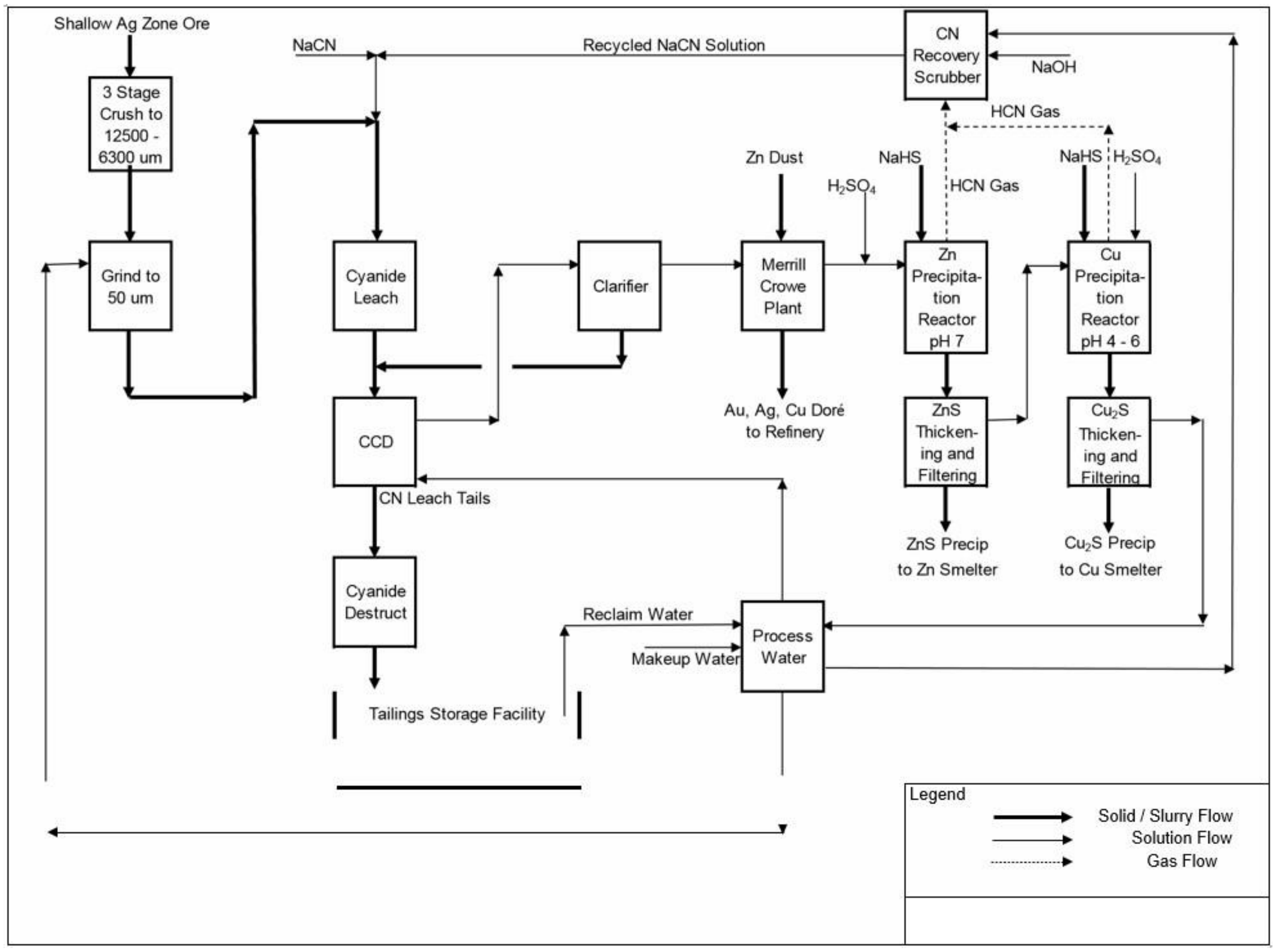


Figure 56. Proposed Process Block Flow Diagram for the silver ore

10.3.2 ZINC ORE PROCESSING

A simple flow diagram has been developed and is shown in the Figure 57.

It is envisioned that the zinc ores at Sierra Mojada will require a crushing circuit to produce a particle size P80 of 3.66mm to feed a dense media separation (DMS) unit with the +48 mesh sink fraction reporting to a rod mill for additional grinding prior to flotation. The final grind size is currently estimated at a P80 of 105 microns which should maximize zinc recovery, minimize slimes production, and maximize project economics. Following grinding, slimes separation will be performed with the slimes portion reporting to a fine bubble flotation cell, such as a Jameson cell. The coarser fraction will report to a standard flotation circuit. Both the slimes and coarse flotation circuits will incorporate one or more cleaning stages to improve the zinc content of the concentrate. Concentrates will be thickened, filtered, and dried followed by loading into train cars for bulk shipment to a zinc refinery. Tailings from the flotation circuit will be thickened before reporting to a tailings storage facility.

Water will be reclaimed from the tailings storage facility for reuse. The products produced will be a Hemimorphite and Smithsonite concentrate. A concentrate could then be further refined through kilning.

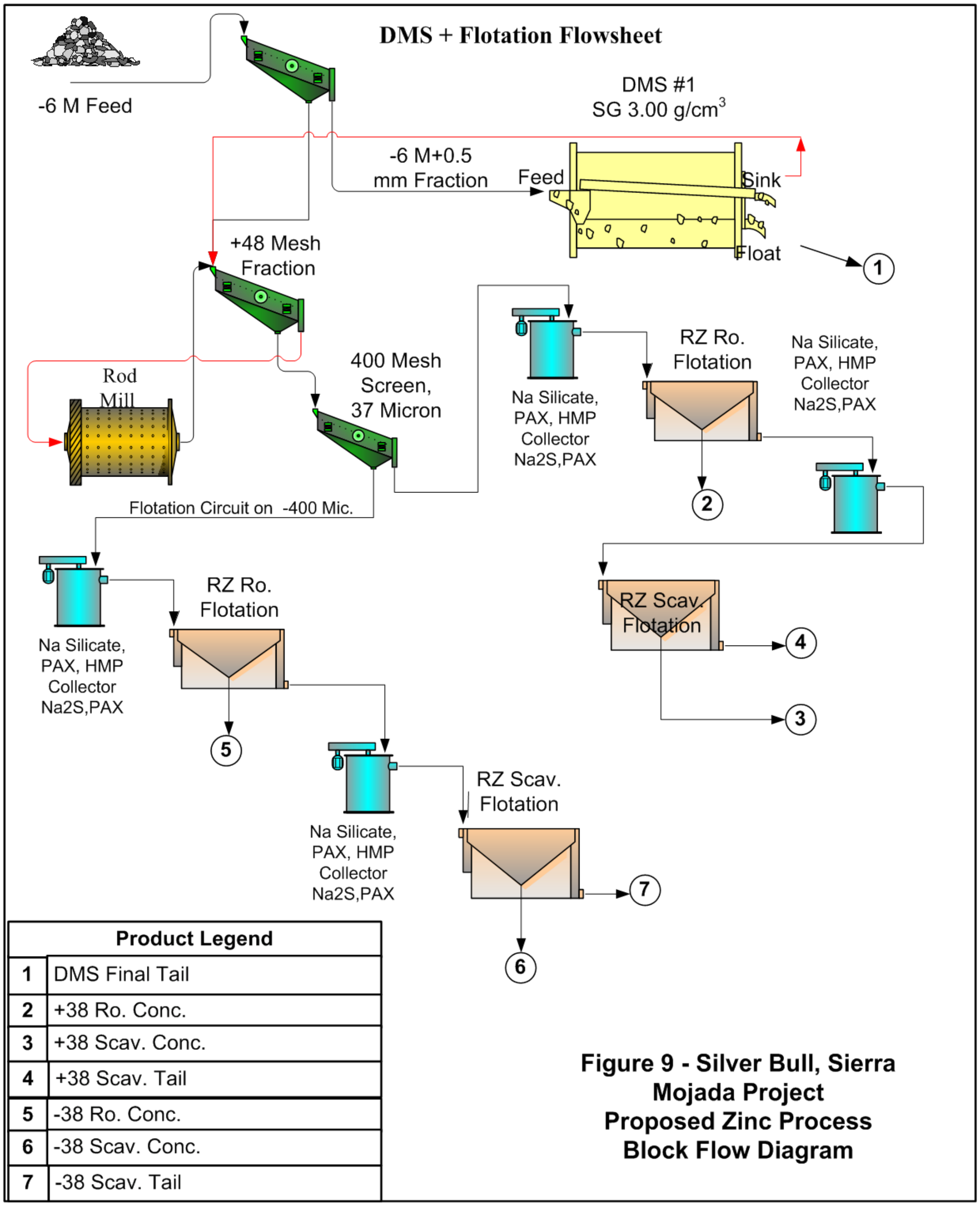


Figure 9 - Silver Bull, Sierra Mojada Project Proposed Zinc Process Block Flow Diagram

Figure 57. Proposed Zinc Process Block Flow Diagram, Sierra Mojada Project

11 MINERAL RESOURCE ESTIMATE

11.1 INTRODUCTION

The Mineral Resource Estimate has been prepared by Archer Cathro & Associates (1981) Limited ("Archer Cathro"). The following sections detail the method and strategies used to estimate the mineral resource. This resource estimation was completed by Matthew Dumala, P. Eng., an independent qualified persons as defined in S-K 1300. The effective date of the resource statement is October 1st, 2018. Work at the Property conducted after 2018 focussed on deeper sulphide mineralization and does not impact the Mineral Resource Estimate.

Geovia GEMS 6.7.2.1 software was used to model surfaces and solids that define the boundaries of the deposit. The software was also used for block modeling, grade estimation, and resource reporting. Snowden Supervisor v8.7 was used to determine basic statistics, geostatistics, and variography.

The current Mineral Resource estimate was completed using the same database as the previous Mineral Resource (June 8, 2018). It has been restated to reflect current metal prices and changes to Mineral Licences.

11.2 RESOURCE DATA BASE

The Sierra Mojada Project drill data was provided to Archer Cathro as a Geovia™ GEMS database. The database used in the resource estimate was audited by Archer Cathro prior to estimation. The Author is of the opinion that the data is sufficiently reliable to interpret with confidence the boundaries of the deposit for the estimation of tonnes and grades of the four metals: zinc, copper, lead and silver.

The drill hole data base consists of 12,772 surface and underground diamond drill holes, reverse circulation drill holes, long holes, underground channel samples and a surface trench sample intended for a metallurgical bulk sample test. Of these 12,772 holes and channel samples, only 12,733 were used to estimate the Mineral Resource. These are listed in Table 28 below.

Table 28. Resource Database

Description	Number	Metres
Diamond Drill holes	1,336	153,265.4
Reverse Circulation holes	24	32,446.2
Underground long holes	2,346	14,693.5
Channel Samples	9,027	6,628.0
TOTAL	12,733	207,033.1

11.2.1 SURFACES AND SOLIDS

Silver Bull Resources provided 3D surfaces and solids for the estimation work. These define geological surfaces, faults, topography, mineralization, and underground. These solids and surfaces are unchanged from the 2015 Mineral Resource estimate.

The underground workings are complex with numerous small adits, declines, drifts, cross-cuts, stopes and shafts as described earlier in this report. They had been surveyed in small segments over the years but never combined. The workings are shown in Figure 58 with the mining areas colour-coded by the main mining area:

- Centenario/Fronteriza – blue
- Encantada – green
- Esmeralda – teal
- Parreña – magenta
- San Salvador – red

Some workings were inaccessible due to collapse or unsafe conditions. Based on historical mining records it appears that, based on an average density (~2.7), only about 12-15% of property-wide mined workings have been surveyed. Some of the workings (e.g. Parreña) are clearly development in waste or in mineralized zones outside the current Mineral Resource area. The volume within the zone is not considered to be significant compared to the mineralized zone.

The volumes for the validated solids are summarized in Table 29.

Table 29. Underground Void Volumes

Mining Area	Volume
B06_09	32,658 m^3
AB08_02	33,932 m^3
B09_05	27,198 m^3
B04_32	200,860 m^3
B05_39	70,364 m^3
F_09	40,834 m^3
Total Volume	401,663 m^3

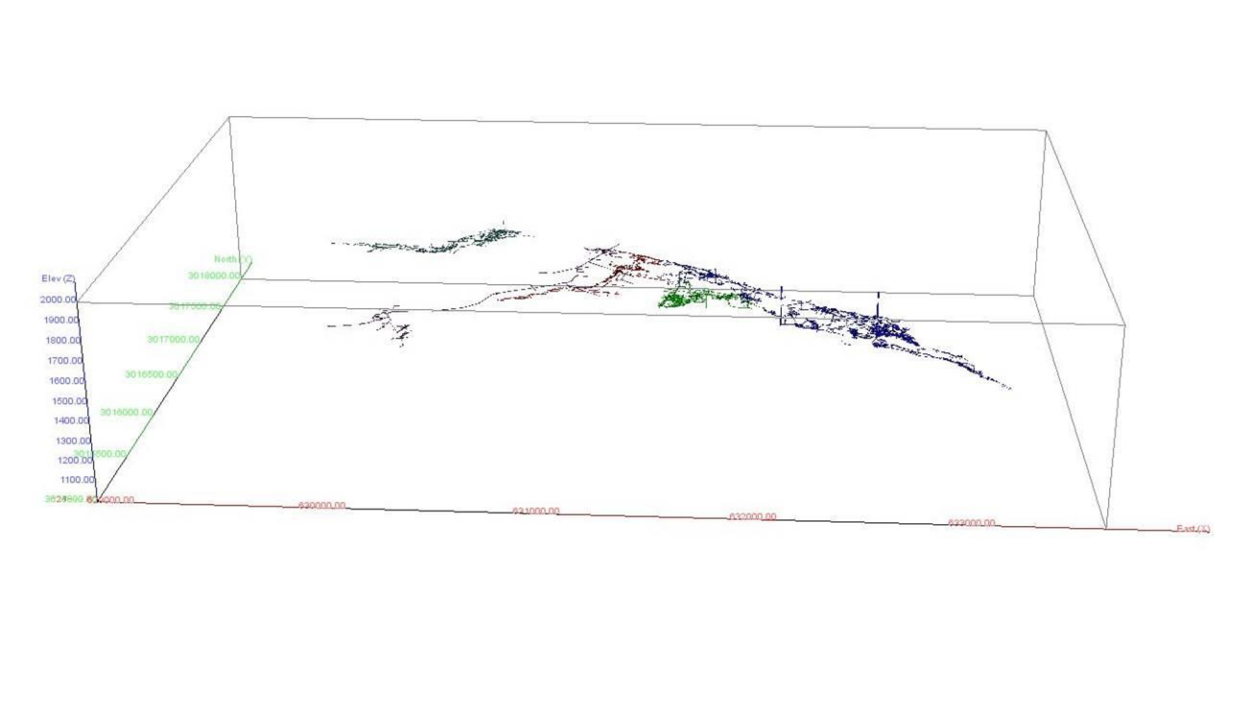


Figure 58. Underground Workings

The “plunge” of the workings to the south-east (right) is apparent in Figure 58.

A single solid representing mineralization was constructed by Silver Bull staff from available information including assays, faults and interpreted geologic sections. Figure 59 is an example of the geologic interpretation along Section 631600E through the San Salvador - Centenario block, while Figure 60 shows the mineralized solid overlaid onto the same Section.

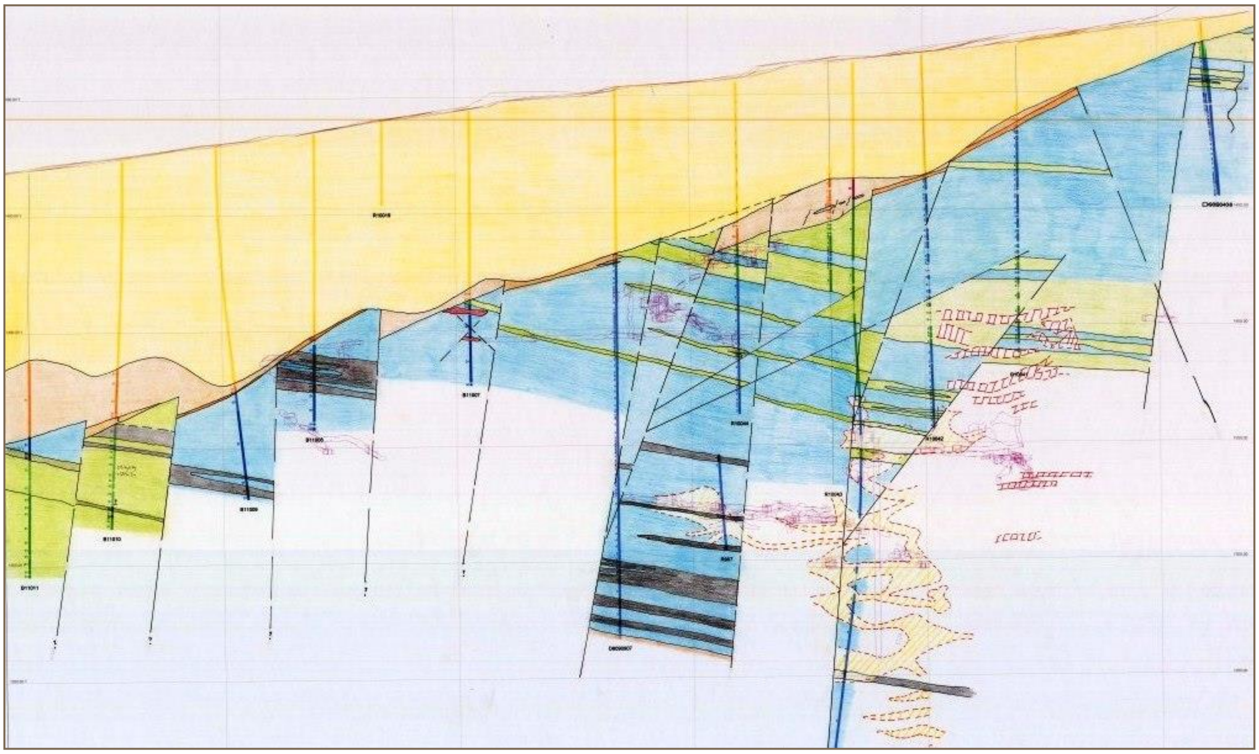


Figure 59. SBR Geologic Interpretation 631600E (+/- 50m window)

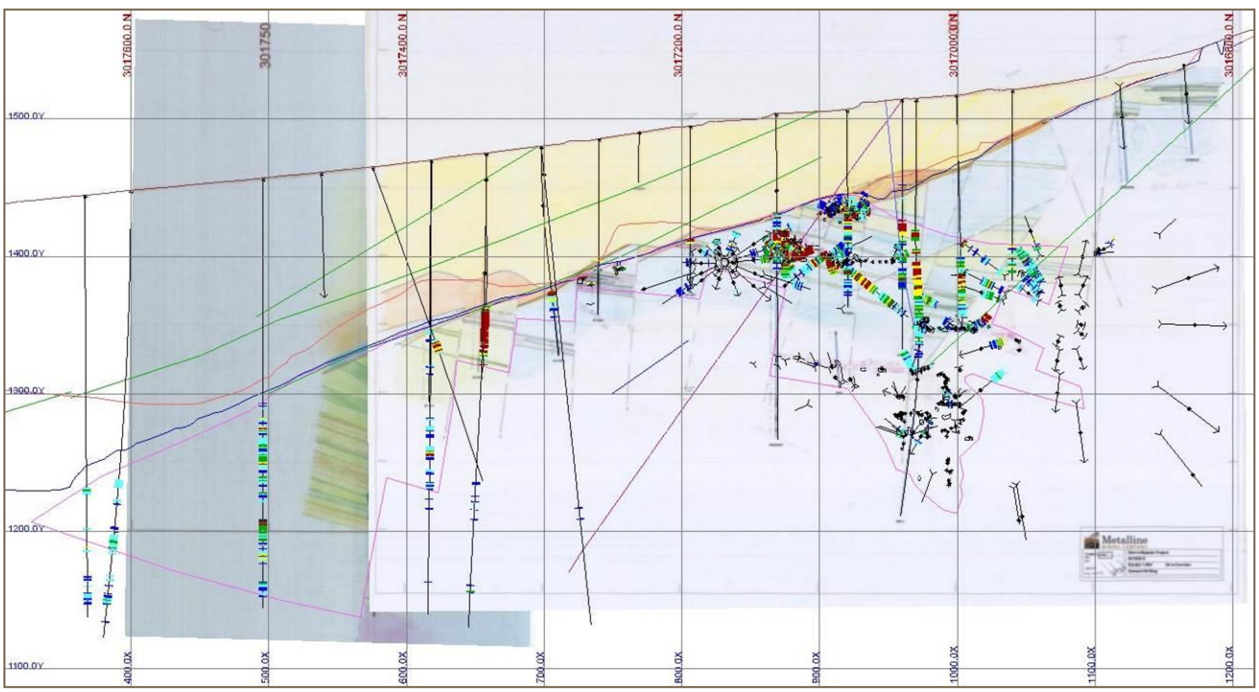


Figure 60. Section 631600E - Mineral Zone Wireframe

The lower dashed line yellow area on Figure 59 is the white zinc (smithsonite) chimney zone.

While the wireframe has a jagged appearance in 3D (Figure 61), it does an acceptable job of capturing the complexity of the carbonate replacement deposit where deposition is assumed to have been via the main Sierra Mojada Fault system with leakage along northern and north-westerly faults. The wireframe intersection with the plane is magenta.

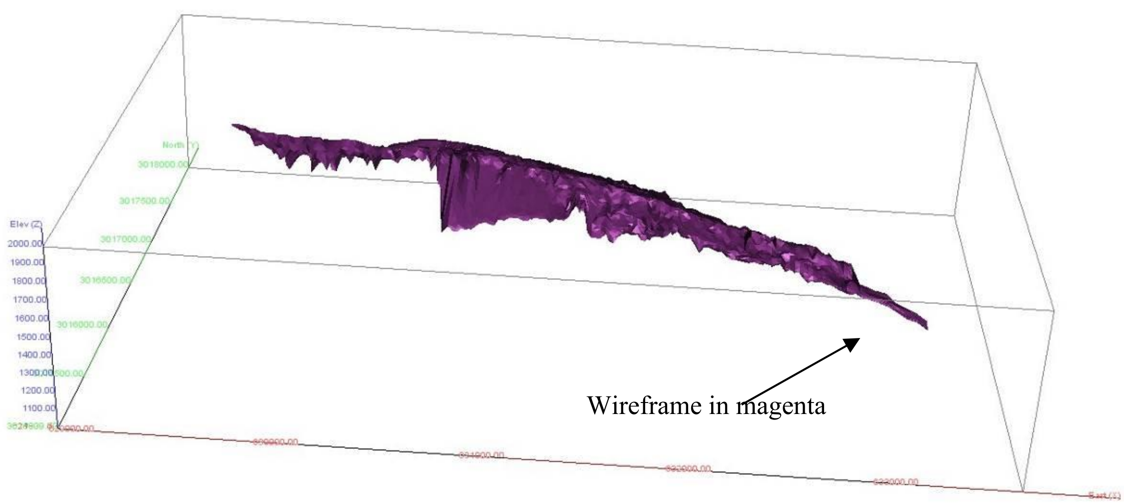


Figure 61. Three-dimensional view of the Mineral Zone wireframe

The surfaces and solids were then used to create rock, density and percentage block models. The percentage block models were for topography, mineral zone, and underground workings (voids). The rock codes used for modeling are shown in Table 30.

Table 30. Block Model Rock Codes

Rock Type	Rock Code	Bulk Density (g/cm^3)
Air	998	0
Void	999	0
Alluvium (QAL)	9	2.61
Conglomerate (UC)	13	2.54
Limestone	31	2.60
Mineral Zone	555	modeled

11.2.2 DATA EVALUATION AND STATISTICAL ANALYSIS

The Resource Database contains over 160,000 assay records. Solids provided by Silver Bull representing mineralized zones were used to code samples. Samples not within these mineralized solids do not impact the Mineral Resource estimate

The descriptive statistics for the sample data within the mineralized solid is shown in Table 31, while correlation coefficients are shown in Table 32.

Table 31. Basic Statistics of Assay Data

Variable	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Number of samples	76,127	81,851	81,851	77,391
Minimum value	0.00	0.00	0.00	0.00
Maximum value	10,000.00	14.7	30.2	53.8
Mean	31.70	0.032	0.21	2.68
Median	7.90	0.100	0.03	0.35
Standard Deviation	139.56	0.171	0.898	6.027
Coefficient of variation	4.40	5.39	4.28	2.24
99.0 Percentile	383.0	0.53	3.49	28.20

Table 32. Assay Correlation Coefficients

	Ag	Cu	Pb	Zn
Ag	1.000	0.219	0.161	0.027
Cu	0.219	1.000	0.077	0.002
Pb	0.161	0.077	1.000	0.119
Zn	0.027	0.002	0.119	1.000

Figure 62 shows a histogram plot for silver within the mineralized solid. This plot shows that silver grade is relatively evenly distributed. There is a second population of lower grade mineralization. Some of these are believed to represent edge cases along the mineralized solid boundaries where low grade samples were included in the mineralized solid.

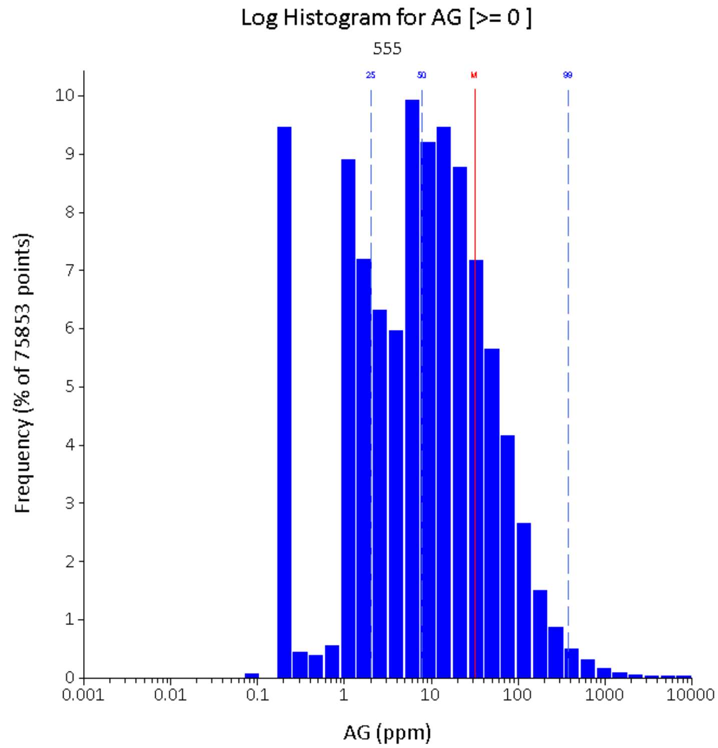


Figure 62. Silver Log-Histogram plot

11.2.3 CAPPING AND COMPOSITING

One metre composite were chosen because the majority of samples are 1.0 m long. The mean length of samples within the mineralized solid is 1.10 m and median length is 1.00 m. Samples were composited down-hole honouring the mineralized solid. Composites less than 0.5 m were not calculated.

Composites exceeding the high-grade limit were limited to 20 m (2 blocks) in any direction. It is the Author's opinion that limiting the range of influence of composited high values is appropriate for this project since the area has a mining history that included legitimate high grade silver (Veta Rica) and high grade zinc mines (Frontireza, Esmeralda, Encatada etc). High-grade limits were set to approximately the 99th percentile for each element.

The compositing shows an improvement in the coefficient of variation but little changes in other basic statistics (Table 33) within the data set. There are no strong correlations between metals (Table 34).

Table 33. Declustered Composite Statistics

Variable	Ag	Cu	Pb	Zn
Number of samples	89,222	89,291	89,229	89,246

Minimum value	0.0	0.0	0.0	0.0
Maximum value	10,000.0	14.7	30.2	53.8
Mean	31.68	0.043	0.322	3.02
Median	8.00	0.010	0.040	0.36
Standard Deviation	91.70	0.14	1.00	6.70
Coefficient of variation	2.90	3.35	3.11	2.22
99.0 Percentile	398.0	0.69	5.38	33.93

Table 34. Composite Correlation Coefficients

	Ag	**Cu**	**Pb**	**Zn**
Ag	1.000	0.246	0.137	0.013
Cu	0. 246	1.000	0.061	-0.006
Pb	0. 137	0. 061	1.000	0.112
Zn	0. 013	0. 006	0. 112	1.000

Examination of histograms and distribution curves for the composited data did not reveal any significant multiple populations (Figure 63 and Figure 64).

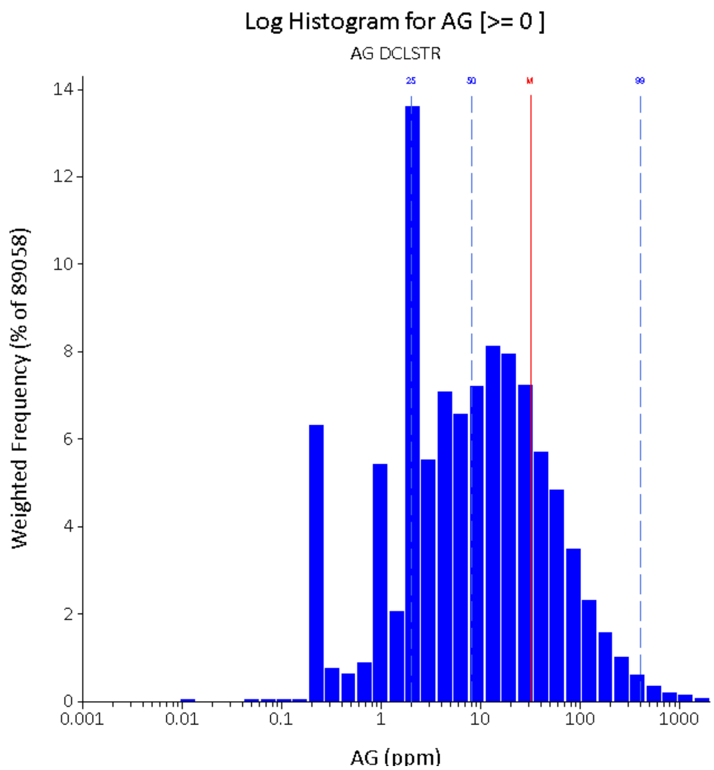


Figure 63. Composite Silver Histogram

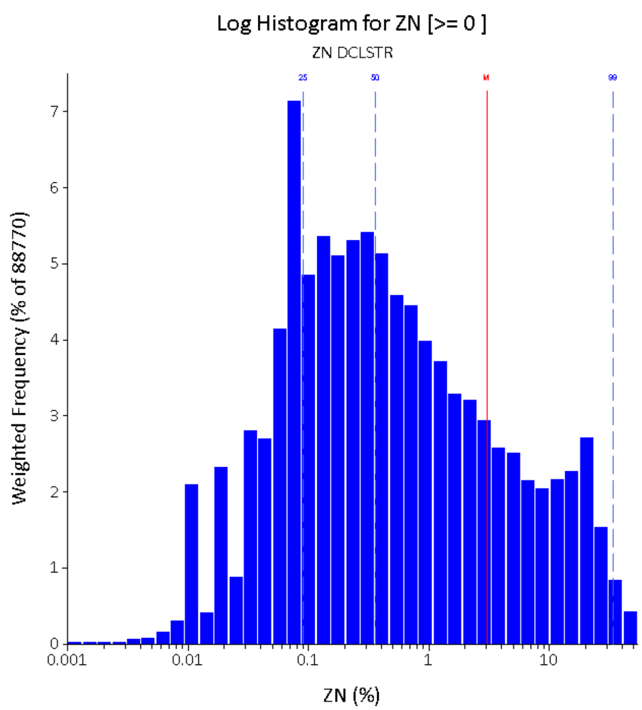


Figure 64. Composite Zinc Histogram

11.2.4 BULK DENSITY ESTIMATION

Density for waste rock is based on approximately 3,500 samples from various rock types. This data had not been tabulated with corresponding Hole-ID and “From-To” information so could not be used for Inverse Distance Squared (ID2) modeling. Instead, the average values had been used to populate the model. Background waste rocks from that work is summarized in Table 14-3 with the corresponding Block Model rock codes.

Using an average value in the mineralized zone fails to recognize variability due to very high zinc or lead grades. A total of 1,985 additional samples were taken and density measured by the use of a pycnometer loaned by the neighbouring Peñoles La Dolomita Mine. These samples were used to estimate the density of the mineralized zone by the use of the ID2 technique.

11.2.5 GEOSTATISTICAL ANALYSIS AND VARIOGRAPHY

Variograms were calculated for silver, copper, lead and zinc composites within the mineralized solid to produce inputs for the estimate.

Horizontal continuity was modeled first using eighteen horizontal variograms at 20^{o} increments. Continuity models were then created for the across strike and dip plane orientations. Once the direction of maximum continuity was selected, a down-hole linear semi-variogram was created to determine the nugget effect. Nested exponential models were fitted for all elements as summarized in Table 35. The anisotropy was assessed using Azimuth, Dip, and Azimuth (ADA) rotation.

Table 35. Semi-Variogram Parameters.

Metal	Azim	Dip	Azim	Co	C_1	C_2	X (m)	Y (m)	Z (m)
Ag	111.5	-3.5	18.0	0.16	0.48		47	34	29
						0.36	201	139	121
Cu	106.4	-6.3	13.5	0.25	0.55		29	19	16
						0.20	188	115	100
Pb	100.3	-3.4	9.7	0.24	0.26		34	22	18
						0.50	180	133	95
Zn	110	0	N/A	0.21	0.55		55	35	52
						0.24	205	144	157

While the deposit has a very strong east-west orientation sub-parallel to the Sierra Mojada Fault, continuity is disrupted by numerous north and north-westerly faults. Displacements within the mineralized zone are generally minor as has been noted during underground mine tours. These displacements have had a minor effect on anisotropy as an easterly plunge is apparent.

11.3 BLOCK MODEL DEFINITION

The block model origin and orientation and size are the same as the previous Mineral Resource estimate. The block model is not rotated and parameters are summarized in Table 36.

Table 36. Block Model Parameters

	Easting	Northing	Elevation
Minimum	628800	3016100	1050
Maximum	633500	3018000	2000
Block Size	10	10	10
No. Blocks	470	190	95

A 10 m by 10 m by 10 m block size was used and is believed a reasonable approximation of a selective mining unit (SMU) for either a small truck-excavator mining fleet or an underground bulk mining operation. Supervisor was used to perform a Kriging Neighbourhood Analysis to validate the block size and estimation parameters.

11.3.1 GRADE INTERPOLATION

Block model grades were estimated in three passes using Ordinary Kriging (OK) with the minimum and maximum samples and searches as summarized in Table 37. The classification methodology used was that blocks meeting the criteria of Pass 1 would be flagged as Measured; Pass 2 – Indicated; and Pass 3 – Inferred.

Silver, copper, lead and zinc were estimated using Ordinary Kriging (OK) on uncapped composited 1.0m grades.

Table 37. Grade Interpolation Search Parameters

Metal	Pass	Orientation Angle			Search Size			# of Composites		Max Samples per hole
		Az	Dip	Az	X (m)	Y(m)	Z(m)	Min	Max	

Ag	**1**	111.5	-3.5	18	30	25	20	8	30	4
	2	111.5	-3.5	18	75	75	70	4	30	3
	3	111.5	-3.5	18	150	125	120	3	30	2
Cu	**1**	106.4	-6.3	13.5	25	20	15	8	30	4
	2	106.4	-6.3	13.5	95	95	45	4	30	3
	3	106.4	-6.3	13.5	150	120	100	3	30	2
Pb	**1**	100.3	-3.4	9.7	30	25	20	8	30	4
	2	100.3	-3.4	9.7	100	95	45	4	30	3
	3	100.3	-3.4	9.7	150	125	85	3	30	2
Zn	**1**	110	0.0	n/a	40	35	40	8	30	4
	2	110	0.0	n/a	75	70	75	4	30	3
	3	110	0.0	n/a	150	140	150	3	30	2

11.3.2 MINERAL RESOURCE CLASSIFICATION

According to the S-K 1300 regulations, to reflect geological confidence, Mineral Resources are subdivided into the following categories based on increased geological confidence: Inferred, Indicated, and Measured, which are defined under S-K 1300 as:

“Inferred Mineral Resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. The level of geological uncertainty associated with an inferred mineral resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred mineral resource has the lowest level of geological confidence of all mineral resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred mineral resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a mineral reserve.”

“Indicated Mineral Resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of adequate geological evidence and sampling. The level of geological certainty associated with an indicated mineral resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated mineral resource has a lower level of confidence than the level of confidence of a measured mineral resource, an indicated mineral resource may only be converted to a probable mineral reserve.”

“Measured Mineral Resource is that part of a mineral resource for which quantity and grade or quality are estimated on the basis of conclusive geological evidence and sampling. The level of

geological certainty associated with a measured mineral resource is sufficient to allow a qualified person to apply modifying factors, as defined in this section, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured mineral resource has a higher level of confidence than the level of confidence of either an indicated mineral resource or an inferred mineral resource, a measured mineral resource may be converted to a proven mineral reserve or to a probable mineral reserve."

The guideline commentary also clarifies that the phrase **"reasonable prospects for economic extraction"** implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable."

Blocks were classified as measured, indicated, and inferred based upon the OK pass they were estimated. Blocks estimated in the first pass are considered measured, while blocks that were estimated during the second pass were classified as an Indicated category. All other blocks estimated are considered Inferred. This method of classification is consistent with standard industry practices. Blocks estimated in the first pass are spatially closer to more sample locations and therefore can be considered to have a higher level of confidence than blocks estimated in later passes.

11.3.3 BLOCK MODEL VALIDATION

The block models were visually validated by comparing the blocks estimated with actual drill hole composite data on both section and in plan view. Figure 65 and Figure 66 are section and plan respectively. Composite grades are a good match to the estimated block grades.

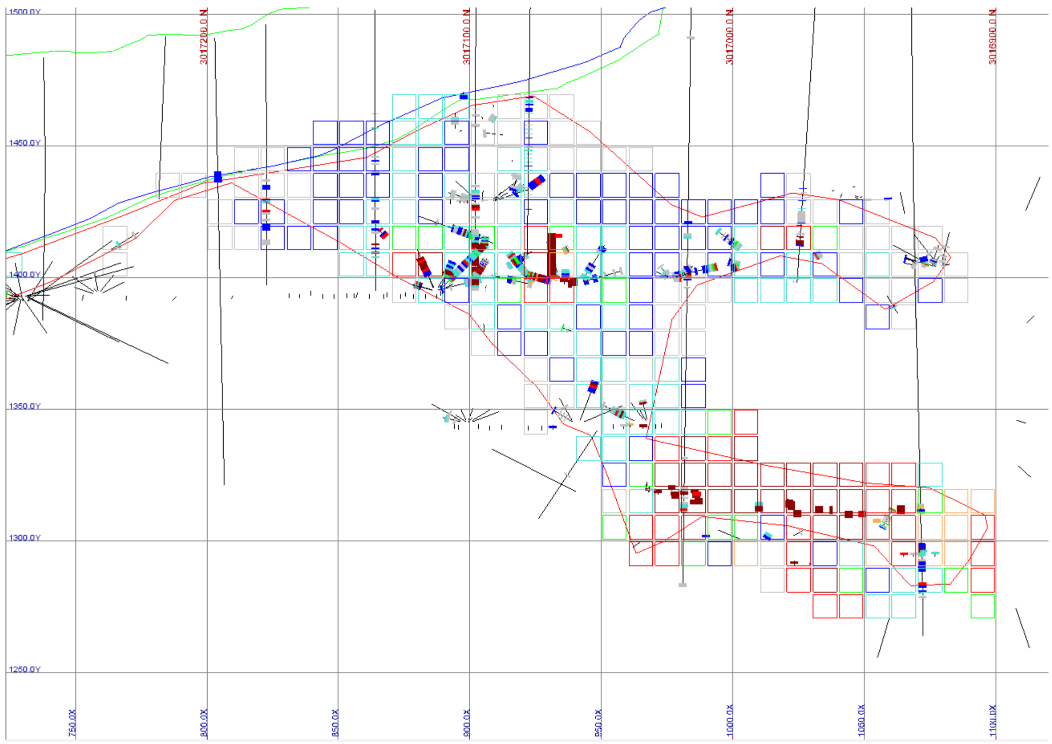


Figure 65. Section 631500E Zinc blocks versus Zinc grades.

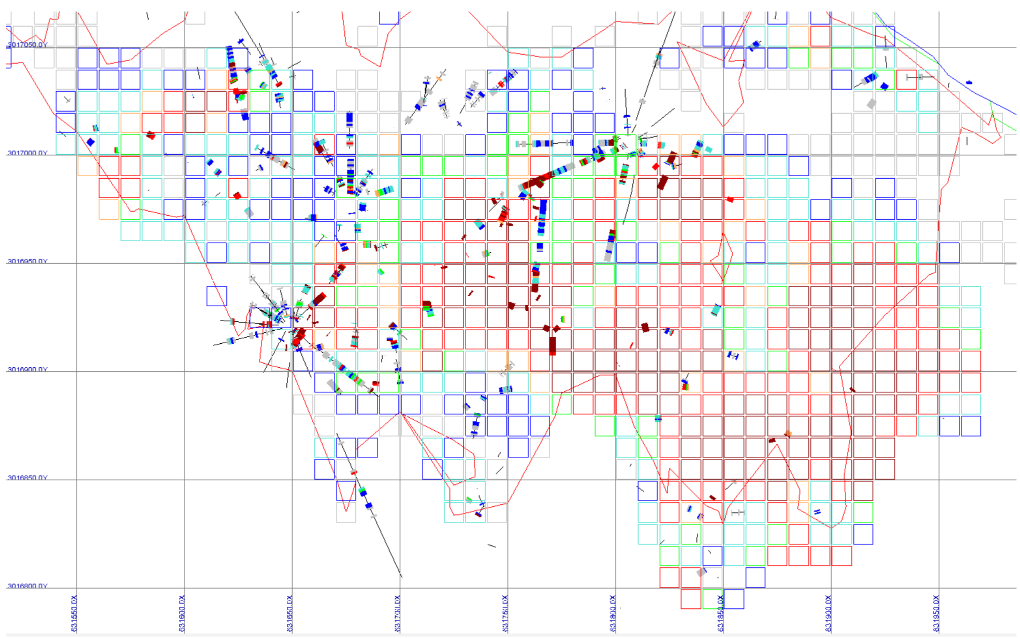


Figure 66. Planview 1355 Elevation Zinc Blocks vs Zinc grades.

In addition, nearest neighbor (NN) model and inverse distance squared (IDS) models were generated for comparison to the ordinary kriged (OK) model. Table 38**Error! Reference source not found.** shows the zero cut-off totals and percentage differences of the estimates. The nearest neighbor model represents an unbiased estimate. The similarity of the three models further validates that OK is an appropriate method for the resource estimate.

Table 38. Mineral Resource Estimate Comparisons

Model	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
ID2	30.60	0.043	0.289	2.16
NN	30.88	0.044	0.291	2.13
OK	29.53	0.042	0.281	2.05
% Diff: OK-IDS	-3.5%	-3.4%.	-2.8%	-5.4%
% Diff: OK-NN	-4.6%	-5.2%	-3.5%	-3.9%

Grade-tonnage curves for silver and zinc (Figure 67 and Figure 68) were also prepared.

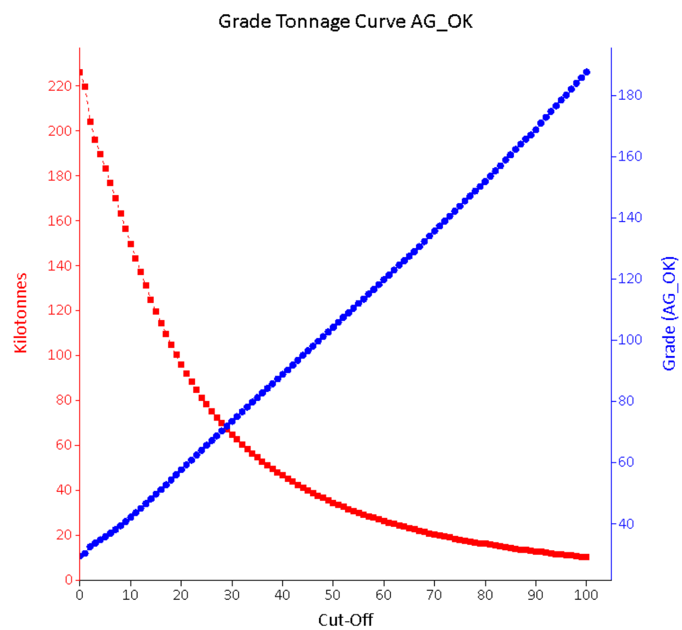


Figure 67. Silver Grade Tonnage Curve

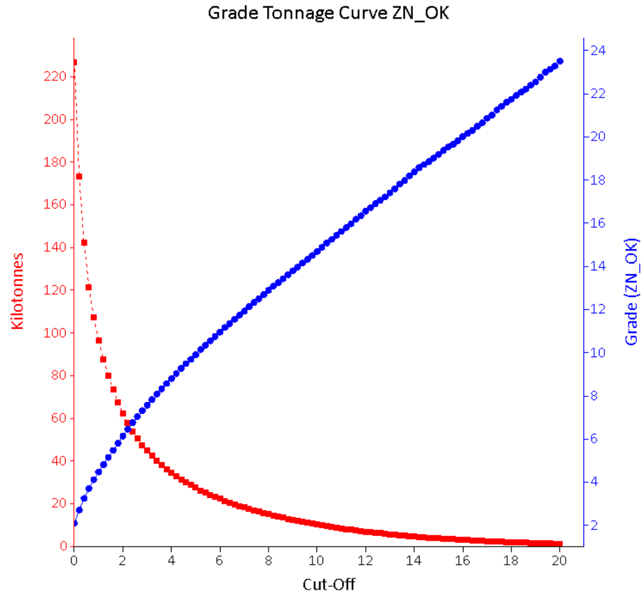


Figure 68. Zinc Grade Tonnage Curve

11.4 MINERAL RESOURCE ESTIMATE

To demonstrate "reasonable prospects for economic extraction", Archer Cathro generated a conceptual pit shell based on the parameters listed in Table 39 using Geovia Whittle 4.7.2. These parameters are derived from the JDS PEA Nov 2013 using silver and zinc processing considerations and summarized in Section 10. The silver ores will utilize cyanide leach technology and the zinc ores will be blended into the ore feed stream to allow for zinc recovery in the SART (Sulfidization, Acidification, Recycling and Thickening) process. Silver and zinc metal prices were chosen to be consistent with five year averages, which is believed to be sufficient long enough period to balance erratic price fluctuations in the past two years.

It is the QP's opinion that these prices are adequate for the determination of "reasonable prospects for economic extraction". The material factors that could cause actual results to differ materially from the conclusions, estimates, or designs in the following section include any significant differences from one or more of the material factors or assumptions that were set forth in this section including cut-off grade assumptions, and product pricing forecasts.

Results of the Sierra Mojada conceptual open pit Mineral Resource estimate are shown in Table 40 at a $13.50 NSR cut-off. Net smelter return ("NSR") (US$/tonne) values were calculated for each block for silver and zinc based on the parameters listed in Table 39 Below.

Table 39. Pit Optimization Parameters

Parameter	Unit	Value
Silver	US$/oz	$18.00
Zinc	US$/lb	$1.20
Processing + G&A Cost	US$/t ore	$12.00
Mining Cost – Open Pit	US$/t mined	$1.50
Pit Slopes	degrees (°)	55°
Throughput	Tonne per day	8,500
Silver Recovery	%	75%
Zinc Recovery to Solution	%	41%
Zinc Recovery SART	%	99%
Zinc Concentrate Grade	%	64%
Silver Payable	%	99.5%
Silver Transportation and Refining	US$/oz	$0.495
Zinc Payable	%	85%
Zinc Smelting and Transportation	US$/tonne	$232.00

Table 40. Pit-constrained Mineral Resource Estimate

CLASS	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	NSR ($/t)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs)	Zn (Mlbs)
Measured	52.0	39.2	0.04%	0.3%	4.0%	$44.3	65.5	45.9	379.1	4,589.3
Indicated	18.4	37.0	0.03%	0.2%	1. 9%	$27.3	21.9	10.8	87.0	764.6
Total M&I	70.4	38.6	0.04%	0.3%	3.4%	$39.8	87.4	56.8	466.1	5,353.9
Inferred	0.1	8.8	0.02%	0.2%	6.4%	$52.3	0.02	0.04	0.4	10.7

Notes:

1) S-K 1300 definitions were followed for the Mineral Resource.

2) The Mineral Resource is reported within a conceptual pit-shell using an NSR cut-off value of US$13.50/tonne.

3) Mineral resources are not reserves and do not demonstrate economic viability.

4) Tonnages are reported to the nearest 100,000 tonne. Grades are rounded to the nearest decimal place for Ag, Zn, & Pb and the nearest 2 decimal places for Cu

5) Rounding as required by reporting guidelines may result in apparent summation differences between tonnes, grade, and contained metal.

6) Tonnage and grade are in metric units; contained Zn, Cu, & Pb are in imperial pounds.

7) Tonnages and grades are as reported directly from block model; with mined out areas removed.

The open pit resources reported for variable silver and zinc cut-offs within the conceptual pit shell are shown in

Table 41. Pit-constrained Mineral Resource Estimate by Silver Cut-Off

Category	Ag Cut-off (%)	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs))	Zn (Mlbs)
MEASURED	25	21.0	83.6	0.08%	0.5%	2.6%	56.5	37.4	245.8	1,222.25
	35	15.9	101.2	0.10%	0.6%	2.5%	51.6	34.4	201.6	869.2
	45	12.5	117.7	0.11%	0.6%	2.5%	47.3	31.7	168.3	679.2
	50	11.2	126.6	0.12%	0.6%	2.5%	45.3	30.3	155.0	611.2
	55	10.1	134.2	0.13%	0.6%	2.5%	43.4	29.1	141.5	548.4
	60	9.1	142.3	0.14%	0.6%	2.5%	41.7	28.0	129.8	493.2
	65	8.3	149.7	0.15%	0.7%	2.5%	40.1	26.9	120.0	452.3
	70	7.5	158.4	0.15%	0.7%	2.5%	38.4	25.6	110.6	409.9
	75	6.9	166.5	0.16%	0.7%	2.4%	36.9	24.6	101.7	370.9
INDICATED	25	10.4	54.9	0.03%	0.2%	1.3%	18.4	7.9	53.2	288.1
	35	7.3	65.4	0.04%	0.2%	1.3%	15.4	6.6	40.0	208.2
	45	5.0	77.6	0.05%	0.3%	1.3%	12.4	5.2	27.4	142.4
	50	4.1	84.0	0.05%	0.3%	1.3%	11.1	4.4	23.2	119.5
	55	3.4	90.7	0.05%	0.3%	1.3%	9.9	3.6	19.8	98.1
	60	2.9	96.8	0.05%	0.3%	1.3%	8.9	2.9	17.0	83.0
	65	2.4	102.9	0.05%	0.3%	1.3%	8.0	2.5	14.0	68.8
	70	2.0	109.5	0.05%	0.3%	1.3%	7.2	2.2	11.8	56.6
	75	1.8	115.7	0.05%	0.3%	1.3%	6.5	1.8	10.0	49.8
TOTAL M&I	50	15.2	114.9	0.10%	0.5%	2.2%	56.3	34.7	178.2	730.7
INFERRED	25	0.01	28.8	0.07%	0.3%	1.6%	0.01	0.02	0.06	0.35
	35	0.00	0.0	0.00%	0.0%	0.0%	0.00	0.00	0.00	0.00
	45	0.00	0.0	0.00%	0.0%	0.0%	0.00	0.00	0.00	0.00

NOTES as per Table 40.

Table 42. Pit-constrained Mineral Resource Estimate by Zinc Cut-Off

Category	Zn Cut-off (%)	Tonnes (Mt)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	Ag (Mozs)	Cu (Mlbs)	Pb (MLbs)	Zn (Mlbs)
MEASURED	4	17.1	26.9	0.02%	0.4%	9.5%	14.8	8.6	162.3	3,578.5
	6	11.9	22.3	0.02%	0.4%	11.5%	8.5	4.7	106.4	3,019.7
	8	8.6	19.3	0.02%	0.4%	13.3%	5.3	2.9	69.9	2,505.1
	10	6.2	15.8	0.02%	0.3%	15.0%	3.1	2.1	43.6	2,030.0
	11	5.1	14.5	0.02%	0.3%	15.8%	2.4	1.7	34.0	1,794.8
	12	4.3	13.8	0.02%	0.3%	16.7%	1.9	1.4	27.6	1,586.5
	13	3.6	12.9	0.02%	0.3%	17.5%	1.5	1.2	21.2	1,381.2
	14	2.9	11.7	0.02%	0.2%	18.5%	1.1	1.0	15.3	1,170.8
INDICATED	4	2.5	22.2	0.03%	0.3%	7.7%	1.8	1.5	17.6	417.0
	6	1.6	20.4	0.03%	0.3%	9.2%	1.0	0.9	11.1	317.0
	8	0.8	18.7	0.02%	0.3%	11.4%	0.5	0.3	5.8	200.8
	10	0.4	19.2	0.02%	0.3%	13.7%	0.2	0.2	2.9	124.4
	11	0.3	19.5	0.02%	0.3%	15.0%	0.2	0.1	2.0	98.1
	12	0.2	19.6	0.02%	0.3%	15.9%	0.2	0.1	1.6	83.1
	13	0.2	19.8	0.02%	0.3%	16.4%	0.1	0.1	1.3	74.3
	14	0.2	21.9	0.02%	0.3%	16.9%	0.1	0.1	1.1	65.3
TOTAL M&I	6	13.5	22.0	0.02%	0.4%	11.2%	9.6	5.6	117.5	3,336.6
INFERRED	4	0.05	5.9	0.01%	0.2%	8.5%	0.01	0.01	0.2	9.97
	6	0.04	6.5	0.01%	0.2%	9.6%	0.01	0.01	0.2	8.60
	8	0.03	5.7	0.01%	0.2%	11.0%	0.00	0.01	0.1	6.34

NOTES as per Table 40.

11.4.1 FACTORS THAT MAY AFFECT THE ESTIMATE

It is the QP's opinion that the Mineral Resource block model is representative of the informing data and that the data is of sufficient quality to support the Mineral Resource Estimate.

Risk factors that could potentially affect the Mineral Resources estimates include:

- Assumptions used to generate the conceptual data for consideration of reasonable prospects of economic extraction including:
    - long-term commodity price assumptions
    - changes in local interpretations of mineralization geometry and continuity of mineralization zones
    - metal recovery assumptions
    - concentrate grade and smelting/refining terms.
- The estimated tonnage of mineralization to be mined may vary as infill drilling provides more detailed information about characteristics, thickness and continuity of grade in the deposit.
- Delays or other issues in reaching agreements with local communities
- Changes in permitting requirements

It is the QP's opinion that technical factors that are likely to influence the prospect of economic extraction, including geological interpretations and metallurgical recovery, can be resolved through additional testwork and drilling. Issues related to existing agreements and permitting requirements believed to be able to be resolved.

12 MINERAL RESERVE ESTIMATES

Not applicable to this report.

13 MINING METHODS

Not applicable to this report.

14 PROCESS AND RECOVERY METHODS

Not applicable to this report.

15 INFRASTRUCTURE

Not applicable to this report.

16 MARKET STUDIES

Not applicable to this report.

17 ENVIRONMENTAL STUDIES, PERMITTING AND PLANS, NEGOTIATIONS OR AGREEMENTS WITH INDIVIDUALS OR GROUPS

Not applicable to this report.

18 CAPITAL AND OPERATING COSTS

Not applicable to this report.

19 ECONOMIC ANALYSIS

Not applicable to this report.

20 ADJACENT PROPERTIES

All of Silver Bull's holdings cover all the mineralized zones, and while the Sierra Mojada District and the Sierra Mojada property has been the subject of past production, there are currently no adjacent properties or operators publicly reporting resources or reserves.

The only commercial mining operation active within the area is the adjacent dolomite quarrying operation of Peñoles. The quarry has a small staff (<25) that work a five-day week, 8 hour day shift only, to produce material for their plant at Laguna del Rey. Waste rock is stockpiled on land that they have surface rights.

No information from adjacent properties was used in the completion of this report.

21 OTHER RELEVANT DATA AND INFORMATION

On September 30, 2019 Silver Bull halted all work on the Sierra Mojada project due to a blockade by a cooperative of local miners called Sociedad Cooperative de Exploración Minera Mineros Norteños, S.C.L. ("Mineros Norteños").

Silver Bull has an agreement with Mineros Norteños on Unification de Minera Nortenos and Vulcano mineral licences which cover the eastern part of the Sierra Mojada deposit. These licences are subject to a 2% production royalty capped at US$6.875 million ("the Royalty"). Payment would go to Mineros Norteños should a mine go into production.

Since 2014, Silver Bull had been fighting a lawsuit by Mineros Norteños seeking payment of the Royalty, including interest at a rate of 6% per annum since August 30, 2004, even though no revenue has been produced from the applicable mining concessions. Mineros Norteños also sought payment of wages to the Mineros Norteños members since August 30, 2004 under this agreement, even though none of the individuals were hired or performed work for Silver Bull under this agreement and Silver Bull did not commit to hiring them. On October 4, 2017, the court ruled that Mineros Norteños was time barred from bringing the case. On October 19, 2017, Mineros Norteños appealed this ruling. On July 31, 2019, the Federal Appeal Court held the original ruling. This ruling was been subsequently challenged by Mineros Norteños.

On March 31, 2021 Silver Bull announced it had won the law suit against Minera Nortenos and the courts agreed Silver Bull did not owe Minera Nortneos any royalty payments until the mine goes into production.

In an attempt to force Silver Bull into making a settlement before the final court ruling is issued on March 31, 2022, Mineros Norteños undertook to illegally block access to the project. To ensure the safety of all involved, Silver Bull elected to halt all operations on the project until a resolution can be found.

Despite the court ruling in its favor, and the fact that Silver Bull has at all times proceeded in accordance with the law, the Sierra Mojada project remains under an illegal blockade. To date the Mexican authorities have refused to intervene despite the blockade clearly being in violation of the law.

Silver Bull continues to engage in good faith dialogue with selected members from Minera Norteños to try and find a solution that facilitates the resumption of work on the project.

22 INTERPRETATIONS AND CONCLUSIONS

22.1 INTERPRETATIONS AND CONCLUSIONS

The alteration-mineralizing events have generated two types of mineralization in the Sierra Mojada district; The Shallow Silver Zone (SSZ) and the Base Metal Manto Zone (BMM). Mineralization in the Shallow Silver Zone is dominated by acanthite, the silver halide solid solution of bromargyrite-chloragyrite, and tennantite. Silver occurs in early to late high grade structures, karst breccias, low-angle fault breccias, and mantos, and as disseminated replacements in porous hydrothermally altered dolomites.

The Base Metal mineralization is dominated by hemimorphite in the Red Zinc zone and smithsonite in the White Zinc zone. Mineralization primarily occurs as replacement of karst breccia and accessory faults which feed the breccia zones. Nonsulfide Base Metal mineralization is a result of oxidation and supergene enrichment of an original zone of semi-to massive pyritesphalerite-galena ore largely located in the Lead zone manto mineralization.

The result is a silver (copper) rich polymetallic zone of mineralization overlaying a large non-sulfide zinc-lead resource, both forming a linear zone of manto shaped mineralization cross cut by mineralized structures. (*Tuun & AFK 2015*).

It is the QP's opinion that the Mineral Resource block model is representative of the informing data and that the data is of sufficient quality to support the Mineral Resource Estimate. The estimated tonnage of mineralization to be mined may vary as infill drilling provides more detailed information about characteristics, thickness and continuity of grade in the deposit.

22.2 DEPOSIT MODEL CONCLUSIONS

Sierra Mojada is a polymetallic Pb-Zn-Ag-Cu district and it represents the distal expression of Carbonate Replacement Deposit (CRD) mineralization which is well documented in northern Mexico. The Sierra Mojada district demonstrates a well-known base metal zoning pattern overprinted by silver mineralization. (*Tuun & AFK 2015*)

Silver Bull recognizes the importance of cross-cutting structures for fluid-flow and the resultant "chimney" effects seen in parts of the white zinc and red zinc zones. A better understanding of the major structures (e.g. Calabassos) will help to delineate future targets such as the Parreña. (*Tuun & AFK 2015*)

22.3 RESOURCE MODELING CONCLUSIONS

Silver Bull Resources continues to employ state of the art exploration techniques at Sierra Mojada. All data collected is managed in Microsoft Excel or Access, and then transformed to a visual format in MapInfo. AutoCAD is also used for tracking mineral leases, surface and claim boundaries and locating shafts and adits.

The current Mineral Resource utilizes a single wireframe that encompasses the carbonate replacement deposit. This eliminates "hard boundaries" and allows more samples to be available for estimation. Conceptual pit shells generated to demonstrate "reasonable prospects for economic extraction" were primarily driven by zinc resources. This further highlights the importance of the deeper zinc zones at Sierra Mojada.

23 RECOMMENDATIONS

The authors recommend the next phase work program for Silver Bull Resources to consider on the oxide mineralization should include:

- Complete additional metallurgical test work on both the silver and the zinc to confirm recovery parameters.
- Consider a pilot-plant program to prove the viability of the selected process
- The next phase work program should include geotechnical drilling to confirm appropriate slope angles for future open pit design work.
- Continue underground diamond drill work for improved interpretation and modeling of domains.
- Detail power and water sources, requirements, and begin all permitting processes.
- Examine the potential of the silver and zinc zones as stand-alone minable resources.
- Conduct a Preliminary Economic Assessment (PEA).
- Continue to explore the property with an emphasis on targeting potential sulphide targets.

The Authors estimates that the total cost of the next phase work program is approximately US$2.0M.

Table 43. Estimated Cost of Recommended Work Programs

Item	**Cost in US$**
Drilling of 5,000 meters (Exploration; geotechnical; metallurgical)	1,000,000
Geotechnical analysis (equipment rentals; collection; analysis)	500,000
Hydrological packer testing (8 @ ~$2500 each)	20,000
Metallurgical testing –SART and Zinc process	200,000
Preliminary Economic Analysis study	300,000
Subtotal	**$2,020,000**

24 REFERENCES

Ahn, Hye In, 2010, Mineralogy and geochemistry of the non-sulphide Zn deposits in the Sierra Mojada district, Coahuila, Mexico, 179p. MSc. thesis, University of Texas-Austin, August 2010.

Borg, G., 2009, The influence of fault structures on the genesis of supergene zinc deposits. Society of Economic Geologists, Special Publication No. 14, 2009, pp 121-132.

Clark, J. L., Conner, J. R., and McMahon, A. M., Pincock, Allen & Holt, 2010, Technical Report and Resource Estimate for the Sierra Mojada Project, Mexico. January 29, 2010.

Davis, B. M., Some Methods of Producing Interval Estimates for Global and Local Resources, SME Preprint 97-5, 4p.

Gonzalez-Sanchez, et al, 2009, Regional stratigraphy and distribution of epigenetic stratabound celestine, fluorite, barite and Pb–Zn deposits in the MVT province of northeastern Mexico. Mineralium Deposita, 2009, vol. 44, pp 343–361.

Gryger, S.M., 2010, Geologic framework of the Sierra Mojada mining district, Coahuila, Mexico; An integrative study of a Mesozoic platform-basin margin, 376p. MSc. thesis, University of Texas-Austin, December 2010.

Israel, S., 2011 – 2016, Internal reports on the Geology and Structure at Sierra Mojada, Mexico. 2011 - 2016

JDS Energy & Mining Inc., Preliminary Economic Assessment on the Sierra Mojada Silver Project, Coahuila State, Mexico. December 16, 2013

JDS Energy & Mining Inc., Technical Report on the Sierra Mojada Silver Project, Coahuila State, Mexico, April 30, 2013

Kappes, Cassiday & Associates 2010c, Sierra Mojada Project, Report of Metallurgical Test Work, October 2010.

Kappes, Cassiday & Associates, 2010a, Coeur Mexico Project, Report on Metallurgical Test Work, February 2010.

Kappes, Cassiday & Associates, 2010b, Sierra Mojada Project, Report of Metallurgical Test Work, May 2010.

King, Martin, 2010, A geological review of the Sierra Mojada zinc-lead-silver-copper project, June 25, 2010. Internal Metalline Mining company report.

McGee, J.W, et al, 1990, Stratigraphy and provenance of strata along the San Marcos fault, central Coahuila, Mexico: Geological Society of America Bulletin v. 102, pp 593-614.

McKee, J. W. and Jones, N. W. 1979, A large Mesozoic fault in Coahuila, Mexico: Geological Society of America Abstracts with Programs, v. 11, p. 476.

McKee, J. W., Jones, N. W. and Long, L. E., 1990, Stratigraphy and provenance of strata along the San Marcos fault, central Coahuila, Mexico: Geological Society of America Bulletin v. 102, pp 593-614.

McMahon, A. M. 2010, Pincock, Allen & Holt, Re-Sampling Program for the Sierra Mojada Project Coahuila State, Mexico, August 11, 2010.

Megaw, Peter, 2009, Evaluation of oxidized Pb-Zn carbonate replacement deposits of Mexico in light of supergene zinc and residual lead enrichment processes. Society of Economic Geologists, Special Publication No. 14, 2009, pp 51-58.

Megaw, Peter, et al, 1988, High temperature, carbonate hosted Ag-Pb-Zn (Cu) deposits of northern Mexico: Journal of Economic Geology, v 83, No 8, p 1856-1885.

Megaw, Peter, et al, 1996, Carbonate-hosted lead-zinc (Ag, Cu, Au) deposits of northern Chihuahua, Mexico. Society of Economic Geologists, Special Publication No. 4, 1996, pp 277-289.

Mountain States R&D International, Inc., 2011, Progress Report No.1 Regarding Three Silver Ore Composites – Sierra Mojada. January 06, 2011.

Natalie Pietrzak and Jim Renaud, 2011, A petrographic and microprobe investigation of the carbonate mineral chemistry as it relates to silver grade at Sierra Mojada, February 11, 2011.

Nilsson J., and Simpson, R.G, 2009, Technical report “shallow silver zone” silver-zinc deposit, Sierra Mojada Project, Coahuila state, Mexico, 130p. S-K 1300 report prepared for Metalline Mining Company and filed on SEDAR.

Pincock, Allen & Holt, 2010, Technical Report and Resource Estimate for the Sierra Mojada Project, Mexico, January 29, 2010. S-K 1300 technical report prepared for Metalline Mining Company and filed on SEDAR.

Process Engineering LLC, 2011, Sierra Mojada Project – Silver Oxide System Metallurgical Test Work Review, 14p.

Reeves, A., and Loschiavo A., 2015, Updated Technical Report on the Sierra Mojada Silver Project, Coahuila State, Mexico, May 2015.

Reichert, J., 2009, A geochemical model of supergene carbonate-hosted nonsulphide zinc deposits. Society of Economic Geologists, Special Publication No. 14, 2009, pp 69-76.

Sillitoe, Richard, 2009, Supergene silver enrichment reassessed. Society of Economic Geologists, Special Publication No. 14, 2009, pp 15-32.

Simpson, R., G., and Nilsson, J., 2011, Technical report Shallow Silver Zone Silver Zinc Deposit Sierra Mojada Project, Coahuila State, Mexico, 130p.

SRK Consulting (Canada) Inc., 2012, Technical Report on the Sierra Mojada Silver Project, Coahuila State, Mexico, Report No.2CS030.001, July 06, 2012.

Stockhausen, Tim, 2012, The Upper Conglomerate and Its Importance to the Sierra Mojada Ag-Zn Deposit System, Coahuila, Mexico, 151 p. PhD. thesis, Colorado School of Mines, December 2012.

Thorson, J., 2010, Sierra Mojada, ferruginous breccia, Fbx, June 3, 2010. Internal Metalline Mining Company report, 18p.

Wyss, Gary, 2013, MLA Characterization of ore samples from Sierra Mojada, for Silver Bull Resources, Center for Advanced Mineral and Metallurgical Processing, Butte, Montana, January 23, 2013. 48p.

25 RELIANCE ON INFORMATION BY THE REGISTRANT

This report was prepared as a S-K 1300 Technical Report for Silver Bull Resources Inc. The quality of information, conclusions and estimates contained herein is based on: (i) information available at the time of preparation; (ii) data supplied by outside sources, and (iii) the assumptions, conditions and qualifications set forth in this report.

The Authors have no reason to believe that Silver Bull have not acted in good faith providing this information, but the authors are not qualified to evaluate legal title matter. The property description presented in this report is not intended to represent a legal, or any other opinion as to title.

Silver Bull Resources Inc. is authorized to file this report as a Technical Report with the Securities Exchange Commission ("SEC") pursuant to securities legislation. Except for the purposes legislated under securities law, any other use of this report by any third party is at that party's sole risk.

26 DATE AND SIGNATURE PAGE

This report titled "S-K1300 SUMMARY TECHNICAL REPORT on the RESOURCES of the SILVER-ZINC SIERRA MOJADA PROJECT COAHUILA, MEXICO" with an effective date of January 24, 2023 was prepared and signed by:

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And

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