Technical Report

on the

# Mineral Resource Estimate Update for the La Cigarra Ag-Pb-Zn Project, Chihuahua State, Mexico

WGS84 Zone 13, 409500 m E; 2992500 m N
LATITUDE 27° 03’ N, LONGITUDE 105° 54.5’ W

**Prepared for:**

**Kootenay Silver Inc.**
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# 1 SUMMARY

SGS Geological Services Inc. (“SGS”) was contracted by Kootenay Silver Inc., (“Kootenay” or the "Company") to complete an updated Mineral Resource Estimate (“MRE”) for the La Cigarra Ag-Pb-Zn Project (“La Cigarra” or “Project”) near Parral, Chihuahua State, Mexico, and to prepare a National Instrument 43-101 ("NI 43-101") Technical Report written in support of the updated MRE. The Project is considered an early-stage exploration project.

The current MRE is an update to a MRE completed by GeoVector Management Inc. in 2015 (Armitage and Campbell, 2015), completed for Northair Silver Corp. (“Northair”). On April 21, 2016, Kootenay completed its acquisition of Northair pursuant to a court approved plan of arrangement under the provisions of the Business Corporations Act (British Columbia). Kootenay acquired all the issued and outstanding common shares of Northair in exchange for common shares and share purchase warrants of the Kootenay and Northair became a wholly owned subsidiary of Kootenay. Since acquiring the La Cigarra project in April 2016, Kootenay has completed several exploration programs including drilling, relogging of core and mapping of large areas of the project.

Kootenay is an exploration stage mining company involved in the exploration and development of mineral properties in Mexico, including La Cigarra. The Company is classified as a Tier One issuer on the TSX Venture Exchange (“TSX-V”), and its common shares are listed and trade under the symbol “KTN”

The head office and principal address of the Company is located at Suite 1125 - 595 Howe Street, Vancouver, British Columbia Canada V6C 2T5.

The current report is authored by Allan Armitage, Ph.D., P. Geo., (“Armitage”) and Ben Eggers, B.Sc. (Hons), MAIG, P.Geo. (“Eggers”) of SGS (the “Authors”). The Authors are independent Qualified Persons as defined by NI 43-101 and are responsible for all sections of this report. The updated MRE presented in this report was estimated by Armitage.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The current Technical Report will be used by Kootenay in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). This Technical Report is written in support of an updated MRE completed for Kootenay.

## 1.1 Property Description, Location, Access, and Physiography

The La Cigarra project is located in the state of Chihuahua, within North Central Mexico approximately 28 km northwest of the city of Hidalgo del Parral (Parral) and 225 km south of the city of Chihuahua, the state capital. There are multiple access roads to the deposit area from Parral using public gravel roads for access is approximately 55-75 minutes, depending on routing. The deposit area is centered at Latitude 27°03’ North & Longitude 105°54.5 West (UTM co-ordinates are approximately 409500 E and 2992500 N within Zone 13 N, WGS 1984). The La Cigarra project consists of 16 mineral concessions that total 4,033.32 ha. The mineral concessions are held 100% by Kootenay and are in good standing.

The Project is located in the southern part of the Mexican state of Chihuahua near the city of Hidalgo del Parral. Parral is best accessed by road from Chihuahua some 225 km to the north and the largest city in the state of Chihuahua with a population of about 843,000 people. Chihuahua is the political capital of the state and contains offices for many state and federal agencies overseeing mining operations and permitting. Chihuahua is also the closest city to the La Cigarra Project, serviced by an international airport. The General

Roberto Fierro Villalobos International Airport (code: CUU) is located about 3 hours' drive north from the Project by either free or toll Highways.

Parral is serviced by two small local airports, open only for day flights. The larger airport is the J. Ernesto Lozano airport situated about 23 km ENE of Parral at UTM co-ordinates 458670 E and 2982995 N within Zone 13N, WGS 1984. The paved runway capable of handling small jets is 2,600 m long by 30 m wide. The second and smaller strip is the Frisco airport situated 8 km west of Parral on Highway 24 at approximately 422000 E and 2978000 N, Zone 13N, WGS 1984. The paved runway is only 1,350 m long and caters mainly to small propeller airplanes.

From Parral the Project is accessible by taking Highway 24 (Hwy 24) west from the outskirts of Parral toward Guadalupe de Clavo. There are two options to reach the La Cigarra from Hwy 24; the west and the east access. The west access allows La Cigarra to be reached from either the south or the north.

No permanent infrastructure exists on the Property although temporary base camps can be set up in several areas. Drill crews typically operate out of a temporary camp on site. Surface exploration completed on the Property is conducted out of a house rented in Parral. Core logging is also completed in a large secure warehouse located near the house in Parral; drill core and samples are stored at the same facility. An additional secure warehouse (fenced) is located immediately south of the Las Carolinas Zone on the Baca ranch land. Rejects from the reverse circulation drill program are stored at this warehouse.
Besides the two small airports and good road access from Parral, a 115 kV electric transmission line extends from Parral to the operating mines of Santa Barbara and San Francisco del Oro, located approximately 17 km south-southeast of the La Cigarra.

There are no rivers or large bodies of water in the immediate Project area; however, water is available from the San Felipe de Jesus and Parral-Valle del Verano aquifers which underlie and are adjacent to the project area. It is anticipated water will be attained by purchasing existing permitted water concessions and/or wells in the area or by applying for new water rights from the government.

## 1.2 History of Exploration, Drilling

Despite its proximity to the Santa Barbara and San Francisco del Oro Districts and evidence of good potential for vein and bulk tonnage silver deposits, past work on the Property appeared limited to numerous small, hand excavated pits and trenches (approximately 190 have been documented to date) with a number of larger workings established along veins occurring at the east dipping contact between Cretaceous turbidites and underlying Jurassic and Triassic rocks (Reeves and Arseneau, 2013). Most workings in the La Borracha and San Gregorio Zones are open drifts and cuts accessed by cross-cuts at or above the valley floor. In the Las Carolinas Zone, workings are generally underground drifts accessed by cross-cuts from the valley floor. A couple of steep shafts believed to be in the order of 10-30 m deep with undetermined amounts of drifting are in the southernmost part of the Las Carolinas Zone and further south in the Las Venadas and La Soledad areas.

Total production from all workings appears to be considerably less than 60,000 tonnes and was carried out by independent, small-time miners over the last 10-40 years who high-graded silver and gold bearing oxidized material from the various veins before trucking the material elsewhere for processing.

Following a program of data compilation, property mapping and prospecting in early 2009, the six concessions that cover the La Borracha, San Gregorio and Las Carolinas Zones were optioned from three private individuals.

The La Cigarra Project was first visited in late 2008 by a prospecting crew working for Grupo Northair de Mexico under the supervision of Jim Robinson. This program included taking 49 soil samples and 255 rock chip samples along a 3 km trend of mineralization that returned values ranging from 1.2 g/t Ag and 1,940 g/t Ag and averaged 118 g/t Ag. Northair defined three potentially significant zones of silver mineralization from its initial sampling.

The first soil sampling in 2008 (49 samples) were collected from two contour lines coincident with and paralleling the trend of old workings and quartz veined outcrops through the San Gregorio and Las Carolinas zones. In May 2011 systematic grid sampling began over the La Borracha-San Gregorio-Las Carolinas zones with 1,377 samples collected at 50 m intervals from lines spaced 50 m apart. This work successfully outlined a 3.6 km long by typically 150 m but up to 300 m wide, open-ended, multi-element soil anomaly including Ag that can be traced from La Borracha in the northwest to Las Carolinas in the southeast.

In 2012, the grid soil sampling was extended south to cover the 3 km long area encompassing the Las Venadas-La Soledad-Las Chinas zones. Although most of the 148 samples were collected at 50 m intervals from lines spaced 100 m apart the work successfully extended the Ag soil anomaly a further 650 m south through the Las Venadas Zone before it showed a discontinuous series of anomalous values for a further 2 km through the La Soledad and Las Chinas zones.

As part of the reconnaissance, target identification work away from the La Cigarra zone, 417 soil samples were collected at 50 m intervals from two lines spaced 1200 m apart starting 2,200 m south of Las Chinas. No anomalous values were obtained. Similar style sampling was also carried out over six widely spaced lines starting 5,100 m northeast of San Gregorio over what is now referred to as the La Bandera Area. A number of multi-element anomalies including Ag were obtained at the western end of two lines from the 255 samples collected over lines spaced 1200 apart. Systematic follow-up exploration is warranted in this area where initial prospecting indicates similar stratigraphy to the La Cigarra system.

Since October 2008 when Northair crews first visited the property, 1,222 chip, channel and grab rock samples have been taken over the entire property. In the La Cigarra area, 296 of the samples have returned Ag values of 30 g/t or greater with individual values ranging to 1,940 g/t Ag in La Borracha; 991 g/t Ag in San Gregorio and 707 g/t Ag in Las Carolinas. Collectively the rock samples have defined a strong, 4.25 km long, open-ended, multi-element anomaly with significant silver values that extends from La Borracha in the northwest to Las Venadas in the southeast.

In La Borracha strongly anomalous silver values occur over widths of 70-80 m on surface. At San Gregorio the anomalous silver values occur over an area up to 200 m wide. In Las Carolinas and Las Venadas, the same zone has returned strongly anomalous values in Ag over widths to 80 m. In addition, in the Las Venadas Zone, a second area with anomalous Ag values to 34 ppm occurs 300 m west of the main trend and based on alignment with scattered anomalous Ag values to the northwest, may reflect a parallel mineralized structure that occurs on the west limb of the La Cigarra anticline.

Rock sampling further south has yielded anomalous silver values in the La Soledad area where restricted sampling has yielded silver values to 86 ppm Ag over an area 700 m north-south by at least 10-15 m wide that parallels the road. Further south, scattered rock sampling has yielded anomalous values to 199 ppm Ag over an area 750 m long by 500 m wide in the Las Chinas area. Additional, systematic sampling is required in both the La Soledad and Las Chinas areas to better define the targets for drill testing.
In late December 2012, fifty-four samples were collected over a very wide area in what is now called the La Navidad Zone. Although sampling is widespread and irregular, anomalous values to 63.7 ppm Ag were obtained along a 330 m long, northwest trending interval underlain by altered stratigraphy with drusy quartz veining that is identical to that encountered in the San Gregorio Zone situated 500-600 m to the southwest. The similarity in geology, alteration and style of mineralization make the parallel, La Navidad structure a high priority target for future exploration work.

Property geological mapping at 1:2500 scale was carried out by consulting geologist Tom Chapin from Reno, Nevada. The work was conducted in three separate phases. The initial mapping which focused on the San Gregorio-La Borracha Zones was carried out in May-June 2011. A second phase which focused on the southern portion of San Gregorio and the Las Carolinas zones was carried out in November-December 2011. The third phase of mapping which focused on the area south of Las Carolinas including Las Venadas, La Soledad and Las Chinas and to a small degree at the La Navidad Zone east of San Gregorio was conducted in November-December 2012.

In November-December 2012, DFX were contracted to carry out detailed geological mapping and rock sampling over the La Bandera area approximately 5.1 km northeast of the San Gregorio Zone. Initial results are encouraging with the identification of north-south striking, Jurassic stratigraphy, similar to that exposed at La Cigarra, which is parallel to and concordant with an open-ended Ag soil anomaly.

In conjunction with the field work, three separate petrographic studies on 55 pieces of drill core and hand samples were carried out between mid-2011 and early 2012. These include a thin and polished section study of 13 pieces of drill core, a thin and polished section study of 34 rock samples and a thin and polished section study of 8 pieces of drill core.

A detailed ground magnetic survey was carried out by SJ Geophysics Ltd. of Vancouver, British Columbia in May 2011. Approximately 50-line km of surveying was conducted with readings taken every 12.5 m on lines spaced 50 m apart extending from 17+00N in La Borracha down to 8+00S in Las Carolinas. Total magnetic intensity, reduced to the poles, shows a strong magnetic high underlies much of the San Gregorio and northern half of the Las Carolinas zones and likely reflects an underlying hornblende diorite body that was intersected at depth in a couple of San Gregorio drill holes. A very pronounced and sharp margin to the magnetic high that parallels the grid at about San Gregorio grid line 4+25N suggests a fault contact. The southern contact by contrast is quite gradual with magnetic values diminishing between Las Carolinas grid lines 1+50S and 3+50S.

In May-June 2010, fifteen reverse circulation holes were drilled, totalling 1,455.4 m. The program was successful in testing the three known mineralized targets on the property and intercepted significant widths of altered and mineralized sediments and intrusive rocks. Results obtained in the three zones included: 138.7 g/t Ag over 13.7 m in Las Carolinas (CRC-10-001); 95.7 g/t Ag over 51.8 m in San Gregorio (CRC-10-006) and 32.7 g/t Ag over 21.3 m in La Borracha (CRC-10-015).

In December 2010, Northair commenced its initial core drill program and by the end of 2014 had completed 29,070.2 m of core drilling in 156 diamond drill holes (CC-10-001 to CC-14-156).

Kootenay has completed additional surface exploration on the Property, including diamond drilling, between 2016 and 2018.

## 1.3 Geology and Mineralization

The La Cigarra deposit is a good example of a Mexican Intermediate Sulphidation Ag-Pb-Zn-(Cu-Au) epithermal deposit. The Deposit lies within the north-east portion of the Central Mexican Silver Belt ("CMSB"). It is defined by several silver mining districts including Guanajuato, Zacatecas, Fresnillo, and Santa Barbara-San Francisco del Oro as well as the mining districts of Parral, Santa Maria del Oro, and Sombrerete-Chalchihuites.

The Property is located along the eastern flanks of the Sierra Madre Occidental ("SMO") Volcanic Province within the north-east portion of the CMSB. The SMO mountain range extends for more than 1,500 km in a north-westerly direction through the northern half of Mexico. This mountain range is the erosional remnant of a significant accumulation of intermediate to felsic volcanic rocks, which formed a calc-alkaline magmatic arc that was built during Eocene to early Miocene time, roughly 52 to 25 million years ago, in response to subduction of the Farallón tectonic plate beneath North America. The CMSB is a north-westerly aligned, metallogenic province which stretches approximately 900 km along the SMO Mountains. It is defined by a number of silver mining districts including Guanajuato, Zacatecas, Fresnillo, and Santa Barbara-San Francisco del Oro as well as the mining districts of Parral, Santa Maria del Oro, and Sombrerete-Chalchihuites. Medium to high-level hydrothermal systems variably enriched in Ag, Pb, Zn, Au and to a lesser extent Cu, Sb, As, Hg, and F were intermittently generated during the extended period of volcanism which formed the SMO mountain range.

The Property is underlain by a series of northwest-southeast trending horsts and grabens where the La Cigarra zone is an up-lifted block exposing some of the oldest rocks in the area. The vast majority of the property is underlain by Lower Cretaceous shales and limestones with "windows" of underlying Lower

Cretaceous sandstone exposed in an approximately 4.5 km long, cigar shaped body in the La Cigarra area, a 6.5 km long, similar shaped body 4 km north and 3 km east and in a broad area covering the extreme northwest corner of the property.

Unconformably overlying the Lower Cretaceous stratigraphy and outcropping southwest of La Cigarra and in the eastern portions of the property are Paleogene andesites which are capped by slightly younger rhyolite pyroclastics and ignimbrites. Neogene aged polymictic conglomerates fill grabens in the northeast corner of the property and over much of the ground occurring south of Las Chinas. A small plateau immediately southeast of Las Chinas is unconformably capped by Neogene aged basalt flows.

Within the La Cigarra area (from La Borracha in the north to Las Chinas in the south) detailed mapping indicates the rocks are part of an approximately 4.5 km long, north northwest striking block that has been uplifted, folded into an anticline, and tilted to the north. It has exposed basement, Triassic rocks in the south and is cut-off by a left lateral normal fault to the north.

The most prevalent and likely oldest intrusive rocks within the area being drilled is a Middle Cretaceous aged, fine to medium grained, porphyritic granodiorite to dacite which occurs as sills throughout the Middle Cretaceous stratigraphy. Variations in texture and appearance are in part due to alteration and likely reflect multiple phases of a similar intrusive that has been lumped into one rock type by different mappers. Thin section work indicates the feldspar phenocrysts are k-spar and mafic phenocrysts are hornblende though they are frequently altered and have been leached out. Within the silver zone, contacts to the sills are typically brecciated and/or sheared. At depth in a number of drill holes within San Gregorio and La Borracha, medium grained, hornblende +/- pyroxene diorite (possibly gabbro) intrudes Middle Cretaceous turbidites. The fresh-looking intrusive rocks contain traces of finely disseminated chalcopyrite.

There are two predominant types of structures in the region, Laramide thrusting and folding that occurred in the late Cretaceous early Tertiary, and Miocene basin and range block faulting. Evidence of the Laramide thrusting can be seen on the outskirts of Parral where Cretaceous sediments are chevron folded, and at the northern entrance to the property where spectacular isoclinal and chevron folds are exposed. Miocene basin and range faulting created a horst called the La Cigarra ridge, which forms a window through the Sierra Madre volcanic field. The conduits for mineralization are a combination of older thrust fabric and the younger extensional events.

The Deposit consists of silver grades with low gold, lead, and zinc values contained in drusy quartz veins, stockwork and silicified, brecciated zones parallel to stratigraphy. Approximately 80% of the deposit contains sulphide minerals. The upper 20% of the deposit has been partially oxidized.

Silver mineralization outlined at La Cigarra occurs in bedding parallel zones that have been intersected in San Gregorio between 1,975 m (section 1+50N) and 1,650 m (section 0+00) above sea level. Silver-lead-zinc-gold values typically occur in 1-4, higher-grade intervals ranging between 5 and 46 m in width that occur within a broader mineralized envelope that ranges up to 120 m in true width. Mineralized zones typically dip northeast at 50° to 55° although some variability does occur.

Drilling has traced the zones at least 400 m down dip and 290 m vertically from surface. The mineralization remains open to depth and along strike on all sections.

In the San Gregorio Zone mineralization occurs in thinly bedded, de-calcified Cretaceous mudstones (turbidites) and to a small extent in immediately underlying Jurassic greywackes and occasionally in strongly altered, Cretaceous, granodiorite or Tertiary andesite, dacite and rhyolite intrusions. Grades are best developed in highly brecciated, bedding parallel zones (thrust faults?); in brecciated contact envelopes surrounding the granodiorite; and at the contact between the underlying Jurassic stratigraphy with the overlying Cretaceous rocks.

In the Las Carolinas Zone mineralization occurs predominantly in Jurassic greywackes with minor siltstone and sandstone beds and to a lesser extent in overlying de-calcified Cretaceous mudstones.

Occasionally significant silver values occur in Tertiary rhyolite sills and dykes but unlike San Gregorio, they do not occur in granodiorite even though they are present in the stratigraphy. Silver values also occur on sporadically in calcareous mudstones (with Ca values to 8%) although in minor quantities.

In both San Gregorio and Las Carolinas, the stratiform nature of the mineralization is thought to reflect increased permeability in the sediments created by alteration from the placement of dykes and sills.

## 1.4 Mineral Processing, Metallurgical Testing and Recovery Methods

Three phases of metallurgical testing were completed on the Project between 2011 and 2015 for Northair. Two phases of scoping level metallurgical testing were completed by G&T Metallurgical Services ("G&T"), Kamloops, BC (G&T, 2011 and 2012) to investigate the recovery of silver. Most of the intervals studied were from the San Gregorio mineral zone in the La Cigarra Project. Hoe Teh, P. Eng. was commissioned by Northair to manage the metallurgical test work and to summarize the results of the test programs.

The first phase of study, completed in August 2011, was a preliminary metallurgical assessment of four composite samples made from several drill holes. The samples were identified as sulphide, low-grade (LG) oxide, high-grade (HG) oxide, and mixed sulphide-oxide. From chemical analysis, the LG oxide samples contained significant levels of sulphide and could be considered as sulphide, while the HG oxide could be considered as a mixed sulphide-oxide. Consequently, the samples could be broadly labelled as sulphides and mixed sulphide-oxides. The two sulphide composites assayed 89 g/t silver and 81 g/t silver, while the mixed sulphide-oxide composite assayed 148 g/t silver and 157 g/t silver. The composites were tested by mineralogical analysis, whole ore leaching with cyanide, flotation and flotation concentrate leaching using the carbon-in-leach process. The program indicated that flotation would be effective on sulphide ores while whole ore cyanidation would be favored on oxide or mix-sulphide ores.

Following the metallurgical assessment of silver recovery in the first phase of testing, a second phase of test work was conducted on more samples from the San Gregorio Zone. The samples were composited into a sulphide and an oxide composite. The samples for the sulphide composite were selected from 13 core drill holes, while the samples for the oxide composite were selected from four core drill holes. More sulphide than oxide samples were used to reflect their relative abundance in the deposit. The composites were further tested by mineralogical analysis, flotation and cyanide leaching of whole ore and flotation concentrate to better understand the mineralization, define the process parameters, and develop a potential flow sheet for the project. Preliminary ore hardness measurements in terms of Bond ball and rod mill indices were completed for the sulphide composite and just the ball mill index for the oxide composite. These measurements were conducted as an initial assessment of milling requirements.

The Phase 3 metallurgical program was carried out by Base Metallurgical Laboratories Ltd. of Kamloops, B.C. (Base Met Laboratories Ltd., 2015), with Terra Mineralogical Services of Peterborough, ON selected to conduct further mineralogical assessment of the La Cigarra sample material. The metallurgical and mineralogical work was conducted under the supervision of Mr. Hoe Teh, P.Eng.

Phase 3 test work was conducted on two main global composites: an Oxide composite and a sulphide composite. Additionally, two sulphide variability composites were assessed: sulphide material of higher and lower silver feed grade. The samples making up the sulphide composite were selected from 12 drill holes in San Gregorio and 9 drill holes from Las Carolinas.

The oxide composite contained silver values of about 80 g/t with low values of lead and zinc. The sulphide composites had silver feed grades ranging from about 104 g/t to about 133 g/t. Levels of lead and zinc in the three sulphide composites ranged from about 0.14 to 0.30%. Sulphur levels in the sulphide samples averaged about 2 %, indicating relatively high levels of other sulphides. The mineralogy analysis indirectly indicated the presence of pyrite as the dominate sulphide mineral in the sulphide composite.

Semi quantitative mineralogy analysis was conducted on the oxide and sulphide composites. The analysis focused on visible silver minerals and indicated that silver was observed mostly in acanthite in the oxide composite.

In the sulphide composite silver was observed as acanthite with lesser amounts of stephanite, pyrargyrite, polybasite. The later three minerals are silver antimony sulphides (stephanite, pyrargyrite) and silver, copper, antimony, and arsenic sulfosalts (polybasite). The silver minerals were observed as tiny occurrences, averaging between 3 and 5 microns and usually locked with other sulphides, mainly pyrite. The silver minerals observed will respond favorably to flotation, behaving as copper or lead minerals. However, due to the fine grain size observed, it will be difficult to efficiently separate silver sulphide minerals into a concentrate at high grade and high recovery.

The cyanide leach response of acanthite is relatively good, however, the leach response of the other silver sulfosalt minerals observed in the sulphide composite is less well understood. The mineral analysis did not indicate levels of silver that could be contained in other minerals like galena and pyrite. If silver is present in this form, it will not respond well to direct cyanidation.

Metallurgical testing on the oxide composite confirmed that the valuable metals in the feed responded poorly to flotation. Cyanide leaching was more successful for this mineralization. The best tests indicating finer primary grind size of 55 µm K80 improved silver extraction rates by 5 percent when compared to the coarser grind size of 100 µm K80. Silver leaching by cyanide often has a slow kinetic rate and the higher dosages of cyanide (1000 ppm) and long leach times were required to achieve the best results of 88 percent extraction.

The several different processes and combination of processes were investigated for the sulphide composite. Flotation of a bulk concentrate, maximizing the recovery of sulphide minerals, achieved about 93% recovery of silver. The concentrate however, contained relatively low levels of silver, lead and zinc that would make marketing the concentrate as a product very difficult. Attempts to clean the concentrate by flotation did not improve the grade of the concentrate by enough to make this concentrate a candidate for direct marketing.

Two leach tests were performed on the bulk rougher concentrate. Silver was between 70 and 80% leached from the concentrate. Combined silver recovery of flotation and leach performance would therefore be between 64 and 74%. Due to the low extractions of silver and no revenue from either lead or zinc, this process was not further developed.

Sequential flotation for lead and zinc concentrates was demonstrated to be successful, producing concentrates that can be considered marketable. Lead in the feed was on average 70% recovered from the feed into concentrates that graded about 35% lead. Similarly, a zinc in the feed was 60 percent recovered from the feed into a concentrate grading 52 percent zinc. There was limited amount of optimization work conducted for the base metal concentrate production. Further optimization may improve the performance, particularly for the zinc concentrate. In advance of any such testing, detailed mineralogy should be conducted on the concentrate and tailings to understand the nature of the lead and zinc losses.

Silver was recovered to flotation concentrates as by byproduct, but still providing the majority of revenue for the project. For the sulphide composite, silver was on average about 68% recovered to the lead concentrate. The grade of silver in the lead concentrate was about 22,000 g/t. Sequential flotation also showed that an addition 8 units of silver could be recovered to the zinc concentrate at silver grades of about 3500 g/t. At these levels, silver payment should be expected from the zinc concentrate, albeit at lower levels than the lead concentrate.

Cyanide leaching of the cleaner tailings streams and pyrite concentrate from a sequential lead zinc flotation circuit was estimated to bring total silver recovery to 86 percent. This value would need to be confirmed by leaching products from a locked cycle test with the pyrite circuit fully optimized.

Flotation testing also examined a simpler flowsheet that produced a lead concentrate and a pyrite concentrate for silver leaching. The locked cycle test for this process recovered 69 percent of the lead in the feed into a concentrate grading 28% lead. Silver in the feed was 69 percent recovered into the lead concentrate grading 20,000 g/t silver.

The pyrite concentrate recovered an additional 12% of the silver in the feed into a concentrate grading 95 g/t silver. The mass of the concentrate was 13% of the feed mass, therefore requiring a smaller volume leach circuit. The lead cleaner tailings from this circuit also made a good candidate for cyanide leaching as it contained 12% of the silver in the feed, grading 365 g/t silver. The combined silver recovery to the lead concentrate, lead cleaner tailings and pyrite concentrate was 93 percent.

To supplement silver recovery, the lead cleaner tailings and pyrite concentrate were cyanide leached. Leach performance for these lead cleaner tailings and pyrite was 82 and 77%, respectively. The additional extraction increased the total silver recovery to about 88 percent for this flowsheet.

Due to the low concentrate masses of the concentrates, analyses full element specific analyses could not be performed. Quantitative XRF (X-ray Fluorescence) was completed to indicate elements that may be of interest.

The lead concentrate is unique due to the very high silver content. There were some other elements that could add or detract from revenue when the concentrate is marketed. Specifically, copper, zinc, antimony, mercury, arsenic, and cadmium levels may be of concern. It is strongly recommended that advice from a concentrate marketing specialist be sought.

Similarly, the zinc concentrate analysis indicated only a few elements of potential concern, including: cadmium, antimony, copper and possibly mercury. It is recommended that future test programs set aside a budget for generating sufficient concentrate to fully investigate minor element levels and produce enough concentrate for marketing studies.

Finally, cyanide leaching of the whole feed was investigated for the sulphide composite. While extraction rate was about 83 percent, the fine primary grind, high cyanide consumption and loss of revenue from lead and zinc made this option less attractive.

The metallurgical testing to date has identified likely processes for both the oxide and sulphide mineralization styles. As the project progresses, metallurgical testing should move to focus on measuring the variability (or geometallurgical) testing to measure the applicability of the developed flowsheet across the deposit. Developing a model for prediction for metallurgical performance that can be used in mine modelling should be the goal.

## 1.5 Mineral Resource Estimate

Completion of the updated MRE for La Cigarra involved the assessment of a validated updated drill hole database, which included all data for surface drilling completed through 2018, and the assessment of updated three-dimensional (3D) mineral resource models (resource domains).

The Inverse Distance Squared ("$ID^2$") calculation method restricted to the resource domains was used to interpolate grades for Ag (g/t), Au (g/t), Pb (ppm) and Zn (ppm) into block models for all deposit areas.

Measured, Indicated, and Inferred mineral resources are reported in the summary tables below. The MRE presented below takes into consideration that La Cigarra may be mined by the open pit mining method.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016). The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres as best as possible to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The update MRE for the Project is presented in Table 1-1, and includes an oxide and sulphide MRE (Table 1-2).

**Highlights of the Project Mineral Resource Estimate are as follows:**

- Measured + Indicated Mineral Resources are estimated at 15.73 Mt grading 102 g/t silver, 0.07 g/t gold, 0.16% lead, and 0.21% zinc (120 AgEq). The Measured MRE includes resources of 51.57 Moz of silver, 33.9 koz of gold, 54.8 Mlbs of lead, and 73.5 Mlbs of zinc (60.56 Moz AgEq).
- Inferred Mineral Resources are estimated at 3.37 Mt grading 102 g/t silver, 0.06 g/t gold, 0.20% lead, and 0.19% zinc (119 AgEq). The Inferred MRE includes resources of 11.00 Moz of silver, 6.00 koz of gold, 14.8 Mlbs of lead, and 13.8 Mlbs of zinc (12.85 Moz AgEq).

**Table 1-1 La Cigarra Deposit Mineral Resource Estimate, November 29, 2023**

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 2.08 | 103 | 0.06 | 0.16 | 0.22 | 121 | 6.90 | 4.30 | 7.6 | 9.9 | 8.10 |
| Indicated | 13.65 | 102 | 0.07 | 0.16 | 0.21 | 120 | 44.66 | 29.60 | 47.3 | 63.6 | 52.46 |
| Mea. + Ind. | 15.73 | 102 | 0.07 | 0.16 | 0.21 | 120 | 51.57 | 33.90 | 54.8 | 73.5 | 60.56 |
| Inferred | 3.37 | 102 | 0.06 | 0.20 | 0.19 | 119 | 11.00 | 6.00 | 14.8 | 13.8 | 12.85 |

*The base-case AgEq Cut-off grade of 50 g/t AgEq considers metal prices of $23.50/oz Ag, $1,800/oz Au, $1.00/lb Pb and $1.30/lb Zn, and considers variable metal recoveries for Ag, Au, Pb and Zn: for oxide mineralization - 85% for Ag, 40% for Au, 75% for Pb and 65% for Zn; for sulphide mineralization - 92% for Ag, 40% for Au, 91% for Pb and 85% for Zn.*

*[1]AgEq = Ag ppm + (((Au ppm x Au price/gram) + (Pb% x Pb price/t) + (Zn% x Zn price/t))/Ag price/gram). Metal price assumptions are $23.50/oz silver, $1,800/oz gold, $1.00/lb lead and $1.30/t zinc.*

***La Cigarra Mineral Resource Estimate Notes:***

(1) *The Mineral Resource Estimate was estimated by Allan Armitage, Ph.D., P. Geo. of SGS Geological Services and is an independent Qualified Person as defined by NI 43-101. Dr Armitage conducted a recent site visit to the La Cigarra Property on November 28 and 29, 2023.*

(2) *The classification of the current Mineral Resource Estimate into Measured, Indicated and Inferred mineral resources is consistent with current 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves. The effective date for the Updated Mineral Resource Estimate is November 29, 2023.*

(3) *All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.*

(4) *The mineral resource is presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction.*

(5) *Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that most Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

(6) *The La Cigarra mineral resource estimate is based on a validated database which includes data 201 surface diamond and RC drill holes totalling 36,988 m. The resource database totals 26,419 assay intervals representing 34,447 m of drilling. The average assay sample length is 1.30 m.*

(7) *The mineral resource estimate is based on 9 three-dimensional ("3D") resource models, constructed in Leapfrog. Grades for Ag, Au, Pb and Zn were estimated for each mineralization domain using 1.5 metre capped composites assigned to that domain. To generate grade within the blocks, the inverse distance squared ($ID^2$) interpolation method was used for all domains. Each domain was then subdivided into oxide and sulphide domains.*

(8) *Average density values were assigned to oxide and sulphide domains and a waste domain based on based on a database of 1,412 samples.*

(9) *It is envisioned that the La Cigarra deposit may be mined using open-pit mining methods. Mineral resources are reported at a base case cut-off grade of 50 g/t AgEq. The in-pit Mineral Resource grade blocks are quantified above the base case cut-off grade, above the constraining pit shell, below topography and within the constraining mineralized domains (the constraining volumes).*

(10) *The results from the pit optimization are used solely for the purpose of testing the "reasonable prospects for economic extraction" by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a Mineral Resource statement and to select an appropriate resource reporting cut-off grade.*

(11) *The pit optimization and base-case AgEq Cut-off grade considers metal prices of $23.50/oz Ag, $1,800/oz Au, $1.00/lb Pb and $1.30/lb Zn, and considers variable metal recoveries for Ag, Au, Pb and Zn: for oxide mineralization - 85% for Ag, 40% for Au, 75% for Pb and 65% for Zn; for sulphide mineralization - 92% for Ag, 40% for Au, 91% for Pb and 85% for Zn.*

(12) *The pit optimization and base case cut-off grade of 50 g/t AgEq considers a mining cost of US$2.50/t mined, and processing, treatment, refining, G&A and transportation cost of USD$22.40/t of mineralized material.*

(13) *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*

**Table 1-2 La Cigarra Oxide and Sulphide MRE, November 29, 2023**

***Oxide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 0.50 | 141 | 0.06 | 0.12 | 0.06 | 152 | 2.28 | 1.00 | 1.3 | 0.7 | 2.46 |
| Indicated | 2.66 | 104 | 0.08 | 0.11 | 0.09 | 117 | 8.92 | 6.5 | 6.4 | 5.0 | 9.96 |
| Mea. + Ind. | 3.16 | 110 | 0.07 | 0.11 | 0.08 | 122 | 11.20 | 7.50 | 7.7 | 5.7 | 12.42 |
| Inferred | 0.89 | 84 | 0.05 | 0.17 | 0.05 | 94 | 2.40 | 1.30 | 3.4 | 1.0 | 2.70 |

***Sulphide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 1.58 | 91 | 0.07 | 0.18 | 0.26 | 111 | 4.62 | 3.30 | 6.2 | 9.2 | 5.64 |
| Indicated | 10.99 | 101 | 0.07 | 0.17 | 0.24 | 120 | 35.75 | 23.10 | 40.9 | 58.5 | 42.50 |
| Mea. + Ind. | 12.57 | 100 | 0.07 | 0.17 | 0.24 | 119 | 40.37 | 26.40 | 47.1 | 67.7 | 48.14 |
| Inferred | 2.48 | 108 | 0.06 | 0.21 | 0.24 | 128 | 8.60 | 4.70 | 11.4 | 12.9 | 10.15 |

## 1.6 Recommendations

The La Cigarra project contains an in-pit Measured, Indicated and Inferred Mineral Resource that is associated with relatively well-defined mineralized trends and models. The deposit is open along strike and at depth.

Armitage considers that the Project has potential for delineation of additional Mineral Resources and that further exploration is warranted. Given the prospective nature of the Property, it is the opinion of Armitage that the Property merits further exploration and that a proposed plan for further work by Kootenay is justified.

Armitage is recommending Kootenay conduct further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its business activities or alterations which may affect the program as a result of exploration activities themselves.

For 2024, Kootenay is planning a minimum of 5,000 m of infill and step-out drilling in the central parts of the La Cigarra deposit area (referred to as the gap zone), and additional drilling in the La Borracha area to include this area in the next MRE update. The next MRE update will form the basis of an initial engineering study in the form of a Preliminary Economic Assessment.

The total cost of the three-phase planned work program by Kootenay is estimated at ~$2.64 million and includes:

Phase One - $915,000

- *Drilling– $600,000*
    - *2,400 m at roughly $250/m*
        - *All in costs include geos and workers salaries, equipment, fuel, accommodation expenses, truck rentals, and sample shipment, assaying, QA/QC, standards, density checks.*
- *Prospecting and mapping – $50,000*
- *Permitting and Environmental - $65,000*
- *Geophysics (additional IP) - $200,000*

Phase Two – $1,275,000

- *Infill Drilling of Gap Zone $1,000,000*
    - *4,000 m at roughly $250/m*
- *Metallurgical Testwork - $200,000*
- *Update MRE and Technical Report - $75,000*

Phase Three - $450,000

- *Preliminary Economic Assessment (“PEA”) and Technical Report - $450,000*

# 2 INTRODUCTION

SGS Geological Services Inc. (“SGS”) was contracted by Kootenay Silver Inc., (“Kootenay” or the "Company") to complete an updated Mineral Resource Estimate (“MRE”) for the La Cigarra Ag-Pb-Zn Project (“La Cigarra” or “Project”) near Parral, Chihuahua State, Mexico, and to prepare a National Instrument 43-101 ("NI 43-101") Technical Report written in support of the updated MRE. The Project is considered an early-stage exploration project.

The current MRE is an update to a MRE completed by GeoVector Management Inc. in 2015 (Armitage and Campbell, 2015), completed for Northair Silver Corp. (“Northair”). On April 21, 2016, Kootenay completed its acquisition of Northair pursuant to a court approved plan of arrangement under the provisions of the Business Corporations Act (British Columbia). Kootenay acquired all the issued and outstanding common shares of Northair in exchange for common shares and share purchase warrants of the Kootenay and Northair became a wholly owned subsidiary of Kootenay. Since acquiring the La Cigarra project in April 2016, Kootenay has completed several exploration programs including drilling, relogging of core and mapping of large areas of the project.

Kootenay is an exploration stage mining company involved in the exploration and development of mineral properties in Mexico, including La Cigarra. The Company is classified as a Tier One issuer on the TSX Venture Exchange (“TSX-V”), and its common shares are listed and trade under the symbol “KTN”

The head office and principal address of the Company is located at Suite 1125 - 595 Howe Street, Vancouver, British Columbia Canada V6C 2T5.

The current report is authored by Allan Armitage, Ph.D., P. Geo., (“Armitage”) and Ben Eggers, B.Sc. (Hons), MAIG, P.Geo. (“Eggers”) of SGS (the “Authors”). The Authors are independent Qualified Persons as defined by NI 43-101 and are responsible for all sections of this report. The updated MRE presented in this report was estimated by Armitage.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The current Technical Report will be used by Kootenay in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”). This Technical Report is written in support of an updated MRE completed for Kootenay.

## 2.1 Sources of Information

In preparing the current updated MRE and the current technical report, the Authors utilized a digital database, provided to the Author by Kootenay, and technical reports provided by Kootenay. All background information regarding the Property has been sourced from previous NI 43-101 technical reports and revised or updated as required:

- *The Property was the subject of a NI 43-101 technical report by Allan E. Armitage, Ph. D., P. Geol. and Joe Campbell, B.SC., P. Geo. in 2015 titled “Updated Mineral Resource Estimate on the San Gregorio/Las Carolinas Zones, La Cigarra Silver Project, Chihuahua Mexico” for Northair Silver Corp. Dated: February 27, 2015, and with an Effective Date: January 14th, 2015.*
- *The Property was the subject of a NI 43-101 technical report by Allan Reeves, P.Geo. and Gilles Arseneau, P.Geo. in 2013 titled “San Gregorio/Las Carolinas Resources Technical Report La Cigarra Project, Chihuahua Mexico” for International Northair Mines Ltd. Dated: April 10, 2013, and with an Effective Date: February 26, 2013.*

Information regarding the Property accessibility, climate, local resources, infrastructure, and physiography, exploration history, previous mineral resource estimates, regional property geology, deposit type, recent exploration and drilling, metallurgical test work, and sample preparation, analyses, and security for previous drill programs (Sections 5-13) have been sourced from previous technical reports and updated where required. The Authors believe the information used to prepare the current Technical Report is valid and appropriate considering the status of the Project and the purpose of the Technical Report.

## 2.2 Site Visits

Armitage conducted multiple site visits to the Property in 2014, 2015 and 2023. Through the multiple site visits Armitage become familiar with conditions on the Property, was able to observe and gain an understanding of the geology and various styles mineralization, was able to verify the work done and, on that basis, can review and recommend to Kootenay an appropriate exploration or development program. This site visit conducted by Armitage in 2023 is considered current, per Section 6.2 of NI 43-101CP.

### 2.2.1 2014 Site Visits

Armitage conducted a site visit to the Project between June 19 and June 27, 2014, accompanied by consulting geologists Dave Mehner, Eduardo Durán and Nora Alejandra Sepulveda Castro. Armitage inspected the offices and core logging facilities in Parral; core is transported from site to the facility daily. Armitage reviewed logging procedures, core cutting procedures, assay sampling procedures, on-site density measurement procedures, QA/QC procedures and core security procedures. All core and assay sample pulps are stored in the secure warehouse in Parral; core rejects are stored in a small storage facility located on the Property. Armitage examined several core holes, drill logs and assay certificates. Assays were examined against drill core mineralized zones.

Armitage participated in two field tours during the site visit. Time was spent traversing, by vehicle and on foot, the main La Cigarra deposit area reviewing the geology and mineralization in outcrop. Armitage visited the drill rig as the 2014 drill program was in progress, and the on-site storage facility. Spot checks of random drill hole locations and road locations was done, and planned 2014 drill hole locations were examined.

Armitage conducted a second site visit between November 6 and November 9, 2014. The purpose of the second site visit was to review core from the 2014 drill program. Armitage examined several drill core holes, drill logs and assay certificates from the 2014 drill campaign. Armitage participated in a field tour of the property geology conducted by David Ernst, VP Exploration for Northair and Nora Alejandra Sepulveda Castro. Field checks were conducted of the 2014 drill sites.

### 2.2.2 2015 Site Visit

Armitage conducted a site visit to the Property from May 5 and May 18, 2015, accompanied by David Ernst and, Nora Alejandra Sepulveda Castro. The purpose of the 2015 site visit was to assist Northair in completing a more extensive review of the Property Geology and mineralization. During the site visit Armitage examined complete drill core from 22 drill holes from across the La Cigarra deposit area. Drill core photographs, and assay and whole rock geochemistry data from the 22 holes was reviewed while on site. Armitage also completed magnetic susceptibility and conductivity surveys on each hole. Armitage reviewed, taking measurements at 1 to 3 m intervals. The measurements were taken using a hand-held GDD-MPP-EM2S+ probe.

The site visit also included 2 separate trips to the Property for more detailed review of the geology and mineralization in outcrop and to verify if any additional work had been completed on the property.

### 2.2.3 2023 Site Visit

Armitage conducted a site visit to the Property between November 28 and 29, 2023. The main purpose of the site visit was to verify work completed on the property since the previous site visit. There is currently no active exploration or mining being conducted on the Property; there has been no surface mining completed on the Property.

Armitage visited the core storage facility located in Parral and conducted a site visit to the Property, accompanied by Dale Brittliffe, Gustavo Gallego and Rafael Gutierrez of Kootenay. We reviewed drill core from the La Cigarra deposit area, including drill core from the 2018 drilling completed in the deposit area. The property site visit time was limited due to poor road conditions (currently being upgraded to support future exploration), but we were able to traverse the deposit area and access drill sites of the more recent drill holes completed in the La Cigarra and La Borracha deposit areas, and I was able view the current conditions on the Property.

## 2.3 Units of Measure

Units used in the report are metric units unless otherwise noted. Monetary units are in United States dollars (US$) unless otherwise stated.

## 2.4 Effective Date

The Effective Date of the current MRE is November 29, 2023.

## 2.5 Units and Abbreviations

All units of measurement used in this technical report are in metric. All currency is in US dollars (US$), unless otherwise noted.

**Table 2-1 List of Abbreviations**

| | | | |
|---|---|---|---|
| $ | Dollar sign | $m^2$ | Square metres |
| % | Percent sign | $m^3$ | Cubic metres |
| ° | Degree | masl | Metres above sea level |
| °C | Degree Celsius | mm | millimetre |
| °F | Degree Fahrenheit | $mm^2$ | square millimetre |
| µm | micron | $mm^3$ | cubic millimetre |
| AA | Atomic absorption | Moz | Million troy ounces |
| Ag | Silver | MRE | Mineral Resource Estimate |
| AgEq | Silver equivalent | Mt | Million tonnes |
| Au | Gold | NAD 83 | North American Datum of 1983 |
| Az | Azimuth | mTW | metres true width |
| CAD$ | Canadian dollar | NI | National Instrument |
| CAF | Cut and fill mining | NN | Nearest Neighbor |
| cm | centimetre | NQ | Drill core size (4.8 cm in diameter) |
| $cm^2$ | square centimetre | NSR | Net smelter return |
| $cm^3$ | cubic centimetre | oz | Ounce |
| Cu | Copper | OK | Ordinary kriging |
| DDH | Diamond drill hole | Pb | Lead |
| ft | Feet | ppb | Parts per billion |
| $ft^2$ | Square feet | ppm | Parts per million |

| | | | |
|---|---|---|---|
| $ft^3$ | Cubic feet | QA | Quality Assurance |
| g | Grams | QC | Quality Control |
| GEMS | Geovia GEMS 6.8.3 Desktop | QP | Qualified Person |
| g/t or gpt | Grams per Tonne | RC | Reverse circulation drilling |
| GPS | Global Positioning System | RQD | Rock quality designation |
| Ha | Hectares | SD | Standard Deviation |
| HQ | Drill core size (6.3 cm in diameter) | SG | Specific Gravity |
| ICP | Induced coupled plasma | SLS | Sub-level stoping |
| $ID^2$ | Inverse distance weighting to the power of two | t.oz | Troy ounce (31.1035 grams) |
| $ID^3$ | Inverse distance weighting to the power of three | Ton | Short Ton |
| kg | Kilograms | Zn | Zinc |
| km | Kilometres | Tonnes or T | Metric tonnes |
| $km^2$ | Square kilometre | US$ | US Dollar |
| kt | Kilo tonnes | µm | Micron |
| m | Metres | UTM | Universal Transverse Mercator |

# 3 Reliance on Other Experts

Final verification of information concerning Property status and ownership, which are presented in Section 4 below, have been provided to the Armitage by Gustavo Gallego, Chief Geological Engineer for Kootenay, by way of E-mail on January 16 and 17 and February 5, 2024. The Author only reviewed the land tenure in a preliminary fashion and has not independently verified the legal status or ownership of the Property or any underlying agreements or obligations attached to ownership of the Property. However, the Author has no reason to doubt that the title situation is other than what is presented in this technical report (Section 4). The Author is not qualified to express any legal opinion with respect to Property titles or current ownership.

# 4 PROPERTY DESCRIPTION AND LOCATION

## 4.1 Property Location

The La Cigarra project is located in the state of Chihuahua, within North Central Mexico approximately 28 km northwest of the city of Hidalgo del Parral (Parral) and 225 km south of the city of Chihuahua, the state capital (Figure 4-1). There are multiple access roads to the deposit area from Parral using public gravel roads for access is approximately 55-75 minutes, depending on routing. The deposit area is centered at Latitude 27°03' North & Longitude 105°54.5 West (UTM co-ordinates are approximately 409500 E and 2992500 N within Zone 13 N, WGS 1984).

**Figure 4-1 Property Location Map (from Reeves and Arseneau, 2013)**


## 4.2 Land Tenure and Mining Concessions

The La Cigarra project consists of 16 mineral concessions that total 4,033.32 ha (Figure 4-2; Table 4-1). The mineral concessions are held 100% by Kootenay and are in good standing. The holdings are in good standing for fifty years following the allocation of the title number, provided that annual filings and tax payments are made. The concessions are valid for 50 years, provided semi-annual property tax payments are made in January and July each year and if minimum annual investment requirements are met, or if there is minimum annual production equal to the amount of the annual investment requirement. The concession owner may apply for a second 50-year term. As of the effective date of this report, annual payments were made in January of 2023 and July 2023.

**Figure 4-2 La Cigarra Property Concession Map**

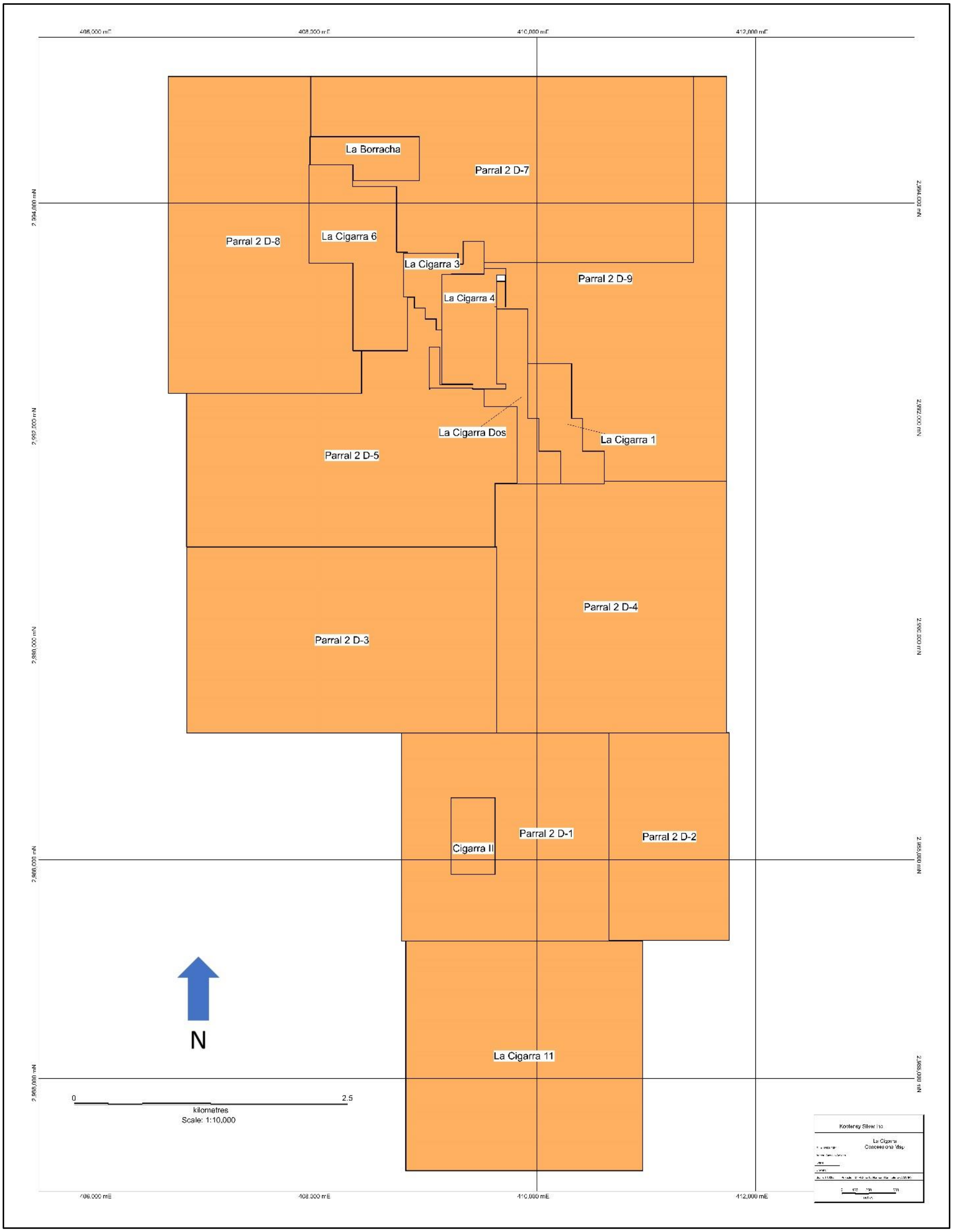


**Table 4-1 La Cigarra Property Concessions**

| Concession Name | Title # | Area (ha) | Title Date | Expiry Date | Semestral Land taxes (*Mxp) |
|---|---|---|---|---|---|
| CIGARRA I | 227521 | 44.00 | 2006-07-06 | 2058-07-05 | 8,957 |
| CIGARRA II | 230786 | 28.00 | 2007-10-12 | 2057-10-11 | 5,700 |
| CIGARRA DOS | 233964 | 46.2521 | 2009-04-30 | 2059-04-29 | 9,416 |
| CIGARRA 3 | 226030 | 27.6691 | 2005-11-15 | 2055-11-14 | 5,633 |
| CIGARRA 4 | 226029 | 57.2273 | 2005-11-15 | 2055-11-14 | 11,650 |
| CIGARRA 6 | 216082 | 103.496 | 2002-04-09 | 2052-04-08 | 21,069 |
| CIGARRA 11 | 246902 | 454.751 | 2013-03-27 | 2063-03-26 | 92,574 |
| LA BORRACHA | 219276 | 34.3932 | 2003-02-25 | 2053-02-24 | 7,001 |
| PARRAL 2 D-1 | 244005/247051 | 333.0000 | 2012-09-18 | 2062-09-17 | 67,789 |
| PARRAL 2 D-2 | 244005/247052 | 209.0000 | 2012-09-18 | 2062-09-17 | 42,546 |
| PARRAL 2 D-3 | 244005/247053 | 482.0741 | 2012-09-18 | 2062-09-17 | 98,136 |
| PARRAL 2 D-4 | 244005/247054 | 481.3538 | 2012-09-18 | 2062-09-17 | 97,989 |
| PARRAL 2 D-5 | 244005/247055 | 446.6729 | 2012-09-18 | 2062-09-17 | 90,929 |
| PARRAL 2 D-7 | 244005/247057 | 490.2292 | 2012-09-18 | 2062-09-17 | 99,796 |
| PARRAL 2 D-8 | 244005/247058 | 423.7528 | 2012-09-18 | 2062-09-17 | 86,263 |
| PARRAL 2 D-9 | 244005/247059 | 371.4473 | 2012-09-18 | 2062-09-17 | 75,616 |
| **Total:** | | **4,033.32** | | | **821,062.77** |

* Mexican Peso

## 4.3 Underlying Agreements

On April 21, 2016, the Company closed its January 13, 2016, announced acquisition of Northair Silver Corp., pursuant to a plan of arrangement under the provisions of the Business Corporations Act (British Columbia). The Company acquired all the issued and outstanding common shares of Northair, which is now a wholly owned subsidiary of Kootenay. As consideration for the arrangement, each Northair shareholder received, in respect of each Northair common share held, 0.35 of a common share of Kootenay, plus 0.15 of a tradeable warrant to purchase Kootenay common shares at an exercise price of $0.55 for a period of five years from closing. Following the completion of this arrangement, former shareholders of Northair held approximately 40% of the shares of Kootenay on an outstanding basis. At closing the Company issued 53,918,807 common shares to Northair shareholder and 22,520,560 common share purchase warrants which are listed on the TSXV. under the symbol “KTN.WT”. At the time of the acquisition, Northair owned 100% of the La Cigarra Project.

On March 29, 2016, the Company announced that it had signed an agreement with Coeur Capital, Inc. ("Coeur") to acquire its 2.5% net smelter return royalty ("NSR") on future production from Northair’s La Cigarra project.

Under the terms of the agreement, Kootenay paid to Coeur US$250,000 in cash upon signing and a second cash payment of US$250,000 was made on April 19, 2016 (the "Closing Date"). In addition, the Company issued to Coeur on the Closing Date common shares of the Company equal to US$2,000,000 at a share price of CDN$0.275 per share which resulted in the issuance of 9,629,091 common shares. The shares issued were subject to a statutory hold period of four months plus one day from the Closing Date under applicable Canadian securities laws.

## 4.4 Other property interests

To the knowledge of the authors, there are no additional underlying interests, back-in rights, payments, or other agreements on the Property.

## 4.5 Permits

Exploration and mining activities in Mexico are regulated by the General Law of Ecological Equilibrium and Environmental Protection (Ley General de Equilibrio Ecologico y Proteccion al Ambiente [LGEEPA]), and the Regulations Environmental Impact Assessment [REIA]. Laws pertaining to mining and exploration activities are administered by SEMARNAT and the Federal Attorney for Environmental Protection (Procuraduria Federal de Proteccion al Ambiente [PROFEPA]) enforces SEMARNAT laws and policy.

Activities that exceed specified limits require authorization from SEMARNAT and comprise the presentation of an environmental impact assessment (Manifestación de Impacto Ambiental [MIA]). SEMARNAT authorizes activities that fall below the specified threshold under Article 31 of the LGEEPA, and require the submission report known as an Informe Preventivo.

Exploration activities that are expected to generate impacts to the physical or social environment that are assessed as potentially of low significance by the regulators are regulated under Norma Oficial Mexicana-120-SEMARNAT-1997 (NOM-120-SEMARNAT-1997), and its subsequent modifications.

The Project is not included within any specially protected, federally designated, ecological zones known as Áreas Naturales Protegidas (ANP).

Kootenay is in the process of acquiring permits to conduct exploration and drilling on the Property in 2024.

## 4.6 Surface Use and Rights Agreements

Surface rights covering the La Cigarra Project are of two types: privately owned ranch land and communally held ejido land (Figure 4-3). In the study area pertaining to this report, the boundary separating private ranch land to the east from ejido land to the west runs in a northwest direction through the centre of the project.

### 4.6.1 Private Land

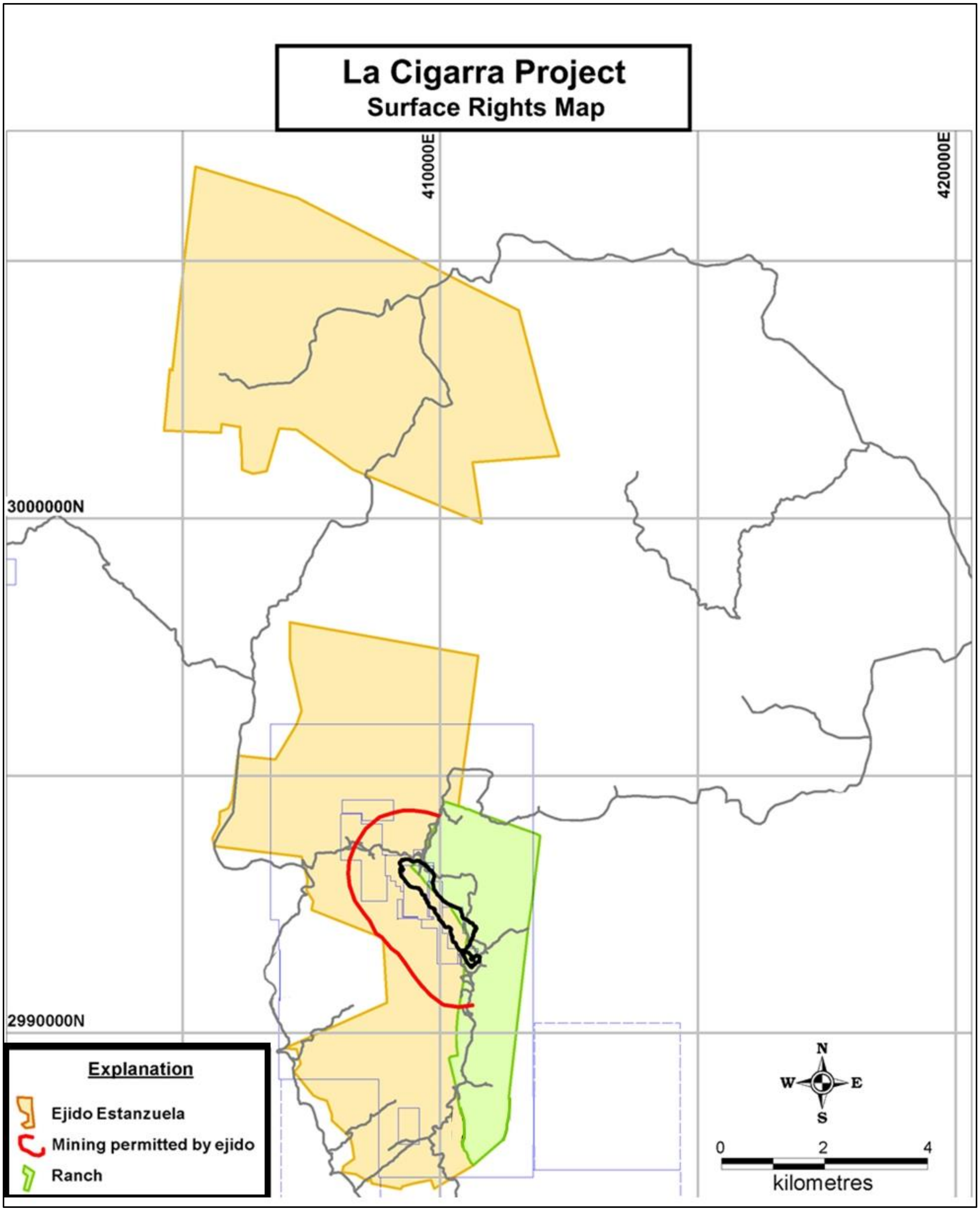
The most important private land in the project area is a 1,098-ha ranch situated immediately east of the La Estanzuela Ejido with whom it shares a common boundary that trends north-south through the Las Chinas-La Soledad-Las Venadas zones and northwest-southeast through the Las Carolinas and San Gregorio zones. This ranch is owned by Northair (Kooteany).

### 4.6.2 Ejido

La Estanzuela Ejido owns a large land position including all lands immediately west of the Duranguito ranch as well as the ground covering the La Borracha zone and the approximately 2 km of on strike ground between La Borracha and the western boundary of the Property.

Kootenay has an access agreement (originally signed by Northair in 2013) with the ejido which permits Kootenay unrestricted access to ejido lands for exploration purposes at no cost.

**Figure 4-3 La Cigarra Property Surface Rights Map**



## 4.7 Environmental Liabilities

Other than some small-scale underground vein mining operations carried out by independent, small-time miners over the last 10-40 years on the Property, there are no mine workings, tailing ponds, waste deposits or other significant natural or man-made features on the claims and consequently the Property is not subject to any liabilities due to previous mining activities that may impact future development of the Property.

## 4.8 Other Relevant Factors

The Project has no outstanding environmental liabilities from prior mining activities. The Author's are unaware of any other significant factors and risks that may affect access, title, or the right, or ability to perform exploration work recommended for the Property.

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

## 5.1 Accessibility

The Project is located in the southern part of the Mexican state of Chihuahua near the city of Hidalgo del Parral. Parral is best accessed by road from Chihuahua some 225 km to the north and the largest city in the state of Chihuahua with a population of about 843,000 people. Chihuahua is the political capital of the state and contains offices for many state and federal agencies overseeing mining operations and permitting. Chihuahua is also the closest city to the La Cigarra Project, serviced by an international airport. The General Roberto Fierro Villalobos International Airport (code: CUU) is located about 3 hours' drive north from the Project by either free or toll Highways (Reeves and Arseneau, 2013).

Parral is serviced by two small local airports, open only for day flights. The larger airport is the J. Ernesto Lozano airport situated about 23 km ENE of Parral at UTM co-ordinates 458670 E and 2982995 N within Zone 13N, WGS 1984. The paved runway capable of handling small jets is 2,600 m long by 30 m wide. The second and smaller strip is the Frisco airport situated 8 km west of Parral on Highway 24 at approximately 422000 E and 2978000 N, Zone 13N, WGS 1984 (Figure 5-1). The paved runway is only 1,350 m long and caters mainly to small propeller airplanes.

From Parral the Project is accessible by taking Highway 24 (Hwy 24) west from the outskirts of Parral toward Guadalupe de Clavo (Figure 5-1). There are two options to reach the Deposit from Hwy 24; the west and the east access. The west access allows the Deposit to be reached from either the south or the north.

### 5.1.1 West access

After 18.5 km west on Hwy 24 turn north to a public gravel road to:

- <u>South access</u>

  Head north on the gravel road for 12.5 km before entering private land through a locked gate and heading northeast then east for about 10.5 km on a dirt road before arriving in the San Gregorio zone.

- <u>North access</u>

  Head north on the same public gravel road for about 21.0 km from the highway before heading east on a dirt road for 4.4 km.

### 5.1.2 East access

After 14.5 km west on Hwy 24 turn north to access the San Gregorio/Las Carolinas zones from the south by utilizing a new 25.5 km gravel and dirt road that cross private, gated land.

The East Access option is the preferred access route as it is shorter and there are no arroyo crossings.

## 5.2 Infrastructure

No permanent infrastructure exists on the Property although temporary base camps can be set up in several areas. Drill crews typically operate out of a temporary camp on site. Surface exploration completed on the Property is conducted out of a house rented in Parral. Core logging is also completed in a large secure warehouse located near the house in Parral; drill core and samples are stored at the same facility. An additional secure warehouse (fenced) is located immediately south of the Las Carolinas Zone on the Baca ranch land. Rejects from the reverse circulation drill program are stored at this warehouse.

Besides the two small airports and good road access from Parral, a 115 kV electric transmission line extends from Parral to the operating mines of Santa Barbara and San Francisco del Oro, located approximately 17 km south-southeast of the La Cigarra.

There are no rivers or large bodies of water in the immediate Project area; however, water is available from the San Felipe de Jesus and Parral-Valle del Verano aquifers which underlie and are adjacent to the project area. It is anticipated water will be attained by purchasing existing permitted water concessions and/or wells in the area or by applying for new water rights from the government.

## 5.3 Local Resources

Parral is the closest city to the project with a population of about 117,000 as of 2020. It was established in the 1600's as a silver mining town and continues to be a source of skilled and unskilled labour, that are mine oriented for exploration and for mining purposes, for the Santa Barbara and San Francisco del Oro mines which are located about 18 km west southwest of Parral. Housing and storage facilities, food, fuel and supplies are readily available in Parral.

## 5.4 Climate

The project area is located in a semi-arid climatic zone with average annual temperatures in the 17 to 18°C range. The warmest months are May through August where daily temperatures average in the 22-25°C and the coldest months are December to February where daily temperatures average 10°C to 12°C. The highest recorded temperature in the Parral area is 50°C while the coldest is -22°C.

The average annual precipitation is ~480 mm (19 inches) with about 70% of this occurring in the rainy season which extends from mid-June until late September. Rainfall is typically limited to heavy thunderstorms during the hot summer months. The driest months are February and March. Snow can occur at the higher elevations during the winter months but seldom lasts for more than a day or two. During the dry season from October to May, days range from mild to hot and nights from chilly to mild. Frosts are common though not persistent in the winter. Exploration on the Property can be conducted year round.

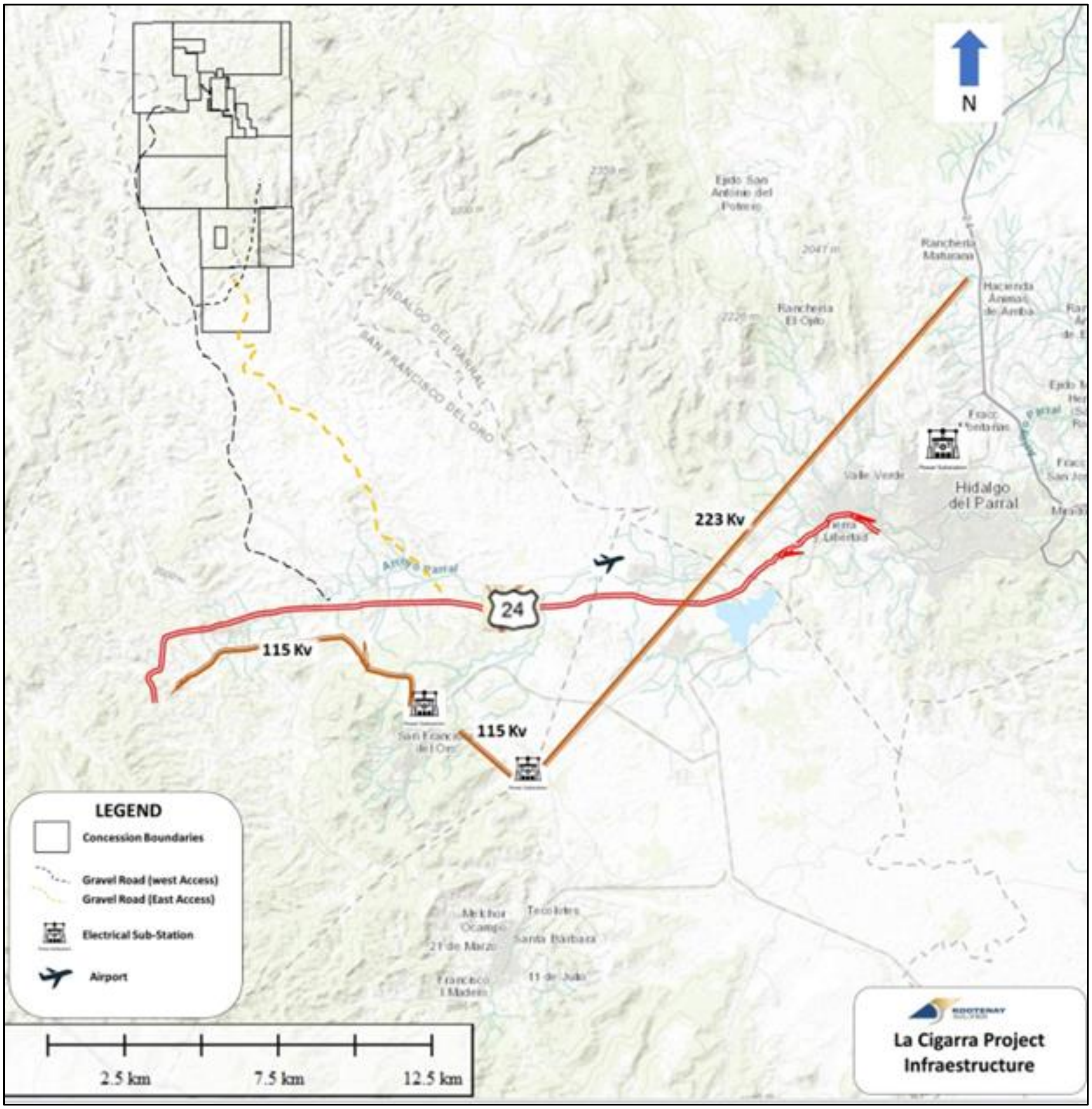
## 5.5 Physiography

The La Cigarra Project is located along the eastern flank of the Sierra Madres Occidental within the low-lying hills of the Central Mexican Plateau. The Central Mexican Plateau, also known as the Mexican Altiplano, is a large arid-to-semiarid plateau that occupies much of northern and central Mexico. Averaging 1,825 m (5,988 ft) above sea level, it extends from the United States border in the north to the Trans-Mexican Volcanic Belt in the south and is bounded by the Sierra Madre Occidental and Sierra Madre Oriental to the west and east, respectively.

The Property area is characterized by gently rolling ranch land with basalt and rhyolite topped mesas with steep, west facing cliffs along the eastern side of the concessions. The study area is situated between these mesas to the east and a north trending, grass and shrub covered, rounded ridge to the west. Small east facing cliffs occur sporadically along the ridge where zones of silicification and felsic intrusives outcrop. Elevations where drilling has taken place range from a high of about 1,960 m above sea level in the San Gregorio Zone to elevations typically in the 1,870 to 1,915 m above sea level range in the Las Carolinas Zone and down to a low of 1,705 m above sea level at the north end of the La Borracha Zone.

Vegetation in the area is best described as desert scrub and grassland and includes small stands of red and white oak with occasional mesquite and engordacabras (shrub). Scattered cacti include maguey, ocotillo and biznaga.

**Figure 5-1 La Cigarra Project and Nearby Infrastructure**



# 6 HISTORY

The earliest mining activity in the area dates to the pre-Spanish conquest days when local natives mined oxidized material for decorative purposes in what is now the Santa Barbara Mining District (Reeves and Arseneau, 2013). The first recorded history of exploration dates to 1536 when gold was discovered in the area, but it was not until 1563 when Spanish explorer Rodrigo del Rio discovered the Veta Mina del Agua deposit that mining really began. That led to the founding of the town of Santa Barbara in 1567 and the start of mining in 1575.

Between 1567 and 1616 numerous shallow oxidized fissure veins were mined in the Santa Barbara District before the easily procurable ores ran out and wars with the local natives forced closure of the mines still operating.

In the early 1600's exploration activity shifted northeast to what is now the city of Parral where numerous small silver deposits were discovered before the important veins that became known as the La Negrita Mine (later renamed La Prieta) were discovered in 1629 and put in production in 1631. Exploration and discovery of small veins continued throughout the area for the next few decades before the rich veins that became known as the San Francisco del Oro District were discovered in 1658. Material from these veins was extracted from the San Pedro Mine which commenced production in 1659 and followed by the Clarines mine which started up in 1673.

Until about 1745, mines in the Santa Barbara-San Francisco del Oro-Parral Districts extracted silver and gold from oxidized zones that extended to depths of 30 to 300 m below surface. By this time many of the significant mines reached the sulphide zone and were abandoned until technological advances in water pumping and ore treatment allowed mining operations to progress to greater depths.

In the late 1800's larger, organized companies with significant capital started to take over the mines in the Parral. San Francisco del Oro and Santa Barbara Districts introduced new exploration and exploitation techniques that allowed mining to change from relatively small to large operations. In the Parral District these advances led to the discovery of a bonanza stockwork in 1901 that contained ores which were extracted over the next 25 years at the Palmilla Mine. In 1925 ASARCO purchased the La Prieta Mine and worked it until declining lead grades and silver prices forced its closure in 1975. Since then, numerous small-scale mines have operated in the district intermittently.

At San Francisco del Oro, an English company called Marine Mines of Mexico acquired several of the mines in the district and worked them between 1880 and 1908. In 1913, San Francisco Mines Company of Mexico, another English company, took over the mines and by 1920 introduced selective flotation to increase production and recovery from sulphide ores. Today the mine is owned by Minera Frisco S.A.B. de C.V. who process about 4000 tons per day from underground mining operations and a further 10,000 tons per day from three open pits and treatment of old tailings.

In the Santa Barbara District, the introduction of cyanide leaching and selective floatation in 1925-26 resulted in a substantial increase in sulphide reserves. The mine is owned by Grupo Mexico S.A.B. de C.V.

## 6.1 Exploration History

Despite its proximity to the Santa Barbara and San Francisco del Oro Districts and evidence of good potential for vein and bulk tonnage silver deposits, past work on the Property appeared limited to numerous small, hand excavated pits and trenches (approximately 190 have been documented to date) with a number of larger workings established along veins occurring at the east dipping contact between Cretaceous turbidites and underlying Jurassic and Triassic rocks (Reeves and Arseneau, 2013). Most workings in the La Borracha and San Gregorio Zones are open drifts and cuts accessed by cross-cuts at or above the valley floor. In the Las Carolinas Zone, workings are generally underground drifts accessed by cross-cuts from the valley floor. A couple of steep shafts believed to be in the order of 10-30 m deep with undetermined amounts of drifting are in the southernmost part of the Las Carolinas Zone and further south in the Las Venadas and La Soledad areas.

Total production from all workings appears to be considerably less than 60,000 tonnes and was carried out by independent, small-time miners over the last 10-40 years who high-graded silver and gold bearing oxidized material from the various veins before trucking the material elsewhere for processing.

Following a program of data compilation, property mapping and prospecting in early 2009, the six concessions that cover the La Borracha, San Gregorio and Las Carolinas Zones were optioned from three private individuals.

The La Cigarra Project was first visited in late 2008 by a prospecting crew working for Grupo Northair de Mexico under the supervision of Jim Robinson. This program included taking 49 soil samples and 255 rock chip samples along a 3 km trend of mineralization that returned values ranging from 1.2 g/t Ag and 1,940 g/t Ag and averaged 118 g/t Ag. Northair defined three potentially significant zones of silver mineralization from its initial sampling.

The first soil sampling in 2008 (49 samples) were collected from two contour lines coincident with and paralleling the trend of old workings and quartz veined outcrops through the San Gregorio and Las Carolinas zones. In May 2011 systematic grid sampling began over the La Borracha-San Gregorio-Las Carolinas zones with 1,377 samples collected at 50 m intervals from lines spaced 50 m apart. This work successfully outlined a 3.6 km long by typically 150 m but up to 300 m wide, open-ended, multi-element soil anomaly including Ag that can be traced from La Borracha in the northwest to Las Carolinas in the southeast.

In 2012, the grid soil sampling was extended south to cover the 3 km long area encompassing the Las Venadas-La Soledad-Las Chinas zones. Although most of the 148 samples were collected at 50 m intervals from lines spaced 100 m apart the work successfully extended the Ag soil anomaly a further 650 m south through the Las Venadas Zone before it showed a discontinuous series of anomalous values for a further 2 km through the La Soledad and Las Chinas zones.

As part of the reconnaissance, target identification work away from the La Cigarra zone, 417 soil samples were collected at 50 m intervals from two lines spaced 1200 m apart starting 2,200 m south of Las Chinas. No anomalous values were obtained. Similar style sampling was also carried out over six widely spaced lines starting 5,100 m northeast of San Gregorio over what is now referred to as the La Bandera Area. A number of multi-element anomalies including Ag were obtained at the western end of two lines from the 255 samples collected over lines spaced 1200 m apart. Systematic follow-up exploration is warranted in this area where initial prospecting indicates similar stratigraphy to the La Cigarra system.

Since October 2008 when Northair crews first visited the property, 1,222 chip, channel and grab rock samples have been taken over the entire property. In the La Cigarra area, 296 of the samples have returned Ag values of 30 g/t or greater with individual values ranging to 1,940 g/t Ag in La Borracha; 991 g/t Ag in San Gregorio and 707 g/t Ag in Las Carolinas. Collectively the rock samples have defined a strong, 4.25 km long, open-ended, multi-element anomaly with significant silver values that extends from La Borracha in the northwest to Las Venadas in the southeast.

In La Borracha strongly anomalous silver values occur over widths of 70-80 m on surface. At San Gregorio the anomalous silver values occur over an area up to 200 m wide. In Las Carolinas and Las Venadas, the same zone has returned strongly anomalous values in Ag over widths to 80 m. In addition, in the Las Venadas Zone, a second area with anomalous Ag values to 34 ppm occurs 300 m west of the main trend and based on alignment with scattered anomalous Ag values to the northwest, may reflect a parallel mineralized structure that occurs on the west limb of the La Cigarra anticline.

Rock sampling further south has yielded anomalous silver values in the La Soledad area where restricted sampling has yielded silver values to 86 ppm Ag over an area 700 m north-south by at least 10-15 m wide that parallels the road. Further south, scattered rock sampling has yielded anomalous values to 199 ppm Ag over an area 750 m long by 500 m wide in the Las Chinas area. Additional, systematic sampling is required in both the La Soledad and Las Chinas areas to better define the targets for drill testing.

In late December 2012, fifty-four samples were collected over a very wide area in what is now called the La Navidad Zone. Although sampling is widespread and irregular, anomalous values to 63.7 ppm Ag were obtained along a 330 m long, northwest trending interval underlain by altered stratigraphy with drusy quartz veining that is identical to that encountered in the San Gregorio Zone situated 500-600 m to the southwest. The similarity in geology, alteration and style of mineralization make the parallel, La Navidad structure a high priority target for future exploration work.

Property geological mapping at 1:2500 scale was carried out by consulting geologist Tom Chapin from Reno, Nevada. The work was conducted in three separate phases. The initial mapping which focused on the San Gregorio-La Borracha Zones was carried out in May-June 2011. A second phase which focused on the southern portion of San Gregorio and the Las Carolinas zones was carried out in November-December 2011. The third phase of mapping which focused on the area south of Las Carolinas including Las Venadas, La Soledad and Las Chinas and to a small degree at the La Navidad Zone east of San Gregorio was conducted in November-December 2012.

In November-December 2012, DFX were contracted to carry out detailed geological mapping and rock sampling over the La Bandera area approximately 5.1 km northeast of the San Gregorio Zone. Initial results are encouraging with the identification of north-south striking, Jurassic stratigraphy, similar to that exposed at La Cigarra, which is parallel to and concordant with an open-ended Ag soil anomaly.

In conjunction with the field work, three separate petrographic studies on 55 pieces of drill core and hand samples were carried out between mid-2011 and early 2012. These include a thin and polished section study of 13 pieces of drill core, a thin and polished section study of 34 rock samples and a thin and polished section study of 8 pieces of drill core.

A detailed ground magnetic survey was carried out by SJ Geophysics Ltd. of Vancouver, British Columbia in May 2011. Approximately 50-line km of surveying was conducted with readings taken every 12.5 m on lines spaced 50 m apart extending from 17+00N in La Borracha down to 8+00S in Las Carolinas. Total magnetic intensity, reduced to the poles, shows a strong magnetic high underlies much of the San Gregorio and northern half of the Las Carolinas zones and likely reflects an underlying hornblende diorite body that was intersected at depth in a couple of San Gregorio drill holes. A very pronounced and sharp margin to the magnetic high that parallels the grid at about San Gregorio grid line 4+25N suggests a fault contact. The southern contact by contrast is quite gradual with magnetic values diminishing between Las Carolinas grid lines 1+50S and 3+50S.

In May-June 2010, fifteen reverse circulation holes were drilled, totalling 1,455.4 m. The program was successful in testing the three known mineralized targets on the property and intercepted significant widths of altered and mineralized sediments and intrusive rocks. Results obtained in the three zones included: 138.7 g/t Ag over 13.7 m in Las Carolinas (CRC-10-001); 95.7 g/t Ag over 51.8 m in San Gregorio (CRC-10-006) and 32.7 g/t Ag over 21.3 m in La Borracha (CRC-10-015).

In December 2010, Northair commenced its initial core drill program and by the end of 2014 had completed 29,070.2 m of core drilling in 156 diamond drill holes (CC-10-001 to CC-14-156).

Kootenay has completed additional surface exploration on the Property, including diamond drilling, between 2016 and 2018.

Recent exploration work completed on the Property by Northair and Kootenay is presented in Items 9 and 10 below.

## 6.2 Previous Mineral Resource Estimate

On January 14, 2015, Northair announced the results of its an updated pit constrained MRE for the Property prepared by Allan Armitage, PhD, P. Geo. and Joe Campbell, B.Sc., P. Geo., of GeoVector Management Inc. ("GeoVector") (Armitage and Campbell, 2015). The MRE was reported at a base case cut-off grade 35 g/t Ag and had an effective date of January 14, 2015 (Table 6-1). The 2015 MRE is superseded by the MRE presented in Section 14.

**Highlights of the 2015 MRE:**

- Measured and Indicated mineral resource of 18,540,000 tonnes at an average grade of 86.3 g/t Ag for a total of 51,470,000 ounces, 0.13% Pb for a total of 53.9 MLbs, 0.18% Zn for a total of 74.8 MLbs and 0.07 g/t Au for a total of 41,000 ounces.

- Inferred mineral resource of 4,450,000 tonnes at an average grade of 80.0 g/t Ag for a total of 11,460,000 ounces, 0.13% Pb for a total of 12.7 MLbs, 0.16% Zn for a total of 15.6 MLbs and 0.06 g/t Au for a total of 8,000 ounces.

**Table 6-1 San Gregorio/Las Carolinas 2015 Mineral Resource Estimate, January 14th, 2015 (Armitage and Campbell, 2015)**

| Resource Category* | Tonnes | In-Situ Grade | | | | Contained Metal | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | Ag (oz) | Au (oz) | Pb (lbs) | Zn (lbs) |
| Measured | 3,620,000 | 88.9 | 0.074 | 0.14 | 0.19 | 10,340,000 | 9,000 | 10,920,000 | 15,510,000 |
| Indicated | 14,930,000 | 85.7 | 0.068 | 0.13 | 0.18 | 41,130,000 | 33,000 | 42,950,000 | 59,260,000 |
| **Meas + Ind** | **18,540,000** | **86.3** | **0.069** | **0.13** | **0.18** | **51,470,000** | **41,000** | **53,870,000** | **74,770,000** |
| **Inferred** | **4,450,000** | **80.0** | **0.058** | **0.13** | **0.16** | **11,460,000** | **8,000** | **12,680,000** | **15,610,000** |

*Note:* Mineral resources are reported in relation to a conceptual pit shell at a 35 g/t silver cut-off grade and a $22/oz silver price. Mineral resources that are not mineral reserves do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add up due to rounding.*

## 6.3 La Cigarra Silver Project 2015 Mineral Resource Estimation Parameters

To complete the update resource, digital files containing topographic information, drill hole collar information, drill hole survey data, assay data, lithological logs of the drill hole intercepts, and density data were evaluated. All geological data was reviewed and verified by the Authors as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. The Authors feel that the assay sampling and extensive QA/QC sampling of core by Northair provides adequate and good verification of the data and believe the work to have been done within the guidelines of NI 43-101.

The complete La Cigarra drill hole database includes 173 drill holes (15 RC and 158 core) for a total of 30,443 m and 22,064 assays. This includes 17 drill holes (4,817 m) completed in 2014 in the Las Chinas, Las Venadas, San Gregorio, Las Carolinas and La Borracha zones. Of the 173 drill holes, 156 drill holes (11 RC and 145 core) were used in the preparation of the resource models and resource estimate. The database used to construct the San Gregorio/Las Carolinas resource models utilized 27,617 m and 20,022 sample assays including the 13 drill holes completed in 2014.

Grade control models (a high grade and a low-grade silver domain) of the San Gregorio/Las Carolinas deposit were constructed which involved outlining the limits of mineralization on 50 metre spaced cross sections based on histograms of silver, lead and zinc values. Polygons of mineral intersections were made on each cross section and were wire framed together to create a contiguous resource model in GEOVIA GEMS 6.6.0.1 software.

The grade control models were constructed to define silver mineralization, as controlled by interpreted geology and structure. A high-grade core silver model was created to capture mineralization generally above a grade of 15 to 20 g/t silver. In addition a low grade envelope, which encompasses the high grade core model, was defined to capture mineralization above a grade of 5 to 10 g/t silver. The modeling exercise incorporated predicted controls of the deposit's dominant geology and geologic limits. The resource model extends for approximately 2.4 km on a 320° trend with an average dip of 45° to the northeast. Mineralization defined by drilling extends from surface to depths of up to 380 m.

For the resource estimate a block model with dimensions of 10 x 10 x 10 m was utilized as were composite samples of 1.5 m in length. Grades for silver, lead, zinc and gold were interpolated into resource blocks by the Ordinary Kriging ("**OK**") interpolation method using a minimum of 8 and maximum of 12 composites (maximum of 4 composites per hole) to generate block grades in the Measured and Indicated category and a minimum of 4 and maximum of 12 composites to generate block grades in the Inferred category.

The search ellipse orientation is based on 3D semi-variography analysis of Ag for the 1.5 metre composites within the High-Grade Core resource model using GEOVIA GEMS 6.6.0.1 software. The same variograms were used to interpolate grades of all metals into each block for both the High-grade Core and Low-Grade Halo resource models. The search ellipse is generally oriented to reflect the observed preferential long axis (geological trend) of the resource models. The dip axis of the search ellipse reflects the observed trend of the mineralization down dip.

Based on a statistical analysis of the composite database from each resource model, it was decided that no capping was required on the composite populations to limit high values. Log histograms of the data identify very few outliers within the database. Analyses of the spatial location of these samples and the sample values proximal to them indicate that the high values were legitimate parts of the population, and that the impact of including these high composite values uncut would be negligible to the overall resource estimate.

The WW/WA density measurements from the 2014 drill program as well as the WW/WA measurements from previous drill programs were used for the current resource. The density database totalled 970 samples (average 2.57) including 406 samples from within the mineralized zones. Average density values are very consistent between domains when comparing oxide and sulphide zones separately and there appears to be little correlation of density value and silver grade.

Due to the relative sparseness of density data, average density values were used for the resource estimation. Values used include: 2.45 for oxide mineralization, 2.55 for sulphide mineralization and 2.57 for waste. The average SG values are based on limited SG testing (406 samples from within the mineralized zones) of representative mineralized core that intersect the resource model.

The confidence classification of the resource (Measured, Indicated, and Inferred) is based on an understanding of geological controls of the mineralization, and the drill hole pierce point spacing in the resource area. Three passes were used to interpolate grade into all of the blocks in the wireframe. Mineral resources were classified as Measured if at least two drill holes were found within a 35 x 35 x 20 metre search radius. Blocks were classified as Indicated if two drill holes were found within a 60 x 60 x 30 metre radius and blocks were classified as Inferred if at least one drill hole was found within a 120 x 120 x 60 metre search radius. The principal azimuth of the search ellipse is oriented at 059º, the principal dip is oriented at -44° and the Intermediate azimuth is oriented at 325°.

The 2015 Measured, Indicated and Inferred mineral resource were disclosed in compliance with NI 43-101 Standards of Disclosure for Mineral Projects and were reported in conformity with generally accepted CIM (2014) Definition Standards on Mineral Resources guidelines, including the critical requirement that all mineral resources "have reasonable prospects for eventual economic extraction".

The "reasonable prospects for eventual economic extraction" requirement generally imply that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. To meet this requirement, the Authors consider that major portions of La Cigarra mineralization are amenable for open pit extraction.

To determine the quantities of material offering "reasonable prospects for economic extraction" by an open pit, GeoVector used Whittle™ pit optimization software and reasonable mining assumptions to evaluate the proportions of the block model (Measured, Indicated and Inferred blocks) that could be "reasonably expected" to be mined from an open pit.

The optimization parameters, found in**Error! Reference source not found.** Table 6-2 were selected based on benchmarking against similar projects. Two phases of scoping level metallurgical testing were conducted in 2011 and 2012 (see Section 13).

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the "reasonable prospects for economic extraction" by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the La Cigarra Project. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

**Table 6-2 Parameters used for Whittle™ pit optimization and In-pit Cut-off Grade Calculation**

| Parameter | Value | Unit |
|---|---|---|
| Silver Price | $ 22.00 | US$ per ounce |
| Gold Price | $1,250.00 | US$ per ounce |
| Lead Price | $ 0.95 | US$ per pound |
| Zinc Price | $ 0.95 | US$ per pound |
| Mining Cost | $ 2.00 | US$ per tonne mined |
| Processing (Sulphide material) | $ 15.00 | US$ per tonne of sulphide feed |
| Processing (Oxide Material) | $ 12.00 | US$ per tonne of oxide feed |
| General and Administrative | $ 1.00 | US$ per tonne of feed |
| Overall Pit Slope | 45 | Degrees |
| Silver Recovery | 84 | Percent |
| Lead Recovery | 62 | Percent |
| Zinc Recovery | 55 | Percent |
| Gold Recovery | 17 | Percent |
| Dilution | 10 | Percent |

# 7 GEOLOGICAL SETTING AND MINERALIZATION

The following description of the regional and Property geology has been extracted from the recent technical report on the Property by Reeves and Arseneau (2013) and Armitage and Campbell (2015). Much of the understanding of the Property geology comes from recent detailed mapping by Tom Chapin in 2011 and 2012 (Chapin, 2012; 2013).

## 7.1 Regional Geology

The La Cigarra property is located along the eastern flanks of the Sierra Madre Occidental ("SMO") Volcanic Province (Figure 7-1) within the north-east portion of the Central Mexican Silver Belt ("CMSB"). The SMO mountain range extends for more than 1,500 km in a north-westerly direction through the northern half of Mexico. This mountain range is the erosional remnant of a significant accumulation of intermediate to felsic volcanic rocks, which formed a calc-alkaline magmatic arc that was built during Eocene to early Miocene time, roughly 52 to 25 million years ago, in response to subduction of the Farallón tectonic plate beneath North America, (Ferrari et al., 2007). The CMSB is a north-westerly aligned, metallogenic province which stretches approximately 900 km along the SMO Mountains. It is defined by a number of silver mining districts including Guanajuato, Zacatecas, Fresnillo, and Santa Barbara-San Francisco del Oro as well as the mining districts of Parral, Santa Maria del Oro, and Sombrerete-Chalchihuites (Figure 7-2). Medium to high-level hydrothermal systems variably enriched in Ag, Pb, Zn, Au and to a lesser extent Cu, Sb, As, Hg, and F were intermittently generated during the extended period of volcanism which formed the SMO mountain range.

The oldest rocks in the region are Triassic continental sandstone beds that transgressed from the northeast to cover the Grenvillian metamorphic basement and are similar to exposures on the North American continent (Figure 7-3 and Figure 7-4). During the late Triassic to early Jurassic the Guerrero island arc formed on the west margin of proto Mexico. Arc sediments were deposited into the back ark basin as a shallow sea began to form over most of Durango and Chihuahua. During the late Jurassic the back arc basin began to rift and arc sediments were no longer deposited over the area. During the late Jurassic, continental flysch deposits were replaced by arkosic calc-arenite and calcareous mudstone deposits of the Las Casitas Formation (Fm).

In the Cretaceous, reefs and carbonate platform deposits formed along the Coahuila-Aldama peninsula that lies to the east of Chihuahua. In the Chihuahua area, most of the early Cretaceous sequence is missing. By the mid Cretaceous, the Mezcalera Formation (deep water and distal slope sediments derived from the peninsula) was deposited largely as in situ mudstone, lime mudstone and turbidites. At the end of the Cretaceous, Laramide compression thrusted and folded the carbonate sequence eastward over the La Casitas Formation. The upper Jurassic and Cretaceous rocks were most affected by thrusting and the older rocks have much less deformation.

The earliest igneous history of the area is related to the island arc and rift events that produced calc-alkaline andesite that is found as sills and dikes in the Jurassic and older rocks. Basaltic andesite sills and andesite epiclastic deposits are found throughout the project area including rocks as young as the Cretaceous Mezcalera Fm. The Laramide Orogeny produced the copper porphyry suites that underlie much of the Sierra Madre but exposures are not present in the field area. Late Eocene to early Oligocene porphyries are known in most of the mining districts in Chihuahua and Durango and are probably related to the onset of calc-alkaline volcanism (lower andesite complex) of the Sierra Madre Occidental. Subsequently, the igneous activity changed to predominantly alkaline rocks that form the huge ignimbrite flows that mantle the region.

During and after this latter phase, rifting and normal faulting related to the opening of the Sea of Cortez has formed a series of horsts and graben across the region. In the field area, the La Cigarra ridge is probably a horst block that forms a window through the volcanic cover.

**Figure 7-1 Tectonic Stratigraphy of Mexico (from Reeves and Arseneau, 2013)**

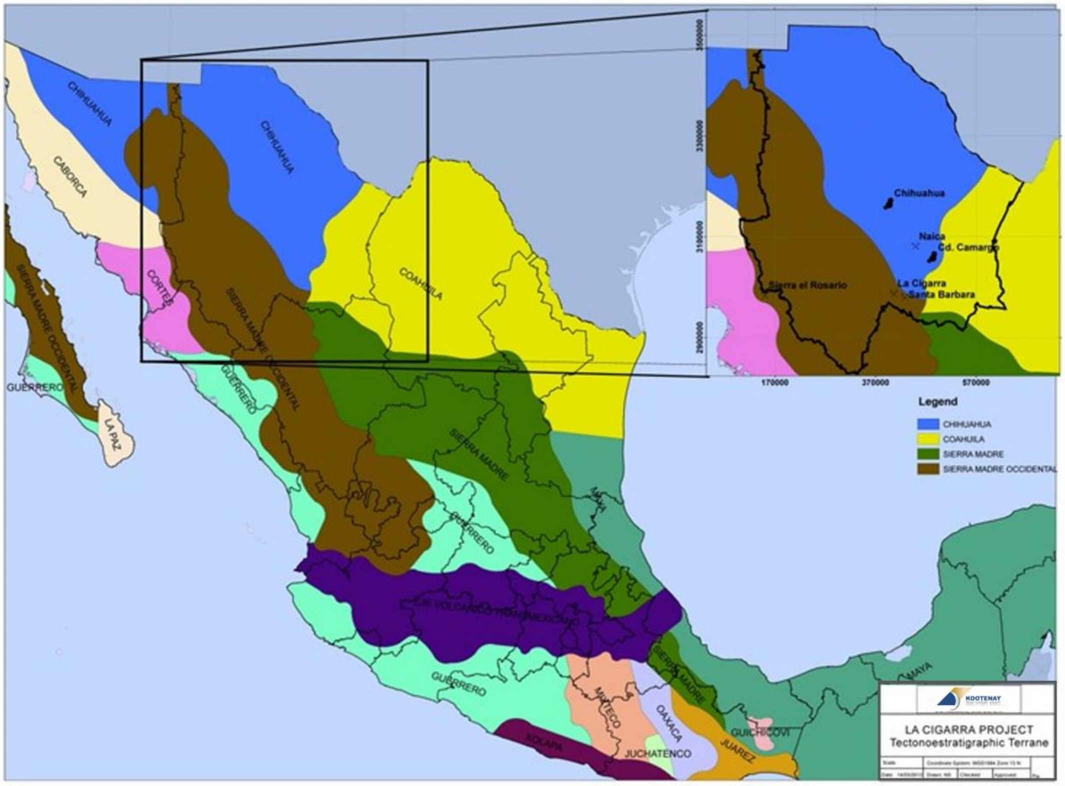



**Figure 7-2 Mexican Silver Belt (from Reeves and Arseneau, 2013)**

**Figure 7-3 La Cigarra Regional Geology (Legend in Figure 7-4)**

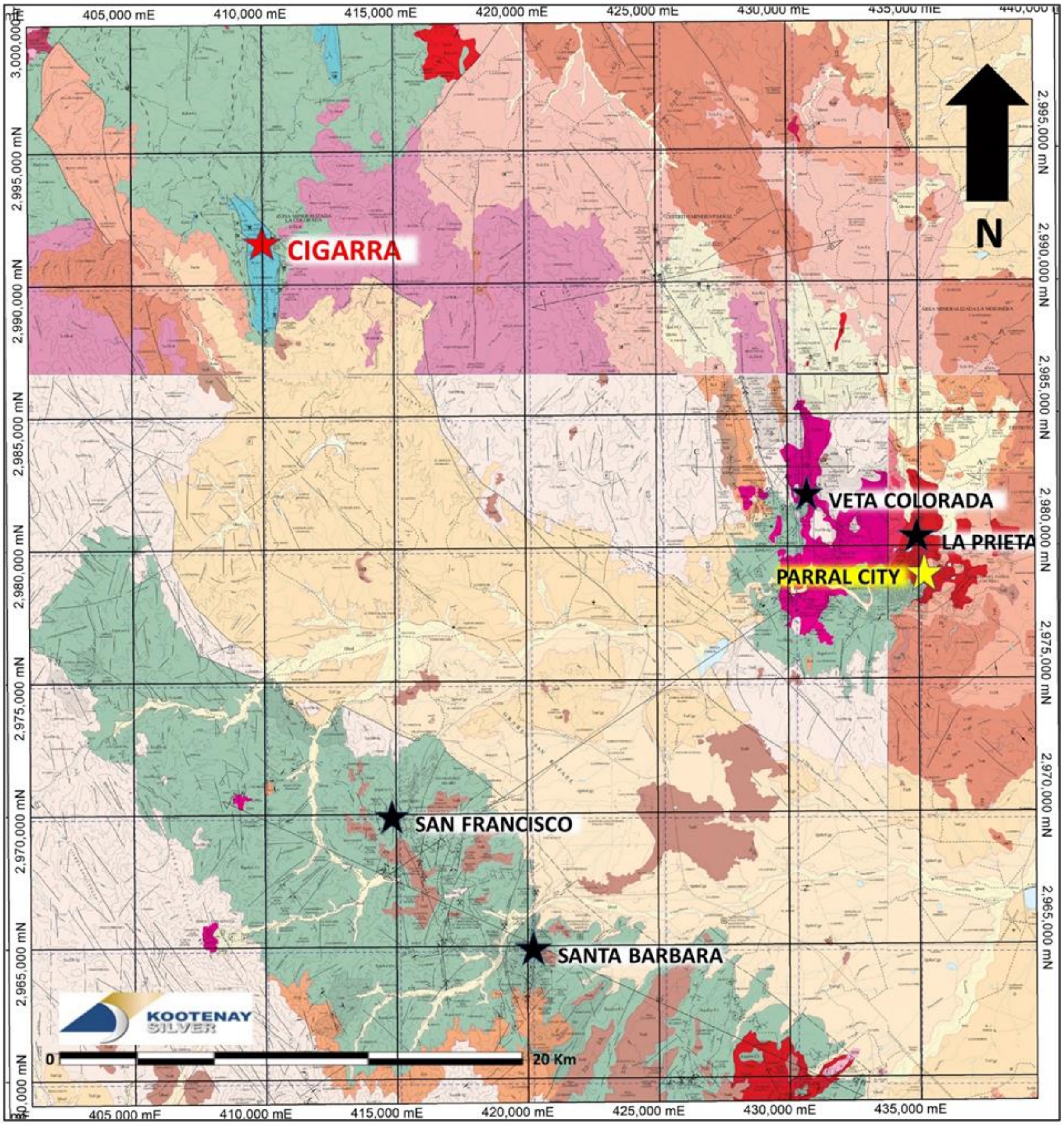
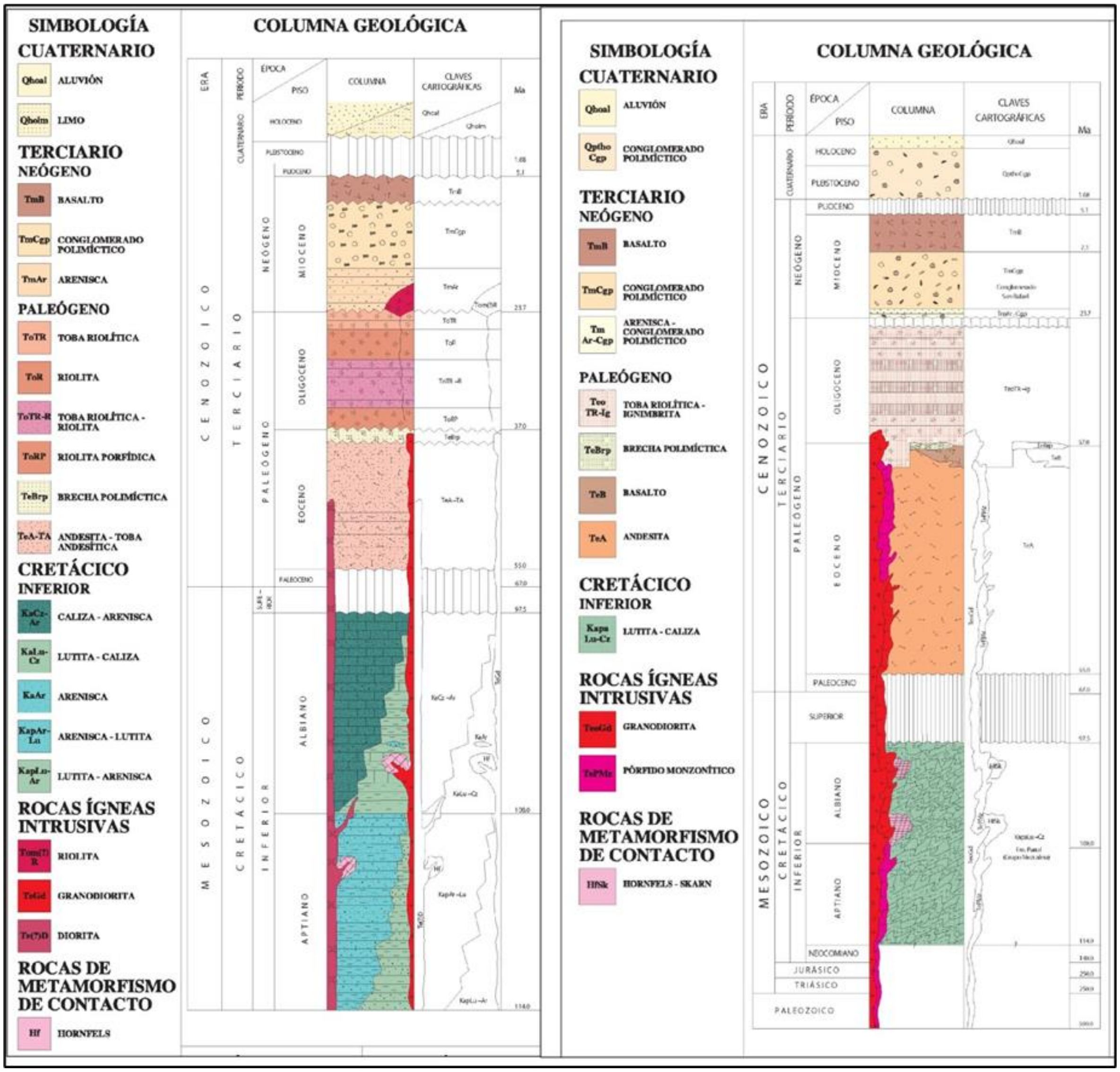


**Figure 7-4 La Cigarra Regional Stratigraphy and Geology Legend for Figure 7-3**



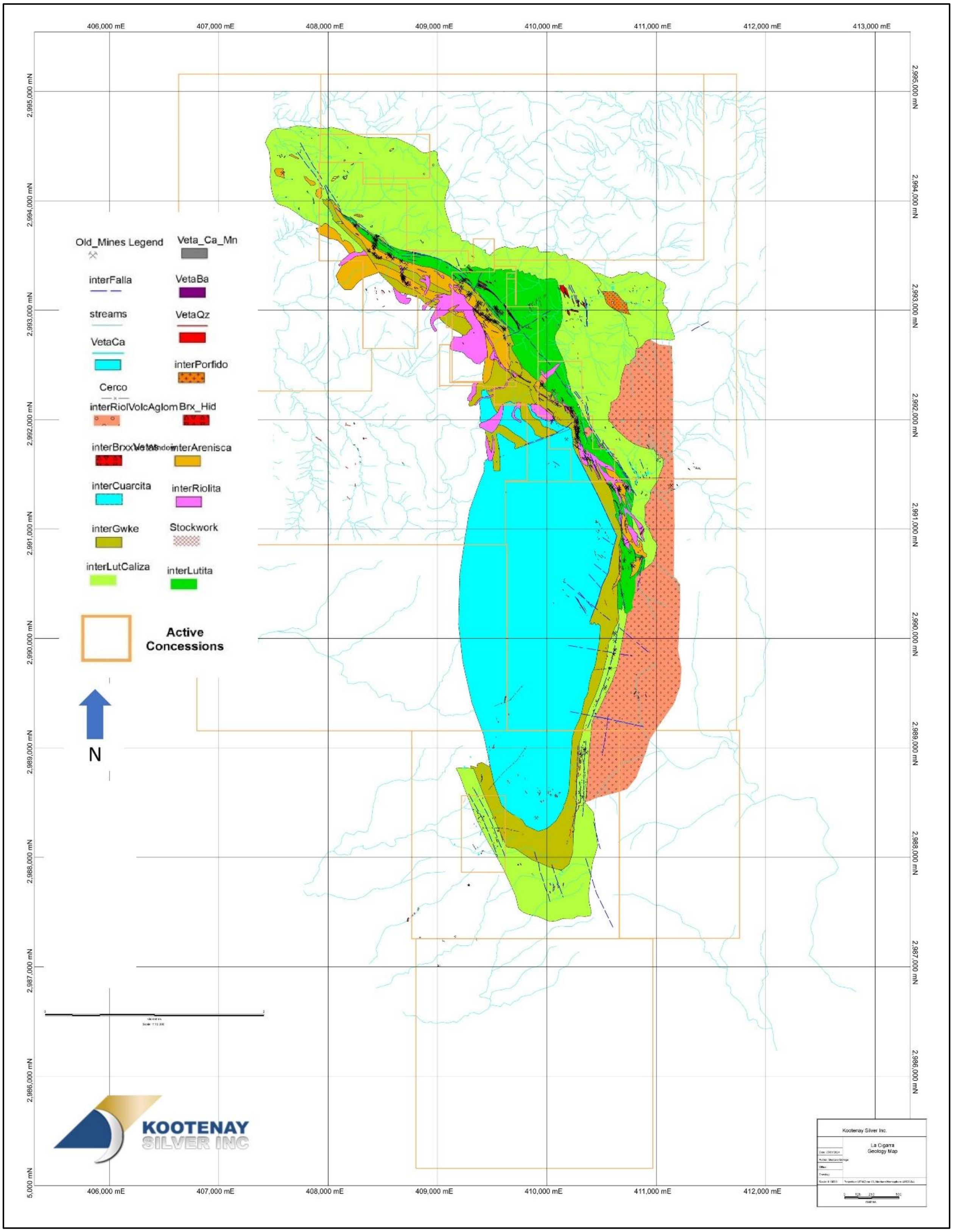

## 7.2 Property Geology

The property as mapped by Servicio Geologico Mexicano (SGM) on map sheets G13-47 (San Antonio del Potrero) and G13-A57 (Santa Barbara) is underlain by a series of northwest-southeast trending horsts and grabens where the La Cigarra zone is an up-lifted block exposing some of the oldest rocks in the area. The vast majority of the property is underlain by Lower Cretaceous shales and limestones with "windows" of underlying Lower Cretaceous sandstone exposed in an approximately 4.5 km long, cigar shaped body in the La Cigarra area, a 6.5 km long, similar shaped body 4 km north and 3 km east and in a broad area covering the extreme northwest corner of the property (Figure 7-3).

Unconformably overlying the Lower Cretaceous stratigraphy and outcropping southwest of La Cigarra and in the eastern portions of the property are Paleogene andesites which are capped by slightly younger rhyolite pyroclastics and ignimbrites. Neogene aged polymictic conglomerates fill grabens in the northeast corner of the property and over much of the ground occurring south of Las Chinas. A small plateau immediately southeast of Las Chinas is unconformably capped by Neogene aged basalt flows.

Within the La Cigarra area (from La Borracha in the north to Las Chinas in the south) detailed mapping by Tom Chapin in 2011 and 2012 (Chapin, 2012; 2013) indicates the rocks are part of an approximately 4.5 km long, north northwest striking block that has been uplifted, folded into an anticline and tilted to the north (Figure 7-5). It has exposed basement, Triassic rocks in the south and is cut-off by a left lateral normal fault to the north.

**Figure 7-5 La Cigarra Geology**



## 7.3 Stratigraphy

The Triassic rocks, which outcrop over the southwest quarter of the La Cigarra area, are composed of continental derived, quartz rich sands which now exist as relatively thickly bedded, resistant, quartzite and quartz-rich sandstone with minor, poorly sorted, inter-bedded greywacke beds. These are unconformably overlain by Middle Jurassic rocks of the Tres Varones Formation (Fm) composed predominantly of back-arc basin, volcanic derived, quartz-poor sediments. They outcrop immediately north and east of the Triassic stratigraphy in the northwest corner of the Las Carolinas Zone and along the road in the Las Venadas, La Soledad and Las Chinas Zones to the south. Rock types include black mudstone (deep basin) that is almost always sheared into shale and lithic wackes.

Conformably overlying these sedimentary rocks are Upper Jurassic, quartz-bearing sandstones of the assumed La Casitas Formation. Rock types include calc-arenites, siltstones, wackes and arkosic sandstone. The wackes outcrop along the eastern margin of the Triassic stratigraphy throughout the entire Las Carolinas Zone and have been intersected in drill holes throughout the San Gregorio Zone where they occur at depth due to the northerly plunge. The sandstones, calc-arenites and siltstones outcrop throughout the western half of the San Gregorio Zone and the western portion of La Borracha. The arkosic sandstone beds, which have only been noted high up in the Upper Jurassic stratigraphy, outcrop in La Borracha and immediately south of the fault separating La Borracha from San Gregorio.

Throughout the eastern half of La Borracha, San Gregorio, Las Carolinas and to a small extent in Las Venadas, La Soledad and Las Chinas, thinly bedded to laminated, calcareous, mudstones (turbidites) of the Cretaceous, Mezcalera Formation outcrop and are overlain by thin to moderately bedded Middle Cretaceous limestones (micrites) sit on top of the Jurassic stratigraphy. It is believed the Middle Cretaceous rocks have been thrust overtop the Jurassic and Triassic rocks in the La Cigarra project area but further works needs to be done to confirm this theory.

In the map area, Tertiary (Paleogene) aged rhyolite ignimbrites, tuffs and re-worked equivalents including polymictic breccias unconformably overly the Cretaceous turbidites to the east from the southern half of the Las Carolinas Zone extending southward through Las Venadas, La Soledad and Las Chinas.

### 7.3.1 Intrusive Rocks

Surface mapping and core drilling has identified three broad types of intrusive rocks including:

#### 7.3.1.1 Middle Cretaceous Porphyritic Rocks

The most prevalent and likely oldest intrusive rocks within the area being drilled is a Middle Cretaceous aged, fine to medium grained, porphyritic granodiorite to dacite which occurs as sills throughout the Middle Cretaceous stratigraphy. Variations in texture and appearance are in part due to alteration and likely reflect multiple phases of a similar intrusive that has been lumped into one rock type by different mappers. Thin section work indicates the feldspar phenocrysts are k-spar and mafics phenocrysts are hornblende though they are frequently altered and have been leached out. Within the silver zone, contacts to the sills are typically brecciated and/or sheared. At depth in a number of drill holes within San Gregorio and La Borracha, medium grained, hornblende +/- pyroxene diorite (possibly gabbro) intrudes Middle Cretaceous turbidites. The fresh-looking intrusive rocks contain traces of finely disseminated chalcopyrite.

#### 7.3.1.2 Tertiary Felsic Rocks

Throughout the Jurassic and Cretaceous stratigraphy, a variety of Tertiary aged, cream to light green to pale pink coloured, fine grained to aphanitic felsic sills and dykes have been mapped. Some contain quartz eyes, some exhibit flow-banding characteristics and others contain thin (1-2 mm) drusy quartz veins. For mapping purposes, the rocks have been sub-divided into three general types:

- Tertiary dacite: forms white sills; have elongate hornblende clasts; less than 5% phenocrysts.

- Tertairy myrmekitic rhyolite: aphanitic white appearance; exhibits chaotic flow-banding; zones of “wormy” quartz are common.
- Tertiary crystal porphyry: abundant sanidine +/- plagioclase and biotite crystals. On cross-sections the above felsic intrusives were “lumped” together as Tertiary rhyolite.

#### 7.3.1.3 Tertiary Andestic Rocks

A set of Tertiary hornblende andesite and trachyandesite dykes and sills have been mapped within the Cretaceous and Jurassic sediments. The andesite contains hornblende crystals to 4 cm long in an aphanitic to fine grained groundmass. The trachyandesite occurs as white, fine grained to aphanitic, feldspathic rich sills with aligned feldspars and up to 40% glass.

### 7.3.2 Structural Geology

There are two predominant types of structures in the region, Laramide thrusting and folding that occurred in the late Cretaceous early Tertiary, and Miocene basin and range block faulting. Evidence of the Laramide thrusting can be seen on the outskirts of Parral where Cretaceous sediments are chevron folded, and at the northern entrance to the property where spectacular isoclinal and chevron folds are exposed. Miocene basin and range faulting created a horst called the La Cigarra ridge, which forms a window through the Sierra Madre volcanic field. The conduits for mineralization are a combination of older thrust fabric and the younger extensional events (Figure 7-6).

#### 7.3.2.1 Laramide thrusts (70-80 Ma)

The thrust faults are very important producers of porosity in the district and evidence from several areas indicate that both the sills and thick zones of mineralization are controlled by low angle faults. Drill holes CC11-09 (San Gregorio section 0+00N) and CC11-13 (Las Carolinas section 1+50N) are examples where thick thrust zones are intruded by bedding parallel sills surrounded by halos of mineralization. Though thrust faults are found throughout the map area, they are much less common in the Triassic and lower Jurassic rocks. The upper Jurassic rocks on the other hand are much more affected, particularly the part of the section called the Las Casitas. The Cretaceous Mezcalera formation is also cut by numerous thrusts and folds. Regionally, lower Cretaceous rocks are missing. It is logical to presume that it has been cut out by the Laramide thrust and that the Las Casitas calc-arenite Fm. forms the footwall of this structure and the Mezcalera Fm is the hanging wall.

There is some evidence that the Triassic rocks may also be allochthonous. In several locations Jurassic epiclastic andesite is found apparently underneath the Triassic. The Triassic quartzite is not a simple open fold following the axis of the La Cigarra ridge. Detailed mapping within the unit shows that there are several small-scale folds within the overall geometry. In the south portion of Las Carolinas an asymmetric anticline-syncline pair verge to the east. The steep limb is almost vertical; the other limbs dip gently to the west indicating transport to the east.

The significant benefit of thrust faulting is that the penetrative deformation it causes provides excellent porosity for younger mineralizing fluids.

#### 7.3.2.2 Extensional faults

The Cigarra fault system extends from south of Las Chinas to north of the La Borracha workings. Individual strands of the system have different strikes forming an arc from NW in the La Borracha area to NNE south of La Soledad. The fault system lies on the east flank of the La Cigarra ridge and separates older footwall facies from the younger hanging wall which is exclusively Cretaceous north of Las Carolinas. South of the El Cajon wash, the fault is found in older rocks, generally the Las Casitas Fm or the Jurassic epiclastic rocks. In the Las Chinas area, the fault strikes NNE and the mineralized portions of the fault lie within the epiclastic rocks. The age of this fault is not known, but north south trending block faults are common to

Chihuahua and are part of the western continental extension event. On the other hand, the La Cigarra fault is mineralized which might suggest an Oligocene date similar to other deposits in the region.

In the north, some sills are found to be folded along the axis of the La Cigarra ridge which suggests that they predate some of the folding. On the east side, the sills dip east and on the west side they dip west and some fold noses are present on the crest. The easiest explanation is that the sills are drag folded after emplacement by movement on the La Cigarra fault. One sill in the footwall contains barite casts related to the hydrothermal event. It forms a scarp along the Cigarra fault and indicates post mineral movement along the main San Gregorio part of the fault.

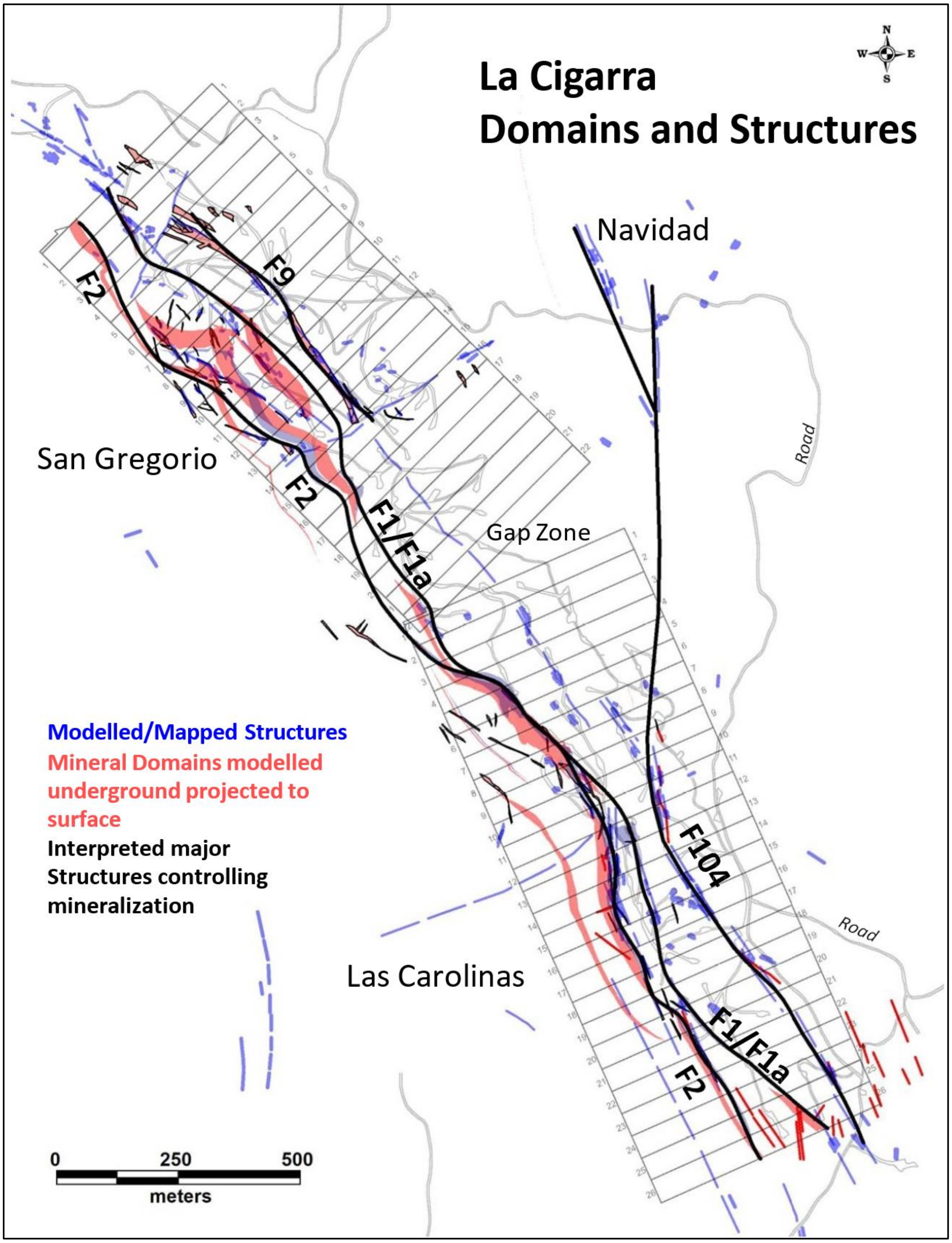
Several N50E striking faults must also have been present during mineralization since the miners exploited pockets with that orientation both along the main fault and in the low angle fault in the San Gregorio footwall. In the latter area, a small N50E dike is present. One instance of a 60 cm wide sulfide bearing quartz vein with a N55E strike was noted on the crest of the La Cigarra ridge. This implies that the stress regime was almost equal in the NNW and NNE directions and that the cause could have been doming related to the many sills in the area prior to Miocene faulting.

Small NNW trending faults are found throughout the footwall. Since they are associated with argillic alteration and arsenic anomalies, they probably formed concurrent with mineralization. Some could be axial plane faults that parallel the La Cigarra anticline. In the Las Carolinas area little NNW structures displace a myrmekitic sill exposing alteration underneath. In the southern block, south of El Cajon, quartz veining with limonite favors the NW direction.

#### 7.3.2.3 Other Faults

Several large-scale faults with an ENE strike are expressed in our ground magnetic survey. In the Las Carolinas area, there is a structure that divides the quartzite from the epiclastic andesite.

**Figure 7-6 La Cigarra Structure**



## 7.4 Alteration

The alteration suites identified on the property are highly influenced by the host rock. In general, the quartz dominated rocks such as greywacke, sandstone and calc-arenite are likely to create clay, vein quartz and alter readily to limonite.

The carbonate hanging wall is much less permeable and tends to buffer ascending fluids. Consequently, the hanging wall is generally altered to jasperoid, zones of decalcification, and calcite veining above the decalcified zones shown as purple in Figure 7-7 and Figure 7-8.

### 7.4.1 Footwall Alteration Suite

- Clay Species

To date most of the clay referred to on the alteration map has been identified where sufficiently obvious with a hand lens. Most is believed to be illite. In the footwall, the calc-arenite and epiclastic andesite alter readily to clay probably due to the presence of fine clay and silt size particles in the original rock. The sandier species can be more porous and are associated with coarser clays such as sericite and fine white mica.

Dickite is the clay most strongly associated with silver and is found in many of the drill holes. It can be identified by its titanium white color, glossy to pearly luster and it can be resolved by hand lens into small flakes. It is a common hydrothermal mineral associated with many silver districts in volcanogenic settings. Some pyrophyllite is also present, usually in the middle of the hydrothermal imprint. Its luster and color are similar to dickite but it has a higher degree of crystallinity and platy or needle like forms may be observed. Sericite is common to the La Cigarra ridge area, particularly associated with quartz. Sometimes the sericite is white mica or identified as phillite, particularly in the San Gregorio mine area. Le Couteur has identified sericite and adularia in thin section. The suite of illite through pyrophillite in association with adularia and either dolomite or bladed calcite is typical of epithermal deposits such as the famous Comstock mines.

- Quartz Veins

Good examples of the main quartz veining are mostly absent on the surface since it is mined out. Some dumps had coarse crystalline to drusy quartz veins that show secondary brecciation. This rock probably had pyrite and manganese associated with it. Since it is still on the dumps, it is not the principal ore carrier. Several veins of dense pyrite bearing quartz were found on the top of La Cigarra ridge, extending from Las Carolinas to San Gregorio. Weak disseminated wormy quartz and silicified breccia is associated with the central fracture zone. The area is weakly anomalous where it has been sampled. In the area south of Las Carolinas, quartz veins in the quartzite are vuggy and do not form distinct banding. However, where they are associated with gossans with mimetite and limonite in the open spaces, they generally carry silver, lead, and arsenic.

Stockwork quartz veining is quite common. Stockwork veining is abundant on the east flank of the Cigarra ridge and has been encountered in the lower parts of angle holes that penetrate the fault into the footwall and in the transition zone from the Mezcalera Fm to the Casitas Fm. The stockworks form irregularly shaped veins and masses that do not appear controlled by a systematic stress regime. The vugs in this material are filled by silver bearing galena and sphalerite.

Sterile straight sided quartz veins with systematic orientation commonly form networks within the Triassic quartzite. These may have formed due to regional stress. Quartz goethite veins found in the axes of small folds within the quartzite, on the other hand, carry silver.

Barren quartz is ubiquitous associated with the myrmekitic rhyolite and is found as quartz breccia blocks that obscure the presence of the mineralizing system. Most of the quartz has irregular boundaries indicating that it is not a cross cutting feature but shared the same temperature as the host rhyolite.

- Barite and or Bladed Calcite

Barite is commonly found in most workings and dumps along the La Cigarra Fault. It is found both in quartz veins and in black calcite veins. Some bladed casts associated with myrmekitic rhyolite are found on the east side of the La Cigarra crest. The presence of alpha veining in the same rock suggests that the mineral timing is associated with the intrusion as it is unlikely that it could crystallize in the solid rock. It is not known whether the casts are barite, calcite or some other bladed mineral. However, barite seems the most likely since the entire footwall is anomalous in barite with values commonly well above 1,000 ppm with highs over 7,000 ppm. Distal areas, such as the La Borracha Norte, on the other hand, had values well under 500 ppm of barite. One concern with the barite association is that it is ubiquitous. There is the possibility that the original source of barite came from basin brines similar to the brines that form domes and traps in the oil fields on the northeast side of Mexico. Thrusting and folding in the Saltillo (Coahuila, MX) area is made possible due to the presence of gypsum layers within the lower carbonate strata and probably similar material lubricates the thrust faulting in the Parral region.

### 7.4.2 Hanging Wall Alteration

The hanging wall rocks are all carbonates. As such, argillic alteration is much weaker and quartz veining is much less common. The most important alteration suite has decalcification and jasperoid. The exceptions are small sills of andesite that are argillically altered and have halos of limonite and hematite.

- Jasperoid

Jasperoid is hereby defined as the passive replacement of a carbonate rock by the process of the removal of calcium carbonate and the introduction of silica leaving the original rock textures essentially unaltered. Jasperoids commonly are darker weathering than the surrounding carbonates, often contain open fractures and may form blobby masses due to their resistance to weathering. Many jasperoids are found in the San Gregorio area.

Zones of decalcification and silicification are common in the drilling in the San Gregorio and the upper portions of the Las Carolinas project. The black and white turbidites that are encountered in the drilling change character from reactive non mineralized turbidites to non-reactive turbidites in the mineralized zones. Therefore, decalcified sediments overlie hidden zones of breccia where silver bearing fluids were deposited on low angle structures. It is common for jasperoids to overlie zones of mineralization in Carlin type deposits and the jasperoids on this property behave similarly.

- Decalcification

Decalcification is more properly called decarbonitization since it is the process where $CO_2$ gas is released from carbonate during hydrothermal alteration. On the alteration map it is designated Dc. Generally, hanging wall mineralization zones are decalcified, but only partly silicified.

- Clay

In the hanging wall, clays are almost always associated with intermediate igneous rocks and the mineralized zones. As previously discussed, the most common clay in the mineralized zones is dickite.

- Limonite and Hematite

Disseminated pyrite is not common in the limestone section. Consequently, iron oxides are only found associated with andesite intrusions and hydrothermally altered faults. The jasperoid areas, for example, commonly have limonite and red iron oxide.

- Black calcite veins

Several black calcite veins are found east of the Las Carolinas historic workings mine, as well as east of Las Chinas, in the hanging wall carbonates. The black color may be due to the remobilization of carbon away from a hydrothermal system. However, the veins could be manganese bearing. Generally, the veins do not have silver values but they are often associated with quartz veins that carry ore. The Las Chinas workings cross-cut four black calcite veins located at the contact between carbonate and clastic rocks.

**Figure 7-7 La Cigarra Alteration - Northern Half**

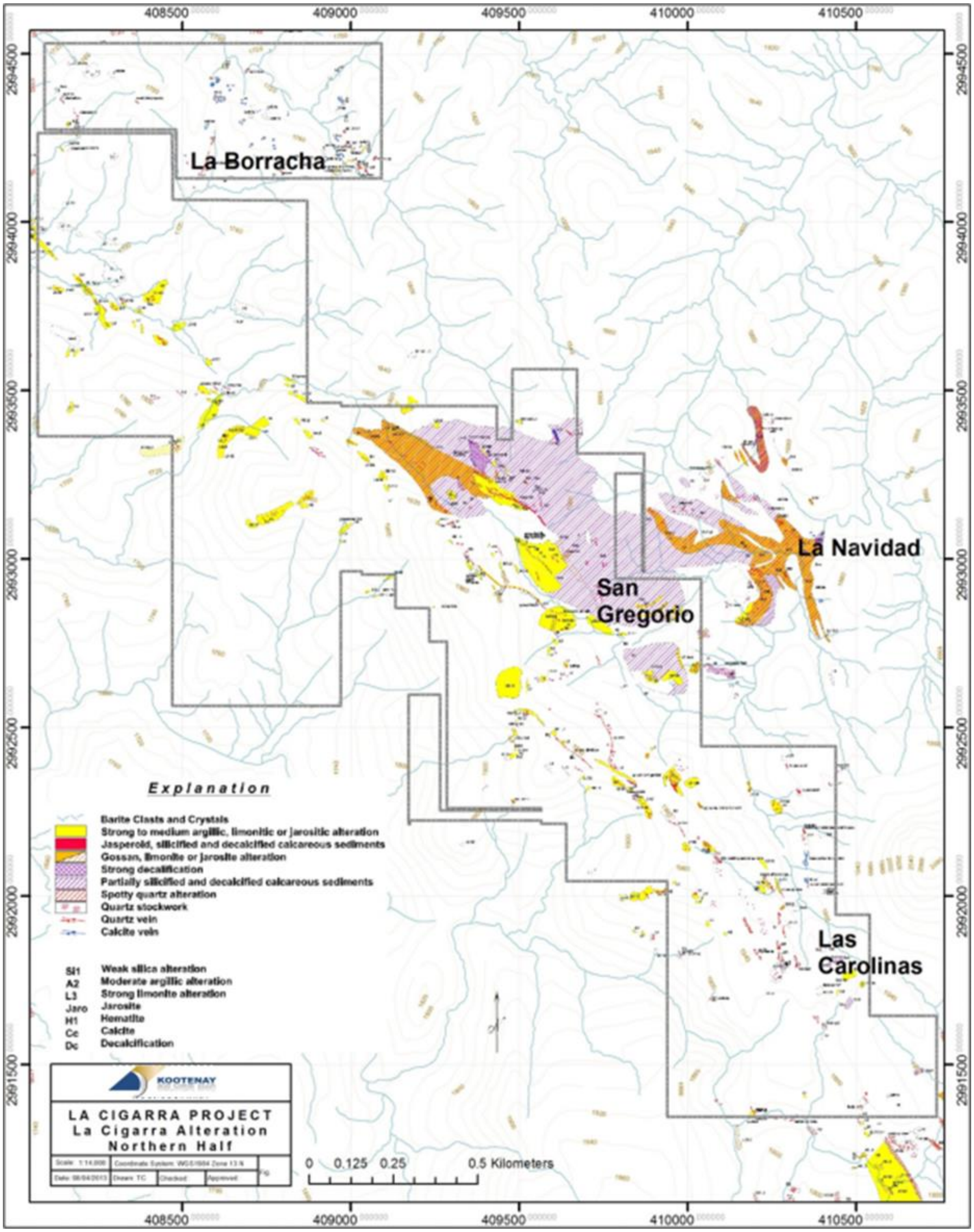
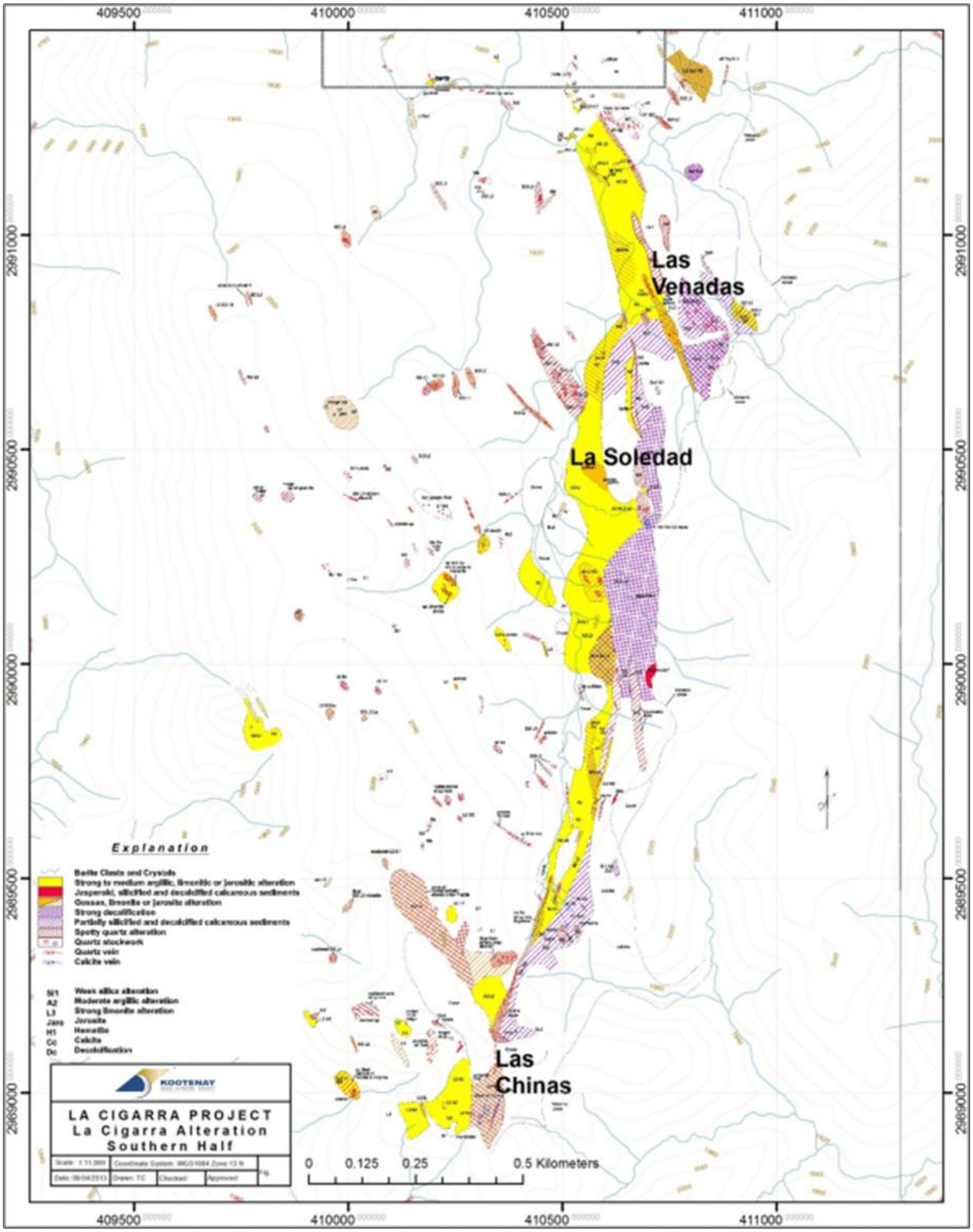


**Figure 7-8 La Cigarra Alteration – Southern Half**



## 7.5 Mineralization

The Deposit consists of silver grades with low gold, lead, and zinc values contained in drusy quartz veins, stockwork and silicified, brecciated zones parallel to stratigraphy. Approximately 80% of the deposit contains sulphide minerals. The upper 20% of the deposit has been partially oxidized.

### 7.5.1 Structural Control

The structural control of the La Cigarra deposit is evident in its high length to thickness ratio where surface sampling and drilling have traced silver mineralization for over 5,900 m in a north-south direction while thicknesses, based on silver values of 20 g/t or greater is more typically in the 20-80 m range and averages about 40 m thick.

#### 7.5.1.1 Compressional Deformation

These faults and structures related to the Laramide thrusting are responsible for forming the La Cigarra anticline and the associated axial planar fractures and faults noted along its crest and western flank. In the San Gregorio Zone, the north northwest striking axial planar fractures are often associated with strong argillic alteration (Figure 7-7 and Figure 7-8) related to anomalous Ag, Au, As, and Sb values in soil and rock samples. In Las Carolinas the same style of alteration with corresponding anomalous Ag, Au, As and Sb values in soil and rock occurs in faults developed along the west flank of the La Cigarra anticline. None of these targets has been thoroughly prospected, trenched or drill tested.

#### 7.5.1.2 Extensional Deformation

These faults, which are part of the horst and graben forming event at the close of the Eocene, include the La Cigarra Fault that follows the eastern flank of the La Cigarra anticline and is related to the silver deposit and resources discussed in this report. It's believed the La Cigarra Fault system acted as conduits for the fluids that produced the sulphide-bearing quartz veins carrying silver, gold, lead, and zinc values. It's also quite likely this is the same fault system that is responsible for the San Francisco del Oro and Santa Barbara mines, 23 km to the south southeast at La Cigarra is believed to have acted as conduits.

### 7.5.2 Lithologic Control

Silver mineralization outlined at La Cigarra occurs in bedding parallel zones that have been intersected in San Gregorio between 1,975 m (section 1+50N) and 1,650 m (section 0+00) above sea level. Silver-lead-zinc-gold values typically occur in 1-4, higher-grade intervals ranging between 5 and 46 m in width that occur within a broader mineralized envelope that ranges up to 120 m in true width. Mineralized zones typically dip northeast at 50° to 55° although some variability does occur.

Drilling has traced the zones at least 400 m down dip (Figure 7-9) and 290 m vertically from surface (section SG 1+00S). The mineralization remains open to depth and along strike on all sections.

In the San Gregorio Zone mineralization occurs in thinly bedded, de-calcified Cretaceous mudstones (turbidites) and to a small extent in immediately underlying Jurassic greywackes and occasionally in strongly altered, Cretaceous, granodiorite or Tertiary andesite, dacite and rhyolite intrusions Grades are best developed in highly brecciated, bedding parallel zones (thrust faults?); in brecciated contact envelopes surrounding the granodiorite; and at the contact between the underlying Jurassic stratigraphy with the overlying Cretaceous rocks.

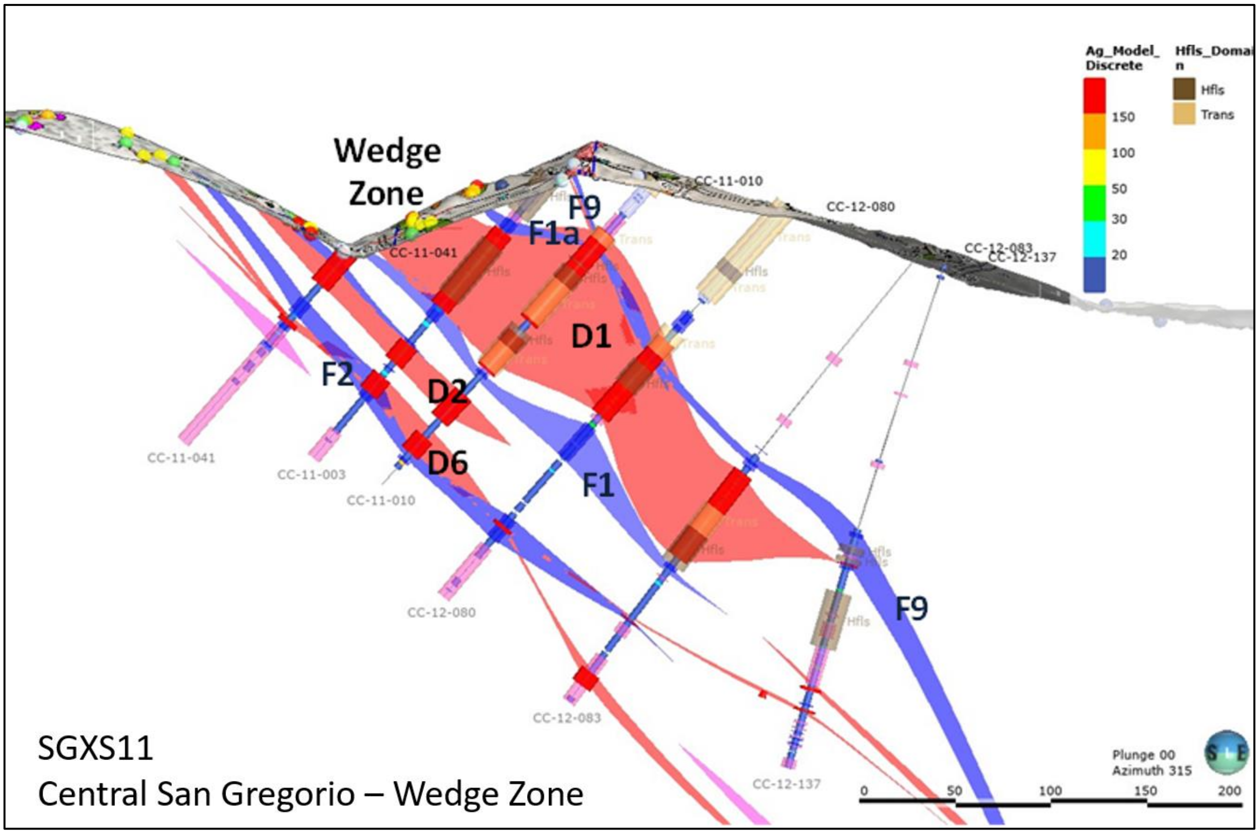
In the Las Carolinas Zone mineralization occurs predominantly in Jurassic greywackes with minor siltstone and sandstone beds and to a lesser extent in overlying de-calcified Cretaceous mudstones.

Occasionally significant silver values occur in Tertiary rhyolite sills and dykes but unlike San Gregorio, they do not occur in granodiorite even though they are present in the stratigraphy. Silver values also occur on sporadically in calcareous mudstones (with Ca values to 8%) although in minor quantities.

In both San Gregorio and Las Carolinas, the stratiform nature of the mineralization is thought to reflect increased permeability in the sediments created by alteration from the placement of dykes and sills.

Thrust faulting at the unconformity between the Jurassic and Cretaceous stratigraphy, particularly in the Middle Cretaceous turbidites is also evident.

**Figure 7-9 Cross Section of the Central San Gregorio – Wedge Zone**



# 8 DEPOSIT TYPES

The La Cigarra deposit is a good example of a Mexican intermediate sulphidation Ag-Pb-Zn-(Cu-Au) epithermal deposit. The Deposit lies within the north-east portion of the CMSB. It is defined by several silver mining districts including Guanajuato, Zacatecas, Fresnillo, and Santa Barbara-San Francisco del Oro as well as the mining districts of Parral, Santa Maria del Oro, and Sombrerete-Chalchihuites.

## 8.1 Epithermal Systems

Epithermal deposits form at depths of 1.0 to 1.5 km in volcanic-hydrothermal and geothermal environments. They define a spectrum with two end members, low and high sulfidation (Hedenquist et al., 2000). Figure 8-1 shows the genetic model for epithermal deposits proposed by Hedenquist et al., (2000). Low and Intermediate sulfidation deposits form part of the epithermal spectrum. Their genesis is complex due to the participation of fluids with meteoric and magmatic origin during their formation and the fluid evolution during water-rock interactions. The fluids that formed the Mexican epithermal deposits represent a mixture of fluids with diverse origins varying from meteoric to magmatic (Simmons et al., 1988; Benton, 1991; Norman et al., 1997; Simmons, 1991; Albinson et al., 2001; Camprubí et al., 2006; Camprubí and Albinson, 2007). Mineral deposits at La Cigarra exhibit characteristics of the low-to-intermediate sulphidation types of deposits.

Epithermal deposits typically consist of fissure veins and disseminations with gold, silver, and base metals concentrations. Most low sulfidation epithermal deposits form as open-space filling of faults and fractures resulting in vein deposits. Some gold deposits occur as replacements or disseminations in permeable host rocks, particularly the high-sulfidation types. Epithermal deposits are more common in extensional settings in volcanic island and continent margin arcs. Due to its relatively shallow deposition level within the Earth’s crust, most epithermal deposits are preserved in Tertiary or younger volcanic rocks. Mineral deposition in the epithermal environment occurs due to complex fluid boiling and mixing processes that involve cooling, decompression, and degassing.

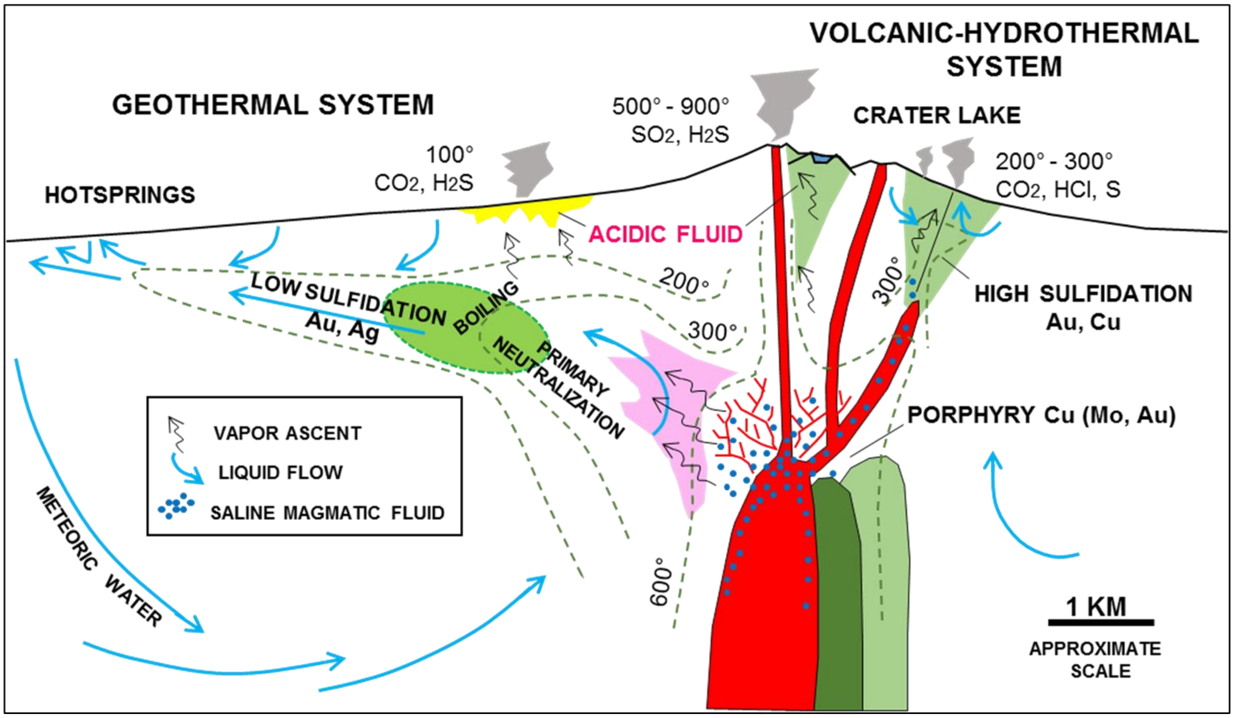
Historically, epithermal gold and silver deposits are an important part of the world’s precious metal budget. Approximately 6% and 16% of the world’s gold and silver have been produced from epithermal deposits. These deposits are significant in Mexico. Mineable epithermal vein deposits range from 50,000 to more than 2,000,000 tonnes in size, with typical grades ranging from 1 to 20 g/t Au and 10 to 1,000 g/t Ag. Locally exceptional, or “bonanza” grades above 20 g/t Au can be important contributors to many gold deposits. lead and zinc are also important contributors to epithermal deposits' low and intermediate sulphidation classes. Veins that host mineralization are about several km long; however, economic mineralization is present in plunging ore shoots with dimensions of tens of metres to hundreds of metres or more. Single veins commonly host multiple ore shoots. The wide range of tonnage and grade characteristics make these deposits attractive targets for small and large mining companies.

Quartz veins are typical hosts for low and intermediate sulphidation mineralization, and these veins have characteristic alteration assemblages that indicate temperatures of deposition between 100°C and 300°C. These alteration assemblages include quartz, carbonates, adularia white phyllosilicates, and barite in the veins; illite, adularia, smectite, mixed-layer clays, and chlorite proximal to the vein walls; and distal chlorite, calcite, epidote, and pyrite more peripherally. Also, unmineralized but related, steam-heated argillic alteration and silica sinters may be present above, or above and laterally from, the veins.

Vein textures are also important guides for targeting low and intermediate sulphidation mineralization. Quartz commonly occurs with cockade and comb textures, as breccias; as microcrystalline, chalcedonic, and colloform banded quartz; and as bladed or lattice quartz. Bladed or lattice quartz forms by replacing bladed calcite formed from a boiling fluid and is a diagnostic indication of the level of boiling in a vein.

Ore minerals include pyrite, electrum, gold, silver, argentite, acanthite, silver sulphosalts, sphalerite, galena, chalcopyrite, and/or selenide minerals. In alkalic host rocks, tellurides, vanadium mica (roscoelite), and fluorite may be abundant, with lesser molybdenite. These mineralized systems have strong geochemical signatures in rocks, soils, and sediments and Au, Ag, Zn, Pb, Cu, As, Sb, Ba, F, Mn, Te, Hg, and Se may be used to vector to mineralization.

**Figure 8-1 Genetic Model for Epithermal Deposits (Hedenquist et. al., 2000)**




## 8.2 Mexican Intermediate Sulphidation Vein Deposits

The Mexican intermediate sulphidation vein deposits are characterized by economically significant concentrations of Ag, Zn, Pb, Au, and occasionally Cu, with these metals occurring in base metal sulphides, accessory amounts of acanthite-argentite, freiburgite, pyrargyrite, tetrahedrite-tennantite, trace amounts of electrum and a variety of Ag-Pb-As-Sb-Cu sulphosalts (Boychuk et al. 2012). Where the hypogene mineralization has been weathered, the sulphides and sulphosalts are replaced by iron oxides, which are accompanied by minor amounts of various Zn, Cu and Pb carbonates, hydroxides, and sulphates along with acanthite, silver halides, and trace amounts of native silver and gold. Gangue minerals in the veins include, in order of decreasing abundance, quartz, chalcedony, calcite, pyrite, adularia, barite, fluorite, Ca-Mg-Mn-Fe carbonates (e.g. rhodochrosite, siderite), amethyst, sericite, and chlorite. Characteristic vein textures include multiple stages of brecciation, colloform banding and crustiform crystallization. Hydrothermal alteration of wall-rocks is generally restricted to vein halos a few metres in width, where silicification occurs immediately next to the veins and grades outwards into an assemblage of sericite-illite-kaolinite, then into illite-smectite-montmorillonite and finally into a low-temperature alteration assemblage dominated by smectite-chlorite. Larger veins have kilometres of strike-length, are several metres wide and have vertical extents in the hundreds of metres, with a few cases of veins extending more than one kilometre below surface. Vertical metal zonation is a common feature of larger veins, with three principal mineralization zones, from shallowest to deepest, being defined by the following metal suites: Ag-(Au)-As-Sb-Hg, Ag-Pb-Zn-(Cu-Au), and Pb-Zn-(Ag). Age dating and lead isotope studies indicate that the Ag-Pb-Zn-(Au-Cu) vein deposits of the CMSB are mainly Tertiary in age (36 to 28 Ma), and are genetically related to rhyolitic magmatism, which in the mineral districts, is manifested as relatively small porphyry stocks, dyke systems and/or flow-dome complexes.

The Santa Barbara-San Francisco del Oro and Parral mining districts are clusters of mines that constitute three districts located within an area of approximately 250 square km in the far southern extremity of Chihuahua, Mexico and together form the principal mining area within the state (Borbolla, 1990). Santa

Bárbara and San Francisco del Oro are both approximately 18 to 20 km to the south-west of Parral. The three districts are approximately 190 km to the south of Chihuahua city. The Deposit lies approximately 25 km north northwest of the Santa Barbara-San Francisco del Oro mining district and 25 km northwest of the Parral mining district.

The ore deposits at Parral, Santa Bárbara and San Francisco del Oro occur predominantly as veins with minor stockworks and massive sulphides, hosted by the Cretaceous Parral Formation shales, and to a lesser extent by the overlying Tertiary andesite and rhyolite (Grant & Ruiz, 1988; Borbolla, 1990).

The Cretaceous Parral Formation, >1000 m thick, are the oldest rocks outcropping in the district. They are composed of dark grey to black carbonaceous shale and calcareous shales/siltstone, with lesser beds and lenses of argillaceous limestone and limestone. Beds of shales are generally uniform and 15 to 20 cm thick, while the limestone lenses and beds are around 50 cm thick. Locally the shales contain nodules and bands of chert, as well as light brown calcite concretions and abundant calcite veinlets (Borbolla, 1990).

In the San Francisco del Oro and Santa Bárbara districts, in contrast to the sequence around Parral, the Parral Formation is more compact, hard and dense, grey to black in colour, rich in carbonaceous material and the strata are thinner (1 to 4 cm), being predominantly calcareous shales with sporadic horizons of limestone which may be 10 cm thick. The shales and calcareous shales weather to red and orange colours, and in addition to clays, contain recrystallised calcite that fills small fractures. They are also usually well folded and fractured, with small scale drag folds. Within the region the unit generally dips at 25 to 30 SW (Escudero, et al., 1990; Grant & Ruiz, 1988).

The Tertiary Escobedo Group, totalling around 665 m in thickness, is composed predominantly of a volcanic series and associated dykes, which cut up through the Parral formation, and sills. The Escobedo Group includes:

- a lower unit of brown conglomerate with subangular fragments of calcareous shale which are well cemented, but poorly sorted which is overlain by a series of sandy tuffs and greenish-grey intermediate agglomerates.

- a middle unit composed of intermediate rocks, basaltic andesites with rare sill like horizons up to 2 m thick. Some possibly intrusive porphyritic andesites have also been recognised (Borbolla, 1990); and,

- an upper unit which is more acid than the two underlying units. It is composed of andesitic tuffs and basaltic andesites at the base; rhyolitic agglomerates, vitrophyres and glass in its middle sections; and an upper suite of rhyolites, dacites and some glass (Borbolla, 1990).

The oldest members of the Escobedo Group are believed to be of late Eocene age, while the upper sections are as young as Oligocene, with an age date of 34.92 ± 0.75 Ma (Borbolla, 1990).

Various intrusives are recorded from Santa Bárbara to Parral, varying in composition from granite to quartz-monzonite, to diorite and monzonite. The Parral intrusive, near the La Prieta mine is an irregular body with dimensions of around 7 x 4 km, almost completely surrounded by the Parral Formation shales. Petrographically it is a quartz-monzonite with biotite and hornblende. Dykes of diorite and quartz-monzonite are also found within the district, being more numerous in the vicinity of larger intrusives, sometimes reaching thicknesses of 30 m and lengths of 4 km (Borbolla, 1990).

The rocks of these three districts have been affected by a period of compression during the Laramide orogeny of the late Cretaceous to Tertiary. This produced a number of folds which deformed the Parral Formation, particularly an asymmetric anticline which is located between the Santa Bárbara and San Francisco del Oro districts. This antiform has dips of 30°W on its southwestern limb and 8°N on its northeastern flank. Its axis trends 332° and plunges to the north at 12°. In detail this structure is very complex with numerous drag folds and minor faults. This folding has been interpreted to have been the result of NE-SW directed compression (Escudero, et al., 1990; Borbolla, 1990; Silva & Gonzalez, 1990).

At the close of the Eocene the deformation changed to an extensional regime producing a series of faults. The faulting and fracturing in the districts can be sub-divided into:

1) 1). Pre-mineralization faults and fractures - these were formed in two stages, the first being two sets of fractures and shears, accompanying the folding, and having a parallel trend along the anticlinal axis. The second fracturing stage is the result of tensional deformation (Silva & Gonzalez, 1990). These faults are occupied by the sulphide veins bearing gold and silver and by siliceous alkaline dykes.

2) 2). Post-mineralization faults - which comprise a number of different varieties, including: a) faults that are similar to the pre-mineral structures, but are a little later than the vein development and do not carry sulphides; b) post-vein faults that are almost perpendicular to the veins and are filled with calcite, fluorite & barite; c) a similar set, also perpendicular to the main sulphide veins, but occupied by basic dykes; d) faults at various orientations that are filled with clay gouge (Escudero, et al., 1990; Silva & Gonzalez, 1990).

In the mineral deposits of the Parral, Santa Bárbara and San Francisco del Oro districts, approximately 95% of the mineralized structures are veins with lesser stockwork and replacement bodies, the latter being mainly at Santa Bárbara.

***Parral District***

At Parral there are two types of veins, namely, fissure veins and fissure filling veins. The fissure veins are characterized by hydrothermal mineralization occupying pre-existing shears that are interpreted to have been created by post-orogenic relaxation. They generally dip at 55 to 75° to either the E or W, have a northsouth strike and may persist over lengths of 2 to 8 km. Thicknesses vary from 2 to 20 m. Mineralization is basically sulphides of Pb and Zn with silver in a well brecciated and silicified matrix. They are also characterized by deep oxidation, commonly to more than 200 m below the surface, with a variable transition to the underlying unoxidised sulphides. Rich ore shoots which alternate with barren zones is also characteristic of these veins. The longitudinal extent of the rich shoots is variable, but may be from 400 to 1000 m, commonly persisting to depth (Borbolla, 1990).

The fissure filling veins are associated with a secondary fracture system having NW and NE striking members, possibly related to the emplacement of the Parral intrusive. These veins are well defined, but of lesser length, and do not persist with depth. Their thickness rarely exceeds 2 m, and they are differentiated from the fissure veins by their strike direction, and shallow oxidation which is usually less than 15 to 50 m (Borbolla, 1990). There is a zonal distribution of commodities in the veins surrounding the intrusive. Close to the contact the veins are rich in silica and pyrite with Au but are low in Pb-Zn. At a greater distance Pb & Zn are more abundant, while Au values disappear. Finally good Au and Ag values are associated with sulphides of Pb and Zn, as well as barite, calcite and silica (Borbolla, 1990).

Stockworks of veins are developed at the intersection of two or more veins, or where two veins are in close proximity (Borbolla, 1990).

Mineralization is possibly of late Oligocene to early Miocene age, being younger than the Escobedo Volcanic Series which host some ore but older than the overlying Oligocene acid flows (Borbolla, 1990).

The mineral assemblages encountered comprise: 1). Sulphide minerals - argentite, pyrargyrite, argentiferous galena, galena and sphalerite; 2). Oxide minerals - embolite, bromyrite, pearceite argentite, argentojarosite, cerussite, anglesite and smithsonite; 3). Gangue minerals - fluorite, barite, quartz, calcite, manganite, pyrolusite, hematite, goethite and smithsonite (Borbolla, 1990).

***San Francisco del Oro***

The Mineralization at San Francisco del Oro is principally composed of veins, and only rarely as replacement bodies (Escudero, et al., 1990).

The veins of the district are divided into three zones, namely the 1). oxidised, 2). enriched and 3). primary zones. The oxidised interval varies from a depth of 50 to 170 m, depending on the surface relief. The minerals found in this interval include gold, silver, anglesite, cerussite, zinc-sulphate, azurite, malachite, limonite, native copper, smithsonite, and others. The principal minerals within the supergene enriched zone are bornite, covellite, chalcocite, chalcopyrite, sphalerite, marmatite, galena, anglesite and pyrite. In the underlying primary sulphide zone, the ore is composed of sphalerite, galena, chalcopyrite, pyrite, arsenopyrite, gold, silver, quartz, fluorite, calcite, barite and high temperature silicates such as garnet and pyroxene. Silver is closely associated with galena, with no discrete silver phase having been identified (Escudero, et al., 1990).

The predominant strike of the veins is north south, with dip variations to the north-west and north-east, from vertical to around 45°. Veins thicknesses generally range from 0.1 to 1.5 m in the Frisco mine, to around 3 m at the Granadeña mine, while in the Clarines mine they may reach 6 m in width. In general the veins are of uniform thickness, although locally two or more may branch off the main structure. The host rocks of the veins within the district are the grey to black carbonaceous shales, or lighter coloured calcareous facies. All become silicified in the lower levels. These beds are well formed, ranging from thin laminations up to thicknesses of 6.5 m with dips from the horizontal to 20°NW. Locally they are tightly folded with steeper dips (Escudero, et al., 1990).

In the Granadeña mine Pb-Zn-Ag veins are localised along small displacement faults that cut obliquely across the hinge zone of the broad asymmetric anticline. Single veins may be more or less continuous over lengths of up to 800 m. Veins average 1.5 m in thickness, but vary from several cm's to 3 m. Pb-Zn-Ag mineralization is found over a vertical interval of more than 500 m. The ore was emplaced in several distinct stages that display crosscutting relationships. The first stage ores contain massive sphalerite, galena, and very minor chalcopyrite, while the second stage is composed of abundant calc-silicates and chalcopyrite with minor sphalerite and galena. Silver was deposited during both stages, although the bulk is associated with the early galena. Stages 3 and 4 contain quartz, calcite, and fluorite and are not important ore phases (Grant & Ruiz, 1988).

Replacement bodies are found at the Frisco mine where they occur as disseminations associated with veining, or in small irregular pockets in the most calcareous shales (Escudero, et al., 1990). In the Granadeña mine two large "massive sulphide" bodies are found, one of which has dimensions of 200 x 70 x 200 m, containing 10 to 50% sulphides. The gangue is composed of axinite, andradite, epidote, and chlorite. Relict bedding is observable in these bodies, defined by silicate and sulphide layering. While veins account for 95% of the ore in the district as a whole, in the Granadeña mine, 20 to 30% is in replacement bodies (Grant & Ruiz, 1988). Sulphides in the replacement ores include sphalerite, arsenopyrite, galena, pyrite, marmatite, chalcopyrite and a little bornite. Pyrite is not as conspicuous as in the veins but is intimately intergrown with arsenopyrite. Chalcopyrite is generally more visible than pyrite. Silver values are low, except where galena levels are locally high (Escudero, et al., 1990).

Wall rock alteration in the San Francisco del Oro district is characterized by silicification, which is more intense at depth than on the surface. In addition, actinolite, epidote and garnet are commonly developed in well silicified calcareous shales in some levels, locally forming banded creamy grey chert like rock. At the Granadeña mine vein related alteration differs with both the stage of veining and with the host rock composition. Early sulphide rich veins have alteration envelopes composed of epidote, axinite, chlorite, minor andradite and quartz. Late calc-silicate veins have selvages of fine grained manganoan hedenbergite, andradite, axinite, monticellite and quartz.

Variations with the Parral Formation also influence the alteration assemblage. Where calcareous siltstones are cut by veins, calc-silicates are formed, while there are fewer calc-silicates where veins cut carbonaceous shales. Alteration does not generally extend far into the wall rock, commonly only forming 1 to 2 m selvages around stage 1 veins, with an inner zone of epidote, chlorite and axinite and an outer zone of fine grained quartz and recrystallised calcite. Wider envelopes are found around stage 2 veins, sometimes extending up to 25 m from the vein. Alteration within 2 to 3 m is pervasive and intense, with the rock texture and bedding being obliterated within 1 m of the vein. The innermost part of this zone consists of alternating 0.5 to 2 cm bands of ilvaite, manganoan hedenbergite, andradite, and sulphides. These bands may be parallel to the vein, or occur as irregular, sinuous and lobate forms. Outwards from this inner zone the wall rock is pervasively recrystallised to an assemblage of axinite, hedenbergite, andradite, and quartz, with or without monticellite and calcite.

The alteration enclosing the "massive sulphide" replacement orebodies is similar to that enveloping the stage 1 veins. From an inner sphalerite, galena, and minor chalcopyrite zone these bodies grade outwards to envelopes rich in axinite, andradite, chlorite, epidote, and quartz. The most distal zones of the replacement orebodies are characterized by pervasive silicification of the wall rocks and small sulphide filled veinlets (Grant & Ruiz, 1988).

***Santa Bárbara***

The ore veins of the Santa Bárbara district occupy fractures which cut both the shales of the Cretaceous Parral Formation and the overlying andesites of the Escobedo Group, and dip at 50 to 90°. The main veins outcrop and are persistent in both strike and depth. They may be up to 4 km long, vary in thickness from 0.5 to 25 m and continue to depths of 600 m below the surface (Silva & Gonzalez, 1990).

There are three mineralization stages and assemblages in the district, namely: 1). the earliest, which is characterized by galena and sphalerite; 2). the second which is rich in chalcopyrite and sphalerite in a quartz gangue, with some fluorite; and 3). the third stage which comprises fluorite, barite, and calcite (Silva & Gonzalez, 1990).

The veins vary in character and orientation with lithology, due to the physical properties of the different rock types and their chemical response to mineralizing and alteration processes. These veins are inclined and increase in length with depth, while declining in thickness. Two different vein styles have been classified, namely: 1) Simple veins - which are persistent in both trend and depth, with no branching or splintering; and 2) Complex veins - the most common and economically significant, which exhibit splinters, wedges of enclosed shale, and brecciation, apparently caused by movement on the host fractures. These movements also result in variations in the dip and trend of the veins. The splinters and wedges are commonly found in the hanging wall of the main veins which become wider and contain better ore grade. In several cases the fracture system, including the associated splinters and enclosed horses, reaches 25 m in thickness. In some instances, these thickenings correspond to a change in strike of the veins (Silva & Gonzalez, 1990).

Quartz is the dominant gangue mineral, commonly accompanied by alteration silicates, such as garnet, epidote, and chlorite. Calcite, fluorite, barite, pyrite and arsenopyrite are also present. Other lesser gangue minerals include diopside, hedenbergite, enstatite, and orthoclase. The ore minerals comprise sphalerite, marmatite, galena, and chalcopyrite, with traces of native gold. Argentite occurs as minute 2 to 18 µm inclusions in sphalerite, and from 1 to 32 microns in galena. Native silver is found near the surface (Silva & Gonzalez, 1990).

The mineralogy of the veins varies with depth, with four zones being recognised, as follows: 1). Leached zone, near the surface; 2). Oxide zone; 3). Zone of secondary enrichment; and the 4). Primary sulphide zone. The latter is the most important economically. In the primary sulphide zone, the predominant ore sulphide is brown sphalerite and associated black marmatite. Galena is of secondary importance and occurs with sphalerite, chalcopyrite, silver bearing phases, and with tetrahedrite and tennantite. Chalcopyrite is of tertiary importance, occurring either as massive sulphides or as intergrowths with sphalerite. The proportion of massive chalcopyrite increases with depth. Pyrite is found in the vein structures, as metasomatic replacement of the vein walls, and as isolated crystals in rhyolitic dykes.

Arsenopyrite, although not rare, occurs in association with pyrite and chalcopyrite. Magnetite and pyrrhotite are found to the southwest of the district (Silva & Gonzalez, 1990).

The paragenetic sequence comprises early silver-lead-zinc mineralization, occurring as sphalerite, galena and silver forming massive sulphides, accompanied by quartz. This was followed by a second stage comprising copper-silver-gold in a gangue of quartz with pyroxene and garnet. Gold appears to be associated with all the minerals, although it most commonly accompanies chalcopyrite. The last phase is represented by the calcite-fluorite-barite association (Silva & Gonzalez, 1990).

All the veins in the district exhibit primary variations and zoning of the sulphide mineralogy. Sphalerite persists in the upper and intermediate levels, but increases with depth, corresponding to a decrease in the galena content. Chalcopyrite also increases with depth. Although the deepest veining is to the northeast, the sulphide zonation, including the pyrite and arsenopyrite, indicate a source from the north or northwest (Silva & Gonzalez, 1990).

# 9 EXPLORATION

Exploration work completed on the Property prior to 2015 is described in the technical reports on the Property by Reeves and Arseneau (2013), and Armitage and Campbell (2015). Northair's work prior to 2016 included extensive geologic mapping, regional and local soil, rock and stream sediment sampling on a number of target locations, trench and channel sampling, and a ground magnetic survey over the deposit area.

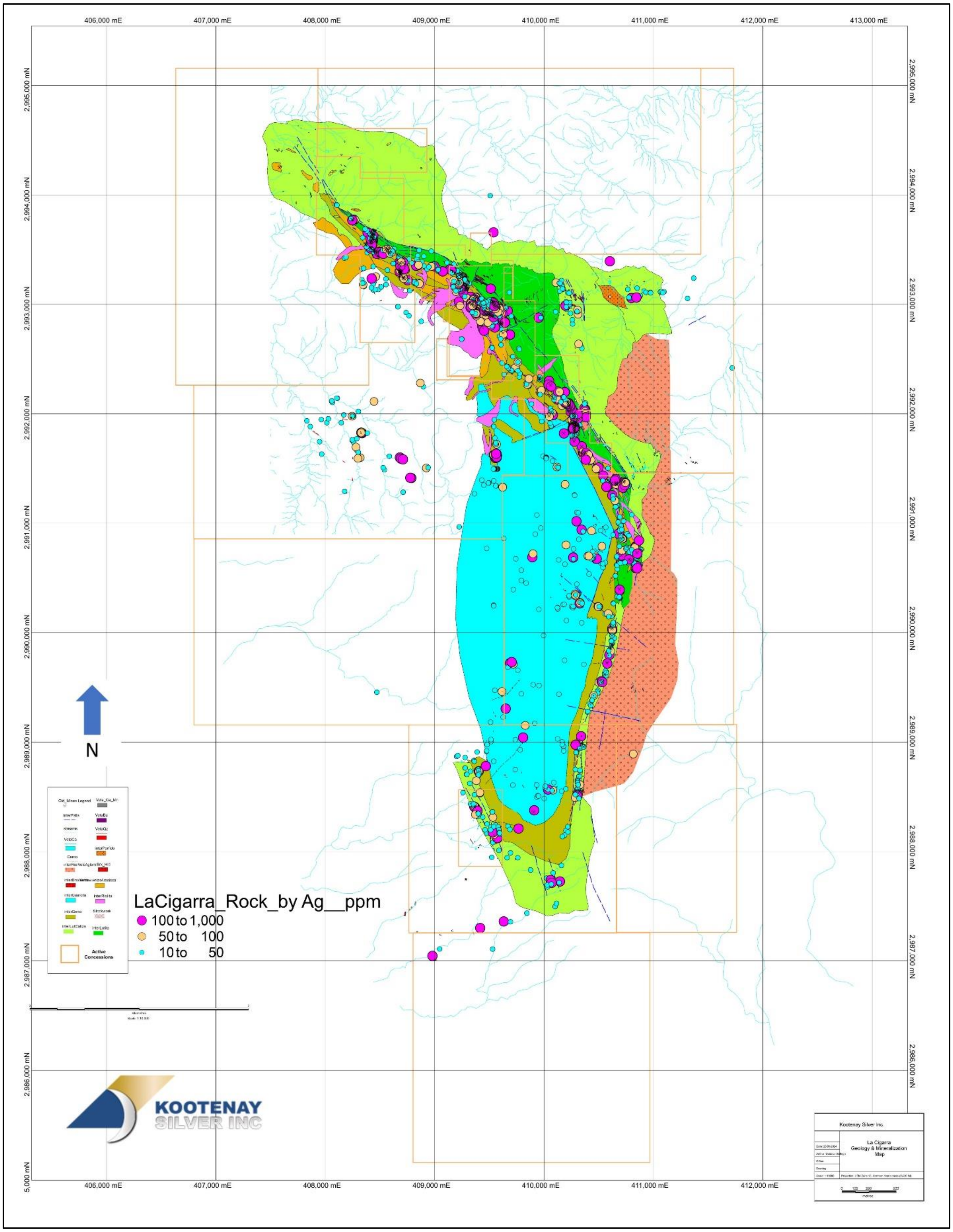
The following is a description of surface exploration work completed on the Property by Kootenay Silver since 2016 and includes additional geologic mapping and rock chip sampling, and a 37.4 line km induced polarisation (IP) survey.

Kootenay Silver advanced surface exploration with geological mapping and rock chip sampling. Exploration has continued to demonstrate further resource exploration potential exists along the 6 km long La Cigarra mineral system. This potential is supported by previous soil sampling along the trend including the La Borracha Zone to the north where 9 drill holes have intercepted silver mineralization, and the Las Venadas Zone to the south.

Kootenay collected a total of 1,931 rock chip samples from across the La Cigarra property from 2016 onward 2019. Rock chip sampling was undertaken as part of routine project scale mapping and reconnaissance work. Results ranged from below detection up to a maximum of 1,310 g/t silver.

All samples were submitted to ALS receiving laboratory in Chihuahua, Mexico, samples were analyzed by method Au-AA23, a fire assay with Atomic Absorbtion Spectroscopy finish for gold and, ME-ICP61a a four-acid digestion on 0.4g sample with ICP-AES finish for a multi-element suite, including silver.

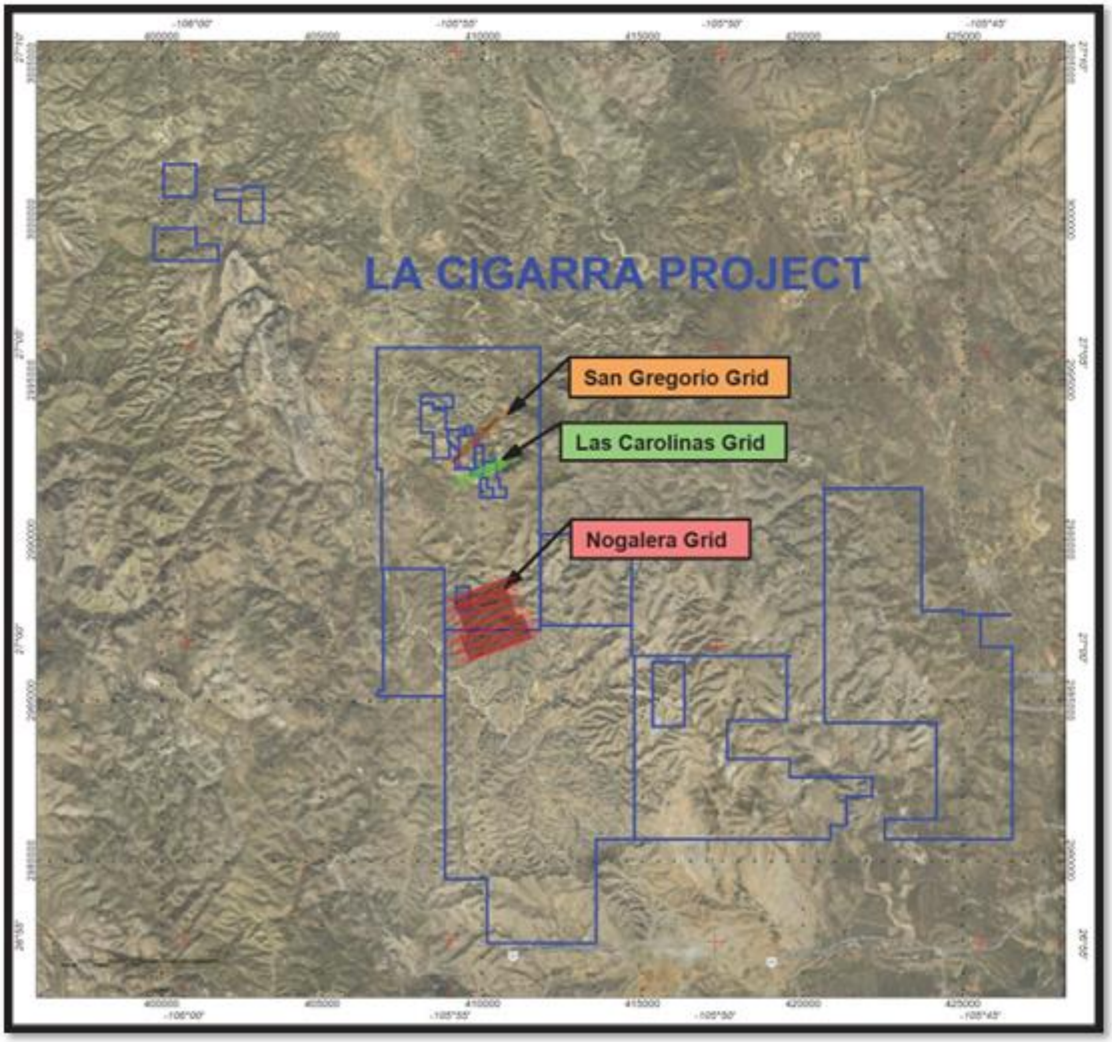
**Figure 9-1 2016 to 2019 Rock Chip Sampling**



## 9.1 2019 Induced Polarization (IP) Survey

During 2019 Kootenay contracted TMC Exploracion SA de CV to complete an Induced Polarization ("I.P.") survey over the Nogalera, San Gregorio and Las Carolinas zones from along the La Cigarra mineralized trend (Figure 9-2) (Simard, 2019). A total of 37.4-line km were collected from these data, 3D inversions were run, and deliverables included chargeability and resistivity models for each of the areas tested.

**Figure 9-2 Map Showing Relative IP Grid Locations – Claim Polygons Reflect Ownership as At 2019 (Simard, 2019)**




### 9.1.1 Nogalera Grid

The survey was completed by using the pole-dipole electrode array with lines read with variable distances between the electrodes (50, 100 and 200 m) and n separation factors, giving an average depth of penetration of approximately 450 m. The injected current was 4.5 A, and the Vp readings were comprised between 1.3 and 2669 mV with a mean value of 185 mV (Simard, 2019).

The IP coverage totalled 24.8 line-km along fourteen (14) N70º lines every 100 or 200 m that were read over 1.6 or 2.0 km. The apparent resistivity values that were measured on this grid ranged between 5.1 and

460 ohm-m with an average value of 45 ohm-m. The chargeability values fluctuated between 0.1 and 27.9 mV/V with a mean amplitude of 4.3 mV/V and a standard deviation of 4.4.

The inversion images (Figure 9-4 and Figure 9-5) indicate the presence in the northern third of the grid of two broad polarisable bodies that connect with each other southward near line L-2200S. In this area, the polarisable bodies are sub-tabular in appearance, essentially defined at more than 50 m from surface and would have apparent thicknesses of 100 to 250 m. A single body is outlined further south, which quickly deepens up to line L-3400S, where it is no longer detected. These polarisable bodies are partially correlated with slight resistivity highs and their lateral extents seem to be controlled by faults that could have induced significant downward thrusts.

Five (5) polarisable axes have been interpreted. They are most probably mapping wide sub-outcropping flat-lying (?) bodies mainly circumscribed at vertical depths between 50 m and 300 m. They could be caused by sulphide-rich mineralisations locally developed within an altered and silicified layer/horizon (or lithology).

**Figure 9-3 Survey Grid and Topography, Nogalera (Simard, 2019)**

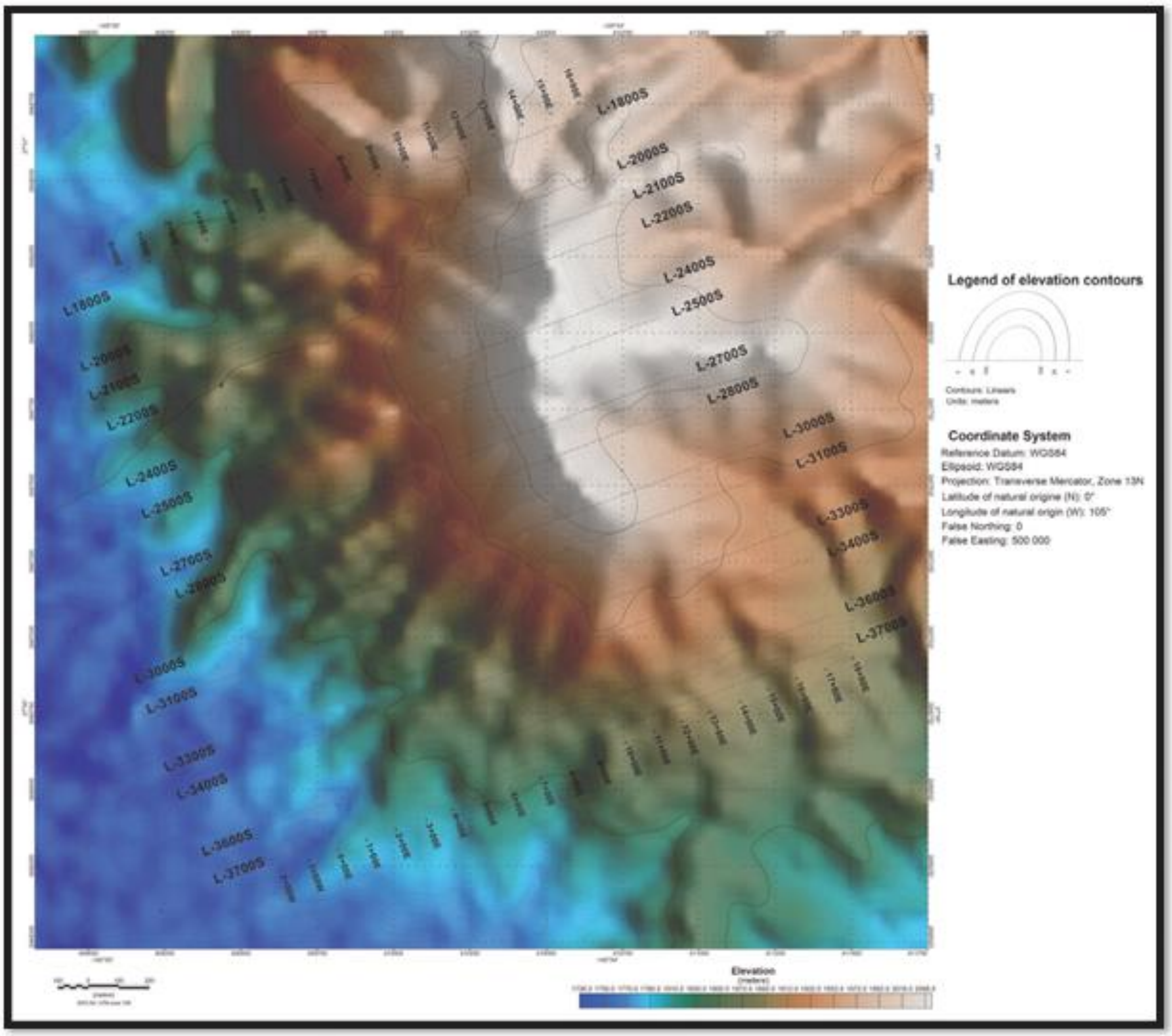


**Figure 9-4 3D IP Inversion, Resistivity Voxel Model, Nogalera Grid (Simard, 2019)**

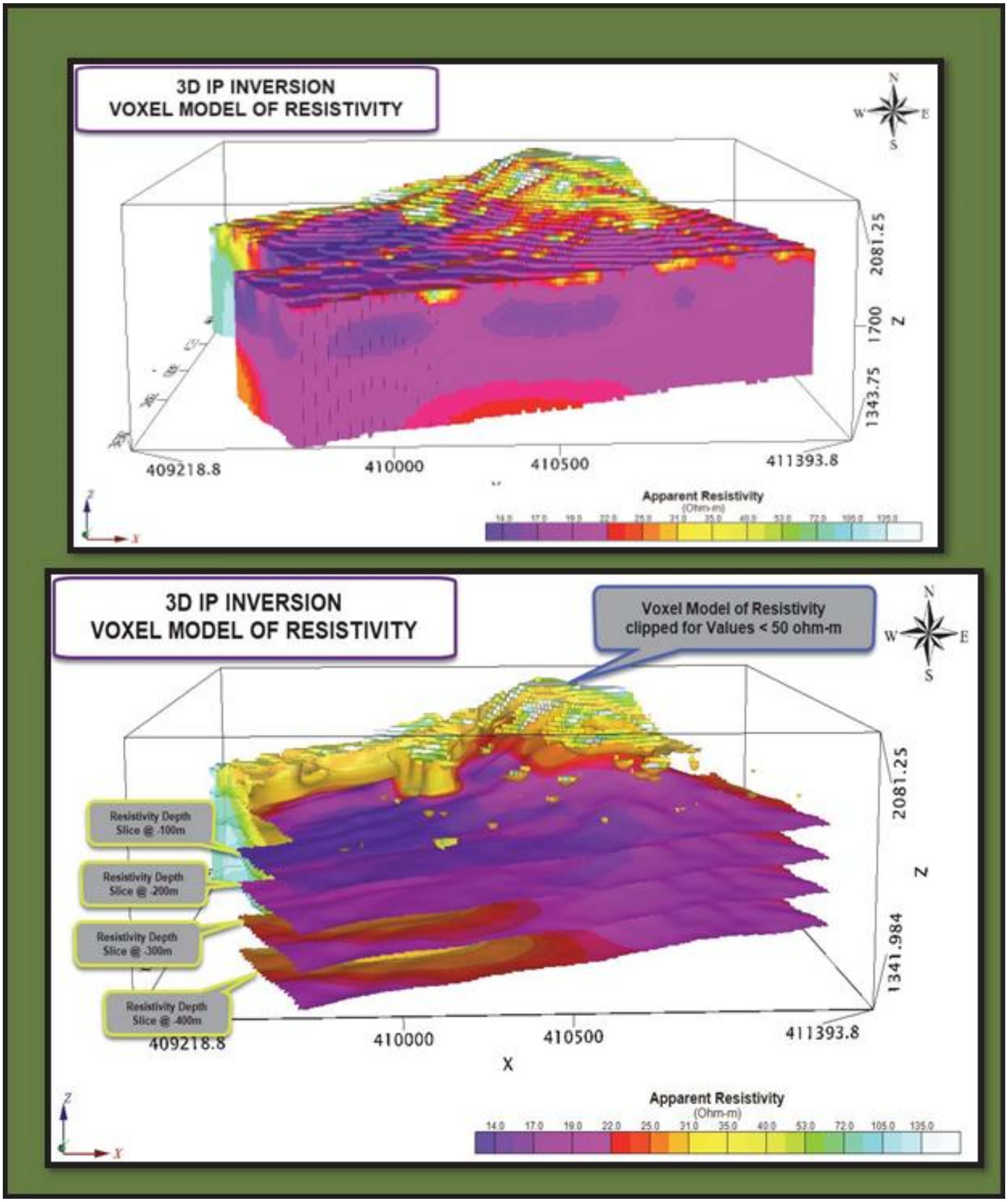
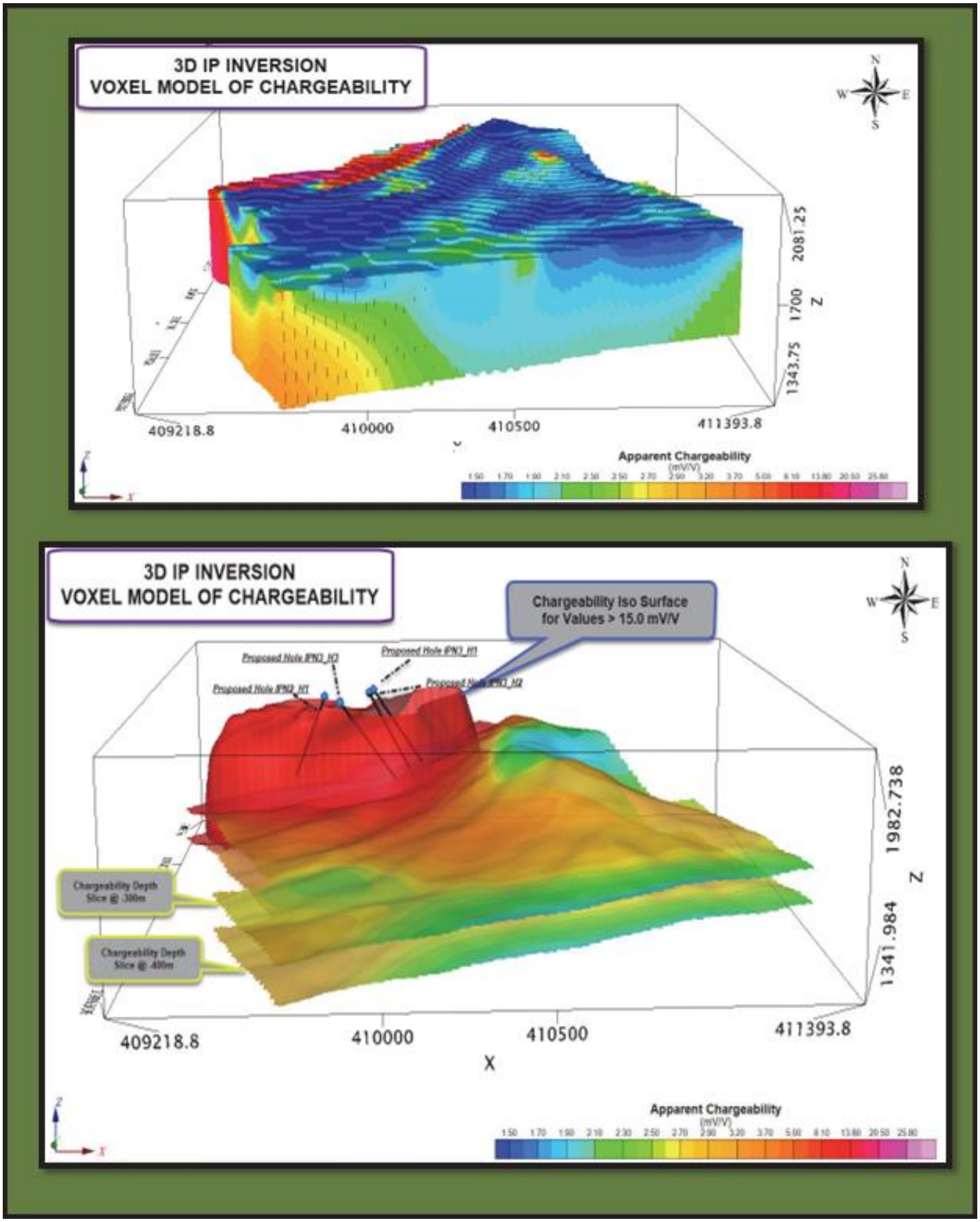


**Figure 9-5 3D IP Inversion, Chargeability Voxel Model, Nogalera Grid (Simard, 2019)**



### 9.1.2 San Gregorio Grid and Las Carolinas Grid

*San Gregorio Grid*

The survey was completed by using the pole-dipole electrode array with lines read with variable distances between the electrodes (50, 100 and 200 m) and n separation factors, giving an average depth of penetration of approximately 450 m (Simard, 2019). Two lines of this grid were also repeated using a small electrode spacing of 25m. The objective being to get a better delineation of the anomalies caused by closely spaced targets at shallow depths (up to 100 m). The injected current was 2.8 A, and the Vp readings were comprised between 2.2 and 3544 mV with a mean value of 189 mV.

The IP coverage totalled 9.0 line-km along seven (7) N45º lines every 50 m that were read over 1.0 or 2.0 km. The apparent resistivity values that were measured on this grid ranged between 20.9 and 1012 ohm-m with an average value of 107 ohm-m. The chargeability values fluctuated between 3.2 and 45.4 mV/V with a mean amplitude of 25.7 mV/V and a standard deviation of 8.0.

The inversion results indicate that the polarisable bodies are mainly defined at vertical depths ranging between 50 m and 250 m but might have near surface expression (Figure 9-7 and Figure 9-8). They could highlight mineralization developed within an altered layer that is locally enriched with metallic sulphides emplaced by the upwelling of hydrothermal fluids along faults. Looking at the maps, one should note that the main polarisable anomalous areas strike in a NW orientation, are relatively wide and open along strike in both directions. They are partially correlated with slight resistivity highs or lows.

Five (5) polarisable axes have been interpreted on this grid (Figure 9-9). An anomaly delineated in the middle of the grid is likely indicative of a broad sub-outcropping flat lying (?) body mainly circumscribed at vertical depths between 50 m and 200/250 m. It could be the potential marker of disseminated to sulphide-rich mineralization developed within an altered and silicified layer/horizon (or lithology). As a second priority target lies towards the west probably highlights the same type of target but is a smaller body.

*Las Carolinas Grid*

The survey was completed by using the pole-dipole electrode array with lines read with variable distances between the electrodes (50, 100 and 200 m) and in separation factors, giving an average depth of penetration of approximately 450 m. The injected current was approximately 2.7 A, and the Vp reading were comprised between 5.9 and 1824 mV with a mean value of 165 mV.

The IP coverage totaled 3.6 line-km along three (3) N65º lines every 100 m that were read over 1.2 km (Figure 9-6). The apparent resistivity values that were measured on this grid ranged between 42 and 491 ohm-m with an average value of 175 ohm-m. The chargeability values fluctuated between 2.0 and 26.3 mV/V with a mean amplitude of 14.7 mV/V and a standard deviation of 6.0.

Two main polarizable bodies (targets) can be observed from the 3D inversion voxel, both partially circumscribed at the western and eastern end of the survey grid (Figure 9-7Figure 9-8). The western body seems to be quite extensive and is associated with a more obvious signature. Furthermore, it is hosted within a more resistive formation and mainly defined below a vertical depth of 150 m. The eastern body is smaller, not as well contrasted, and delineated within a more conductive formation. According to the inversion result, it is either deep seated or comes to point closer to surface. Looking at the maps, one can note that the two mains polarizable areas (targets) are striking in a WNW to NW direction and are open along strike in both directions.

Two (2) polarizable axes have been interpreted on this grid and are labelled IPLC-1 and IPLC-2 (Figure 9-9). Depending upon their interest, it is recommend extending the three original survey lines over distances of 750 m westward and 500 m eastward in order to properly resolve these two anomalies. This will allow help to improve the inversion results, in order to better assess the location and geometry of the associated polarizable bodies/targets.

**Figure 9-6 Survey Grids and Topography, Las Carolinas and San Gregorio (Simard, 2019)**

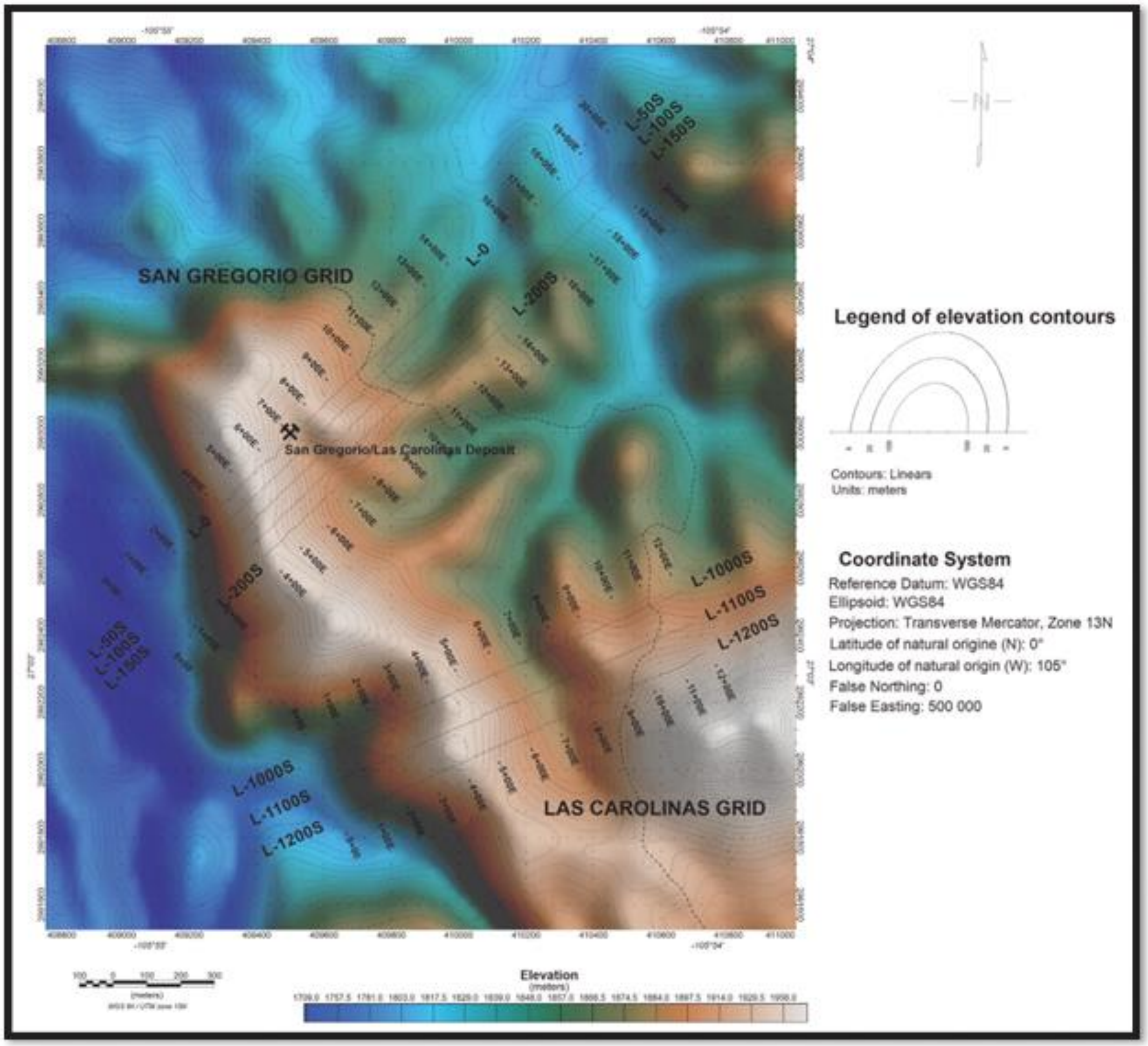


**Figure 9-7 3D IP Inversion, Resistivity Voxel Models, San Gregorio and Las Carolinas Grids (Simard, 2019)**

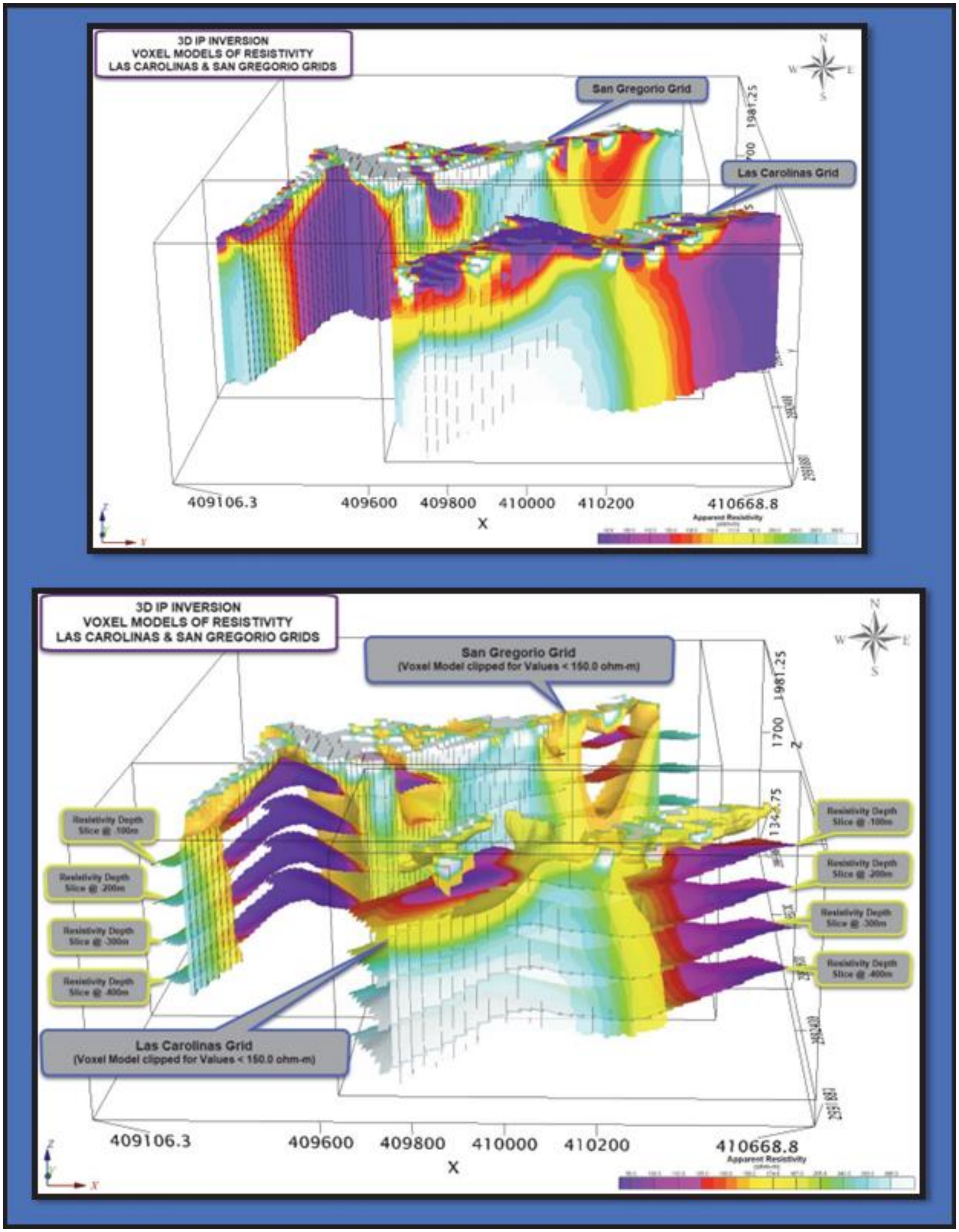


**Figure 9-8 3D IP Inversion, Chargeability Voxel Models, San Gregorio and Las Carolinas Grids (Simard, 2019)**

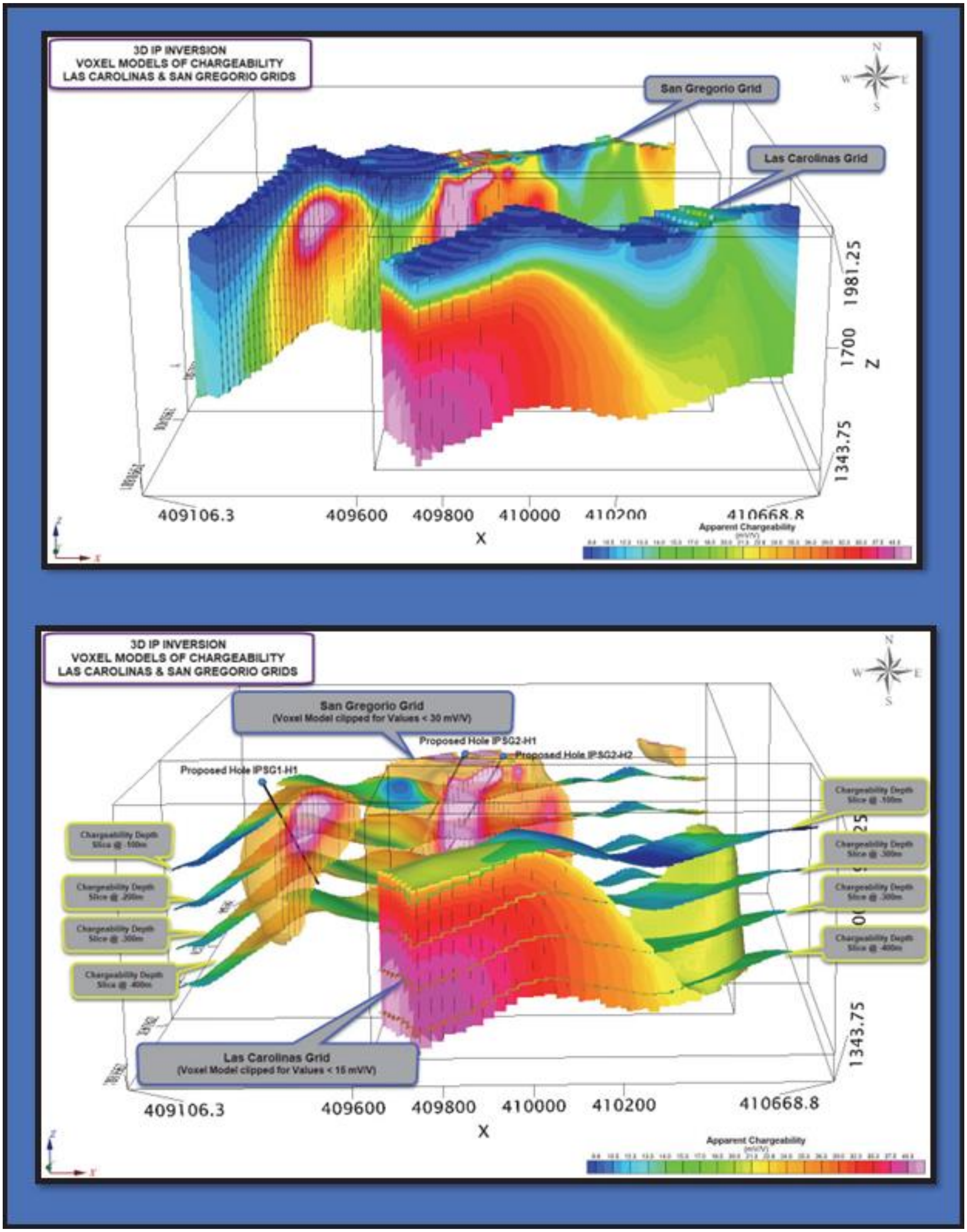
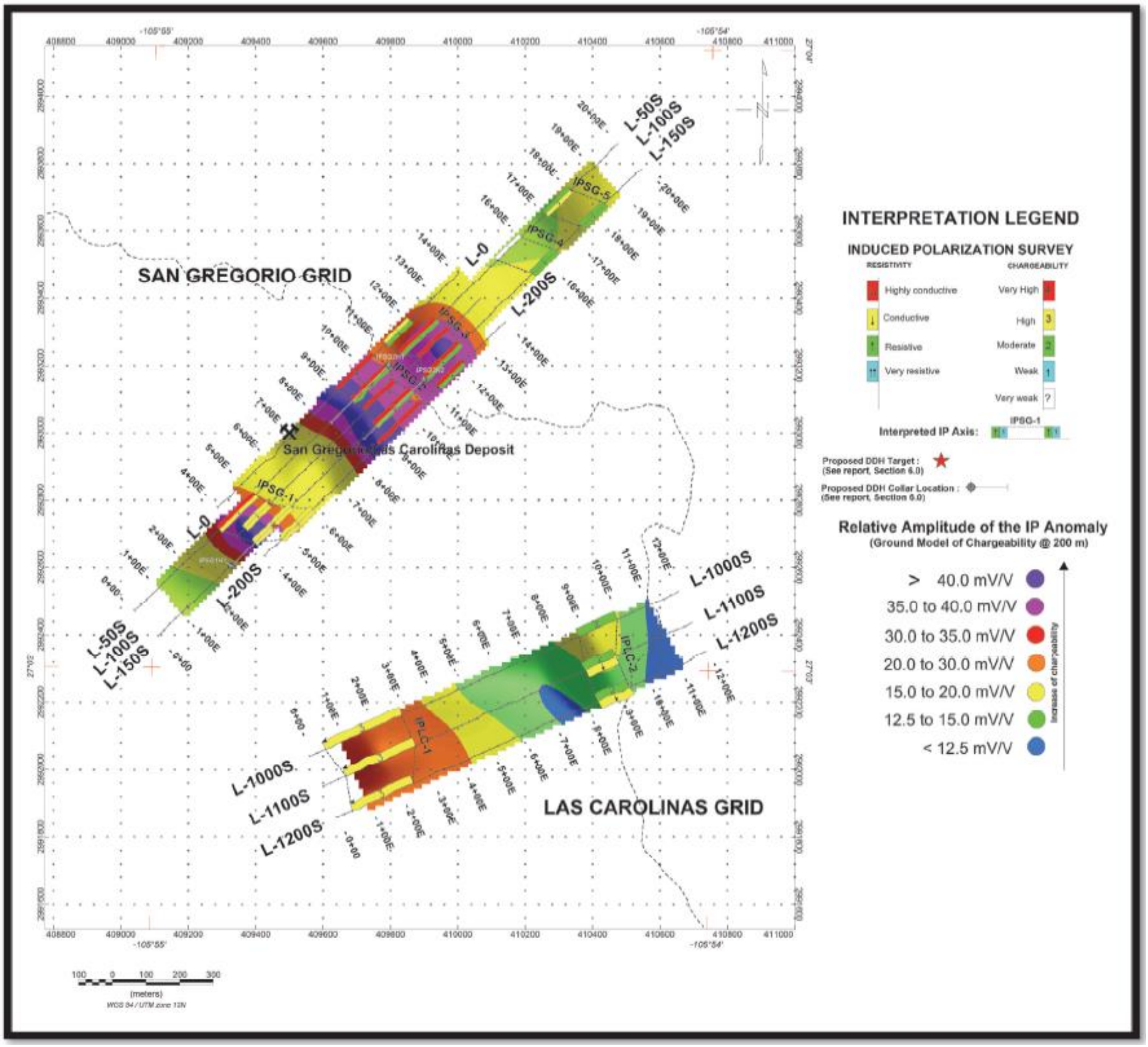


**Figure 9-9 Geophysical Interpretation, Las Carolinas and San Gregorio Grids (Simard, 2019)**




### 9.1.3 Conclusions

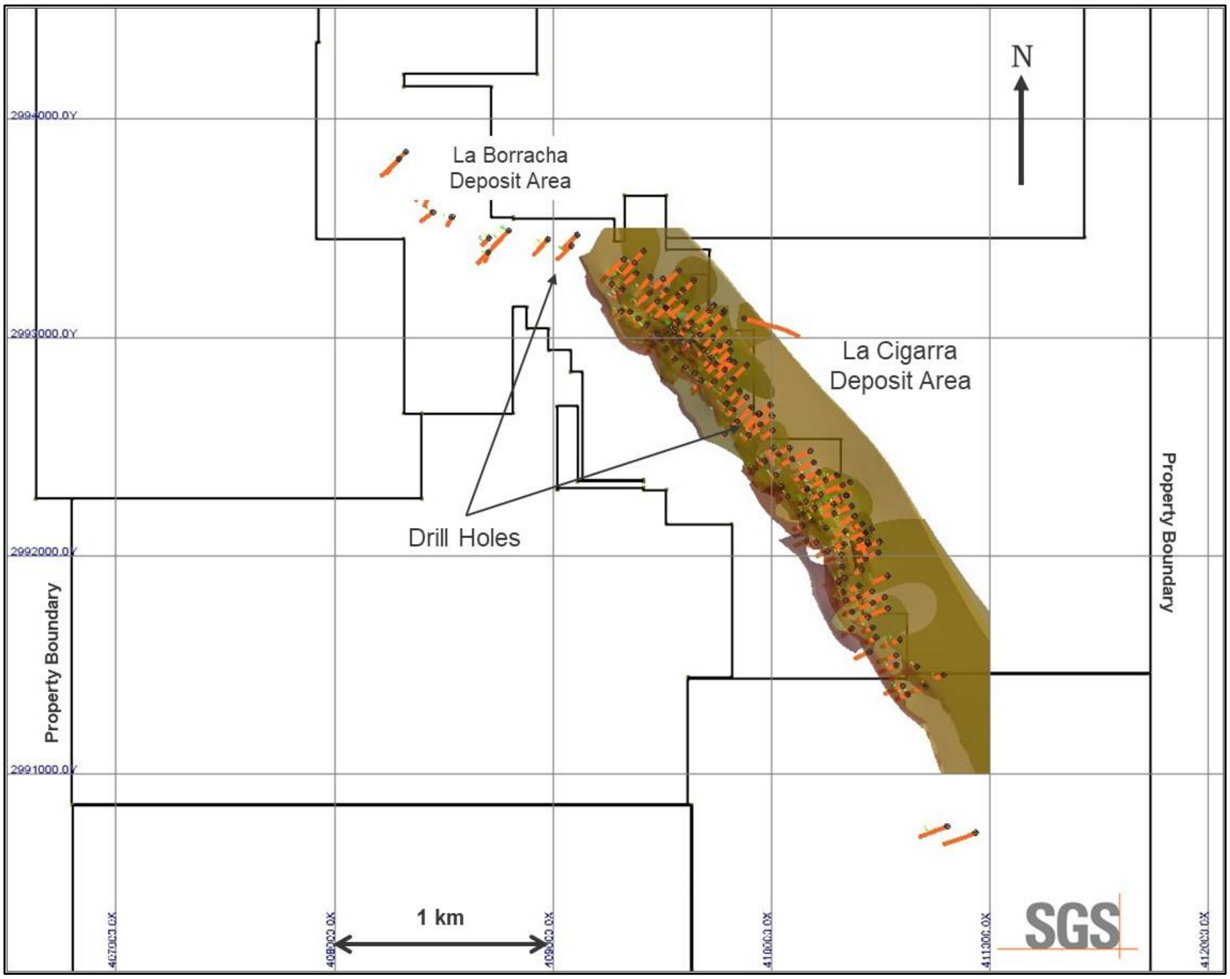
The interpretation of the IP data from this survey concludes that the most promising chargeability anomalies that were delineated are probably indicative of quite thick sub-tabular wide bodies (Simard, 2019). They could outline sulphide-rich mineralization locally developed within altered and silicified layers/lithologies, most likely emplaced due to the presence of hydrothermal fluids.

The IP geophysical work was successful in identifying zones with elevated chargeability. Drilling is recommended as a follow-up over the strongest anomalies and should be considered for inclusion in any subsequent drilling program.

# 10 DRILLING

Drilling completed on the Property prior to 2016 is described in technical reports on the Property by Reeves and Arseneau (2013) and Armitage and Campbell (2015). Prior to 2016, Northair completed 173 holes totaling 30,525.60 m (including two holes that were re-drilled) (Figure 10-1). See Appendix 1 for a summary of drill holes completed on the Property, and Appendix 2 for a summary of drill hole results for the Northair drilling.

**Figure 10-1 Location of Drill Holes on the Property completed by Northair from 2010 – 2014 With Respect to the Current La Cigarra Deposit Models**



The following is a description of the drilling completed on the Property by Kootenay between 2016 and 2018, since acquiring Northair. Only 3 drill holes by Kootenay were completed within the La Cigarra deposit (Las Carolinas Zone). The remainder of the drilling by Kootenay was completed elsewhere on the Property.

## 10.1 2016 Drilling

In 2016, Kootenay completed a 2,112 m, 11 hole drill program (CC-16-01 to 11) (Table 10-1) that discovered the RAM structure located approximately 700 m to the west and south of the La Cigarra silver deposit (Figure 10-2). The drill tested a 400 m strike length of the 3,800 m long RAM structure and dip extents between 65 and 200 m. Assay results from drilling confirm RAM is a strongly mineralized silver system, hosting multiple zones of quartz veining as sheeted, stockwork or brecciated veins within an altered structure that measures 50 to 150 m wide. The system remains open along strike to the north and south for up to 3,400 m and down dip to the west.

Drill Highlights from RAM Structure:

- CC-16-04 returning 89.83 g/t silver over 18.0 m; including 190.5 g/t silver over 3.0 m
- CC-16-09 returning 166.5 g/t silver over 6.0 m; including 761.0 g/t silver over 1.0 m
- CC-16-03 returning 58.86 g/t silver over 16.5 m; including 141.25 g/t silver over 4.5 m
- CC-16-01 returning 27.60 g/t silver over 31.1 m; including 83.0 g/t silver over 4.45 m
- CC-16-06 returning 56.45 g/t silver over 14.7 m; including 80.14 g/t silver over 9.35 m

Kootenay completed seven holes with 1,395 m of drilling (CC-16-12 to 18) (Table 10-1) along the La Soledad Structure (Figure 10-2). The drill program tested a 700 m strike length of the La Soledad structure, which extends southward along strike from the La Cigarra silver deposit for approximately 2 km. All seven holes intercepted significant widths of veining and varying grades of silver mineralization confirming the presence of a potentially large, mineralized structure (Table 10-2).

**Table 10-1 Listing of Drill Holes Completed in 2016**

| HOLE-ID | LOCATIONX | LOCATIONY | LOCATIONZ | LENGTH | YEAR | AZIMUTH | DIP |
|---|---|---|---|---|---|---|---|
| CC-16-01 | 409497.00 | 2991615.00 | 1852.82 | 126.00 | 2016 | 90.00 | -50.00 |
| CC-16-02 | 409497.00 | 2991615.00 | 1852.82 | 132.00 | 2016 | 90.00 | -70.00 |
| CC-16-03 | 409500.00 | 2991580.00 | 1853.33 | 119.00 | 2016 | 90.00 | -70.00 |
| CC-16-04 | 409495.00 | 2991512.00 | 1866.57 | 123.00 | 2016 | 90.00 | -55.00 |
| CC-16-05 | 409495.00 | 2991512.00 | 1866.57 | 210.00 | 2016 | 0.00 | -90.00 |
| CC-16-06 | 409488.00 | 2991399.00 | 1899.59 | 144.00 | 2016 | 80.00 | -70.00 |
| CC-16-07 | 409488.00 | 2991399.00 | 1899.59 | 130.00 | 2016 | 120.00 | -60.00 |
| CC-16-08 | 409495.00 | 2991686.00 | 1841.83 | 273.00 | 2016 | 90.00 | -50.00 |
| CC-16-09 | 409495.00 | 2991686.00 | 1841.83 | 288.00 | 2016 | 40.00 | -70.00 |
| CC-16-10 | 409335.00 | 2991573.00 | 1779.95 | 273.00 | 2016 | 90.00 | -55.00 |
| CC-16-11 | 409393.00 | 2991801.00 | 1796.73 | 294.00 | 2016 | 90.00 | -55.00 |
| CC-16-12 | 410658.82 | 2990055.03 | 1962.88 | 199.00 | 2016 | 270.00 | -70.00 |
| CC-16-13 | 410658.82 | 2990055.03 | 1962.88 | 268.50 | 2016 | 100.00 | -70.00 |
| CC-16-14 | 410720.32 | 2989932.02 | 1998.13 | 153.00 | 2016 | 290.00 | -55.00 |
| CC-16-15 | 410682.59 | 2989770.82 | 1996.16 | 222.00 | 2016 | 290.00 | -60.00 |
| CC-16-16 | 410682.59 | 2989770.82 | 1996.16 | 240.00 | 2016 | 265.00 | -60.00 |
| CC-16-17 | 410431.02 | 2989309.04 | 1997.46 | 117.00 | 2016 | 350.00 | -70.00 |
| CC-16-18 | 410594.57 | 2989580.10 | 2004.99 | 195.00 | 2016 | 280.00 | -65.00 |

**Figure 10-2 Location of Drill Holes on the Property completed by Kootenay in 2016 With Respect to the La Cigarra Deposit**

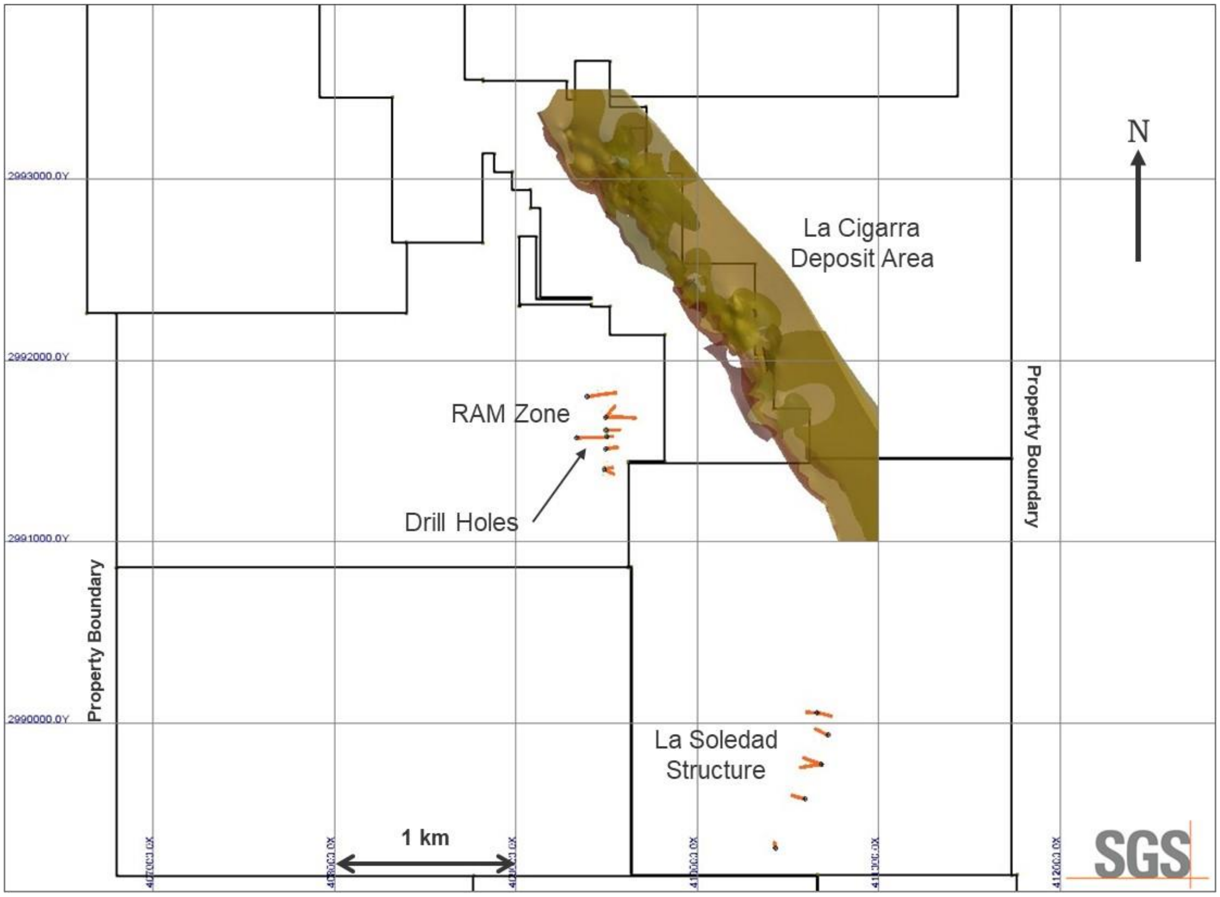



**Table 10-2 Summary of the 2016 Drilling within the La Soledad Zone**

| Hole ID | From (m) | To (m) | Interval (m) | Silver (g/t) | Gold (g/t) | Pb+Zn (%) | Cu (%) |
|---|---|---|---|---|---|---|---|
| CC-16-12 | 34 | 66 | 32 | 13.18 | 0.025 | 0.61 | 0.23 |
| Including | 54.5 | 57 | 2.5 | 21 | 0.049 | 0.565 | 1.04 |
| and | 156.63 | 166 | 9.37 | 23.9 | 0.024 | 0.02 | 0.01 |
| Including | 156.63 | 160.5 | 3.87 | 33 | 0.026 | 0.03 | 0.022 |
| CC-16-13 | 199 | 200 | 1 | 54 | 0.372 | 0.1 | 0.041 |
| CC-16-14 | 105.2 | 127.1 | 21.9 | 10.29 | 0.065 | 1.229 | 0.031 |
| Including | 116.4 | 124.6 | 8.2 | 15.33 | 0.142 | 1.35 | 0.05 |
| CC-16-15 | 158 | 162 | 4 | 36 | 0.037 | 0.037 | 0.008 |
| and | 199.25 | 200.9 | 1.65 | 17 | 0.038 | 0.441 | 0.019 |
| CC-16-16 | 120.7 | 121.6 | 0.9 | 3 | 0.032 | 0.583 | 0.486 |
| and | 165.5 | 167 | 1.5 | 45 | 0.041 | 0.004 | 0.006 |
| CC-16-17 | 15 | 35 | 20 | 4.53 | 0.014 | 0.234 | 0.035 |
| and | 73.5 | 76.5 | 3 | 10.5 | 0.081 | 0.397 | 0.01 |
| CC-16-18 | 40 | 52 | 12 | 16 | not reported | 0.368 | 0.009 |
| Including | 51.4 | 52 | 0.6 | 26 | not reported | 0.688 | 0.012 |

## 10.2 2017 Drilling

In 2017, Kootenay completed 19 drill holes (Table 10-3) for a total of 4,861 m in the La Borracha, La Navidad and Las Venedas areas (Figure 10-3). Significant drill intercepts are presented in Table 10-4.

Drilling was successful in the discovery of a new mineralized silver zone within the Las Venadas target area. This discovery area is blind to surface and lies approximately 1,000 m south of the edge of the La Cigarra resource as defined to date. More than 250 meters in core length of quartz-calcite and quartz vein breccia and veining within altered sediments was intercepted in hole CC-17-26 which bottomed in veining. Textures are indicative of a variant of an epithermal hydrothermal breccia complex. The zone is anomalous throughout. Individual samples grade as high as 799 g/t silver over 1.1 m and 692 g/t silver over 1 metre in two different zones indicating excellent grade potential. The best weighted average intervals in hole CC-17-26 are highlighted: 91.32 g/t silver over 29.5 m, including 123.24 g/t silver over 19.25 m, with 435.36 g/t silver over 2.5 m, and 113.78 g/t silver over 10.75 m. The best intercept to date elsewhere in the Las Venadas area is CC-17-27 which returned 107.15 g/t silver over 9.5 m.

The strength and intensity of brecciation, veining and alteration observed in hole CC-17-28 is consistent with discovery hole CC-17-26. Assays from hole CC-17-28 returned a series of good grading silver intercepts, extending the Las Venedas discovery zone 140 m northeast of original discovery hole CC-17-26. The weighted average intervals are: 168.64 g/t silver over 7.0 m, within 121.25 g/t silver over 12.0 m and 92.88 g/t silver over 24.20 m.

A La Borracha drill intercept in Hole CC-17-37, about 500 m northwest of the La Cigarra resource area, includes 107.2 g/t silver over 8.0 m within a wider intercept of 31 m grading 45.75 g/t silver. There is a total of 46 m of mineralization in the hole separated by 15 m of rhyolite dyke. The second interval grades 42 g/t silver over 15 m. These results extend silver mineralization 100 m down dip from a previous hole (CC-12-089), which returned an intercept of 56 g/t silver over 9.25 m. To date, 12 holes have been drilled along the La Borracha trend with nine of those being drilled too far west to hit the main mineralized structure extending northward from the resource. Additional previous holes of note include 166 g/t silver over 4.5 m (CC 12-93), 130 g/t silver over 2.95 m (CC-11-29) and 455 g/t silver over 1.5 m (CC-11-28).

**Table 10-3 Listing of Drill Holes Completed in 2017**

| HOLE-ID | LOCATIONX | LOCATIONY | LOCATIONZ | LENGTH | YEAR | AZIMUTH | DIP |
|---|---|---|---|---|---|---|---|
| CC-17-19 | 410793.00 | 2990443.00 | 1943.75 | 123.00 | 2017 | 75.00 | -55.00 |
| CC-17-20 | 410793.00 | 2990443.00 | 1943.75 | 195.00 | 2017 | 255.00 | -65.00 |
| CC-17-21 | 410872.00 | 2990584.00 | 1939.06 | 88.50 | 2017 | 310.00 | -70.00 |
| CC-17-22 | 410872.00 | 2990584.00 | 1939.06 | 144.00 | 2017 | 130.00 | -70.00 |
| CC-17-23 | 410872.00 | 2990584.00 | 1939.06 | 156.00 | 2017 | 220.00 | -70.00 |
| CC-17-24 | 410873.00 | 2990693.00 | 1928.30 | 309.00 | 2017 | 200.00 | -45.00 |
| CC-17-25 | 410793.00 | 2990542.00 | 1931.06 | 238.50 | 2017 | 200.00 | -60.00 |
| CC-17-26 | 410793.00 | 2990542.00 | 1931.06 | 528.50 | 2017 | 110.00 | -60.00 |
| CC-17-27 | 410793.00 | 2990542.00 | 1931.06 | 263.50 | 2017 | 250.00 | -50.00 |
| CC-17-28 | 410912.00 | 2990582.00 | 1952.83 | 485.00 | 2017 | 120.00 | -65.00 |
| CC-17-29 | 410931.00 | 2990948.00 | 1960.58 | 219.00 | 2017 | 260.00 | -65.00 |
| CC-17-30 | 410931.00 | 2990948.00 | 1960.58 | 213.00 | 2017 | 130.00 | -60.00 |
| CC-17-31 | 410793.00 | 2990542.00 | 1931.06 | 483.40 | 2017 | 120.00 | -45.00 |
| CC-17-32 | 410132.00 | 2993169.00 | 1884.34 | 202.20 | 2017 | 70.00 | -55.00 |
| CC-17-33 | 410395.00 | 2993073.00 | 1832.39 | 300.00 | 2017 | 255.00 | -50.00 |
| CC-17-34 | 410319.00 | 2993001.00 | 1835.66 | 243.00 | 2017 | 250.00 | -50.00 |
| CC-17-35 | 410292.00 | 2993110.00 | 1862.44 | 249.00 | 2017 | 250.00 | -50.00 |
| CC-17-36 | 410764.00 | 2993189.00 | 1877.07 | 228.00 | 2017 | 250.00 | -60.00 |
| CC-17-37 | 408747.00 | 2993577.00 | 1765.98 | 192.00 | 2017 | 190.00 | -45.00 |

**Figure 10-3 Location of Drill Holes on the Property completed by Kootenay in 2017 With Respect to the La Cigarra Deposit**

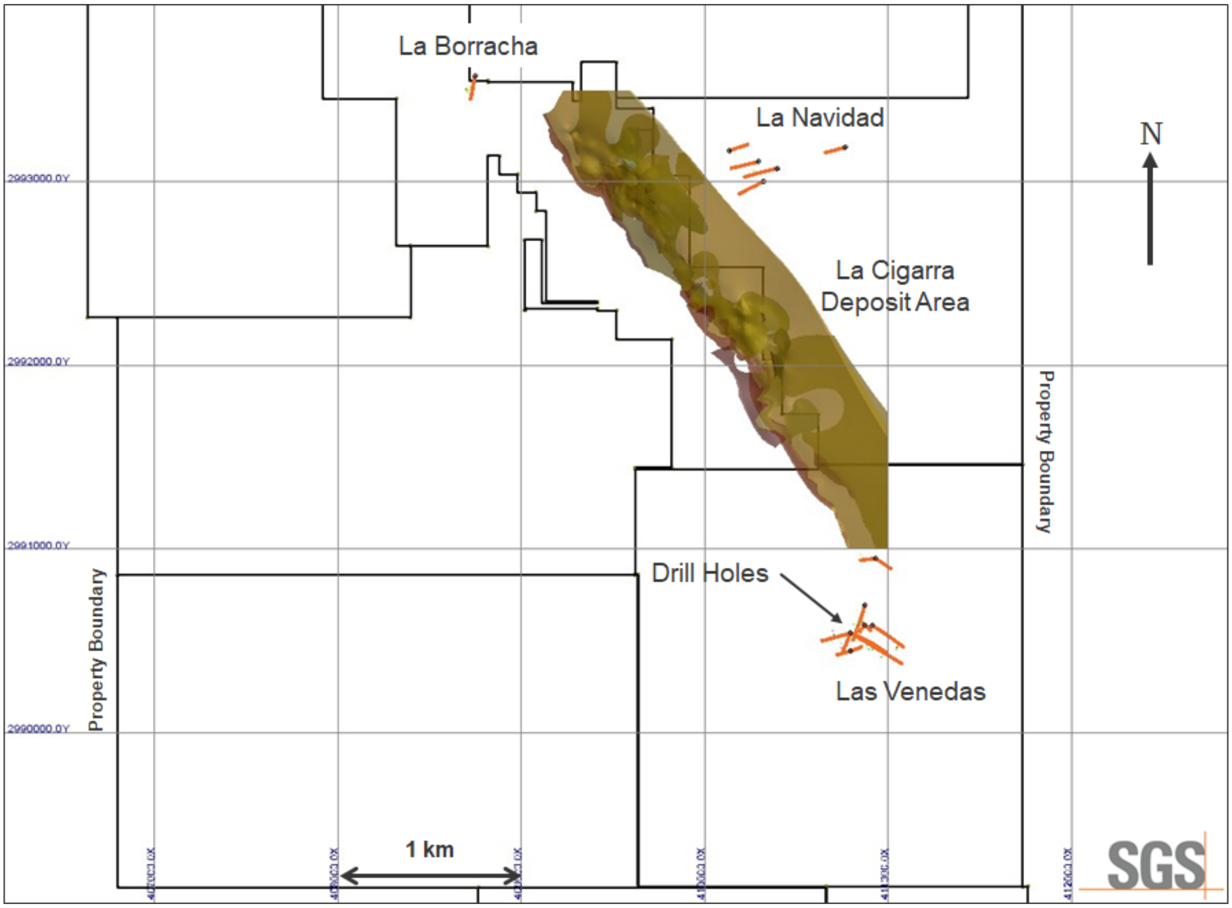



**Table 10-4 2017 Significant Drill Results**

| Hole ID | From (m) | To (m) | Interval (m) | Silver (g/t) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|
| CC-17-19 | 6 | 52 | 46 | 8.2 | 0.16 | 0.19 |
| Including | 33 | 36 | 3 | 15.7 | 0.39 | 0.19 |
| CC-17-20 | 33 | 37 | 4 | 27.0 | 0.04 | 0.08 |
| | 84 | 89 | 5 | 27.0 | 0.02 | 0.08 |
| CC-17-21 | 9 | 19 | 10 | 19.5 | 0.28 | 0.33 |
| Including | 9 | 16 | 7 | 24.9 | 0.34 | 0.34 |
| | 66 | 69 | 3 | 35.0 | 0.11 | 0.23 |
| | 77 | 79 | 2 | 166.0 | 0.06 | 0.21 |
| CC-17-22 | 8 | 20 | 12 | 73.5 | 0.30 | 1.22 |
| Including | 12 | 15 | 3 | 189.3 | 0.34 | 3.29 |
| | 31 | 36 | 5 | 16.6 | 0.33 | 0.29 |
| | 57 | 60 | 3 | 26.3 | 0.32 | 0.07 |
| CC-17-23 | 7.5 | 32 | 24.5 | 24.4 | 0.34 | 0.64 |
| | 127 | 134.5 | 7.5 | 22.6 | 0.36 | 0.08 |
| CC-17-24 | 174 | 184 | 10 | 47.5 | 0.13 | 0.13 |

| Hole ID | From (m) | To (m) | Interval (m) | Silver (g/t) | Pb (%) | Zn (%) |
|---|---|---|---|---|---|---|
| | 190 | 192 | 2 | 31.5 | 0.02 | 0.08 |
| CC-17-25 | 54 | 73 | 19 | 20.8 | 0.38 | 0.15 |
| | 146 | 156 | 10 | 17.7 | 0.01 | 0.21 |
| | 201 | 205 | 4 | 58.8 | 0.03 | 0.09 |
| CC-17-26 | 33 | 43.5 | 10.5 | 17.8 | 0.27 | 0.92 |
| | 60 | 75 | 15 | 15.8 | 0.28 | 0.21 |
| | 246 | 282 | 36 | 26.6 | 0.01 | 0.03 |
| | 297 | 301.5 | 4.5 | 105.4 | 0.15 | 0.43 |
| Including | 298 | 301.5 | 3.5 | 135.6 | 0.17 | 0.48 |
| | 342 | 348 | 6 | 31.3 | 0.18 | 0.46 |
| | 387.5 | 417 | 29.5 | 91.3 | 0.22 | 0.16 |
| Including | 387.5 | 406.8 | 19.25 | 123.2 | 0.25 | 0.23 |
| Including | 387.5 | 390 | 2.5 | 435.4 | 0.55 | 0.99 |
| Including | 396 | 406.8 | 10.75 | 113.8 | 0.32 | 0.16 |
| | 456 | 462 | 6 | 43.3 | 0.00 | 0.01 |
| | 487.5 | 491 | 3.5 | 72.7 | 0.11 | 0.26 |
| | 499 | 501 | 2 | 169.0 | 0.28 | 0.33 |
| CC-17-27 | 48 | 64 | 16 | 14.5 | 0.58 | 0.07 |
| | 136.5 | 146 | 9.5 | 107.2 | 0.03 | 0.10 |
| Including | 143 | 146 | 3 | 281.0 | 0.05 | 0.14 |
| CC-17-29 | 195 | 200 | 5 | 41.0 | 0.03 | 0.08 |
| CC-17-30 | 191 | 197 | 6 | 8.3 | 0.25 | 0.28 |
| CC-17-31 | 32 | 78 | 46 | 12.5 | 0.17 | 0.79 |
| ncluding | 62 | 78 | 16 | 20.5 | 0.29 | 1.41 |
| Including | 72.5 | 78 | 5.5 | 31.8 | 0.36 | 1.89 |
| | 145 | 218 | 73 | 13.8 | 0.19 | 0.54 |
| Including | 157 | 175.5 | 18.5 | 20.8 | 0.30 | 0.77 |
| Including | 194 | 204 | 10 | 14.7 | 0.26 | 0.70 |
| | 256 | 285 | 29 | 17.8 | 0.24 | 0.69 |
| Including | 258 | 266 | 8 | 27.6 | 0.35 | 1.04 |
| CC-17-33 | 46 | 47 | 1 | 5.0 | 0.03 | 0.24 |
| | 52.35 | 54 | 1.65 | 1.0 | 0.01 | 0.04 |
| | 197 | 204.6 | 7.6 | 27.2 | 0.02 | 0.06 |
| Including | 197 | 200 | 3 | 51.5 | 0.04 | 0.11 |
| CC-17-36 | 24 | 26 | 2 | 0.8 | 0.00 | 0.04 |
| | 105 | 105.8 | 0.8 | 21.0 | 0.21 | 2.54 |
| CC-17-37 | 78 | 93 | 15 | 42.1 | 0.24 | 0.21 |
| Including | 84 | 93 | 9 | 52.0 | 0.21 | 0.26 |
| | 107 | 138 | 31 | 45.8 | 0.26 | 0.19 |
| Including | 111 | 119 | 8 | 107.1 | 0.59 | 0.30 |
| | 132 | 138 | 6 | 27.2 | 0.05 | 0.11 |

## 10.3 2018 Drilling

In 2018, Kootenay completed 14 drill holes (Table 10-5) for a total of 2,814 m in the La Borracha, Las Carolinas (La Cigarra) and the newly Identified Nogalera Gold Trend (Figure 10-4 and Figure 10-5). Significant drill intercepts are presented in Table 10-4.

A total of seven broadly spaced holes were drilled across the La Borracha Zone (Figure 10-4). All seven holes hit the mineralized structure, with the two highest grading holes being the two holes furthest from the resource. Highlights included:

- Hole CC-18-44 intercepted 73.00 g/t silver over 2.0 m and 32.93 g/t silver over 12.37 m
- Hole CC-18-42 returning 437.08 g/t silver over 10.0 m within 267.07 g/t silver over 17.0 m; includes samples of 947 g/t silver over 0.67 m, 1,755 g/t silver over 0.87 m, 519 g/t silver over 1.0 m and 1145 g/t silver over 1.0 m.
- Hole CC-18-43 returning 144.05 g/t silver over 10.0 m within 112.00 g/t silver over 16.0 m and 61.8 g/t silver over 34.50 m
- Hole CC-18-38 returning 102.80 g/t silver over 3.55 m within 40.17 g/t silver over 22.0 m

The La Borracha mineralized structure is open along strike to the northwest as well as down dip. The results indicate the mineralized structure is continuous with the La Cigarra resource for an additional 1000 m of strike to the northwest. It varies in width from about 15 to 45 m and has been tested by broad spaced drilling from surface down dip from between 50 m and 150 m.

Drilling in the Las Carolinas Zone (La Cigarra Deposit) was limited to 3 drill holes, CC-18-49 to 51 (Figure 10-4). Highlights of this drilling includes:

- Hole CC-18-49 tested for continuity of the 104 vein and hit 143.86 g/t silver over 6.79 m within a wider intercept of 78.89 g/t silver over 14.0 m.
- Hole CC-18-51 intercepted 109.27 g/t silver over 12.0 m within a wider intercept of 45.22 g/t silver over 41.38 m, extending the mineralized silver zone to the south for 100 m as well as down dip for 200 m.

Drilling in Nogalera Gold trend returned only anomalous amounts of gold in narrow structures. The program was curtailed since although the results were successful in extending mineralization along strike of the La Cigarra resource area they were not adding value. Highlights of drilling include:

- Hole CC-18-47 intercepted 2,890.00 g/t silver over 1.0 metre within a wider intercept of 736.25 g/t silver over 4.0 m
- High grade silver mineralization at Nogalera looks promising as it is associated with a structurally focused zone of alteration and mineralization traceable for 800 to 1,000 m on surface. Holes CC 18-45,46 and 48 all hit narrow weakly anomalous gold and or silver within similar structurally focused zones.

**Table 10-5 Listing of Drill Holes Completed in 2018**

| HOLE-ID | LOCATIONX | LOCATIONY | LOCATIONZ | LENGTH | YEAR | AZIMUTH | DIP |
|---|---|---|---|---|---|---|---|
| CC-18-38 | 408701.00 | 2993633.00 | 1766.95 | 211.00 | 2018 | 190.00 | -50.00 |
| CC-18-39 | 408557.00 | 2993646.00 | 1739.92 | 162.00 | 2018 | 240.00 | -50.00 |
| CC-18-40 | 408557.00 | 2993646.00 | 1739.92 | 168.00 | 2018 | 170.00 | -55.00 |
| CC-18-41 | 408918.00 | 2993509.00 | 1779.94 | 165.00 | 2018 | 185.00 | -55.00 |
| CC-18-42 | 408392.00 | 2993791.00 | 1719.42 | 183.00 | 2018 | 190.00 | -50.00 |
| CC-18-43 | 408374.00 | 2993901.00 | 1718.61 | 210.00 | 2018 | 190.00 | -50.00 |
| CC-18-44 | 408761.00 | 2993673.00 | 1766.02 | 252.00 | 2018 | 190.00 | -50.00 |
| CC-18-45 | 409501.00 | 2988152.00 | 1824.40 | 146.20 | 2018 | 75.00 | -45.00 |
| CC-18-46 | 409603.00 | 2988230.00 | 1847.79 | 431.40 | 2018 | 255.00 | -60.00 |
| CC-18-47 | 409428.00 | 2988380.00 | 1801.89 | 237.00 | 2018 | 255.00 | -50.00 |
| CC-18-48 | 409344.00 | 2988384.00 | 1796.18 | 186.00 | 2018 | 35.00 | -55.00 |
| CC-18-49 | 410402.00 | 2992029.00 | 1907.91 | 50.00 | 2018 | 245.00 | -45.00 |
| CC-18-50 | 410504.00 | 2991912.00 | 1923.66 | 115.00 | 2018 | 245.00 | -45.00 |
| CC-18-51 | 410667.00 | 2991866.00 | 1949.36 | 297.00 | 2018 | 245.00 | -45.00 |

**Figure 10-4 Location of Drill Holes on the Property completed by Kootenay in 2018 in the La Borracha and Las Carolinas Areas**

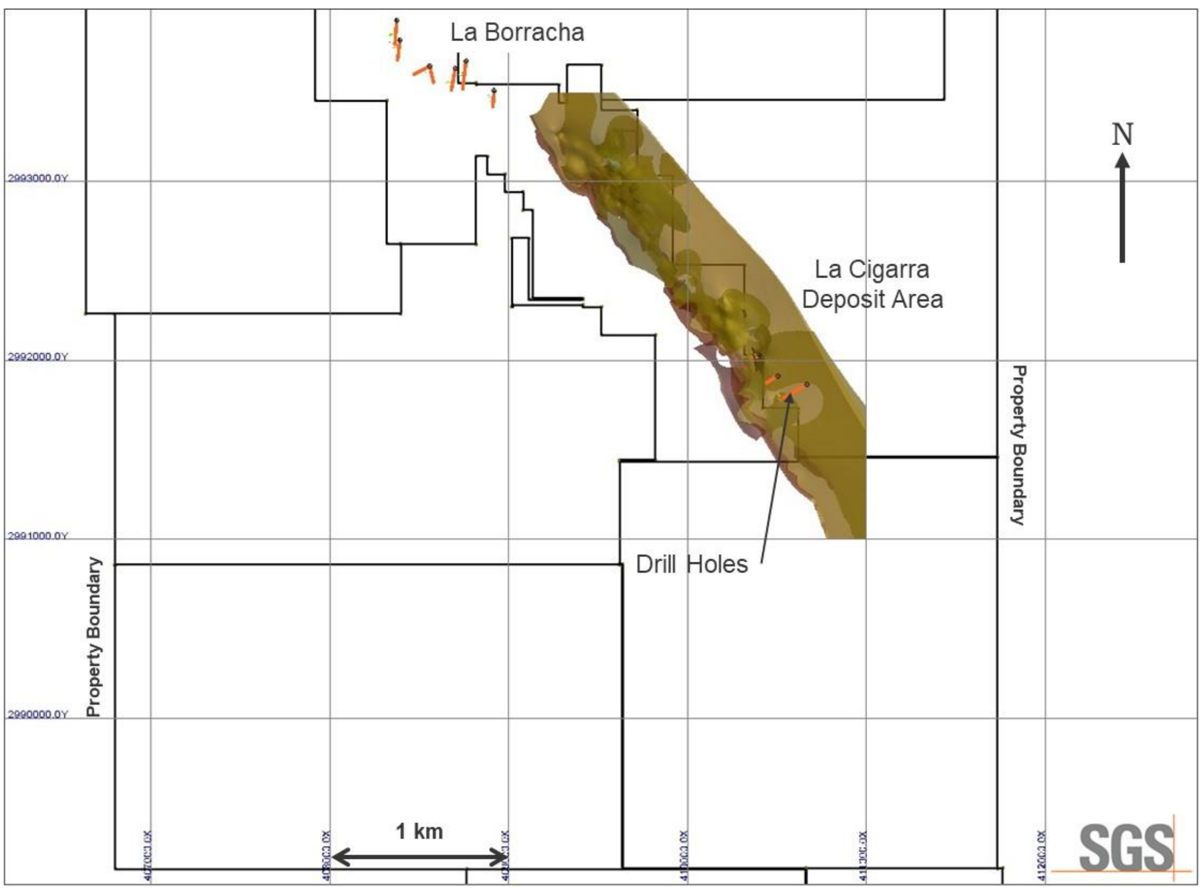
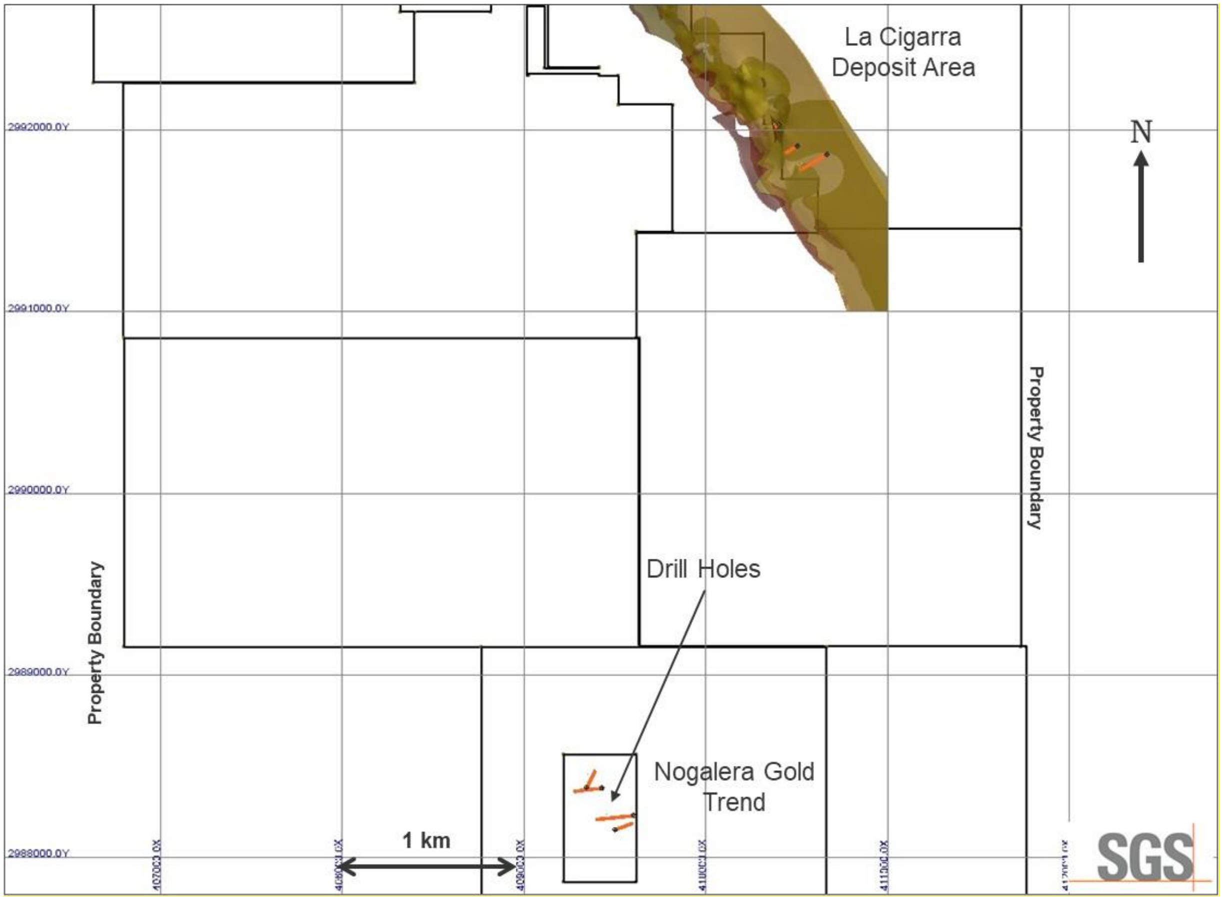


**Figure 10-5 Location of Drill Holes on the Property completed by Kootenay in 2018 in the newly Identified Nogalera Gold Trend**



# 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Since acquiring the Property in November 2016, Kootenay has maintained a comprehensive and consistent system for the sample preparation, analysis, and security of all drill core samples, including the implementation of a consistent QA/QC program. The current MRE includes drilling data collected by Northair between 2010 and 2014 and by Kootenay in 2018. The following describes sample preparation, analyses and security protocols implemented by Kootenay and Northair with analytical labs and analysis methods summarised in Table 11-1.

Sample preparation, analyses and security for the work competed during the 2010-2012 programs is summarized from the technical report on the Property by Reeves and Arseneau (2013), and the work competed during the 2014 program is summarized from the technical report on the Property by Armitage and Campbell (2015).

Since the beginning of drilling by Kootenay in 2016, all samples have been shipped to ALS Limited in Chihuahua, Chihuahua, Mexico for sample preparation and for analysis at the ALS laboratory in North Vancouver, BC, Canada. The ALS Chihuahua and North Vancouver facilities are ISO 9001 and ISO/IEC 17025 certified. Silver and base metals were analyzed using a high-grade four-acid digestion with an inductively coupled plasma ("ICP") finish and gold was assayed by 30 gram fire assay with atomic absorption ("AA") spectroscopy finish. Over-limit analyses for silver >200 ppm were re-assayed using an ore-grade four-acid digestion with an ICP finish. Samples with over-limit silver assays > 1500 ppm were fire assayed by gravimetric methods on 30 g sample pulps. Control samples comprising certified reference samples, blanks, and duplicate samples were systematically inserted into the sample stream and analyzed as part of the Company's QA/QC protocol. The Authors are independent of ALS Limited in Chihuahua, Chihuahua, Mexico and North Vancouver, BC, Canada.

**Table 11-1 Summary of Analytical Labs and Analysis Methods 2010 – 2018**

| Year | Company | Lab & Location | Prep Code | Fire Assay Method | Fire Assay Code | Multi-element Method | Multi-element Code |
|---|---|---|---|---|---|---|---|
| 2010-2014 | Groupo Northair | ALS Limited, Chihuahua, Mexico & Vancouver, Canada | PREP-31 | Pb fire assay (FA) 30g fusion – Au FA w/ AAS finish, overlimit ICP Ag > 100 ppm FA w/ gravimetric finish | Au-AA23, Ag-GRA21 | 4 Acid digestion ICP-AES with ore-grade over-limit | ME-ICP61, OG62 |
| 2012 (select samples only) | Groupo Northair | Inspectorate Laboratories, Durango, Mexico & Reno, Nevada, USA | - | Pb fire assay (FA) 30g fusion – Au FA w/ AAS finish | - | Aqua regia digestion ICP-OES with ore-grade AAS over-limit | - |
| 2016-2018 | Kootenay Silver | ALS Limited, Chihuahua, Mexico & Vancouver, Canada | PREP-31 | Pb fire assay (FA) 30g fusion – Au FA w/ AAS finish, overlimit ICP Ag > 1500 ppm FA w/ gravimetric finish | Au-AA23, Ag-GRA21 | High-grade 4 Acid digestion ICP-AES with ore-grade over-limit | ME-ICP61a, OG62 |

Sampling QA/QC programs are set in place to ensure the reliability and trustworthiness of exploration data. They include written field procedures and independent verifications of drilling, surveying, sampling, assaying, data management, and database integrity. Appropriate documentation of quality-control measures and regular analysis of quality-control data are essential for the project data and form the basis for the quality-assurance program implemented during exploration.

Analytical quality control measures typically involve internal and external laboratory control measures implemented to monitor sampling, preparation, and assaying precision and accuracy. They are also essential to prevent sample mix-up and monitor the voluntary or inadvertent contamination of samples. Sampling QA/QC protocols typically involve regular duplicate and replicate assays as well as the insertion of blanks and standards (certified reference materials – “CRMs”). Routine monitoring of quality control samples is undertaken to ensure that the analytical process remains in control and confirms the accuracy and precision of laboratory analyses. In addition to laboratory internal quality control protocols, sample batches should be evaluated for evidence of suspected cross sample contamination, certified reference material performance evaluated relative to established warning and failure limits to ensure the analytical process remains in control while maintaining an acceptable level of accuracy and precision, duplicate and replicate assay performance evaluated, and any concerns communicated to the laboratory in a timely fashion. Check assaying is typically performed as an additional reliability test of assaying results. These checks involve re-assaying a set number of rejects and pulps at a second umpire laboratory.

## 11.1 2010 – 2012 Drilling Programs (Northair)

### 11.1.1 Sample Preparation and Security

During the course of drilling, core, which was put in plastic boxes capable of holding about 2.0 m, was normally delivered by company personnel from the drill site to the warehouse every afternoon. In the warehouse core recoveries and RQD were determined by trained helpers before the core was logged by company geologists and sample intervals marked out. Sample numbers were then assigned to the sample intervals and standards and blanks inserted into the boxes and sample stream were pre-determined by company geologists. Pieces of flagging with sample numbers inscribed were then stapled to the inside row of each box at the start of each sample interval. Sample intervals, which are based on geology wherever possible, vary between a minimum 0.5 m and a maximum 1.5 m.

The core was then photographed and bulk densities measured before being split and sampled using mechanical and hydraulic core splitters.

All rock and core samples are secured in plastic sample bags with sure-lock straps then put into rice sacks for shipping, also secured with sure-lock straps. Soil samples are kept in brown, kraft bags. Until shipping, all samples were stored in the company’s locked warehouse in Parral.

All rock samples, chips from the 15 reverse circulation drill holes, and core from 112 diamond drill holes were analyzed by ALS Limited. Sample processing was carried out at their facility in Chihuahua, Mexico where all rock and core samples are dried followed by crushing the entire sample to better than 70% passing through a 2 mm (Tyler 10 mesh) screen. A split of 250 grams was taken and pulverized to better than 85% passing a 75 micron (Tyler 200 mesh) screen (ALS Method Code PREP-31); this pulp was then air-freighted to the ALS Limited laboratory in Vancouver, Canada for analysis.

Samples submitted to ALS were picked up at the company warehouse and shipped directly via courier to the sample processing facility in Chihuahua. Pulps from there were sent by ALS to their facility in Vancouver, British Columbia where they were analyzed. The ALS Chihuahua and North Vancouver facilities are ISO 9001 and ISO/IEC 17025 certified. The Authors are independent of ALS Limited in Chihuahua, Chihuahua, Mexico and North Vancouver, BC, Canada.

To help speed up the receipt of assay results, samples from 27 diamond drill holes were submitted to Inspectorate Laboratories in Durango, Mexico for sample preparation. These samples were dried then crushed to better than 70% passing through a 10 mesh screen using a TM Engineering jaw crusher. A 250 gram sub-sample was taken and pulverized to better than 85% passing a -200 mesh screen; this pulp was then airfreighted to the Inspectorate Laboratory in Reno, Nevada for analysis.

Samples submitted to Inspectorate were picked up at the warehouse by an Inspectorate truck and staff and delivered directly to their facility in Durango. Pulps from there were sent by Inspectorate to their laboratory in Reno, Nevada where they were analyzed. The Inspectorate Durango, Mexico and Reno, Nevada facilities are ISO/IEC 17025 certified.

Soil samples were also submitted to the ALS sample process facility in Chihuahua, Mexico where they were dried then sieved through 180 micron (80 mesh) screens. Both size fractions were retained. Analysis was carried out on the fine fraction which included pulverizing to better than 85% passing a 75 micron (Tyler 200 mesh) screen; the pulp was then air-freighted to the ALS laboratory in Vancouver, Canada for analysis.

On a regular basis during the ongoing drilling program, drill hole collars were surveyed by Ingeniero Jesus Manuel Elias N. of Parral, Chihuahua, using a Trimble 4800 Double frequency RTK, GPS system capable of determining co-ordinates and elevations to within 1.5 cm. Cement blocks with hole numbers, depth, azimuth and inclination inscribed are put on top each hole to preserve the hole for possible future re-entry.

### 11.1.2 Sample Analyses

The original 255 rock samples collected in 2008 were analyzed by ALS Chemex (subsequently ALS Limited) for 12 elements including Au, Ag, As, Ba, Bi, Cu, Hg, Mo, Pb, Sb, Te, and Zn by conventional inductively coupled plasma-atomic emission spectrometry (ICP-AES) analysis using a 0.50 gram sub-sample with a four acid digestion.

Subsequent rock samples, chips from the 15 reverse circulation holes and core from 112 diamond drill holes were analyzed by ALS Limited, but for 33 elements plus gold. The ICP analysis details are as described above (ALS Method Code ME-ICP61). Gold values were determined using the fire assay procedure with an AA finish on 30 gram sub-samples (ALS Method Code Au-AA23).

All samples returning $\geq$ 100ppm Ag were re-assayed by fire assay using a gravimetric procedure on 30 gram sub-samples (ALS Method Code Ag-GRA21). Samples returning $\geq$ 10,000ppm Pb, Zn or Cu were re-assayed using a HF-$HNO_3$-$HClO_4$ digestion and ICP (ALS Method Code OG62).

Samples submitted to the Inspectorate laboratory were analyzed for 30 elements by conventional inductively coupled plasma-optical emissions spectrometry (ICP-OES) using a 0.50 gram sub-samples and aqua regia digestion. Gold values are determined using a fire assay and atomic absorption finish. Overlimits (>100 ppm Ag and 10,000 ppm Pb, Zn or Cu) were determined by using an aqua regia digestion and atomic absorption finish.

### 11.1.3 Bulk Density

Prior to sampling, bulk density measurements were routinely carried out on core starting with hole CC-11-013. Normal practise was to determine bulk density using the “immersion in water” technique on the first piece of core weighing at least 800 grams. Thereafter measurements were made approximately every 30-40 m. As silver values tend to occur where vuggy quartz veins are most numerous or where vugs and open fractures commonly occur within silicified rock, two bulk densities were normally determined: one a dry measurement where the sample is vacuum sealed in plastic and then immersed in water and the second a wet technique where the samples is immersed in water directly. The vacuum bag methodology was used because of the difficulty in obtaining wax for sealing the samples. It is acknowledged that difficulties in ensuring that the bag has air completely removed may lead to an underestimation of the bulk density.

### 11.1.4 Quality Assurance/Quality Control

Initially QA/QC protocols for RC drill holes, from CRC-10-001, consisted of the insertion of blanks and taking a duplicate “second split” of the RC chips (with a splitter). Blank or duplicate samples were inserted or taken and added to the sample stream at approximately every 20th sample. From hole CRC-10-012 to CRC-10-015 blank samples were substituted for QC standards of two different sources in the 125 – 150 ppm Ag range.

QA/QC protocols for diamond core drill holes, from CC-10-001, consisted of the insertion of blanks and standards (P7B and 5G) added to the sample stream at approximately every 20th sample. Starting at CC-11-007 and continuing to CC-11-058 the QA/QC program was expanded to include field core duplicate samples in addition to blanks and standards. Standards P7B and 5G were substituted for SQ-47 and SP-49. As before, every 21st sample was either a blank, standard, or duplicate. Holes CC-10-001 to CC-11-011 used gravel for blank material. However, starting with CC-11-012 blanks were changed from un-assayed gravel to using intervals of previously logged, split, and assayed core. Only core that previously returned less than detection limit silver was used (<0.5 g/t Ag). In most cases the remaining split core for a previously analyzed interval was made into 2 “blanks”. The number of the previously analyzed sample now used as a “blank” is recorded so a comparison can be made with the earlier analysis.

At hole CC-12-059 and continuing to CC-12-139 (final drill hole) the QA/QC program was revised again. Standards 5G and P7B were substituted with 3 new standards: ME-15; ME-19; and FCM-7. The spacing between standards, blanks or duplicates was reduced by half so that one of the above occurred at every 11th interval in the sample stream.

The overall insertion rate is shown in Table 11-2 and is based on 18,818 original samples taken during the drill campaigns.

**Table 11-2 2010-2012 QC Sample Insertion Rates**

| Standards | Number of Standard Tests |
|---|---|
| SQ-47 | 11 |
| SP-49 | 10 |
| CDN-GS-5G | 82 |
| CDN-GS-P7B | 84 |
| CDN-ME-15 | 103 |
| CDN-ME-19 | 93 |
| CDN-FCM-7 | 100 |
| Blanks | 267 |
| Duplicates | 686 |
| Total | 1,436 |
| Insertion Rate | 7.6% |

### 11.1.5 Certified Reference Material

A selection of seven CRMs were used by Northair in the course of the 2010-2012 drill programs: multi-element standards from CDN Resource Laboratories in Langley, B.C. (CDN-GS-5G, CDN-GS-P7B, CDN-FCM-7, CDN-ME-15 and CDN-ME-19), and Rocklabs in Auckland, New Zealand (SQ-47 and SP-49). The means and standard deviations (SD) (listed in Table 11-3), warning, and control limits for standards were utilized as per the QA/QC program described below.

CRM performance and analytical accuracy is evaluated using the assay concentration values relative to the certified mean concentration to define the Z-score relative to sample sequence with warning and failure limits. Warning limits are indicated by a Z-score of between ±2 SD and ±3 SD, and control limits/failures are indicated by a Z-score of greater than ±3 SD from the certified mean. Sample batches with certified reference materials returning assay values outside of the mean ± 3SD control limits, or with suspected cross sample contamination indicated by blank sample analysis, are considered as analytical failures.

CRM analytical results for the Northair drilling programs are summarized in Table 11-4 for silver to evaluate analytical failure rates. Shewhart CRM control charts for the Northair drilling programs are presented in Figure 11-1 to Figure 11-5.

Note that changes of standards took place after initial standards (SQ-47 and SP-49) had very high rates of analytical failure. Subsequently preliminary metallurgical tests identified that lead and zinc credits may be recoverable and standards were switched again materials certified for both precious and base metals.

CRM analytical results from 2010 – 2012 confirm acceptable analytical accuracy and acceptable analytical precision for Ag.

**Table 11-3 Standards used at the La Cigarra Project 2010-2012**

| Source of Standards | Standard | Ag Mean ± 2SD ( g/t) | Au Mean ± 2SD (g/t) | Cu Mean ± 2SD (%) | Pb Mean ± 2SD (%) | Zn Mean ± 2SD (%) |
|---|---|---|---|---|---|---|
| Rocklabs Limited | SQ-47 | 122.3 +/-2.3g/t | 39.88+/-0.29g/t | n/a | n/a | n/a |
| | SP-49 | 60.2+/-1.0g/t | 18.34+/-0.12g/t | n/a | n/a | n/a |
| CDN Resource Laboratories Ltd. | CDN-GS-5G | 101.8+/-7g/t | 4.77+/-0.40g/t | n/a | n/a | n/a |
| | CDN-GS-P7B | 13.4+/-1.6g/t | 0.71+/-0.07g/t | n/a | n/a | n/a |
| | CDN-FCM-7 | 64.7+/-4.1g/t | 0.896+/-0.084g/t | 0.526+/-0.026% | 0.629+/-0.042% | 3.85+/-0.19% |
| | CDN-ME-15 | 34.0+/-3.7g/t | 1.386+/-0.102g/t | 0.014+/-0.001% | 0.413+/-0.044% | 0.251+/-0.026% |
| | CDN-ME-19 | 103+/-7g/t | 0.620+/-0.062g/t | 0.474+/-0.018% | 0.98+/-0.06% | 0.75+/-0.04% |

**Table 11-4 Standard Sample Performance 2010-2012**

| Source of Standards | Standard | Ag Mean ± 2SD (g/t) | Count | Failure # >3SD | Failure % >3SD |
|---|---|---|---|---|---|
| Rocklabs Limited | SQ-47 | 122.3 +/-2.3g/t | 11 | 3 | 27% |
| | SP-49 | 60.2+/-1.0g/t | 10 | 9 | 90% |
| CDN Resource Laboratories Ltd. | CDN-GS-5G | 101.8+/-7g/t | 82 | 0 | 0% |
| | CDN-GS-P7B | 13.4+/-1.6g/t | 84 | 3 | 3.6% |
| | CDN-FCM-7 | 64.7+/-4.1g/t | 100 | 1 | 1% |
| | CDN-ME-15 | 34.0+/-3.7g/t | 103 | 0 | 0% |
| | CDN-ME-19 | 103+/-7g/t | 93 | 0 | 0% |

**Figure 11-1 Standard CDN-GS-5G Assay Results 2010-2012**


**Figure 11-2 Standard CDN-P7B Assay Results 2010-2012**

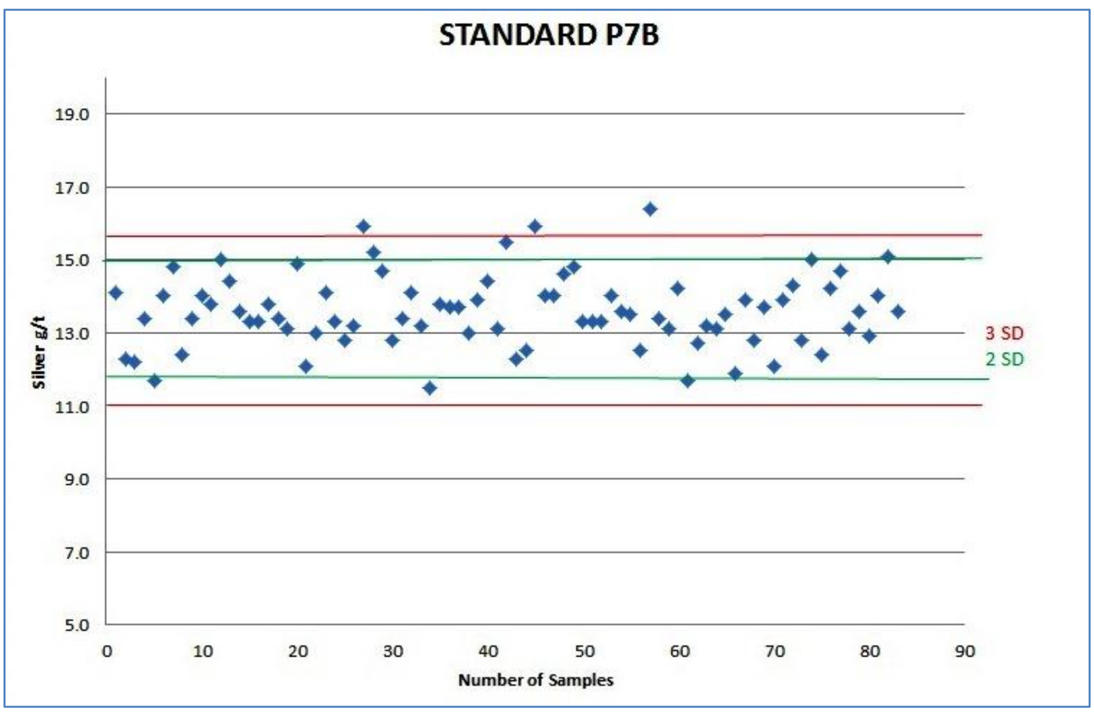


**Figure 11-3 Standard CDN-FCM-7 Assay Results 2010-2012**

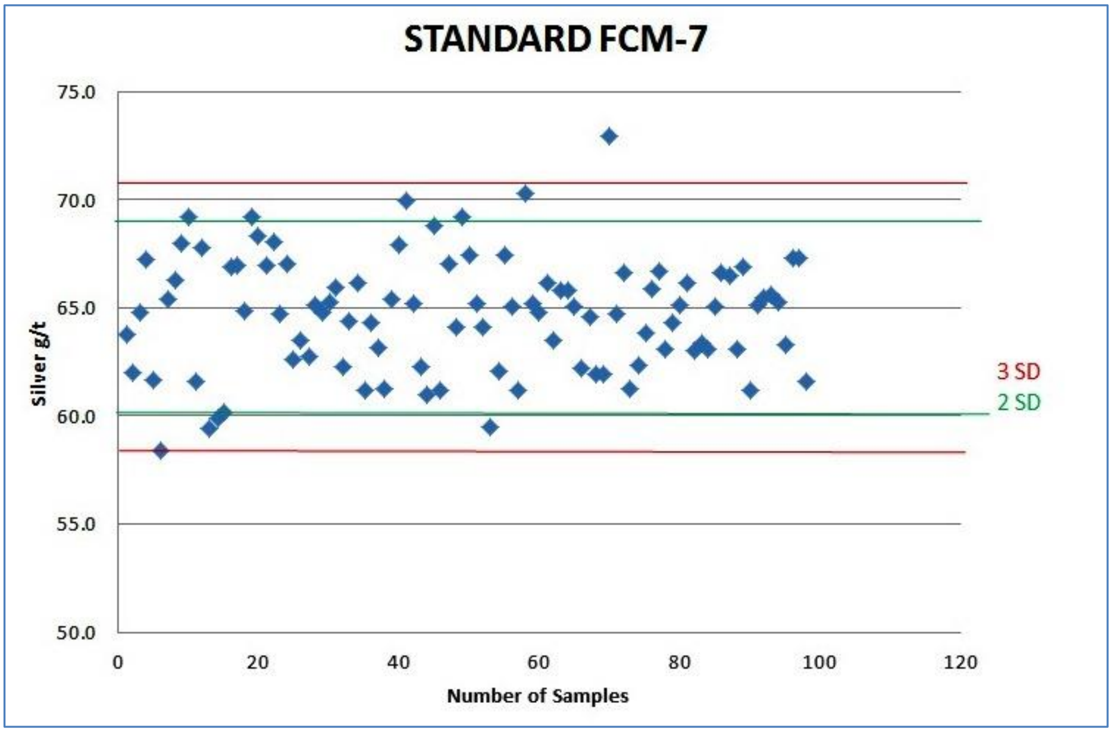



**Figure 11-4 Standard CDN-ME-15 Assay Results 2010-2012**

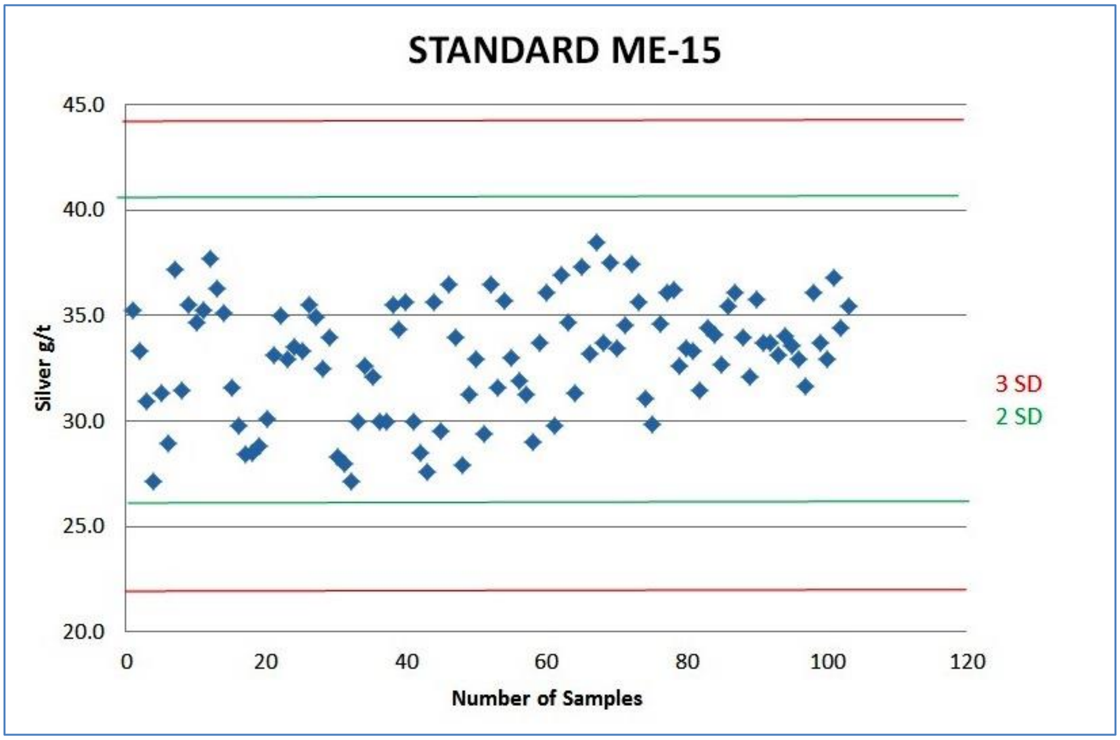
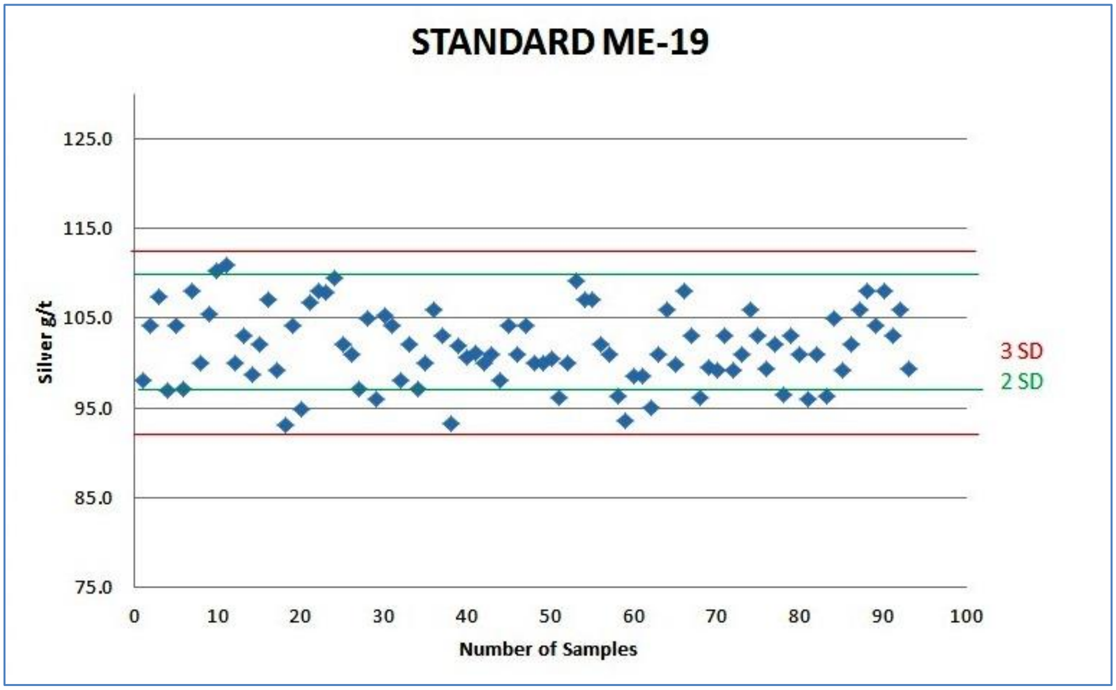


**Figure 11-5 Standard CDN-ME-19 Assay Results 2010-2012**



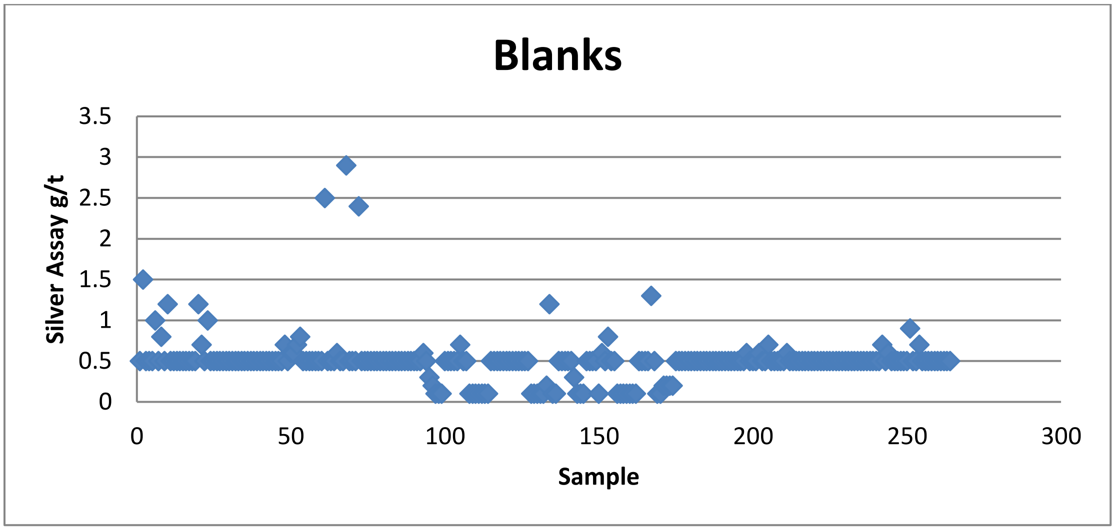

### 11.1.6 Blank Material

Blank samples comprising gravel from local sources were initially inserted into the sample stream in the field to determine the degree of sample contamination after sample collection, particularly during the sample preparation process. This material does not have certified values established by a third party through round robin lab testing. Beginning in 2011 with hole CC-11-012, blanks were changed to intervals of previously assayed core from the project that returned silver values less than detection limit (<0.5 g/t Ag). The QA/QC program from 2010 – 2012 included the insertion of blank samples at a frequency of approximately 1 blank sample in every 70 samples, for a total of 267 blank samples.

For blank sample values, failure is more subjective, and a hard failure ceiling value has not been set. Evaluation of blank samples using a failure ceiling for silver of 1.5 ppm (3x detection limit) indicates that the combined blank failure rate from 2010 – 2012 was 1.9%. The highest result from a blank sample was 7.2 g/t Ag. Blank sample variability is shown in Figure 11-6.

The blank failure rate is considered acceptable by industry standards. Based on the low risk of cross-sample contamination and the low amounts of silver that may have contaminated blank material, it is considered unlikely that there is a contamination problem with the Project drilling data.

**Figure 11-6 Blank Material Assay Results 2010-2012**




### 11.1.7 Duplicate Material

Northair's QA/QC program from 2010 – 2012 included the insertion of duplicate samples (preparation duplicates, analysis duplicates, and field duplicates) inserted at a frequency of approximately 1 duplicate sample in every 30 samples, for a total of 686 duplicates. Duplicate samples were analyzed at ALS to evaluate analytical precision and sampling error.

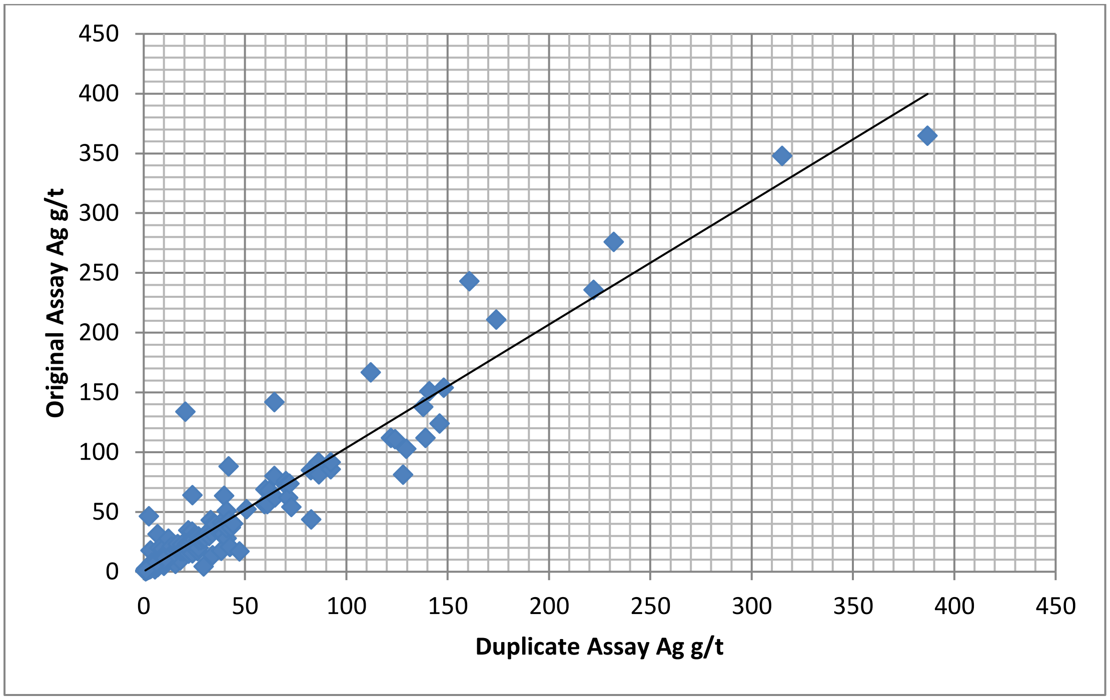
Three different duplicate types were used to test "homogenization" when making the pulp, accuracy in the assaying procedure (can re-produce the same values), and variability in sampling procedure (sample both halves of the core). The duplicates used were:

- Preparation Duplicate: two pulps made from the same coarse crush; both pulps analyzed.
- Analysis Duplicate: wo separate analyses made on the same pulp (fine grind).
- Core Duplicate: both halves of core from the same sample interval were analyzed.

Generally, there was good reproducibility in values from the preparation and analysis duplicates, however, there are a number of instances where the core duplicates returned significantly different values. This most likely reflects poor sample marking by the logging geologist who may not have marked a sampling line on the core along which the sampler was to split the core. This is required when core contains significant quartz veining or silicification patches that are not equally distributed throughout the core. By not carefully marking the core so that 50% of the quartz/silicification occurs in each half, significant variance in silver values will occur.

Figure 11-7 illustrates the comparative assay results and precision of 533 duplicate sample analyses which show very good correlation to the original sample out to about 150 g/t silver. One outlier value of 2,260 g/t Ag (and its duplicate value of 2,270 g/t Ag) was removed from the dataset for the purpose of clarity at the expected grade ranges in the estimation.

**Figure 11-7 Duplicate vs. Original Assay Results 2010-2012**



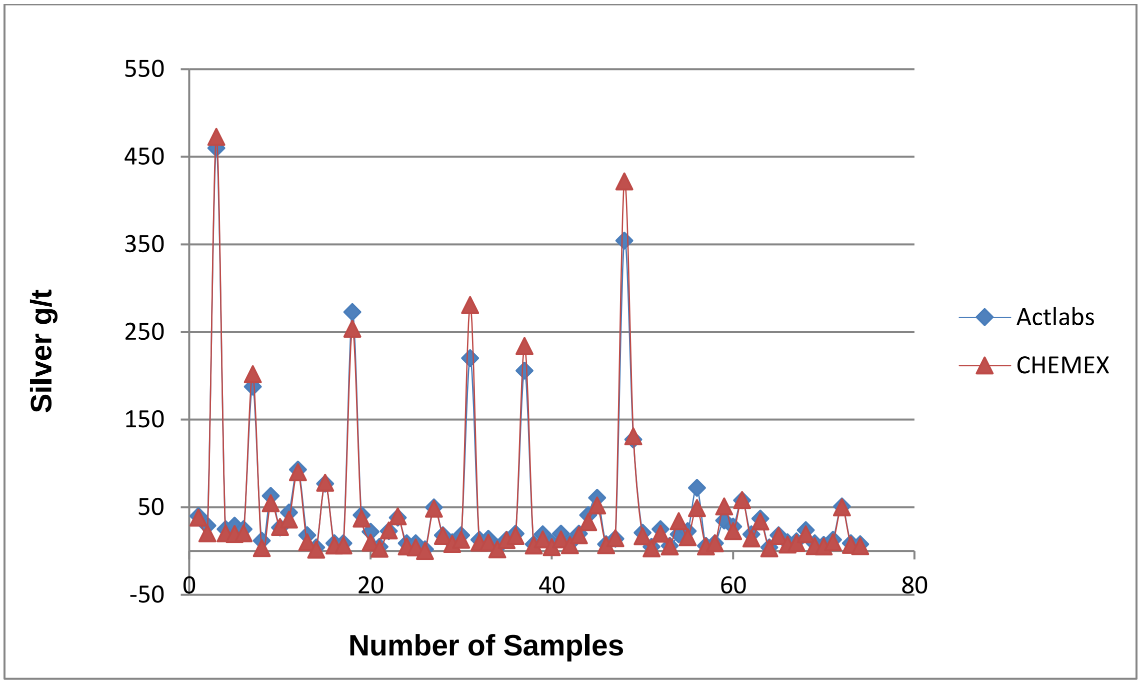

### 11.1.8 Umpire Laboratory

Northair utilized Actlabs to cross-check accuracy of the primary ALS assay lab. As part of the QA/QC process, 72 reject material samples were sent to Actlabs in Zacatecas, Mexico who prepared their own pulps and then analyzed the samples. They used duplicates, splits, and standards in their sample stream as well as part of their own internal, QC/QA program. The standards utilized were from CDN Resource Laboratories: CDN-ME-8; CDN-CM-17; CDN-FCM-6.

Analysis was done using a 4 acid digestion followed with an AAS finish. Samples returning 100 g/t Ag or more were then re-assayed using the fire assay technique with a gravimetric finish.

Comparative assay results between the two labs are shown in Figure 11-8.

**Figure 11-8 Actlabs vs. ALS Chemex Check Assay Results**




### 11.1.9 Sample Storage and Security

All drill core is stored in a warehouse rented by the company in Parral.

Reverse circulation chips from the 2010 drilling are in secure storage at a warehouse constructed by Northair, situated immediately south of the Las Carolinas Zone on the Baca ranch land.

## 11.2 2014 Drilling Programs (Northair)

### 11.2.1 Sample Preparation and Security

Individual logging sheets specifically designed for capturing lithology, alteration and structure data were used by Northair geologists. Geotechnical information and sample information were recorded digitally. Geotechnical information included core recovery (%) per run (3 m), rock quality designation (RQD; core chunks that are greater than 100 mm in length) per run, and a measure of natural breaks per run (principal angle and #).

All drill cores have been logged by geologists onsite at the Northair warehouse in Parral.

Drill core is sampled at intervals ranging from 0.10 to 3.0 m, averaging 1.25 m. The half split core sample material sent for assay is considered to accurately represent the entire core and should be free of bias because of the relatively competent nature of the core recovered.

Locally, the core can be broken and blocky, but recovery was generally good averaging approximately 90% overall recovery. Core recovery was recorded for all drill holes in 3 m intervals. Intervals where core loss was greater than 50% over 3 m runs were rare forming approximately 3% of total assay database (1% of mineralized material with >5 g/t Ag).

Core photos are taken after the geological logging, geotechnical logging and sample mark-up are completed. Sets of three to four core boxes are placed on a stand in order from top to bottom and photographed together. The core is wet before being photographed as this generally allows subtle geological features or colours to be more easily discerned.

Cement blocks with hole numbers, depth, azimuth, and inclination inscribed are put on top of each hole to preserve the hole for possible future re-entry.

All rock and core samples are secured in plastic sample bags with sure-lock straps then put into rice sacks for shipping, also secured with sure-lock straps. Until shipping, all samples are stored in the company’s locked warehouse in Parral.

All rock and core samples were analyzed by ALS Limited. Sample processing was carried out at their facility in Chihuahua, Mexico where all rock and core samples are dried followed by crushing the entire sample to better than 70% passing through a 2 mm (Tyler 10 mesh) screen. A split of 250 grams was taken and pulverized to better than 85% passing a 75 micron (Tyler 200 mesh) screen (ALS Method Code PREP-31); this pulp was then air-freighted to the ALS Limited laboratory in Vancouver, Canada for analysis.

Samples submitted to ALS were picked up at the company warehouse and shipped directly via courier to the sample processing facility in Chihuahua. Pulps from there were sent by ALS to their facility in Vancouver, British Columbia where they were analyzed. The ALS Chihuahua and North Vancouver facilities are ISO 9001 and ISO/IEC 17025 certified. The Authors are independent of ALS Limited in Chihuahua, Chihuahua, Mexico and North Vancouver, BC, Canada.

### 11.2.2 Sample Analyses

Drill core samples were analyzed by ALS for 33 elements plus gold. Samples are analysed for the 33 elements, including Ag, Pb and Zn, by four acid digestion ($HF–HNO_3–HClO_4$-HCl) and ICP finish (ALS Method Code ME-MS61; trace level method). A prepared sample (0.25 g) is digested with perchloric, nitric, hydrofluoric and hydrochloric acids. The residue is topped up with dilute hydrochloric acid and the resulting solution is analyzed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). Results are corrected for spectral inter-element interferences.

All samples returning > 100 ppm Ag or >10,000 ppm Pb or Zn were re-assayed by four acid digestion ($HF–HNO_3–HClO_4$-HCl) and ICP finish (ALS Method Code ME-OG62; for ore grade elements). A prepared sample is digested with nitric, perchloric, hydrofluoric, and hydrochloric acids, and then evaporated to incipient dryness. Hydrochloric acid and de-ionized water is added for further digestion, and the sample is heated for an additional allotted time. The sample is cooled to room temperature and transferred to a volumetric flask (100 mL). The resulting solution is diluted to volume with de-ionized water, homogenized and the solution is analyzed by ICP-AES or by atomic absorption spectrometry (AAS).

All samples returning > 1,500 ppm Ag are re-assayed by fire assay fusion with a gravimetric finish (ALS Method Code Ag-GRA21). A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button. The lead button containing the precious metals is cupelled to remove the lead. The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver, if requested, is then determined by the difference in weights.

Gold values were determined using the fire assay fusion with an AAS finish (ALS Method Code Au-AA23). A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica, and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven, 0.5 mL concentrated hydrochloric acid is then added, and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by atomic absorption spectroscopy against matrix-matched standards.

### 11.2.3 Bulk Density

For the majority of drill holes, bulk density samples were taken at variable intervals (typically 20-40 m) but on average every 20 m. A total of 246 samples were collected. Density measurements were done on whole core prior to sampling. Density values were determined using 4 methods:

Caliper method – A piece of drill core was taken and a perfect perpendicular cut across the drill core was made on both ends. With calipers the length and diameter of core was accurately measured to calculate volume. With a scale the weight was determined and the density was calculated with the formula Density = mass / volume.

Weight in Air/Weight in Water method – Whole core samples were weighed in air and then weighed in water. Density was calculated using the following formula.

Density = (Wt. in Air) / (Wt. in Air – Wt. in Water)

Plastic Wrap followed by Weight in Air/Weight in Water method – Whole core samples were first wrapped in saran wrap and then weighed in air and weighed in water. Density was calculated using the formula above.

Wax Immersion – Periodically samples used in the caliper method were sent to ALS for bulk density measurement. ALS used the method OA-GRA08a on all of the samples to measure SG. The core section (up to 6 kg) is covered in a paraffin wax coat and weighed. The sample is then weighed while it is suspended in water. The specific gravity is calculated from the following equation.

$$\text{OAGRA08a: Specific Gravity} = \frac{A}{B - C - [(B-A)/D_{wax}]}$$

where: A = weight of sample in air
B = weight of waxed sample in air
C = weight of waxed sample suspended in water
D = density of wax

### 11.2.4 Quality Assurance/Quality Control

Sample QA/QC procedures for drilling conducted in 2014 included the insertion of a blank, standard, or duplicate QC samples into the assay sample batch at approximately every $10^{th}$ sample. The number of QC samples inserted totaled 352 and included 59 blank samples, 178 duplicate samples and 115 standard samples (Table 11-5). The QC sample insertion rate was 10%.

**Table 11-5 2014 QA/QC Insertion Rates**

| QA/QC Samples | Number of Samples |
|---|---|
| Standard LCO-3 | 41 |
| Standard LCS-1 | 35 |
| Standard LCS-2 | 39 |
| Blanks | 59 |
| Duplicates | 177 |
| Total QA/QC samples | 351 |
| Total Assay Samples | 3,527 |
| Insertion Rate | 10% |

### 11.2.5 Certified Reference Material

Certified Reference Material ("CRM") included samples prepared and packaged by CDN Labs of Surrey, BC and certified by Smee & Associates Consulting Ltd. of Vancouver, BC (Table 11-6) made using material from the La Cigarra project including two sulphide and one oxide standard.

Figure 11-9 to Figure 11-11 show the results of the certified reference material for Ag used in the 2014 drilling. With a few exceptions, the analysis of the reference samples returned Ag values within the acceptable limits and no significant accuracy issues were noted. It should be noted that all 3 standards were of similar grade. As noted in the assay database, there are a significant number of high-grade samples (>100 g/t Ag). Future drill programs should include at least one higher grade Ag standard (> 100 g/t).

**Table 11-6 Standard Reference Material Recommended Values**

| Standard | Variable | Expected Value | 2 Standard Deviations | 3 Standard Deviations |
|---|---|---|---|---|
| LCO-3 | FA Au | 0.114 g/t | 0.014 g/t | 0.021 g/t |
| | 4 acid Ag | 66.4 ppm | 3.7 ppm | 5.6 ppm |
| | | | | |
| LCS-1 | FA Au | 0.052 g/t | 0.006 g/t | 0.009 g/t |
| | 4 acid Ag | 62.4 ppm | 4.6 ppm | 6.9 ppm |
| | | | | |
| LCS-2 | FA Au | 0.046 g/t | 0.004 g/t | 0.006 g/t |
| | 4 acid Ag | 59.1 ppm | 2.0 ppm | 3.0 ppm |

**Figure 11-9 Results of the LCO-3 Reference Sample for Ag from the 2014 Drill Program**

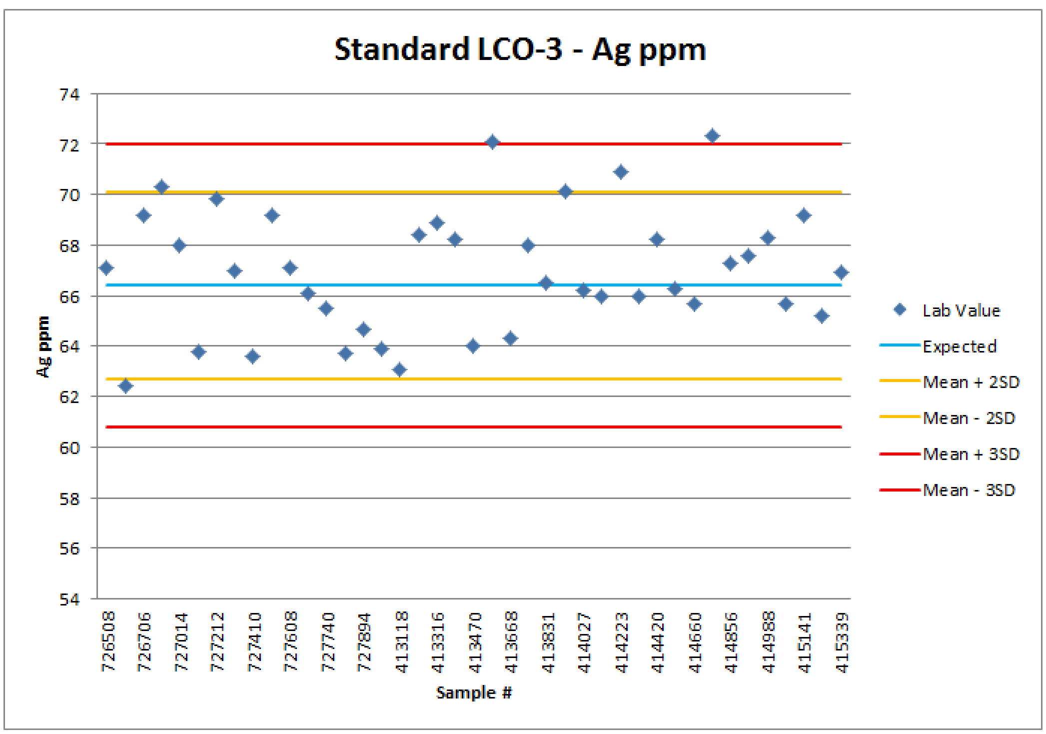


**Figure 11-10 Results of the LCS-1 Reference Sample for Ag from the 2014 Drill Program**

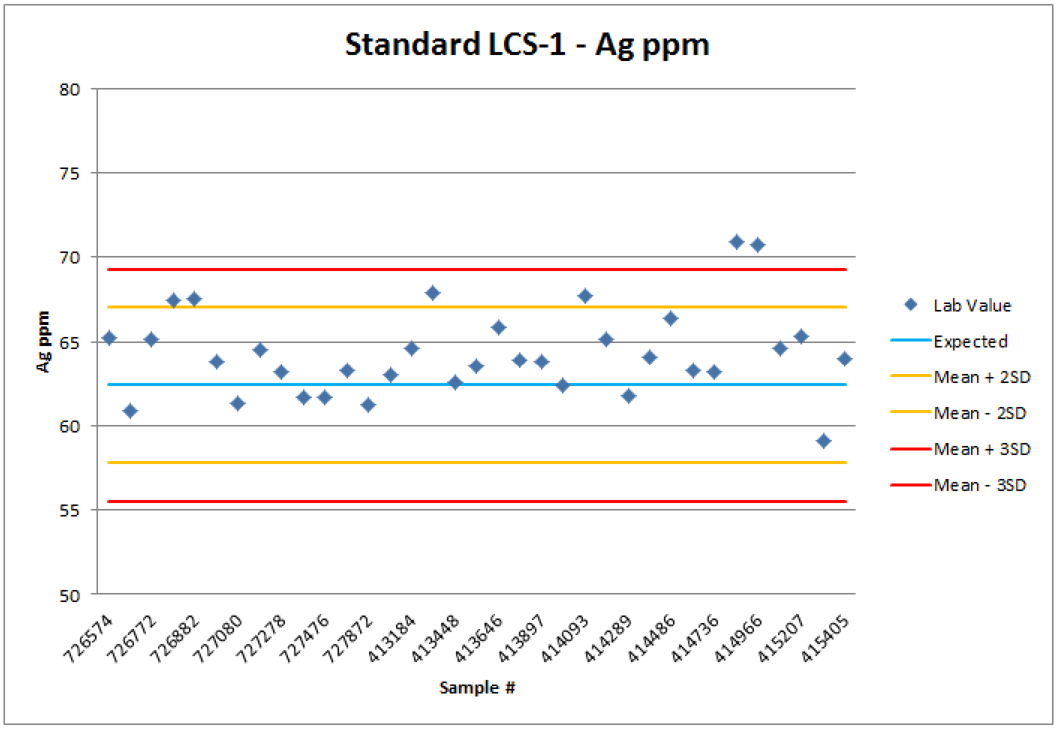
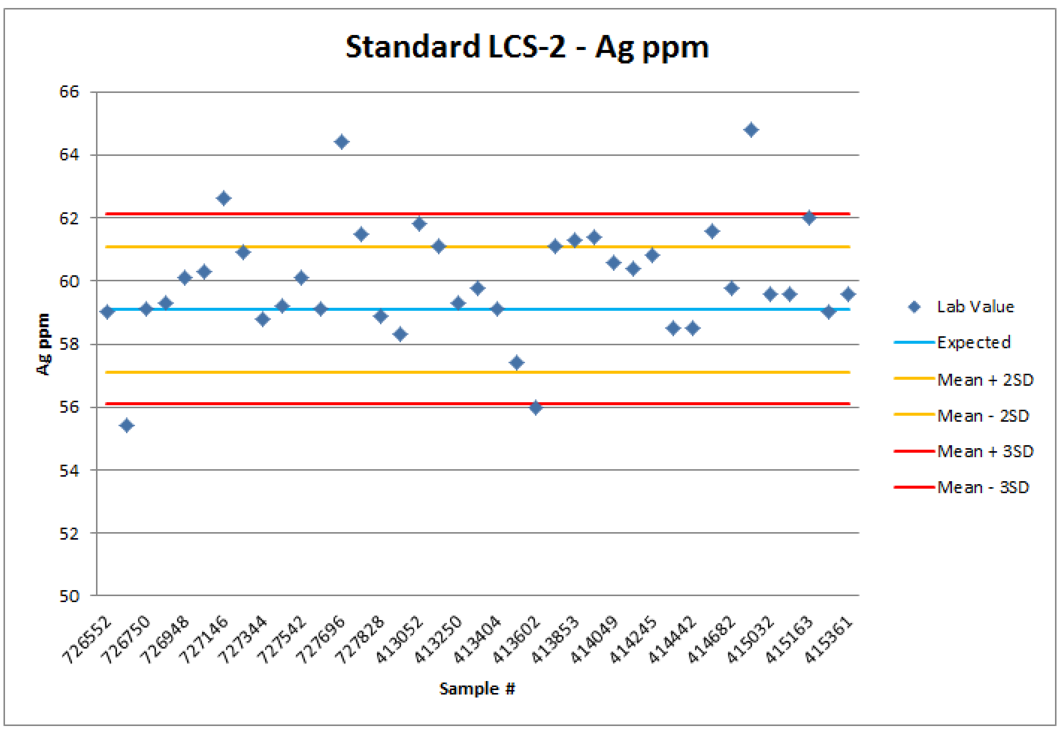


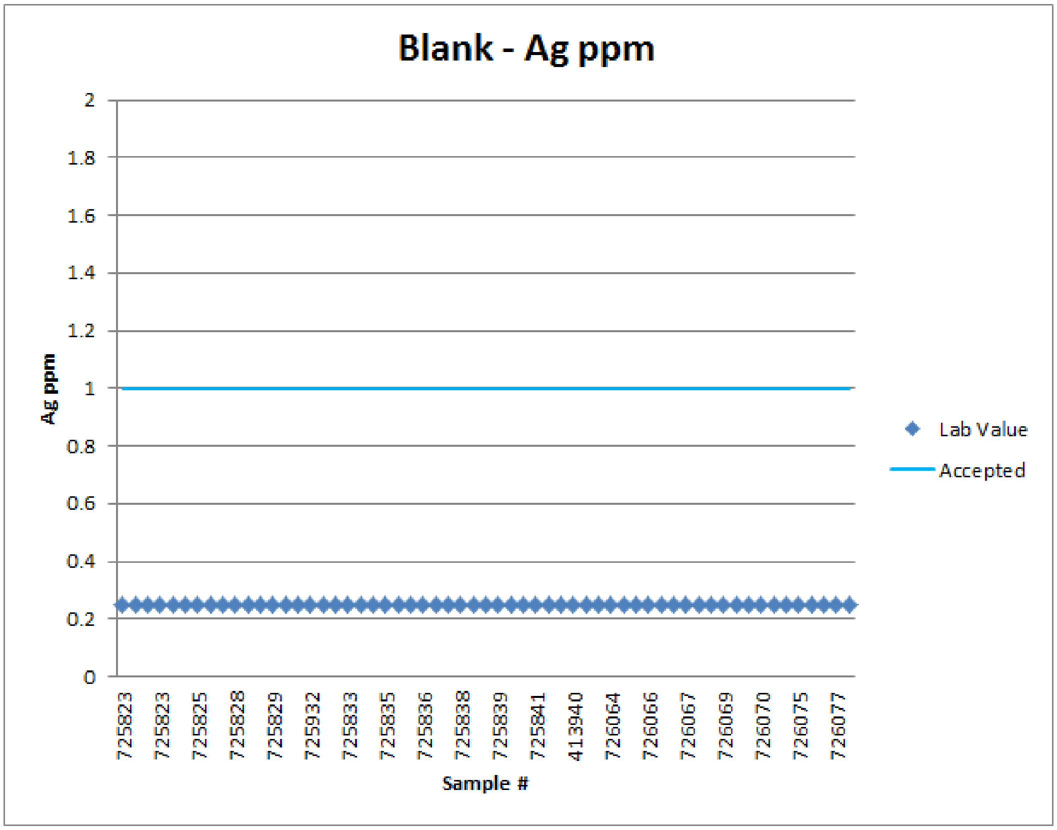

**Figure 11-11 Results of the LCS-2 Reference Sample for Ag from the 2014 Drill Program**



### 11.2.6 Blank Material

During the 2014 drill program, blank samples totaled 59. For blank sample values, failure is more subjective, and a hard failure ceiling value has not been set. Evaluation of blank samples using a failure ceiling for silver of 1.5 ppm (3x detection limit) indicates that the combined blank failure rate in 2014 was 0%. Blank sample variability is shown in Figure 11-12. Blank assays of Ag were found to be acceptable.

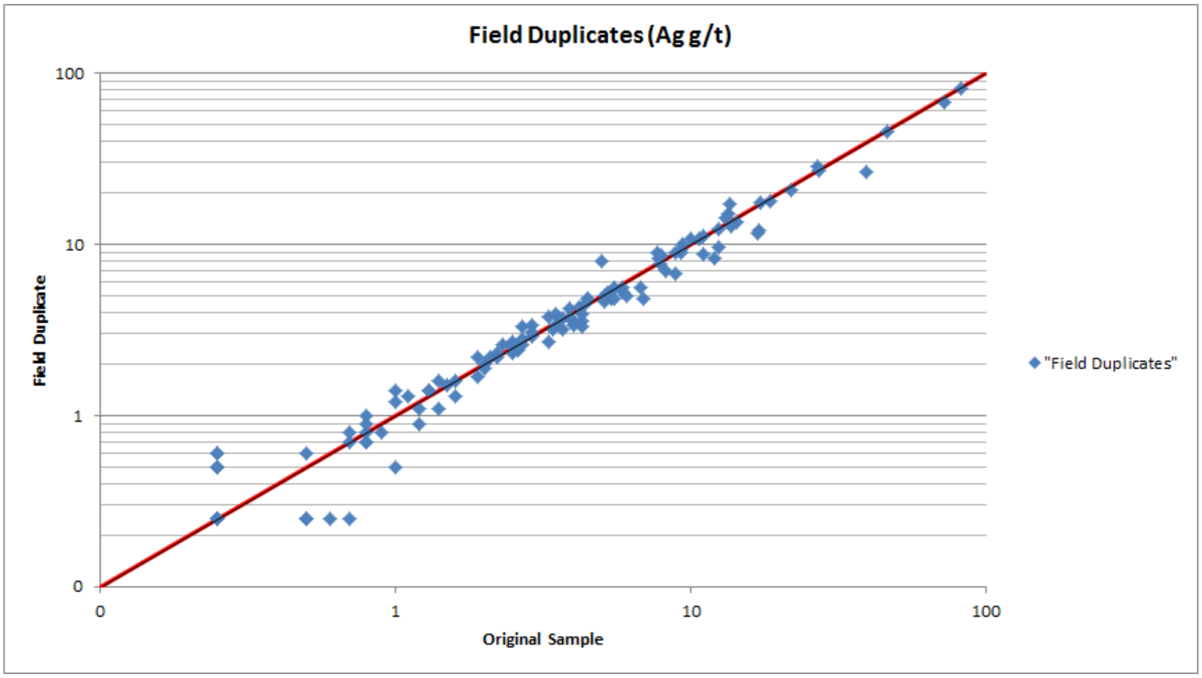
**Figure 11-12 Results of the 2014 Blank Reference Samples for Ag**




### 11.2.7 Duplicate Material

Field duplicate samples for the 2014 drill program totaled 177. With few exceptions, the results indicate an acceptable level of repeatability with field duplicates for Ag (Figure 11-13). It should be noted that the majority of the samples were much less than 100 g/t Ag. Future programs should test a number of samples with values >100 g/t Ag to test the repeatability of higher-grade sample material.

**Figure 11-13 Results of the Field Duplicates for Ag from the 2014 Drill Program**




### 11.2.8 Sample Storage and Security

All drill core is stored in a warehouse rented by the company in Parral. During the course of drilling, core, which is put in plastic boxes capable of holding about 2.0 m, is normally delivered by company personnel from the drill site to the warehouse every afternoon.

## 11.3 2016-2018 Drilling Programs (Kootenay Silver)

### 11.3.1 Sample Preparation and Security

Core is collected into boxes at the drill site and marked with the drill hole number. At the end of each core-run, the driller places the core carefully into the box and marks the down hole depth and recovered interval on wooden blocks. Transportation of the core from drill-site to the core logging facility is done by the drilling contractors.

Upon arrival at the core logging facility, the drill core is cleaned. The drill core is logged for lithology, structure, alteration, and mineralization prior to marking out sample intervals. Sample intervals are defined to honor vein, mineralization, alteration, and lithology contacts. Suspect high-grade intervals are sampled separately. The maximum sample length is 2.0 m, the minimum sample length is 0.20 m, and routine samples are 1.5 m in length. Before sampling, the geologist also marks a saw line along the core axis trying to split the vein or mineralized structure into two symmetrical halves. Geotechnical logging consists of recording core recovery, RQD, fracture density, fracture type, weathering, hardness, and point load testing. Core is photographed in boxes with sample intervals clearly visible for later reference.

The sampler saws core in half, with half being submitted for analysis and half remaining in the core box as a record. Care is taken to replace the unsampled portion of the core in the core box in the original orientation. The drill hole number and sample intervals are clearly entered into a sample book to back up the digital logging files. The geologist staples the portion of the uniquely numbered sample ticket at the beginning of the corresponding sample interval in the core box, and the sampler places one portion of the ticket in the sample bag. The sample ticket book is archived. Sample bags are sealed with a plastic strap.

Certified reference materials and blanks are inserted into the sample stream, and then the samples are bagged in sacks for transport. A control file, the laboratory sample dispatch form, includes the sack number and contained sample-bag numbers in each sack. The laboratory sample dispatch form accompanies the sample shipment and is used to control and monitor the shipment. The sample shipment is delivered to ALS in Chihuahua via a parcel transport company. ALS sends a confirmation email with detail of samples received upon delivery.

Sample preparation and reduction is carried out at ALS in Chihuahua Mexico, and sample pulps are further sent to ALS in North Vancouver, BC, Canada for analysis. The ALS Chihuahua and North Vancouver facilities are ISO 9001 and ISO/IEC 17025 certified. Samples are dried, weighed, and crushed, and a 250 g split is pulverized to at least 85% passing ($P_{85}$) 75 µm (ALS Method Code PREP-31). The Authors are independent of ALS Limited in Chihuahua, Chihuahua, Mexico and North Vancouver, BC, Canada.

### 11.3.2 Sample Analyses

Silver and base metals are analyzed using a high-grade four-acid digestion with an inductively coupled plasma ("ICP") finish (ALS Method Code ME-ICP61a) and gold is assayed by 30 gram fire assay with atomic absorption ("AA") spectroscopy finish (ALS Method Code Au-AA23). Over-limit analyses for silver >200 ppm are re-assayed using an ore-grade four-acid digestion with an ICP finish (ALS Method Code OG62). Samples with over-limit silver assays >1500 ppm are fire assayed by gravimetric methods on 30 g sample pulps (ALS Method Code Ag-GRA21).

### 11.3.3 Bulk Density

Bulk density measurements are collected on site. Specific gravity testing on drill core is conducted on >10 cm wide core samples using the volumetric displacement in water method. Samples are weighed using a high precision electronic scale, in air and suspended in a bucket of water. Each pair of measurements produces a specific gravity (SG) using the following equation:

$$SG = \frac{(Sample\ Weight\ in\ Air)}{(Sample\ Weight\ in\ Air - Sample\ Weight\ in\ Water)}$$

The scale is calibrated with a calibrated with a certified weight. The scale is tared/zeroed before every measurement, and measurement will not proceed until the scale has stabilized at each reading. Specific gravity samples are collected at a rate of 1 sample every 10 m.

### 11.3.1 Data Management

Data are verified and double-checked by senior geologists on site for data entry verification, error analysis, and adherence to strict analytical quality-control protocols.

### 11.3.2 Quality Assurance/Quality Control

Kootenay's QA/QC program comprises the systematic insertion of standards or certified reference materials (CRMs), blanks, and field duplicates. QC samples are inserted into the sample sequence at a frequency of approximately 1 sample per 40 samples for CRMs, 1 sample per 50 samples for blank QC samples, and 1 sample per 60 samples for field duplicates. Approximately 5.7% of samples assayed have been QC samples. In total, 172 CRMs, 155 blanks, and 128 field duplicate pairs have been submitted (Table 11-7). All QC samples are analyzed by the primary analytical lab (ALS).

**Table 11-7 QC Sample Statistics for Kootenay Core Sampling 2016 - 2018**

| Original Samples | Standards | Blanks | Field Duplicates | QC Sample Total | QC Sample % |
|---|---|---|---|---|---|
| 7,507 | 172 | 155 | 128 pairs | 455 | 5.7% |

Sample batches with suspected cross-sample contamination or certified reference materials returning assay values outside of the mean ± 3SD control limits are considered analytical failures by Kootenay.

ALS has its own internal QA/QC program, which is reported in the assay certificates, but no account is taken of this in the determination of batch acceptance or failure.

### 11.3.3 Certified Reference Material

A selection of five CRMs have been used to-date by Kootenay in the course of the La Cigarra Project drill program: multi-element standards from CDN Resource Laboratories in Langley, B.C. (LCS-01, LCS-02, LCO-3, CDN-ME-1202, CDN-ME-1303). The means, standard deviations (SD), warning, and control limits for standards are utilized as per the QA/QC program described below.

CRM performance and analytical accuracy is evaluated using the assay concentration values relative to the certified mean concentration to define the Z-score relative to sample sequence with warning and failure limits. Warning limits are indicated by a Z-score of between ±2 SD and ±3 SD, and control limits/failures are indicated by a Z-score of greater than ±3 SD from the certified mean. Sample batches with certified reference materials returning assay values outside of the mean ± 3SD control limits, or with suspected cross sample contamination indicated by blank sample analysis, are considered as analytical failures and selected affected batches are re-analyzed to ensure data accuracy.

For geochemical exploration analysis methods, laboratory benchmark standards are to achieve a precision and accuracy of plus or minus 10% (of the concentration) ±1 Detection Limit (DL) for duplicate analyses, in-house standards and client submitted standards, when conducting routine geochemical analyses for gold and base metals. These limits apply at, or greater than, 20 times the limit of detection. For samples containing coarse gold, native silver or copper, precision limits on duplicate analyses can exceed plus or minus 10% (of the concentration).

For ore grade analysis methods, laboratory benchmark standards are to achieve a precision and accuracy of plus or minus 5% (of the concentration) ± 1 DL for duplicate analyses, in-house standards and client submitted standards. These limits apply at 20 times the limit of detection. As in the case of routine geochemical analyses, samples containing coarse gold, native silver or copper are less likely to meet the expected precision levels for ore grade analysis.

Kootenay's QA/QC program from 2016 – 2018 included the insertion of CRM samples at a frequency of approximately 1 CRM sample in every 40 samples, for a total of 172 CRM samples.

CRM analytical results for the Kootenay drilling programs are summarized in Table 11-8 for silver to evaluate analytical accuracy (bias), precision (average coefficient of variation "$CV_{AVR}$%"), warning rates, and failure rates. A Shewhart CRM control chart for silver for the Kootenay drilling programs is presented in Figure 11-14.

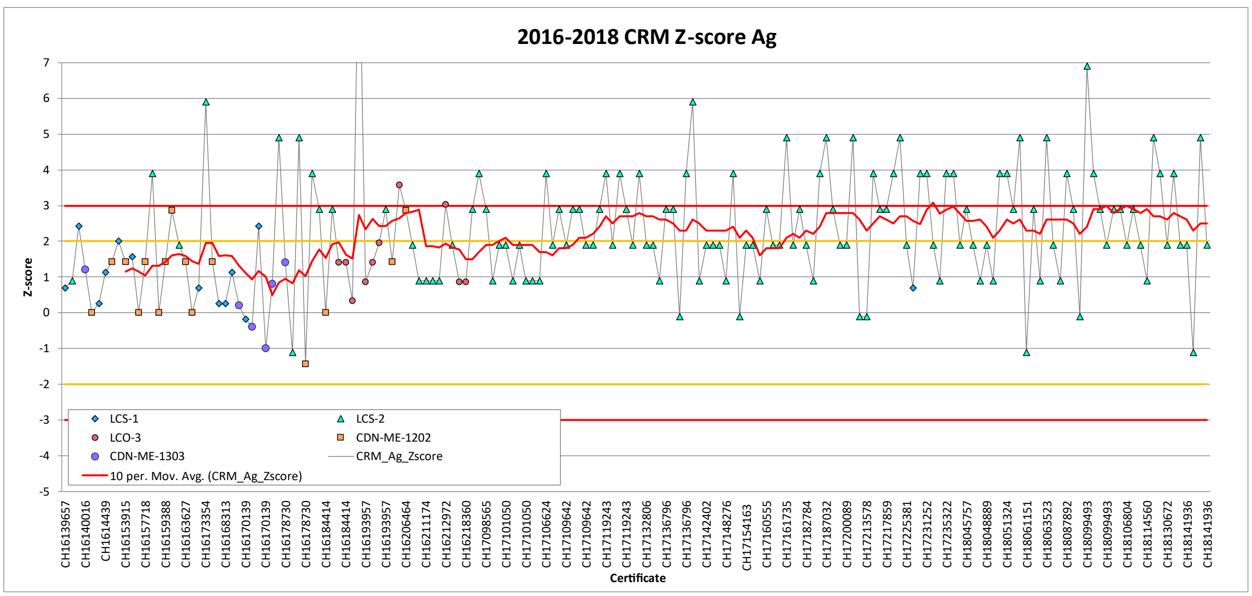
The combined CRM failure rate during this period was 22.1% for Ag; however, this elevated analytical failure rate is heavily influenced by two CRMs (LCS-2 and LCO-3) which were responsible for all CRM analytical failures during this period. CRM LCS-2 accounted for 74% of the CRM samples used during this period. Based on analysis of the data available, the Author considers the analytical discrepancy to be related to an issue with CRM LCS-2, not the laboratory, and recommends that the Company discontinue the use of this CRM. Analysis of the analytical performance of the other CRMs utilized by Kootenay (LCS-1, CDN-ME-1202, and CDN-ME-1303) indicates acceptable analytical accuracy (bias generally less than ±5%) and acceptable analytical precision (CVAVR% generally within ±5%) for Ag.

Review of the Company's CRM QC program indicates that there are no significant issues with the drill core assay data. The Author recommends that Kootenay replaces CRMs LCS-1, LCS-2, and LCO-3 with CRMs with both a wider range of Ag mean values representative of the La Cigarra mineralization ranges and with certified values for Au, Pb and Zn.

**Table 11-8 CRM Sample Silver Performance for the 2016-2018 Drill Programs**

| CRM - Ag | Certified Value | | 2016-2018 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean | SD | Count | Mean Ag ppm | Bias % | $CV_{AVR}$% | Warning # >2SD | Warning % >2SD | Failure # >3SD | Failure % >3SD |
| LCS-1 | 62.4 | 2.3 | 13 | 64.769 | 3.8 | 3.3 | 3 | 23.1% | 0 | 0.0% |
| LCS-2 | 59.1 | 1 | 127 | 61.567 | 4.2 | 3.3 | 25 | 19.7% | 35 | 27.6% |
| LCO-3 | 66.4 | 1.85 | 11 | 70.909 | 6.8 | 6.6 | 0 | 0.0% | 3 | 27.3% |
| CDN-ME-1202 | 10 | 0.7 | 15 | 10.667 | 6.7 | 6.8 | 2 | 13.3% | 0 | 0.0% |
| CDN-ME-1303 | 152 | 5 | 6 | 153.833 | 1.2 | 2.1 | 0 | 0.0% | 0 | 0.0% |
| **Total** | - | - | **172** | | | | **30** | **17.4%** | **38** | **22.1%** |

**Figure 11-14 CRM Control Chart for Silver for the 2016-2018 Drill Programs**



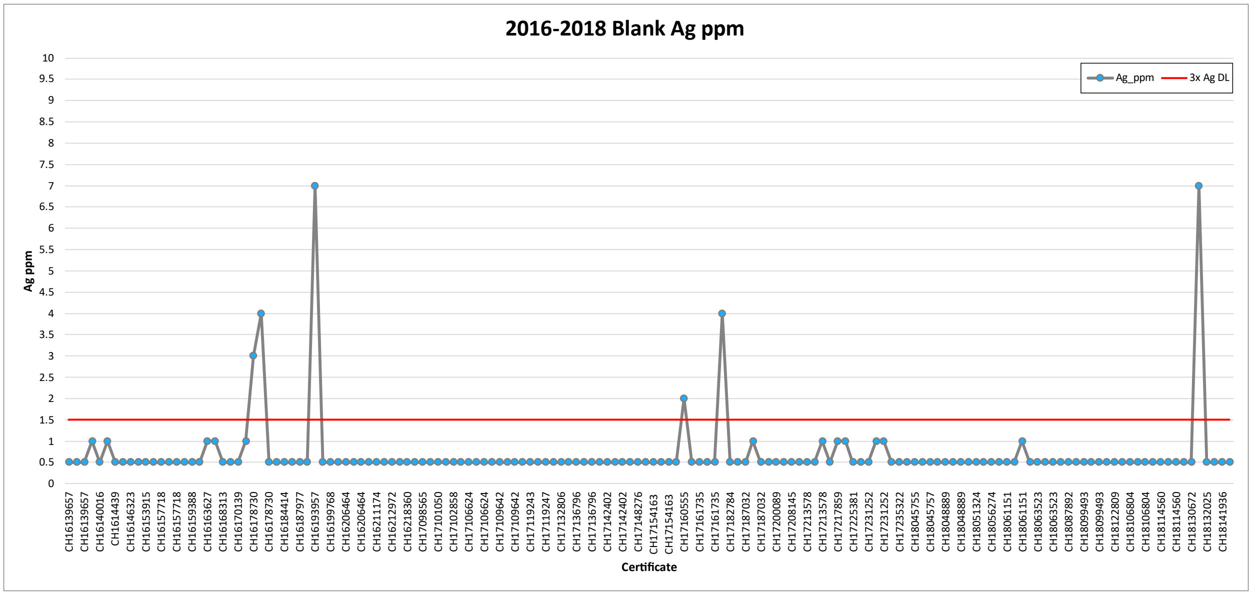

## 11.3.4 Blank Material

Blank samples comprising crushed basalt, analyzed prior to drilling, were inserted into the sample stream in the field to determine the degree of sample contamination after sample collection, particularly during the sample preparation process. This material does not have certified values established by a third party through round robin lab testing. The QA/QC program from 2016 – 2018 included the insertion of blank samples at a frequency of approximately 1 blank sample in every 50 samples, for a total of 155 blank samples.

For blank sample values, failure is more subjective, and a hard failure ceiling value has not been set. Evaluation of blank samples using a failure ceiling for silver of 1.5 ppm (3x detection limit) indicates that the combined blank failure rate from 2016 – 2018 was 3.9%. The highest result from a blank sample was 7 g/t Ag (Figure 11-15).

The blank failure rate is considered acceptable by industry standards. Based on the low risk of cross-sample contamination and the low amounts of silver that may have contaminated blank material, it is considered unlikely that there is a contamination problem with the Project drilling

**Figure 11-15 Blank Sample Chart for Silver for the 2016-2018 Drill Programs**




### 11.3.5 Duplicate Material

Kootenay's QA/QC program from 2016 – 2018 included the insertion of duplicate samples inserted at a frequency of approximately 1 field duplicate sample in every 60 samples, for a total of 128 field duplicate samples. Duplicate samples were analyzed at ALS to evaluate analytical precision and sampling error.

Figure 11-16 illustrates the comparative assay results and precision of duplicate sample analyses for silver.

To obtain a relatively accurate estimate of the sampling precision or average relative error a large number of duplicate data pairs are required. Reliably determining the base metal data precision, which typically exhibits relatively small average relative errors (such as 5%), would require 500 – 1000 duplicate data pairs, while reliable determination of gold data precision, which typically exhibits relatively large average relative errors (such as 25%), would require greater than 2500 duplicate data pairs (Stanley and Lawie, 2007).

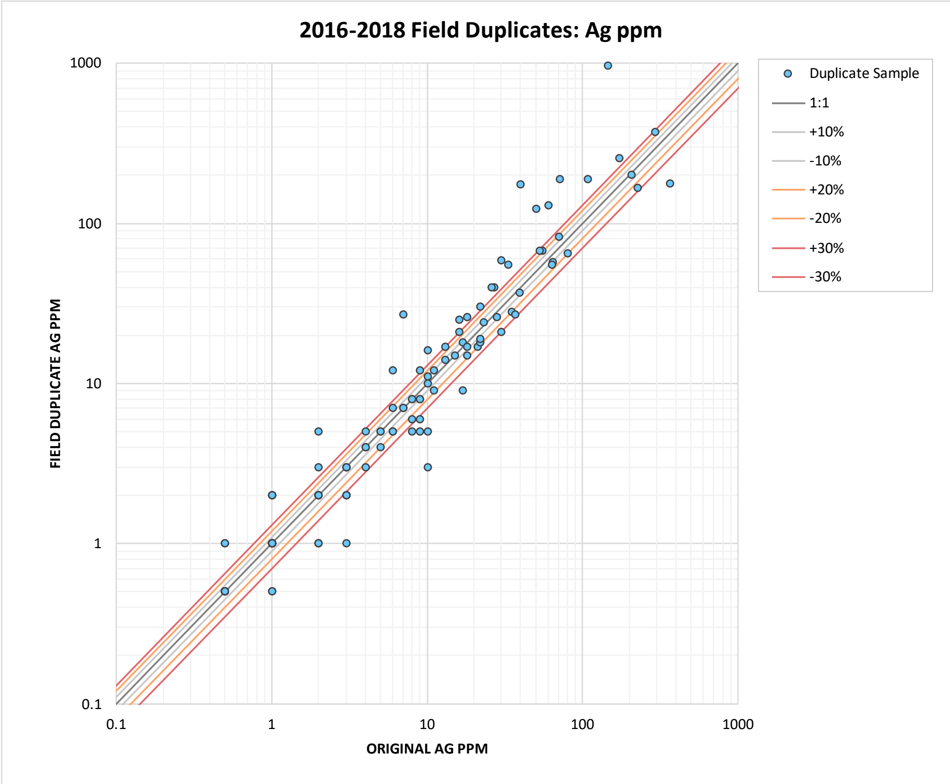
In the case of the La Cigarra deposit, based on the current duplicate data set size, analysis of the precision should be considered approximate in nature only for silver until a larger dataset is available. The average Coefficient of Variation ($CV_{AVR}$%) for silver is shown inTable 11-9, calculated using the root mean square coefficient of variation calculated from the individual coefficients of variation.

The estimates of precisions errors ($CV_{AVR}$%) for La Cigarra sampling suggests that the sampling precision is acceptable by industry standards for field duplicates for this style of mineralization (Abzalov, 2008). The precision of field and preparation pulp duplicates should continue to be monitored as the drill program progresses and the size of the duplicate data set becomes more representative.

**Table 11-9 Average Relative Error of Duplicate Samples from 2016-2018**

| Drillhole Series | Duplicate Type | Count | Ag $CV_{AVR}$% |
|---|---|---|---|
| 2016-2018 Drilling | Field Duplicates | 128 duplicate pairs | 29.2 |

**Figure 11-16 Plot of Field Duplicate Samples for Silver from the 2016-2018 Drill Program**




### 11.3.6 Sample Storage and Security

All drill core continues to be stored in a warehouse rented by the company in Parral. During the course of drilling, core, which is put in plastic boxes capable of holding about 2.0 m, is normally delivered by company personnel from the drill site to the warehouse every afternoon.

## 11.4 QP's Comments

It is the Author's opinion, based on a review of all possible information, that the sample preparation, analyses, and security used on the Project by the Company meet acceptable industry standards (past and current). Review of the Company's QA/QC program indicates that there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support resource estimation of Measured, Indicated, and Inferred mineral resources.

# 12 DATA VERIFICATION

The following section summarises the data verification procedures that were carried out, completed, and documented by the Authors for this technical report, including verification of all drill data collected by previous explorers and Kootenay during their 2016 to 2018 drill programs, as of the effective date of this report.

## 12.1 Drill Sample Database

Eggers conducted an independent verification of the assay data in the drill sample database used for the current MRE. Digital assay records were randomly selected and checked against the available laboratory assay certificate reports. Assay certificates were available for all diamond drilling. Eggers reviewed the assay database for errors, including overlaps and gapping in intervals, and typographical errors in assay values. In general, the database was in good shape and no adjustments were required to be made to the assay values contained in the assay database.

Verifications were also carried out on drill hole locations, down hole surveys, lithology, SG, and topography information. Minor errors were noted and corrected during the validation. The database is considered of sufficient quality to be used for the current MRE.

Eggers has reviewed the sample preparation, analyses, and security (see Section 11) completed by Kootenay and previous explorers for the Property. Based on a review of all possible information, the sample preparation, analyses, and security used on the Project, including QA/QC procedures, are consistent with standard industry practices and the drill data can be used for geological and resource modeling, and resource estimation of Measured, Indicated, and Inferred mineral resources.

## 12.2 Metallurgical Test Work

Armitage reviewed the metallurgical work reports made available (see Section 13), for the La Cigarra deposit, and notes that they come from a reputable metallurgical laboratory, and that their results are plausible within the bounds of this type of deposit and style of mineralization. Armitage is of the opinion that the metallurgical test work is representative of the deposit and the conclusions and recommendations made by are reasonable.

## 12.3 Site Visit

Armitage conducted multiple site visits to the Property in 2014, 2015, and 2023. Through the multiple site visits Armitage become familiar with conditions on the Property, was able to observe and gain an understanding of the geology and various styles mineralization, was able to verify the work done and, on that basis, can review and recommend to Kootenay an appropriate exploration or development program. This site visit conducted by Armitage in 2023 is considered current, per Section 6.2 of NI 43-101CP.

### 12.3.1 2014 Site Visits

Armitage conducted a site visit to the Project on between June 19 and June 27, 2014, accompanied by consulting geologists Dave Mehner, Eduardo Durán, and Nora Alejandra Sepulveda Castro. Armitage inspected the offices and core logging facilities in Parral; core is transported from site to the facility daily. Armitage reviewed logging procedures, core cutting procedures, assay sampling procedures, on-site density measurement procedures, QA/QC procedures, and core security procedures. All core and assay sample pulps are stored in the secure warehouse in Parral; core rejects are stored in a small storage facility located on the Property. Armitage examined several core holes, drill logs, and assay certificates. Assays were examined against drill core mineralized zones.

Armitage participated in two field tours during the site visit. Time was spent traversing, by vehicle and on foot, the main La Cigarra deposit area reviewing the geology and mineralization in outcrop. Armitage visited the drill rig as the 2014 drill program was in progress, and the on-site storage facility. Spot checks of random drill hole locations and road locations was done, and planned 2014 drill hole locations were examined.

Armitage conducted a second site visit between November 6 and November 9, 2014. The purpose of the second site visit was to review core from the 2014 drill program. Armitage examined several drill core holes, drill logs and assay certificates from the 2014 drill campaign. Armitage participated in a field tour of the property geology conducted by David Ernst, VP Exploration for Northair and Nora Alejandra Sepulveda Castro. Field checks were conducted of the 2014 drill sites.

### 12.3.2 2015 Site Visit

Armitage conducted a site visit to the Property from May 5 and May 18, 2015, accompanied by David Ernst and, Nora Alejandra Sepulveda Castro. The purpose of the 2015 site visit was to assist Northair in completing a more extensive review of the Property Geology and mineralization. During the site visit I examined complete drill core from 22 drill holes from across the La Cigarra deposit area. Drill core photographs, and assay and whole rock geochemistry data from the 22 holes was reviewed while on site. Armitage also completed magnetic susceptibility and conductivity surveys on each hole he reviewed, taking measurements at 1 to 3 m intervals. The measurements were taken using a hand-held GDD-MPP-EM2S+ probe.

The site visit also included 2 separate trips to the Property for more detailed review of the geology and mineralization in outcrop and to verify if any additional work had been completed on the property.

### 12.3.3 2023 Site Visit

Armitage conducted a site visit to the Property between November 28 and 29, 2023. The main purpose of the site visit was to verify work completed on the property since the previous site visit. There is currently no active exploration or mining being conducted on the Property; there has been no surface mining completed on the Property.

Armitage visited the core storage facility located in Parral and conducted a site visit to the Property, accompanied by Dale Brittliffe, Gustavo Gallego and Rafael Gutierrez of Kootenay. We reviewed drill core from the La Cigarra deposit area, including drill core from the 2018 drilling completed in the deposit area. The property site visit time was limited due to poor road conditions (currently being upgraded to support future exploration), but we were able to traverse the deposit area and access drill sites of the more recent drill holes completed in the La Cigarra and La Borracha deposit areas, and I was able view the current conditions on the Property.

## 12.4 Conclusion

All geological data has been reviewed and verified as being accurate to the extent possible, and to the extent possible, all geologic information was reviewed and confirmed. There were no significant or material errors or issues identified with the drill database. Based on a review of all possible information, Armitage and Eggers are of the opinion that the database is of sufficient quality to be used for the current Measured, Indicated, and Inferred MRE.

# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

Three phases of metallurgical testing were completed on the Project between 2011 and 2015 for Northair. Two phases of scoping level metallurgical testing were completed by G&T Metallurgical Services ("G&T"), Kamloops, BC (G&T, 2011 and 2012) to investigate the recovery of silver. Most of the intervals studied were from the San Gregorio mineral zone in the La Cigarra Project. Hoe Teh, P. Eng. was commissioned by Northair to manage the metallurgical test work and to summarize the results of the test programs.

The first phase of study, completed in August 2011, was a preliminary metallurgical assessment of four composite samples made from several drill holes. The samples were identified as sulphide, low-grade (LG) oxide, high-grade (HG) oxide, and mixed sulphide-oxide. From chemical analysis, the LG oxide samples contained significant levels of sulphide and could be considered as sulphide, while the HG oxide could be considered as a mixed sulphide-oxide. Consequently, the samples could be broadly labelled as sulphides and mixed sulphide-oxides. The two sulphide composites assayed 89 g/t silver and 81 g/t silver, while the mixed sulphide-oxide composite assayed 148 g/t silver and 157 g/t silver. The composites were tested by mineralogical analysis, whole ore leaching with cyanide, flotation and flotation concentrate leaching using the carbon-in-leach process.

Following the metallurgical assessment of silver recovery in the first phase of testing, a second phase of test work was conducted on more samples from the San Gregorio Zone. The samples were composited into a sulphide and an oxide composite. The samples for the sulphide composite were selected from 13 core drill holes, while the samples for the oxide composite were selected from four core drill holes. More sulphide than oxide samples were used to reflect their relative abundance in the deposit. The composites were further tested by mineralogical analysis, flotation and cyanide leaching of whole ore and flotation concentrate to better understand the mineralization, define the process parametres, and develop a potential flow sheet for the project. Preliminary ore hardness measurements in terms of Bond ball and rod mill indices were completed for the sulphide composite and just the ball mill index for the oxide composite. These measurements were conducted as an initial assessment of milling requirements.

The Phase 3 metallurgical program was carried out by Base Metallurgical Laboratories Ltd. of Kamloops, B.C. (Base Met Laboratories Ltd., 2015), with Terra Mineralogical Services of Peterborough, ON selected to conduct further mineralogical assessment of the La Cigarra sample material. The metallurgical and mineralogical work was conducted under the supervision of Mr. Hoe Teh, P.Eng.

Phase 3 test work was conducted on two main global composites: an Oxide composite and a sulphide composite. Additionally, two sulphide variability composites were assessed: sulphide material of higher and lower silver feed grade. The samples making up the sulphide composite were selected from 12 drill holes in San Gregorio and 9 drill holes from Las Carolinas.

## 13.1 Phase 1 Metallurgical Testing Program

The initial metallurgical assessment phase was conducted between June and August 2011 on 4 composites of coarse crush (<10 mesh) samples to determine the silver mineralogy and their amenability to silver recovery by conventional flotation and cyanide leaching processes. Only rougher flotation was tested to determine if the silver is amenable to the flotation process.

The makeup of the four composites tested is shown in Table 13-1, while their head assays are listed in Table 13-2. Sample numbers in Table 13-1 correspond to assay sample numbers from the drill program.

**Table 13-1 Makeup of Phase 1 Metallurgical Test Composites**

| Sample IDs of Composites | | | |
|---|---|---|---|
| **Sulphide** | **LG Oxide** | **HG Oxide** | **Mix Sulphide-Oxide** |
| 270244 | 14297 | 270184 | 270204 |
| 270245 | 14298 | 270186 | 270670 |

| | | | |
|---|---|---|---|
| 270249 | 14299 | 270187 | 270676 |
| 270695 | 14311 | 270631 | 270677 |
| 271024 | 270629 | 270632 | 270955 |
| 271030 | | 270633 | 270956 |
| 271031 | | 270634 | 270957 |
| 271033 | | 270635 | 270960 |
| | | 270636 | 270961 |

**Table 13-2 Head Assays of Phase 1 Metallurgical Test Composites**

| Composite | % Cu | % Pb | % Zn | % Fe | % As | g/t Au | g/t Ag | % S | % C |
|---|---|---|---|---|---|---|---|---|---|
| Sulphide | 0.02 | 0.37 | 0.40 | 2.1 | 0.02 | 0.10 | 89 | 2.78 | 0.37 |
| LG oxide | 0.04 | 0.28 | 0.38 | 2.2 | 0.04 | 0.11 | 81 | 2.81 | 0.28 |
| HG Oxide | 0.01 | 0.17 | 0.07 | 2.2 | 0.04 | 0.13 | 139 | 0.23 | 0.03 |
| Mix Sulphide-Oxide | 0.02 | 0.33 | 0.10 | 2.1 | 0.03 | 0.27 | 157 | 1.22 | 0.33 |

The mineralogical analysis showed that regardless of ore type designation, approximately 80% of the silver in the samples occurs as acanthite/argentite. Other silver bearing sulphide minerals were tetrahedrite and rosieresite, both of which may potentially be more challenging to recover.

About 30% to 60% of the silver in the sulphide, LG oxide and mix sulphide-oxide were liberated while the silver in HG oxide was locked with gangue. Rougher flotation was effective in recovering the silver in the sulphide and LG oxide samples due to their higher sulphide contents. The silver bearing sulphide minerals were easily floated at a $P_{80}$ grind size of about 100 microns, natural pH and using the standard PAX (xanthate) reagent. As shown in Table 13-3, silver recovery was about 95% for the 2 sulphide samples and about 80% for the 2 mixed sulphide-oxide samples. The results showed that flotation is a potential process and further work would be required to develop a complete flotation flow sheet while achieving a high-grade concentrate.

Whole ore cyanide leaching was conducted at a $P_{80}$ of 100 microns, pH 11 and initial 2 g/L sodium cyanide for 48 hours. As expected, silver was more effectively extracted from the oxide, mix sulphide-oxide samples than from the sulphides. The leach results are shown in Table 13-4. It appears that the lower extraction from sulphide samples is due to the higher occurrences of silver as tetrahedrite which is known to be more refractory to cyanidation. The results indicated that whole ore leaching is better suited for oxides and not necessarily a universal process for the entire deposit.

As shown in Table 13-5, cyanidation of sulphide and LG oxide rougher concentrate gave similar low extractions as for the whole ore, again indicating that the silver bearing sulphide (tetrahedrite) in these ore samples are less leachable than the silver minerals in HG oxide and mix sulphide-oxide samples. The results also show that, for the HG oxide and mix sulphide-oxide samples, whole ore cyanidation is better than a combined flotation-concentrate cyanidation process.

The program indicated that flotation would be effective on sulphide ores while whole ore cyanidation would be favored on oxide or mix-sulphide ores.

**Table 13-3 Rougher Flotation Performance**

| Composite | Feed Grade | Rougher Concentrate Grade | Recovery | |
|---|---|---|---|---|
| | g/t Ag | g/t Ag | % Mass | % Ag |
| Sulphide | 92 | 342 | 25 | 96 |
| LG Oxide | 86 | 376 | 20 | 94 |
| HG Oxide | 140 | 981 | 10 | 79 |
| Mix Sulphide-Oxide | 159 | 604 | 22 | 80 |

**Table 13-4 Whole Ore Cyanidation Test Results**

| Composite | Feed Grade | | | Extraction |
|---|---|---|---|---|
| | g/t Ag | % S | % Tetrahedrite | % Ag |
| Sulphide | 89 | 2.90 | 15.0 | 49.6 |
| LG Oxide | 79 | 3.06 | 46.5 | 66.0 |
| HG Oxide | 123 | 0.24 | -- | 81.7 |
| Mix Sulphide-Oxide | 163 | 1.19 | 1.2 | 85.6 |

**Table 13-5 Combined Rougher Flotation-Concentrate Leaching Results**

| Composite | Feed | Flot Rec | Con Leach Rec | Overall Recovery |
|---|---|---|---|---|
| | g/t Ag | % Ag | % Ag | % Ag |
| Sulphide | 92 | 94.1 | 28.1 | 26.4 |
| LG Oxide | 86 | 93.9 | 62.8 | 59.0 |
| HG Oxide | 140 | 78.7 | 97.4 | 76.7 |
| Mix Sulphide-Oxide | 159 | 76.9 | 91.6 | 70.4 |

## 13.2 Phase 2 Metallurgical Testing Program

As a result of the favorable metallurgical assessment in Phase 1, a Phase 2 program was initiated to develop the flow sheet further. Phase 2 was conducted between February and August 2012 on composites of sulphide and oxide ore samples. Lower grade ranges were selected for these tests.

Twenty drums containing 9 sulphide samples and 8 drums containing 3 oxide samples were received at G&T Metallurgical Services for the test program. The 9 sulphide samples were then composited to form a sulphide master composite and the 3 oxide samples were composited to make an oxide master sample for the test work. The sulphide samples were selected from 13 core drill holes while the oxide samples were selected from 4 core drill holes. The number of drill holes selected for the ore types reflected the relative abundance of the ore types. Similarly, the program focussed more on the sulphides than the oxides. The objectives of the program for each composite were to characterize the mineralogy, determine the ore hardness in terms of Bond ball and rod mill indexes, confirm the flotation and leaching flow sheets identified in Phase 1, and to evaluate closed-circuit performance using locked cycle flotation tests.

Silver was primarily observed in tetrahedrite and freibergite. Significant occurrences as acanthite/argentite were also observed. Over 40% of the silver was liberated at a $P_{80}$ grind size of 100 microns. Most of the silver sulphide minerals were interlocked as binaries or ternaries with sulphides in the sulphide composite, indicating that the silver could be recovered by flotation. However, the silver sulphides in the oxide composite were largely interlocked with non-sulphide gangue, indicating that flotation would not be effective for recovering the silver.

Other significant sulphides in the sulphide composite were pyrite, galena, and sphalerite – the latter 2 minerals were 60% to 70% liberated at the 100-micron grind. These minerals were expected to respond well to flotation.

The hardness tests showed that the composites would be classified as moderately hard, as shown by the indexes in Table 13-6.

The head assays of the 2 master composites are listed in Table 13-7.

**Table 13-6 Hardness of Master Sulphide and Oxide Composites**

| | Bond Ball Mill Test | | Bond Rod Mill Test | |
|---|---|---|---|---|
| Composite | Index | P80 | Index | P80 |
| | kWh/t | Microns | kWh/t | Microns |
| Master Sulphide | 16.7 | 79 | 18.6 | 949 |
| Master Oxide | 14.4 | 76 | -- | -- |

*Note: Oxide composite was too fine for rod mill test*

**Table 13-7 Head Assays of Master Sulphide and Oxide Composites**

| | Cu % | Pb % | PbOx % | Zn % | ZnOx % | Fe % | Ag g/t | Au g/t | As % | S % | C % | TOC % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulphide composite | 0.012 | 0.16 | 0.010 | 0.225 | 0.004 | 1.92 | 70 | 0.07 | 0.035 | 2.22 | 0.53 | 0.31 |
| Oxide composite | 0.016 | 0.10 | <0.001 | 0.02 | 0.002 | 1.64 | 54.5 | 0.10 | 0.035 | 0.62 | 0.12 | 0.10 |

### 13.2.1 Sulphide Flotation

As expected from the mineralogy and Phase 1 work, the master sulphide composite responded to flotation much better with substantially higher recovery than from the oxide composite. Organic carbon was detected in the samples and was found to interfere with flotation and diluted the concentrate grade. A pre-flotation stage was added to the flow sheet to reject most of the carbon with starch addition prior to sulphide flotation. Several flow sheet variations including lead flotation, bulk flotation, lead-bulk flotation, and lead-zinc flotation were investigated to determine the optimum flow sheet for the La Cigarra ores.

The flow sheet development work indicated that the pre-flotation of organic carbon was critical for effective lead flotation to produce a high silver recovery and a high-grade lead concentrate. A subsequent zinc flotation on lead cleaner tailings indicated the potential for producing a relatively high-grade zinc concentrate.

Lead flotation was effective with the use of PAX and 3418A as collectors and the additions of zinc sulphate and sodium cyanide to depress sphalerite and pyrite. Zinc sulphate addition alone was not effective as a depressant. Adding the cyanide in the mill was more effective than adding it to lead flotation feed. As shown in Table 13-8 for open circuit tests, silver recovery increased at a finer grind while generating a smaller high grade concentrate mass. In each case, the lead rougher concentrate was reground to 11 microns prior to cleaning. Tests showed no effect on metallurgical performance for regrind sizes between 7 microns and 18 microns.

**Table 13-8 Effect of Grind Size on Lead Flotation Performance**

| Primary Grind P80 | Con Mass % of ore | Concentrate Assay - percent or g/t | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pb | Zn | Fe | S | Au | Ag | C |
| 100 microns | 0.2 | 52.3 | 2.24 | 4.6 | 18.5 | 0.45 | 23900 | 0.45 |
| 75 microns | 0.2 | 48.2 | 1.80 | 5.0 | 17.1 | 1.09 | 22600 | 0.34 |
| Primary Grind P80 | Con Mass % of ore | **Recovery – percent** | | | | | | |
| | | Pb | Zn | Fe | S | Au | Ag | C |
| 100 microns | 0.2 | 76.1 | 1.7 | 0.4 | 1.4 | 1.9 | 65.0 | 0.2 |
| 75 microns | 0.2 | 69.8 | 1.9 | 0.4 | 1.5 | 4.5 | 72.7 | 0.8 |

A preliminary marketing study indicated that the high silver grade lead concentrate would be saleable to most lead smelters and preferred by western smelters.

In the finer grind test, a subsequent zinc flotation of lead cleaner tailings recovered 55% of the zinc and 6% of the silver in a concentrate grading 57% zinc and 1,764 g/t silver.

A locked cycle flotation test was run to assess the performance of a continuous circuit. As shown in Table 13-9, the test confirmed that the good performance obtained routinely in open circuit tests at a $P_{80}$ of 99 microns would be achieved in a continuous operation. Future locked cycle tests will compare the performance at the finer grind of 70 microns used in the best open circuit test shown in Table 13-8.

### 13.2.2 Oxide Flotation

Flotation tests on the oxide master composite and its blend with sulphide master composite were tested to evaluate process options for silver recovery. Process options include direct flotation on the oxide using PAX with and without sodium hydrosulphide (NaHS) addition and using sulphide flotation reagent scheme with NaHS addition. Given that sulphides are more dominant in the deposit, an arbitrary blend of 85:15 sulphide to oxide was also tested under sulphide reagent scheme and NaHS addition.

Relatively poor metallurgical performance was achieved in all tests. As shown in Table 13-10 sulphidization of oxide aided silver recovery but the recovery and concentrate grade were still low.

**Table 13-9 Locked Cycle Lead Flotation Performance**

| | Mass % | Assay, percent or g/t | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Flotation feed | 100.00 | 0.14 | 0.21 | 2.4 | 2.38 | 0.04 | 62 | 0.47 |
| Pre-flot concentrate | 1.27 | 0.24 | 0.13 | 3.3 | 3.31 | 0.14 | 163 | 4.98 |
| Pb concentrate | 0.16 | 55.00 | 3.31 | 3.7 | 18.30 | 1.34 | 25964 | 0.60 |
| Pb 1st cleaner tails | 4.03 | 0.32 | 0.46 | 4.0 | 3.76 | 0.11 | 221 | 1.19 |
| Pb rougher tails | 94.54 | 0.04 | 0.20 | 2.4 | 2.28 | 0.03 | 11 | 0.38 |
| | Mass % | **Recovery, percent** | | | | | | |
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Flotation feed | 100.00 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Pre-flot concentrate | 1.27 | 2.2 | 0.8 | 1.7 | 1.8 | 4.6 | 3.3 | 13.4 |
| Pb concentrate | 0.16 | 62.0 | 2.5 | 0.2 | 1.2 | 5.5 | 66.5 | 0.2 |
| Pb 1st cleaner tails | 4.03 | 9.1 | 8.6 | 6.5 | 6.4 | 11.5 | 14.2 | 10.2 |
| Pb rougher tails | 94.54 | 26.7 | 88.1 | 91.5 | 90.6 | 78.4 | 15.9 | 76.2 |

**Table 13-10 Rougher Flotation of Master Oxide Composite Performance**

| | Mass % | Concentrate Assay - percent or g/t | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Rougher flot without NaHS | 1.0 | 0.22 | 0.05 | 3.4 | 2.04 | 0.30 | 758 | 0.34 |
| | 10.1 | 0.14 | 0.03 | 2.8 | 1.30 | 0.14 | 166 | 0.27 |
| Rougher flot with NaHS | 1.7 | 0.46 | 0.13 | 6.4 | 4.72 | 0.80 | 2200 | 0.64 |
| | 9.9 | 0.19 | 0.05 | 3.6 | 1.90 | 0.28 | 446 | 0.37 |
| Cleaner flot with NaHS | 0.8 | 0.67 | 0.22 | 11.9 | 12.30 | 1.56 | 3080 | 1.24 |
| | Mass % | **Recovery – percent** | | | | | | |
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Rougher flot without NaHS | 1.0 | 2.6 | 4.0 | 1.7 | 3.2 | 9.5 | 24.4 | 2.6 |
| | 10.1 | 16.7 | 27.6 | 14.1 | 20.3 | 43.3 | 53.8 | 20.6 |
| Rougher flot with NaHS | 1.7 | 9.4 | 6.8 | 5.5 | 11.8 | 29.8 | 65.3 | 10.0 |
| | 9.9 | 22.8 | 15.4 | 18.0 | 28.1 | 60.5 | 77.7 | 33.5 |
| Cleaner flot with NaHS | 0.8 | 5.8 | 13.7 | 4.7 | 15.0 | 18.2 | 43.8 | 7.7 |

The results in Table 13-11 show that the metallurgical performance of the oxide-sulphide blend was poor even with sulphidization. An analysis of the data indicated that floating the oxide and sulphide separately then blending the concentrates would give better overall recovery than from floating a blend if flotation of oxide is considered.

**Table 13-11 Cleaner Flotation of 85:15 Sulphide-Oxide Blend Performance**

| | Mass % | Concentrate Assay - percent or g/t | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Without NaHS | 0.3 | 24.3 | 1.72 | 4.0 | 10.1 | 2.54 | 10500 | 1.30 |
| With NaHS | 0.3 | 26.5 | 0.91 | 3.6 | 8.7 | 1.29 | 9618 | 0.99 |
| | Mass % | **Recovery – percent** | | | | | | |
| | | Pb | Zn | Fe | S | Au | Ag | C |
| Without NaHS | 0.3 | 46.4 | 2.2 | 0.4 | 1.2 | 9.2 | 55.8 | 1.0 |
| With NaHS | 0.3 | 57.8 | 1.4 | 0.4 | 1.1 | 5.7 | 50.5 | 0.8 |

### 13.2.3 Whole Ore Cyanidation

One bottle roll cyanidation test was conducted on the sulphide master composite while 3 tests were conducted on the oxide master composite. All leaches were run for 48 hours using an initial sodium cyanide concentration of 2 g/L.

The silver extraction from the sulphide composite, ground to 99 micron, was slow and only about 50% while consuming 1.2 kg/t sodium cyanide and 1.2 kg/t lime at pH 11. This indicates that the flotation process is the better option for sulphide ore.

The silver extraction from the oxide composite was fast, achieving about 90% at 60- and 94-micron grind sizes. The extraction was virtually completed in 24 hours. Coarsening the grind size to 170 microns decreased the extraction by about 7%. Sodium cyanide consumption was between 0.5 and 0.8kg/t while lime consumption ranged from 1.3 to 1.7 kg/t at pH 11. The results show that the oxide is more amenable to direct cyanide leaching than to flotation.

### 13.2.4 Cyanidation of Flotation Products

Two carbon-in-leach (CIL) tests were conducted on reground lead rougher concentrate and one CIL test on reground lead cleaner tailings. CIL, rather than direct cyanidation, was conducted due to the presence of organic carbon. All leaches ran for 96 hours.

For the lead rougher concentrate, the effects on extraction of regrind size (11 vs. 17 microns), sodium cyanide concentration (2 and 5 g/L), carbon concentration (22 and 50 g/L), and lead nitrate additions (0 and 250 mg/L) were investigated. Silver extractions remained low at 50% to 60%.

A single CIL test on lead cleaner tailings achieved about 85% silver extraction at 11 micron regrind size, 5 g/L sodium cyanide concentration, 50 g/L carbon and with 250mg/L lead nitrate addition. The extraction equates to about 9% of the silver in the ore. Based on this test and a flotation recovery of 73% achieved at fine grind, the overall silver recovery from ore in a combined flotation-CIL process is then projected to be 82%.

The results of the Phase 2 program suggest that a combined flotation-CIL flow sheet could be adopted for processing both the sulphide and oxide ores. The sulphide ores would be processed through the entire circuit while the oxide ores could be campaigned through grinding followed by the leaching circuit.

### 13.2.5 Concentrate Quality

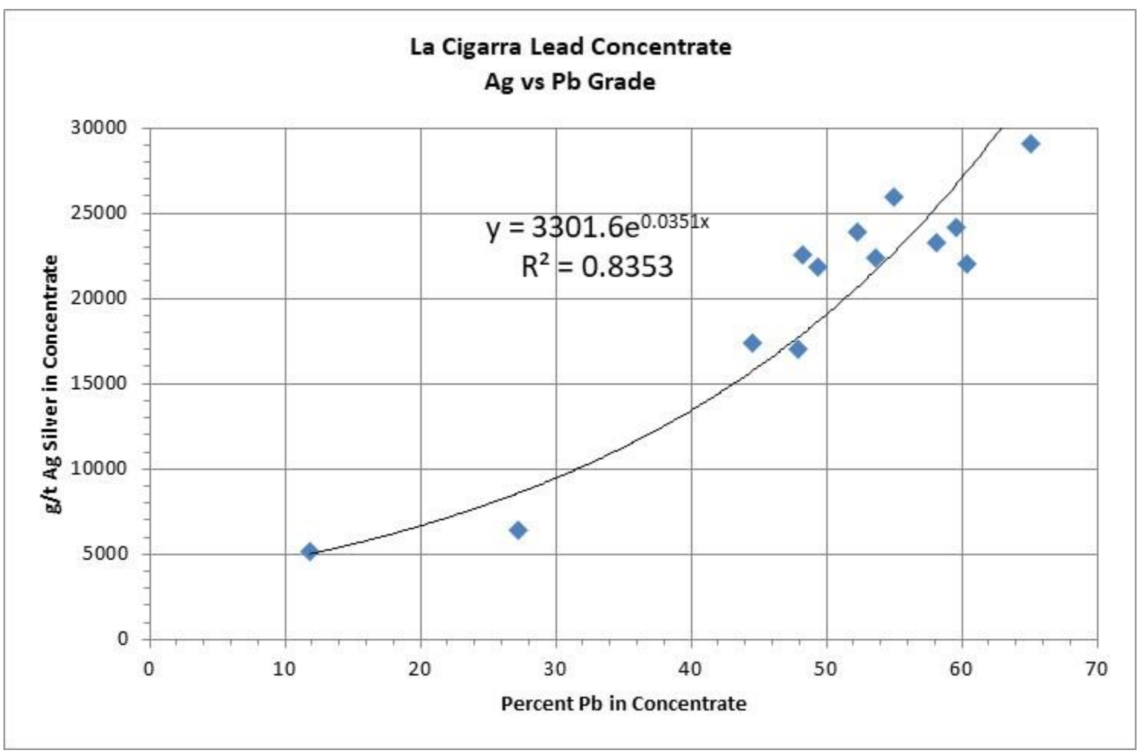
The lead concentrate from the locked cycle test was assayed for minor elements as a preliminary assessment of quality and its marketability. The assays listed in Table 13-12 show somewhat high levels of zinc and copper in a lead concentrate but the preliminary marketing study suggests that these and other contaminants would unlikely to incur penalties. More concentrate samples will be assayed in the next program phase to ensure that contaminants, including chloride, selenium and germanium, are within acceptable ranges.

As shown in Figure 13-1, there is a good correlation between lead and silver grades in lead concentrate based on test program data. This will be assessed further in the next program as it could be used as a basis for evaluating concentrate grade against smelter requirements and concentrate value and to aid process design.

**Table 13-12 Lead Concentrate Quality**

| Element | Symbol | Units | Assay |
|---|---|---|---|
| Aluminum | Al | % | 0.38 |
| Antimony | Sb | % | 0.43 |
| Arsenic | As | % | 0.24 |
| Bismuth | Bi | g/t | 92 |
| Cadmium | Cd | g/t | 844 |
| Carbon | C | % | 1.57 |
| Cobalt | Co | g/t | 4 |
| Copper | Cu | % | 7.80 |
| Fluorine | F | g/t | 97 |
| Gold | Au | g/t | 1.87 |
| Iron | Fe | % | 5.10 |
| Lead | Pb | % | 50.6 |
| Magnesium | Mg | % | 0.055 |
| Manganese | Mn | % | 0.020 |
| Mercury | Hg | g/t | 158 |
| Nickel | Ni | g/t | 39 |
| Silicon | Si | % | 1.88 |
| Sulphur | S | % | 18.7 |
| Silver | Ag | % | 2.39 |
| Zinc | Zn | % | 3.47 |

**Figure 13-1 Correlation of Lead and Silver Grades in Concentrate**



## 13.3 Phase 3 Metallurgical Testing Program

For the Phase 3 metallurgical test program, 4 composites were constructed for metallurgical testing according to client instructions (Table 13-13) (Base Met Laboratories Ltd., 2015). Most of the testing was performed on two composites, broadly classified as sulphide and oxide material. The other two composites were sulphide material of higher and lower silver feed grade. The samples contain levels of silver ranging from 80 to 135 g/t. Silver is the primary economic metal with minor contributions from lead and zinc.

**Table 13-13 Head Assays**

| Composite | Assay - percent or g/t | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pb | Zn | Fe | S | S (SO4) | Ag | Au | Cu | C | C(G) | As | Sb | Cd |
| Oxide Comp. | 0.08 | 0.06 | 2.52 | 1.00 | 0.6 | 80 | 0.07 | 0.01 | 0.07 | < 0.05 | 0.05 | 0.01 | 6 |
| Sulphide Comp. | 0.14 | 0.29 | 2.27 | 2.31 | 0.4 | 104 | 0.07 | 0.03 | 0.49 | 0.13 | 0.04 | 0.01 | 25 |
| LG Comp. | 0.16 | 0.26 | 2.00 | 2.39 | 0.5 | 113 | 0.07 | 0.06 | 0.54 | 0.13 | 0.03 | 0.03 | 27 |
| HG Comp. | 0.22 | 0.30 | 1.83 | 2.02 | 0.5 | 133 | 0.07 | 0.02 | 0.36 | 0.08 | 0.03 | 0.01 | 35 |

*Notes: Ag, Au and Cd are in g/t, all other assays are in percent. S(SO4) represents the amount wt% of S in the form of sulphates. C(G) represents the wt% of C in the form of graphite.*

### 13.3.1 Mineralogical Characterization

Specialized mineralogy analyses were conducted by Terra Mineralogical Services Ltd. The analyses exclusively examined the distribution of visible silver sulphide minerals. Visible silver minerals for the oxide sample were mainly acanthite. Acanthite is soluble by cyanide and recoverable by flotation. The estimates of grain size indicate the acanthite (AgS) was finely disseminated, with an average grain size of 3.1 um. While the data provided is not quantitative, it does provide an indication that leaching will likely be a better option for the oxide composite as the grain size of the observed particles will be difficult to recover by flotation.

The sulphide composite had acanthite and various other antimony-copper-silver sulfosalts. These minerals should all respond favorably to flotation, however, the flotation response of the individual species is unknown in a system of differential flotation. Ideally, recovery of these minerals to the lead concentrate is preferred. Recovery of these minerals to the zinc concentrate will also provide revenue. The liberation status of these minerals was a concern, many of the particles observed were observed as small inclusions or adhesions to larger pyrite grains.

### 13.3.2 Comminution Testing

Each composite was tested for hardness using Bond Ball Mill Work Index Tests. In addition, the Sulphide Composite was subjected to Bond Abrasion and Bond Rod Mill Work Index Tests. The tests were conducted by ALS Metallurgy Kamloops.

The Bond Ball Mill Work Index Test was conducted using a closing screen sizing of 106μm, resulting in a product sizing averaging 78 μm $K_{80}$. Based on these results, the samples would be described as moderately hard, particularly the sulphide composite.

With respect to comminution, wet grinding of the samples was used for metallurgical testing. It was noted that the samples had relatively high viscosity compared to many other samples. Additional water was added during the grind calibration process. This observation is purely anecdotal but, as the project develops it should further be investigated as it could affect the design of the grinding circuit.

### 13.3.3 Metallurgical Testing – Oxide Composite

Testing on the oxide composite consisted of two rougher flotation tests and six cyanide leach tests.

The following salient points were deduced when reviewing the data:

- Flotation tests were performed to assess the response of the metals. A sulphide flotation regime (Test 1) and an oxide flotation regime (Test 27) were tested. As shown in the table, both tests had very similar performance: total silver recovery was about 65% with the rougher concentrate grading between 29 and 33 g/t of silver.
- Cyanide leaching of silver was investigated over grind sizes of 55 to 100 µm $K_{80}$. Under similar leaching conditions, 48-hour leach performance at the coarser grind was about 80%, compared to 85% extraction at the fine grind size.
- Two pairs of tests examined the effect of cyanide concentration in solution on dissolution of silver. Increasing the cyanide concentration from 500 ppm to 1000 ppm made a notable increase in silver dissolution (Tests 4 and 5). However, increasing the cyanide concentration from 1000 to 2000 ppm did not further improve silver extraction.
- Increasing the cyanide concentration in solution appeared to increase the cyanide consumption.
- In general, the silver leach kinetics were slow. Increasing the leach time from 48 hours to 96 hours typically increased the overall silver dissolution by 5%.
- The best results were obtained at a primary grind size of 55 µm K80 and a cyanide concentration 1000ppm. At these conditions 85 and 88% of the silver were extracted at leach times of 48 and 96 hours respectively.
- The leach solution also contained high levels of copper and iron. Future testing should examine the solutions for other metals (arsenic and antimony) and how to efficiently recovery the metal from solution.

### 13.3.4 Metallurgical Testing – Sulphide Composite

The sulphide composite was studied intently in this program. Several different flowsheets and processes were investigated. Most of the testing was dedicated to investigating a sequential lead and zinc flow sheet. Bulk flotation was also investigated as a means to maximize silver recovery. Finally, cyanide leaching was investigated; both on whole ore and various flotation products. The results of the sulphide composite testing are discussed by test type and flowsheet in the following subsections.

#### 13.3.4.1 Rougher Flotation Testing – Sequential Flowsheet

Previous testing investigated a preflotation step to remove the organic carbon in advance of lead and zinc flotation. A single test was performed to measure the metal deportment to the preflotation concentrate for this sample.

The pre-flotation concentrate contained 2.2% carbon and recovered 19.9 % of the carbon in the feed. The pre-flotation concentrates also contained 15% of the lead, 5% of the zinc and 21% of the silver from the feed. The deportment of lead, zinc, and silver to the prefloation concentrate was relatively high and would represent a significant metal loss.

Due to the poor carbon recovery and high metal loss to the preflotation concentrate, preflotation was not included in any further testing.

The lead flotation circuit showed encouraging results, recovering 61 % of the lead in the feed. Similarly, silver was 64% recovered from the feed into the lead concentrate. It was noted that about 33 % of the zinc was also recovered to the lead concentrate. Additional depressant in the primary grind or Pb rougher would be needed to reduce zinc recovery to the lead rougher concentrate.

13.3.4.2 Cleaner Flotation Testing – Sequential Flowsheet

There were seven sequential lead zinc cleaner tests performed. Not all of the tests had a zinc cleaning circuit, to conserve testing budget. The reagent scheme utilized cyanide and zinc sulphate in lead flotation to increase the rejection of sphalerite and pyrite. The pH of the lead flotation circuit was varied from 7.8 to 9.0. Collectors for lead and silver sulphide minerals were primarily AP3418A (sodium diisobutyl-dithiophosphinate). Later tests also included sodium isobutyl xanthate (SIBX) to increase silver sulphide recoveries.

After lead flotation, the flotation pulp pH was increased to pH 10.5 to 11.0. Copper sulphate was added to activate the sphalerite. SIBX was used as the collector. On some tests, a pyrite rougher flotation stage was added to recover the remaining sulphides.

As shown in the test results, silver was well recovered to the lead final concentrate. When aggressive collector conditions were applied silver recovery to the final lead concentrate averaged about 71% and a silver grade of about 21,000 g/t. Lead in the feed was about 69% recovered into a concentrate grade of 30% lead with the same aggressive conditions.

Silver was also recovered to the zinc and pyrite concentrates. On average about 8 % of the silver in the feed reported to rougher concentrate. When zinc concentrates were produced, the silver grade ranged from 389 to 2150 g/t. Silver at these levels would be typically payable, albeit at a lower rate than payment for silver in lead concentrates.

There were two tests conducted with lead, zinc and pyrite flotation. Silver was also recovered to the pyrite concentrate, an additional 2 to 5% silver was recovered into concentrates grading 31 to 56 g/t silver.

The metallurgical performance of zinc was remarkably consistent. For the three tests with zinc cleaning, zinc in the feed was 62% recovered into a concentrate grading 54% zinc. This is a typical zinc concentrate grade for smelter feed, and barring any minor element penalties, should be marketable.

13.3.4.3 Locked Cycle Flotation Tests – Sequential Flowsheet

Three locked cycle tests were performed, each having slightly different flowsheet configurations. Test 29 utilized a produced lead, zinc, and pyrite concentrates. Test 32 produced lead and zinc concentrates, omitting the pyrite concentrate. The final locked cycle test omitted the production a zinc concentrate.

For all tests, the performance of the lead circuit was consistent. Lead in the feed was 68 to 70% recovered into a concentrate grading 28 to 35% lead. More aggressive collector additions applied in test 35 did not improve the recovery of lead to the concentrate, resulting only in slightly lower lead concentrate grades.

Similarly, silver recovery to the lead concentrate was ranged from 64 to 69%. Despite recirculating the lead second cleaner tailings back to the first lead cleaner, no additional silver was obtained compared to the batch tests. Silver grades in the concentrate ranged from 20,000 to 24,000 g/t.

Zinc concentrate was produced from test 29 and 32. The recirculation of the lead first cleaner tailing to the zinc rougher caused difficulties in recovery in test 29. The lead cleaner tailing contains residual cyanide and zinc sulphate. To compensate, additional copper sulphate was added, however, not enough to stabilize zinc flotation. In test 32 more copper sulphate was added resulting in much better zinc circuit performance. In test 32, zinc in the feed was 59% recovered into a concentrate grading 52% zinc. The performance of the zinc circuit was below that measured in the batch cleaner test, suggesting that conditions could be further optimized to increase the metallurgical performance of zinc.

Surprisingly, silver not recovered in the lead concentrate was recovered in the zinc concentrate. After the recirculation of the lead first cleaner tailings to the zinc rougher, levels of 3300 to 4200 g/t silver in the zinc concentrate was measured. For the first two tests, total silver recovery to lead and zinc concentrates was 77%. When the silver recovery was low in the lead concentrate it would increase in the zinc concentrate.

The pyrite flotation circuit performed poorly in test 29. Apparently, the recirculation of the cleaner tailing streams caused insufficient collection. In test 35, significantly more collector was added resulting in much higher sulphur and silver recovery.

13.3.4.4 Rougher Flotation Testing – Bulk Flowsheet

Bulk flotation was also investigated to maximize silver recovery into a concentrate that could be marketed as a silver concentrate or leached on site to recover the silver. Using rougher testing, finer primary grind size and variations in collector were investigated. To maximize sulphide recovery, the pH of the flotation pulp was maintained at natural and copper sulphate was added to promote pyrite and sphalerite flotation.

The following relevant points become apparent when reviewing the data:

- The single test at finer primary grind did not significantly increase metal recovery to the combined concentrate when considering the mass recovery.
- Adding additional collector and including AF241 in the collector suite increased the mass recovery to the bulk rougher concentrate. Considering the substantial increase in rougher concentrate mass for these tests, the metal recovery of silver only marginally increased and may not be justified from an operating cost basis.
- Silver was between 90 and 93% recovered into a rougher concentrate grading from 420 to 900 g/t silver.
- Base metal recovery (lead, zinc, copper) ranged between 60 and 85%. The tests with the higher mass recovery tended to have the highest base metal recovery values. Unfortunately, the concentrate grades of base metals were very low and would have little or no marketing potential with further upgrading.

13.3.4.5 Cleaner Flotation Testing – Bulk Flowsheet

The bulk flotation process was advanced to cleaner tests to determine if the rougher concentrate could be further upgraded. Specifically, the tests were intended to determine if silver recovery from the rougher could be maintained while reducing the mass of the concentrate. The concentrate would be intended as feed to leach circuit. By reducing the concentrate mass, the size and subsequent capital and operating cost of the leach circuit could be dramatically reduced.

Test 11 also attempted to produce lead concentrate from the bulk concentrate by using cyanide to depress other sulphides. The following points were revealed when reviewing the data:

- Silver was about 85% recovered into a concentrate grading about 3,000 g/t silver.
- Applying regrind ahead of cleaning and reducing the particle size from nominal 50 µm $K_{80}$ to 30 µm $K_{80}$ marginally improved the grade recovery performance. Based on the relatively small grain size of silver minerals observed in the mineralogy, it is speculated that ultrafine regrind sizes would be required to have material impact on the grade recovery relationship for silver. This was not pursed due to perceived high cost of ultrafine regrinding relative the value of the concentrate.
- Base metal grades, lead in particular, were improved in the concentrate. However, the base metal concentrate grades were well below what would be considered marketable.

- As a feed for leaching, concentrate mass was reduced to about 3% of the feed. Based on the silver grade recovery relationship this process could produce concentrates of about 1000 g/t at 90% silver recovery.

13.3.4.6 Cyanidation Testing

To maximize silver recovery of the sulphide mineralization, cyanide leaching was investigated on whole ore as well as selected streams from the flotation process. Generally aggressive silver leach conditions were applied to determine the maximum metallurgical extraction. If leaching becomes a part of the process to treat sulphide mineralization, additional optimization testing is recommended as a measure to reduce the operating cost estimates for the process.

The leach conducted on the whole feed extracted 83% of the silver in the feed. The test was conducted at 2000 ppm cyanide concentration and resulted in a cyanide consumption of 6.2 kg/tonne, which is relatively high. The test was conducted with carbon in leach to counteract any possible effects from organic carbon presence in the feed.

Silver extraction rates on the bulk flotation concentrate ranged from 69 to 80%. The poorest leach extraction was achieved during a 48 hour test without activated carbon. The 80% extraction was achieved during a 96 hour test with activated carbon. Even with the better extraction conditions, combined flotation and leaching results for silver make this process economically unattractive at 74% overall silver recovery.

When considering leaching of silver from the sequential flotation process, two cases were considered. A full lead, zinc, and pyrite flotation circuit was estimated from batch flotation test 25. Leaching of the lead first cleaner tailings and pyrite yielded silver dissolution rates of 76 to 82%. When applied to possible concentrate and tailings from the process, total silver recovery, to either lead or zinc concentrates or leach solution was about 86%. Additional revenue would be generated from the lead and zinc concentrates.

The second case was flotation of lead and pyrite concentrate with leaching of the lead first cleaner tailings and pyrite concentrate. The products from locked cycle test 35 were leached. Silver in the lead first cleaner tailings and pyrite concentrate was 82 and 77% leached respectively. Total of recovery to concentrate and leach products was 88%. This process presents a strong economic case as revenues are high from lead concentrate and silver extraction was high at 88%. Leaching flotation products would reduce the costs of the process due to the smaller process volume when compared to whole ore leaching.

13.3.4.7 Concentrate Minor Elements

Minor elements of the concentrates were estimated from Test 32. Due to the small mass of concentrate produced, typical element specific analyses were not possible. However, quantitative XRF was used to estimate levels of critical minor elements. Elements that were below detection limits of the technique are not shown. The following comments may be relevant when reviewing the data:

- The high level of silver in the lead concentrate should have a dramatic positive impact on the marketing of this concentrate. Typical minor element deductions may not apply and the services of a specialist in concentrate marketing should be sought to determine the value of the concentrate.
- For typical lead concentrates, the levels of mercury, antimony, copper, cadmium, and zinc may be of concern. The level of mercury should be verified by alternate methods (Cold vapor AA/ICP) with lower detection limits and higher levels of precision.
- The silver level in the zinc concentrate is relatively high and positive revenue should be expected. Payment of silver in zinc concentrates is more variable and dependent on the smelter. Payment of 85% of silver (minus deductions) often possible.
- Cadmium levels in the zinc concentrate were relatively high at 0.4%. Again, advice from a marketing specialist should be sought as cadmium can be either a payable or deleterious element, depending on the smelter receiving the concentrate.

- While below detection limit, mercury levels in zinc concentrates should be further checked with an alternative method.
- Additional elements such as chlorine, fluorine, uranium should also be checked in greater detail in future studies. Generation of sufficient concentrate mass is of for addition minor element analyses and for submission to potential buyers is strongly recommended.

### 13.3.5 Variability Testing

Two variability composites were generated to determine the effect of primarily silver feed grade and spatial distribution in the deposit on metallurgical performance. The samples were selected from two discreet intervals from the deposit. The goal was to produce samples with feed grades of 80 and 140 g/t respectively. Unfortunately, the lower grade sample had a resulting grade of closer to 110 g/t, nullifying the analysis of this aspect of the sample. The spatial distribution aspects of the composite remain valid.

Two sets of tests were completed on the composites: a rougher and batch cleaner test. The sequential flowsheet with the lead, zinc, and pyrite concentrates, was used to assess the composites. The optimal reagent conditions, as determined from the testing on the earlier sulphide composite, was used as a guideline for the variability samples.

The variability samples demonstrated similar overall silver recovery to rougher concentrates as the sulphide composite. Silver was mainly recovered to the lead circuit (77-83 p%), followed by an additional 4-8% recovery to the zinc circuit. Silver recovery to the pyrite rougher concentrate was lower. Based on very low sulphur recovery to the pyrite concentrate, additional collector may be required to enhance recovery of sulphur and silver.

The concentrate grades produced from the cleaner tests were remarkably similar to those produced in the sulphide composite. Results indicate that high grade silver/lead concentrates were produced. Similarly, zinc concentrates were also produced at very similar grades for both zinc and silver.

The limited suite of variability samples indicate that the sequential flowsheet would have application to other samples. A much larger sample set would be required to prove this initial hypothesis and develop relationships with the deposit (like feed grade or geographical lithology) and metallurgical performance. The testing should be extended to other flowsheets that include leaching.

### 13.3.6 Summary

Metallurgical testing of La Cigarra silver, lead, zinc deposit was conducted on two main global composites: an Oxide composite and a sulphide composite. Additionally, two sulphide variability composites were assessed (Base Met Laboratories Ltd., 2015).

The oxide composite contained silver values of about 80 g/t with low values of lead and zinc. The sulphide composites had silver feed grades ranging from about 104 g/t to about 133 g/t. Levels of lead and zinc in the three sulphide composites ranged from about 0.14 to 0.30%. Sulphur levels in the sulphide samples averaged about 2 %, indicating relatively high levels of other sulphides. The mineralogy analysis indirectly indicated the presence of pyrite as the dominate sulphide mineral in the sulphide composite.

Semi quantitative mineralogy analysis was conducted on the oxide and sulphide composites. The analysis focused on visible silver minerals and indicated that silver was observed mostly in acanthite in the oxide composite.

In the sulphide composite silver was observed as acanthite with lesser amounts of stephanite, pyrargyrite, polybasite. The later three minerals are silver antimony sulphides (stephanite, pyrargyrite) and silver, copper, antimony, and arsenic sulfosalts (polybasite). The silver minerals were observed as tiny occurrences, averaging between 3 and 5 microns and usually locked with other sulphides, mainly pyrite.

The silver minerals observed will respond favorably to flotation, behaving as copper or lead minerals. However, due to the fine grain size observed, it will be difficult to efficiently separate silver sulphide minerals into a concentrate at high grade and high recovery.

The cyanide leach response of acanthite is relatively good, however, the leach response of the other silver sulfosalt minerals observed in the sulphide composite is less well understood. The mineral analysis did not indicate levels of silver that could be contained in other minerals like galena and pyrite. If silver is present in this form, it will not respond well to direct cyanidation.

Metallurgical testing on the oxide composite confirmed that the valuable metals in the feed responded poorly to flotation. Cyanide leaching was more successful for this mineralization. The best tests indicating finer primary grind size of 55 µm $K_{80}$ improved silver extraction rates by 5 percent when compared to the coarser grind size of 100 µm $K_{80}$. Silver leaching by cyanide often has a slow kinetic rate and the higher dosages of cyanide (1000 ppm) and long leach times were required to achieve the best results of 88 percent extraction.

The several different processes and combination of processes were investigated for the sulphide composite. Flotation of a bulk concentrate, maximizing the recovery of sulphide minerals, achieved about 93% recovery of silver. The concentrate however, contained relatively low levels of silver, lead and zinc that would make marketing the concentrate as a product very difficult. Attempts to clean the concentrate by flotation did not improve the grade of the concentrate by enough to make this concentrate a candidate for direct marketing.

Two leach tests were performed on the bulk rougher concentrate. Silver was between 70 and 80% leached from the concentrate. Combined silver recovery of flotation and leach performance would therefore be between 64 and 74%. Due to the low extractions of silver and no revenue from either lead or zinc, this process was not further developed.

Sequential flotation for lead and zinc concentrates was demonstrated to be successful, producing concentrates that can be considered marketable. Lead in the feed was on average 70% recovered from the feed into concentrates that graded about 35% lead. Similarly, a zinc in the feed was 60 percent recovered from the feed into a concentrate grading 52 percent zinc. There was limited amount of optimization work conducted for the base metal concentrate production. Further optimization may improve the performance, particularly for the zinc concentrate. In advance of any such testing, detailed mineralogy should be conducted on the concentrate and tailings to understand the nature of the lead and zinc losses.

Silver was recovered to flotation concentrates as by byproduct, but still providing the majority of revenue for the project. For the sulphide composite, silver was on average about 68% recovered to the lead concentrate. The grade of silver in the lead concentrate was about 22,000 g/t. Sequential flotation also showed that an addition 8 units of silver could be recovered to the zinc concentrate at silver grades of about 3500 g/t. At these levels, silver payment should be expected from the zinc concentrate, albeit at lower levels than the lead concentrate.

Cyanide leaching of the cleaner tailings streams and pyrite concentrate from a sequential lead zinc flotation circuit was estimated to bring total silver recovery to 86 percent. This value would need to be confirmed by leaching products from a locked cycle test with the pyrite circuit fully optimized.

Flotation testing also examined a simpler flowsheet that produced a lead concentrate and a pyrite concentrate for silver leaching. The locked cycle test for this process recovered 69 percent of the lead in the feed into a concentrate grading 28% lead. Silver in the feed was 69 percent recovered into the lead concentrate grading 20,000 g/t silver.

The pyrite concentrate recovered an additional 12% of the silver in the feed into a concentrate grading 95 g/t silver. The mass of the concentrate was 13% of the feed mass, therefore requiring a smaller volume leach circuit. The lead cleaner tailings from this circuit also made a good candidate for cyanide leaching as it contained 12% of the silver in the feed, grading 365 g/t silver. The combined silver recovery to the lead concentrate, lead cleaner tailings and pyrite concentrate was 93 percent.

To supplement silver recovery, the lead cleaner tailings and pyrite concentrate were cyanide leached. Leach performance for these lead cleaner tailings and pyrite was 82 and 77%, respectively. The additional extraction increased the total silver recovery to about 88 percent for this flowsheet.

Due to the low concentrate masses of the concentrates, analyses full element specific analyses could not be performed. Quantitative XRF (X-ray Fluorescence) was completed to indicate elements that may be of interest.

The lead concentrate is unique due to the very high silver content. There were some other elements that could add or detract from revenue when the concentrate is marketed. Specifically, copper, zinc, antimony, mercury, arsenic, and cadmium levels may be of concern. It is strongly recommended that advice from a concentrate marketing specialist be sought.

Similarly, the zinc concentrate analysis indicated only a few elements of potential concern, including: cadmium, antimony, copper and possibly mercury. It is recommended that future test programs set aside a budget for generating sufficient concentrate to fully investigate minor element levels and produce enough concentrate for marketing studies.

Finally, cyanide leaching of the whole feed was investigated for the sulphide composite. While extraction rate was about 83 percent, the fine primary grind, high cyanide consumption and loss of revenue from lead and zinc made this option less attractive.

The metallurgical testing to date has identified likely processes for both the oxide and sulphide mineralization styles. As the project progresses, metallurgical testing should move to focus on measuring the variability (or geometallurgical) testing to measure the applicability of the developed flowsheet across the deposit. Developing a model for prediction for metallurgical performance that can be used in mine modelling should be the ultimate goal.

During the variability testing campaign, ore hardness testing should also be incorporated to gain a similar deposit wide understanding of the variations in ore hardness and its impact on grinding circuit design.

Once a complete understanding of the deposit from a metallurgical perspective, more detailed metallurgical testing can be considered on composites constructed to add value to the project. Detailed engineering information can be generated from this phase of testing, including:

- Concentrate settling and thickening properties
- Cyanide leach optimization and destruction testing
- Silver extraction and production of dore (carbon absorption, or Merrill crowe)
- Site water testing
- Thickening and filtering properties of the tailings
- Concentrate for minor elements and marketing studies
- Regrind size optimization

## 13.4 Preliminary Testing by Silvox Technologies Inc. ("SILVOX")

On January 22, 2017, Kootenay announced results from preliminary metallurgical testing on its La Cigarra Silver Project in Chihuahua State, Mexico, applying the proprietary Silvox Technologies Inc. ("SILVOX") process which indicated a marked improvement in cyanide leaching for silver recoveries versus industry standard leaching processes previously applied to the deposit.

This testing was conducted to assess the possibility of utilizing leach processes on La Cigarra mineralization as an alternative to floatation processes. Leach processes are typically lower cost in operation and capital requirements than floatation and concentration methods. Although the leach recoveries are substantially lower than results of floatation testing (up to 58% indicated for Silvox leach vs. up to 88% for floatation) further testing is warranted to be able to assess which process or combination of processes will maximize the potential returns.

Initial bottle roll ("BR") testing using industry standards and SILVOX processes were completed using a typical 48-hour period at minus ¼ inch crush size from a bulk sample collected from La Cigarra. Standard cyanide leaching returned an estimated 38% silver recovery compared to a range of 44% to 52% from the SILVOX process, a 6% to 14% increase in silver recovery.

Additionally, two column tests using the SILVOX process were completed indicating potential for higher silver recovery than the BR test results. These tests were completed over a 120-day period at minus ¼ inch crush size with results suggesting at silver recovery of 52% to 58%. Column tests were not conducted to sufficient QA/QC standards but may suggest potentially higher recoveries than BR testing.

# 14 MINERAL RESOURCE ESTIMATES

## 14.1 Introduction

The following section describes the updated MRE for La Cigarra. Completion of the updated MRE involved the assessment of an updated drill hole database, which included all data for surface drilling completed through 2018, and the assessment of updated three-dimensional (3D) mineral resource models (resource domains).

The Inverse Distance Squared ("$ID^{2}$") calculation method restricted to the resource domains was used to interpolate grades for Ag (g/t), Au (g/t), Pb (ppm) and Zn (ppm) into block models for all deposit areas. Measured, Indicated and Inferred mineral resources are reported in the summary tables in Section 14.11. The MRE presented below takes into consideration that La Cigarra may be mined by the open pit mining method.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016). The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres as best as possible to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

## 14.2 Drill Hole Database

To complete the current MRE for La Cigarra, a database comprising a series of comma delimited spreadsheets containing surface diamond drill hole information was provided by Kootenay. The database included hole location information, down-hole survey data, assay data for all metals of interest, lithology data and density data. The data in the geochemistry/assay tables included data for the elements of interest including Ag (g/t), Au (g/t), Pb (%) and Zn (%). After review of the database, the data was then imported into GEOVIA GEMS version 6.8.3 software ("GEMS") for statistical analysis, block modeling and resource estimation. No errors were identified when importing the data. The data was validated in GEMS and no erroneous data, data overlaps or duplication of data was identified.

The database provided by Kootenay for the update MRE include data for 224 surface diamond and RC (15 holes) drill holes, completed on the Property, totalling 41,836 m. The database available for the current MRE included 201 surface diamond and RC drill holes totalling 36,988 m (

Table 14-1) (Figure 14-1 and Figure 14-2). The resource database totals 26,419 assay intervals representing 34,447 m of drilling. The average assay sample length is 1.30 m.

The database was checked for typographical errors in drill hole locations, down hole surveys, lithology, assay values and supporting information on source of assay values. Overlaps and gapping in survey, lithology and assay values in intervals were checked. All assays had analytical values for Ag (g/t), Au (g/t) Pb (%) and Zn (%).

**Table 14-1 Drill Hole Completed in the La Cigarra Deposit Area**

| 2010 - 2018 La Cigarra Resource Drill Database | |
|---|---|
| **Total Number of drill holes** | 201 |
| **Total metres of drilling** | 36,988 m |
| **Total number of assay samples** | 26,419 |
| **Total assay length** | 34,447 |
| **Average sample length** | 1.30 |
| **Total number of density samples (WW/WA)** | 1,407 |

**Figure 14-1 Plan View: Distribution of Surface Drill Holes in the La Cigarra Deposit Area (WGS84), on Topography**

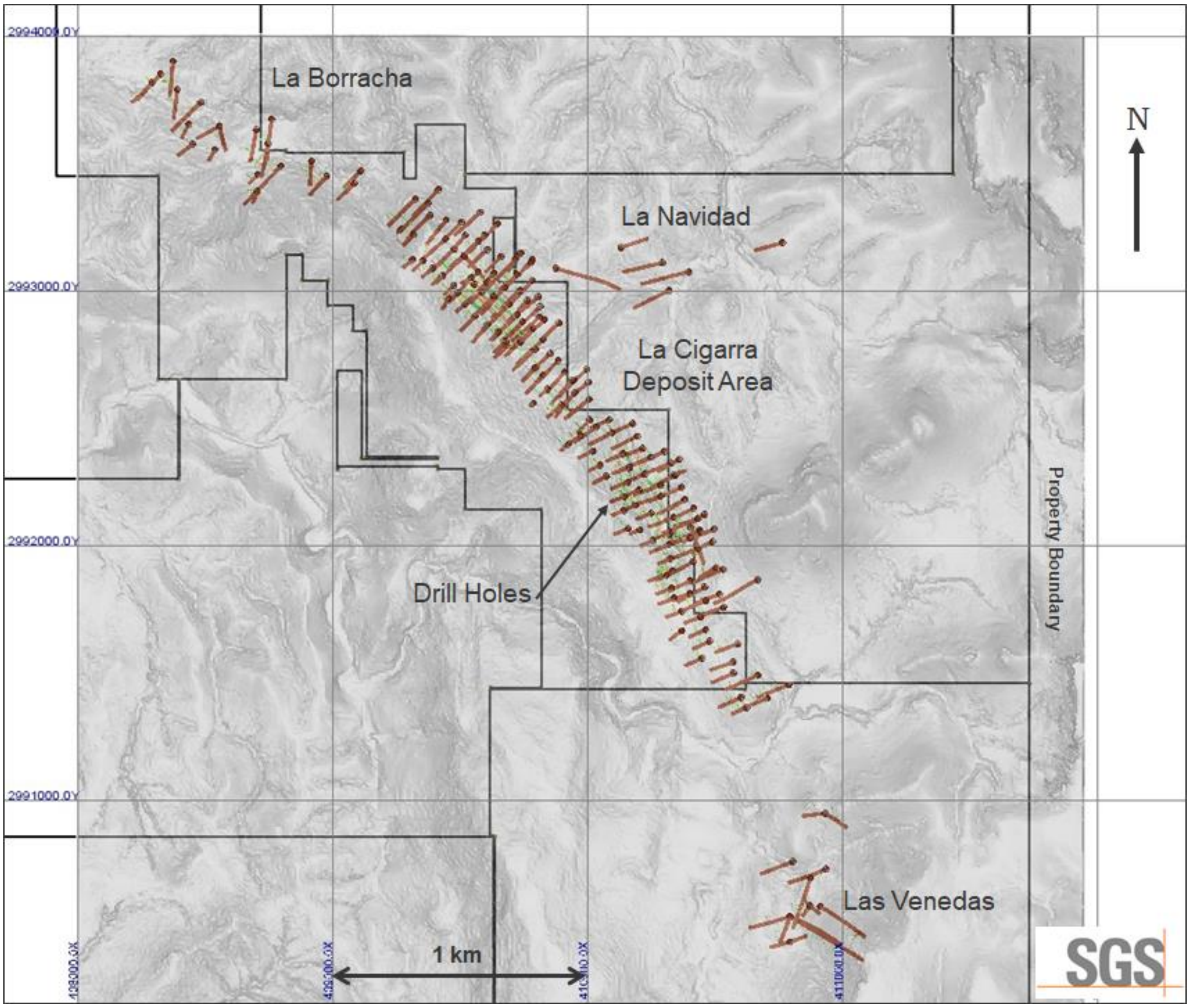
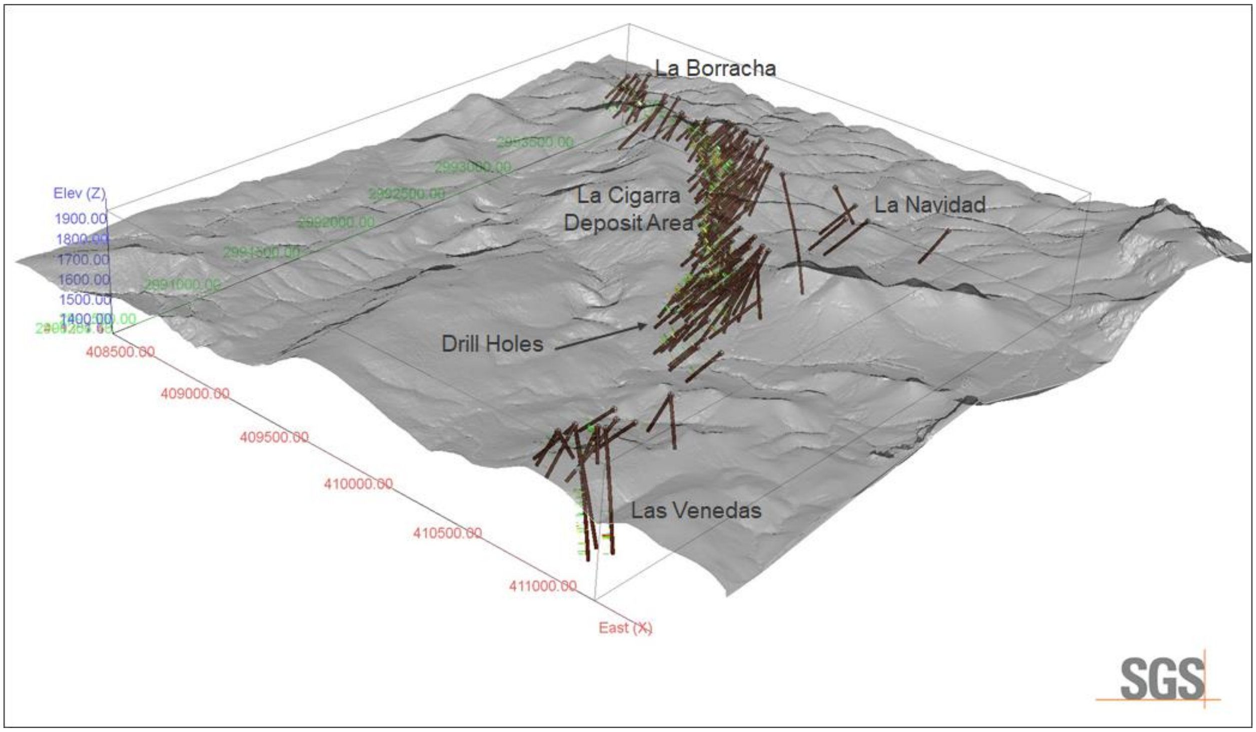


**Figure 14-2 Isometric View Looking Northwest: Distribution of Surface Drill Holes in the La Cigarra Deposit Area (WGS84)**




## 14.3 Mineral Resource Modelling and Wireframing

For the current MRE, Kootenay provided the author with a total of 9 three-dimensional ("3D") resource models (domains), constructed in Leapfrog (Table 14-2) (Figure 14-3 to Figure 14-5). The resource models included a single high-grade domain (HG_D1) and 8 lower grade domains. The author was also provided with a digital elevation surface model (LiDAR), and a surface model representing the base of surface oxidation (Figure 14-6). All 3D resource models were clipped to topography. As well, for resource estimation purposes and reporting purposes, all models were divided into oxide and sulphide models (Figure 14-7).

Leapfrog software was utilized for analyzing in 3D and Imago for viewing and logging drill core photos. Zoom was used for online collaboration during the entire process. Egnyte served as the online database storage and sharing portal (Richards and Huebert, 2022).

The author has reviewed the resource models on section and in the author's' opinion the models provided are well constructed and accurately represent the main structures identified on the Property and the distribution of the Ag-Au-Pb-Zn mineralization within these structures. All models have been extended beyond the limits of the current drilling for the purpose of providing guidance for continued exploration. However, the extension of the mineral resource beyond the limits of drilling is limited by the search radius during the interpolation procedure (120 m past drilling), as well as the Property boundary.

Mineralization in the La Cigarra area extends for approximately 2,600 m on a 320° trend with an average dip of 45° to the northeast. Mineralization defined by drilling extends from surface to depths of up to 380 m.

**Table 14-2 Property Domain Descriptions**

| MODEL (Kootenay Models) | OXIDATION | ROCK CODE (GEMS) | BLOCK ROCK CODE (GEMS) | BULK DENSITY |
|---|---|---|---|---|
| MinHG_D1_2021_InclCode1 | Sx | HD1OX | 1011 | 2.59 |
| | Ox | HD1SX | 1012 | 2.44 |
| Min_D1_2021_MinCode1 | Sx | D1_SX | 111 | 2.44 |
| | Ox | D1_OX | 112 | 2.59 |
| Min_D2_2021_MinCode2 | Sx | D2_SX | 121 | 2.59 |
| | Ox | D2_OX | 122 | 2.44 |
| Min_D3_2021_MinCode2 | Sx | D3_SX | 131 | 2.59 |
| | Ox | D3_OX | 132 | 2.44 |
| Min_D4_2021_MinCode3 | Sx | D4_SX | 141 | 2.59 |
| | Ox | D4_OX | 142 | 2.44 |
| Min_D6_2021_MinCode1 | Sx | D6_SX | 161 | 2.59 |
| | Ox | D6_OX | 162 | 2.44 |
| Min_D8_2021_MinCode2 | Sx | D8_SX | 181 | 2.59 |
| | Ox | D8_OX | 182 | 2.44 |
| Min_D104_2021_MinCode1 | Sx | D14SX | 11041 | 2.59 |
| | Ox | D14OX | 11042 | 2.44 |
| Min_D7_2021_MinCode2 | Sx | D7_SX | 171 | 2.59 |
| | Ox | D7_OX | 172 | 2.44 |
| Waste | Ox | | 201 | 2.47 |
| | Sx | | 203 | 2.59 |

**Figure 14-3 Plan View: La Cigarra Mineral Resource Models**

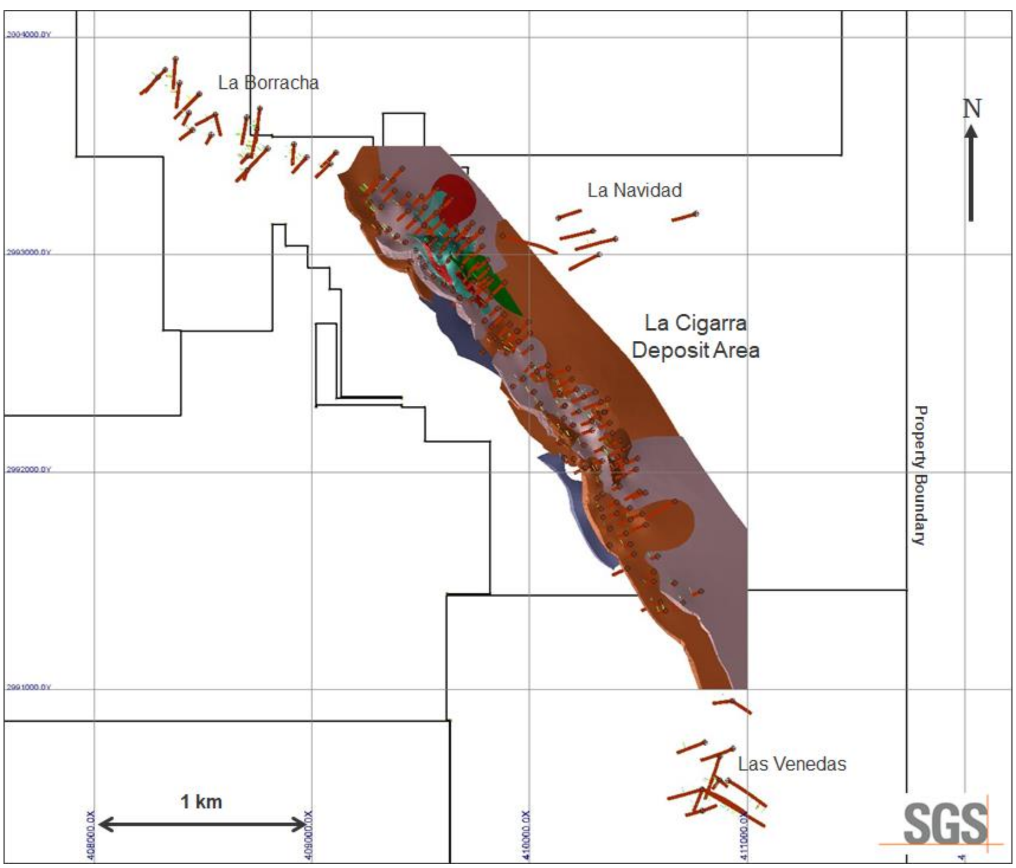


**Figure 14-4 Isometric View Looking Northeast: La Cigarra Mineral Resource Models**

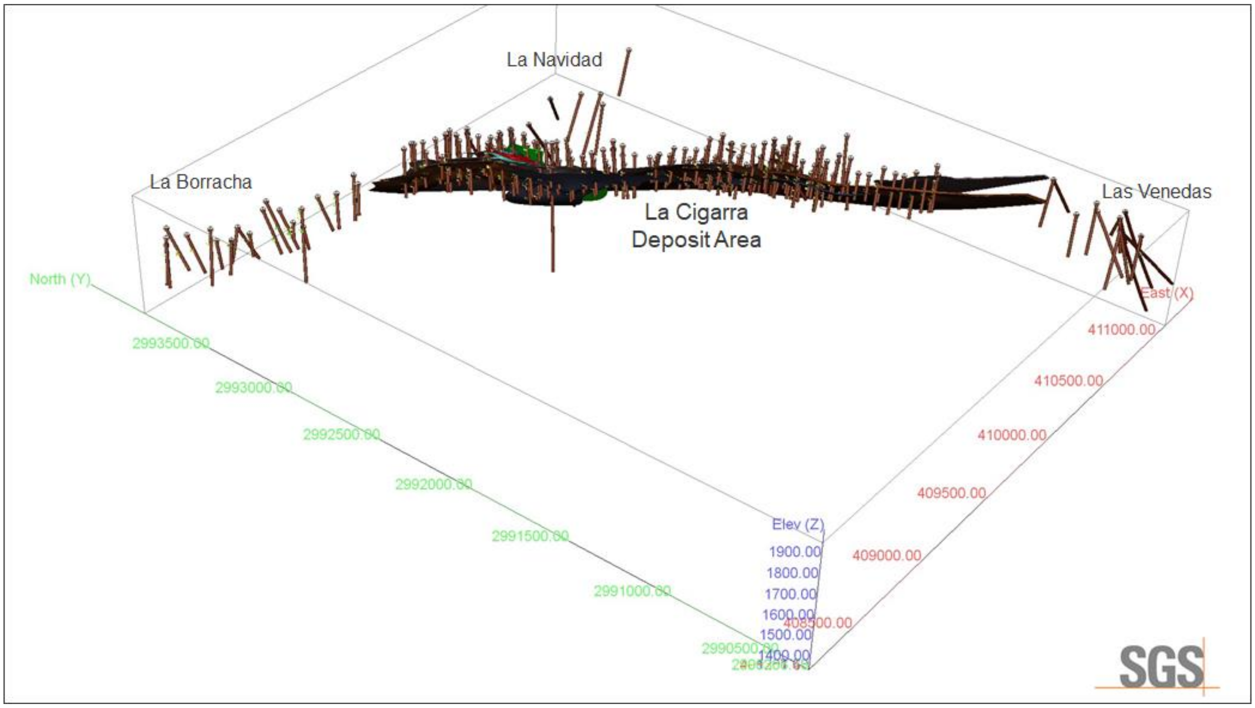



**Figure 14-5 Isometric View Looking Northwest: La Cigarra Mineral Resource Models**

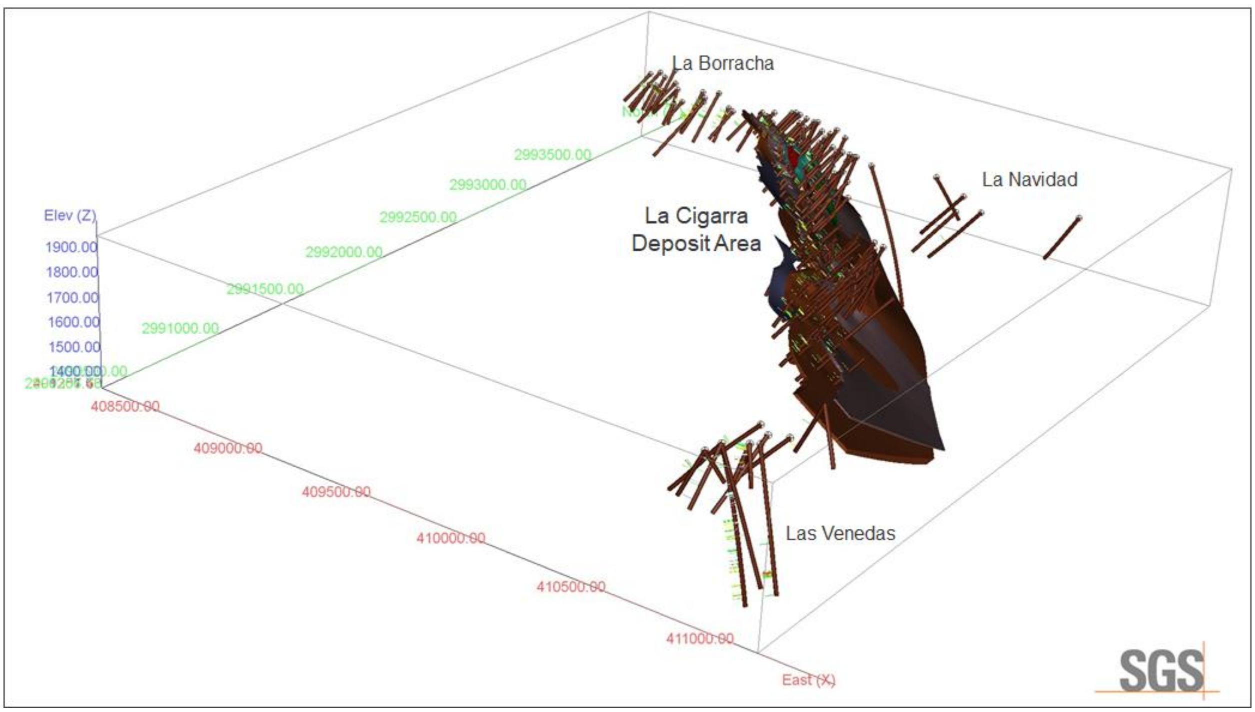


**Figure 14-6 Isometric View Looking Northwest: La Cigarra Base of Oxide Surface Model**

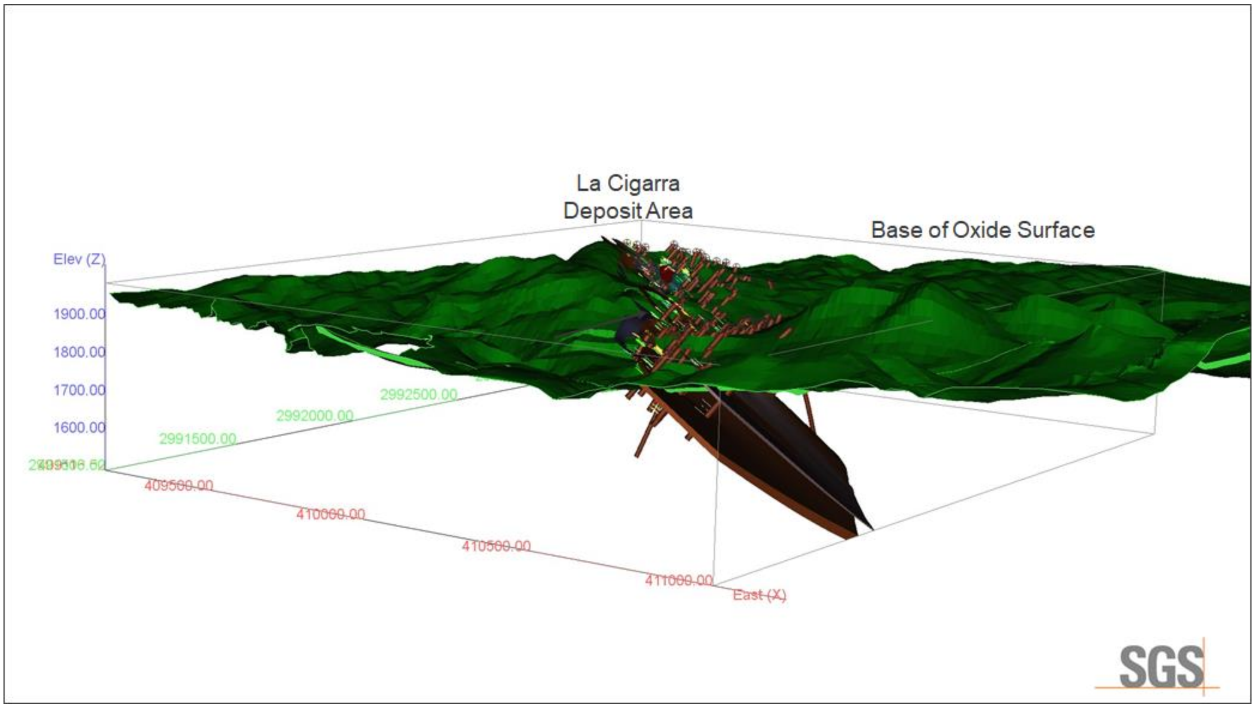
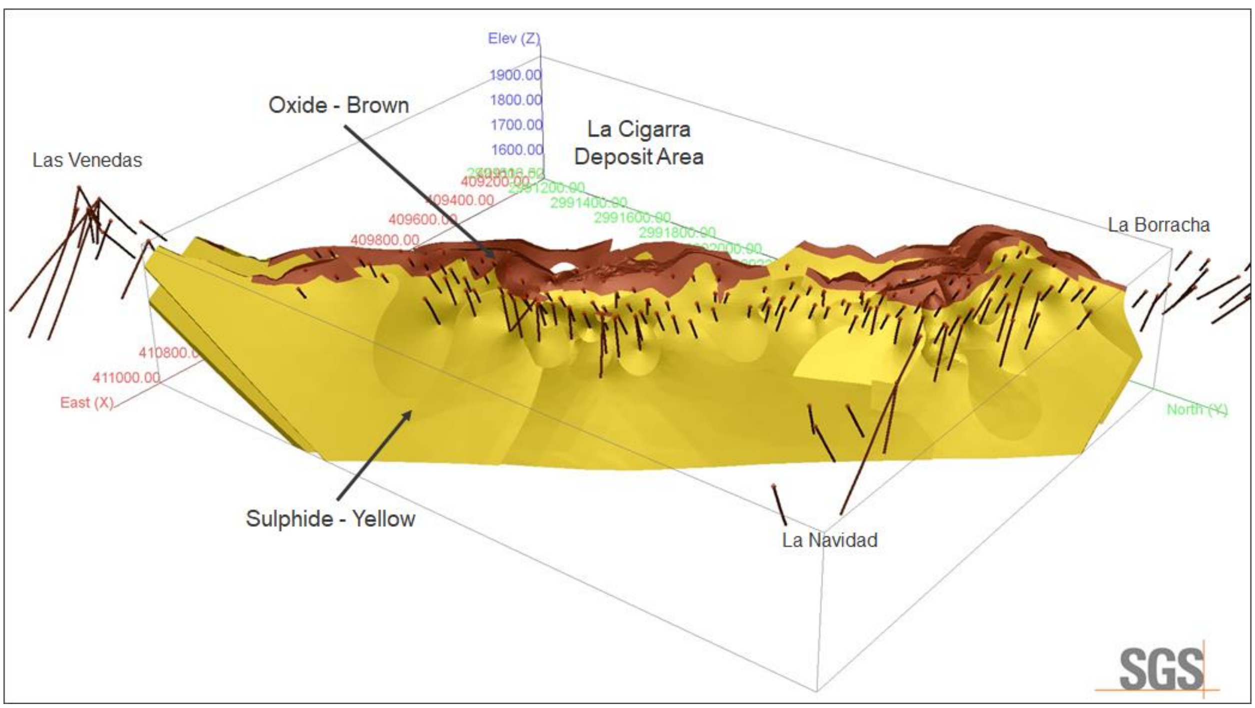



**Figure 14-7 Isometric View Looking Southwest: La Cigarra Oxide and Sulphide Models**



### 14.3.1 La Cigarra Resource Domain Construction

Development of the domains designed for use in resource estimation at La Cigarra was based upon firstly creating a geological model (Richards and Huebert, 2022). Once a confident geologic model was constructed, assay data was superimposed into the geologic model and from this the resource domains were defined. The construction of a geologic model as the first step followed the recommendations of Hans Smit, who advised the authors on methodologies of creating a resource model.

La Cigarra is a structurally controlled, epithermal, silver, lead, zinc prospect hosted in a thick monotonous accumulation of turbiditic thin bedded black shales and greywacke (Lower Cretaceous Mezcalera Formation). The Mezcalera Formation was regionally deformed by easterly-directed low-angle thrust faulting in Laramide times (90-40 Ma). This regional tectonic event established the initial structural setting that hosts the mineralization on La Cigarra. In mid-Tertiary times, reactivation of Laramide structures was associated with volcanism and intrusions created calderas (Escobda caldera), basin-and- range geomorphology and regional mineralization that includes La Cigarra and the established La Prieta and Santa Barabara mines.

The mineralized setting at La Cigarra is adjacent to the outer western border of the Escobeda caldera and plausibly relate to its origin. In the La Cigarra area caldera evolution reactivated earlier faults, sourced felsic and intermediate dykes with accompanying hornfels and mineralization.

Mineralization at La Cigarra comprises veins, breccias, stockworks and gash systems hosted in a northeast dipping (40-45º) structural panel intruded by feldspar porphyry and rhyolite dikes. Mineralization is dominantly bound between two structures. The upper boundary (hanging wall) of the mineralization is termed the F1/F1a fault zone and the lower boundary (footwall), the F2 Fault. The F1/F1a and F2 faults are interconnected by an array of fault splays whose intersecting geometry control the mineralization and the defined resource domains.

The area has been well mapped, both in detail and regional. Surface geologic mapping gave rigid control on the geologic interpretations in constructing the model.

*Geologic Model: Assumptions*

To create a three dimensional geologic model requires the presence of a framework or “marker” that can used to connect between drill holes, drill sections and the surface mapping. The La Cigarra prospect is hosted in monotonous, but dividable, assemblage of grey to black laminated, thin to coarse-bedded turbidite clastics that have no recognized internal marker horizons.

On La Cigarra, within the resource area, the Mezcalera turbidites are divided into upper and lower assemblages. The upper assemblage comprises 200’s+ m of finely laminated to platy, alternating bands of black shale and fine grey carbonate mud (micrite) and is refered to as cmd in the accompanying file. The lower assemblage, referred to as the greywacke unit (gwke), comprises an unknown thickness of thick bedded sandstone, greywacke and laminated blacks clastics that structurally underlie the micrite (cmd). The structural contact between the cmd and greywacke units is traceable on surface the length of the resource area and defines the fault structure F2.

The La Cigarra resource analysis began on San Gregorio, as it possessed the most potential for the development of economic tonnage and grade. Initial features recognized as potential markers were the distribution of the hornfelsed mudstone/micrite and the trace of the F1 and F2 faults. No stratigraphic or intrusive marker was identified. The use of the term “hornfels” is here restricted to the cmd (the mudstone/micrite) and not the underlying greywacke assemblage. The marked contrast of the thermal metamorphic effects on the shale (hornfels) versus the micrite (skarn) and induration of the laminations in the cmd gave a recognizable guide to the general intensity of hornfels. No thin section work was done.

Hornfels was instrumental in the initial 3D framework within San Gregorio as its distribution was trackable between holes, sections, and surface along with a close association to fault/shear zones. Modelling identified two major structural zones that host mineralization and are termed the F1/F1a and F2 fault zone structures. F1/F1a and F2 structures are traceable on surface and drill hole for the 2.4 km length of the resource area.

F1/F1a structure is the hanging wall structure of the La Cigarra Mineralization. All mineralization is hosted below the F1/F1a structure, excepting for two known high-grade splays represented by domains D3 and D104 domains. San Gregorio mineralization is located entirely within the cmd unit. In the most highly mineralized section of San Gregorio, the Wedge Zone, the hanging wall fault F1/F1a splays with the upper boundary of the Wedge Zone bounded by F1a (hanging wall structure) and the lower boundary defined by the F1 fault. South of the Wedge zone, the hanging wall structure F1a rejoins F1. Between southern San Gregorio and northern sector of Carolinas, the hanging wall (F1/F1a) and footwall (F2) faults merge until the Gap Zone in northern Carolinas, where they again separate into distinctive structures.

F2 structure is the footwall of the La Cigarra mineralization. It represents the structural contact between the upper cmd unit and lower greywacke turbidite unit. The strata of the hanging wall of F2 is the cmd unit. The rock assemblages of the footwall of F2 are complex. The contact varies from gradational to abrupt transition into the greywacke unit and is commonly occupied by dykes of white rhyolite, mezcalera rhyolite, feldspar porphyry, gouge/shears and quartz breccias (mineral domain D6). The complexity of the footwall assemblages in contrast to the simplicity of the hanging wall cmd assemblage suggests that the F2 zone represents the sole of a reactivated Laramide thrust. San Gregorio mineralization is hosted between F1/F1a and F-2 structures. In Carolinas, mineralization extends from the F1/F1a structure into and below the F2 structure.

## 14.4 Specific Gravity

The author was provided with a database of 1,412 SG measurements. Of this data, 1,407 values were used for the current MRE. The database included a mix of samples determined either by the weight in air/weight in water method (WW/WA) (1,241 samples) or the wax immersion method (171 samples) completed by ALS Global (see section 11). As previously discussed, (Armitage and Campbell, 2015), the SG determined using the WW/WA method on average agrees well with the wax immersion method. The SG data was subdivided by samples from within the mineralized domains and those outside (waste). The samples were further subdivided by whether the samples are from oxidized or non-oxidized mineralization or waste.

Of the data collected, 238 samples are from mineralized material: 54 from oxidized mineralization and 184 from sulphide mineralization. A total of 1,169 samples are from waste material: 192 from oxidized rock and 977 from non-oxidized rock. Based on a review of the available SG data, it was decided that fixed SG values be used for the resource models and for waste. The average SG values used by domain for the current MRE are presented in Table 14-2 above. As previously discussed, (Armitage and Campbell, 2015), there appears to be little correlation of density value and silver grade.

## 14.5 Compositing

The assay sample database available for the revised resource modelling totalled 26,419 samples representing 34,447 m of drilling (Table 14-1). Of the total assay database, there are 3,029 assays within the resource domains. A statistical analysis of the assay data from within the resource domains is presented in Table 14-3, and includes the resource assay database, and subdivided by state of oxidation, and with the high-grade domain broken out.

**Table 14-3 Statistical Analysis of the Drill Assay Data from Within the Deposit Mineral Domains**

*Total MRE assay database including by oxidation state*

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit | | | |
| Total # Assay Samples | 3,029 | | | |
| Average Sample Length | 1.17 m | | | |
| Minimum Grade | 0.05 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 3,920 | 4.78 | 18.8 | 26.7 |
| Mean | 86.5 | 0.06 | 0.17 | 0.24 |
| Standard Deviation | 193 | 0.15 | 0.67 | 0.79 |
| Coefficient of variation | 2.22 | 2.47 | 3.88 | 3.30 |
| 97.5 Percentile | 527 | 0.20 | 0.95 | 1.59 |

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit: Oxide | | | |
| Total # Assay Samples | 497 | | | |
| Average Sample Length | 1.36 m | | | |
| Minimum Grade | 3.70 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 2,270 | 3.90 | 4.56 | 0.37 |
| Mean | 93.2 | 0.07 | 0.11 | 0.06 |
| Standard Deviation | 181 | 0.21 | 0.26 | 0.05 |
| Coefficient of variation | 1.94 | 2.89 | 2.26 | 0.87 |
| 97.5 Percentile | 489 | 0.33 | 0.55 | 0.18 |

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit: Sulphide | | | |
| Total # Assay Samples | 2,532 | | | |
| Average Sample Length | 1.13 m | | | |
| Minimum Grade | 0.05 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 3,920 | 4.78 | 18.9 | 26.7 |
| Mean | 85.2 | 0.06 | 0.19 | 0.28 |
| Standard Deviation | 195 | 0.13 | 0.73 | 0.86 |
| Coefficient of variation | 2.29 | 2.32 | 3.93 | 3.12 |
| 97.5 Percentile | 535 | 0.19 | 1.03 | 1.86 |

The sample length of the resource domain assay sample intervals ranges from 0.10 to 2.80 m and averages 1.17 m. Of the 3,029 assay samples from within the resource domains, approximately 35% are 1.5 m or greater in length; 57% of the assays are >1.00 m. To minimize the dilution and over smoothing due to compositing, a composite length of 1.50 m was chosen as an appropriate composite length, for the current MRE.

Composites were generated starting from the collar of each hole. Un-assayed intervals were given a value of 0.0001 for Ag, Au, Pb and Zn. Composites were then constrained to the individual mineral domains. The constrained composites were extracted to point files for statistical analysis and capping studies. The constrained composites were grouped based on the mineral domain (rock code) of the constraining models.

A total of 2,318 1.5 m composite sample points occur within the resource models. A statistical analysis of the composite data from within the resource domains is presented in Table 14-4, and includes the resource assay database, and subdivided by state of oxidation, and with the high-grade domain broken out.

### Table 14-4 Statistical Analysis of the 1.5 M Composite Data from Within the Deposit Mineral Domains

*Total MRE Composite database including by oxidation state*

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit | | | |
| Total # Assay Samples | 2,318 | | | |
| Average Sample Length | 1.50 m | | | |
| Minimum Grade | 1.33 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 2,153 | 3.19 | 10.6 | 12.9 |
| Mean | 77.5 | 0.06 | 0.14 | 0.19 |
| Standard Deviation | 142 | 0.12 | 0.41 | 0.47 |
| Coefficient of variation | 1.82 | 2.01 | 2.82 | 2.44 |
| 97.5 Percentile | 436 | 0.19 | 0.80 | 1.06 |

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit: Oxide | | | |
| Total # Assay Samples | 441 | | | |
| Average Sample Length | 1.50 m | | | |
| Minimum Grade | 4.60 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 1,568 | 1.30 | 1.43 | 0.37 |
| Mean | 89.1 | 0.07 | 0.11 | 0.06 |
| Standard Deviation | 141 | 0.13 | 0.16 | 0.05 |
| Coefficient of variation | 1.58 | 1.96 | 1.47 | 0.80 |
| 97.5 Percentile | 468 | 0.19 | 0.56 | 0.18 |

| Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|
| | La Cigarra Deposit: Sulphide | | | |
| Total # Assay Samples | 1,877 | | | |
| Average Sample Length | 1.50 m | | | |
| Minimum Grade | 1.33 | 0.00 | 0.00 | 0.00 |
| Maximum Grade | 2,153 | 3.19 | 10.6 | 12.9 |
| Mean | 74.8 | 0.06 | 0.15 | 0.23 |
| Standard Deviation | 142 | 0.11 | 0.44 | 0.52 |
| Coefficient of variation | 1.90 | 2.01 | 3.91 | 2.31 |
| 97.5 Percentile | 427 | 0.17 | 0.83 | 1.17 |

## 14.6 Grade Capping

A statistical analysis of the composite database within the resource models (the “resource” population) was conducted to investigate the presence of high-grade outliers which can have a disproportionately large influence on the average grade of a mineral deposit. High grade outliers in the composite data were investigated using statistical data (Table 14-4), histogram plots, and cumulative probability plots of the 1.5 m composite data.

After review, it is the opinion that capping of high-grade composites to limit their influence during the grade estimation is necessary for Ag, Au, Pb and Zn. Due to the limited composite sample population by domain or by oxide vs sulphide, the capping analysis was done based on the one high grade domain and the lower grade domains. A summary of grade capping values within the mineralized domains is presented in Table 14-5. In the opinion of the author, the capping applied to the deposit composites has had the desired effect of limiting the influence of high-grade outliers on the global MRE. The capped composites are used for grade interpolation into the Deposit block models.

**Table 14-5 Composite Capping Summary – by Domain/Deposit Area**

| | Total # of Composites | Attribute | Capping Value | # Capped | Mean of Raw Composites | Mean of Capped Composites | CoV of Raw Composites | CoV of Capped Composites |
|---|---|---|---|---|---|---|---|---|
| La Cigarra | 2,093 | Ag g/t | 750 | 8 | 67.4 | 64.8 | 1.83 | 1.46 |
| | | Au g/t | 0.8 | 7 | 0.06 | 0.05 | 2.09 | 1.29 |
| | | Pb % | 3.00 | 5 | 0.13 | 0.13 | 2.54 | 2.12 |
| | | Zn % | 3.50 | 6 | 0.18 | 0.18 | 2.08 | 1.94 |
| La Cigarra HG | 225 | Ag g/t | 850 | 5 | 171 | 164 | 1.38 | 1.23 |
| | | Au g/t | 0.3 | 4 | 0.08 | 0.07 | 1.38 | 0.83 |
| | | Pb % | 1.50 | 4 | 0.25 | 0.19 | 3.20 | 1.48 |
| | | Zn % | 3.00 | 3 | 0.33 | 0.28 | 3.03 | 1.86 |

## 14.7 Block Model Parameters

The Property mineral resource domains are used to constrain composite values chosen for interpolation, and the mineral blocks reported in the estimate of the mineral resources. A block model within UTM coordinate space, was created for the La Cigarra deposit area (Table 14-6, and Figure 14-8 to Figure 14-9). Block model dimensions, in the x (east m), y (north m) and z (level m) directions were placed over the grade shells with only that portion of each block inside the shell recorded (as a percentage of the block) as part of the MRE (% Block Model). The block size for each block model was selected based on drillhole spacing, composite length, the geometry and shape of the mineralized domains, and the selected mining methods (open pit). At the scale of the deposit models, the selected block size for each model provides a reasonable block size for discerning grade distribution, while still being large enough not to mislead when looking at higher cut-off grade distribution within the model. The models were intersected with surface topography to exclude blocks, or portions of blocks, that extend above the bedrock surface.

**Table 14-6 La Cigarra Deposit Block Model Geometry**

| Block Model | *La Cigarra* | | |
|---|---|---|---|
| | X (East) | Y (North) | Z (Level) |
| Origin (WGS 84) | 410767 | 2990800 | 2085 m |
| Extent (blocks) | 155 | 621 | 108 |
| Block Size | 5 m | 5 m | 5 m |
| Rotation (counter clockwise) | 35° | | |

**Figure 14-8 Plan View: Distribution of Mineral the Resource Block Model and Mineralization Domains within the Property**

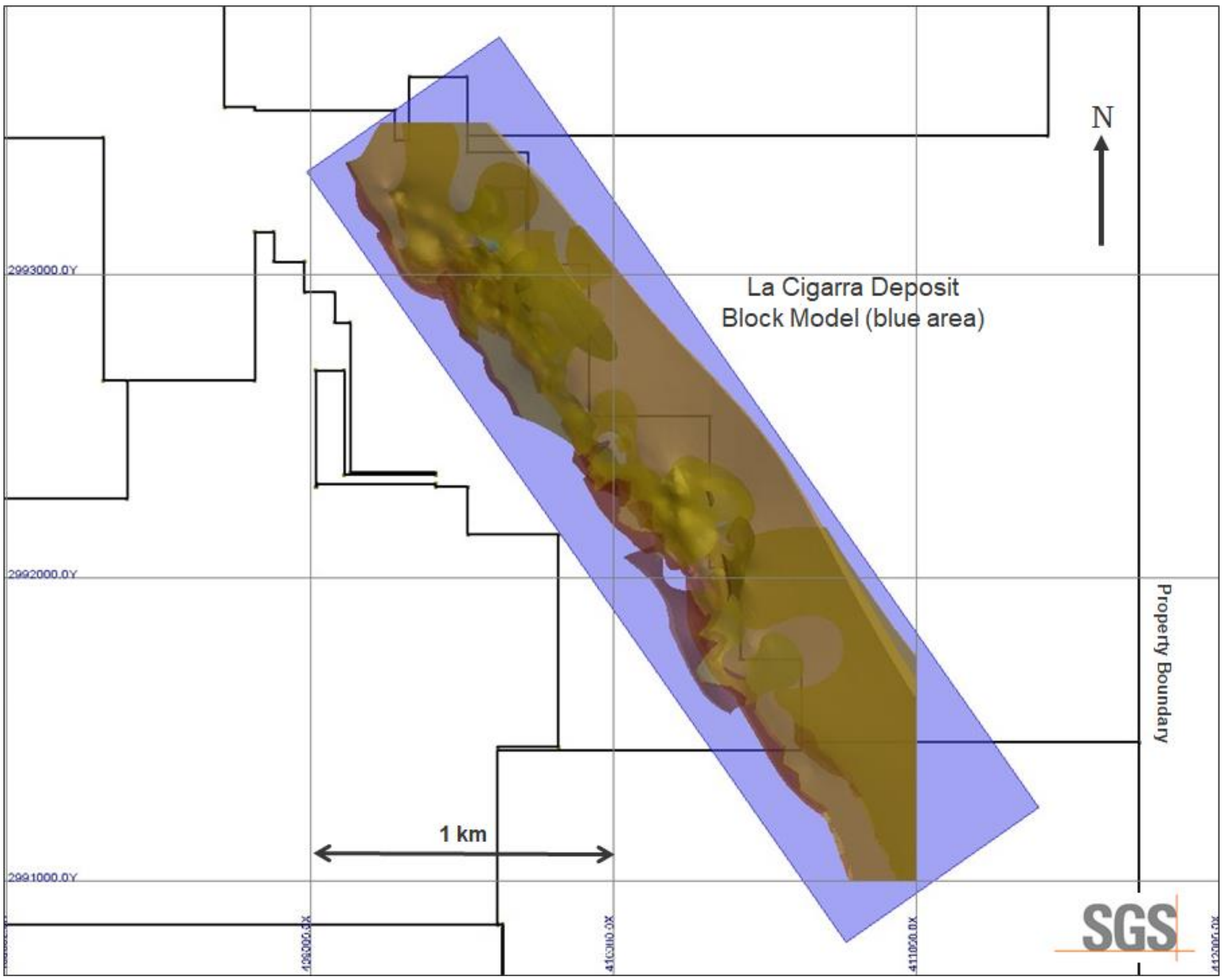
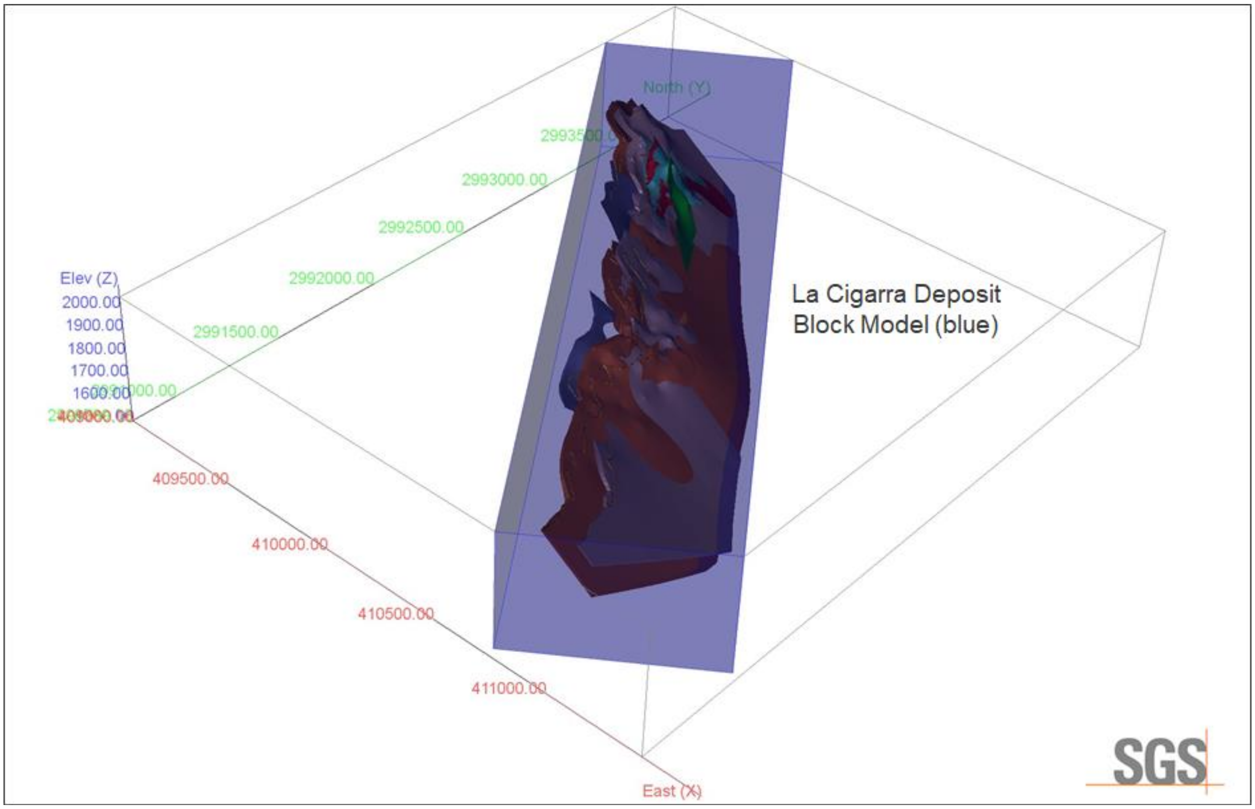


**Figure 14-9 Isometric View looking NW: Distribution of Mineral the Resource Block Model and Mineralization Domains within the Property**




## 14.8 Grade Interpolation

Silver, gold, lead and zinc grades were estimated into the blocks for the La Cigarra block model. Blocks within each mineralized domain were interpolated using composites assigned to that domain. To generate grade within the blocks, the inverse distance squared ($ID^2$) interpolation method was used for all domains. Due to the lack of drill data representing oxide mineralization, the composites were not separated into oxide and sulphide domains. The base-of-oxide surface was considered as a soft boundary and is only used for reporting of separate resources for oxide and sulphide.

For all domains, the search ellipse used to interpolate grade into the resource blocks was interpreted based on orientation and size of the mineralized domain. The search ellipse axes are generally oriented to reflect the observed preferential long axis (geological trend) of the domain and the observed trend of the mineralization down dip/down plunge (Table 14-7).

Three passes were used to interpolate grade into all of the blocks in the grade shells (Table 14-7). For Pass 1 the search ellipse size (in metres) for all mineralized domains was set at 35 x 35 x 15 in the X, Y, Z direction; for Pass 2 the search ellipse size for each domain was set at 60 x 60 x 20; for Pass 3 the search ellipse size was set at 120 x 120 x 30. Blocks were classified as Measured if they were populated with grade during Pass 1 and indicated if they were populated with blocks Pass 2 of the interpolation procedure. The Pass 3 search ellipse size was set to assure all remaining blocks within the wireframe were assigned a grade. These blocks were classified as Inferred. Note that additional blocks in areas of denser drilling, that were initially classified as inferred were reclassified as Indicated.

Grades were interpolated into blocks using a minimum of 5 and maximum of 8 composites to generate block grades during pass 1 and pass 3 (maximum of 3 sample composites per drill hole), and a minimum of 3 and maximum of 8 composites to generate block grades during pass 3 (maximum of 2 sample composites per drill hole).

### Table 14-7 Grade Interpolation Parameters by Domain

| Parameter | Domains: HG_D1 | | | Domains: D1, D2, D4, D6, D7, D8 | | |
|---|---|---|---|---|---|---|
| | Pass 1 | Pass 2 | Pass 3 | Pass 1 | Pass 2 | Pass 3 |
| | Measured | Indicated | Inferred | Measured | Indicated | Inferred |
| Calculation Method | Inverse Distance squared | | | Inverse Distance squared | | |
| Search Type | Ellipsoid | | | Ellipsoid | | |
| Principle Azimuth | 59° | | | 59° | | |
| Principle Dip | -44° | | | -44° | | |
| Intermediate Azimuth | 325° | | | 325° | | |
| Anisotropy X | 35 | 60 | 120 | 35 | 60 | 120 |
| Anisotropy Y | 35 | 60 | 120 | 35 | 60 | 120 |
| Anisotropy Z | 10 | 20 | 30 | 10 | 20 | 30 |
| Min. Samples | 5 | 5 | 3 | 5 | 5 | 3 |
| Max. Samples | 8 | 8 | 8 | 8 | 8 | 8 |
| Min. Drill Holes | 2 | 2 | 2 | 2 | 2 | 2 |

| Parameter | Domains: D3 | | | Domains: D104 | | |
|---|---|---|---|---|---|---|
| | Pass 1 | Pass 2 | Pass 3 | Pass 1 | Pass 2 | Pass 3 |
| | Measured | Indicated | Inferred | Measured | Indicated | Inferred |
| Calculation Method | Inverse Distance squared | | | Inverse Distance squared | | |
| Search Type | Ellipsoid | | | Ellipsoid | | |
| Principle Azimuth | 61° | | | 84° | | |
| Principle Dip | -63° | | | -59° | | |
| Intermediate Azimuth | 327° | | | 354° | | |
| Anisotropy X | 35 | 60 | 120 | 35 | 60 | 120 |
| Anisotropy Y | 35 | 60 | 120 | 35 | 60 | 120 |
| Anisotropy Z | 10 | 20 | 30 | 10 | 20 | 30 |
| Min. Samples | 5 | 5 | 3 | 5 | 5 | 3 |
| Max. Samples | 8 | 8 | 8 | 8 | 8 | 8 |
| Min. Drill Holes | 2 | 2 | 2 | 2 | 2 | 2 |

## 14.9 Mineral Resource Classification Parameters

The MRE presented in this Technical Report is disclosed in compliance with all current disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016). The classification of the current MREs into Indicated and Inferred are consistent with current 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources "have reasonable prospects for eventual economic extraction".

The current MRE is sub-divided, in order of increasing geological confidence, into the Measured, Indicated, and Inferred 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 solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. For many gold or base metal deposits, application of the concept would normally be perhaps 10 to 15 years.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling.

***Measured Mineral Resource***

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity, and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

***Indicated Mineral Resource***

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity, and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource Estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

***Inferred Mineral Resource***

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated based on limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings, and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

## 14.10 Reasonable Prospects of Eventual Economic Extraction

The general requirement that all Mineral Resources have “reasonable prospects for eventual economic extraction” implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade considering extraction scenarios and processing recoveries. To meet this requirement, based on the location, size, shape, general thickness, and orientation of the La Cigarra deposit, the Author considers that the La Cigarra deposit is amenable to open pit extraction.

To determine the quantities of material offering “reasonable prospects for eventual economic extraction” by open pit mining methods, reasonable mining assumptions to evaluate the proportions of the block model (Measured, Indicated, and Inferred blocks) that could be “reasonably expected” to be mined from open pit are used. The open pit optimization parameters used are summarized in Table 14-8. A Whittle (GEOVIA Whittle™ 2022) pit shell at a revenue factor of 1.0 was selected as the ultimate pit shell for the purposes of this MRE.

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the “reasonable prospects for eventual economic extraction” by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a Mineral Resource statement and to select an appropriate resource reporting cut-off grade. A selected base case cut-off grade of 50 g/t AgEq is used to determine the in-pit MRE for the La Cigarra deposit.

The reporting of the in-pit MRE is presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction. The in-pit mineral resource grade blocks were quantified above the base case cut-off grade, below topography and within the 3D constraining mineralized wireframes (the constraining volumes).

**Table 14-8 Parameters used for Whittle™ pit optimization and In-pit Cut-off Grade Calculation**

| Parameter | Value | Unit |
|---|---|---|
| Silver Price | $23.50 | US$ per oz |
| Gold Price | $1800 | US$ per oz |
| Zinc Price | $1.30 | US$ per pound (US$/t) |
| Lead Price | $1.00 | US$ per pound (US$/t) |
| In-pit Mining Cost | $2.50 | US$ per tonne mined |
| Transportation | $3.00 | US$ per tonne milled |
| Processing Cost (incl. crushing) | $17.40 | US$ per tonne milled |
| In-pit General and Administrative | $2.00 | US$ tonne of feed |
| Pit Slope - Oxide | 48 | Degrees |
| Pit Slope - Sulphide | 55 | Degrees |
| Silver Recovery - Oxide | 85.0 | Percent (%) |
| Gold Recovery - Oxide | 40.0 | Percent (%) |
| Lead Recovery - Oxide | 75.0 | Percent (%) |
| Zinc Recovery - Oxide | 65.0 | Percent (%) |
| Silver Recovery - Sulphide | 92.0 | Percent (%) |
| Gold Recovery - Sulphide | 40.0 | Percent (%) |
| Lead Recovery - Sulphide | 91.0 | Percent (%) |
| Zinc Recovery - Sulphide | 85.0 | Percent (%) |
| Mining loss / Dilution (open pit) | 5/5 | Percent (%) / Percent (%) |
| Density Mineralization Ox/Sx | 2.44/2.59 | |
| Density Waste Ox/Sx | 2.47/2.59 | |
| Base Case Cut-off grade | 50 g/t AgEq | |

## 14.11 Mineral Resource Statement

The update MRE for the Project is presented in Table 14-9 and includes an oxide and sulphide MRE (Table 14-9) (Figure 14-10 to Figure 14-17).

**Highlights of the Project Mineral Resource Estimate are as follows:**

- Measured + Indicated Mineral Resources are estimated at 15.73 Mt grading 102 g/t silver, 0.07 g/t gold, 0.16% lead, and 0.21% zinc (120 AgEq). The Measured MRE includes resources of 51.57 Moz of silver, 33.9 koz of gold, 54.8 Mlbs of lead, and 73.5 Mlbs of zinc (60.56 Moz AgEq).
- Inferred Mineral Resources are estimated at 3.37 Mt grading 102 g/t silver, 0.06 g/t gold, 0.20% lead, and 0.19% zinc (119 AgEq). The Inferred MRE includes resources of 11.00 Moz of silver, 6.00 koz of gold, 14.8 Mlbs of lead, and 13.8 Mlbs of zinc (12.85 Moz AgEq).

**Table 14-9 La Cigarra Deposit Mineral Resource Estimate, November 29, 2023**

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 2.08 | 103 | 0.06 | 0.16 | 0.22 | 121 | 6.90 | 4.30 | 7.6 | 9.9 | 8.10 |
| Indicated | 13.65 | 102 | 0.07 | 0.16 | 0.21 | 120 | 44.66 | 29.60 | 47.3 | 63.6 | 52.46 |
| Mea. + Ind. | 15.73 | 102 | 0.07 | 0.16 | 0.21 | 120 | 51.57 | 33.90 | 54.8 | 73.5 | 60.56 |
| Inferred | 3.37 | 102 | 0.06 | 0.20 | 0.19 | 119 | 11.00 | 6.00 | 14.8 | 13.8 | 12.85 |

*[1]AgEq = Ag ppm + (((Au ppm x Au price/gram) + (Pb% x Pb price/t) + (Zn% x Zn price/t))/Ag price/gram). Metal price assumptions are $23.50/oz silver, $1,800/oz gold, $1.00/lb lead and $1.30/t zinc.*

(1) *The classification of the current Mineral Resource Estimate into Indicated and Inferred is consistent with current 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves.*

(2) *All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.*

(3) *Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that most Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

(4) *It is envisioned that the La Cigarra deposit may be mined using open-pit mining methods. Mineral resources are reported at a base case cut-off grade of 50 g/t AgEq. The in-pit Mineral Resource grade blocks are quantified above the base case cut-off grade, above the constraining pit shell, below topography and within the constraining mineralized domains (the constraining volumes).*

(5) *The results from the pit optimization are used solely for the purpose of testing the "reasonable prospects for economic extraction" by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a Mineral Resource statement and to select an appropriate resource reporting cut-off grade.*

(6) *Mineral resources are presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction at the base case cut-off grade of 50 g/t AgEq.*

(7) *The base-case AgEq Cut-off grade considers metal prices of $23.50/oz Ag, $1,800/oz Au, $1.00/lb Pb and $1.30/lb Zn, and considers variable metal recoveries for Ag, Au, Pb and Zn: for oxide mineralization - 85% for Ag, 40% for Au, 75% for Pb and 65% for Zn; for sulphide mineralization - 92% for Ag, 40% for Au, 91% for Pb and 85% for Zn.*

(8) *The base case cut-off grade of 50 g/t AgEq considers a mining cost of US$2.50/t mined, and processing, treatment, refining, G&A and transportation cost of USD$22.40/t of mineralized material.*

(9) *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*

## Table 14-10 La Cigarra Oxide and Sulphide MRE, November 29, 2023

***Oxide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 0.50 | 141 | 0.06 | 0.12 | 0.06 | 152 | 2.28 | 1.00 | 1.3 | 0.7 | 2.46 |
| Indicated | 2.66 | 104 | 0.08 | 0.11 | 0.09 | 117 | 8.92 | 6.5 | 6.4 | 5.0 | 9.96 |
| Mea. + Ind. | 3.16 | 110 | 0.07 | 0.11 | 0.08 | 122 | 11.20 | 7.50 | 7.7 | 5.7 | 12.42 |
| Inferred | 0.89 | 84 | 0.05 | 0.17 | 0.05 | 94 | 2.40 | 1.30 | 3.4 | 1.0 | 2.70 |

***Sulphide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 1.58 | 91 | 0.07 | 0.18 | 0.26 | 111 | 4.62 | 3.30 | 6.2 | 9.2 | 5.64 |
| Indicated | 10.99 | 101 | 0.07 | 0.17 | 0.24 | 120 | 35.75 | 23.10 | 40.9 | 58.5 | 42.50 |
| Mea. + Ind. | 12.57 | 100 | 0.07 | 0.17 | 0.24 | 119 | 40.37 | 26.40 | 47.1 | 67.7 | 48.14 |
| Inferred | 2.48 | 108 | 0.06 | 0.21 | 0.24 | 128 | 8.60 | 4.70 | 11.4 | 12.9 | 10.15 |

*[1]AgEq = Ag ppm + (((Au ppm x Au price/gram) + (Pb% x Pb price/t) + (Zn% x Zn price/t))/Ag price/gram). Metal price assumptions are $23.50/oz silver, $1,800/oz gold, $1.00/lb lead and $1.30/t zinc.*

**Figure 14-10 Plan View: La Cigarra In-Pit Mineral Resource Blocks by Grade**

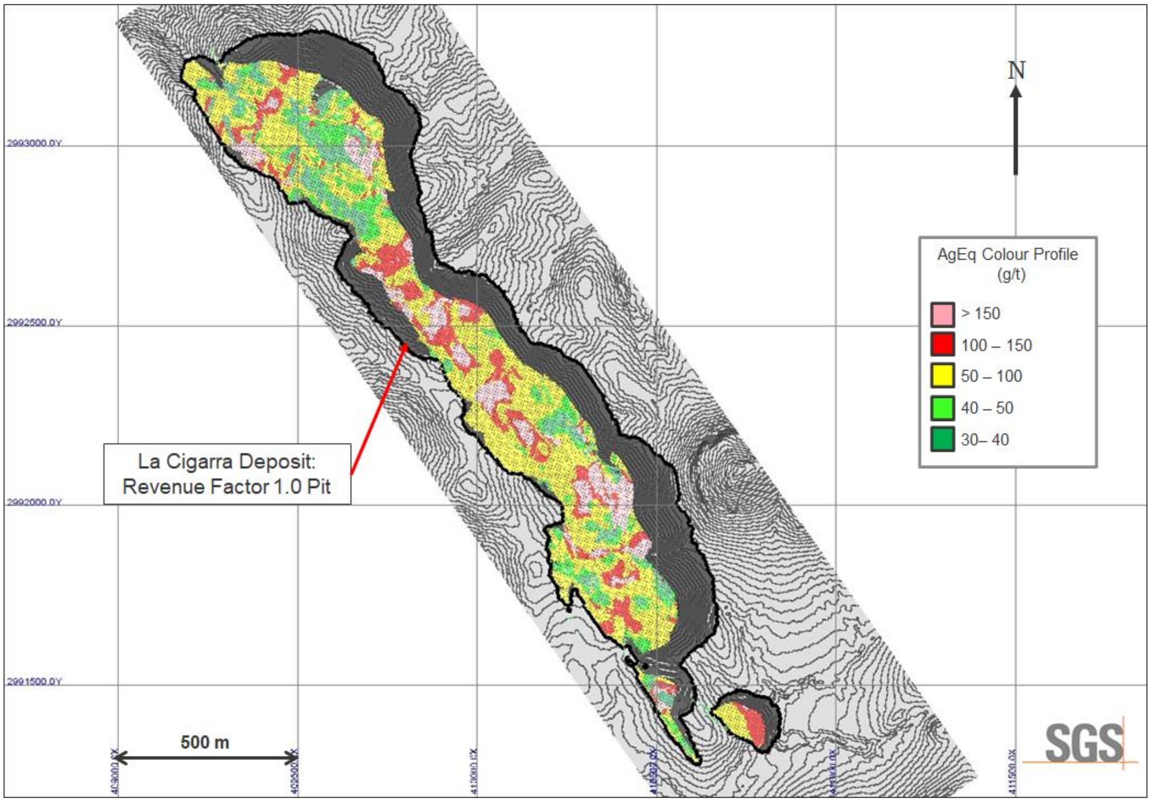



**Figure 14-11 Plan View: La Cigarra In-Pit Mineral Resource Blocks by Class**

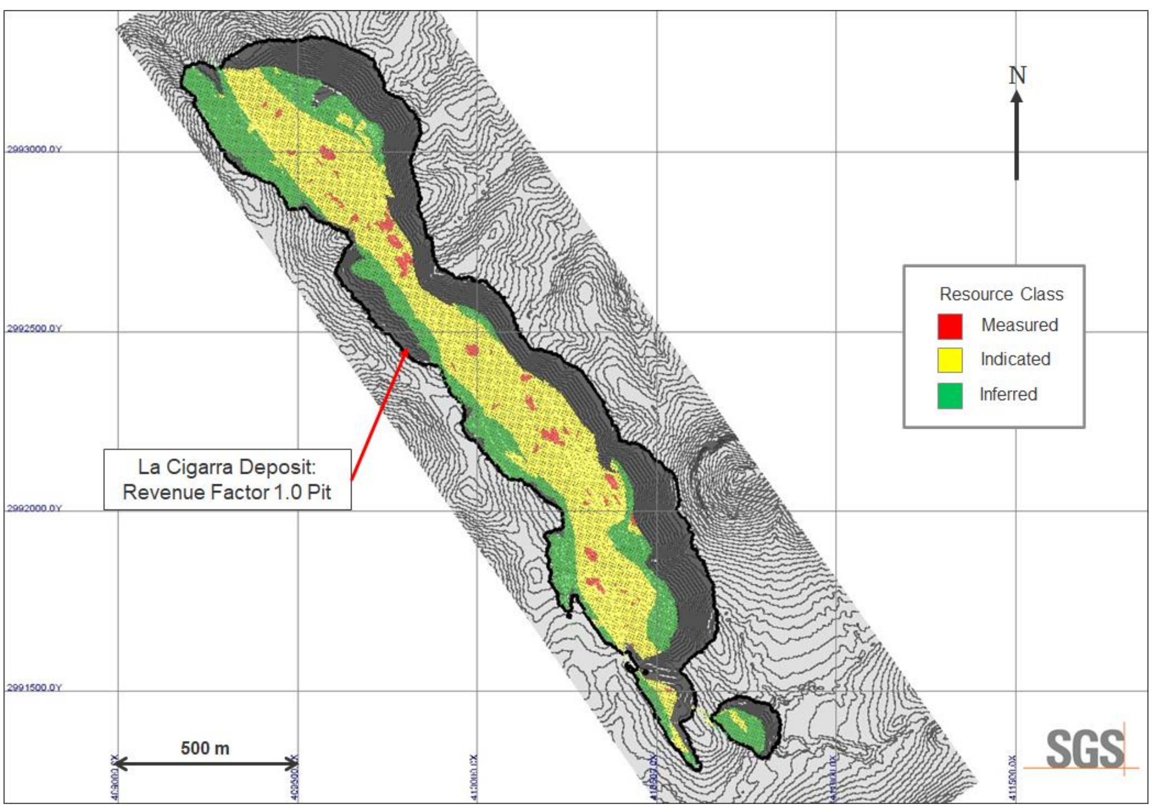


**Figure 14-12 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Blocks by Grade**

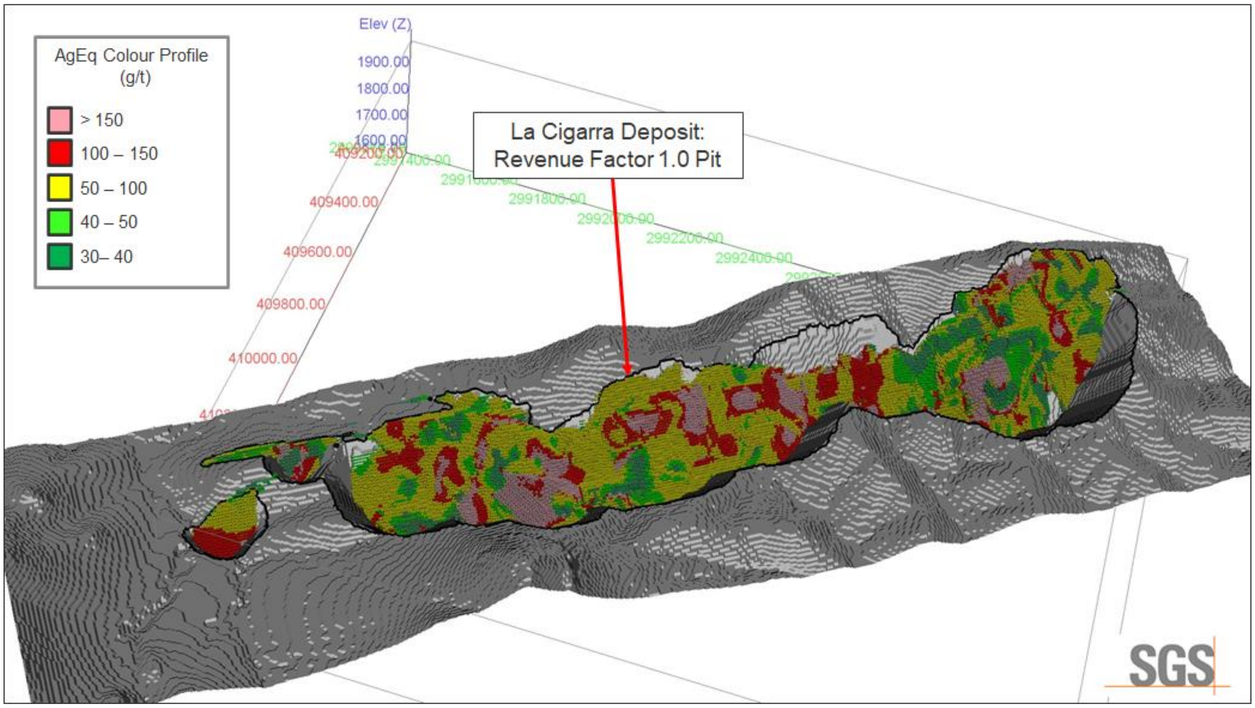



**Figure 14-13 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Blocks by Class**

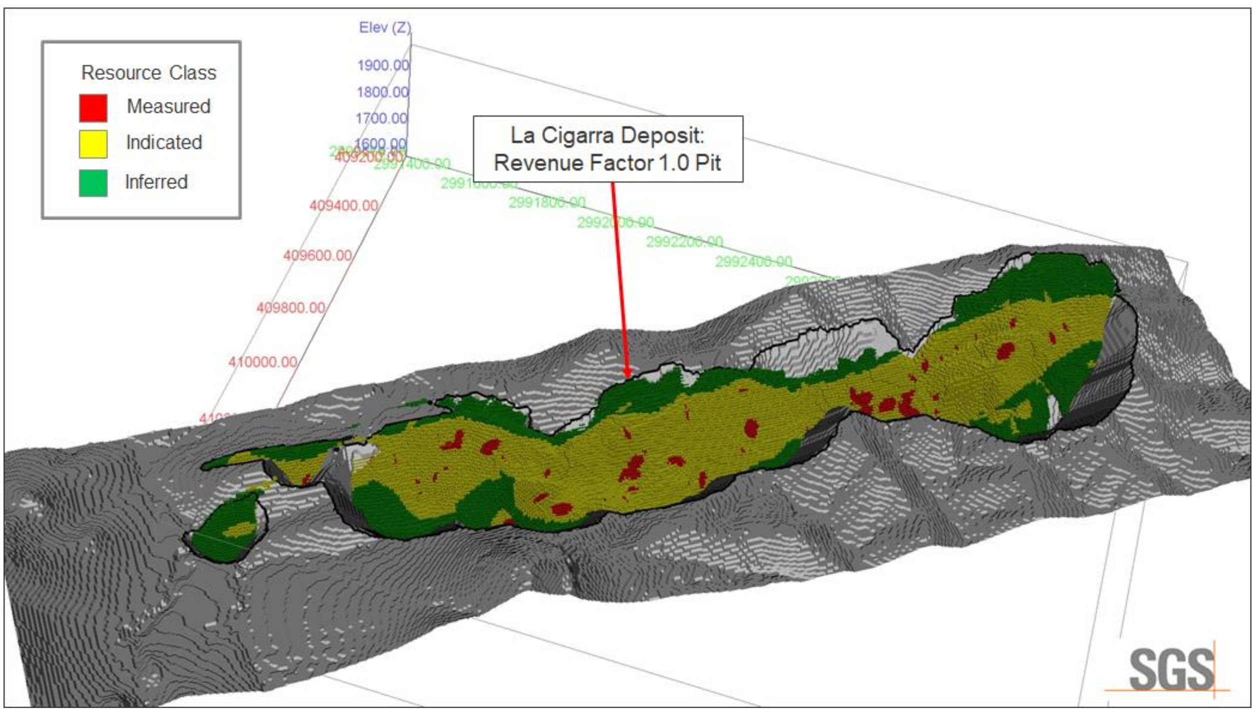


**Figure 14-14 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Oxide Blocks by Grade**

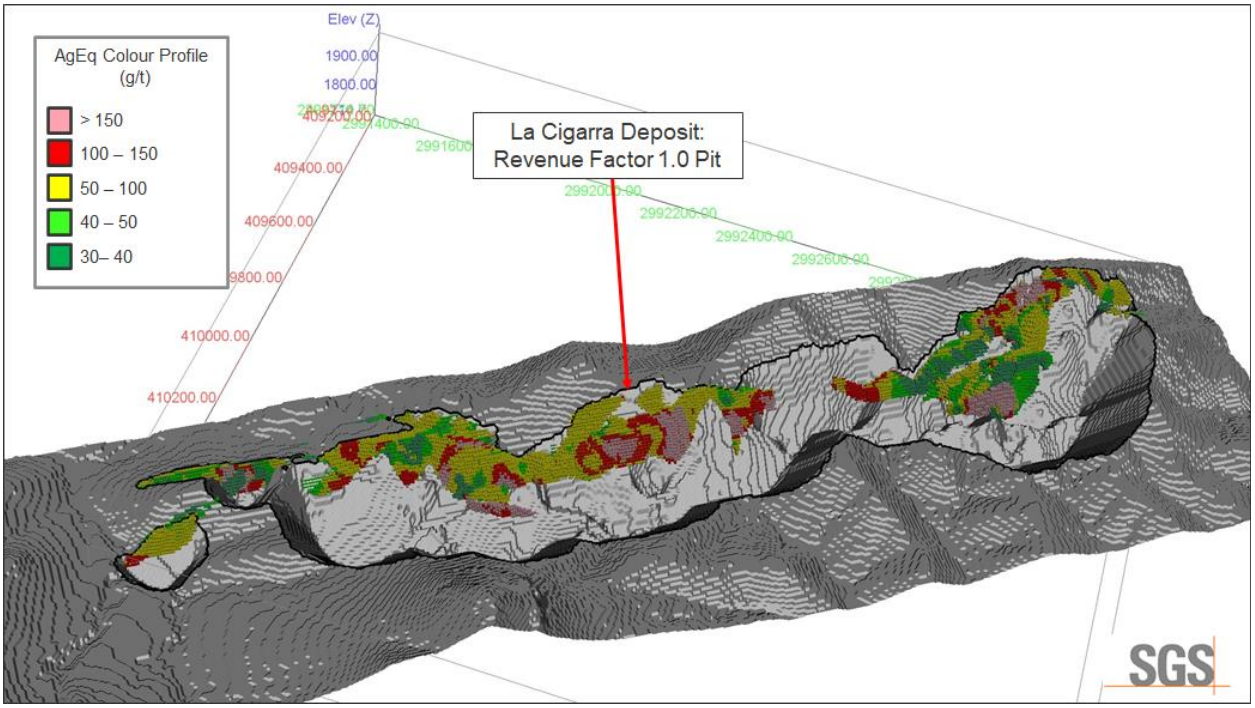



**Figure 14-15 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Oxide Blocks by Class**

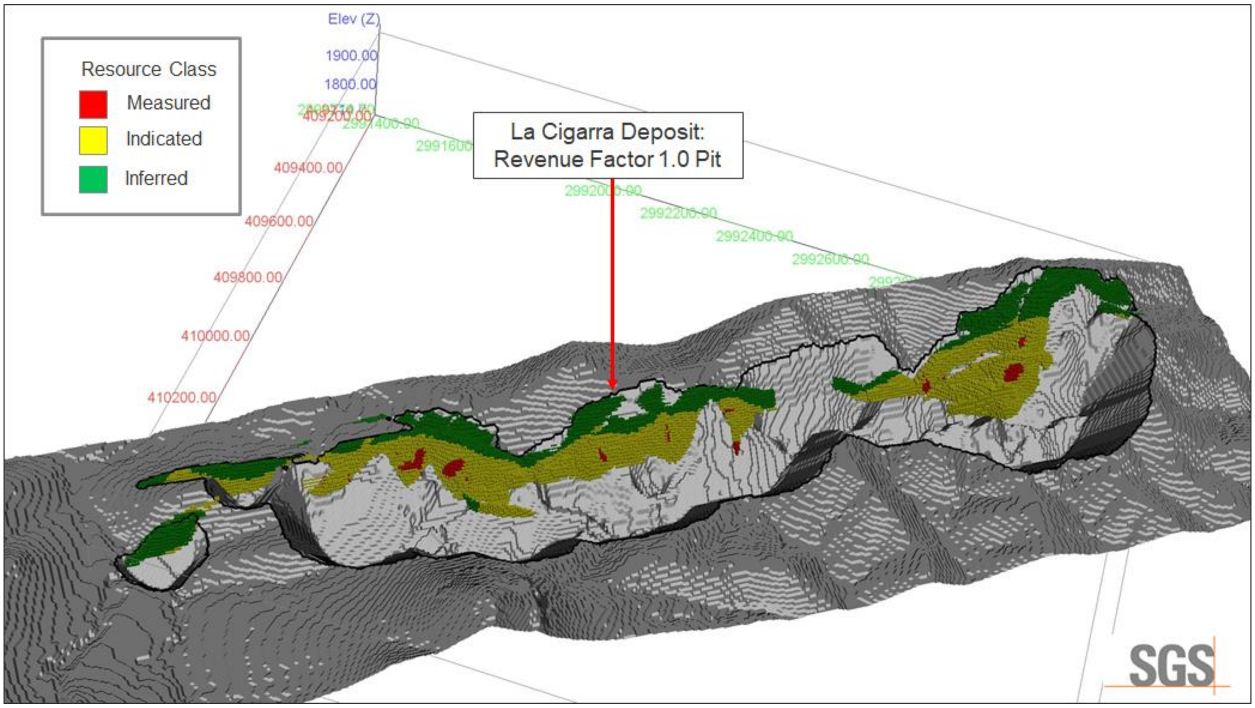


**Figure 14-16 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Sulphide Blocks by Grade**

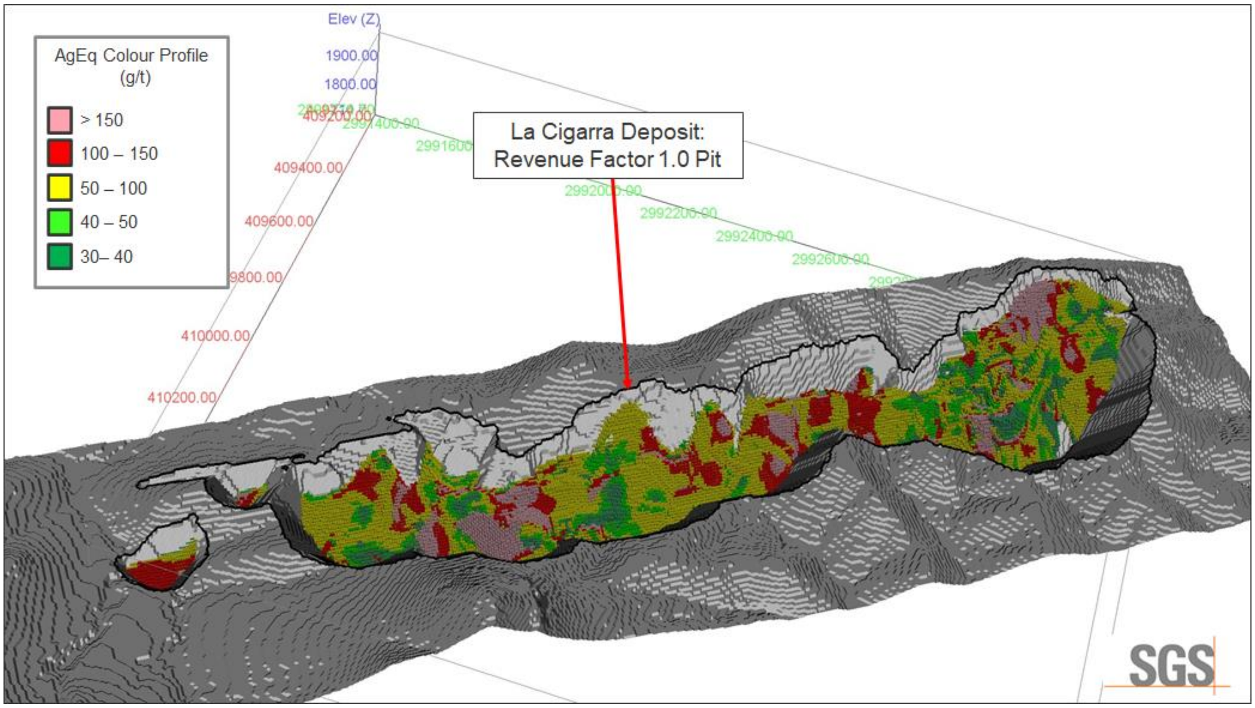
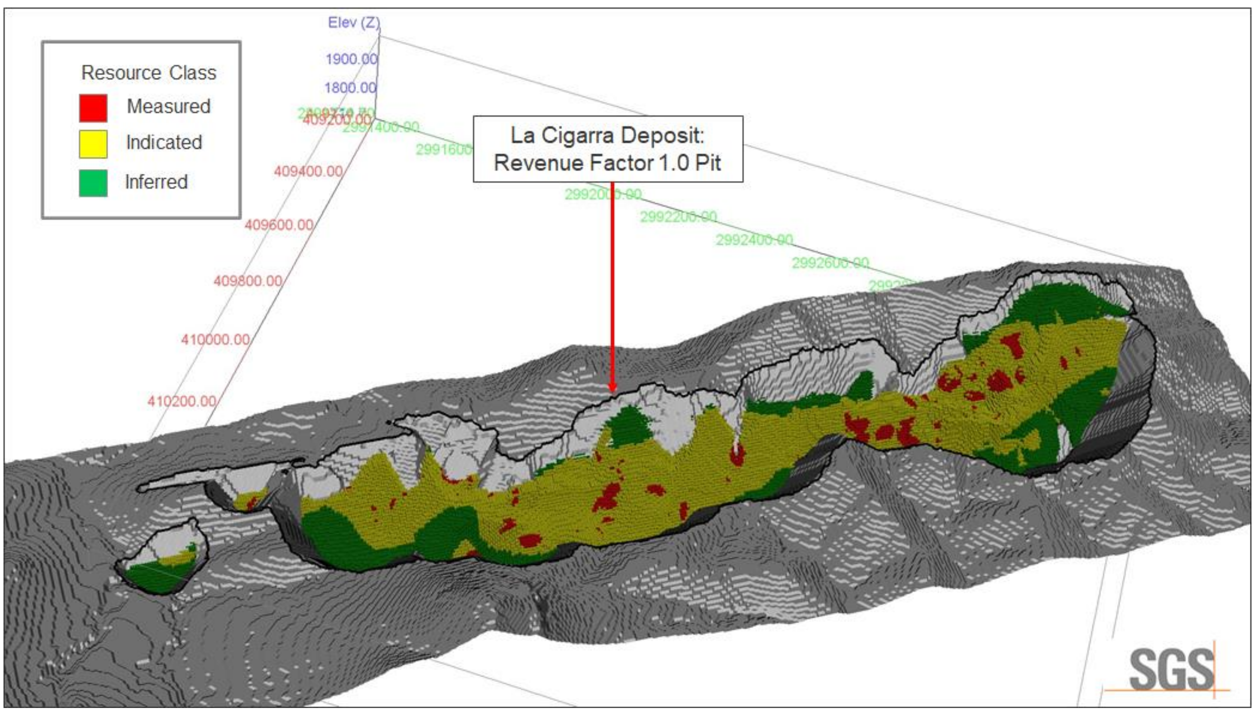



**Figure 14-17 Isometric View Looking Southwest: La Cigarra In-Pit Mineral Resource Sulphide Blocks by Class**



## 14.12 Model Validation and Sensitivity Analysis

Visual checks of block grades against the composite data and assay data on vertical section showed good correlation between block grades and drill intersections.

A comparison of the average capped composite grades (≥0.001) and average assay grades by model/domain with the average grades of all the blocks in the block model at a 0.001% AgEq cut-off grade was completed and is presented in

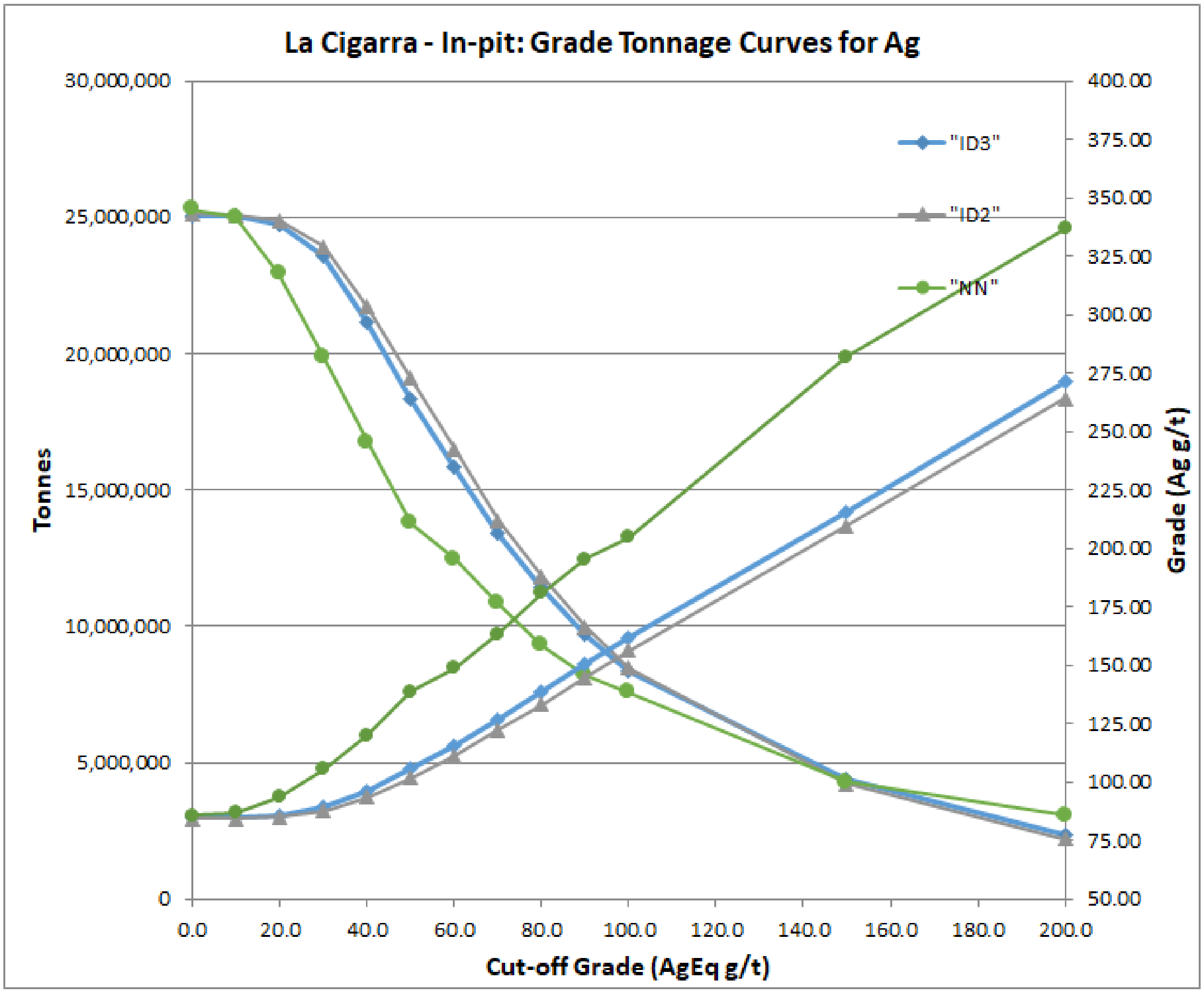
Table 14-11. The block model average grades compared well with the composite average grades.

For comparison purposes, additional grade models were generated using a varied inverse distance weighting ($ID^3$) and nearest neighbour (NN) interpolation methods. The results of these models are compared to the chosen models ($ID^2$) at various cut-off grades in a grade/tonnage graph shown in Figure 14-18. In general, the $ID^2$ and $ID^3$ models show similar results, and both are much more conservative and smoother than the NN model. For models well-constrained by wireframes and well-sampled (close spacing of data), $ID^2$ should yield very similar results to other interpolation methods such as $ID^3$ or Ordinary Kriging.

**Table 14-11 Comparison of Average Composite Grades with Global Block Model Grades**

| Domain | Variable | Ag g/t | Au g/t | Pb ppm | Zn ppm |
|---|---|---|---|---|---|
| La Cigarra Deposit | Assays | 86.5 | 0.06 | 0.17 | 0.24 |
| | Composites Capped | 67.4 | 0.06 | 0.13 | 0.18 |
| | Blocks | 69.8 | 0.06 | 0.14 | 0.18 |
| | | | | | |
| La Cigarra Deposit: Oxide | Assays | 93.2 | 0.07 | 0.11 | 0.06 |
| | Composites Capped | 86.2 | 0.06 | 0.11 | 0.06 |
| | Blocks | 77.8 | 0.06 | 0.11 | 0.07 |
| | | | | | |
| La Cigarra Deposit: Sulphide | Assays | 85.2 | 0.06 | 0.19 | 0.28 |
| | Composites Capped | 71.6 | 0.05 | 0.14 | 0.22 |
| | Blocks | 68.2 | 0.05 | 0.15 | 0.20 |

**Figure 14-18 Comparison of ID$^3$, ID$^2$ & NN Models for the La Cigarra Deposit**



### 14.12.1 Sensitivity to Cut-off Grade

The La Cigarra deposit Mineral Resource has been estimated at a range of cut-off grades, presented in Table 14-12 to Table 14-12, to demonstrate the sensitivity of the resource to cut-off grades. The current Mineral Resource is reported at a base-case cut-off grade of 50 g/t AgEq (highlighted) within a conceptual pit shell.

Values in these tables reported above and below the base-case cut-off 50 g/t AgEq for in-pit Mineral Resources should not be misconstrued with a Mineral Resource Statement. The values are only presented to show the sensitivity of the block model estimates to the selection of the base case cut-off grade. All values are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.

**Table 14-12 In-Pit Mineral Resource Estimate at Various AgEq Cut-off Grades, November 29, 2023**

| Cut-off Grade (AgEq g/t) | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | AgEq (g/t) | Ag (Moz) | Au (kOz) | Pb (Mlbs) | Zn (Mlbs) | AgEq (Moz) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Measured | | | | | | | | | | | |
| 30 | 2.73 | 86 | 0.06 | 0.14 | 0.19 | 102 | 7.54 | 5.30 | 8.5 | 11.4 | 8.94 |
| 40 | 2.43 | 93 | 0.06 | 0.15 | 0.20 | 110 | 7.28 | 4.90 | 8.1 | 10.8 | 8.60 |
| 50 | 2.08 | 103 | 0.06 | 0.16 | 0.22 | 121 | 6.90 | 4.30 | 7.6 | 9.9 | 8.10 |
| 60 | 1.75 | 114 | 0.07 | 0.18 | 0.23 | 134 | 6.44 | 3.70 | 7.0 | 9.0 | 7.51 |
| 70 | 1.48 | 126 | 0.07 | 0.19 | 0.25 | 146 | 5.99 | 3.10 | 6.3 | 8.1 | 6.94 |
| 80 | 1.27 | 137 | 0.06 | 0.21 | 0.26 | 158 | 5.59 | 2.60 | 5.8 | 7.2 | 6.44 |
| Indicated | | | | | | | | | | | |
| 30 | 17.16 | 87 | 0.06 | 0.14 | 0.19 | 103 | 48.18 | 35.30 | 52.4 | 71.1 | 57.04 |
| 40 | 15.52 | 94 | 0.07 | 0.15 | 0.20 | 111 | 46.77 | 32.80 | 50.2 | 67.9 | 55.17 |
| 50 | 13.65 | 102 | 0.07 | 0.16 | 0.21 | 120 | 44.66 | 29.60 | 47.3 | 63.6 | 52.46 |
| 60 | 11.86 | 111 | 0.07 | 0.17 | 0.22 | 129 | 42.18 | 26.30 | 44.0 | 58.7 | 49.31 |
| 70 | 10.00 | 122 | 0.07 | 0.18 | 0.24 | 141 | 39.08 | 22.50 | 39.6 | 52.9 | 45.41 |
| 80 | 8.56 | 132 | 0.07 | 0.19 | 0.25 | 152 | 36.28 | 19.50 | 35.8 | 47.7 | 41.94 |
| Inferred | | | | | | | | | | | |
| 30 | 4.03 | 90 | 0.06 | 0.18 | 0.17 | 106 | 11.64 | 7.50 | 15.8 | 15.2 | 13.73 |
| 40 | 3.77 | 94 | 0.06 | 0.19 | 0.18 | 111 | 11.44 | 6.80 | 15.4 | 14.7 | 13.44 |
| 50 | 3.37 | 102 | 0.06 | 0.20 | 0.19 | 119 | 11.00 | 6.00 | 14.8 | 13.8 | 12.85 |
| 60 | 2.87 | 111 | 0.06 | 0.22 | 0.20 | 130 | 10.28 | 5.20 | 14.0 | 12.8 | 11.98 |
| 70 | 2.39 | 123 | 0.06 | 0.24 | 0.22 | 143 | 9.45 | 4.30 | 12.7 | 11.7 | 10.97 |
| 80 | 1.99 | 135 | 0.06 | 0.25 | 0.24 | 156 | 8.67 | 3.60 | 11.1 | 10.7 | 10.01 |

## Table 14-13 In-Pit Oxide and Sulphide Mineral Resource Estimates at Various AgEq Cut-off Grades, November 29, 2023

| Cut-off Grade (AgEq g/t) | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | AgEq (g/t) | Ag (Moz) | Au (kOz) | Pb (Mlbs) | Zn (Mlbs) | AgEq (Moz) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oxide Measured | | | | | | | | | | | |
| 30 | 0.67 | 114 | 0.05 | 0.11 | 0.06 | 123 | 2.46 | 1.10 | 1.6 | 0.9 | 2.67 |
| 40 | 0.58 | 128 | 0.06 | 0.11 | 0.06 | 138 | 2.37 | 1.00 | 1.5 | 0.8 | 2.56 |
| 50 | 0.50 | 141 | 0.06 | 0.12 | 0.06 | 152 | 2.28 | 1.00 | 1.3 | 0.7 | 2.46 |
| 60 | 0.46 | 150 | 0.06 | 0.13 | 0.07 | 161 | 2.22 | 0.90 | 1.3 | 0.7 | 2.38 |
| 70 | 0.42 | 160 | 0.06 | 0.13 | 0.07 | 171 | 2.14 | 0.80 | 1.2 | 0.6 | 2.29 |
| 80 | 0.39 | 167 | 0.06 | 0.13 | 0.07 | 178 | 2.09 | 0.70 | 1.1 | 0.6 | 2.22 |
| Oxide Indicated | | | | | | | | | | | |
| 30 | 3.57 | 86 | 0.07 | 0.10 | 0.08 | 97 | 9.87 | 7.90 | 7.6 | 6.2 | 11.14 |
| 40 | 3.12 | 94 | 0.07 | 0.10 | 0.08 | 106 | 9.47 | 7.20 | 7.0 | 5.6 | 10.63 |
| 50 | 2.66 | 104 | 0.08 | 0.11 | 0.09 | 117 | 8.92 | 6.50 | 6.4 | 5.0 | 9.96 |
| 60 | 2.30 | 113 | 0.08 | 0.12 | 0.09 | 126 | 8.39 | 5.80 | 5.9 | 4.6 | 9.34 |
| 70 | 1.92 | 125 | 0.08 | 0.12 | 0.10 | 138 | 7.72 | 4.70 | 5.1 | 4.2 | 8.53 |
| 80 | 1.60 | 138 | 0.07 | 0.13 | 0.10 | 151 | 7.09 | 3.70 | 4.5 | 3.6 | 7.77 |
| Oxide Inferred | | | | | | | | | | | |
| 30 | 1.09 | 75 | 0.04 | 0.16 | 0.05 | 85 | 2.63 | 1.60 | 3.8 | 1.1 | 2.98 |
| 40 | 1.04 | 77 | 0.04 | 0.16 | 0.05 | 87 | 2.59 | 1.50 | 3.7 | 1.1 | 2.92 |
| 50 | 0.89 | 84 | 0.05 | 0.17 | 0.05 | 94 | 2.40 | 1.30 | 3.4 | 1.0 | 2.70 |
| 60 | 0.68 | 94 | 0.05 | 0.20 | 0.05 | 106 | 2.07 | 1.10 | 3.1 | 0.8 | 2.33 |
| 70 | 0.51 | 108 | 0.05 | 0.22 | 0.06 | 120 | 1.76 | 0.80 | 2.5 | 0.7 | 1.97 |
| 80 | 0.42 | 118 | 0.05 | 0.22 | 0.06 | 130 | 1.57 | 0.70 | 2.0 | 0.6 | 1.75 |

| Cut-off Grade (AgEq g/t) | Tonnes | Ag (g/t) | Au (g/t) | Pb (%) | Zn (%) | AgEq (g/t) | Ag (Moz) | Au (kOz) | Pb (Mlbs) | Zn (Mlbs) | AgEq (Moz) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulphide Measured | | | | | | | | | | | |
| 30 | 2.06 | 77 | 0.06 | 0.15 | 0.23 | 95 | 5.08 | 4.10 | 6.9 | 10.5 | 6.27 |
| 40 | 1.85 | 82 | 0.06 | 0.16 | 0.24 | 101 | 4.91 | 3.80 | 6.6 | 10.0 | 6.04 |
| 50 | 1.58 | 91 | 0.07 | 0.18 | 0.26 | 111 | 4.62 | 3.30 | 6.2 | 9.2 | 5.64 |
| 60 | 1.29 | 102 | 0.07 | 0.20 | 0.29 | 124 | 4.22 | 2.80 | 5.7 | 8.3 | 5.14 |
| 70 | 1.06 | 113 | 0.07 | 0.22 | 0.32 | 137 | 3.84 | 2.30 | 5.1 | 7.5 | 4.65 |
| 80 | 0.88 | 124 | 0.07 | 0.24 | 0.34 | 149 | 3.51 | 1.90 | 4.6 | 6.7 | 4.22 |
| Sulphide Indicated | | | | | | | | | | | |
| 30 | 13.59 | 88 | 0.06 | 0.15 | 0.22 | 105 | 38.30 | 27.40 | 44.8 | 64.9 | 45.90 |
| 40 | 12.40 | 94 | 0.06 | 0.16 | 0.23 | 112 | 37.30 | 25.60 | 43.2 | 62.3 | 44.54 |
| 50 | 10.99 | 101 | 0.07 | 0.17 | 0.24 | 120 | 35.75 | 23.10 | 40.9 | 58.5 | 42.50 |
| 60 | 9.56 | 110 | 0.07 | 0.18 | 0.26 | 130 | 33.79 | 20.50 | 38.1 | 54.1 | 39.97 |
| 70 | 8.08 | 121 | 0.07 | 0.19 | 0.27 | 142 | 31.36 | 17.80 | 34.5 | 48.7 | 36.88 |
| 80 | 6.95 | 131 | 0.07 | 0.20 | 0.29 | 153 | 29.19 | 15.70 | 31.3 | 44.0 | 34.17 |
| Sulphide Inferred | | | | | | | | | | | |
| 30 | 2.94 | 95 | 0.06 | 0.19 | 0.22 | 114 | 9.01 | 5.90 | 12.0 | 14.1 | 10.75 |
| 40 | 2.73 | 101 | 0.06 | 0.20 | 0.23 | 120 | 8.85 | 5.30 | 11.8 | 13.6 | 10.52 |
| 50 | 2.48 | 108 | 0.06 | 0.21 | 0.24 | 128 | 8.60 | 4.70 | 11.4 | 12.9 | 10.15 |
| 60 | 2.19 | 117 | 0.06 | 0.23 | 0.25 | 137 | 8.21 | 4.10 | 10.9 | 12.0 | 9.65 |
| 70 | 1.88 | 127 | 0.06 | 0.25 | 0.27 | 149 | 7.69 | 3.50 | 10.2 | 11.0 | 9.01 |
| 80 | 1.58 | 140 | 0.06 | 0.26 | 0.29 | 163 | 7.10 | 2.90 | 9.1 | 10.1 | 8.27 |

## 14.13 Comparison of the current MRE to the January 2015 MRE

The current MRE is compared to the 2015 MRE in Table 14-14. The main difference in the resource estimate is the result of the following:

- Revised mineral resource models, constructed to better reflect higher grade Ag mineralization.
- Revised interpolation parameters to reflect the revised modeling.
- Revised capping values.
- Revised average density values based on additional data.
- Revised Parameters used for Whittle™ pit optimization and In-pit Cut-off Grade Calculation, including revised metal prices and process recoveries.
- Reporting of the current MRE at AgEq cut-off grades rather than an Ag cut-off grade.

**Table 14-14 Comparison of the November 2023 MRE to the January 2015 MRE for the Project**

| *Resource Class* | *Tonnes (MT)* | *Grade* | | | | | *Total Metal* | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Ag g/t* | *Au g/t* | *Pb %* | *Zn %* | *[1]AgEq (g/t)* | *Ag (Moz)* | *Au (koz)* | *Pb (Mlbs)* | *Zn (Mlbs)* | *[1]AgEq (Moz)* |
| **Mineral Resource Estimate -** November 29, 2023 – 50 g/t AgEq Cut-off | | | | | | | | | | | |
| Measured | 2.08 | 103 | 0.06 | 0.16 | 0.22 | 121 | 6.90 | 4.30 | 7.6 | 9.9 | 8.10 |
| Indicated | 13.65 | 102 | 0.07 | 0.16 | 0.21 | 120 | 44.66 | 29.60 | 47.3 | 63.6 | 52.46 |
| Mea. + Ind. | 15.73 | 102 | 0.07 | 0.16 | 0.21 | 120 | 51.57 | 33.90 | 54.8 | 73.5 | 60.56 |
| Inferred | 3.37 | 102 | 0.06 | 0.20 | 0.19 | 119 | 11.00 | 6.00 | 14.8 | 13.8 | 12.85 |
| **Mineral Resource Estimate -** January 14, 2015 – 35 g/t Ag cut-off | | | | | | | | | | | |
| Measured | 3.62 | 88.9 | 0.07 | 0.14 | 0.19 | 106 | 10.34 | 9.00 | 10.92 | 15.51 | 12.32 |
| Indicated | 14.93 | 85.7 | 0.07 | 0.13 | 0.18 | 102 | 41.13 | 33.00 | 42.95 | 59.26 | 48.74 |
| Mea. + Ind. | 18.54 | 86.3 | 0.07 | 0.13 | 0.18 | 102 | 51.47 | 41.00 | 53.87 | 74.77 | 60.93 |
| Inferred | 4.45 | 80 | 0.06 | 0.13 | 0.16 | 94 | 11.46 | 8.00 | 12.68 | 15.61 | 13.49 |

*[1]AgEq = Ag ppm + (((Au ppm x Au price/gram) + (Pb% x Pb price/t) + (Zn% x Zn price/t))/Ag price/gram). Metal price assumptions are $23.50/oz silver, $1,800/oz gold, $1.00/lb lead and $1.30/t zinc.*

## 14.14 Disclosure

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading.

The Author is not aware of any known mining, processing, metallurgical, environmental, infrastructure, economic, permitting, legal, title, taxation, socio-political, or marketing issues, or any other relevant factors not reported in this technical report, that could materially affect the updated MRE.

# 15 MINERAL RESERVE ESTIMATE

There are no Mineral Reserve Estimates for the Property.

# 16 MINING METHODS

This section does not apply to the Technical Report.

# 17 RECOVERY METHODS

This section does not apply to the Technical Report.

# 18 PROJECT INFRASTRUCTURE

This section does not apply to the Technical Report.

# 19 MARKET STUDIES AND CONTRACTS

This section does not apply to the Technical Report.

# 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section does not apply to the Technical Report.

# 21 CAPITAL AND OPERATING COSTS

This section does not apply to the Technical Report.

# 22 ECONOMIC ANALYSIS

This section does not apply to the Technical Report.

# 23 ADJACENT PROPERTIES

There is no information on properties adjacent to the Property necessary to make the technical report understandable and not misleading.

# 24 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. To the Authors' knowledge, there are no significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information or MRE.

# 25 INTERPRETATION AND CONCLUSIONS

SGS Geological Services Inc. ("SGS") was contracted by Kootenay Silver Inc., to complete an updated MRE for the La Cigarra Ag-Pb-Zn Project near Parral, Chihuahua State, Mexico, and to prepare a National Instrument 43-101 ("NI 43-101") Technical Report written in support of the updated MRE. The Project is considered an advanced-stage exploration project.

The current MRE is an update to a MRE completed by GeoVector Management Inc. in 2015 (Armitage and Campbell, 2015), completed for Northair Silver Corp. On April 21, 2016, Kootenay completed its acquisition of Northair pursuant to a court approved plan of arrangement under the provisions of the Business Corporations Act (British Columbia). Kootenay acquired all the issued and outstanding common shares of Northair in exchange for common shares and share purchase warrants of the Kootenay and Northair became a wholly owned subsidiary of Kootenay. Since acquiring the La Cigarra project in April 2016, Kootenay has completed several exploration programs including drilling, relogging of core and mapping of large areas of the project.

The current report is authored by Allan Armitage, Ph.D., P. Geo., ("Armitage") and Ben Eggers, B.Sc. (Hons), MAIG, P.Geo. ("Eggers") of SGS (the "Authors"). The Authors are independent Qualified Persons as defined by NI 43-101 and are responsible for all sections of this report. The updated MRE presented in this report was estimated by Armitage.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects. The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The current Technical Report will be used by Kootenay in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101 – Standards of Disclosure for Mineral Projects. This Technical Report is written in support of an updated MRE completed for Kootenay.

## 25.1 Diamond Drilling

Drilling completed on the Property prior to 2016 by Northair included 173 holes totalling 30,525.60 m.

Since acquiring Northair, Kootenay has completed 3 drill campaigns between 2016 and 2018 on the Property.

In 2016, Kootenay completed a 2,112 m, 11-hole drill program (CC-16-01 to 11) that discovered the RAM structure located approximately 700 m to the west and south of the La Cigarra silver deposit. The drill tested a 400-m strike length of the 3,800-m long RAM structure and dip extents between 65 and 200 m. Assay results from drilling confirm RAM is a strongly mineralized silver system, hosting multiple zones of quartz veining as sheeted, stockwork or brecciated veins within an altered structure that measures 50 to 150 metres wide. The system remains open along strike to the north and south for up to 3,400 m and down dip to the west.

Drill Highlights from RAM Structure:

- CC-16-04 returning 89.83 g/t silver over 18.0 m; including 190.5 g/t silver over 3.0 m
- CC-16-09 returning 166.5 g/t silver over 6.0 m; including 761.0 g/t silver over 1.0 m
- CC-16-03 returning 58.86 g/t silver over 16.5 m; including 141.25 g/t silver over 4.5 m
- CC-16-01 returning 27.60 g/t silver over 31.1 m; including 83.0 g/t silver over 4.45 m

- CC-16-06 returning 56.45 g/t silver over 14.7 m; including 80.14 g/t silver over 9.35 m

Kootenay completed seven holes with 1,395 m of drilling (CC-16-12 to 18) along the La Soledad Structure in 2016. The drill program tested a 700 m strike length of the La Soledad structure, which extends southward along strike from the La Cigarra silver deposit for approximately 2 km. All seven holes intercepted significant widths of veining and varying grades of silver mineralization confirming the presence of a potentially large, mineralized structure.

In 2017, Kootenay completed 19 drill holes for a total of 4,861 m in the La Borracha, La Navidad and Las Venadas areas.

Drilling was successful in the discovery of a new mineralized silver zone within the Las Venadas target area. This discovery area is blind to surface and lies approximately 1,000 m south of the edge of the La Cigarra resource as defined to date. More than 250 m in core length of quartz-calcite and quartz vein breccia and veining within altered sediments was intercepted in hole CC-17-26 which bottomed in veining. Textures are indicative of a variant of an epithermal hydrothermal breccia complex. The zone is anomalous throughout. Individual samples grade as high as 799 g/t silver over 1.1 m and 692 g/t silver over 1 metre in two different zones indicating excellent grade potential. The best weighted average intervals in hole CC-17-26 are highlighted: 91.32 g/t silver over 29.5 m, including 123.24 g/t silver over 19.25 m, with 435.36 g/t silver over 2.5 m, and 113.78 g/t silver over 10.75 m. The best intercept to date elsewhere in the Las Venadas area is CC-17-27 which returned 107.15 g/t silver over 9.5 m.

The strength and intensity of brecciation, veining and alteration observed in hole CC-17-28 is consistent with discovery hole CC-17-26. Assays from hole CC-17-28 returned a series of good grading silver intercepts, extending the Las Venadas discovery zone 140 m northeast of original discovery hole CC-17-26. The weighted average intervals are: 168.64 g/t silver over 7.0 m, within 121.25 g/t silver over 12.0 m and 92.88 g/t silver over 24.20 m.

A La Borracha drill intercept in Hole CC-17-37, about 500 m northwest of the La Cigarra resource area, includes 107.2 g/t silver over 8.0 m within a wider intercept of 31 m grading 45.75 g/t silver. There is a total of 46 m of mineralization in the hole separated by 15 m of rhyolite dyke. The second interval grades 42 g/t silver over 15 m. These results extend silver mineralization 100 m down dip from a previous hole (CC-12-089), which returned an intercept of 56 g/t silver over 9.25 m. To date, 12 holes have been drilled along the La Borracha trend with nine of those being drilled too far west to hit the main mineralized structure extending northward from the resource. Additional previous holes of note include 166 g/t silver over 4.5 m (CC 12-93), 130 g/t silver over 2.95 m (CC-11-29) and 455 g/t silver over 1.5 m (CC-11-28).

In 2018, Kootenay completed 14 drill holes for a total of 2,814 m in the La Borracha, Las Carolinas (La Cigarra) and the newly Identified Nogalera Gold Trend.

A total of seven broadly spaced holes were drilled across the La Borracha Zone (Figure 10-4). All seven holes hit the mineralized structure, with the two highest grading holes being the two holes furthest from the resource. Highlights included:

- Hole CC-18-44 intercepted 73.00 g/t silver over 2.0 m and 32.93 g/t silver over 12.37 m.
- Hole CC-18-42 returning 437.08 g/t silver over 10.0 m within 267.07 g/t silver over 17.0 m; includes samples of 947 g/t silver over 0.67 m, 1,755 g/t silver over 0.87 m, 519 g/t silver over 1.0 m and 1145 g/t silver over 1.0 m.
- Hole CC-18-43 returning 144.05 g/t silver over 10.0 m within 112.00 g/t silver over 16.0 m and 61.8 g/t silver over 34.50 m.
- Hole CC-18-38 returning 102.80 g/t silver over 3.55 m within 40.17 g/t silver over 22.0 m.

The La Borracha mineralized structure is open along strike to the northwest as well as down dip. The results indicate the mineralized structure is continuous with the La Cigarra resource for an additional 1000 m of strike to the northwest. It varies in width from about 15 to 45 m and has been tested by broad spaced drilling from surface down dip from between 50 m and 150 m.

Drilling in the Las Carolinas Zone (La Cigarra Deposit) was limited to 3 drill holes, CC-18-49 to 51. Highlights of this drilling includes:

- Hole CC-18-49 tested for continuity of the 104 vein and hit 143.86 g/t silver over 6.79 m within a wider intercept of 78.89 g/t silver over 14.0 m.
- Hole CC-18-51 intercepted 109.27 g/t silver over 12.0 m within a wider intercept of 45.22 g/t silver over 41.38 m, extending the mineralized silver zone to the south for 100 m as well as down dip for 200 m.

Drilling in Nogalera Gold trend returned only anomalous amounts of gold in narrow structures. The program was curtailed since although the results were successful in extending mineralization along strike of the La Cigarra resource area they were not adding value. Highlights of drilling include:

- Hole CC-18-47 intercepted 2,890.00 g/t silver over 1.0 metre within a wider intercept of 736.25 g/t silver over 4.0 m.

High grade silver mineralization at Nogalera looks promising as it is associated with a structurally focused zone of alteration and mineralization traceable for 800 to 1,000 m on surface. Holes CC 18-45,46 and 48 all hit narrow weakly anomalous gold and or silver within similar structurally focused zones.

## 25.2 Mineral Resource Estimate

Completion of the updated MRE for La Cigarra involved the assessment of a validated updated drill hole database, which included all data for surface drilling completed through 2018, and the assessment of updated three-dimensional (3D) mineral resource models (resource domains).

The Inverse Distance Squared (“$ID^2$”) calculation method restricted to the resource domains was used to interpolate grades for Ag (g/t), Au (g/t), Pb (ppm) and Zn (ppm) into block models for all deposit areas.

Measured, Indicated, and Inferred mineral resources are reported in the summary tables below. The MRE presented below takes into consideration that La Cigarra may be mined by the open pit mining method.

The reporting of the updated MRE complies with all disclosure requirements for Mineral Resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016). The classification of the updated MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions) and adheres as best as possible to the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The update MRE for the Project is presented in Table 25-1, and includes an oxide and sulphide MRE (Table 25-2).

**Highlights of the Project Mineral Resource Estimate are as follows:**

- Measured + Indicated Mineral Resources are estimated at 15.73 Mt grading 102 g/t silver, 0.07 g/t gold, 0.16% lead, and 0.21% zinc (120 AgEq). The Measured + Indicated MRE includes resources of 51.57 Moz of silver, 33.9 koz of gold, 54.8 Mlbs of lead, and 73.5 Mlbs of zinc (60.56 Moz AgEq).
- Inferred Mineral Resources are estimated at 3.37 Mt grading 102 g/t silver, 0.06 g/t gold, 0.20% lead, and 0.19% zinc (119 AgEq). The Inferred MRE includes resources of 11.00 Moz of silver, 6.00 koz of gold, 14.8 Mlbs of lead, and 13.8 Mlbs of zinc (12.85 Moz AgEq).

### Table 25-1 La Cigarra Deposit Mineral Resource Estimate, November 29, 2023

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 2.08 | 103 | 0.06 | 0.16 | 0.22 | 121 | 6.90 | 4.30 | 7.6 | 9.9 | 8.10 |
| Indicated | 13.65 | 102 | 0.07 | 0.16 | 0.21 | 120 | 44.66 | 29.60 | 47.3 | 63.6 | 52.46 |
| Mea. + Ind. | 15.73 | 102 | 0.07 | 0.16 | 0.21 | 120 | 51.57 | 33.90 | 54.8 | 73.5 | 60.56 |
| Inferred | 3.37 | 102 | 0.06 | 0.20 | 0.19 | 119 | 11.00 | 6.00 | 14.8 | 13.8 | 12.85 |

*The base-case AgEq Cut-off grade of 50 g/t AgEq considers metal prices of $23.50/oz Ag, $1,800/oz Au, $1.00/lb Pb and $1.30/lb Zn, and considers variable metal recoveries for Ag, Au, Pb and Zn: for oxide mineralization - 85% for Ag, 40% for Au, 75% for Pb and 65% for Zn; for sulphide mineralization - 92% for Ag, 40% for Au, 91% for Pb and 85% for Zn.*

*[1]AgEq = Ag ppm + (((Au ppm x Au price/gram) + (Pb% x Pb price/t) + (Zn% x Zn price/t))/Ag price/gram). Metal price assumptions are $23.50/oz silver, $1,800/oz gold, $1.00/lb lead and $1.30/t zinc.*

***La Cigarra Mineral Resource Estimate Notes:***

(14) *The Mineral Resource Estimate was estimated by Allan Armitage, Ph.D., P. Geo. of SGS Geological Services and is an independent Qualified Person as defined by NI 43-101. Dr Armitage conducted a recent site visit to the La Cigarra Property on November 28 and 29, 2023.*

(15) *The classification of the current Mineral Resource Estimate into Measured, Indicated and Inferred mineral resources is consistent with current 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves. The effective date for the Updated Mineral Resource Estimate is November 29, 2023.*

(16) *All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.*

(17) *The mineral resource is presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction.*

(18) *Mineral resources which are not mineral reserves do not have demonstrated economic viability. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that most Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.*

(19) *The La Cigarra mineral resource estimate is based on a validated database which includes data 201 surface diamond and RC drill holes totalling 36,988 m. The resource database totals 26,419 assay intervals representing 34,447 m of drilling. The average assay sample length is 1.30 m.*

(20) *The mineral resource estimate is based on 9 three-dimensional ("3D") resource models, constructed in Leapfrog. Grades for Ag, Au, Pb and Zn were estimated for each mineralization domain using 1.5 metre capped composites assigned to that domain. To generate grade within the blocks, the inverse distance squared ($ID^2$) interpolation method was used for all domains. Each domain was then subdivided into oxide and sulphide domains.*

(21) *Average density values were assigned to oxide and sulphide domains and a waste domain based on based on a database of 1,412 samples.*

(22) *It is envisioned that the La Cigarra deposit may be mined using open-pit mining methods. Mineral resources are reported at a base case cut-off grade of 50 g/t AgEq. The in-pit Mineral Resource grade blocks are quantified above the base case cut-off grade, above the constraining pit shell, below topography and within the constraining mineralized domains (the constraining volumes).*

(23) *The results from the pit optimization are used solely for the purpose of testing the "reasonable prospects for economic extraction" by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a Mineral Resource statement and to select an appropriate resource reporting cut-off grade.*

(24) *The pit optimization and base-case AgEq Cut-off grade considers metal prices of $23.50/oz Ag, $1,800/oz Au, $1.00/lb Pb and $1.30/lb Zn, and considers variable metal recoveries for Ag, Au, Pb and Zn: for oxide mineralization - 85% for Ag, 40% for Au, 75% for Pb and 65% for Zn; for sulphide mineralization - 92% for Ag, 40% for Au, 91% for Pb and 85% for Zn.*

(25) *The pit optimization and base case cut-off grade of 50 g/t AgEq considers a mining cost of US$2.50/t mined, and processing, treatment, refining, G&A and transportation cost of USD$22.40/t of mineralized material.*

(26) *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*

**Table 25-2 La Cigarra Oxide and Sulphide MRE, November 29, 2023**

***Oxide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 0.50 | 141 | 0.06 | 0.12 | 0.06 | 152 | 2.28 | 1.00 | 1.3 | 0.7 | 2.46 |
| Indicated | 2.66 | 104 | 0.08 | 0.11 | 0.09 | 117 | 8.92 | 6.5 | 6.4 | 5.0 | 9.96 |
| Mea. + Ind. | 3.16 | 110 | 0.07 | 0.11 | 0.08 | 122 | 11.20 | 7.50 | 7.7 | 5.7 | 12.42 |
| Inferred | 0.89 | 84 | 0.05 | 0.17 | 0.05 | 94 | 2.40 | 1.30 | 3.4 | 1.0 | 2.70 |

***Sulphide MRE***

| Resource Class | Tonnes (MT) | Grade | | | | | Total Metal | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Ag g/t | Au g/t | Pb % | Zn % | AgEq (g/t) | Ag (Moz) | Au (koz) | Pb (Mlbs) | Zn (Mlbs) | [1]AgEq (Moz) |
| Measured | 1.58 | 91 | 0.07 | 0.18 | 0.26 | 111 | 4.62 | 3.30 | 6.2 | 9.2 | 5.64 |
| Indicated | 10.99 | 101 | 0.07 | 0.17 | 0.24 | 120 | 35.75 | 23.10 | 40.9 | 58.5 | 42.50 |
| Mea. + Ind. | 12.57 | 100 | 0.07 | 0.17 | 0.24 | 119 | 40.37 | 26.40 | 47.1 | 67.7 | 48.14 |
| Inferred | 2.48 | 108 | 0.06 | 0.21 | 0.24 | 128 | 8.60 | 4.70 | 11.4 | 12.9 | 10.15 |

## 25.3 Risk and Opportunities

The following risks and opportunities were identified that could affect the future economic outcome of the project. The following does not include external risks that apply to all exploration and development projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.).

There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. To the Authors knowledge, there are no additional risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information or MRE.

### 25.3.1 Risks

#### 25.3.1.1 Mineral Resource Estimate

A portion of the contained metal of the Deposit, at the reported cut-off grades for the updated MRE, is in the Inferred Mineral Resource classification. It is reasonably expected that the majority of Inferred Mineral resources could be upgraded to Indicated Minerals Resources with continued exploration.

The mineralized structures (mineralized domains) in all zones are relatively well understood. However, due to the limited drilling in some areas, all mineralization zones might be of slightly variable shapes from what have been modeled. A different interpretation from the current mineralization models may adversely affect the current MRE. Continued drilling may help define with more precision the shapes of the zones and confirm the geological and grade continuities of the mineralized zones.

### 25.3.2 Opportunities

#### 25.3.2.1 Mineral Resource Estimate

Based on recent exploration work, there is an opportunity in all deposit areas to extend known mineralization at depth, on strike and elsewhere on the Property and to potentially convert Inferred Mineral Resources to Indicated Mineral Resources. Kootenay's intentions are to direct their exploration efforts towards resource growth in 2024 with a focus on extending the limits of known mineralization and testing other targets on the greater La Cigarra Property.

# 26 RECOMMENDATIONS

The La Cigarra project contains an in-pit Measured, Indicated and Inferred Mineral Resource that is associated with relatively well-defined mineralized trends and models. The deposit is open along strike and at depth.

Armitage considers that the Project has potential for delineation of additional Mineral Resources and that further exploration is warranted. Given the prospective nature of the Property, it is the opinion of Armitage that the Property merits further exploration and that a proposed plan for further work by Kootenay is justified.

Armitage is recommending Kootenay conduct further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its business activities or alterations which may affect the program as a result of exploration activities themselves.

Kootenay is planning a 3-phase program leading to a Preliminary Economic Assessment. Phase one will be a minimum of 2,400 m of step-out drilling in the central parts of the La Cigarra deposit area (referred to as the gap zone), to include this area in the next MRE update. Phase Two is informed by phase one results and is anticipated to entail about 4000 meters of infill drilling to result in the next MRE update which will form the basis of an initial engineering study in the form of a Preliminary Economic Assessment (phase 3) if results warrant.

The total cost of the planned work programs by Kootenay Silver are estimated at $915,000 in phase one and $1.275 million in phase two and $450,000 in phase three.

Phase One - $915,000

- *Drilling – $600,000*
  - *2,400 m at roughly $250/m*

    - *All in costs include geos and workers salaries, equipment, fuel, accommodation expenses, truck rentals, and sample shipment, assaying, QA/QC, standards, density checks.*
    - *Program to test continuity of Gap zone.*
- *Prospecting and mapping – $50,000*
- *Permitting and Environmental - $65,000*
- *Geophysics (additional IP) - $200,000*

*Phase Two-$1,275,000*

- *Infill Drilling Gap 4000 meters - $1,000,000*
- *Metallurgical Testwork - $200,000*
- *Update MRE and Technical Report - $75,000*

*Phase Three - $450,000*

- *Preliminary Economic Assessment ("PEA") and Technical Report – $450,000*

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## 28 DATE AND SIGNATURE PAGE

This report titled "Mineral Resource Estimate Update For The La Cigarra Ag-Pb-Zn Project, Chihuahua State, Mexico" dated February 13, 2024 (the "Technical Report") for Kootenay Silver Inc. was prepared and signed by the following authors:

The effective date of the report is November 29, 2023
The date of the report is February 13, 2024.

Signed by:

| Qualified Persons | Company |
|---|---|
| Allan Armitage, Ph. D., P. Geo., | SGS Geological Services ("SGS") |
| Ben Eggers, B.Sc.(Hons), MAIG, P.Geo. | SGS Geological Services ("SGS") |

February 13, 2024

# 29 CERTIFICATES OF QUALIFIED PERSONS

## QP CERTIFICATE – ALLAN ARMITAGE

To accompany the technical report titled **Mineral Resource Estimate Update for the La Cigarra Ag-Pb-Zn Project, Chihuahua State, Mexico"** with an effective date of November 29, 2023 (the "Technical Report") prepared for Kootenay Silver Corp. (the "Company").

I, Allan E. Armitage, Ph. D., P. Geol. of 62 River Front Way, Fredericton, New Brunswick, hereby certify that:

1. I am a Senior Resource Geologist with SGS Canada Inc., 10 de la Seigneurie E blvd., Unit 203 Blainville, QC, Canada, J7C 3V5 .

2. I am a graduate of Acadia University having obtained the degree of Bachelor of Science - Honours in Geology in 1989, a graduate of Laurentian University having obtained the degree of Master of Science in Geology in 1992 and a graduate of the University of Western Ontario having obtained a Doctor of Philosophy in Geology in 1998.

3. I have been employed as a geologist for every field season (May - October) from 1987 to 1996. I have been continuously employed as a geologist since March of 1997.

4. I have been involved in mineral exploration and resource modeling at the grass roots to advanced exploration stage, including producing mines, since 1991, including mineral resource estimation and mineral resource and mineral reserve auditing since 2006 in Canada and internationally. I have extensive experience in Archean and Proterozoic load gold deposits, volcanic and sediment hosted base metal massive sulphide deposits, porphyry copper-gold-silver deposits, low and intermediate sulphidation epithermal gold and silver deposits, magmatic Ni-Cu-PGE deposits, and unconformity- and sandstone-hosted uranium deposits.

5. I am a member of: the Association of Professional Engineers, Geologists and Geophysicists of Alberta (P.Geol.) (License No. 64456; 1999), the Association of Professional Engineers and Geoscientists of British Columbia (P.Geo.) (Licence No. 38144; 2012), and the Professional Geoscientists Ontario (P.Geo.) (Licence No. 2829; 2017).

6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects – ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43 101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43 101.

7. I am an author of the Technical Report and responsible for sections 1, 2, 3, 4, 8, 12.2, 12.4, 13, 14, 15 to 27. I have reviewed all sections and accept professional responsibility for these sections of the Technical Report.

8. I have conducted site visits to the Property on several occasions, including June 19 and June 27, 2014, May 5 and May 18, 2015, and November 28 and 29, 2023.

9. I have had prior involvement with the Property. I was an author of the previous NI43-101 Technical Report for the Property, dated Northair Silver dated February 27, 2015.

10. I am independent of the Company as described in Section 1.5 of NI 43-101.

11. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

12. I have read NI 43-101 and Form 43-101F1 (the "Form"), and the Technical Report has been prepared in compliance with NI 43-101 and the Form.

Signed and dated February 13, 2024 at Fredericton, New Brunswick.

***"Original Signed and Sealed"***

*Allan Armitage, Ph. D., P. Geo., SGS Canada Inc.*

# QP CERTIFICATE – BEN EGGERS

To accompany the report titled **"Mineral Resource Estimate Update for the La Cigarra Ag-Pb-Zn Project, Chihuahua State, Mexico"** with an effective date of November 29, 2023 (the "Technical Report") prepared for Kootenay Silver Corp. (the "Company").

I, Benjamin K. Eggers, B.Sc.(Hons), MAIG, P.Geo. of 321 Olsen Road, Tofino, British Columbia, hereby certify that:

1. I am a Senior Geologist with SGS Canada Inc., 10 Boulevard de la Seigneurie E., Suite 203, Blainville, QC, J7C 3V5, Canada.
2. I am a graduate of the University of Otago, New Zealand having obtained the degree of Bachelor of Science (Honours) in Geology in 2004.
3. I have been continuously employed as a geologist since February of 2005.
4. I have been involved in mineral exploration and resource modeling at the greenfield to advanced exploration stages, including at producing mines, in Canada, Australia, and internationally since 2005, and in mineral resource estimation since 2022 in Canada and internationally. I have experience in lode gold deposits, porphyry copper-gold-silver deposits, low and high sulphidation epithermal gold and silver deposits, volcanic and sediment hosted base metal massive sulphide deposits, and albitite-hosted uranium deposits.
5. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia and use the designation (P.Geo.) (EGBC Licence No. 40384; 2014), and I am a member of the Australian Institute of Geoscientists and use the designation (MAIG) (AIG Licence No. 3824; 2013).
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects – ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
7. I am an author of the Technical Report and responsible for sections 5, 6, 7, 9, 10, 11 and 12.1. I have reviewed these sections and accept professional responsibility for these sections of the Technical Report.
8. I have not personally conducted a site visit.
9. I have not had prior involvement with the La Cigarra Property.
10. I am independent of the Company as described in Section 1.5 of NI 43-101.
11. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. I have read NI 43-101 and Form 43-101F1 (the "Form"), and the Technical Report has been prepared in compliance with NI 43-101 and the Form.

Signed and dated February 13, 2024 at Tofino, British Columbia.

***"Original Signed and Sealed"***

*Ben Eggers, B.Sc.(Hons), MAIG, P. Geo., SGS Canada Inc.*

# Appendix 1

## Summary of Drill Holes Completed on the La Cigarra Property: 2010 - 2014

| HOLE-ID | UTM WGS84, zone 13 | | LOCATIONZ | LENGTH | AZIMUTH | DIP |
|---|---|---|---|---|---|---|
| | LOCATIONX | LOCATIONY | | | | |
| **CC-10-001** | 409570.50 | 2993073.20 | 1932.50 | 216.00 | 225.0 | -50.0 |
| **CC-11-002** | 409605.80 | 2993033.10 | 1947.30 | 202.50 | 225.0 | -50.0 |
| **CC-11-003** | 409631.90 | 2992979.10 | 1932.50 | 193.00 | 225.0 | -50.0 |
| **CC-11-004** | 409691.70 | 2992945.40 | 1915.50 | 268.00 | 225.0 | -50.0 |
| **CC-11-005** | 410334.00 | 2991899.40 | 1903.50 | 167.00 | 247.0 | -50.0 |
| **CC-11-006** | 410319.00 | 2992003.10 | 1882.90 | 131.00 | 247.0 | -50.0 |
| **CC-11-007** | 409725.20 | 2992905.90 | 1905.40 | 219.50 | 225.0 | -50.0 |
| **CC-11-008** | 409491.70 | 2992990.90 | 1915.60 | 83.50 | 225.0 | -50.0 |
| **CC-11-009** | 409632.60 | 2993069.80 | 1930.00 | 210.00 | 220.0 | -49.0 |
| **CC-11-010** | 409674.70 | 2993012.90 | 1931.60 | 214.00 | 220.0 | -48.0 |
| **CC-11-011** | 409733.10 | 2993000.40 | 1907.30 | 232.50 | 225.0 | -48.0 |
| **CC-11-012** | 410443.30 | 2992050.90 | 1917.40 | 205.50 | 247.0 | -46.0 |
| **CC-11-013** | 410432.00 | 2992104.60 | 1914.20 | 220.50 | 247.0 | -46.0 |
| **CC-11-014** | 410413.60 | 2991934.60 | 1900.60 | 184.00 | 242.0 | -50.0 |
| **CC-11-015** | 410400.80 | 2991810.90 | 1929.30 | 204.00 | 251.0 | -50.0 |
| **CC-11-016** | 410380.30 | 2992179.90 | 1900.90 | 195.30 | 241.0 | -50.0 |
| **CC-11-017** | 410381.20 | 2992180.20 | 1900.90 | 229.00 | 236.0 | -71.0 |
| **CC-11-018** | 410345.80 | 2992276.40 | 1891.90 | 221.00 | 242.0 | -49.0 |
| **CC-11-019** | 410345.80 | 2992276.40 | 1891.90 | 226.50 | 243.0 | -71.0 |
| **CC-11-020** | 410300.90 | 2992368.30 | 1899.70 | 228.00 | 242.0 | -58.0 |
| **CC-11-021** | 410301.50 | 2992368.60 | 1899.60 | 197.50 | 247.0 | -70.0 |
| **CC-11-022** | 409853.30 | 2992753.40 | 1859.60 | 165.00 | 227.0 | -50.0 |
| **CC-11-023** | 409787.30 | 2992852.60 | 1891.30 | 198.00 | 227.0 | -51.0 |
| **CC-11-024** | 409762.50 | 2992961.30 | 1894.40 | 262.50 | 221.0 | -47.0 |
| **CC-11-025** | 409783.10 | 2993040.10 | 1895.40 | 293.50 | 221.0 | -63.0 |
| **CC-11-026** | 409715.80 | 2993123.00 | 1895.40 | 301.50 | 223.0 | -52.0 |
| **CC-11-027** | 408294.20 | 2993817.80 | 1705.20 | 175.00 | 223.0 | -48.0 |
| **CC-11-028** | 408326.20 | 2993851.50 | 1712.10 | 219.00 | 223.0 | -50.0 |
| **CC-11-029** | 408483.80 | 2993740.20 | 1727.30 | 249.00 | 225.0 | -48.0 |
| **CC-11-030** | 408797.50 | 2993489.90 | 1784.90 | 327.00 | 223.0 | -50.0 |
| **CC-11-031** | 409516.50 | 2993138.30 | 1948.00 | 246.00 | 225.0 | -50.0 |
| **CC-11-032** | 409442.70 | 2993202.70 | 1960.70 | 201.00 | 228.0 | -48.0 |
| **CC-11-033** | 409744.20 | 2992878.40 | 1901.00 | 186.00 | 226.0 | -50.0 |
| **CC-11-034** | 409831.10 | 2992886.50 | 1896.50 | 239.00 | 227.0 | -50.0 |
| **CC-11-035** | 409380.90 | 2993294.80 | 1936.40 | 204.00 | 227.0 | -50.0 |
| **CC-11-036** | 409825.40 | 2992808.80 | 1879.20 | 228.00 | 227.0 | -50.0 |

| HOLE-ID | UTM WGS84, zone 13 | | LOCATIONZ | LENGTH | AZIMUTH | DIP |
|---|---|---|---|---|---|---|
| | LOCATIONX | LOCATIONY | | | | |
| CC-11-037 | 409794.20 | 2992697.20 | 1873.50 | 117.00 | 224.0 | -50.0 |
| CC-11-038 | 409795.30 | 2992697.80 | 1873.40 | 163.00 | 225.0 | -88.0 |
| CC-11-039 | 409606.20 | 2992865.70 | 1886.60 | 147.00 | 220.0 | -50.0 |
| CC-11-040 | 409607.00 | 2992866.70 | 1886.50 | 155.50 | 221.0 | -89.0 |
| CC-11-041 | 409559.90 | 2992902.10 | 1893.80 | 132.00 | 224.0 | -49.0 |
| CC-11-042 | 409736.80 | 2992797.90 | 1874.60 | 129.00 | 228.0 | -50.0 |
| CC-11-043 | 409737.70 | 2992798.80 | 1874.60 | 148.00 | 297.0 | -89.0 |
| CC-11-044 | 409908.90 | 2992679.90 | 1899.80 | 171.00 | 221.0 | -49.0 |
| CC-11-045 | 409950.60 | 2992600.60 | 1883.50 | 200.00 | 219.0 | -51.0 |
| CC-11-046 | 409445.10 | 2993277.00 | 1930.10 | 202.70 | 219.0 | -51.0 |
| CC-11-047 | 409374.20 | 2993341.80 | 1912.10 | 222.00 | 225.0 | -45.0 |
| CC-11-048 | 409324.40 | 2993358.20 | 1904.00 | 222.00 | 227.0 | -45.0 |
| CC-12-049 | 409795.10 | 2992770.10 | 1864.40 | 183.00 | 227.0 | -48.0 |
| CC-12-050 | 409825.90 | 2992669.10 | 1890.70 | 159.00 | 222.0 | -50.0 |
| CC-12-051 | 409940.00 | 2992649.10 | 1897.90 | 52.00 | 224.0 | -50.0 |
| CC-12-051B | 409946.00 | 2992649.10 | 1897.90 | 213.00 | 224.0 | -50.0 |
| CC-12-052 | 410003.10 | 2992640.80 | 1892.60 | 241.50 | 230.0 | -49.0 |
| CC-12-053 | 410005.50 | 2992573.40 | 1870.60 | 198.00 | 231.0 | -51.0 |
| CC-12-054 | 410215.90 | 2992381.30 | 1877.30 | 180.00 | 247.0 | -52.0 |
| CC-12-055 | 410033.40 | 2992464.00 | 1893.20 | 158.00 | 235.0 | -48.0 |
| CC-12-056 | 410096.00 | 2992441.60 | 1878.30 | 150.00 | 243.0 | -47.0 |
| CC-12-057 | 410248.00 | 2992346.20 | 1882.50 | 188.00 | 247.0 | -49.0 |
| CC-12-058 | 410224.70 | 2992279.60 | 1874.00 | 158.00 | 247.0 | -48.0 |
| CC-12-059 | 410286.20 | 2992235.10 | 1878.30 | 177.00 | 250.0 | -49.0 |
| CC-12-060 | 410287.20 | 2992193.40 | 1880.90 | 159.00 | 251.0 | -49.0 |
| CC-12-061 | 410337.90 | 2992110.10 | 1889.40 | 160.00 | 247.0 | -48.0 |
| CC-12-062 | 410415.70 | 2992145.90 | 1915.00 | 225.00 | 243.0 | -66.0 |
| CC-12-063 | 410433.30 | 2992105.80 | 1914.50 | 228.00 | 250.0 | -64.0 |
| CC-12-064 | 410432.10 | 2991987.50 | 1908.80 | 204.00 | 248.0 | -50.0 |
| CC-12-065 | 410666.80 | 2991490.40 | 1903.90 | 210.00 | 245.0 | -49.0 |
| CC-12-066 | 410479.40 | 2991623.40 | 1926.10 | 120.00 | 245.0 | -50.0 |
| CC-12-067 | 410704.40 | 2991399.00 | 1909.70 | 171.00 | 248.0 | -50.0 |
| CC-12-068 | 410443.00 | 2991718.60 | 1923.80 | 114.00 | 249.0 | -53.0 |
| CC-12-069 | 410332.90 | 2992051.70 | 1885.70 | 102.00 | 250.0 | -49.0 |
| CC-12-070 | 410328.90 | 2991832.00 | 1920.90 | 105.00 | 248.0 | -51.0 |
| CC-12-071 | 410400.70 | 2991861.00 | 1916.00 | 153.00 | 243.0 | -50.0 |
| CC-12-072 | 410248.70 | 2992125.80 | 1885.00 | 99.00 | 248.0 | -50.0 |
| CC-12-073 | 410199.40 | 2992216.20 | 1883.20 | 90.00 | 246.0 | -51.0 |
| CC-12-074 | 410162.30 | 2992304.00 | 1871.90 | 111.00 | 251.0 | -50.0 |
| CC-12-075 | 409995.40 | 2992690.70 | 1901.60 | 250.50 | 226.0 | -50.0 |
| CC-12-076 | 409884.60 | 2992725.50 | 1875.50 | 198.00 | 224.0 | -51.0 |

| HOLE-ID | UTM WGS84, zone 13 | | LOCATIONZ | LENGTH | AZIMUTH | DIP |
|---|---|---|---|---|---|---|
| | LOCATIONX | LOCATIONY | | | | |
| **CC-12-077** | 409887.10 | 2992873.30 | 1885.80 | 266.50 | 225.0 | -51.0 |
| **CC-12-078** | 409813.00 | 2992937.50 | 1880.10 | 253.50 | 225.0 | -49.0 |
| **CC-12-079** | 409679.10 | 2992801.10 | 1881.20 | 105.00 | 226.0 | -51.0 |
| **CC-12-080** | 409721.60 | 2993063.80 | 1916.50 | 272.00 | 226.0 | -48.0 |
| **CC-12-081** | 409648.40 | 2992835.40 | 1881.40 | 72.00 | 224.0 | -51.0 |
| **CC-12-082** | 409659.80 | 2993133.70 | 1899.40 | 102.90 | 225.0 | -50.0 |
| **CC-12-082A** | 409659.80 | 2993133.70 | 1899.40 | 136.50 | 225.0 | -50.0 |
| **CC-12-083** | 409777.70 | 2993109.50 | 1895.20 | 302.00 | 226.0 | -51.0 |
| **CC-12-084** | 409429.70 | 2993057.90 | 1942.20 | 81.00 | 228.0 | -48.0 |
| **CC-12-085** | 409570.80 | 2993193.80 | 1930.60 | 245.00 | 227.0 | -51.0 |
| **CC-12-086** | 409474.70 | 2993020.00 | 1925.50 | 81.00 | 225.0 | -49.0 |
| **CC-12-087A** | 409391.40 | 2993086.90 | 1951.50 | 90.00 | 230.0 | -51.0 |
| **CC-12-088** | 409477.80 | 2993164.50 | 1950.50 | 177.00 | 225.0 | -50.0 |
| **CC-12-089** | 408707.40 | 2993455.70 | 1770.50 | 81.00 | 224.0 | -51.0 |
| **CC-12-090** | 409354.10 | 2993117.80 | 1957.80 | 94.50 | 224.0 | -51.0 |
| **CC-12-091** | 408976.40 | 2993449.00 | 1795.30 | 159.00 | 222.0 | -51.0 |
| **CC-12-092** | 409318.90 | 2993221.00 | 1940.00 | 96.00 | 225.0 | -49.0 |
| **CC-12-093** | 409084.40 | 2993419.50 | 1806.10 | 141.00 | 226.0 | -48.0 |
| **CC-12-094** | 409896.50 | 2992550.90 | 1880.00 | 117.00 | 227.0 | -50.0 |
| **CC-12-095** | 410008.00 | 2992492.20 | 1887.80 | 114.00 | 223.0 | -50.0 |
| **CC-12-096** | 410020.70 | 2992369.50 | 1915.00 | 102.00 | 245.0 | -50.0 |
| **CC-12-097** | 410083.60 | 2992492.40 | 1869.60 | 129.00 | 246.0 | -51.0 |
| **CC-12-098** | 410194.70 | 2992427.90 | 1870.80 | 186.00 | 244.0 | -52.0 |
| **CC-12-099** | 410162.00 | 2992306.00 | 1875.00 | 120.50 | 90.0 | -88.0 |
| **CC-12-100** | 410177.50 | 2992478.10 | 1864.80 | 171.00 | 246.0 | -50.0 |
| **CC-12-101** | 410200.20 | 2992216.60 | 1882.90 | 114.50 | 185.0 | -88.0 |
| **CC-12-102** | 410327.40 | 2992322.80 | 1895.50 | 223.50 | 248.0 | -51.0 |
| **CC-12-103** | 410464.10 | 2991782.70 | 1935.40 | 181.00 | 247.0 | -52.0 |
| **CC-12-104** | 410440.10 | 2992058.70 | 1916.50 | 235.50 | 249.0 | -53.0 |
| **CC-12-105** | 410369.40 | 2991741.30 | 1926.60 | 108.00 | 249.0 | -51.0 |
| **CC-12-106** | 410463.50 | 2991669.20 | 1921.30 | 120.00 | 247.0 | -51.0 |
| **CC-12-107** | 410448.70 | 2991557.00 | 1919.10 | 120.00 | 246.0 | -51.0 |
| **CC-12-108** | 410601.10 | 2991402.40 | 1937.30 | 154.50 | 246.0 | -51.0 |
| **CC-12-109** | 410256.60 | 2992019.90 | 1893.40 | 87.00 | 245.0 | -49.0 |
| **CC-12-110** | 410158.90 | 2992066.70 | 1912.40 | 96.00 | 246.0 | -51.0 |
| **CC-12-111** | 410204.10 | 2992060.70 | 1913.20 | 69.00 | 248.0 | -51.0 |
| **CC-12-112** | 410186.40 | 2992157.40 | 1899.00 | 89.00 | 248.0 | -51.0 |
| **CC-12-113** | 410143.30 | 2992190.40 | 1911.30 | 96.00 | 250.0 | -51.0 |
| **CC-12-114** | 410571.10 | 2991497.60 | 1926.90 | 151.50 | 246.0 | -51.0 |
| **CC-12-115** | 410073.40 | 2992270.50 | 1913.20 | 96.00 | 243.0 | -51.0 |
| **CC-12-116** | 410048.10 | 2992314.50 | 1910.10 | 81.00 | 243.0 | -51.0 |

| HOLE-ID | UTM WGS84, zone 13 | | LOCATIONZ | LENGTH | AZIMUTH | DIP |
|---|---|---|---|---|---|---|
| | LOCATIONX | LOCATIONY | | | | |
| **CC-12-117** | 410138.80 | 2992360.80 | 1871.10 | 123.00 | 244.0 | -51.0 |
| **CC-12-118** | 410157.90 | 2992247.90 | 1889.20 | 120.00 | 248.0 | -50.0 |
| **CC-12-119** | 410624.60 | 2991363.00 | 1933.20 | 100.50 | 247.0 | -50.0 |
| **CC-12-120** | 410787.80 | 2991452.40 | 1897.20 | 214.50 | 247.0 | -51.0 |
| **CC-12-121** | 410588.20 | 2991612.90 | 1911.80 | 153.00 | 249.0 | -50.0 |
| **CC-12-122** | 410532.60 | 2991757.40 | 1934.40 | 168.00 | 249.0 | -50.0 |
| **CC-12-123** | 410489.30 | 2992013.60 | 1931.30 | 259.50 | 245.0 | -69.0 |
| **CC-12-124** | 410460.30 | 2991836.10 | 1920.20 | 208.00 | 241.0 | -52.0 |
| **CC-12-125** | 410367.90 | 2992226.40 | 1890.80 | 246.00 | 247.0 | -54.0 |
| **CC-12-126** | 409923.80 | 2992395.40 | 1924.59 | 57.00 | 232.0 | -46.0 |
| **CC-12-127** | 409971.20 | 2992431.40 | 1912.30 | 75.00 | 235.0 | -50.0 |
| **CC-12-128** | 410141.10 | 2992136.70 | 1931.70 | 79.50 | 247.0 | -50.0 |
| **CC-12-129** | 409842.30 | 2992615.20 | 1894.50 | 69.00 | 225.0 | -50.0 |
| **CC-12-130** | 409786.80 | 2992557.10 | 1913.50 | 30.00 | 231.0 | -50.0 |
| **CC-12-131** | 409606.10 | 2993161.20 | 1917.10 | 187.00 | 227.0 | -56.0 |
| **CC-12-132** | 409269.30 | 2993242.10 | 1906.60 | 84.00 | 223.0 | -74.0 |
| **CC-12-133** | 409415.00 | 2993396.50 | 1874.80 | 231.00 | 224.0 | -51.0 |
| **CC-12-134** | 410358.90 | 2992336.80 | 1908.40 | 280.50 | 242.0 | -70.0 |
| **CC-12-135** | 409519.60 | 2993217.40 | 1941.10 | 231.00 | 219.0 | -71.0 |
| **CC-12-136** | 409737.30 | 2993146.70 | 1884.90 | 255.00 | 217.0 | -69.0 |
| **CC-12-137** | 409783.10 | 2993121.20 | 1891.20 | 280.50 | 222.0 | -71.0 |
| **CC-12-138** | 409596.30 | 2993218.60 | 1918.60 | 264.00 | 221.0 | -69.0 |
| **CC-12-139** | 410495.30 | 2992064.00 | 1935.70 | 231.00 | 246.0 | -69.0 |
| **CC-14-140** | 409504.70 | 2993268.30 | 1931.60 | 264.00 | 225.0 | -68.0 |
| **CC-14-141** | 409577.30 | 2993307.00 | 1904.10 | 280.00 | 225.0 | -62.0 |
| **CC-14-142** | 409645.50 | 2993261.60 | 1897.90 | 255.00 | 222.0 | -70.0 |
| **CC-14-143** | 409516.00 | 2993135.50 | 1946.20 | 285.00 | 138.0 | -64.0 |
| **CC-14-144** | 410457.90 | 2992120.70 | 1924.40 | 270.00 | 235.0 | -77.0 |
| **CC-14-145** | 410404.00 | 2992071.10 | 1902.30 | 270.00 | 159.0 | -56.0 |
| **CC-14-146** | 410517.60 | 2991808.50 | 1936.00 | 198.00 | 250.0 | -60.0 |
| **CC-14-147** | 410570.40 | 2991541.50 | 1921.00 | 185.50 | 250.0 | -59.0 |
| **CC-14-148A** | 410934.80 | 2990728.90 | 1925.40 | 234.00 | 247.0 | -46.0 |
| **CC-14-149** | 410804.80 | 2990757.80 | 1918.50 | 192.00 | 249.0 | -44.0 |
| **CC-14-150** | 410440.40 | 2988966.60 | 1995.20 | 211.50 | 272.0 | -45.0 |
| **CC-14-151** | 409111.10 | 2993470.80 | 1819.60 | 204.00 | 225.0 | -61.0 |
| **CC-14-152** | 409806.00 | 2992976.00 | 1877.00 | 267.00 | 225.0 | -60.0 |
| **CC-14-153** | 409810.00 | 2992897.00 | 1893.00 | 589.80 | 225.0 | -67.0 |
| **CC-14-154** | 409875.00 | 2993087.00 | 1886.00 | 589.80 | 105.0 | -60.0 |
| **CC-14-155** | 410532.00 | 2991906.00 | 1930.00 | 294.00 | 247.0 | -60.0 |
| **CC-14-156** | 410341.00 | 2992277.00 | 1890.00 | 306.70 | 67.0 | -80.0 |
| **CRC-10-001** | 410324.70 | 2991947.50 | 1894.20 | 105.16 | 247.0 | -60.0 |

| HOLE-ID | UTM WGS84, zone 13 | | LOCATIONZ | LENGTH | AZIMUTH | DIP |
|---|---|---|---|---|---|---|
| | LOCATIONX | LOCATIONY | | | | |
| **CRC-10-002** | 410308.70 | 2991881.20 | 1915.30 | 86.87 | 245.0 | -60.0 |
| **CRC-10-003** | 410338.40 | 2991793.70 | 1924.90 | 102.11 | 245.0 | -60.0 |
| **CRC-10-004** | 410368.10 | 2991664.70 | 1919.60 | 121.92 | 232.0 | -60.0 |
| **CRC-10-005** | 409519.70 | 2992947.20 | 1903.20 | 96.01 | 230.0 | -60.0 |
| **CRC-10-006** | 409585.40 | 2992994.70 | 1933.30 | 129.54 | 228.0 | -60.0 |
| **CRC-10-007** | 409555.20 | 2993024.40 | 1932.80 | 16.76 | 239.0 | -60.0 |
| **CRC-10-008** | 409555.30 | 2993024.40 | 1932.80 | 16.76 | 239.0 | -70.0 |
| **CRC-10-009** | 409313.10 | 2993121.20 | 1960.20 | 100.58 | 230.0 | -60.0 |
| **CRC-10-010** | 409544.80 | 2993051.60 | 1931.00 | 100.58 | 239.0 | -60.0 |
| **CRC-10-011** | 409453.60 | 2992968.20 | 1937.10 | 100.58 | 210.0 | -60.0 |
| **CRC-10-012** | 408704.30 | 2993390.20 | 1777.30 | 100.58 | 200.0 | -60.0 |
| **CRC-10-013** | 408451.40 | 2993574.30 | 1756.70 | 150.88 | 233.0 | -60.0 |
| **CRC-10-014** | 408538.50 | 2993552.40 | 1757.50 | 100.58 | 210.0 | -60.0 |
| **CRC-10-015** | 408435.50 | 2993653.10 | 1729.00 | 126.49 | 206.0 | -60.0 |
| | | **Total:** | | **30,525.60** | | |

# Appendix 2

## Summary of Significant Drill Results from Holes Completed on the La Cigarra Property: 2010 to 2014

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CC-10-001** | San Gregorio | 42.55 | 53.50 | 10.95 | | 30.8 |
| | | 83.40 | 152.65 | 69.25 | | 27.3 |
| ***Includes*** | | 134.65 | 152.65 | **18.00** | | **54.6** |
| ***and*** | | 148.95 | 152.65 | **3.70** | | **117.3** |
| | | | | | | |
| **CC-11-002** | San Gregorio | 46.00 | 126.45 | **80.45** | | **123.5** |
| | | | | | *cut to 500 g/t* | **91.2** |
| ***Includes*** | | 46.00 | 106.15 | **60.15** | | **117.2** |
| | | | | | *cut to 500 g/t* | **105.2** |
| ***and*** | | 121.60 | 126.45 | **4.85** | | **559.7** |
| | | | | | *cut to 500 g/t* | **174.3** |
| | | 146.80 | 173.65 | 26.85 | | 35.7 |
| ***Includes*** | | 149.35 | 159.75 | **10.40** | | **55.5** |
| | | | | | | |
| **CC-11-003** | San Gregorio | 38.40 | 148.30 | **109.90** | | **51.3** |
| ***Includes*** | | 38.40 | 90.25 | **51.85** | | **81.7** |
| ***Includes*** | | 40.40 | 74.00 | **33.60** | | **100.6** |
| | | 115.20 | 144.80 | 29.60 | | 36.2 |
| | | | | | | |
| **CC-11-004** | San Gregorio | 17.60 | 24.95 | **7.35** | | **148.6** |
| | | | | | *cut to 500 g/t* | **136.8** |
| | | | | | | |
| | | 46.90 | 100.60 | 53.70 | | 87.1 |
| ***Includes*** | | 57.60 | 80.25 | **22.65** | | **175.5** |
| | | | | | | |
| | | 140.50 | 166.65 | 26.15 | | 23.3 |
| | | 195.05 | 200.15 | 5.10 | | 27.2 |
| | | | | | | |
| **CC-11-005** | Las Carolinas | 1.35 | 62.15 | **60.80** | | **114.8** |
| | | | | | *cut to 500 g/t* | 79.1 |
| ***Includes*** | | 14.10 | 36.20 | **22.10** | | **261.7** |
| | | | | | *cut to 500 g/t* | **163.4** |
| ***Includes*** | | 17.20 | 31.80 | **14.60** | | **382.3** |
| | | | | | *cut to 500 g/t* | **233.5** |
| | | | | | | |
| | | 91.10 | 94.85 | 3.75 | | 27.4 |
| | | | | | | |
| **CC-11-006** | Las Carolinas | 0.00 | 53.30 | **53.30** | | **55.5** |
| ***Includes*** | | 21.35 | 36.55 | **15.20** | | **134.6** |
| | | | | | | |
| **CC-11-007** | San Gregorio | 20.90 | 26.70 | 5.80 | | 23.0 |
| | | 67.50 | 145.30 | **77.80** | | **61.4** |
| | | | | | *cut to 500 g/t* | 47.4 |
| ***Includes*** | | 72.00 | 81.50 | **9.50** | | **317.3** |
| | | | | | *cut to 500 g/t* | **202.5** |
| ***and*** | | 109.20 | 117.00 | **7.80** | | **84.7** |
| | | | | | | |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CC-11-008** | San Gregorio | 0.00 | 47.80 | 47.80 | | 35.4 |
| ***Includes*** | | 27.05 | 46.25 | **19.20** | | **65.5** |
| | | 51.25 | 73.85 | 22.60 | | 3.2 |
| ***Includes*** | | 63.20 | 73.85 | 10.65 | | 2.6 |
| | | | | | | |
| **CC-11-009** | San Gregorio | 65.40 | 192.95 | **127.55** | | **86.4** |
| | | | | | *cut to 500 g/t* | **65.3** |
| ***Includes*** | | 68.55 | 104.70 | **36.15** | | **222.1** |
| | | | | | *cut to 500 g/t* | **151.6** |
| ***Includes*** | | 68.55 | 89.05 | **20.50** | | **328.0** |
| | | | | | *cut to 500 g/t* | **220.1** |
| ***and*** | | 100.35 | 104.70 | **4.35** | | **278.6** |
| | | | | | *cut to 500 g/t* | **201.5** |
| ***and*** | | 140.75 | 192.95 | **52.20** | | **52.4** |
| | | | | | *cut to 500 g/t* | 49.7 |
| ***Includes*** | | 164.35 | 179.80 | **15.45** | | **125.4** |
| | | | | | *cut to 500 g/t* | **116.4** |
| | | | | | | |
| **CC-11-010** | San Gregorio | 37.50 | 133.00 | **95.50** | | **77.4** |
| | | | | | *cut to 500 g/t* | **57.4** |
| ***Includes*** | | 108.70 | 124.30 | **15.60** | | **157.6** |
| | | | | | *cut to 500 g/t* | **148.3** |
| | | | | | | |
| | | 158.60 | 199.40 | 40.80 | | 37.4 |
| ***Includes*** | | 180.50 | 192.00 | **11.50** | | **83.4** |
| | | | | | | |
| **CC-11-011** | San Gregorio | 80.00 | 216.70 | **136.70** | | **80.4** |
| | | | | | *cut to 500 g/t* | 47.5 |
| ***Includes*** | | 82.65 | 92.00 | **9.35** | | **628.7** |
| | | | | | *cut to 500 g/t* | **180.7** |
| ***and*** | | 103.50 | 124.15 | **20.65** | | **158.3** |
| | | | | | *cut to 500 g/t* | **143.6** |
| ***and*** | | 158.10 | 162.95 | **4.85** | | **60.6** |
| | | | | | | |
| **CC-11-012** | Las Carolinas | 104.40 | 187.10 | 82.70 | | 45.2 |
| | | | | | *cut to 500 g/t* | 39.4 |
| ***Includes*** | | 104.40 | 113.60 | **9.20** | | **95.3** |
| ***and*** | | 138.70 | 157.20 | **18.50** | | **77.5** |
| ***and*** | | 181.85 | 187.10 | **5.25** | | **177.9** |
| | | | | | *cut to 500 g/t* | **86.5** |
| | | | | | | |
| **CC-11-013** | Las Carolinas | 106.70 | 123.30 | **16.50** | | **242.1** |
| | | | | | *cut to 500 g/t* | **161.6** |
| | | 143.45 | 167.10 | **23.65** | | **82.5** |
| | | | | | *cut to 500 g/t* | **79.9** |
| ***Includes*** | | 156.45 | 167.10 | **10.65** | | **163.7** |
| | | | | | *cut to 500 g/t* | **158.0** |
| | | 201.75 | 208.40 | 6.65 | | 22.6 |
| | | | | | | |
| **CC-11-014** | Las Carolinas | 68.50 | 97.30 | 28.80 | | 30.2 |
| | | 109.50 | 114.15 | **4.65** | | **61.5** |
| | | | | | | |
| **CC-11-015** | Las Carolinas | 65.80 | 70.90 | **5.10** | | **98.7** |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | 92.30 | 96.70 | 4.40 | | 38.0 |
| | | 122.70 | 125.55 | **2.85** | | **50.3** |
| | | | | | | |
| **CC-11-016** | Las Carolinas | 105.00 | 176.00 | 71.00 | | 28.2 |
| ***Includes*** | | 128.20 | 144.15 | 15.95 | | **50.6** |
| | | | | | | |
| **CC-11-017** | Las Carolinas | 140.25 | 144.50 | 4.25 | | 44.5 |
| | | 154.75 | 165.00 | **10.25** | | **55.1** |
| | | 223.55 | 229.00 | **5.45** | | **57.2** |
| | | | | | | |
| **CC-11-018** | Las Carolinas | 85.35 | 197.00 | 111.75 | | 24.7 |
| ***Includes*** | | 85.35 | 89.00 | **3.65** | | **81.4** |
| ***and*** | | 104.15 | 110.00 | **5.85** | | **52.0** |
| ***and*** | | 143.00 | 165.95 | 22.95 | | 47.0 |
| ***and*** | | 182.90 | 190.10 | 7.20 | | 43.2 |
| | | | | | | |
| **CC-11-019** | Las Carolinas | 151.85 | 203.50 | 51.65 | | 25.0 |
| ***Includes*** | | 168.15 | 183.65 | 15.50 | | 43.2 |
| | | | | | | |
| **CC-11-020** | Las Carolinas | 151.00 | 201.90 | 50.90 | | 34.7 |
| ***Includes*** | | 151.00 | 168.50 | 17.50 | | 46.3 |
| ***and*** | | 180.20 | 198.20 | 18.00 | | 41.6 |
| | | | | | | |
| **CC-11-021** | Las Carolinas | 151.85 | 190.50 | 38.65 | | 31.8 |
| | | | | | | |
| **CC-11-022** | San Gregorio | 81.50 | 102.80 | **21.30** | | **61.3** |
| | | | | | *cut to 500 g/t* | **60.8** |
| ***Includes*** | | 82.25 | 90.95 | **8.70** | | **114.9** |
| | | | | | *cut to 500 g/t* | **113.7** |
| | | | | | | |
| **CC-11-023** | San Gregorio | 84.80 | 136.25 | **51.45** | | **85.7** |
| | | | | | *cut to 500 g/t* | **67.0** |
| ***Includes*** | | 84.80 | 98.50 | **13.70** | | **239.7** |
| | | | | | *cut to 500 g/t* | **169.2** |
| | | | | | | |
| **CC-11-024** | San Gregorio | 120.90 | 203.85 | 82.95 | | 37.4 |
| | | | | | *cut to 500 g/t* | 36.6 |
| ***Includes*** | | 120.90 | 127.00 | **6.10** | | **121.3** |
| ***and*** | | 143.80 | 157.95 | **14.15** | | **53.8** |
| ***and*** | | 172.30 | 203.85 | 31.55 | | 44.7 |
| | | | | | *cut to 500 g/t* | 42.4 |
| | | | | | | |
| **CC-11-025** | San Gregorio | 146.50 | 157.00 | 10.50 | | 32.5 |
| | | 195.30 | 206.85 | **11.55** | | **80.2** |
| | | | | | *cut to 500 g/t* | **66.8** |
| | | 278.70 | 288.70 | 10.00 | | 22.4 |
| | | | | | | |
| **CC-11-026** | San Gregorio | 133.85 | 216.70 | **82.85** | | **62.8** |
| | | | | | *cut to 500 g/t* | 49.9 |
| ***Includes*** | | 133.85 | 192.25 | **58.40** | | **82.6** |
| | | | | | *cut to 500 g/t* | **64.4** |
| ***Includes*** | | 133.85 | 146.70 | **12.85** | | **190.3** |
| | | | | | *cut to 500 g/t* | **160.6** |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | | | | | |
| **CC-11-027** | La Borracha | 39.25 | 57.10 | 17.85 | | 20.4 |
| ***Includes*** | | 39.25 | 47.65 | 8.40 | | 28.0 |
| | | | | | | |
| **CC-11-028** | La Borracha | 66.10 | 81.10 | 15.00 | | 30.9 |
| | | | | | | |
| **CC-11-029** | La Borracha | 64.40 | 76.80 | **12.40** | | **50.2** |
| ***Includes*** | | 64.40 | 71.70 | **7.30** | | **78.1** |
| | | | | | | |
| **CC-11-030** | La Borracha | 7.50 | 45.80 | 38.30 | | 23.5 |
| ***Includes*** | | 37.90 | 45.80 | 7.90 | | 42.3 |
| | | 83.25 | 110.40 | 27.15 | | 25.0 |
| ***Includes*** | | 89.20 | 97.00 | 7.80 | | 46.4 |
| | | | | | | |
| **CC-11-031** | San Gregorio | 104.50 | 158.80 | 54.30 | | 36.9 |
| ***Includes*** | | 115.50 | 145.85 | **30.35** | | **52.7** |
| ***Includes*** | | 120.30 | 135.00 | **14.70** | | **76.6** |
| | | | | | | |
| **CC-11-032** | San Gregorio | 104.45 | 153.70 | 49.25 | | 32.6 |
| ***Includes*** | | 104.45 | 133.50 | 29.05 | | 46.2 |
| ***Includes*** | | 104.45 | 116.00 | **11.55** | | **76.5** |
| | | | | | | |
| **CC-11-033** | San Gregorio | 73.50 | 99.00 | 25.50 | | 40.4 |
| | | | | | *cut to 500 g/t* | 36.5 |
| ***Includes*** | | 81.00 | 91.50 | **10.50** | | **79.1** |
| | | | | | *cut to 500 g/t* | **69.8** |
| | | 112.00 | 132.75 | 20.75 | | 38.5 |
| | | | | | | |
| **CC-11-034** | San Gregorio | 137.10 | 178.10 | 41.00 | | 30.8 |
| ***Includes*** | | 154.25 | 178.10 | 23.85 | | 43.6 |
| | | | | | | |
| **CC-11-035** | San Gregorio | 97.00 | 131.55 | 34.55 | | 20.9 |
| ***Includes*** | | 106.65 | 117.00 | 10.35 | | 41.6 |
| | | 160.85 | 166.25 | 5.40 | | 25.3 |
| | | | | | | |
| **CC-11-036** | San Gregorio | 81.60 | 132.60 | **51.00** | | **52.2** |
| | | | | | *cut to 500 g/t* | 34.6 |
| | | | | | | |
| **CC-11-037** | San Gregorio | 27.25 | 39.95 | **12.70** | | **86.5** |
| | | 94.50 | 102.70 | **8.20** | | **242.9** |
| | | | | | *cut to 500 g/t* | **121.2** |
| | | | | | | |
| **CC-11-038** | San Gregorio | 44.80 | 78.55 | **33.75** | | **101.1** |
| | | | | | *cut to 500 g/t* | **70.1** |
| | | 131.50 | 136.90 | 5.40 | | 17.5 |
| | | | | | | |
| **CC-11-039** | San Gregorio | 14.00 | 26.90 | 12.90 | | 18.0 |
| | | 50.70 | 63.00 | 12.30 | | 11.0 |
| | | | | | | |
| **CC-11-040** | San Gregorio | 0.00 | 76.65 | 76.65 | | 29.9 |
| ***Includes*** | | 0.00 | 60.10 | 60.10 | | 35.1 |
| ***Includes*** | | 0.00 | 13.80 | **13.80** | | **55.8** |
| | | 102.50 | 105.00 | 2.50 | | 26.8 |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | | | | | |
| **CC-11-041** | San Gregorio | 0.00 | 24.80 | **24.80** | | **59.5** |
| ***Includes*** | | 0.00 | 15.70 | **15.70** | | **62.6** |
| | | 47.35 | 57.10 | 9.75 | | 14.7 |
| | | | | | | |
| **CC-11-042** | San Gregorio | 38.40 | 64.85 | 26.45 | | 39.3 |
| ***Includes*** | | 42.10 | 50.35 | **8.25** | | **65.3** |
| | | | | | | |
| **CC-11-043** | San Gregorio | 35.70 | 43.45 | 7.75 | | 42.2 |
| | | 71.90 | 98.80 | **26.90** | | **56.0** |
| | | | | | *cut to 500 g/t* | 46.9 |
| ***Includes*** | | 71.90 | 89.95 | **18.05** | | **74.0** |
| | | | | | *cut to 500 g/t* | **60.4** |
| | | | | | | |
| **CC-11-044** | San Gregorio | 121.00 | 134.00 | 13.00 | | 16.3 |
| | | 167.00 | 168.00 | 1.00 | | **306.7** |
| | | | | | | |
| **CC-11-045** | San Gregorio | 87.50 | 103.95 | **16.45** | | **127.4** |
| | | | | | *cut to 500 g/t* | **123.5** |
| ***Includes*** | | 91.40 | 99.00 | **7.60** | | **230.0** |
| | | | | | *cut to 500 g/t* | **221.6** |
| | | 176.45 | 178.20 | 1.75 | | 29.9 |
| | | | | | | |
| **CC-11-046** | San Gregorio | 102.00 | 155.90 | 53.90 | | 15.4 |
| ***Includes*** | | 102.00 | 118.60 | 16.60 | | 23.8 |
| | | 174.60 | 184.55 | 9.95 | | 17.8 |
| | | | | | | |
| **CC-11-047** | San Gregorio | 109.35 | 115.80 | **6.45** | | **107.0** |
| | | | | | *cut to 500 g/t* | **83.6** |
| | | 150.00 | 154.60 | 4.60 | | 17.6 |
| | | 168.30 | 175.50 | 7.20 | | 21.5 |
| | | | | | | |
| **CC-11-048** | San Gregorio | 118.25 | 127.00 | 8.75 | | 15.0 |
| | | 151.90 | 160.60 | 8.70 | | 19.1 |
| | | | | | | |
| **CC-12-049** | San Gregorio | 34.20 | 39.00 | **4.80** | | **143.7** |
| | | | | | *cut to 500 g/t* | **141.0** |
| | | 60.70 | 88.90 | 28.20 | | 37.7 |
| ***Includes*** | | 60.70 | 69.75 | **9.05** | | **74.3** |
| | | | | | | |
| **CC-12-050** | San Gregorio | 51.45 | 66.00 | **14.55** | | **72.6** |
| ***Includes*** | | 56.50 | 66.00 | **9.50** | | **91.8** |
| | | | | | | |
| **CC-12-51b** | San Gregorio | 115.50 | 174.40 | 58.90 | | 44.0 |
| | | | | | *cut to 500g/t* | 31.1 |
| ***Includes*** | | 115.50 | 138.60 | 23.10 | | 38.5 |
| | | | | | *cut to 500g/t* | 37.0 |
| ***and*** | | 157.30 | 174.40 | **17.10** | | **94.4** |
| | | | | | *cut to 500g/t* | **51.9** |
| | | | | | | |
| **CC-12-052** | San Gregorio | 132.70 | 158.10 | 25.40 | | 18.5 |
| ***Includes*** | | 152.50 | 158.10 | 5.60 | | 35.0 |
| | | | | | | |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CC-12-053** | San Gregorio | 82.00 | 108.85 | 26.85 | | 44.6 |
| | | | | | *cut to 500g/t* | 42.7 |
| ***Includes*** | | 82.00 | 95.75 | **13.75** | | **68.1** |
| | | | | | *cut to 500g/t* | **64.4** |
| | | | | | | |
| **CC-12-054** | Las Carolinas | 95.60 | 136.55 | 40.95 | | 42.1 |
| ***Includes*** | | 123.15 | 136.55 | **13.40** | | **77.3** |
| | | | | | | |
| **CC-12-055** | Las Carolinas | 72.00 | 87.50 | 15.50 | | 26.2 |
| | | 104.85 | 113.70 | 8.85 | | 18.7 |
| | | | | | | |
| **CC-12-056** | Las Carolinas | 73.00 | 95.95 | **22.95** | | **84.9** |
| | | | | | *cut to 500 g/t* | **71.6** |
| ***Includes*** | | 78.40 | 90.75 | **12.35** | | **146.0** |
| | | | | | *cut to 500 g/t* | **121.2** |
| | | | | | | |
| **CC-12-057** | Las Carolinas | 93.90 | 99.65 | 5.75 | | 40.9 |
| | | 121.60 | 140.00 | 18.40 | | 47.7 |
| | | | | | | |
| **CC-12-058** | Las Carolinas | 55.10 | 105.25 | **50.15** | | **69.4** |
| | | | | | *cut to 500g/t* | **62.4** |
| ***Includes*** | | 55.10 | 90.10 | **35.00** | | **91.8** |
| | | | | | *cut to 500g/t* | **83.2** |
| | | | | | | |
| **CC-12-059** | Las Carolinas | 83.20 | 153.50 | 70.30 | | 34.9 |
| ***Includes*** | | 83.20 | 111.00 | **27.80** | | **63.1** |
| ***and*** | | 132.75 | 136.00 | **3.25** | | **55.6** |
| ***and*** | | 144.50 | 153.50 | 9.00 | | 21.5 |
| | | | | | | |
| **CC-12-060** | Las Carolinas | 75.75 | 145.40 | 69.65 | | 22.5 |
| ***Includes*** | | 75.75 | 92.75 | 17.00 | | 29.7 |
| | | 120.50 | 132.60 | 12.10 | | 45.7 |
| | | | | | | |
| **CC-12-061** | Las Carolinas | 72.00 | 129.90 | 57.90 | | 38.1 |
| ***Includes*** | | 72.00 | 97.30 | **25.30** | | **63.9** |
| ***and*** | | 124.50 | 131.25 | 5.40 | | 49.7 |
| | | | | | | |
| **CC-12-062** | Las Carolinas | 148.20 | 182.00 | 33.80 | | 23.1 |
| ***and*** | | 219.90 | 221.65 | **1.75** | | **122.4** |
| | | | | | | |
| **CC-12-063** | Las Carolinas | 114.10 | 118.00 | 3.90 | | 22.1 |
| ***and*** | | 142.50 | 205.55 | **63.05** | | **50.3** |
| | | | | | *cut to 500g/t* | 45.0 |
| ***Includes*** | | 161.90 | 179.15 | **17.25** | | **155.2** |
| | | | | | *cut to 500g/t* | **135.9** |
| | | | | | | |
| **CC-12-064** | Las Carolinas | 84.00 | 124.80 | **40.80** | | **52.7** |
| ***Includes*** | | 106.00 | 124.80 | **18.80** | | **98.3** |
| | | | | | | |
| **CC-12-065** | Las Carolinas | 16.50 | 36.00 | 19.50 | | 17.9 |
| ***and*** | | 102.00 | 106.65 | 4.65 | | 28.9 |
| ***and*** | | 166.00 | 180.00 | 14.00 | | 33.5 |
| | | | | | | |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CC-12-066** | Las Carolinas | 53.90 | 82.40 | 28.50 | | 18.3 |
| | | | | | | |
| **CC-12-067** | Las Carolinas | 4.00 | 19.50 | 15.50 | | 20.6 |
| | | 87.00 | 90.00 | 3.00 | | 21.1 |
| | | 120.00 | 123.00 | 3.00 | | 34.3 |
| | | | | | | |
| **CC-12-068** | Las Carolinas | 68.00 | 73.50 | **5.50** | | **67.9** |
| | | | | | | |
| **CC-12-069** | Las Carolinas | 62.30 | 88.30 | **26.00** | | **59.9** |
| ***Includes*** | | 62.30 | 75.60 | **13.30** | | **106.1** |
| | | | | | | |
| **CC-12-070** | Las Carolinas | 11.40 | 81.35 | 69.95 | | 28.7 |
| ***Includes*** | | 28.50 | 55.50 | 27.00 | | 39.4 |
| ***Includes*** | | 69.00 | 78.00 | **9.00** | | **54.6** |
| | | | | | | |
| **CC-12-071** | Las Carolinas | 67.50 | 70.80 | 3.30 | | 35.1 |
| | | 86.40 | 99.50 | 13.10 | | 33.0 |
| | | | | | | |
| **CC-12-072** | Las Carolinas | 19.50 | 72.00 | 52.50 | | 42.3 |
| ***Includes*** | | 51.00 | 72.00 | **21.00** | | **68.4** |
| | | | | | | |
| **CC-12-073** | Las Carolinas | 39.00 | 90.00 | 51.00 | | 27.5 |
| ***Includes*** | | 55.35 | 72.00 | 16.65 | | 40.7 |
| | | | | | | |
| **CC-12-074** | Las Carolinas | 39.00 | 102.70 | **63.70** | | **76.2** |
| | | | | | *cut to 500g/t* | **71.0** |
| ***Includes*** | | 39.00 | 57.75 | **18.75** | | **78.2** |
| ***Includes*** | | 66.10 | 79.50 | **13.40** | | **174.3** |
| ***Includes*** | | 95.10 | 102.70 | **7.60** | | **110.9** |
| | | | | | *cut to 500g/t* | **67.6** |
| | | | | | | |
| **CC-12-075** | San Gregorio | 177.00 | 185.10 | **8.10** | | **63.5** |
| | | | | | | |
| **CC-12-076** | San Gregorio | 105.50 | 116.80 | **11.30** | | **87.7** |
| | | 164.65 | 166.55 | **1.90** | | **60.1** |
| | | | | | | |
| **CC-12-077** | San Gregorio | 171.60 | 187.60 | 16.00 | | 26.0 |
| | | 247.40 | 250.30 | 2.90 | | 22.2 |
| | | | | | | |
| **CC-12-078** | San Gregorio | 113.50 | 157.00 | 43.50 | | 37.2 |
| | | | | | *cut to 500 g/t* | 36.1 |
| ***Includes*** | | 150.25 | 157.00 | **6.75** | | **147.9** |
| | | | | | *cut to 500 g/t* | **141.2** |
| ***Includes*** | | 219.15 | 222.15 | **3.00** | | **91.0** |
| | | | | | | |
| **CC-12-079** | San Gregorio | 12.00 | 24.30 | **12.30** | | **55.4** |
| | | 77.25 | 82.50 | 5.25 | | 19.9 |
| | | | | | | |
| **CC-12-080** | San Gregorio | 94.50 | 146.75 | **52.25** | | **167.0** |
| | | | | | *cut to 500 g/t* | **113.8** |
| ***Includes*** | | 109.50 | 144.25 | **34.75** | | **241.2** |
| | | | | | *cut to 500 g/t* | **161.3** |
| | | | | | | |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CC-12-081** | San Gregorio | 11.90 | 22.50 | 10.60 | | 30.3 |
| | | | | | | |
| **CC-12-082A** | San Gregorio | 115.50 | 134.10 | 18.60 | | 22.0 |
| | | | | | | |
| **CC-12-083** | San Gregorio | 151.50 | 207.50 | **56.00** | | **105.7** |
| | | | | | *cut to 500 g/t* | **71.0** |
| ***Includes*** | | 161.60 | 182.50 | **20.90** | | **241.0** |
| | | | | | *cut to 500 g/t* | **211.4** |
| | | 282.40 | 288.60 | 6.20 | | **84.3** |
| | | | | | | |
| **CC-12-084** | San Gregorio | 9.00 | 48.90 | **39.90** | | **52.1** |
| | | | | | *cut to 500 g/t* | 41.7 |
| | | 60.10 | 74.60 | **14.50** | | **288.2** |
| | | | | | *cut to 500 g/t* | **104.9** |
| | | | | | | |
| **CC-12-085** | San Gregorio | 144.00 | 201.00 | 57.00 | | 34.2 |
| | | | | | *cut to 500 g/t* | 33.8 |
| ***Includes*** | | 144.00 | 170.10 | **26.10** | | **57.5** |
| | | | | | *cut to 500 g/t* | **56.7** |
| | | 219.00 | 221.70 | 2.70 | | 29.2 |
| | | | | | | |
| **CC-12-086** | San Gregorio | 30.00 | 68.90 | **38.90** | | **88.2** |
| | | | | | *cut to 500 g/t* | **78.2** |
| ***Includes*** | | 37.00 | 54.90 | **17.90** | | **170.4** |
| | | | | | *cut to 500 g/t* | **148.6** |
| | | | | | | |
| **CC-12-087A** | San Gregorio | 16.00 | 25.00 | 9.00 | | 29.1 |
| | | 64.90 | 66.20 | **1.30** | | **106.0** |
| | | | | | | |
| **CC-12-088** | San Gregorio | 101.00 | 104.70 | **3.70** | | **140.9** |
| | | 116.00 | 131.50 | **15.50** | | **73.8** |
| | | | | | *cut to 500 g/t* | **66.3** |
| | | 147.70 | 166.00 | **18.30** | | **55.2** |
| | | | | | *cut to 500 g/t* | **54.6** |
| | | | | | | |
| **CC-12-089** | La Borracha | 3.00 | 16.50 | 13.50 | | 30.2 |
| | | 27.25 | 37.00 | **9.75** | | **54.3** |
| | | 42.60 | 51.60 | 9.00 | | 33.0 |
| | | | | | | |
| **CC-12-090** | San Gregorio | 0.00 | 3.00 | 3.00 | | 44.2 |
| | | 41.00 | 44.50 | 3.50 | | 34.0 |
| | | 60.90 | 72.45 | **11.55** | | **127.4** |
| | | | | | *cut to 500 g/t* | **66.3** |
| ***Includes*** | | 66.90 | 72.45 | **5.55** | | **249.5** |
| | | | | | | |
| **CC-12-091** | La Borracha | 21.00 | 28.50 | 7.50 | | 48.0 |
| | | 48.00 | 57.00 | 9.00 | | 48.7 |
| | | 88.00 | 94.00 | 6.00 | | 25.6 |
| | | | | | | |
| **CC-12-092** | San Gregorio | 27.00 | 35.10 | 8.10 | | 29.6 |
| | | 43.80 | 46.60 | 2.80 | | 27.7 |
| | | 54.00 | 65.60 | 11.60 | | 24.8 |
| | | 87.00 | 96.00 | 9.00 | | 46.8 |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | | | | | |
| **CC-12-093** | La Borracha | 0.00 | 4.50 | **4.50** | | **166.2** |
| | | 58.50 | 69.70 | 11.20 | | 17.1 |
| | | | | | | |
| **CC-12-094** | San Gregorio | 31.75 | 59.30 | **27.55** | | **69.3** |
| | | | | | *cut to 500 g/t* | **68.9** |
| | | 72.00 | 80.55 | **8.55** | | **65.8** |
| | | 106.10 | 117.00 | 10.90 | | 46.2 |
| | | | | | | |
| **CC-12-095** | San Gregorio | 64.50 | 77.60 | 13.10 | | 35.1 |
| | | | | | | |
| | | | | | | |
| **CC-12-096** | Las Carolinas | 35.10 | 54.80 | 19.70 | | 29.7 |
| | | 74.10 | 75.70 | 1.60 | | 47.2 |
| | | | | | | |
| **CC-12-097** | Las Carolinas | 86.90 | 106.20 | 19.30 | | **52.4** |
| | | | | | | |
| **CC-12-098** | Las Carolinas | 124.25 | 134.90 | 10.65 | | 44.0 |
| | | | | | | |
| **CC-12-099** | Las Carolinas | 46.60 | 106.10 | 59.50 | | 28.1 |
| ***Includes*** | | 57.90 | 66.75 | 8.85 | | 40.7 |
| | | 93.10 | 101.00 | **7.90** | | **58.1** |
| | | | | | | |
| **CC-12-100** | Las Carolinas | 135.40 | 147.70 | 12.30 | | **60.6** |
| | | | | | | |
| **CC-12-101** | Las Carolinas | 48.80 | 78.80 | **30.00** | | **57.1** |
| ***Includes*** | | 53.40 | 70.40 | **17.00** | | **87.5** |
| ***and*** | | 91.10 | 111.50 | **20.40** | | **50.7** |
| | | | | | *cut to 500 g/t* | 34.3 |
| | | | | | | |
| **CC-12-102** | Las Carolinas | 154.50 | 199.50 | **45.00** | | **90.5** |
| | | | | | *cut to 500 g/t* | **88.0** |
| ***Includes*** | | 179.50 | 197.00 | | | **181.2** |
| | | | | | *cut to 500 g/t* | **174.9** |
| | | | | | | |
| **CC-12-103** | Las Carolinas | 102.20 | 115.50 | **13.30** | | **95.5** |
| | | | | | | |
| **CC-12-104** | Las Carolinas | 85.80 | 152.60 | **66.80** | | **80.2** |
| | | | | | *cut to 500 g/t* | 38.8 |
| ***Includes*** | | 85.80 | 96.20 | **10.40** | | **336.1** |
| | | | | | *cut to 500 g/t* | **73.1** |
| | | 109.10 | 152.60 | 43.40 | | 41.6 |
| | | | | | *cut to 500 g/t* | 40.9 |
| | | 163.50 | 165.80 | 2.30 | | 28.7 |
| | | | | | | |
| **CC-12-105** | Las Carolinas | 28.50 | 53.50 | 25.00 | | 48.1 |
| ***Includes*** | | 33.00 | 42.00 | **9.00** | | **90.6** |
| | | 80.75 | 84.00 | 3.25 | | 45.9 |
| | | | | | | |
| **CC-12-106** | Las Carolinas | 51.00 | 60.00 | 9.00 | | **55.2** |
| | | 88.50 | 91.30 | **2.80** | | **58.1** |
| | | | | | | |
| **CC-12-107** | Las Carolinas | 7.40 | 17.30 | **9.90** | | **55.2** |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | 32.40 | 34.80 | 2.40 | | 17.8 |
| | | | | | | |
| **CC-12-108** | Las Carolinas | 48.00 | 79.50 | 31.50 | | 25.6 |
| ***Includes*** | | 56.00 | 64.85 | **8.85** | | **55.2** |
| | | | | | | |
| **CC-12-109** | Las Carolinas | 10.50 | 18.30 | 7.80 | | 32.5 |
| | | | | | | |
| **CC-12-110** | Las Carolinas | 18.50 | 28.50 | 10.00 | | 31.2 |
| | | | | | | |
| **CC-12-111** | Las Carolinas | no significant intervals | | | | |
| | | | | | | |
| **CC-12-112** | Las Carolinas | 6.00 | 65.40 | 59.40 | | 26.2 |
| ***Includes*** | | 6.00 | 19.50 | **13.50** | | **53.5** |
| | | 41.40 | 58.65 | 17.25 | | 31.1 |
| | | | | | | |
| **CC-12-113** | Las Carolinas | 0.00 | 43.80 | **43.80** | | 44.6 |
| ***Includes*** | | 0.00 | 24.00 | **24.00** | | **63.5** |
| | | | | | | |
| **CC-12-114** | Las Carolinas | 64.00 | 75.00 | **11.00** | | **95.5** |
| | | | | | *cut to 500 g/t* | **84.3** |
| | | | | | | |
| **CC-12-115** | Las Carolinas | 3.00 | 38.00 | 35.00 | | 35.1 |
| ***Includes*** | | 3.00 | 12.00 | **9.00** | | **65.9** |
| | | 81.10 | 85.70 | 4.60 | | 25.5 |
| | | | | | | |
| **CC-12-116** | Las Carolinas | 4.50 | 46.50 | 42.00 | | 48.0 |
| ***Includes*** | | 13.50 | 33.00 | **19.50** | | **81.2** |
| | | | | | | |
| **CC-12-117** | Las Carolinas | 57.00 | 85.50 | **28.50** | | **52.7** |
| | | | | | *cut to 500 g/t* | **51.7** |
| | | 69.00 | 83.00 | **14.00** | | **85.4** |
| | | | | | | |
| **CC-12-118** | Las Carolinas | 24.00 | 66.50 | 42.50 | | 36.5 |
| ***Includes*** | | 24.00 | 33.80 | **9.80** | | **52.4** |
| ***and*** | | 52.00 | 66.50 | **14.50** | | **51.8** |
| | | 77.60 | 86.60 | 9.00 | | 15.0 |
| | | 97.50 | 101.50 | 4.00 | | 42.2 |
| | | 109.90 | 111.00 | **1.10** | | **72.6** |
| | | | | | | |
| **CC-12-119** | Las Carolinas | 3.00 | 11.00 | **8.00** | | **87.5** |
| | | 42.80 | 47.20 | 4.40 | | 45.6 |
| | | 54.00 | 63.00 | 9.00 | | 39.7 |
| | | 73.00 | 75.00 | 2.00 | | 41.6 |
| | | | | | | |
| **CC-12-120** | Las Carolinas | 68.00 | 78.00 | 10.00 | | 32.0 |
| | | 127.50 | 130.20 | 2.70 | | 15.2 |
| | | 140.60 | 161.00 | 20.40 | | 37.5 |
| | | | | | | |
| **CC-12-121** | Las Carolinas | 47.80 | 60.00 | 12.20 | | 20.0 |
| | | 100.20 | 118.80 | 18.60 | | 45.5 |
| | | | | | | |
| **CC-12-122** | Las Carolinas | 130.20 | 156.60 | 26.40 | | 46.4 |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | | | | | |
| **CC-12-123** | Las Carolinas | 162.80 | 192.80 | 30.00 | | 28.1 |
| ***Includes*** | | 183.00 | 192.80 | 9.80 | | 46.0 |
| | | | | | | |
| **CC-12-124** | Las Carolinas | 89.00 | 97.70 | 8.70 | | 9.3 |
| | | 97.70 | 112.50 | **14.80** | | **147.7** |
| | | | | | *cut to 500 g/t* | **147.3** |
| | | 154.00 | 159.00 | 5.00 | | 26.0 |
| | | 177.50 | 179.60 | 2.10 | | **87.3** |
| | | | | | | |
| **CC-12-125** | Las Carolinas | 99.00 | 158.20 | **59.20** | | **54.4** |
| | | | | | *cut to 500 g/t* | 31.5 |
| ***Includes*** | | 103.50 | 119.40 | **15.90** | | **164.0** |
| | | | | | *cut to 500 g/t* | **79.0** |
| | | 175.50 | 190.85 | 15.35 | | 29.4 |
| | | 200.80 | 203.00 | 2.20 | | 23.3 |
| | | 221.00 | 224.40 | 3.40 | | 30.2 |
| | | | | | | |
| **CC-12-126** | Las Carolinas | 1.50 | 7.30 | 5.80 | | 3.3 |
| | | 7.30 | 14.20 | 6.90 | | 25.5 |
| | | 22.00 | 24.00 | 2.00 | | 39.7 |
| | | | | | | |
| **CC-12-127** | Las Carolinas | 35.00 | 48.10 | **13.10** | | **162.5** |
| | | 59.00 | 75.00 | 16.00 | | 25.7 |
| | | | | | | |
| **CC-12-128** | Las Carolinas | 13.00 | 24.00 | 11.00 | | 15.8 |
| | | 37.60 | 43.30 | **5.70** | | **70.1** |
| | | | | | | |
| **CC-12-129** | San Gregorio | 39.8 | 64.5 | 24.70 | | 39.4 |
| ***Includes*** | | 47.3 | 55.5 | 8.20 | | **87.6** |
| | | | | | | |
| **CC-12-130** | San Gregorio | No significant intervals | | | | |
| | | | | | | |
| **CC-12-131** | San Gregorio | 168.20 | 182.10 | **13.90** | | **83.7** |
| | | | | | | |
| **CC-12-132** | San Gregorio | 36.40 | 44.00 | 7.60 | | 15.5 |
| | | | | | | |
| **CC-12-133** | San Gregorio | 129.00 | 132.00 | **3.00** | | **61.8** |
| | | 139.80 | 142.70 | **2.90** | | **195.9** |
| | | 177.00 | 198.20 | **21.20** | | **61.5** |
| | | | | **21.20** | *cut to 500 g/t* | **57.1** |
| | | | | | | |
| **CC-12-134** | Las Carolinas | 177.60 | 178.60 | **1.00** | | **229.1** |
| | | 183.00 | 184.70 | 1.70 | | 20.3 |
| | | 193.50 | 224.15 | 30.65 | | 23.4 |
| | | | | | | |
| **CC-12-135** | San Gregorio | 139.50 | 146.00 | **6.50** | | **765.0** |
| | | | | | *cut to 500 g/t* | **265.8** |
| | | 175.70 | 188.80 | **13.10** | | 32.2 |
| | | 197.00 | 205.00 | **8.00** | | **178.00** |
| | | | | | | |
| | | | | | | |
| **CC-12-136** | San Gregorio | 190.00 | 196.00 | 6.00 | | 26.4 |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | 204.00 | 207.40 | 3.40 | | 23.7 |
| | | 219.20 | 221.50 | 2.30 | | 17.8 |
| | | 236.00 | 239.80 | 3.80 | | 48.3 |
| | | 247.00 | 248.25 | **1.25** | | **185.0** |
| | | | | | | |
| **CC-12-137** | San Gregorio | 169.60 | 172.40 | **2.80** | | **241.0** |
| | | | | | *cut to 500 g/t* | **146.8** |
| | | 236.80 | 238.50 | **1.70** | | **117.1** |
| | | 183.3 | 186.1 | 2.80 | | 23.5 |
| | | 201.4 | 203.5 | 2.10 | | 19.3 |
| | | 224 | 226.3 | 2.30 | | 29.3 |
| | | 236.8 | 238.5 | **1.70** | | **117.1** |
| | | | | | | |
| **CC-12-138** | San Gregorio | 170.00 | 194.20 | **24.20** | | **150.9** |
| | | | | | *cut to 500 g/t* | **114.9** |
| | | 170 | 180.5 | **10.50** | | **317.9** |
| | | | | **10.50** | *cut to 500 g/t* | **234.9** |
| | | 250.7 | 255 | 4.30 | | 31.7 |
| | | | | | | |
| **CC-12-139** | Las Carolinas | 169.10 | 213.00 | 43.90 | | 49.6 |
| | | | | | *cut to 500 g/t* | 30.7 |
| ***Includes*** | | 169.10 | 179.10 | **10.00** | | **173.1** |
| | | | | **10.00** | *cut to 500 g/t* | **90.0** |
| | | | | | | |
| **CC-14-140** | San Gregorio | 159 | 226.2 | 67.20 | | 24.6 |
| *Includes* | | 162 | 171 | **9.00** | | **67.3** |
| | | 208.5 | 221.2 | 12.70 | | 34.8 |
| | | | | | | |
| **CC-14-141** | San Gregorio | 194.8 | 210.2 | 15.40 | | 29.1 |
| | | 244.5 | 250.6 | 6.10 | | 21.8 |
| | | | | | | |
| **CC-14-142** | San Gregorio | 208.6 | 226.3 | **17.70** | | **66.7** |
| *Includes* | | 209.8 | 217.2 | **7.40** | | **119.8** |
| | | | | | | |
| **CC-14-143** | San Gregorio | 147.45 | 185.75 | 38.30 | | 22.1 |
| *Includes* | | 156.5 | 171.1 | 14.60 | | 33.8 |
| | | 264.25 | 268 | **3.75** | | **290.6** |
| **CC-14-144** | Las Carolinas | 142.8 | 146.25 | 3.45 | | 33.7 |
| | | 161 | 169.5 | 8.50 | | 17.3 |
| | | 178.5 | 187.35 | 8.85 | | 17.2 |
| | | 204 | 220.7 | 16.70 | | 32 |
| *Includes* | | 216 | 220.7 | **4.70** | | **79.1** |
| | | 248.1 | 262 | 13.90 | | 16.8 |
| | | | | | | |
| **CC-14-145** | Las Carolinas | 145.3 | 197.3 | 52.00 | | 36.5 |
| *Includes* | | 145.3 | 160.5 | **15.20** | | **42.6** |
| | | 178.1 | 193.25 | **15.15** | | **60.4** |
| | | 221.9 | 232.4 | 10.50 | | 18.5 |
| | | | | | | |
| **CC-14-146** | Las Carolinas | 124.85 | 154.5 | 29.65 | | 28.4 |
| *Includes* | | 138.5 | 154.5 | 16.00 | | 45.6 |
| *Includes* | | 147 | 154.5 | **7.50** | | **81.0** |
| | | 180.9 | 188.7 | 7.80 | | 19.6 |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| | | | | | | |
| **CC-14-147** | Las Carolinas | 77.2 | 98 | 20.80 | | 16.1 |
| | | | | | | |
| **CC-14-148A** | Las Venadas | No significant intervals | | | | |
| | | | | | | |
| **CC-14-149** | Las Venadas | 76.6 | 81.2 | 4.60 | | 16.2 |
| | | 126.6 | 137.1 | 10.50 | | 25.5 |
| | | | | | | |
| **CC-14-150** | Las Chinas | No significant intervals | | | | |
| | | | | | | |
| **CC-14-151** | La Borracha | 58.5 | 62.7 | 4.20 | | 14.3 |
| | | 120 | 124 | 4.00 | | 15.1 |
| | | | | | | |
| **CC-14-152** | San Gregorio | 138 | 147.1 | 9.10 | | 46.75 |
| *includes* | | 175.9 | 183.8 | 7.90 | | 39.75 |
| | | 175.9 | 178.2 | **2.30** | | **98.64** |
| | | 248 | 257.1 | **9.10** | | **58.83** |
| | | | | | | |
| **CC-14-153** | San Gregorio | 144.5 | 150 | 5.50 | | 28.3 |
| | | 176.7 | 186 | 9.30 | | 16.47 |
| | | 237.8 | 244.7 | 6.90 | | 43.87 |
| | | | | | | |
| **CC-14-154** | San Gregorio | 442.6 | 443.4 | 0.80 | | 27 |
| | | | | | | |
| **CC-14-155** | Las Carolinas | 141.85 | 165.3 | **23.45** | | **138.3** |
| | | 172.4 | 186.7 | 14.30 | | 25.5 |
| | | 225 | 231 | **6.00** | | **50.7** |
| | | 244 | 245 | **1.00** | | **169** |
| | | 269 | 271.5 | 2.50 | | 33 |
| | | | | | | |
| **CC-14-156** | Las Carolinas | 146.6 | 153.7 | 7.10 | | 20.8 |
| | | 178.55 | 180.55 | 2.00 | | 25.3 |
| | | 187.4 | 191.65 | 4.25 | | 18.4 |
| | | 199.6 | 201.25 | **1.65** | | **122.1** |
| | | 222.4 | 236.8 | **14.40** | | **53.5** |
| *includes* | | 222.4 | 227 | **4.60** | | **137.4** |
| | | 274 | 278.05 | **4.05** | | **49.4** |
| | | | | | | |
| | | | | | | |
| **CRC-10-001** | Las Carolinas | 1.52 | 36.58 | **35.06** | | **61.7** |
| | | | | | *cut to 500 g/t* | **50.2** |
| | | 19.81 | 33.53 | **13.72** | | **138.7** |
| ***Includes*** | | | | | *cut to 500 g/t* | **109.1** |
| | | | | | | |
| | | 60.96 | 68.58 | 7.62 | | 38.5 |
| | | | | | | |
| **CRC-10-002** | Las Carolinas | 0.00 | 48.77 | 48.77 | | 46.8 |
| ***Includes*** | | 6.10 | 25.91 | **19.81** | | **82.1** |
| | | | | | | |
| **CRC-10-003** | Las Carolinas | 25.91 | 51.82 | 25.91 | | 26.3 |
| ***Includes*** | | 25.91 | 35.05 | **9.14** | | **50.9** |
| | | 64.01 | 67.06 | **3.05** | | **62.7** |
| | | | | | | |

| Hole # | ZONE | Intervals (metres) | | length | Silver Capped | Ag (g/t) |
|---|---|---|---|---|---|---|
| | | from | to | | | |
| **CRC-10-004** | Las Carolinas | 12.19 | 18.29 | **6.10** | | **56.5** |
| | | 53.34 | 62.48 | 9.14 | | 22.3 |
| | | | | | | |
| **CRC-10-005** | San Gregorio | 0.00 | 19.81 | 19.81 | | 30.2 |
| ***Includes*** | | 15.24 | 19.81 | **4.57** | | **82.6** |
| | | | | | | |
| **CRC-10-006** | San Gregorio | 12.19 | 128.02 | **115.83** | | **58.9** |
| ***Includes*** | | 18.29 | 70.10 | **51.81** | | **95.7** |
| ***Includes*** | | 28.96 | 57.91 | **28.95** | | **142.1** |
| ***and*** | | 120.40 | 128.02 | **7.62** | | **142.7** |
| | | | | | | |
| **CRC-10-007** | San Gregorio | 4.57 | 15.24 | **10.67** | | **60.2** |
| | | | | | | |
| **CRC-10-008** | San Gregorio | 4.57 | 15.24 | 10.67 | | 38.1 |
| | | | | | | |
| **CRC-10-009** | San Gregorio | 24.38 | 51.82 | 27.44 | | 42.9 |
| ***Includes*** | | 30.48 | 42.67 | **12.19** | | **74.1** |
| | | | | | | |
| **CRC-10-010** | San Gregorio | 16.76 | 100.58 | 83.82 | | 23.8 |
| ***Includes*** | | 50.29 | 54.86 | **4.57** | | **108.7** |
| | | | | | | |
| **CRC-10-011** | San Gregorio | 0.00 | 32.00 | **32.00** | | **71.9** |
| ***Includes*** | | 10.67 | 28.96 | **18.29** | | **112.9** |
| | | | | | | |
| **CRC-10-012** | La Borracha | 4.57 | 19.81 | 15.24 | | 39.2 |
| ***Includes*** | | 7.62 | 15.24 | **7.62** | | **56.0** |
| | | | | | | |
| **CRC-10-013** | La Borracha | 9.14 | 25.91 | 16.77 | | 38.9 |
| ***Includes*** | | 18.29 | 25.91 | **7.62** | | **68.2** |
| | | | | | | |
| **CRC-10-014** | La Borracha | 18.29 | 30.48 | 12.19 | | 23.2 |
| | | | | | | |
| **CRC-10-015** | La Borracha | 0.00 | 21.34 | 21.34 | | 32.7 |
| | | 60.96 | 64.01 | 3.05 | | 27.5 |