



Technical Report

On The

# **Mineral Resource Estimate for the Columba Ag-Pb-Zn Project, Chihuahua State, Mexico**

WGS84 UTM Zone 13, 231,200 m E; 3,341,500 m N  
LATITUDE 30° 10' 31" N, LONGITUDE 107° 47' 29" W

**Prepared for:**

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SGS Geological Services ("SGS")  
SGS Geological Services ("SGS")

SGS Project # 20278-01

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# 1 SUMMARY

## 1.1 Introduction

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

Kootenay Silver Inc. was incorporated under the Business Corporations Act (British Columbia) on November 9, 2006. The Company's principal business activity is the exploration of mineral properties. The Company currently conducts its operations in Mexico and Canada. It is trading on the TSX Venture Exchange ("TSX-V") under the symbol KTN and the OTCQX under the symbol KOOYF. The head office and principal address of the Company is located at Suite 1125 595 Howe St., Vancouver, British Columbia, V6C 2T5.

The mining concessions comprising the Columba project are held 100% by Kootenay, through a wholly owned subsidiary, Grupo Northair de Mexico, S.A. De C.V., and were acquired through an Exploration with Option to Purchase Mining Concessions Agreement commencing in November 2018 with the final payment completed on May 12, 2023.

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

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in 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 MRE completed for Kootenay.

## 1.2 Property Description, Location, Access, Infrastructure, and Physiography

The Columba Project is located approximately 240 km northwest of the city of Chihuahua, and 28 km south of the municipality of Nuevo Casas Grandes in northwestern Chihuahua State, Mexico. The Project is positioned on the boundary between the municipalities of Galeana and Nuevo Casa Grandes along the northern margin of the Sierra Madre Occidental physiographic province in northern Mexico. The Project is centred at 30° 10' 31" north latitude and 107° 47' 29" west longitude or at 231,200 m E; 3,341,500 m N in the WGS84 UTM Zone 13 datum.

The Project comprises five approved contiguous and overlapping mining concessions, located in the San Joaquín Mineral District, covering a total area of 850.3221 ha held 100% by Kootenay through its wholly owned Mexican subsidiary, Grupo Northair de Mexico, S.A. De C.V. 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. An additional two mining concessions (the second America 2 and San Joaquín concessions) covering

10,896.00 ha are currently in the process of being issued. Under recently passed mining reform laws all applications were canceled in favour of a new process of mineral rights acquisition. After consultation with constitutional lawyers the Company has filed an amparo to enforce the registration of the applications under the old laws as it considers the retroactive application of the new law contravenes the Mexican constitution. The combined Project mining concessions total 11,746.3221 hectares.

On November 12, 2018, Kootenay, through its wholly owned Mexican subsidiary Grupo Northair de Mexico, S.A. De C.V., executed an exploration with option to purchase agreement with Minera Ches Mex, S. de R.L. De C.V. (Ches Mex) to acquire a 100% ownership of six Project mining concessions totaling 946.3221 ha. Under the terms of the Agreement, Kootenay acquired a 100% ownership in the concessions by making staged payments over a 4-year period totaling US\$3,290,000 (completed). A total of US\$3,290,000 has been paid with US\$1,155,000 paid in staged payments during 2023, with the final payment on May 18, 2023, which included US\$215,000 settled in common shares of the Company. A work commitment of US\$250,000 and US\$750,000 by the first and second anniversary, respectively of the Agreement has been met. Per the Agreement, Ches Mex retains a 2% net smelter royalty of which 1% can be bought by Kootenay for US\$750,000 (see November 5, 2018 news release for full details).

Surface rights to most of the land underlying the Project area are owned by a single landowner. Mining concession owners have the right to obtain the expropriation, temporary occupancy, or creation of land easements required to complete exploration and mining work, including the deposition of rock dumps, tailings, and slag. Kootenay has secured a 24-year surface access agreement, valid until December 31, 2047, which covers all the mineralized areas drilled to date and has been registered with the appropriate Mexican government authorities. The agreement includes annual payments, certain bonus payments, and for a 2% net smelter royalty of which 1% can be bought by the Company for US\$4.5M and allows for both exploration and exploitation.

The Project is located approximately 240 km northwest of the city of Chihuahua, and 28 km south of the municipality of Nuevo Casas Grandes in northwestern Chihuahua State, Mexico. The project is accessible via Highway 10 from Galeana or Nuevo Casas Grandes, then approximately 10 km up an all-season gravel road to the project site. The Company has developed and expanded a network of exploration walking trails for the purposes of moving drilling rigs to and from drilling sites.

The Project lies near the municipalities of Nuevo Casas Grandes (pop.<sub>2010</sub>: 55,500) and Galeana (pop.<sub>2010</sub>: 5,890) which host food and lodging, fuel, equipment parts and repair, Nuevo Casas Grandes Municipal Airport (IATA: NCG, ICAO: MMCG), and other services. Power lines paralleling Highway 10 are positioned approximately 10 km north of the Project. Capacities are currently unconfirmed.

Upon execution of a surface access agreement in 2019 the Company completed construction of exploration roads for drill access and an exploration camp was erected in the centre of the Property to facilitate drilling activities. In early 2025 the Company began construction of an expanded core processing and storage facility immediately north of the Property under the updated surface access agreement with the surface rights landowner.

The Project lies at an elevation of approximately 1,500 m to over 2,000 m above sea level within the San Joaquín Mountains, which rise sharply westward from surrounding plains.

### 1.3 History

Columba is host to a low to intermediate-sulphidation epithermal silver system that was the focus of intermittent underground mining activity during the early 1900s and 1950s as the La Fortuna and America mines. A hiatus in mining and exploration activity occurred with only minimal geological investigation completed until Kootenay initiated exploration on the Property late in 2018.

Until 1910, approximately 75 titled mining concessions were undergoing various stages of mining work in the San Joaquín Mineral District, of which the La Fortuna, America and Julieta mines were the principal producers. With the onset of the Mexican Revolution many operations ceased, and concessions reverted

to the Mexican Government (Lerchen and Parker, 1929). In a report for La Fortuna – America Silver Mines, Lerchen and Parker (1929) reference records from the El Paso Smelting Works indicating 339 tons of ore with an average grade of 67.85 oz/ton silver (Ag) were shipped from the La Fortuna mine between 1903 and 1910. It is mentioned that ore shipment records for the America mine and many from La Fortuna may have been destroyed in a fire at El Paso Smelting Works.

During the 1950s, D. D. Burcher visited the La Fortuna property on behalf of owner Cia Minera San Joaquín, S. A., which is referenced in a letter from Howard Meyerhoff of GeoSurveys to D. D. Burcher dated August 7<sup>th</sup>, 1959. Burcher and Meyerhoff completed a site inspection and provided geological interpretations in the La Fortuna (Kootenay's "F Vein") and America ("A Vein") veins as well as the Santo Niño ("I Vein"), Julieta ("J Vein") and Veta de Oro ("D Vein") veins, concluding that mining operations at the time should be economic provided sufficient development was completed. A report by Fink (1960) states the flotation process in use at the operation was "not satisfactory" and was recovering 75% of the silver from the mine. Fink states "Numerous tests have given (recovery) results of 85% silver, and recent tests by a well-known millings company have produced results of 90% of the silver . . . produced by finer grinding."

Underground workings on the Property include 4 shafts extending to depths of up to 200 meters and connect to at least 6 levels of drifts with a combined length measuring over 1,000 meters. Kootenay estimates a total of 70,000 to 100,000 tonnes of material was mined from the Property.

## 1.4 Geology and Mineralization

The Columba Silver Project is located within the northeastern portion of the Sierra Madre Occidental ("SMO"), a siliceous large igneous province which represents the southernmost and largest ignimbrite flare up that extended from British Columbia to Mexico during the Tertiary period (Andrews *et al.*, 2022). Volcanic sequences of the SMO form a linear plateau of silicic ignimbrites and lavas 1 – 1.5 km thick, approximately 1200 km long and 200 – 500 km wide with a mean elevation of 2,000 m above sea level, which spans from the United States – Mexico border (~31°N) south to the Trans-Mexican Volcanic belt (~21°N), and represents calc-alkaline magmatism resulting from rollback of the Farallon slab between ~35 Ma and 27 Ma (King, 1939; McDowell and Keizer, 1977; Swanson and McDowell, 1984; Wark *et al.*, 1990; Camprubí, 2013; Andrews *et al.*, 2022). Extensional tectonics and formation of the Basin and Range province during the middle-Tertiary overlaps with deposition of ignimbrites of the SMO which Aguirre-Díaz and McDowell (1993) and Aguirre-Díaz and Labarthe-Hernández (2003) argue may have resulted from linear fissure-fed extrusive volcanism rather than calderas. Ignimbrites of the SMO have been dated between 51 Ma (Aguirre-Díaz and McDowell, 1991) and 17 – 16 Ma (Nieto-Obregón *et al.*, 1981; 1985), however the largest volume of ignimbrite erupted between 38 Ma and 28 Ma (Aguirre-Díaz and McDowell, 1991). Volcanics of the SMO are represented by two primary pulses: the first during the late Eocene to early Oligocene (~35 Ma to 30 Ma) along the entirety of the SMO; and the second during the early Miocene in the central and southern portions of the SMO (Camprubí, 2013).

The formation of epithermal-type deposits in Mexico coincides with the main volcanic pulses that formed the Sierra Madre Occidental during the Tertiary. Three main groups of epithermal deposits have been identified including, from oldest to youngest: (i) 48 – 40 Ma systems which are hosted within the Lower Volcanic Supergroup of the SMO and are related to Laramide magmatism and include the oldest epithermal deposits in Mexico; (ii) 36 – 27 Ma systems which occur along a northwest – southeast trending belt from northern Chihuahua to Guerrero States and are related to the main ignimbrite flare up of the SMO, and; (iii) 23 – 18 Ma systems which are coincident with the last ignimbrite events of the SMO and lie along a west-northwest – east-southeast trend (Camprubí *et al.*, 2003).

North of Chihuahua City, two important and short-lived, albeit not necessarily distinct ignimbrite events occurred at 46 – 42 Ma and 38 Ma (McDowell, 2007; McDowell and McIntosh, 2012), although the geological history, stratigraphy, and architecture of the SMO in this region is poorly understood (Andrews *et al.*, 2022). The San Joaquín area is dominated by Quaternary alluvial cover below approximately 1,500 above sea level. Above 1,500 m, sub-horizontal Tertiary rhyolites, rhyolite breccias and rare basalts occur with conglomerates of similar age (1:250,000 Map - Hoja H13-4). Normal faults striking northwest dominate the structural architecture with subordinate northeast, north-south and east-west striking normal and strike-slip faults dissecting Tertiary units.



Columba is a low to intermediate-sulphidation epithermal system of veins and breccias in the upper and central parts of a 5 km diameter felsic caldera/diatreme system of probable late Eocene / early Oligocene age. Volcanic facies within the caldera basin are dominantly felsic and include ignimbrite and felsic dykes associated and interlayered with thick-bedded volcanic breccias which grade intermittently with immature volcanic conglomerate, sandstone, siltstone, and mudstone. Intrusive rocks are exposed as resurgent dome(s) within its centre. The caldera rim/walls are dominated by ignimbrites and pyroclastic outflow rocks, immature volcanoclastic sediments within the caldera are interpreted lacustrine deposits and slump blocks.

The mineralized system is characterized by an extensive system of northeast- and northwest-trending veins and splays that cut all lithologies. Two strike populations are evident from surface structural measurements of veins: (i) 030 – 150 (39%<sub>n=893</sub>), and (ii) 210 – 330 (46%<sub>n=893</sub>), which parallel regional structural fabrics and coincide with the dominant veins on the property. Vein dip generally exceeds 45° with 64% (n=893) of veins dipping greater than 75°, and 38% dipping greater than 85°.

True widths of veins vary from several centimetres to several tens of metres, and in some cases are associated with quartz-cemented breccia and vein stockworks in hanging wall and footwall units. Veins display gangue mineralogy dominated by quartz with lesser calcite, barite, iron oxide and manganese oxide. Banded quartz-calcite ± barite vein textures typify primary veins which suggest several hydrothermal episodes occurred resulting in cross-cutting veins and secondary brecciation. Hydrothermal breccias are common in hanging wall units characterized by quartz vein stockwork hosting sulphide minerals associated with silver mineralisation. Mineralization styles can be broadly categorized as: (i) primary banded quartz ± calcite ± barite mid-low sulphidation epithermal veins; (ii) quartz ± barite ± haematite vein and veinlet stockwork breccia in hanging wall rhyolite associated with argillic alteration of the wall rock, and; (iii) silicified hydrothermal breccia near lithological contacts associated with the “J” vein, as identified in hole CDH-19-030.

Silver grades demonstrate a vertical zonation from non- to weakly anomalous at upper levels, increasing with depth into high-grade “bonanza” grades. At the upper levels, quartz veining pinches out into narrow fractured and brecciated zones with weak silicification and irregular veinlets of quartz and/or calcite locally; mineralization here yields low-grade to background silver (<5 ppm -- <100 ppm). One hundred metres lower in elevation, quartz veins are semi-continuous with widths of 1 – 6 m and can host greater than 600 g/t Ag. The vertical zonation in silver grade and geologic mapping demonstrate that erosion has removed only the uppermost structural level of anomalous mineralization, leaving the depth profile of high-grade mineralization intact. The veins continue to depth and have been found in drilling to contain high grades within 150 m of near-barren structures at surface. Grades typically increase below approximately 1700 m elevation. Drilling has tested mineralized veins over a combined length of approximately 3100 m in strike and 540 m in depth but remains open both along strike and at depth. Mapping to date indicates the footprint of the mineralized system to be approximately 3 km x 4 km. A 2024 mineralogical study completed on 4 composite samples from Columba concluded the majority of silver (95-98%) was present as native silver or silver sulphides, dominated by acanthite/argentite (Ag<sub>2</sub>S) with the remaining silver contained with silver halides. While gold is present in the system, grades are not consistently high enough to have economic significance. A brief study of the relationship between silver and other elements from drilling results indicates that zinc ( $y=5.4371x+346.5$ ) has a stronger association to silver grades than lead ( $y=2.4361x+90.39$ ). However, it may be postulated that both galena and sphalerite are important indicators for the presence of silver.

## 1.5 Exploration

Kootenay commenced exploration on the Project in late 2018 and has focused on delineating the strike, depth and thickness of known veins while employing first-principled surface exploration and drilling to locate and delineate previously unknown veins. Surface exploration to date has included geological mapping, rock geochemical sampling, geophysical surveys, and diamond drilling. Mapping and sampling has confirmed anomalous silver in numerous veins at surface mapped over strike lengths from 200 m to 2 km. Exploration channel sampling by Kootenay has returned grades ranging from 1 g/t to a high of 692 g/t silver over widths of 0.5 to 6 meters. Airborne geophysical surveys, including a drone magnetic and LiDAR topographic survey, have been used as tools to help identify new targets on the Columba Property. The LiDAR topographic model is used to find new vein outcrops and historical workings, while structural interpretation

of the magnetic survey products is used to identify new property scale vein structures within the larger vein system.

## 1.6 Drilling

Kootenay initiated drilling on the Property in July 2019 and has continued to systematically explore the Columba vein system with a series of drill programs undertaken each year through to 2025. As of March 2025, Kootenay had completed 217 drill holes totaling 53,476 m and collected 28,488 assays.

Pattern drilling on target vein structures within the Columba vein system has primarily been completed on 100 m and 50 m centres. Drilling predominantly comprises angled holes (45° to -75° dips) completed on drill sections in a fan and fence pattern with holes collared in the hanging wall of and orthogonal to target structures. Terrain restrictions require drilling of target structures from the footwall side in some locations.

Drilling of the Columba vein system by Kootenay has begun to delineate mineralization in multiple structures (17 veins are included in the 2025 MRE). Mineralized strike lengths of the major structures have been tested for up to 1,200 m along strike and up to 450 m vertically (D vein), while several subsidiary hanging wall and footwall splay structures have confirmed mineralized strike lengths of 200 - 400 m and vertical extents of 150 – 250 m. Mineralized portions of veins that comprise the resource models vary in true thickness from 1.5 m to 10+ m and average ~ 5 m. Many of the mineralized veins and resource models remain open along strike and down dip.

Diamond drillholes are typically HQ diameter, with reduction to NQ diameter on deeper holes beyond 300 m or when ground conditions necessitate it. Drilling to date has been completed using man-portable drill rigs to limit surface disturbance on the Property. Maximum drilling depths obtained to date with these drills on the Property has been 340m in HQ and 750 m in NQ. Drillhole collars are positioned for drilling using handheld GPS and subsequently surveyed by Total Station surveying. Downhole orientations of drillhole azimuth, inclination, and total magnetic field are recorded by a magnetic survey instrument every 20 to 30 m downhole. Magnetic declination, adjusted annually, is used for correcting drillhole azimuths to true north values. Drillhole geology is recorded for lithology, alteration, mineralization, structures, and veins. Drillhole recovery and RQD are recorded for all drilled intervals and field density measurements are collected on selected intervals. Full hole geochemical sampling was completed from 2019 to 2023. Selective geochemical sampling was initiated in 2024. Logged mineralized intervals are sampled for geochemical assay at nominal 1 m intervals based on changes in lithology, alteration, mineralization, and structure.

## 1.7 Mineral Processing and Metallurgical Testing

Preliminary scoping level metallurgical test work has been conducted by Kootenay on mineralized material from the Columba project. Test work performed has included sample chemistry and mineralogy, comminution tests, whole ore cyanidation, and floatation/cyanidation.

A scoping metallurgical testing program was conducted to characterize eight variability composites from the Columba project and to determine amenability to cyanidation treatment for recovery of silver. Leaching procedures were optimized with a single master composite, prior to testing the eight individual composites. A single flotation/cyanidation test was also conducted on each individual composite.

One of the eight composites was relatively very high in grade and contained 762 g/t Ag, 3.16% Zn, and 1.06% Pb. Silver grades of the remaining composites ranged from 63 to 247 g/t Ag. Zinc grades were 0.715% or less and lead grades were 0.212% or less. Sulfide sulphur contents for all eight composites were 0.33% or less. Detailed mineralogy, conducted by ALS Metallurgy, indicated that the contained silver occurred primarily as acanthite/argentite or native silver. Most of the zinc and lead occurred as oxides. Aqua regia digestion/leach assays indicate that roughly 0-50% of the contained silver was locked in silicate minerals, which will not be recoverable in any conventional processing circuit. Nearly all of the silver in the highest-grade composite (4883-004) was extractable by aqua regia, suggesting recovery from this composite was not limited by locking in silicate minerals. On average (grade-weighted average), results

indicate that 16% of the contained silver was locked in silicate minerals. This value is skewed by the differing character and relatively high grade of composite 4883-004.

Results show that the master composite was amenable to milling/cyanidation treatment. A silver recovery of 71.1% was observed at an 80%-75µm feed size and 2.0 gNaCN/L cyanide concentration. Recovery was only incrementally improved by grinding to 80%-38µm or 25µm. Adding lead nitrate was ineffective for improving silver recovery. One test was conducted with a reducing sulfuric acid leach (i.e. "Mn pre-leach") prior to cyanidation. Recovery in this case was only incrementally improved.

Leach rates were moderate, and extraction was substantially complete within the first 48 hours of leaching. Cyanide consumption was moderate and generally ranged from 0.32 to 0.60 kgNaCN/mt ore. Lime requirements for pH control generally were low and ranged from 1.4 to 1.7 kg/mt.

Recovery was much lower (42.2%) when the feed size was coarsened to 100%-1.7mm. This indicates that the master composite material would not be amenable to heap leaching treatment.

It should be noted that roughly half of the silver contained in the master composite came from the high-grade composite 4883-004, so master composite testing results are skewed by the differing character of this composite.

The individual variability composites generally were amenable to milling cyanidation treatment at the 80%-75µm grind size. Silver recovery ranged from 49.2% to 81.7% in 96 hours of leaching at a 2.0 gNaCN/L concentration. Recovery tended to be higher for the higher-grade composites and the grade-weighted average silver recovery was 69.8% at the higher cyanide concentration.

The variability composites generally were somewhat sensitive to cyanide concentration and the grade-weighted average silver recovery was 8.2% lower at 0.5 gNaCN/L than at 2.0 gNaCN/L. This sensitivity to cyanide concentration was notably not observed for the high-grade composite (4883-004) or during testing of the master composite.

Variability composite leach rates were moderate and were consistently faster at the higher cyanide concentration. Extractions at the lower cyanide concentration would generally be incrementally improved by extending the leach cycle beyond 96 hours.

Cyanide consumption was generally low and averaged 0.48 kgNaCN/mt ore at the 2.0 gNaCN/L concentration. Consumption was higher for composite 4883-004 (1.06 to 1.34 kgNaCN/mt ore). The higher consumption in this case was primarily due to the high silver extraction. The stoichiometric cyanide requirements for leaching silver account for roughly half of the observed consumptions. Lime requirements for pH control were low and averaged 1.7 kg/mt.

Results from flotation are presented in the detailed report. The variability composites generally responded poorly to floatation concentration treatment. Flotation silver recoveries ranged from 43.6% to 64.8%. Combined rougher floatation and flotation tailings cyanidation silver recoveries ranged from 64.6% to 87.5%. These recoveries are higher than the whole ore cyanidation recoveries, but do not account for any silver losses expected to occur during flotation concentrate processing. Further testing, including concentrate cyanidation testing, would be required to estimate these potential losses.

## 1.8 Mineral Resource Estimate

Completion of the MRE involved the assessment of a validated drill hole database, which included all data for surface drilling completed between July 2019 and March 2025. Completion of the MRE also included the construction of three-dimensional (3D) mineral resource models (resource domains) and 3D models of historical underground workings, and the incorporation of 3D topographic surface models and available written reports.



The Inverse Distance Squared (“ID<sup>2</sup>”) calculation method restricted to mineralized domains was used to interpolate grades for Ag (g/t), Pb (ppm), and Zn (ppm) into block models for all deposit zones.

The MRE presented below takes into consideration that all deposits on the Property may be mined by underground mining methods.

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The MRE for the Project is presented in Table 1-1 and Table 1-2.

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

- The underground MRE includes, at a base-case cut-off grade of 150 g/t Ag, Inferred Mineral Resources estimated at 5.92 Mt grading 284 g/t silver, 0.19% lead, and 0.50% zinc. The Mineral Resource Estimate includes Inferred mineral resources of 54.1 Moz of silver, 25.2 Mlbs of lead, and 65.6 Mlbs of zinc. The MRE is exclusive of mined out material (F Vein).
- A total of 17 epithermal veins that comprise the Columba vein system were included in the Mineral Resource Estimate.

**Table 1-1 Columba Project Underground Mineral Resource Estimate, May 29, 2025**

Cut-off Grade	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
INFERRED							
150 g/t Ag	5.92	284	0.19	0.50	54,072	25.2	65.6

**Columba Property Mineral Resource Estimate Notes:**

- (1) The mineral resource was estimated by Ben Eggers, MAIG, P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Eggers conducted a site visit to the Columba Property on May 28, 2025. The mineral resource was peer reviewed by Allan Armitage, Ph.D., P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Armitage conducted a site visit to the Columba Property on May 24-25, 2024.
- (2) The classification of the Mineral Resource Estimate into Inferred mineral resources is consistent with current 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. The effective date of the Columba Property Mineral Resource Estimate (MRE) is May 29, 2025. This is the close out date for the final mineral resource drilling database.
- (3) All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- (4) All mineral resources are presented undiluted and in situ, constrained by continuous 3D wireframe models (considered mineable shapes), and are considered to have reasonable prospects for eventual economic extraction. The mineral resource is exclusive of mined out material.
- (5) Mineral resources are not mineral reserves. 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 or Measured 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 or Measured Mineral Resources with continued exploration.

- (6) The Columba mineral resource estimate is based on a validated drillhole database which includes data from 217 surface diamond drill holes completed between July 2019 and March 2025. The drilling totals 53,476 m. The resource database totals 28,448 assay intervals representing 45,805 m of data.
- (7) The mineral resource estimate is based on 17 three-dimensional (“3D”) resource models representing epithermal veins which comprise the Columba vein system. 3D models of mined out areas were used to exclude mined out material from the current MRE.
- (8) Grades for Ag, Pb, and Zn are estimated for each mineralization domain using 1.5 m capped composites assigned to that domain. To generate grade within the blocks, the inverse distance squared (ID<sup>2</sup>) interpolation method was used for all domains.
- (9) Average density values were assigned to each domain based on a database of 4,049 samples.
- (10) It is envisioned that the Columba Project deposits may be mined using underground mining methods. Mineral resources are reported at a base case cut-off grade of 150 g/t Ag. The mineral resource grade blocks were quantified above the base case cut-off grade, below surface and within the constraining mineralized wireframes.
- (11) The underground base case cut-off grade of 150 g/t Ag considers a metal price of US\$26.00/oz Ag and metal recovery of 90% for Ag.
- (12) The underground base case cut-off grade of 150 g/t Ag considers a mining cost of US\$60.00/t rock and a processing, treatment and refining, transportation and G&A cost of US\$45.00/t 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 Columba Project Underground Mineral Resource Estimate by Vein, May 29, 2025**

Vein	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
<b>INFERRED</b>							
D	3.29	293	0.22	0.60	30,964	15.8	43.7
DHW	0.08	310	0.65	0.89	789	1.1	1.6
DFW	0.03	250	0.23	0.61	235	0.2	0.4
F	0.79	273	0.16	0.46	6,936	2.8	8.0
FHW	0.11	215	0.07	0.16	790	0.2	0.4
FHW2	0.05	310	0.17	0.32	517	0.2	0.4
FHW3	0.03	265	0.12	0.29	280	0.1	0.2
FFW	0.02	206	0.04	0.14	146	0.0	0.1
FFW2	0.00	160	0.20	1.23	23	0.0	0.1
S	0.05	260	0.16	0.43	407	0.2	0.5
Lupe	0.35	307	0.09	0.27	3,488	0.7	2.1
B2	0.31	262	0.14	0.31	2,593	1.0	2.1
HG	0.34	337	0.19	0.23	3,640	1.4	1.7
J	0.11	214	0.09	0.46	723	0.2	1.1
Z	0.01	165	0.06	0.53	46	0.0	0.1
I	0.31	225	0.20	0.39	2,264	1.4	2.7
E	0.04	189	0.17	0.62	229	0.1	0.5
<b>Total</b>	<b>5.92</b>	<b>284</b>	<b>0.19</b>	<b>0.50</b>	<b>54,072</b>	<b>25.2</b>	<b>65.6</b>

## 1.9 Recommendations

The Columba Project deposits contain underground Inferred Mineral Resources that are associated with well-defined mineralized trends and models. All deposits are open along strike and at depth.

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

It is recommended that Kootenay conduct further exploration on the Project, 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 the next phase of work beginning in 2025, the Company plans to drill 30,000 m on known and new mineralized structures proximal to current resources to grow the resource base. Additional planned work to support the Columba Project includes advancing environmental, hydrological, metallurgical, and preliminary mining economics/engineering studies.

The total cost of the planned exploration work program by Kootenay is estimated at US\$10.1 million (Table 1-3).

**Table 1-3 Cost Summary for Recommended Future Work**

<b>Program Component</b>	<b>Estimated Total Cost (US\$M)</b>
Exploration and Drilling (30,000 m @ \$300/m)	9.00
Metallurgical Test work	0.25
Environmental and Hydrological initial studies	0.40
Mining and Engineering initial studies	0.30
MRE Update	0.10
Community Engagement	0.05
<b>Total</b>	<b>10.10</b>

## 2 INTRODUCTION

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

Kootenay Silver Inc. was incorporated under the Business Corporations Act (British Columbia) on November 9, 2006. The Company's principal business activity is the exploration of mineral properties. The Company currently conducts its operations in Mexico and Canada. It is trading on the TSX Venture Exchange ("TSXV") under the symbol KTN and the OTCQX under the symbol KOOYF. The head office and principal address of the Company is located at Suite 1125 595 Howe St., Vancouver, British Columbia, V6C 2T5.

The mining concessions comprising the Columba project are held 100% by Kootenay, through a wholly owned subsidiary, Grupo Northair de Mexico, S.A. De C.V., and were acquired through an Exploration with Option to Purchase Mining Concessions Agreement commencing in November 2018 with the final payment completed on May 12, 2023.

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

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in 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 MRE completed for Kootenay.

### 2.1 Sources of Information

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

- *The Property was the subject of a NI 43-101 technical report by Sue Bird, P.Eng. in 2023 titled "NI 43-101 Technical Report for the Columba Silver Property", Effective Date March 17, 2023, Report Date July 28, 2023, prepared for Kootenay (Posted on SEDAR+ under Kootenay's profile).*

Information regarding the Property accessibility, climate, local resources, infrastructure, and physiography, exploration history, regional property geology, deposit type, recent exploration and drilling, metallurgical test work, and sample preparation, analyses, and security for previous drill programs etc. (Sections 5-13) have been sourced from the recent internal 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 Qualified Persons

The Qualified Person's for the report are listed in Table 2-1. By virtue of their education, experience and professional association membership, they are considered Qualified Person as defined by NI 43-101.

**Table 2-1 Qualified Person's and Report Responsibility**

Qualified Person	Professional Designation	Position	Employer	Independent of Kootenay	Report Section
Ben Eggers	P.Geo.	Senior Geologist	SGS Canada Inc. – Geological services	Yes	1.1, 1.2, 1.6, 1.8, 1.9, 2.0-2.2, 2.3.2, 2.4, 2.5, 3.1, 4, 10, 11, 12.1, 12.2, 12.5, 12.6, 14, 23, 25.1, 25.3, 25.5, 25.6, and 26
Allan Armitage	P.Geo.	Technical Manager and Senior Resource Geologist	SGS Canada Inc. – Geological services	Yes	1.3-1.5, 1.7, 2.3.1, 5, 6, 7, 8, 9, 12.3, 12.4, 13, 25.2, and 25.4

## 2.3 Site Visits and Scope of Personal Inspection

### 2.3.1 Site Inspection by Allan Armitage, P.Geo.

The Columba Project property was visited by Allan Armitage on May 24-25, 2024 for the purpose of:

- Inspection of selected drill sites and outcrops to review the drill and local geology,
- Inspection of the drill core logging, processing and storage facility,
- Reviewing current core sampling, QA/QC and core security procedures, and
- Inspection of drill core, drill logs, and assay certificates to validate sampling, confirm the presence of mineralization in witness half-core samples, and review of the local geology.

### 2.3.2 Site Inspection by Ben Eggers, P.Geo.

The Columba Project property was visited by Ben Eggers on May 28, 2025 for the purpose of:

- Inspection of selected drill sites and outcrops to validate drill collar positions and review the drill and local geology,
- Inspection of the drill core logging, processing and storage facility,
- Reviewing current core sampling, QA/QC and core security procedures, and
- Inspection of drill core, drill logs, and assay certificates to validate sampling, confirm the presence of mineralization in witness half-core samples, and review of the local geology.

The site visit conducted by Eggers is considered as the current site visit, per Section 6.2 of NI 43-101CP.

## 2.4 Effective Date

The Effective Date of the MRE and Technical Report is May 29, 2025.

## 2.5 Units and Abbreviations

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

**Table 2-2 List of Abbreviations**

\$	Dollar sign	m <sup>2</sup>	Square metres
%	Percent sign	m <sup>3</sup>	Cubic meters
°	Degree	masl	Metres above sea level
°C	Degree Celsius	mm	millimetre
°F	Degree Fahrenheit	mm <sup>2</sup>	square millimetre
µm	micron	mm <sup>3</sup>	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 <sup>2</sup>	square centimetre	NSR	Net smelter return
cm <sup>3</sup>	cubic centimetre	oz	Ounce
Cu	Copper	OK	Ordinary kriging
DDH	Diamond drill hole	Pb	Lead
ft	Feet	ppb	Parts per billion
ft <sup>2</sup>	Square feet	ppm	Parts per million
ft <sup>3</sup>	Cubic feet	QA	Quality Assurance
g	Grams	QC	Quality Control
g/t	Grams per Tonne	QP	Qualified Person
GPS	Global Positioning System	RC	Reverse circulation drilling
Ha	Hectares	RQD	Rock quality designation
HQ	Drill core size (6.3 cm in diameter)	SD	Standard Deviation
ICP	Induced coupled plasma	SG	Specific Gravity
ID <sup>2</sup>	Inverse distance weighting to the power of two	SLS	Sub-level stoping
ID <sup>3</sup>	Inverse distance weighting to the power of three	t.oz	Troy ounce (31.1035 grams)
kg	Kilograms	Ton	Short Ton
km	Kilometres	Zn	Zinc
km <sup>2</sup>	Square kilometre	Tonnes or T	Metric tonnes
kt	Kilo tonnes	TPM	Total Platinum Minerals
Leapfrog	Leapfrog Geo version 2025.1.1	US\$	US Dollar
m	Metres	UTM	Universal Transverse Mercator

### **3 RELIANCE ON OTHER EXPERTS**

#### **3.1 Property Agreements, Mineral Tenure, Surface Rights and Royalties**

Final verification of information concerning Property status and ownership, which are presented in Section 4 below, have been provided to Eggers by Dale Brittliffe for Kootenay, by way of E-mail on July 23, 2025. The QP 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 QP has no reason to doubt that the title situation is other than what is presented in this technical report (Section 4). The QP is not qualified to express any legal opinion with respect to Property titles or current ownership.

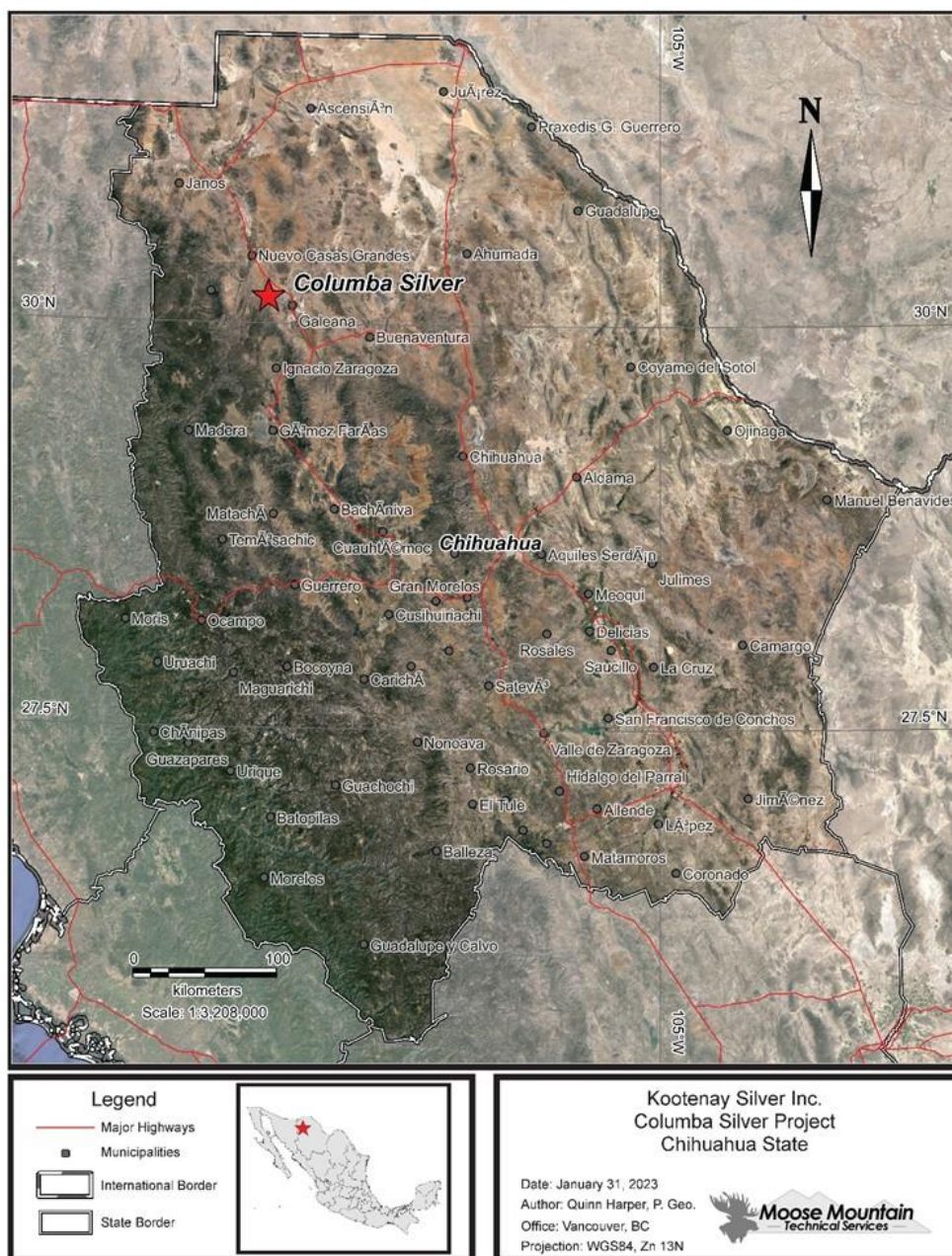


#### 4 PROPERTY DESCRIPTION AND LOCATION

#### 4.1 Location

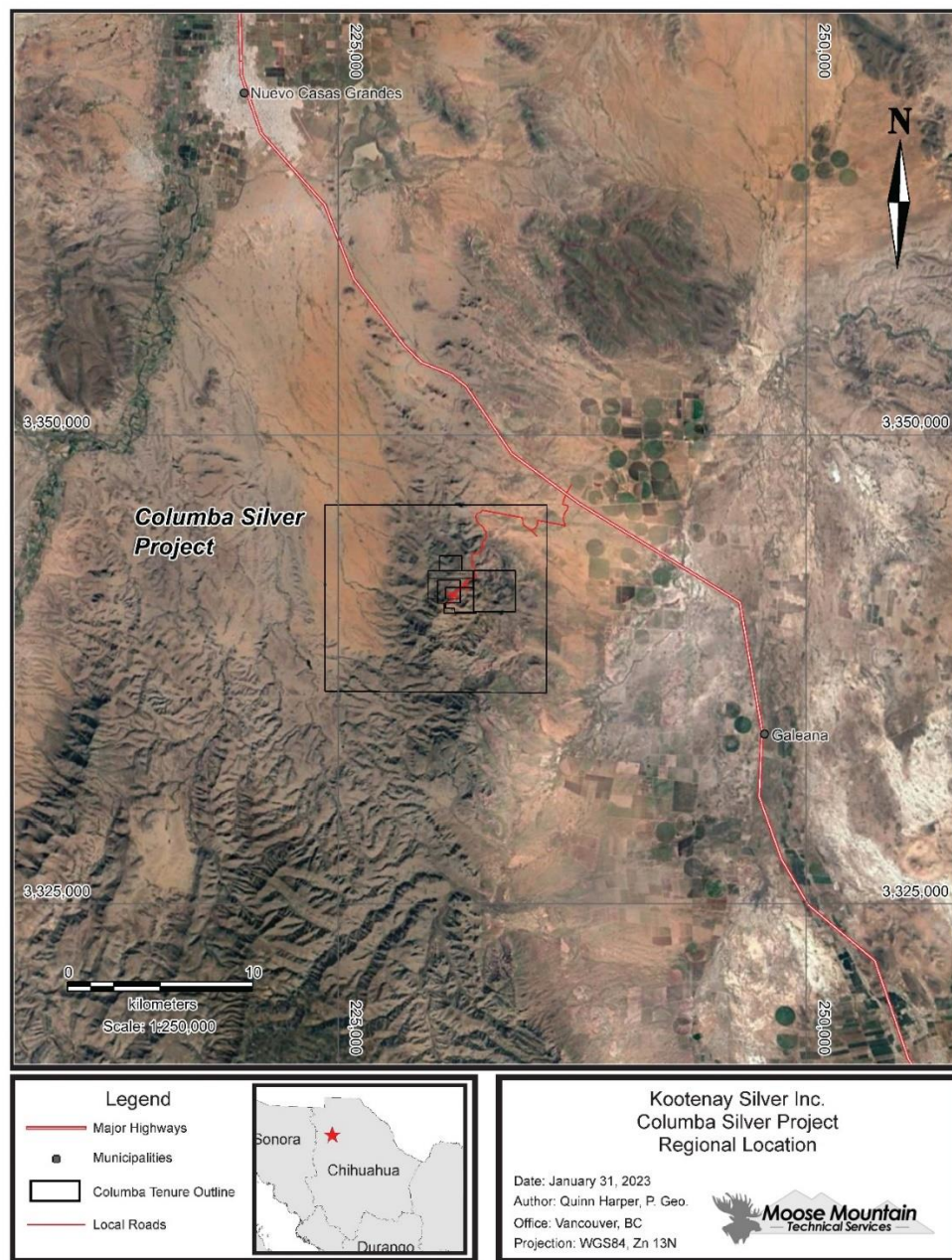
The Columba Project is located approximately 240 km northwest of the city of Chihuahua, and 28 km south of the municipality of Nuevo Casas Grandes in northwestern Chihuahua State, Mexico. The Project is positioned on the boundary between the municipalities of Galeana and Nuevo Casa Grandes along the northern margin of the Sierra Madre Occidental physiographic province in northern Mexico. The Project is centred at 30° 10' 31" north latitude and 107° 47' 29" west longitude or at 231,200 m E; 3,341,500 m N in the WGS84 UTM Zone 13 datum. The Project location is shown in Figure 4-1 and Figure 4-2.

### Figure 4-1 Property Location Map



Source: Bird, 2023



**Figure 4-2 Property Regional Location Map**

Source: Bird, 2023

## 4.2 Land Tenure and Mining Concessions

The Project comprises five approved contiguous and overlapping mining concessions, located in the San Joaquín Mineral District, covering a total area of 850.3221 ha held 100% by Kootenay through its wholly owned Mexican subsidiary, Grupo Northair de Mexico, S.A. De C.V. 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. An additional two mining concessions (the second America 2 and San Joaquín concessions) covering

10,896.00 ha are currently in the process of being issued. Under recently passed mining reform laws all applications were canceled in favour of a new process of mineral rights acquisition. After consultation with constitutional lawyers the Company has filed an amparo to enforce the registration of the applications under the old laws as it considers the retroactive application of the new law contravenes the Mexican constitution. There is no assurance the amparo filing will be successful for the company. The combined Project mining concessions total 11,746.3221 hectares. The mining concessions are presented in Table 4-1 and Figure 4-3.

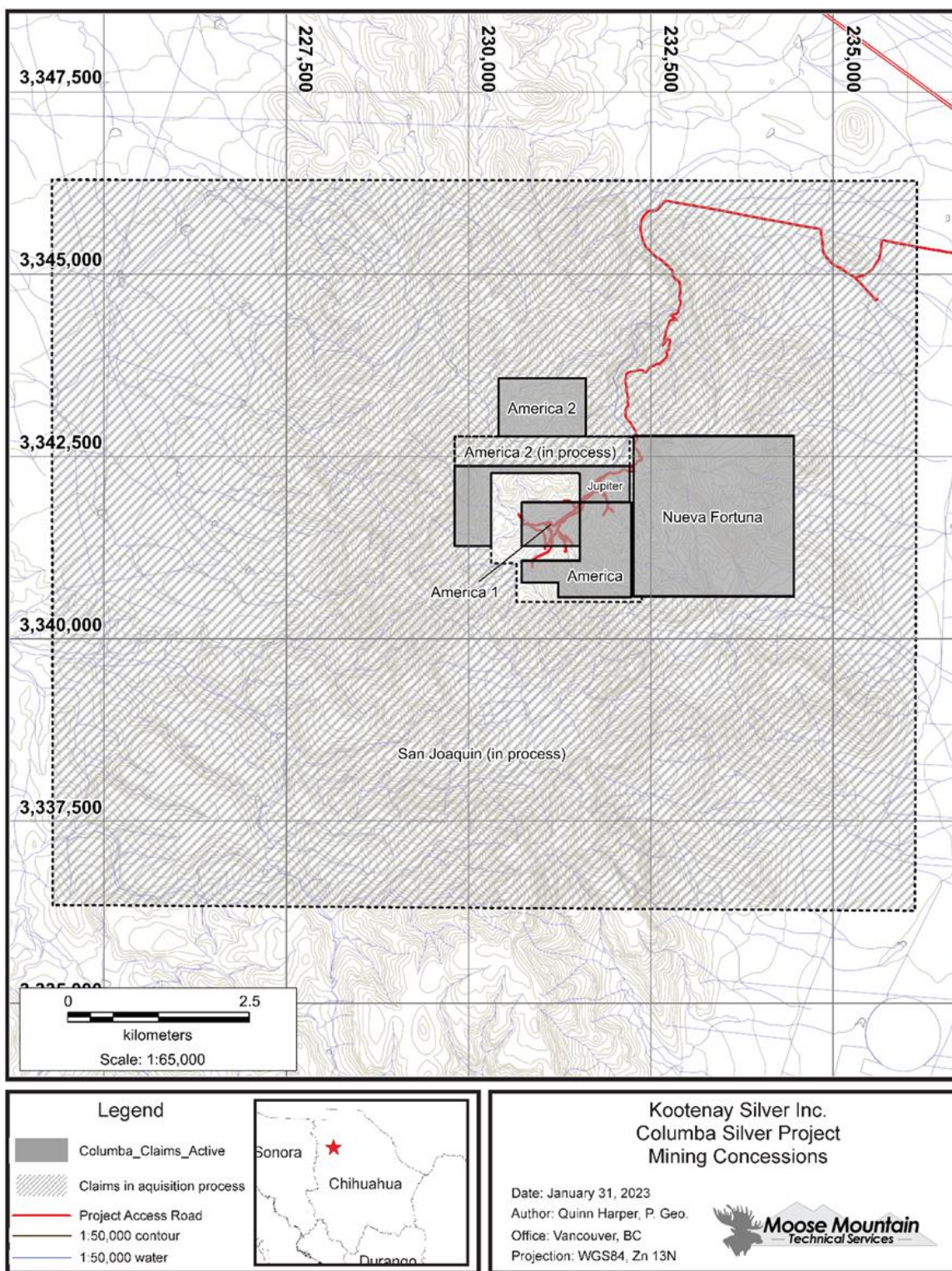
**Table 4-1 Property Mining Concessions Held 100% by Kootenay**

Title Name	Title Number	Issue Date	Expiry Date	Area (ha)
<b>Mining Concessions</b>				
America*	245747	10-11-2017	09-11-2067	121.00
America 1*	245237	15-11-2016	14-11-2066	48.00
America 2*	246240	06-04-2018	05-04-2068	96.00
La Nueva Fortuna*	244190	30-06-2015	29-06-2065	484.00
Jupiter*	243940	23-01-2015	28-11-2061	101.3221
<b>Sub-Total (Approved)</b>				<b>850.3221</b>
America 2 (Pending)*	-	-	-	96.00
San Joaquín (Pending)	-	-	-	10800.00
<b>Sub-Total (Pending)</b>				<b>10896.00</b>
<b>Total</b>				<b>11746.3221</b>

\*Concession has 2% royalty of which 1% can be purchased by Kootenay for \$US750,000



**Figure 4-3 Columba Project Mining Concessions**



Source: Bird, 2023

## 4.3 Underlying Agreements

### 4.3.1 Héctor Alfonso Fernández, Francisco Alberto Peña, and Minera Ches Mex, S. de R.L. De C.V.

On November 12, 2018, Kootenay, through its wholly owned Mexican subsidiary Grupo Northair de Mexico, S.A. De C.V., executed an exploration with option to purchase agreement with Héctor Fernández Vega, Francisco Alberto Peña, and Minera Ches Mex, S. de R.L. De C.V., collectively “the Vendors”, to acquire a 100% ownership of six Project mining concessions totaling 946.3221 ha (Table 4-1).

Under the terms of the Agreement, Kootenay acquired a 100% ownership in the concessions by making staged payments over a 4-year period totaling US\$3,290,000 (completed). A total of US\$3,290,000 has been paid with US\$1,155,000 paid in staged payments during 2023, with the final payment on May 18, 2023, which included US\$215,000 settled in common shares of the Company. A work commitment of US\$250,000 and US\$750,000 by the first and second anniversary, respectively of the Agreement has been met. Per the Agreement, the Vendors retain a 2% net smelter royalty of which 1% can be bought by Kootenay for US\$750,000 (see November 5, 2018 news release for full details).

## 4.4 Surface Rights

Surface rights to most of the land underlying the Project area are owned by a single landowner. Mining concession owners have the right to obtain the expropriation, temporary occupancy, or creation of land easements required to complete exploration and mining work, including the deposition of rock dumps, tailings, and slag.

Kootenay has secured a 24-year surface access agreement, valid until December 31, 2047, which covers all the mineralized areas drilled to date and has been registered with the appropriate Mexican government authorities. The agreement includes annual payments, certain bonus payments, and for a 2% net smelter royalty of which 1% can be bought by the Company for US\$4.5M and allows for both exploration and exploitation.

## 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 Ecológico y Protección al Ambiente [LGEEPA]), and the Regulations Environmental Impact Assessment [REIA]. Laws pertaining to mining and exploration activities are administered by Mexico's environment ministry, the Secretariat of Environment and Natural Resources (Secretaría del Medio Ambiente y Recursos Naturales [SEMARNAT]). SEMARNAT and the Federal Attorney for Environmental Protection (Procuraduría Federal de Protección 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).

The following permits issued by SEMARNAT to Grupo Northair de Mexico, S.A. De C.V. are in force: an Informe Preventivo for the Columba area of Private land and ejido Galeana that permits drilling activities in accordance with official notice SG.IR.08-2021/080 dated May 12, 2021.

There are no development permits currently obtained for the Project.

#### **4.6 Environmental Considerations**

The Project hosts a past producing silver mine, which operated from 1900 until 1910, when work ceased in the region due to the Mexican Revolution. A second period of mining occurred in the late 1950's to early 1960's. On surface four old shafts are reported to extend to depths of up to 200 meters and connect to at least six levels of widespread underground drifts covering lengths of up to 1,000 meters. A historical head frame remains partially intact at the primary shaft access. Old mine dumps and tailings related to the historical production are noted on the Property.

Environmental impacts within the Project site result from historical activities. Under the Mexican environmental and regulatory system, these impacts due to historical activities are considered pre-existing environmental liabilities deemed not significant and acknowledged by regulators.

#### **4.7 Other Relevant Factors**

The Project has no outstanding environmental liabilities from prior mining activities. The Author is 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 approximately 240 km northwest of the city of Chihuahua, and 28 km south of the municipality of Nuevo Casas Grandes in northwestern Chihuahua State, Mexico. The project is accessible via Highway 10 from Galeana or Nuevo Casas Grandes, then approximately 10 km up an all-season gravel road to the project site. The Company has developed and expanded a network of exploration walking trails for the purposes of moving drilling rigs to and from drilling sites.

### **5.2 Climate**

The Project area lies within a Steppe climatic region, typified by semi-arid conditions between 1,200 m and 1,500 m elevation. Annual average temperature is 18°C and monthly temperatures for this area (based on data from Nuevo Casas Grandes) range from lows of 0.0°C in December and January with a peak average monthly temperature of 36.0°C in June. The region sees a minimum of 10.5 hours of daylight during December and January and maximum of 14 hours during June and July. Precipitation averages 475 mm of rainfall annually and snowfall is rare. Work on the Property, including drilling, can be conducted year-round.

### **5.3 Local Resources and Infrastructure**

The Project lies near the municipalities of Nuevo Casas Grandes (pop.<sub>2010</sub>: 55,500) and Galeana (pop.<sub>2010</sub>: 5,890) which host food and lodging, fuel, equipment parts and repair, Nuevo Casas Grandes Municipal Airport (IATA: NCG, ICAO: MMCG), and other services. The state capital Chihuahua is located 240 km southeast of the Project area and is serviced by the Roberto Fierro Villalobos International Airport (IATA Airport code: CUU).

Power lines paralleling Highway 10 are positioned approximately 10 km north of the Project. Capacities are currently unconfirmed.

Upon execution of a surface access agreement in 2019 the Company completed construction of exploration roads for drill access and an exploration camp was erected in the centre of the Property to facilitate drilling activities. In early 2025 the Company began construction of an expanded core processing and storage facility immediately north of the Property under the updated surface access agreement with the surface rights landowner.

### **5.4 Physiography**

The Project lies at an elevation of approximately 1,500 m to over 2,000 m above sea level within the San Joaquín Mountains, which rise sharply westward from surrounding plains.



## 6 HISTORY

### 6.1 Property Exploration and Development History

Columba is host to a low to intermediate-sulphidation epithermal silver system that was the focus of intermittent underground mining activity during the early 1900s and 1950s as the La Fortuna and America mines. A hiatus in mining and exploration activity occurred with only minimal geological investigation completed until Kootenay initiated exploration on the Property late in 2018.

Until 1910, approximately 75 titled mining concessions were undergoing various stages of mining work in the San Joaquín Mineral District, of which the La Fortuna, America and Julieta mines were the principal producers. With the onset of the Mexican Revolution many operations ceased, and concessions reverted to the Mexican Government (Lerchen and Parker, 1929). In a report for La Fortuna – America Silver Mines, Lerchen and Parker (1929) reference records from the El Paso Smelting Works indicating 339 tons of ore with an average grade of 67.85 oz/ton silver (Ag) were shipped from the La Fortuna mine between 1903 and 1910. It is mentioned that ore shipment records for the America mine and many from La Fortuna may have been destroyed in a fire at El Paso Smelting Works.

Selected surface and underground sampling completed at La Fortuna by Lerchen and Parker (1929) found samples ranging from 7.8 oz/ton Ag to 1077.2 oz/ton Ag, the latter characterised as inhabiting drusy galena ore from the “east side dump, vertical shaft”, and Bradlee (1910) indicated that assay values for silver increased with depth within the mine workings.

In a report written for owner Severo G. Gonzalez sometime after 1933, the author (unknown) references a field visit whereby surface mapping and sampling were completed and notes that historical underground workings were inaccessible. The author references Lerchen and Parker (1929) that historical workings at the La Fortuna mine were developed lengthwise for 250 m and vertically for 200 m, and the same vein at the America mine toward the northwest was developed lengthwise for 60 m and vertically for 100 m.

In 1952, Denver Equipment Company – Ore Testing Division of Denver, Colorado completed metallurgical testwork for Cia. Minera La Fortuna, S.A. on two samples from “La Fortuna Dump Ore” and “America Shaft Ore” (Thom and Gisler, 1952). Eight tests were completed on the two samples and included combinations of cyanidation, flotation and gravity separation. Tests found that a portion of the silver occurs in a refractory form and was not amenable to either concentration method at the time. The lowest reported recovery of 44.3% was generated by gravity separation alone. Between 62.3% and 90.8% of the silver was recovered during the seven additional tests with the best results from a combined flotation, acid leach and cyanidation test.

During the 1950s, D. D. Burcher visited the La Fortuna property on behalf of owner Cia Minera San Joaquín, S. A., which is referenced in a letter from Howard Meyerhoff of GeoSurveys to D. D. Burcher dated August 7<sup>th</sup>, 1959. Burcher and Meyerhoff completed a site inspection and provided geological interpretations in the La Fortuna (Kootenay’s “F Vein”) and America (“A Vein”) veins as well as the Santo Niño (“I Vein”), Julieta (“J Vein”) and Veta de Oro (“D Vein”) veins, concluding that mining operations at the time should be economic provided sufficient development was completed. A report by Fink (1960) states the flotation process in use at the operation was “not satisfactory” and was recovering 75% of the silver from the mine. Fink states “Numerous tests have given (recovery) results of 85% silver, and recent tests by a well-known millings company have produced results of 90% of the silver . . . produced by finer grinding.”

Underground workings on the Property include 4 shafts extending to depths of up to 200 meters and connect to at least 6 levels of drifts with a combined length measuring over 1,000 meters. Kootenay estimates a total of 70,000 to 100,000 tonnes of material was mined from the Property.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Geology

The Columba Silver Project is located within the northeastern portion of the Sierra Madre Occidental ("SMO"), a siliceous large igneous province ("SLIP"; Figure 7-1) which represents the southernmost and largest ignimbrite flare up that extended from British Columbia to Mexico during the Tertiary period (Andrews *et al.*, 2022). Volcanic sequences of the SMO form a linear plateau of silicic ignimbrites and lavas 1 – 1.5 km thick, approximately 1200 km long and 200 – 500 km wide with a mean elevation of 2,000 m above sea level, which spans from the United States – Mexico border (~31°N) south to the Trans-Mexican Volcanic belt ("TMVB"; ~21°N), and represents calc-alkaline magmatism resulting from rollback of the Farallon slab between ~35 Ma and 27 Ma (King, 1939; McDowell and Keizer, 1977; Swanson and McDowell, 1984; Wark *et al.*, 1990; Camprubí, 2013; Andrews *et al.*, 2022). Extensional tectonics and formation of the Basin and Range province during the middle-Tertiary overlaps with deposition of ignimbrites of the SMO which Aguirre-Díaz and McDowell (1993) and Aguirre-Díaz and Labarthe-Hernández (2003) argue may have resulted from linear fissure-fed extrusive volcanism rather than calderas. Ignimbrites of the SMO have been dated between 51 Ma (Aguirre-Díaz and McDowell, 1991) and 17 – 16 Ma (Nieto-Obregón *et al.*, 1981; 1985), however the largest volume of ignimbrite was erupted between 38 Ma and 28 Ma (Aguirre-Díaz and McDowell, 1991). Volcanics of the SMO are represented by two primary pulses: the first during the late Eocene to early Oligocene (~35 Ma to 30 Ma) along the entirety of the SMO; and the second during the early Miocene in the central and southern portions of the SMO (Camprubí, 2013).

Volcanism of the SMO during the late Eocene to early Oligocene was andesitic to rhyolitic and bimodal in nature, with earliest episodes dominated by andesitic volcanic centres and the formation of numerous polymetallic intermediate- to low-sulphidation epithermal gold-silver deposits including Mala Noche (48.9 Ma<sub>K-Ar</sub>), Batopilas (48 – 45 Ma<sub>K-Ar</sub>), Candelero (<44.6 Ma<sub>K-Ar</sub>, U/Pb), Topia (43.8 Ma<sub>K-Ar</sub>), Orión (39.5 Ma<sub>K-Ar</sub>) and Dolores (38 – 35 Ma) (McDowell and Keizer, 1977; Camprubí, 2013). This initial period of intense volcanism produced large volumes of silicic ignimbrite from central Chihuahua (38 – 27 Ma) through to Jalisco-Nayarit (16 Ma) in a southwestward migration coinciding spatially and temporally with Basin and Range extension (Aguirre-Díaz and Labarthe-Hernández, 2003).

Volcanism during the Oligocene resulted in deposition of ignimbrites over a larger area (Figure 7-1) and coincides with formation of epithermal deposits such as Mulatos (<31.6 - >25.0 Ma<sub>K-Ar</sub>, Ar/Ar), Fresnillo (29.7 Ma<sub>Ar/Ar</sub>), Ocampo (<29.2 – 27.8 Ma<sub>K-Ar</sub>) and Pueblo Nuevo (29.0 Ma<sub>K-Ar</sub>) (Camprubí, 2013).

During the Mesozoic, rifting of the Guerrero terrane from the North American continent resulted in formation of ultramafic complexes and associated magmatic mineral deposits. During the Late Cretaceous, the tectonic regime switched to a period of compression resulting in docking of the Guerrero terrane to the North American margin once again, and the onset of magmatism related to the Sierra Madre Occidental large igneous province. The earliest epithermal systems in the region are Paleocene and coincide with the development of porphyry copper and other hydrothermal systems.

The formation of epithermal-type deposits in Mexico coincides with the main volcanic pulses that formed the Sierra Madre Occidental during the Tertiary. Three main groups of epithermal deposits have been identified including, from oldest to youngest: (i) 48 – 40 Ma systems which are hosted within the Lower Volcanic Supergroup of the SMO and are related to Laramide magmatism and include the oldest epithermal deposits in Mexico; (ii) 36 – 27 Ma systems which occur along a northwest – southeast trending belt from northern Chihuahua to Guerrero States and are related to the main ignimbrite flare up of the SMO, and; (iii) 23 – 18 Ma systems which are coincident with the last ignimbrite events of the SMO and lie along a west-northwest – east-southeast trend (Camprubí *et al.*, 2003).

During the Paleogene, deposition of ignimbrite sequences occurred up to 1000 km east of the subduction trench (Camprubí *et al.*, 2003) in what would have been a back-arc extensional environment, as supported by evidence that extrusive volumes were erupted predominantly from fault fissure structures rather than calderas (Andrews *et al.*, 2022).

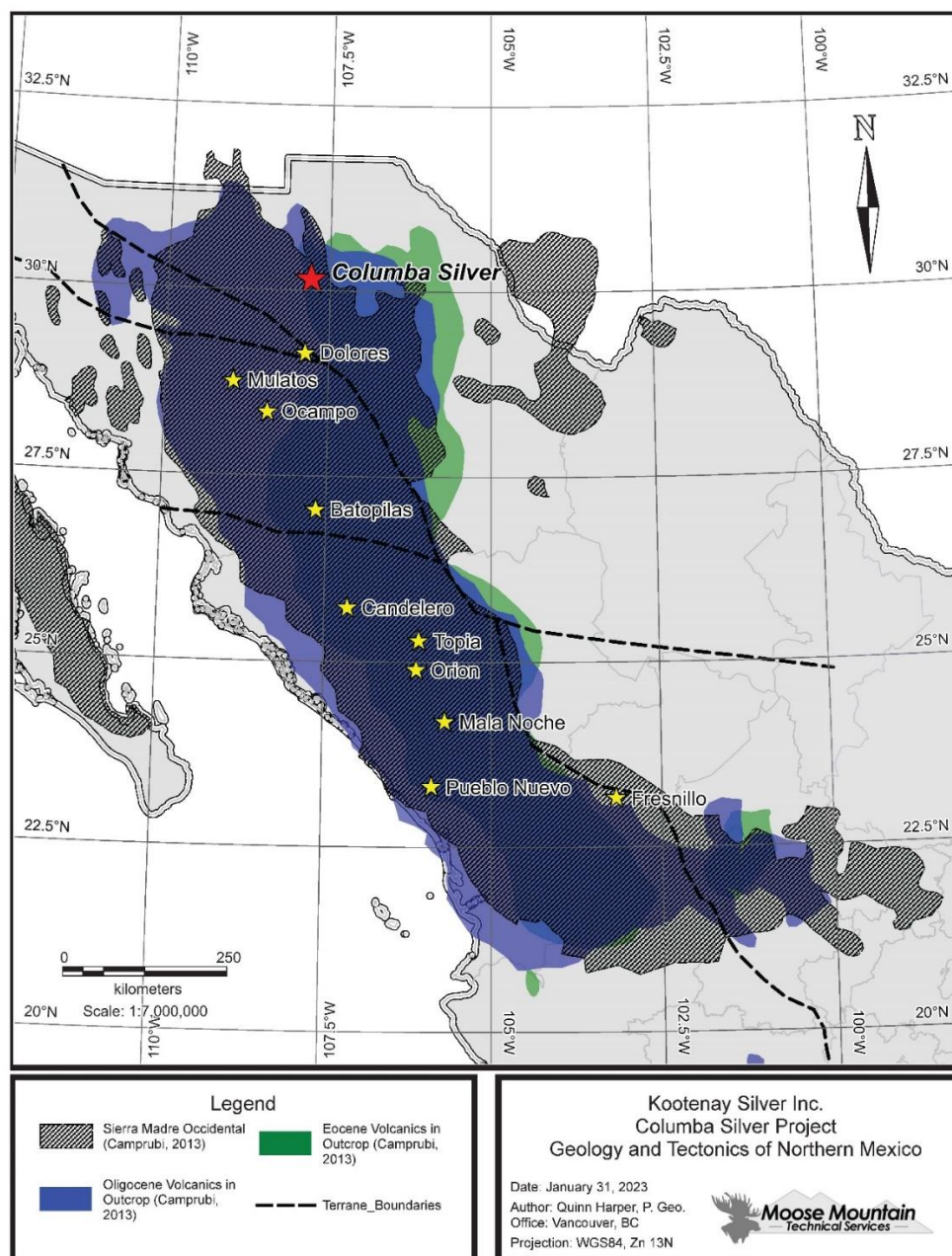
North of Chihuahua City, two important and short-lived, albeit not necessarily distinct ignimbrite events occurred at 46 – 42 Ma and 38 Ma (McDowell, 2007; McDowell and McIntosh, 2012), although the



geological history, stratigraphy, and architecture of the SMO in this region is poorly understood (Andrews *et al.*, 2022).

The San Joaquín area is dominated by Quaternary alluvial cover below approximately 1,500 above sea level. Above 1,500 m, sub-horizontal Tertiary rhyolites, rhyolite breccias and rare basalts occur with conglomerates of similar age (1:250,000 Map - Hoja H13-4). Normal faults striking northwest dominate the structural architecture with subordinate northeast, north-south and east-west striking normal and strike-slip faults dissecting Tertiary units. Figure 7-2 and Figure 7-3 illustrate the surficial geology and major faulting in Chihuahua state as a whole and within the Project area respectively.

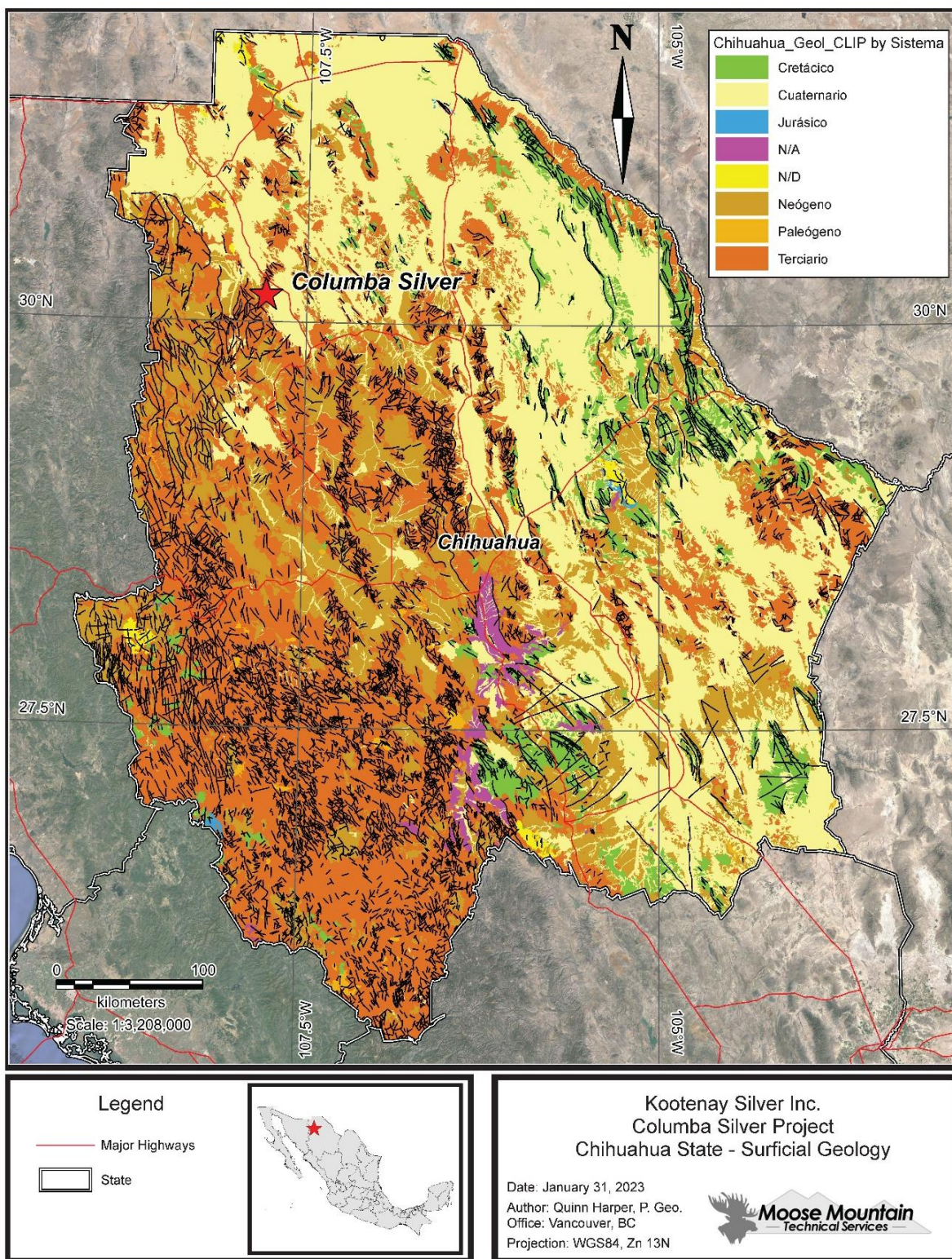
**Figure 7-1 Extent of the Sierra Madre Occidental, Tertiary Volcanics and Terrane Boundaries of Northern Mexico, with Major Epithermal Deposit Locations**



Source: Bird, 2023; edited from Camprubi, 2013

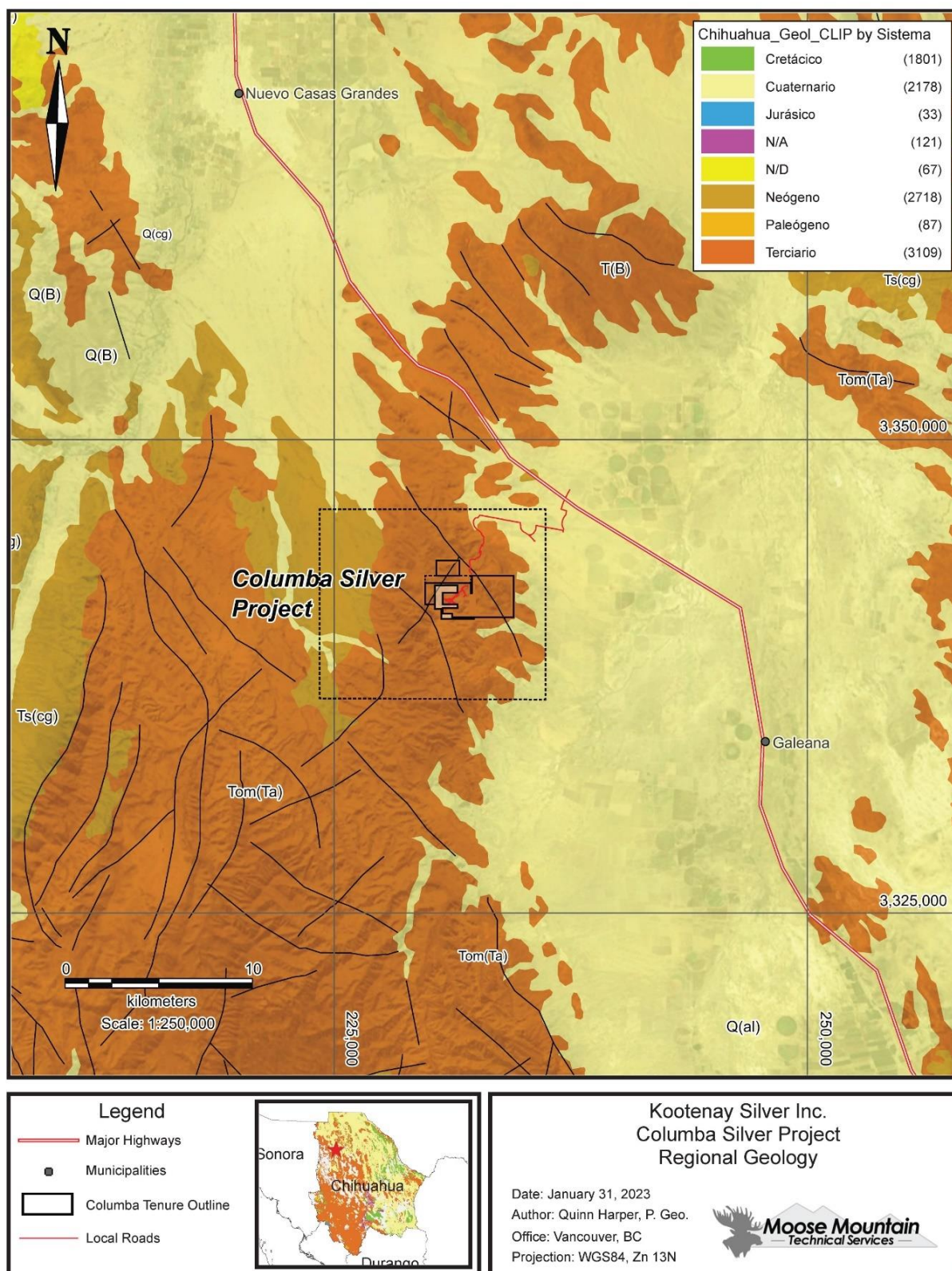


**Figure 7-2 Geology of Chihuahua State - INEGI 1:250,000 scale Geological Database**



Source: Bird, 2023: edited from Instituto Nacional de Estadística, Geografía e Informática – INEGI database



**Figure 7-3 Surficial Geology of the San Joaquín Mining District**

Source: Bird, 2023, Compiled from Kootenay mapping and Instituto Nacional de Estadística, Geografía e Informática – INEGI, Hoja H1304, 1983

## 7.2 Property Geology

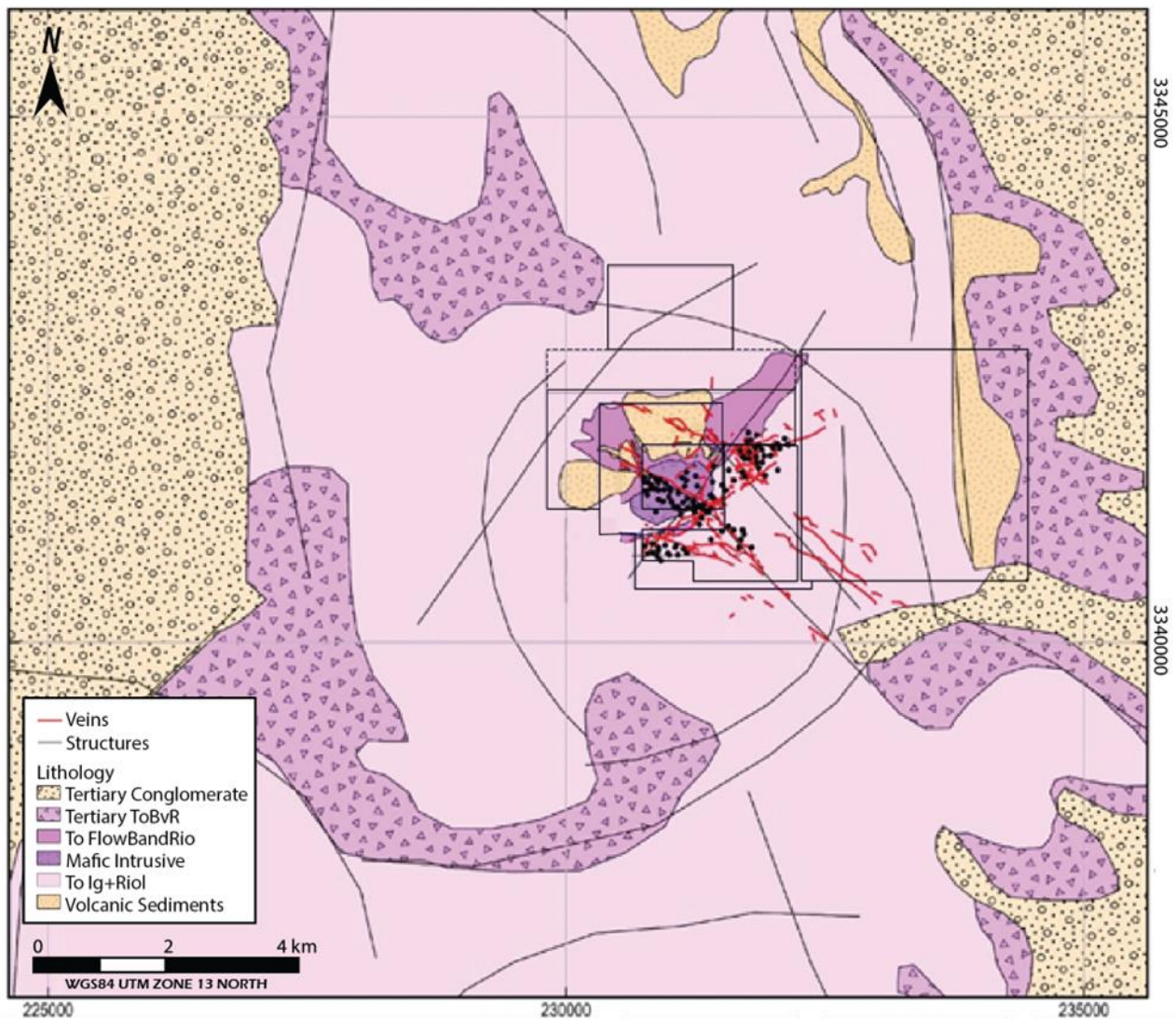
Columba is a low to intermediate-sulphidation epithermal system of veins and breccias in the upper and central parts of a 5 km diameter felsic caldera/diatreme system of probable late Eocene / early Oligocene age (Figure 7-4 and Figure 7-6). Volcanic facies within the caldera basin are dominantly felsic and include ignimbrite and felsic dykes associated and interlayered with thick-bedded volcanic breccias which grade intermittently with immature volcanic conglomerate, sandstone, siltstone, and mudstone. Intrusive rocks are exposed as resurgent dome(s) within its centre. The caldera rim/walls are dominated by ignimbrites and pyroclastic outflow rocks, immature volcanoclastic sediments within the caldera are interpreted lacustrine deposits and slump blocks.

The mineralized system is characterized by an extensive system of northeast- and northwest-trending veins and splays that cut all lithologies (Figure 7-4 and Figure 7-5). Two strike populations are evident from surface structural measurements of veins: (i) 030 – 150 (39%<sub>n=893</sub>), and (ii) 210 – 330 (46%<sub>n=893</sub>), which parallel regional structural fabrics and coincide with the dominant veins on the property. Vein dip generally exceeds 45° with 64% (n=893) of veins dipping greater than 75°, and 38% dipping greater than 85°.

True widths of veins vary from several centimetres to several tens of metres, and in some cases are associated with quartz-cemented breccia and vein stockworks in hanging wall and footwall units. Veins display gangue mineralogy dominated by quartz with lesser calcite, barite, iron oxide and manganese oxide. Banded quartz-calcite ± barite vein textures typify primary veins which suggest several hydrothermal episodes occurred resulting in cross-cutting veins and secondary brecciation. Hydrothermal breccias are common in hanging wall units characterised by quartz vein stockwork hosting sulphide minerals associated with silver mineralisation. Mineralization styles can be broadly categorized as: (i) primary banded quartz ± calcite ± barite mid-low sulphidation epithermal veins; (ii) quartz ± barite ± haematite vein and veinlet stockwork breccia in hanging wall rhyolite associated with argillic alteration of the wall rock, and; (iii) silicified hydrothermal breccia near lithological contacts associated with the “J” vein, as identified in hole CDH-19-030.

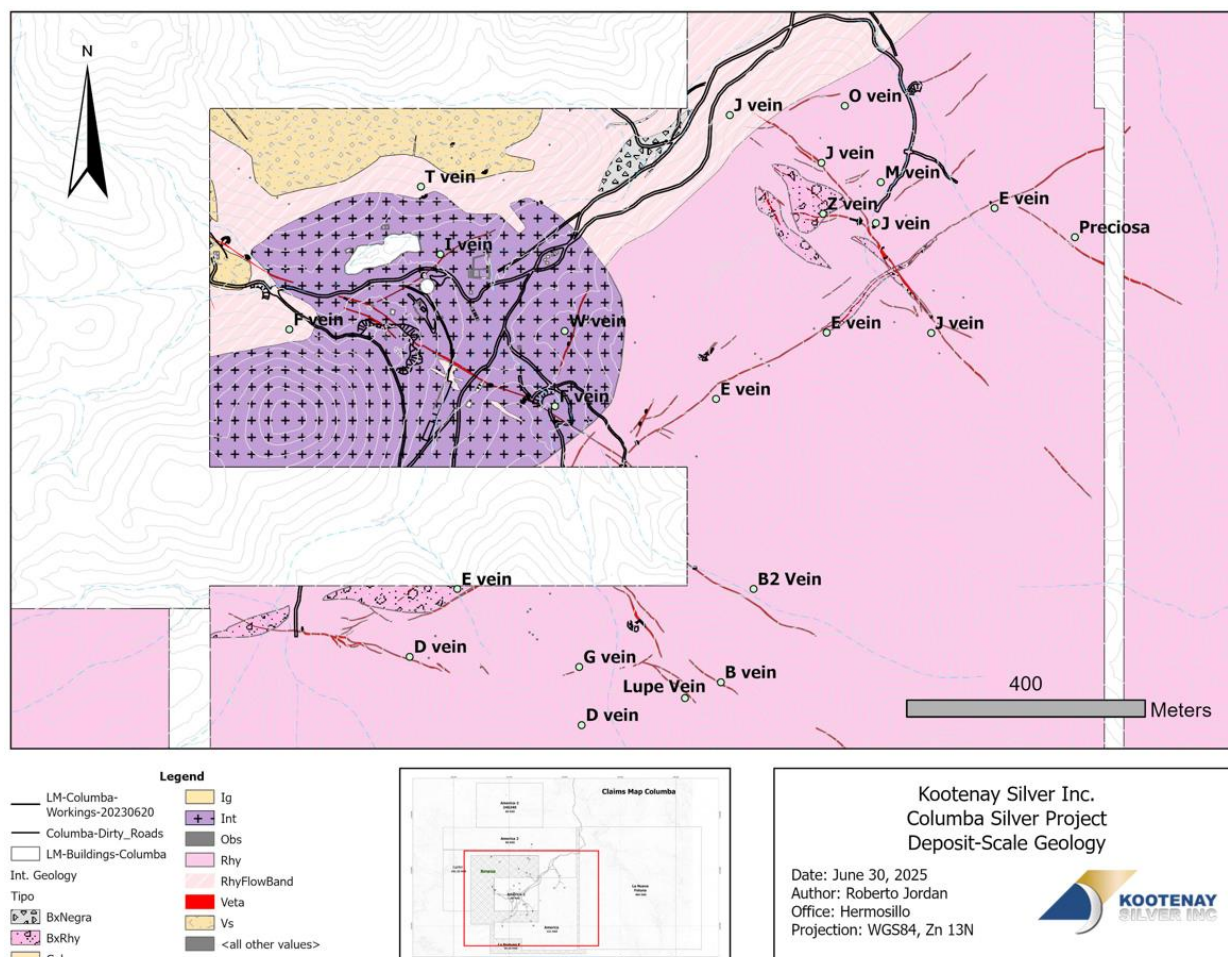
Silver grades demonstrate a vertical zonation from non- to weakly anomalous at upper levels, increasing with depth into high-grade “bonanza” grades. At the upper levels, quartz veining pinches out into narrow fractured and brecciated zones with weak silicification and irregular veinlets of quartz and/or calcite locally; mineralization here yields low-grade to background silver (<5 ppm -- <100 ppm). One hundred metres lower in elevation, quartz veins are semi-continuous with widths of 1 – 6 m and can host greater than 600 g/t Ag. The vertical zonation in silver grade and geologic mapping demonstrate that erosion has removed only the uppermost structural level of anomalous mineralization, leaving the depth profile of high-grade mineralization intact. The veins continue to depth and have been found in drilling to contain high grades within 150 m of near-barren structures at surface. Grades typically increase below approximately 1700 m elevation. Drilling has tested mineralized veins over a combined length of approximately 3100 m in strike and 540 m in depth but remains open both along strike and at depth. Mapping to date indicates the footprint of the mineralized system to be approximately 3 km x 4 km. A 2024 mineralogical study completed on 4 composite samples from Columba concluded the majority of silver (95-98%) was present as native silver or silver sulphides, dominated by acanthite/argentite (Ag<sub>2</sub>S) with the remaining silver contained with silver halides. While gold is present in the system, grades are not consistently high enough to have economic significance. A brief study of the relationship between silver and other elements from drilling results indicates that zinc ( $y=5.4371x+346.5$ ) has a stronger association to silver grades than lead ( $y=2.4361x+90.39$ ). However, it may be postulated that both galena and sphalerite are important indicators for the presence of silver.



**Figure 7-4 Local Geology of the Columba Project Area**

Source: Bird, 2023. Compiled from Kootenay mapping and Instituto Nacional de Estadística, Geografía e Informática – INEGI, Hoja H1304, 1983

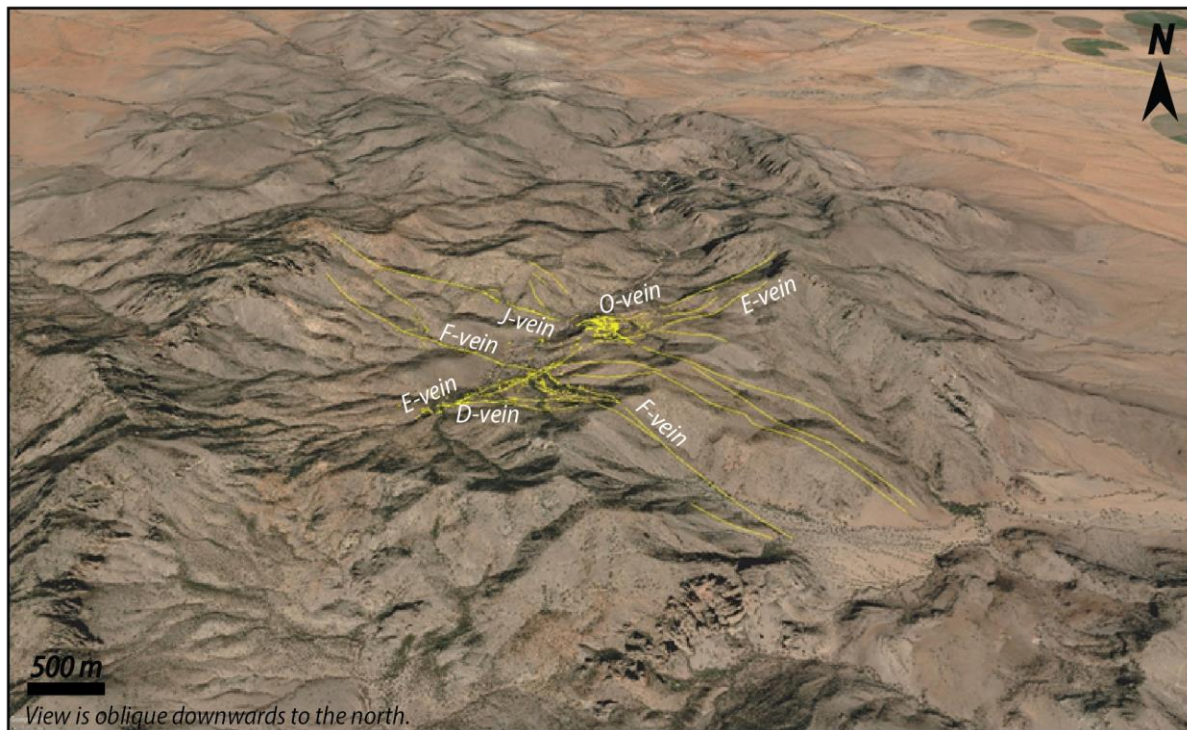
**Figure 7-5 Local Geology of the Columba Project Resource Area**



*Mapped vein structures cut flow-banded rhyolites, breccias, and resurgent intrusive rocks in the floor of the caldera.*



**Figure 7-6 Google Earth Image Looking Down to the North Over Columba Vein System**



Source: Brid, 2023

## 8 DEPOSIT TYPES

Mineralization at Columba occurs in veins with mineralogical characteristics and alteration assemblages typical of low to intermediate sulfidation epithermal deposits. Mineralization styles observed on the Property can be broadly categorized as: (i) primary banded quartz  $\pm$  calcite  $\pm$  barite mid-low sulphidation epithermal veins; (ii) quartz  $\pm$  barite  $\pm$  haematite vein and veinlet stockwork breccia in hanging wall rhyolite associated with argillic alteration of the wall rock; and (iii) silicified hydrothermal breccia near lithological contacts.

### 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. According to several authors, the fluids that formed the Mexican epithermal deposits represent a mixture of fluids with diverse origins varying from meteoric to magmatic (Simmons et al., 1988; Benton, 1991; Norman et al., 1997; Simmons, 1991; Albinson et al., 2001; Camprubí et al., 2006; Camprubí and Albinson, 2007). Mineral deposits at Columba 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 kilometres long; however, economic mineralization is present in plunging mineralized 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.

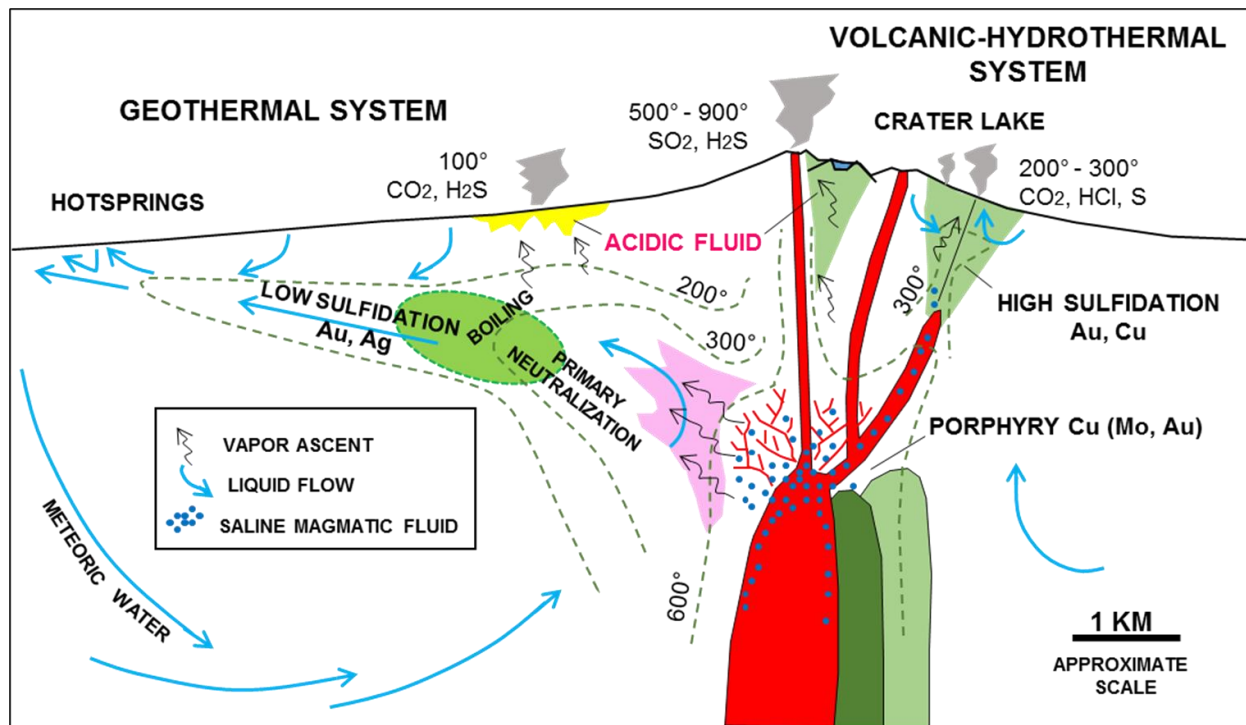
Ore minerals include pyrite, electrum, gold, silver, argentite, acanthite, silver sulphosalts, sphalerite, galena, chalcopyrite, and/or selenide minerals. In alkalic host rocks, tellurides, vanadium mica (roscoelite), and fluorite may be abundant, with lesser molybdenite. These mineralized systems have 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.

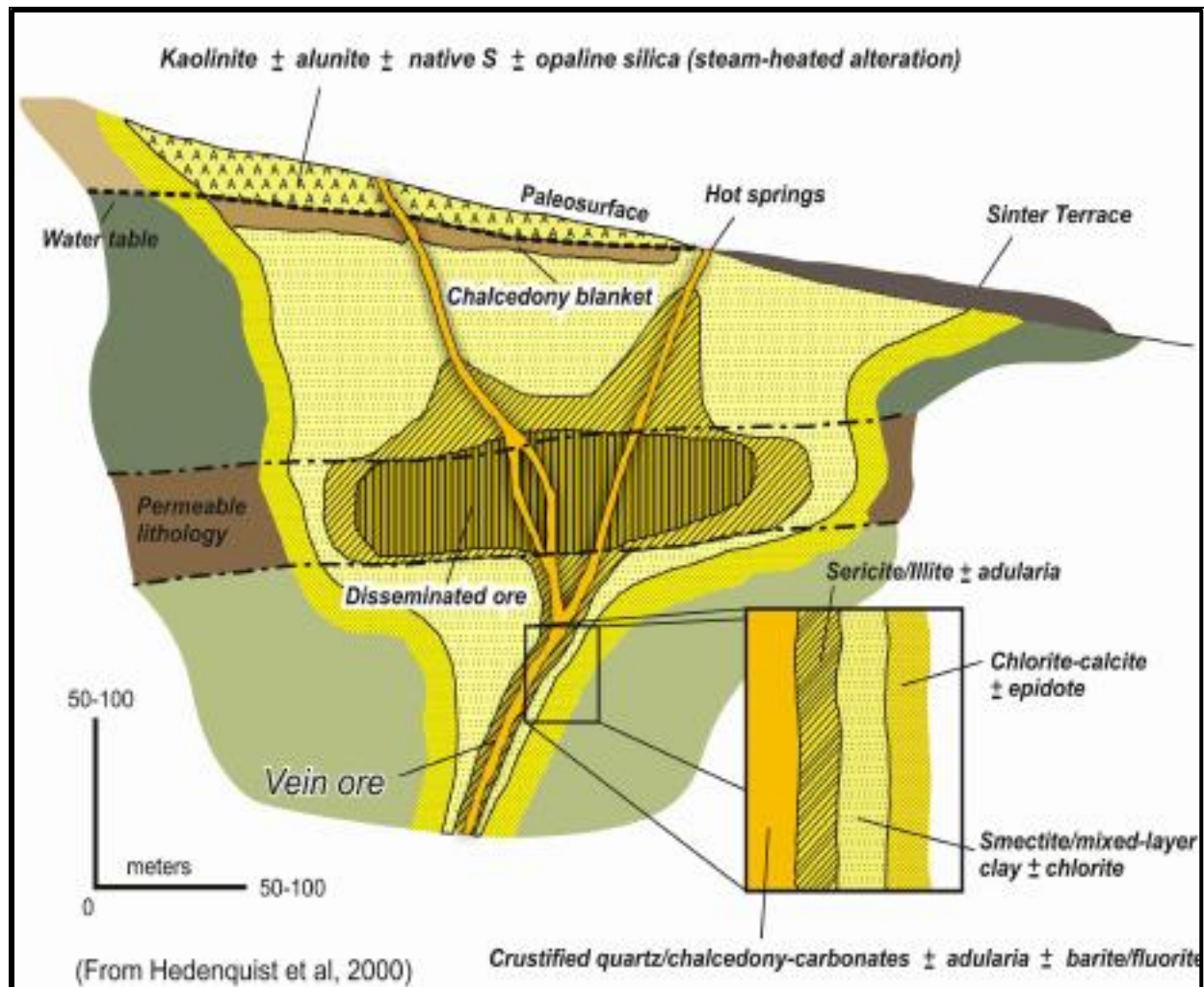
Figure 8-2 shows the associated alteration components of epithermal systems and mineralization.

**Figure 8-1 Genetic Model for Epithermal Deposits**



Source: Hedenquist et. al., 2000

**Figure 8-2 Schematic of Alteration and Mineralization in Low Sulphidation Precious Metal Deposits**



Source: Hedenquist et al., 2000

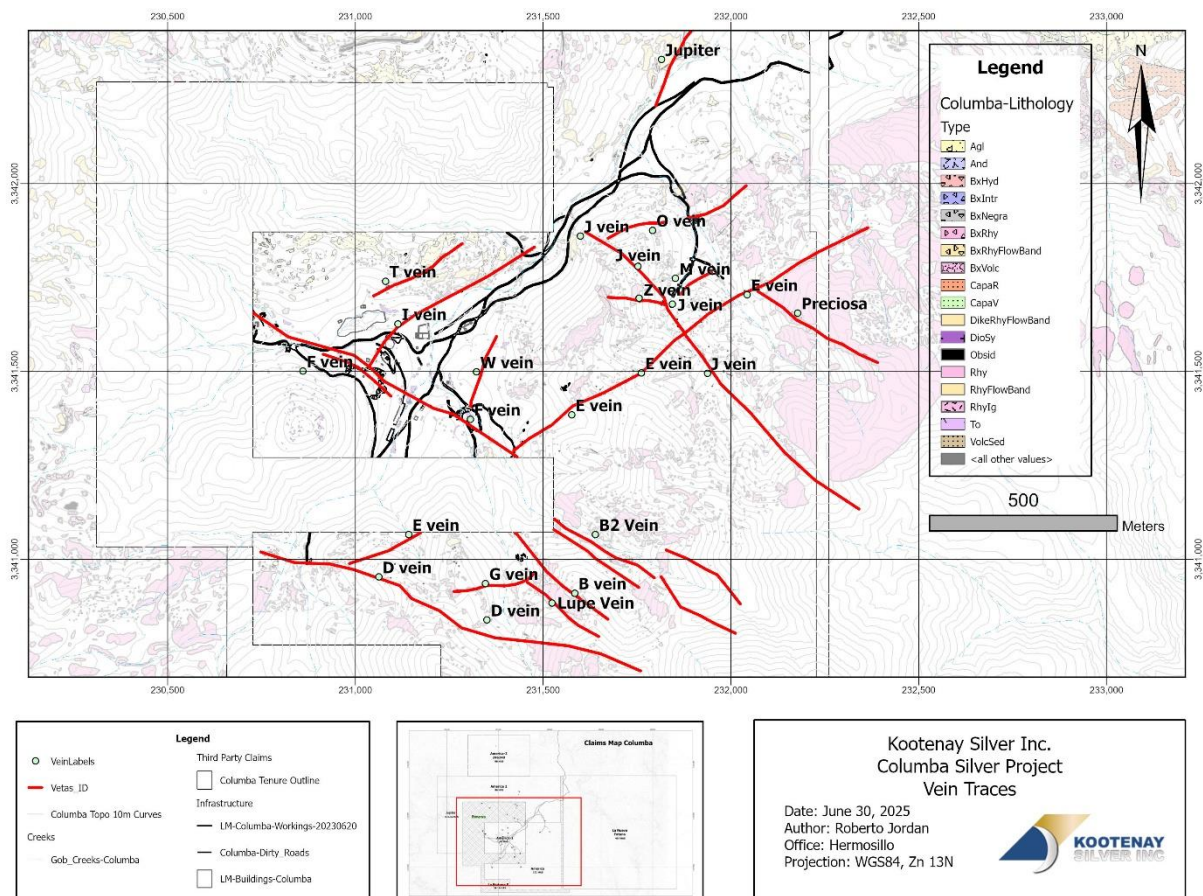
## **9 EXPLORATION**

### **9.1 Summary**

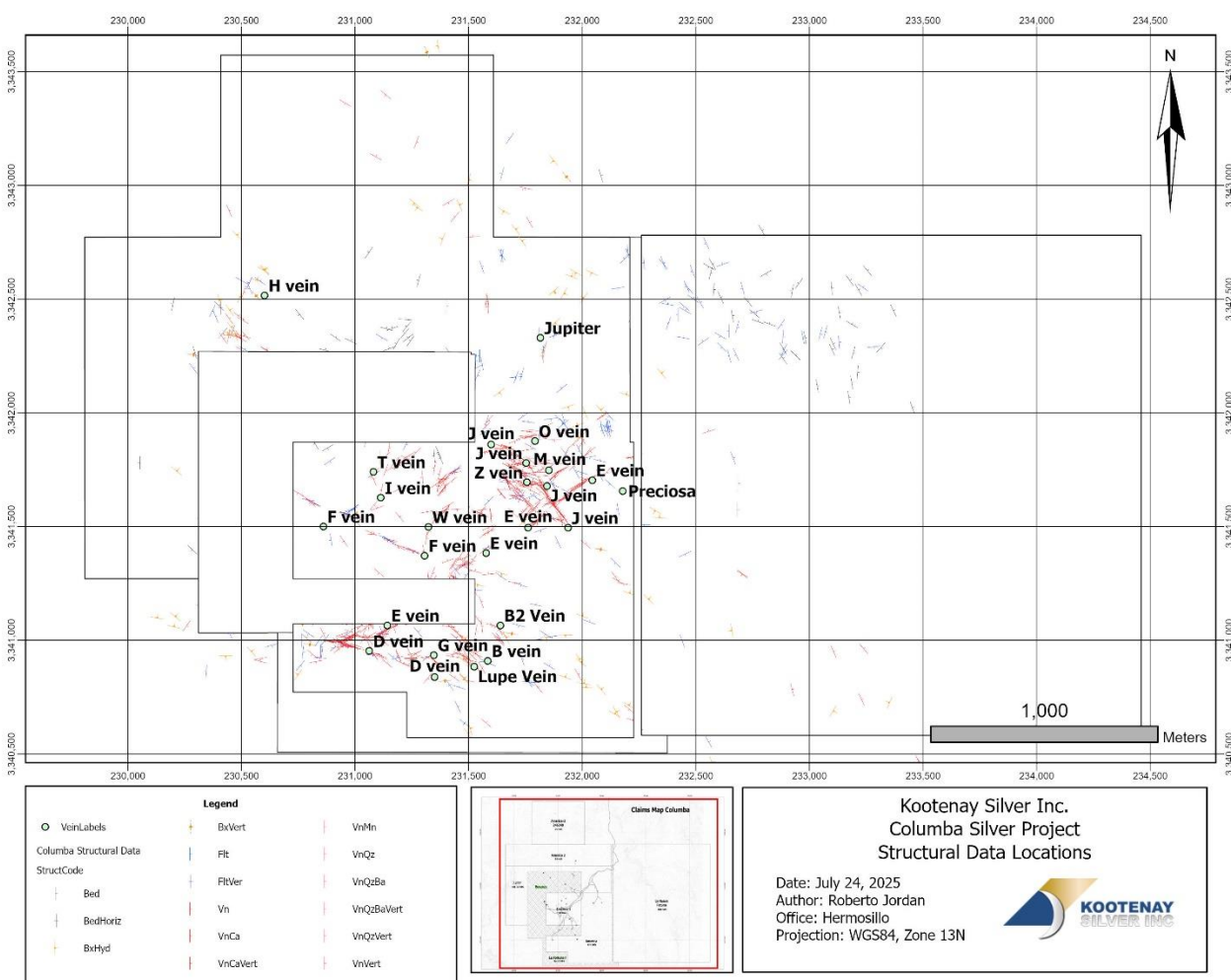
Kootenay commenced exploration on the Project in late 2018 and has focused on delineating the strike, depth and thickness of known veins while employing first-principled surface exploration and drilling to locate and delineate previously unknown veins. Surface exploration to date has included geological mapping, rock geochemical sampling, geophysical surveys, and diamond drilling (see section 10). Mapping and sampling has confirmed anomalous silver in numerous veins at surface mapped over strike lengths from 200 metres to 2 kilometres. Exploration channel sampling by Kootenay has returned grades ranging from 1 g/t to a high of 692 g/t silver over widths of 0.5 to 6 meters. Airborne geophysical surveys, including a drone magnetic and LiDAR topographic survey, have been used as tools to help identify new targets on the Columba Property. The LiDAR topographic model is used to find new vein outcrops and historical workings, while structural interpretation of the magnetic survey products is used to identify new property scale vein structures within the larger vein system.

### **9.2 Geological Mapping**

Geological mapping and prospecting is key to exploring and understanding the geology and vein systems of the Columba Property. Mapping is conducted on a reconnaissance scale initially with detailed mapping undertaken in areas of notable outcrops. Upon entering the agreement to acquire the Columba property in 2018, Kootenay initiated geological mapping, prospecting, and the identification of historical workings. Ten veins were known to exist on the Property at the time. Geological mapping completed as of April 2025 is shown in Figure 9-1. Geological mapping includes the collection of surface structural data shown in Figure 9-2. As of April 2025, 3,029 structural measurements have been collected.

**Figure 9-1 Columba Property Mapped Outcrops 2018 - 2025**



**Figure 9-2 Columba Property Mapped Structural Measurements 2018 - 2025**

### 9.3 Rock Geochemistry

Rock sampling is usually conducted in conjunction with geological mapping and prospecting. Geologists take float and outcrop samples (channel and grab). Table 9-1 outlines the rock geochemistry sampling done by Kootenay from 2018 to 2025. Table 9-2 outlines selected high-grade rock samples collected from the Property by from 2018 to 2025. The locations of these samples are shown in Figure 9-3 with Ag, Pb, and Zn grades shown on Figure 9-4, Figure 9-5, and Figure 9-6.

To date, 985 rock samples have been collected from surface exposures on the Property. The lithology, alteration, and structure of outcrop is mapped to determine controls on mineralization. To the degree possible, channel samples were oriented perpendicular to mineralized structures and variations in mineralization are sampled separately. Samples are collected as continuous chip channel, with sample lengths ranging from 10 cm to 2.0 m.

Sampling is carried out by geologists or trained field assistants under the direct supervision of a geologist. Samples are placed in a sample bag with a uniquely labelled sample number and a reference sample is retained for subsequent review once analytical results are available.

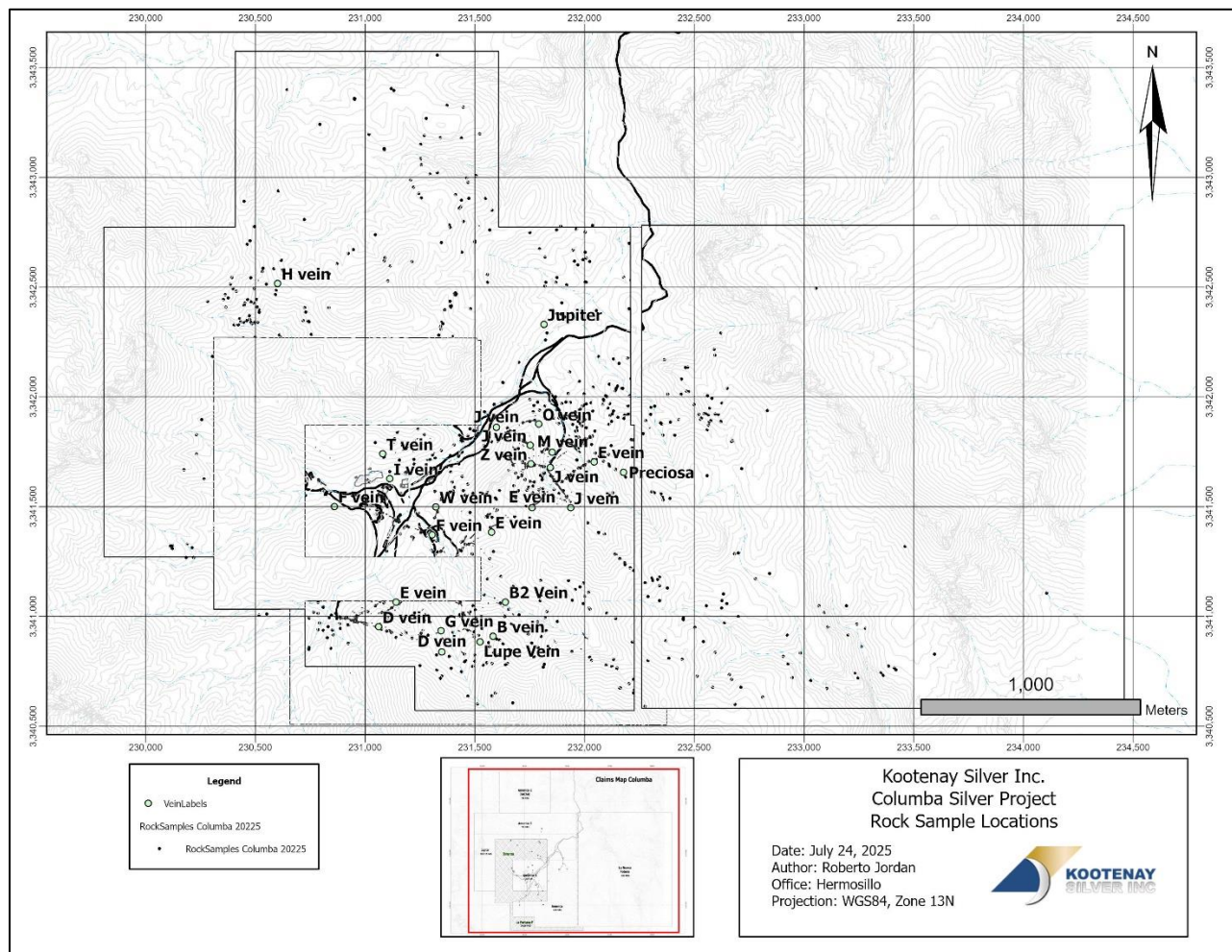
Rock samples were analyzed at ALS Minerals laboratory by multi-element method ME-ICP61a and for gold by fire assay method Au-AA23. Samples with silver values >200 ppm were analyzed with the ore-grade overlimit method Ag-OG62.

**Table 9-1 Summary of Surface Rock Geochemistry Samples from 2018 to 2025**

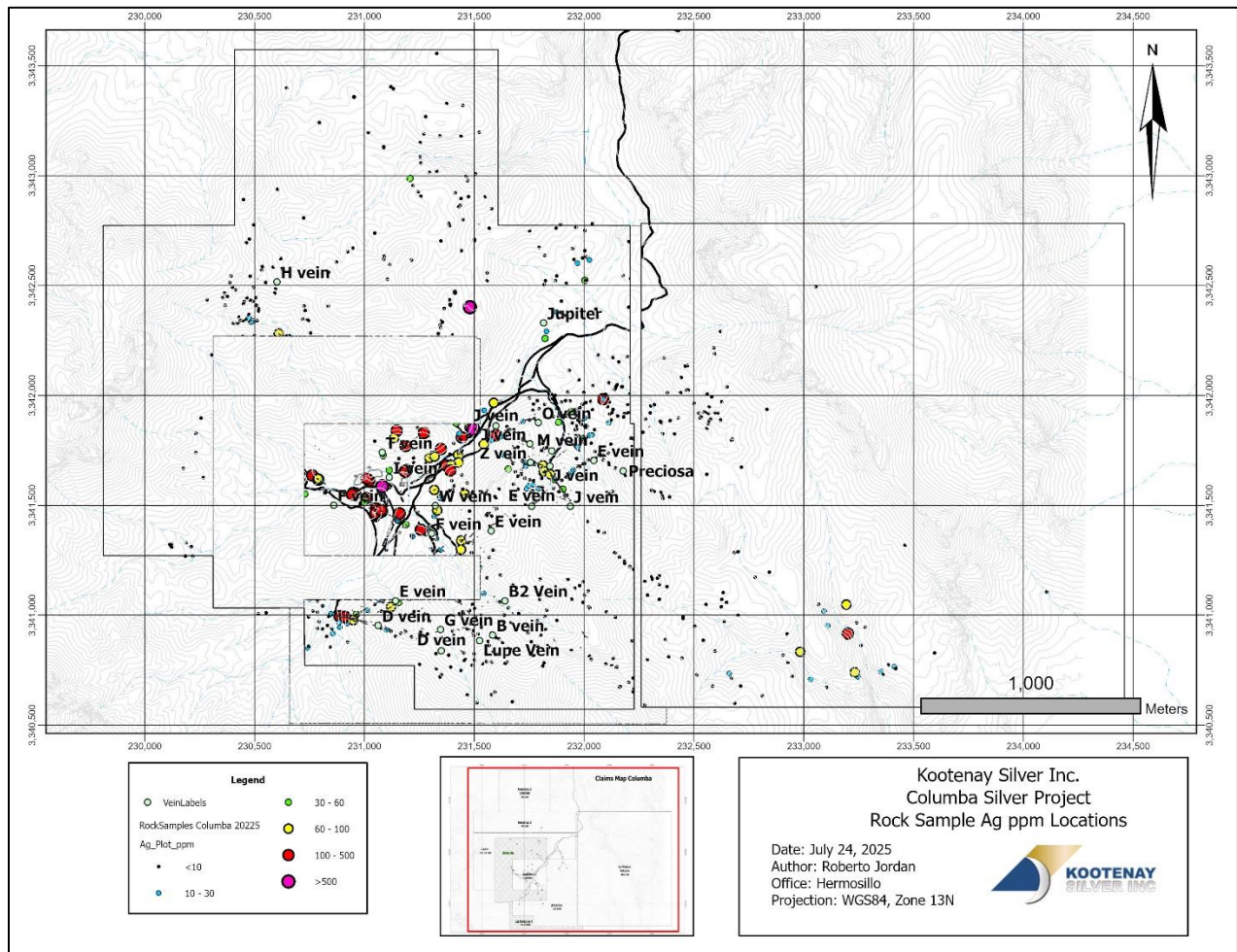
Year	Surface Rock Geochemical Sampling			
	Channel Samples	Grab Samples	Float & Other Samples	Total
2018	204	65	6	275
2019	16	36	19	71
2020	54	63	4	121
2021	33	200	-	233
2022	-	39	-	39
2023	2	21	2	25
2024	-	4	-	4
2025	-	171	46	217
<b>Total</b>	<b>309</b>	<b>599</b>	<b>77</b>	<b>985</b>

**Table 9-2 Selected High-Grade Samples from 2018 to 2025 Surface Exploration**

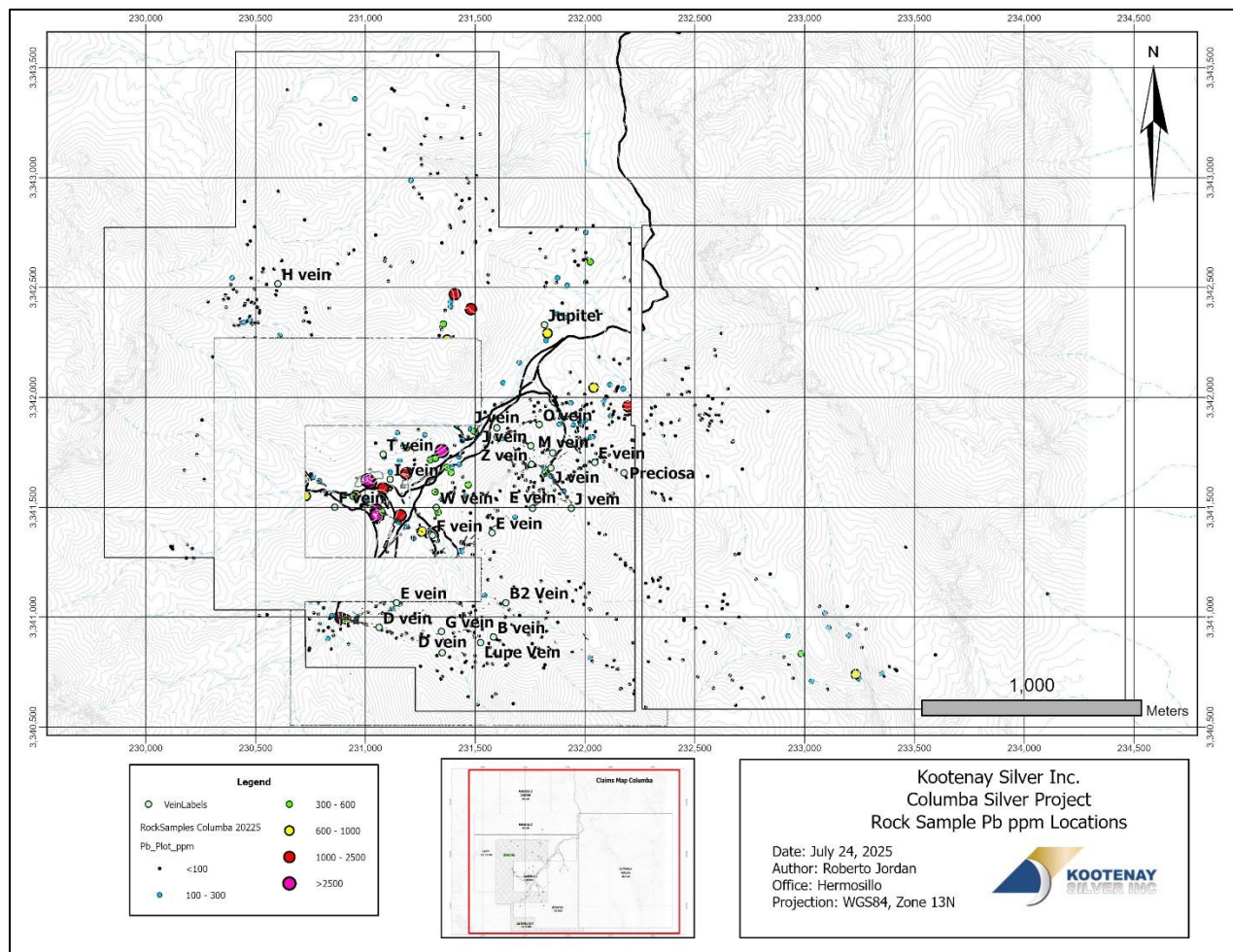
Sample ID	Ag ppm	Au ppb	Pb ppm	Zn ppm	Sample Type	Year
SK-1035f	1135	-	1530	4190	Float	2025
MM436g	759	9	480	170	Grab	2021
FC2339ch	692	-	2290	3700	Channel	2018
FC2536ch	397	8	520	420	Channel	2018
RJ085ch	360	-	1290	1740	Channel	2018
FC2330ch	330	10	730	650	Channel	2018
RG037ch	312	5	600	1100	Channel	2018
RJ081g	305	-	1630	5380	Grab	2018
MM117ch	263	563	60	-	Channel	2020
LM2563ch	254	-	360	490	Channel	2018
FC2327ch	244	38	240	1230	Channel	2018
RG036ch	216	-	1690	1650	Channel	2018
RJ083ch	201	-	340	910	Channel	2018
FC2329ch	200	-	600	380	Channel	2018
MM408g	196	29	170	310	Grab	2021
FC2340ch	195	-	930	1040	Channel	2018
RJ084ch	187	-	660	440	Channel	2018
GG350ch	187	45	360	270	Channel	2018
FC2332ch	179	13	480	270	Channel	2018
FC2338ch	175	7	630	680	Channel	2018

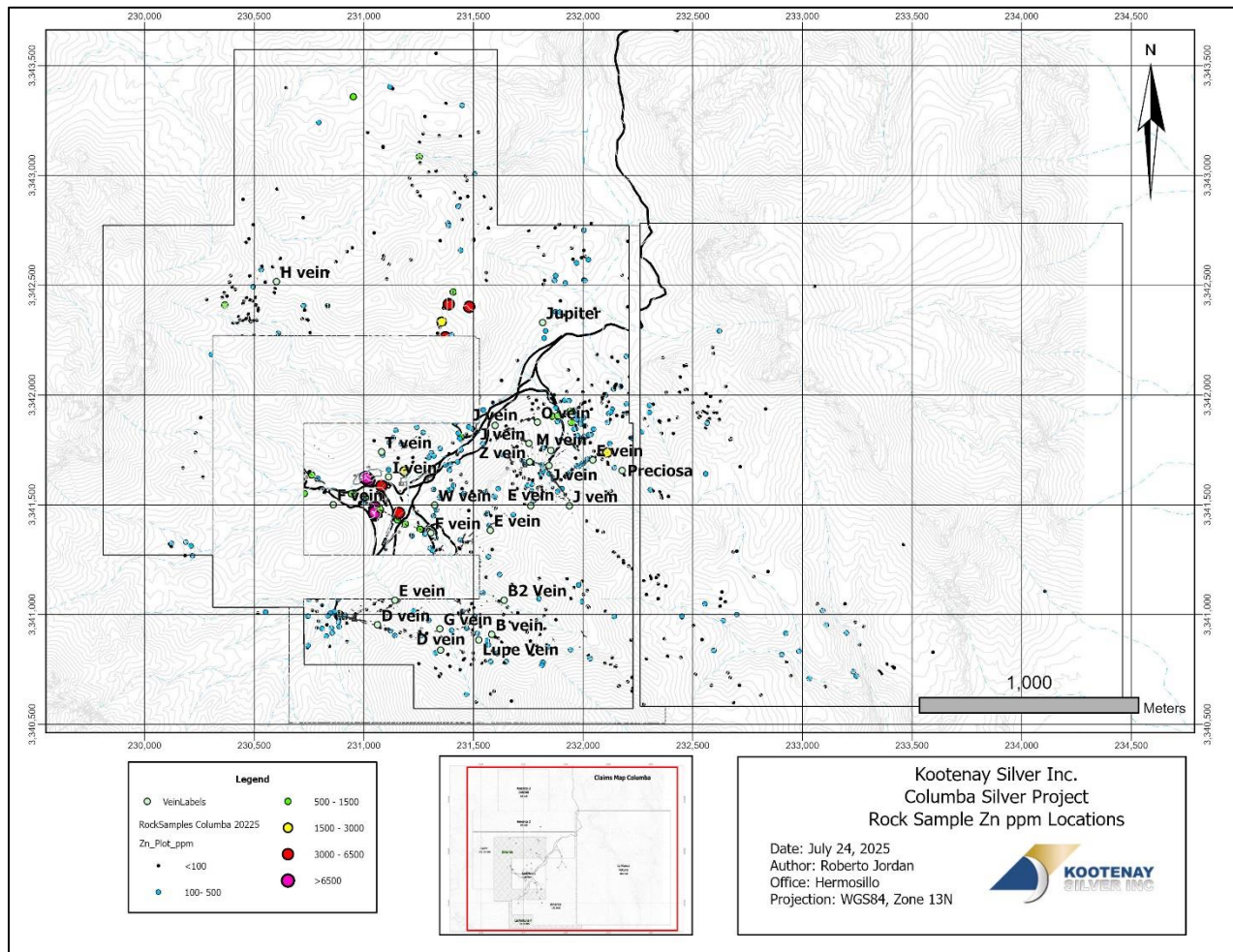
**Figure 9-3 Surface Rock Sampling Locations from 2018 to 2025**

**Figure 9-4 Surface Rock Sampling Ag Grades from 2018 and 2025**





**Figure 9-5 Surface Rock Sampling Pb Grades from 2018 and 2025**

**Figure 9-6 Surface Rock Sampling Zn Grades from 2018 and 2025**


## 9.4 Geophysics

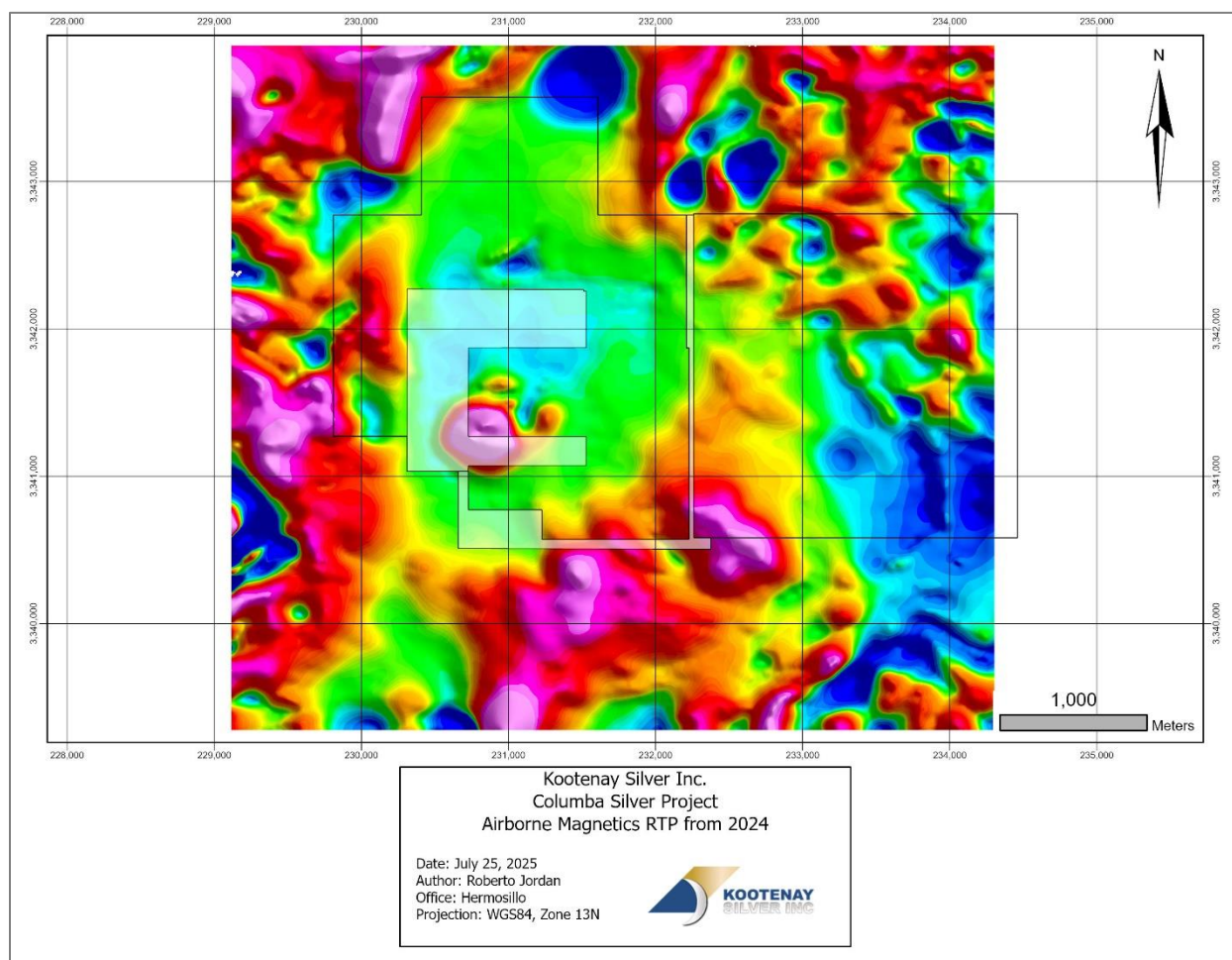
### 9.4.1 Airborne Magnetics

Airborne magnetic surveys have been used as tool to help identify new targets on the Columba Property. Structural interpretation of the magnetic survey products is used to identify new property scale vein structures within the larger vein system.

In June of 2024 Geo Digital Imaging de Mexico S.A de C.V. from Hermosillo, Sonora, Mexico was contracted to complete a drone magnetic survey over the Columba Project claims. The drone magnetic survey was conducted over an area of 23.79 km<sup>2</sup>, with 91 normal EW 5.3 km flight lines at 50 m line spacing. An additional 10 NS 4.6 km tie lines were completed at 500 m line spacing. The survey coverage totaled 521 line-kilometers flown at a nominal height of 35 m.

Products delivered from the drone magnetic survey included total magnetic intensity (TMI), reduction-to-pole (RTP), analytical signal (AS) map, first vertical derivative (1VD), horizontal tilt derivative, tilt derivative, and 1m digital terrain model (DTM) maps. Figure 9-7 shows the drone reduced-to-pole (RTP) magnetic survey results from 2024 for the Property.

**Figure 9-7 Airborne Magnetics RTP from 2024**

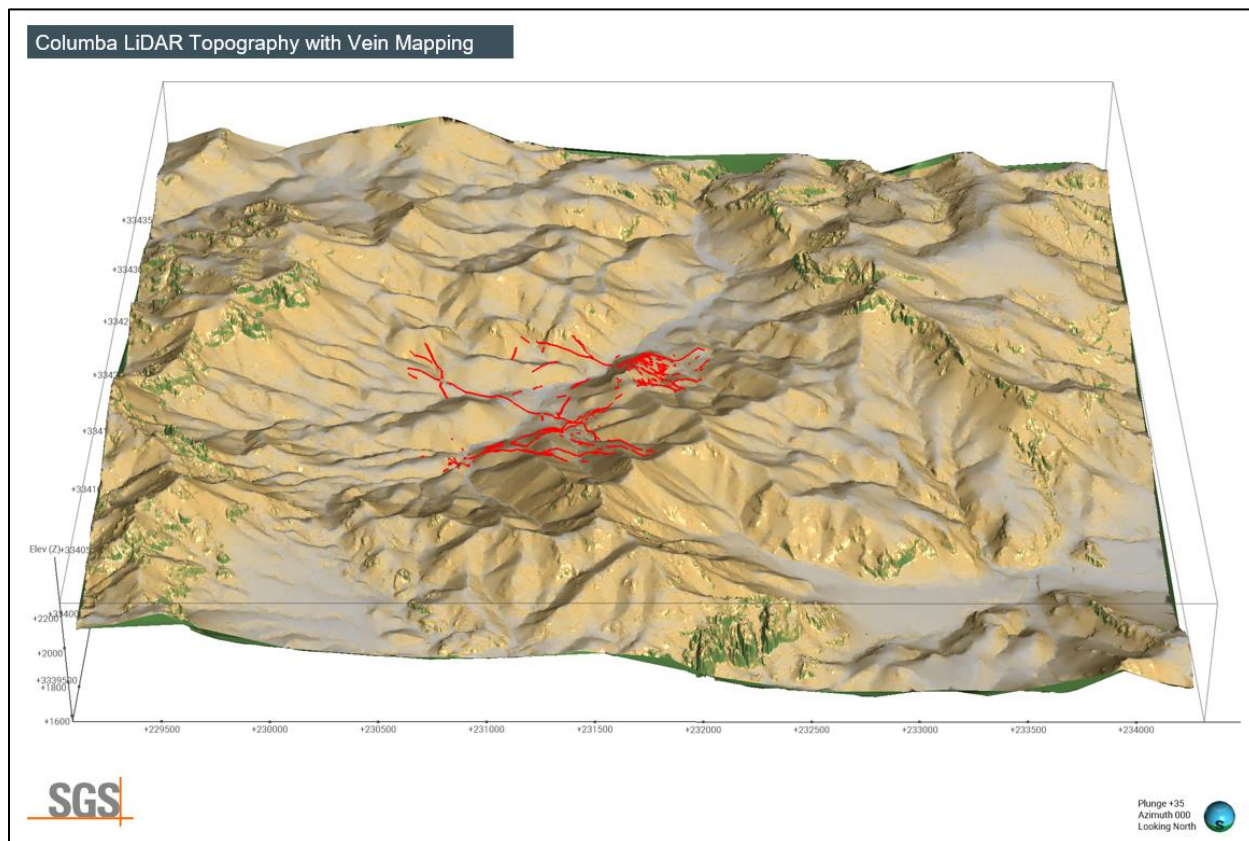




### 9.4.2 LiDAR

A LiDAR survey was completed in June of 2024 by Geo Digital Imaging de Mexico S.A de C.V. from Hermosillo, Sonora, Mexico. Kootenay received the data in September of 2024. The LiDAR survey of the property covered 2,379 Ha and is utilized in exploration planning, geological and resource modelling, and for future planning of mine and plant infrastructure. These high-resolution products (elevation model and orthophotos) are being used to support lithology and structural mapping activities, and as a prospecting tool to find vein outcrops and historical mine workings. Figure 9-8 shows the Lidar topographic model with the surface mapping of the Columba vein system.

**Figure 9-8 LiDAR Topographic Model with Mapped Columba Vein System**





## 10 DRILLING

### 10.1 Summary

Kootenay initiated drilling on the Property in July 2019 and has continued to systematically explore the Columba vein system with a series of drill programs undertaken each year through to 2025. As of March 2025, Kootenay had completed 217 drill holes totaling 53,476 m and collected 28,488 assays (Table 10-1, Figure 10-1, Appendix I).

Pattern drilling on target vein structures within the Columba vein system has primarily been completed on 100 m and 50 m centres. Drilling predominantly comprises angled holes (45° to -75° dips) completed on drill sections in a fan and fence pattern with holes collared in the hanging wall of and orthogonal to target structures. Terrain restrictions require drilling of target structures from the footwall side in some locations.

Drilling of the Columba vein system by Kootenay has begun to delineate mineralization in multiple structures (17 veins are included in the 2025 MRE). Mineralized strike lengths of the major structures have been tested for up to 1,200 m along strike and up to 450 m vertically (D vein), while several subsidiary hanging wall and footwall splay structures have confirmed mineralized strike lengths of 200 - 400 m and vertical extents of 150 – 250 m. Mineralized portions of veins that comprise the resource models vary in true thickness from 1.5 m to 10+ m and average ~ 5 m. Many of the mineralized veins and resource models remain open along strike and down dip.

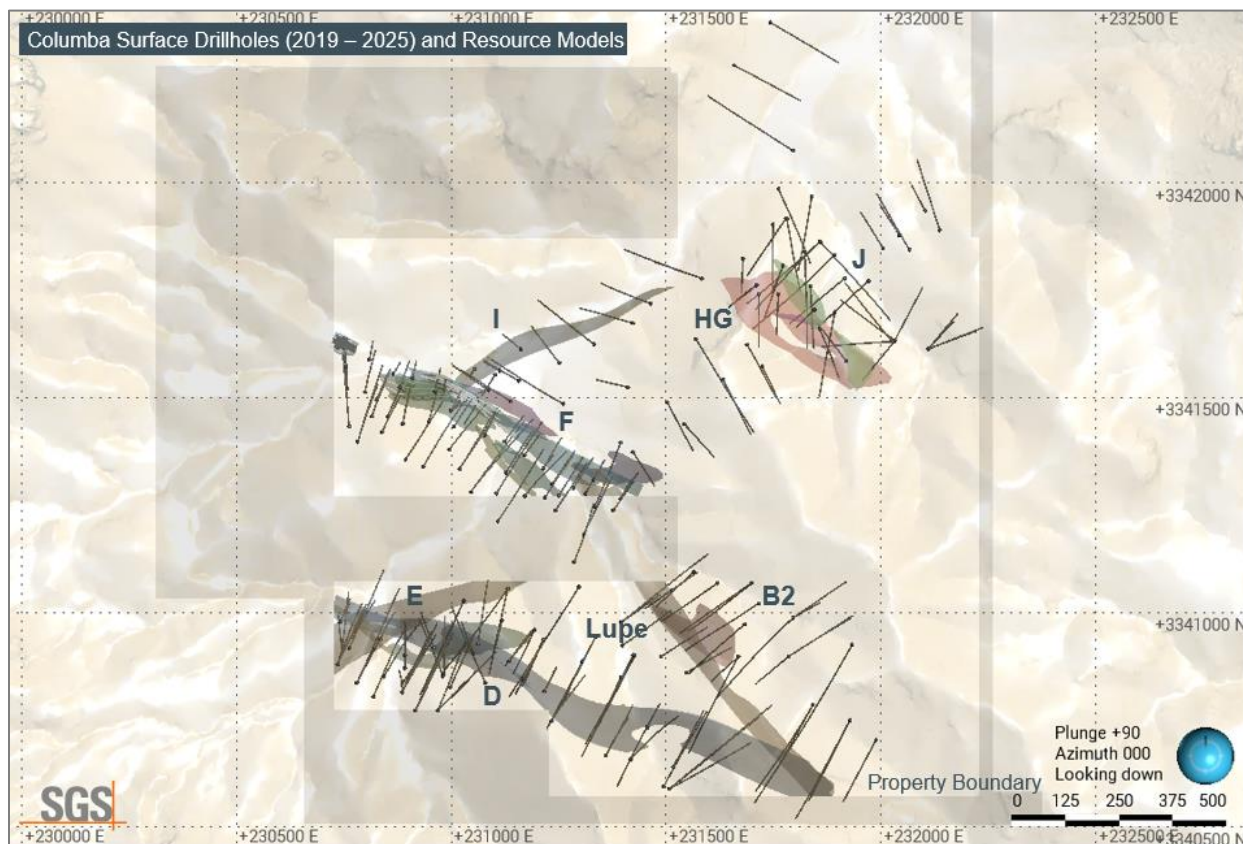
Diamond drillholes are typically HQ diameter, with reduction to NQ diameter on deeper holes beyond 300 m or when ground conditions necessitate it. Drilling to date has been completed using man-portable drill rigs to limit surface disturbance on the Property. Maximum drilling depths obtained to date with these drills on the Property has been 340m in HQ and 750 m in NQ. Drillhole collars are positioned for drilling using handheld GPS and subsequently surveyed by Total Station surveying. Downhole orientations of drillhole azimuth, inclination, and total magnetic field are recorded by a magnetic survey instrument every 20 to 30 m downhole. Magnetic declination, adjusted annually, is used for correcting drillhole azimuths to true north values. Drillhole geology is recorded for lithology, alteration, mineralization, structures, and veins. Drillhole recovery and RQD are recorded for all drilled intervals and field density measurements are collected on selected intervals. Full hole geochemical sampling was completed from 2019 to 2023. Selective geochemical sampling was initiated in 2024. Logged mineralized intervals are sampled for geochemical assay at nominal 1 m intervals based on changes in lithology, alteration, mineralization, and structure.

**Table 10-1 Summary of Drilling Completed by Kootenay on the Columba Project to March, 2025**

Year	Company	Hole Type	Drillhole Start	Drillhole Finish	Drillhole Count	Length Drilled (m)	Sample Count
2019	Kootenay Silver	DDH	CDH-19-001	CDH-19-041	41	6,836.59	3,809
2020			CDH-20-042	CDH-20-084	43	9,114.90	5,319
2021			CDH-21-085	CDH-21-113	29	5,762.75	3,469
2022			CDH-22-114	CDH-22-135	22	5,592.00	3,444
2023			CDH-23-136	CDH-23-147	12	3,052.50	1,911
2024			CDH-24-017*, CDH-24-148	CDH-24-197	55	17,774.62	7,970
2025			CDH-25-198	CDH-25-212	15	5,342.50	2,526
<b>Total</b>					<b>217</b>	<b>53,475.86</b>	<b>28,448</b>

*\*Re-entry and extension of older drillhole*

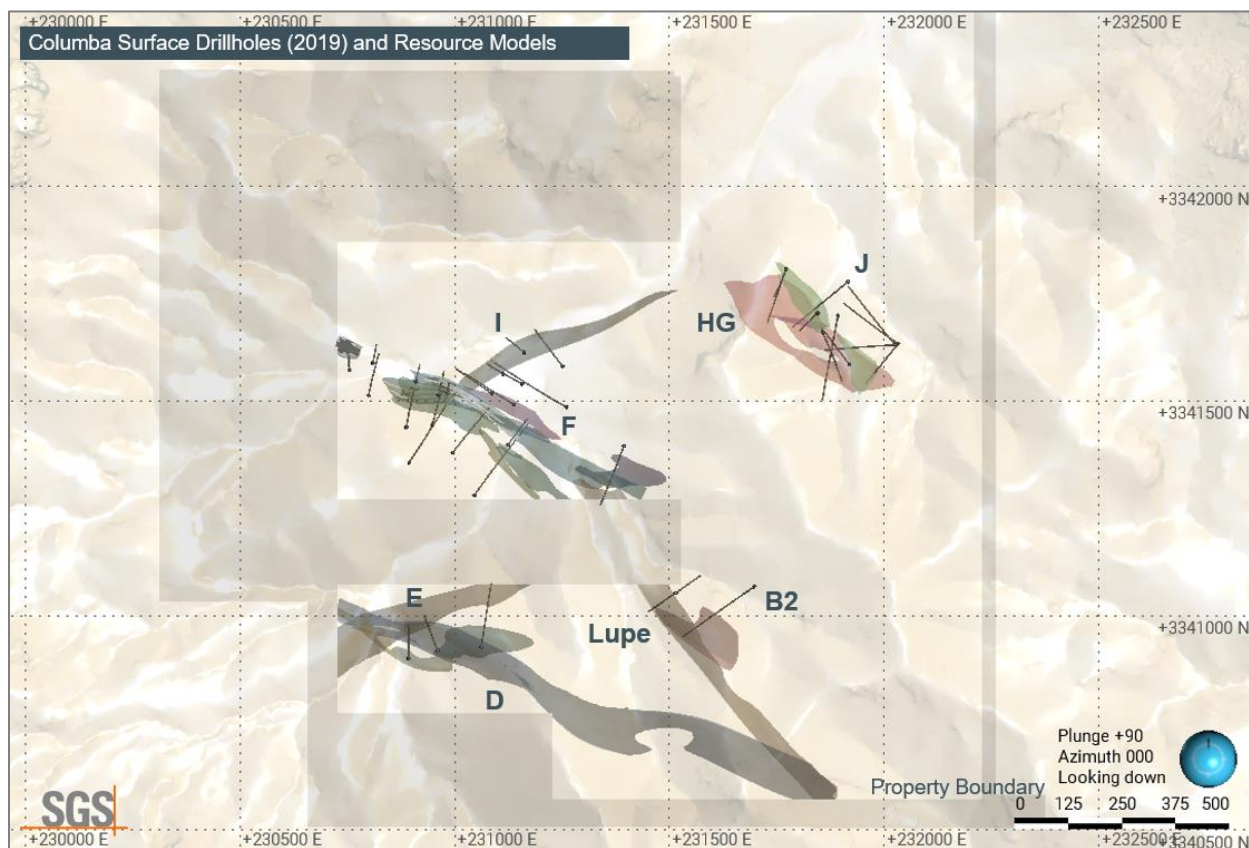
**Figure 10-1 Location of Drillholes on the Columba Project from July 2019 – March 2025 and Resource Models**



## 10.2 2019 Drilling

In July 2019, Kootenay began drilling on the Columba Project. Initial drillholes at Columba targeted the F vein, which was briefly mined during the 1910 era and again in the late 1950's to early 1960's. Drilling along both the F and I veins was carried out by the Company to verify vein width, grades and location of the vein. Results confirmed significant widths of quartz, quartz-calcite vein, vein breccia and stockwork with many holes hitting unexpected hanging wall veining. Preliminary drilling testing the D, E, Lupe, B, HG-J-Z vein corridors was also completed.

Drilling in 2019 totaled 6,837 meters in 41 holes (Figure 10-2). Highlights of the 2019 drilling are presented in Table 10-2.

**Figure 10-2 Location of 2019 Drillholes on the Columba Project and Resource Models****Table 10-2 Highlights of the 2019 Drilling**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-19-001</b>	59	75.5	16.5	93	N/A	-	-	Hanging Wall Vein
Includes	61.58	71	9.42	141	N/A	-	-	F Vein
Includes	68	70.15	2.15	307	N/A	-	-	
<b>CDH-19-005</b>	20	24.83	4.83	230	-	-	-	
Includes	21	22.15	1.15	775	-	-	-	F Vein
Includes	21	23	2	518	-	-	-	
<b>CDH-19-007</b>	110	111.68	1.68	417	-	-	0.13	Hanging Wall Vein
	149.45	151	1.55	693	-	0.43	1.13	
<b>CDH-19-008</b>	19	52.5	33.5	112	-	N/A	N/A	Hanging Wall Vein
Includes	42.45	47.3	4.85	408	-	0.70	1.08	
Includes	44.25	44.83	0.58	707	-	0.27	0.43	
Includes	44.83	46	1.17	366	-	0.14	0.16	F Vein
Includes	46	47.3	1.3	509	-	0.16	0.26	
<b>CDH-19-009</b>	145	147.9	2.9	516	-	-	0.21	
Includes	147	147.9	0.9	1070	-	0.02	0.41	Hanging Wall Vein
	168	178.4	10.4	50	-	-	-	
<b>CDH-19-011</b>	63	74	11	133	-	0.04	0.15	
Includes	63	68	5	245	0.126	0.07	0.27	F Vein

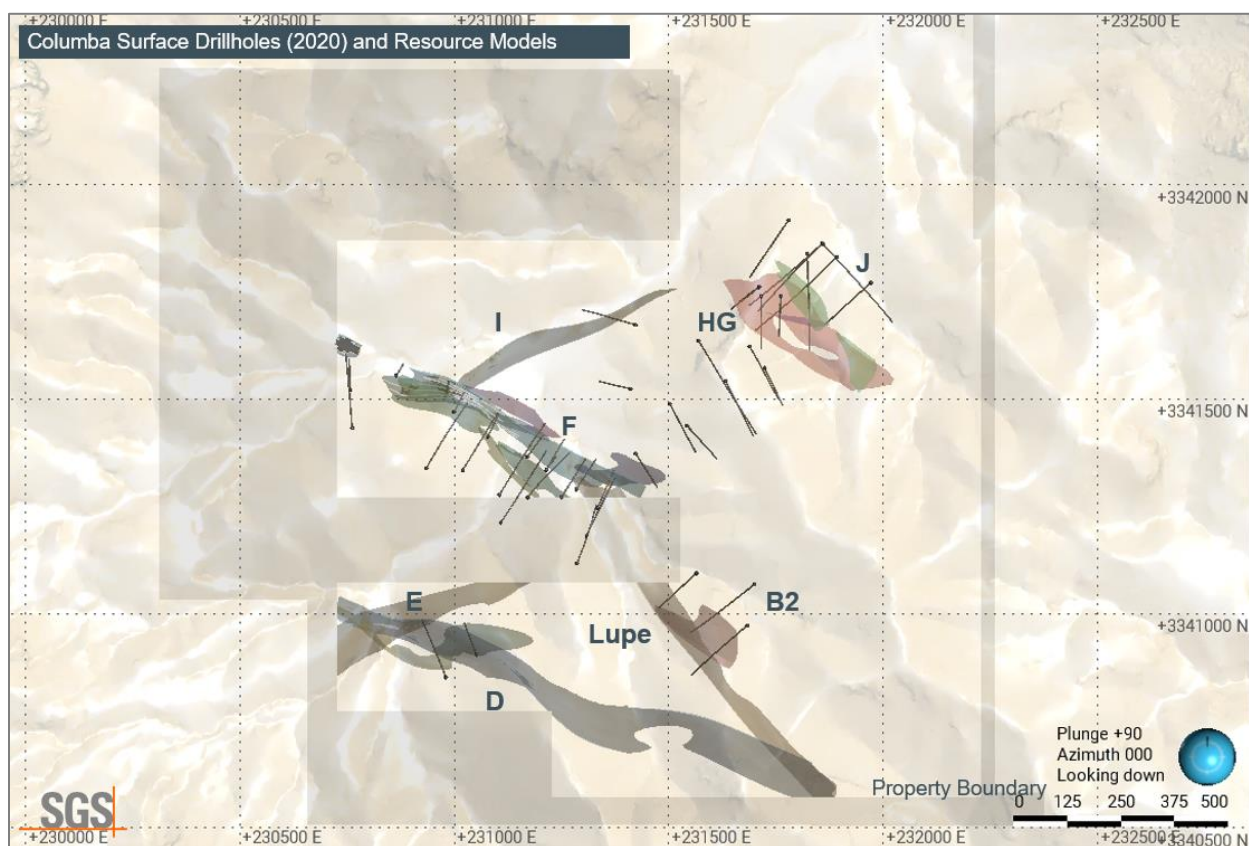
Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
Includes	65	66	1	648	0.634	0.22	0.61	
<b>CDH-19-017</b>	104	117.4	13.4	71	-	0.04	0.12	
Includes	112	117.4	5.4	146	-	0.10	0.24	I Vein
Includes	114.92	117.4	2.48	212	-	0.20	0.33	
	117.4	118.95	1.55	-	-	-	-	Mined Stope
<b>CDH-19-030</b>	67.1	76	8.9	76	-	0.02	0.11	J Vein - Fractured Zone, Quartz Barite vein
Includes	70.67	74	3.33	173	-	0.06	0.24	
	149.15	175	25.85	200	-	0.03	0.15	
Includes	150.5	161.65	11.15	415	-	0.07	0.26	Z Vein - Quartz veinlets in Rhyolite and Hydrothermal Breccias
Includes	154	158.07	4.07	721	-	0.08	0.33	
Includes	154	160.1	6.1	573	-	0.07	0.30	
Includes	156.17	158.07	1.9	982	-	0.08	0.40	
<b>CDH-19-035</b>	39	50.35	11.35	103	-	0.02	0.07	Quartz- Calcite Veinlet Stockwork in Footwall of F Vein
Includes	46	48.28	2.28	405	-	0.05	0.10	
	119	142	23	60	-	0.04	0.16	
Includes	119	122	3	274	-	0.18	0.60	F Vein, Banded Quartz
Includes	120.65	122	1.35	494	-	0.33	1.14	
	179	186.05	7.05	114	-	0.04	0.08	Quartz Calcite Veinlet Stockwork
<b>CDH-19-041</b>	15	54.9	39.9	159	-	0.05	0.13	
Includes	42.85	50.3	7.45	650	-	0.23	0.26	
Includes	42.85	44	1.15	919	-	0.36	0.09	
Includes	44	45	1	953	-	0.34	0.37	F Vein Banded Quartz
Includes	45	46	1	527	-	0.16	0.21	
Includes	46	47	1	860	-	0.24	0.42	
Includes	47	48.8	1.8	715	-	0.30	0.26	

### 10.3 2020 Drilling

Drilling in 2020 comprised infill and step out drilling within the high-grade F vein and the HG-J-Z vein zone. Drillholes intersected additional high-grade silver mineralization within the F vein, including a significant hanging wall structure parallel to the F vein not apparent from surface. Drilling also confirmed the discovery of a broad zone of high grade hydrothermal breccias that encompasses a low to medium grade quartz stockwork system at the HG-J-Z Zone. The E vein was tested with a series of holes and limited drilling was completed in the Lupe, B, and D vein corridors.

Drilling in 2020 totaled 9,115 meters in 43 holes (Figure 10-3). Highlights of the 2020 drilling are presented in Table 10-3.



**Figure 10-3 Location of 2020 Drillholes on the Columba Project and Resource Models****Table 10-3 Highlights of the 2020 Drilling**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-20-045</b>	63.7	68	4.3	239	-	0.08	0.36	Faulted F Vein
Includes	64.6	67.1	2.5	350	-	0.12	0.48	
Includes	65.6	67.1	1.5	456	-	0.17	0.62	F Vein
And	77	80	3	208	-	0.08	0.21	
Includes	78.3	78.8	0.5	974	-	0.03	0.30	Quartz Barite Vein
<b>CDH-20-046</b>	71	77.8	6.8	264	-	0.06	0.13	Footwall Vein
Includes	71.8	73.2	1.4	911	-	0.24	0.24	
Includes	71.8	74.7	2.9	553	-	0.13	0.18	
Includes	71.8	72.4	0.6	1585	-	0.33	0.33	F Vein Structure
Includes	72.7	73.2	0.5	689	-	0.21	0.29	
Includes	73.2	74.7	1.5	219	-	0.04	0.13	
<b>CDH-20-047</b>	111	126.65	15.65	166	-	0.17	0.47	
Includes	114	119.97	5.97	351	-	0.40	1.03	
Includes	115	119.97	4.97	400	-	0.45	1.20	
Includes	115.7	116.75	1.05	782	-	1.13	3.60	
Includes	116.75	117.9	1.15	305	-	0.10	0.30	F Vein Structure
Includes	117.9	119	1.1	219	-	0.38	0.65	
Includes	119	119.97	0.97	432	-	0.48	1.05	
Includes	119.97	126.65	6.68	55	-	0.02	0.13	

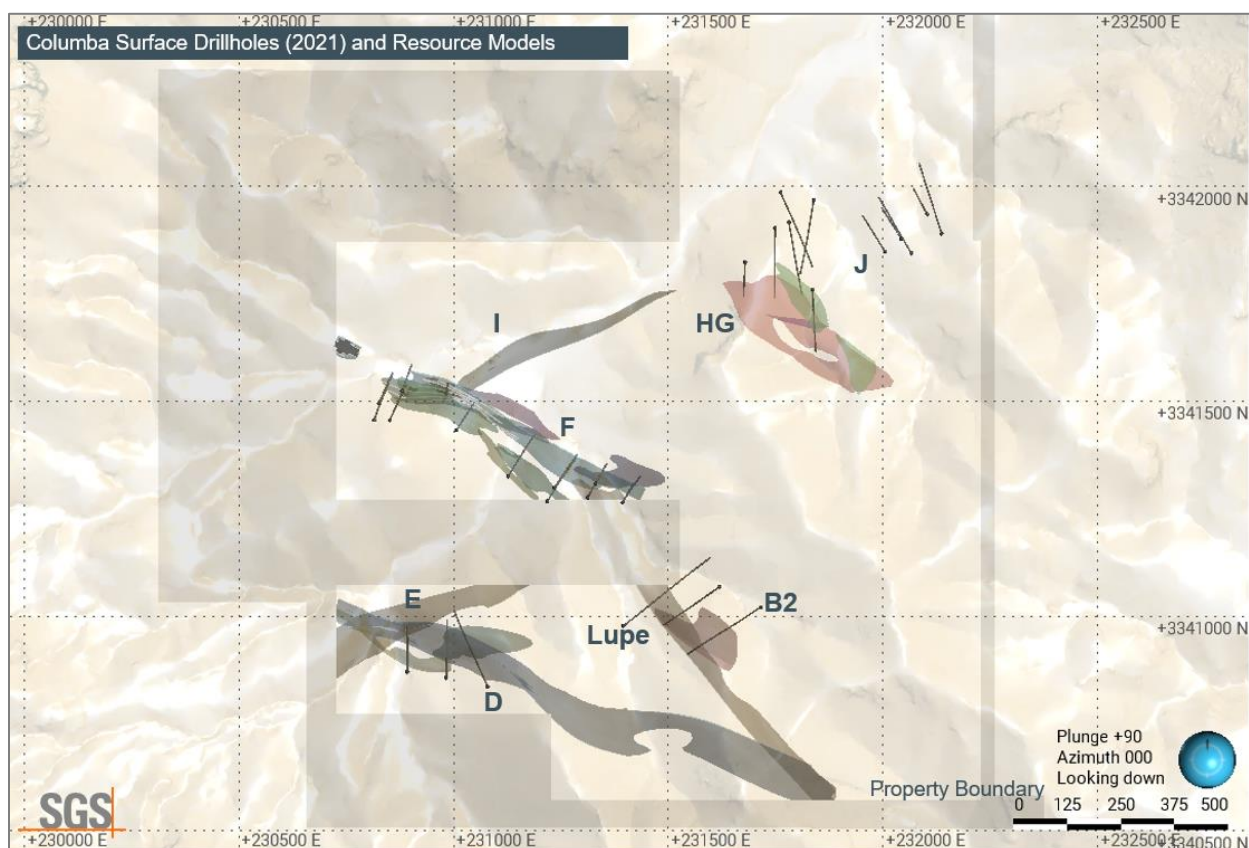
Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-20-051</b>	147	153	6	317	-	0.12	0.17	Hanging Wall Vein
Includes	149	151	2	865	-	0.37	0.42	
	193	198	5	87	-	0.07	0.10	Hanging Wall Vein
Includes	196.54	198	1.46	135	-	0.02	0.15	
	207	243	36	72	-	0.05	0.17	
Includes	207	211.36	4.36	317	-	0.27	0.93	F Vein
Includes	210.26	211.36	1.1	769	-	0.75	2.88	
	278	281.63	3.63	147	-	0.21	1.41	Footwall Vein
<b>CDH-20-052</b>	100.92	143.35	42.43	61	-	0.03	0.12	
Includes	100.92	108.45	7.53	199	-	0.08	0.27	
	100.92	105	4.08	279	-	0.11	0.38	F Vein + Hanging Wall
	102.39	105	2.61	366	-	0.14	0.50	
Includes	102.39	103.62	1.23	601	-	0.26	0.76	
And	132.55	134.48	1.93	103	-	0.06	0.67	F Vein
<b>CDH-20-053</b>	72.48	72.91	0.43	193	-	0.13	0.19	
And	138	172	34	116	-	0.11	0.24	F Vein + Hanging Wall
Includes	139	150	11	175	-	0.17	0.37	
Includes	161.65	164.65	3	496	-	0.55	0.91	
Includes	162.65	164.65	2	620	-	0.35	0.90	
Includes	162.65	163.6	0.95	753	-	0.38	1.00	F Vein
Includes	163.6	164.65	1.05	501	-	1.00	0.82	
<b>CDH-20-060</b>	144	208	64	132	-	0.03	0.10	
Includes	147	156	9	226	-	0.03	0.13	
Includes	152	153	1	1025	-	0.08	0.21	
Includes	183	205	22	229	-	0.05	0.14	
Includes	190	201	11	361	-	0.08	0.18	
Includes	191	196	5	608	-	0.09	0.12	
Includes	191	192	1	447	-	0.03	0.10	J-Z Vein
Includes	192	193	1	342	-	0.06	0.08	
Includes	193	194	1	1160	-	0.10	0.13	
Includes	194	195	1	776	-	0.18	0.22	
Includes	195	196	1	315	-	0.09	0.10	
<b>CDH-20-082</b>	26.3	30.5	4.2	42	-	0.02	0.03	F Vein system
	93	95.5	2.5	195	-	0.06	0.11	F Vein
Includes	93	94	1	434	-	0.15	0.15	
And	127.5	198	70.5	112	-	0.02	0.10	B Vein system
Includes	183	192	9	691	-	0.11	0.46	
Includes	184.5	189.1	4.6	1186	-	0.20	0.53	
Includes	184.5	186.05	1.55	1455	-	0.13	0.34	
Includes	186.05	187.55	1.5	1055	-	0.38	0.88	B Vein
Includes	187.55	189.1	1.55	1045	-	0.09	0.38	

## 10.4 2021 Drilling

Drilling in 2021 focused on three targets areas including the F vein, the HG-J-Z zone and the East Block (located 200 meters east form the HG-J-Z zone). Kootenay also completed follow up drilling on the Lupe, B and D veins, located approximately 600 meters south of the F vein. Results from drilling at these veins confirmed the presence of two additional promising high-grade areas producing some of the then highest grade silver intersections on the Property.

Drilling in 2021 totaled 5,763 meters in 29 holes (Figure 10-4). Highlights of the 2021 drilling are presented in Table 10-4.

**Figure 10-4 Location of 2021 Drillholes on the Columba Project and Resource Models**



**Table 10-4 Highlights of the 2021 Drilling**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-21-089</b>	46.39	47.25	0.86	96	-	0.01	0.12	Hanging Wall Vein
	140.1	155.55	15.45	162	-	0.08	0.37	F vein + Stock work
Includes	140.1	147	6.9	285	-	0.16	0.76	
Includes	140.1	142.8	2.7	439	-	0.35	1.52	F vein
Includes	140.1	140.67	0.57	533	-	0.27	1.51	F vein
Includes	141.35	142	0.65	511	-	0.47	1.23	
	169	173	4	233	-	0.03	0.44	Footwall Vein
Includes	169	170	1	411	-	0.03	0.05	
<b>CDH-21-090</b>	88.45	89.65	1.2	503	-	0.09	0.22	Hanging Wall Vein
Includes	89.1	89.65	0.55	889	-	0.17	0.38	Hanging Wall Vein
	115.7	119.64	3.94	185	-	0.10	0.22	F vein
Includes	116.45	118.85	2.4	245	-	0.13	0.28	
Includes	117.4	118	0.6	365	-	0.21	0.55	
	130	131	1	165	-	0.06	0.19	Footwall vein
<b>CDH-21-092</b>	25.56	28	2.44	217	-	0.08	0.14	
Includes	25.56	26.5	0.94	368	-	0.15	0.17	Hanging Wall Vein
	74.7	77.64	2.94	321	-	0.22	0.57	

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
Includes	75.7	77.64	1.94	428	-	0.30	0.73	
Includes	75.7	76.5	0.8	413	-	0.30	0.57	F Vein
Includes	76.5	77.64	1.14	439	-	0.29	0.84	
	145	153	8	130	-	0.07	0.24	
Includes	145	147.9	2.9	265	-	0.15	0.54	Footwall System
Includes	146.4	147.9	1.5	339	-	0.20	0.77	
<b>CDH-21-094</b>	90.95	92.9	1.95	104	-	0.10	0.15	Hanging Wall Vein
	175	184	9	354	-	0.11	0.36	
Includes	175	181	6	481	-	0.15	0.35	
Includes	176.9	179.53	2.63	809	-	0.30	0.45	F Vein
Includes	176.9	178.4	1.5	985	-	0.47	0.50	
Includes	178.4	179.53	1.13	576	-	0.06	0.40	
<b>CDH-21-103</b>	65.13	66	0.87	179	-	0.01	0.03	Quartz Barite Vein
	166	210	44	333	-	0.10	0.10	Hydrothermal Breccia with Rhyolite
Includes	179	196	17	805	-	0.21	0.14	
And	183	194	11	1201	-	0.30	0.16	Hydrothermal Breccia & Quartz Barite Vein
Includes	188	194	6	2035	-	0.50	0.19	
And	188	189.52	1.52	933	-	0.10	0.26	Quartz barite rhyolite host
And	189.52	191	1.48	657	-	0.13	0.16	Hydrothermal Breccia
And	191	192.15	1.15	483	-	0.17	0.16	
And	192.15	193.07	0.92	9840	-	2.59	0.08	Quartz Barite Vein
<b>CDH-21-108</b>	177	343	166	57	-	0.02	0.12	Rhyolite with tiny quartz stockwork & quartz -barite veins & veinlets
Includes	195	272	77	98	-	0.03	0.14	
Includes	213	224	11	328	-	0.12	0.50	
Includes	218.1	224	5.9	504	-	0.16	0.75	Quartz-barite manganese D Vein
Includes	218.1	220	1.9	519	-	0.09	0.85	
Includes	220	221	1	1100	-	0.54	2.04	
Includes	221	222.5	1.5	400	-	0.09	0.29	
Includes	222.5	223	0.5	331	-	0.07	0.20	
Includes	223	224	1	124		0.06	0.24	Rhyolite with tiny quartz stockwork & quartz -barite veins & veinlets
Includes	316	317	1	273	-	0.20	0.61	Rhyolite with tiny quartz stockwork
<b>CDH-21-109</b>	146	177	31	100	-	0.04	0.14	Rhyolite with tiny quartz stockwork & quartz -barite veins & veinlets
Includes	148.44	163	14.56	193	-	0.08	0.25	Quartz-barite manganese D Vein
Includes	148.44	155.55	7.11	294	-	0.14	0.40	
Includes	148.44	150.19	1.75	226	-	0.16	0.24	
Includes	150.19	152.5	2.31	476	-	0.21	0.75	
Includes	150.19	150.95	0.76	525	-	0.25	0.78	
Includes	150.95	151.75	0.8	323	-	0.17	0.49	
Includes	151.75	152.5	0.75	592	-	0.22	0.99	
Includes	152.5	153.45	0.95	197	-	0.09	0.19	
Includes	153.45	154.12	0.67	167	-	0.05	0.13	

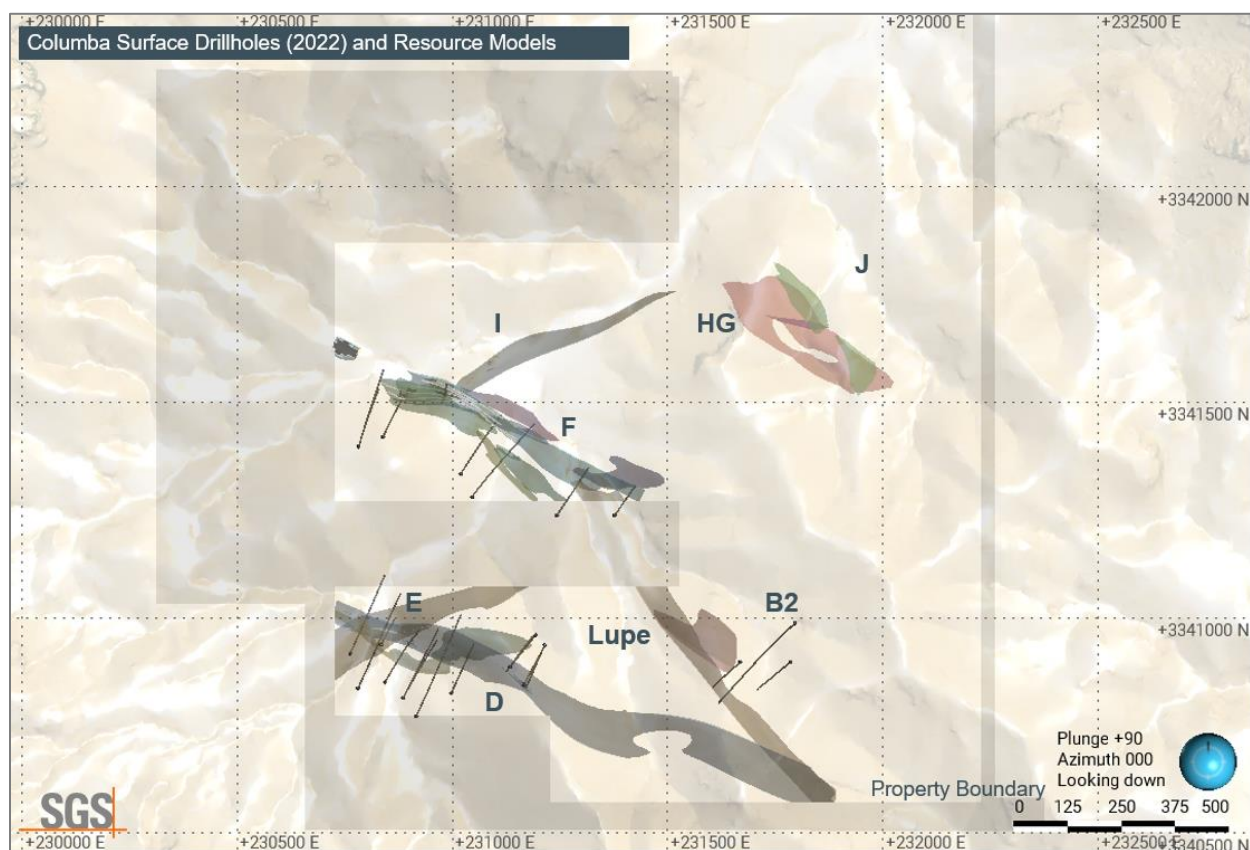


Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
Includes	154.12	155.55	1	206	-	0.10	0.33	
<b>CDH-21-110</b>	151	206	55	269	-	0.33	0.81	Rhyolite with tiny quartz
Includes	176.1	206	29.9	453	-	0.60	1.43	
Includes	178.2	196	17.8	650	-	0.90	2.28	
Includes	178.2	179.61	1.41	557	-	0.14	0.26	
Includes	179.61	179.95	0.34	633	-	0.27	1.51	
Includes	179.95	181.17	1.22	509	-	0.43	1.79	
Includes	181.17	182	0.83	1915	-	0.45	3.51	
Includes	182	184.5	2.5	641	-	0.51	0.59	
Includes	186	187	1	101	-	0.20	0.14	
Includes	187	187.93	0.93	130	-	0.08	0.12	Quartz-barite manganese D Vein
Includes	187.93	189	1	604	-	0.30	1.55	
Includes	189	190	1	520	-	1.42	3.68	
Includes	190	191	1	885	-	1.92	7.11	
Includes	191	192	1	1565	-	3.06	8.86	
Includes	192	193	1	1360	-	5.43	8.96	
Includes	193	194	1	685	-	0.78	1.99	
Includes	194	195	1	362	-	0.13	0.19	
Includes	195	196	1	382	-	0.19	0.22	
Includes	201.3	201.85	1	1765	-	1.22	1.50	
<b>CDH-21-112</b>	98.6	99.9	0.7	125	-	0.05	0.09	Quartz stockwork
	133	133.65	0.65	174	-	0.07	0.15	B2 quartz barite vein
	197.5	227	29.5	219	-	0.06	0.12	B vein + stockwork
Including	205	218.05	13.05	434	-	0.14	0.22	
Including	211	218.05	7.05	667	-	0.25	0.26	
Including	212	214	2	1050	-	0.43	0.23	B vein system
Including	214	215	1	781	-	1.00	0.10	

## 10.5 2022 Drilling

Drilling in 2022 focused on step out and infill drilling primarily on D vein and to a lesser degree on the F and Lupe, B vein zones. Drilling successfully extended known mineralization along strike and beneath existing drilling at both the D vein and the Lupe, B vein zone targets. Results continued to demonstrate wide intervals of significant silver mineralization in wall rock zones adjacent the target veins, a feature often seen in mineralized drill intersections across the Project.

Drilling in 2022 totaled 5,592 meters in 22 holes (Figure 10-5). Highlights of the 2022 drilling are presented in Table 10-5.

**Figure 10-5 Location of 2022 Drillholes on the Columba Project and Resource Models****Table 10-5 Highlights of the 2022 Drilling**

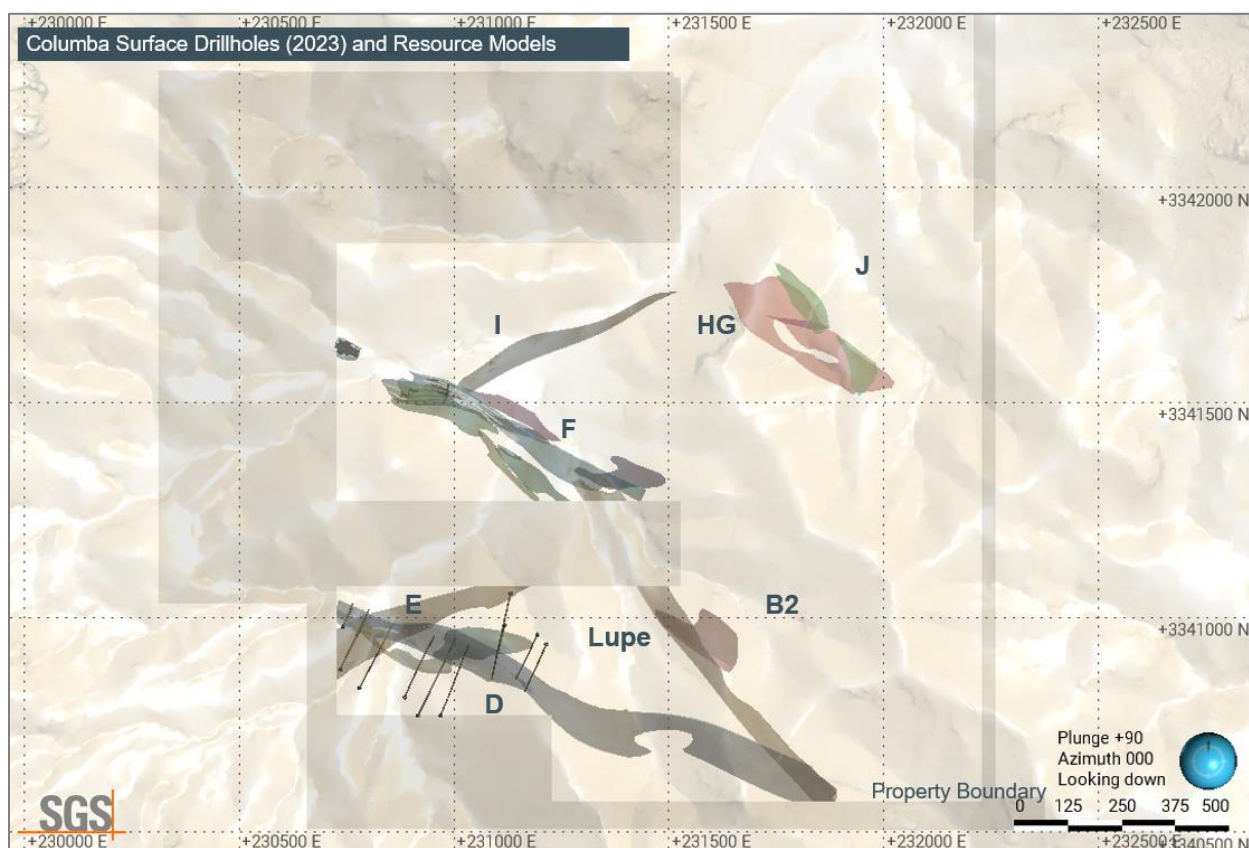
Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-22-115</b>	81.1	92.4	11.3	449	-	0.30	0.66	Quartz stockwork-hydrothermal breccia and D Vein
Includes	83	88.3	5.3	522	-	0.31	0.70	
Includes	83	84.2	1.2	635	-	0.24	0.54	
Includes	85.9	87	1.1	665	-	0.24	1.08	
Includes	87	88.3	1.3	509	-	0.55	1.16	
Includes	90	91	1	795	-	0.95	1.47	
<b>CDH-22-119</b>	145.5	147	1.5	112	-	0.07	0.20	Hydrothermal Breccia
And	244.5	252.24	7.74	416	-	0.32	1.30	D Vein
Includes	247.5	249	1.5	1395	-	0.94	5.30	
Includes	247.87	248.76	0.89	1550	-	0.95	4.50	
And	268.2	268.86	0.66	604	-	0.34	1.20	Quartz stockwork in rhyolite
And	275	276	1	213	-	0.26	0.74	Quartz barite vein
And	287.14	287.64	0.5	365	-	1.43	1.33	Calcite vein
And	293.64	293.94	0.5	346	-	8.12	9.94	
And	368	370	2	190	-	0.07	0.06	Quartz-Chlorite stockwork New System
<b>CDH-22-121</b>	87.85	88.69	0.84	134	-	0.05	0.15	Hydrothermal Breccia

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
And	202	203.6	1.58	425	-	0.11	0.35	
And	211	214	2.97	91	-	0.07	0.23	Quartz-Barite vein
Includes	212.8	213.5	0.7	161	-	0.16	0.33	
And	248.6	250.2	1.63	2330	-	0.06	0.80	Calcite vein in Intrusive
And	260	262	2	161	-	0.04	0.07	
<b>CDH-22-122</b>	194.1	198	3.9	574	-	0.19	0.66	D Vein
Includes	194.1	195	0.9	949	-	0.38	1.14	
Includes	195	195.7	0.72	956	-	0.27	1.20	
Includes	195.7	196.1	0.41	503	-	0.08	0.13	
<b>CDH-22-123</b>	91	97.5	6.5	156	-	0.08	0.15	Hydrothermal breccia
Includes	92.83	93.88	1.05	769	-	0.34	0.52	Calcite vein
And	283	284	1	117	-	0.01	0.05	Calcite vein in Intrusive
<b>CDH-22-124</b>	175	184	9	101	-	0.05	0.15	Dioritic rock with narrow quartz stockwork
Includes	175	176	1	305	-	0.22	0.17	
And	193	194.2	1.2	153	-	0.15	0.16	Hanging Wall Vein
And	208	209	1	180	-	0.08	0.50	Quartz Calcite Hydrothermal breccia
And	222	225	3	136	-	0.12	0.15	
And	328	329	1	194	-	0.18	0.16	Dioritic rock with narrow quartz stockwork
<b>CDH-22-125</b>	183	184.82	1.83	158	-	0.06	0.20	Hydrothermal breccia
And	269.6	304	34.45	540	-	0.37	1.56	Hydrothermal breccia, D vein and quartz stockwork
Includes	283.1	292.8	9.7	1746	-	1.11	5.20	D Vein System
Includes	283.1	289.7	6.6	2498	-	1.59	7.47	
Includes	286	288.5	2.45	5840	-	3.08	17.25	D Vein
<b>CDH-22-126</b>	230	244.63	14.63	135	-	0.08	0.18	Quartz Stockwork in rhyolite, D Vein
Includes	238	244	6.03	234	-	0.15	0.31	D Vein
Includes	243.6	244	0.43	915	-	0.35	0.54	
And	247.4	248.3	0.84	137	-	0.18	0.32	Quartz Stockwork in rhyolite, D Vein

## 10.6 2023 Drilling

Drilling in 2023 focused on step out and infill drilling exclusively on D vein and proximal mineralized vein stockworks and splay structures. Drilling continued to identify broad zones of mineralized stockwork adjacent to the primary D vein structure and continued to intersect high-grade mineralization within D vein over true widths of up to 5 m and broader intervals of significant mineralization up to 10+ m true width. Drillholes CDH-23-146 and 147 represented the southeastern extent of drilling in 2023 on D vein, leaving about 800 meters of untested strike extensions before a predicted intersection with B vein.

Drilling in 2023 totaled 3,053 meters in 12 holes (Figure 10-6). Highlights of the 2023 drilling are presented in Table 10-6.

**Figure 10-6 Location of 2023 Drillholes on the Columba Project and Resource Models****Table 10-6 Highlights of the 2023 Drilling**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-23-136</b>	76.03	81	4.97	203	-	0.03	0.09	D Vein System
Includes	76.03	79	2.97	335	-	0.03	0.08	
<b>CDH-23-137</b>	116.8	146	29.2	118	-	0.03	0.08	D Vein System
Includes	116.8	128	11.2	190	-	0.04	0.09	
Includes	122	123	1	864	-	0.17	0.16	
Includes	122	126	4	340	-	0.06	0.08	
<b>CDH-23-138</b>	182.94	196.5	13.56	599	-	0.54	1.21	D Vein System
Includes	184	192	8	858	-	0.78	1.88	
Includes	185	186	1	2060	-	3.22	4.29	
<b>CDH-23-139</b>	230.7	244.2	13.5	65	-	0.04	0.10	D Vein System
Includes	243.15	244.2	1.05	104	-	0.05	0.07	
<b>CDH-23-140</b>	154.9	181	26.1	69	-	0.03	0.09	Hanging Quartz Barite Stockwork Veining
Includes	154.9	158	3.1	308	-	0.14	0.26	
Includes	155.44	157	1.56	532	-	0.25	0.40	
And	297	307.1	10.1	152	-	0.20	0.40	D Vein System
Includes	297	301.25	4.25	231	-	0.30	0.60	
Includes	303.36	303.94	0.58	745	-	0.80	1.30	D Vein System
<b>CDH-23-141</b>	250	279	29	208	-	0.21	0.46	

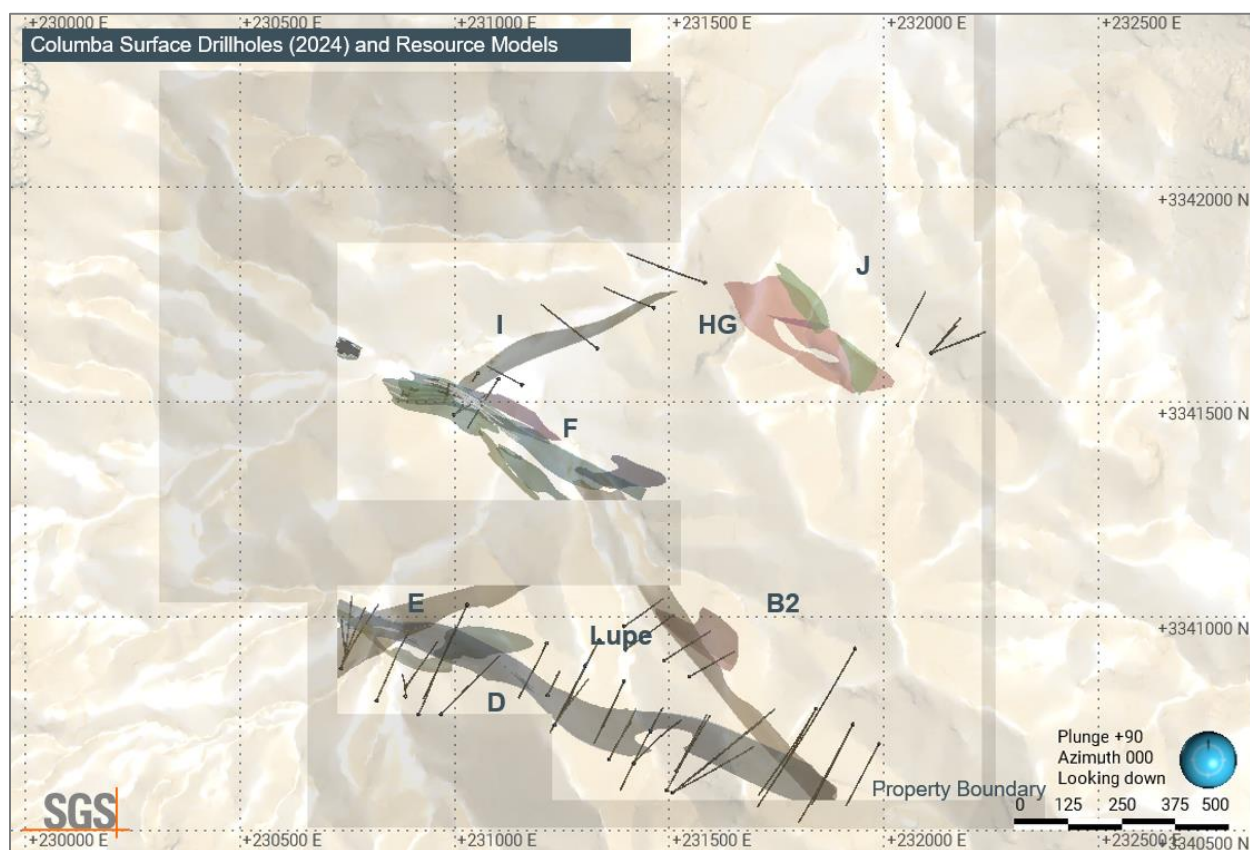


Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
Includes	266.7	276.37	9.67	510	0.2	0.50	1.00	
Includes	266.7	267.2	0.5	728	1.7	0.30	0.30	
Includes	270.3	276.37	6.07	663	0.1	0.70	1.50	
Includes	274	276.37	2.37	1142	0.1	0.90	2.50	
And	339.7	340.18	0.48	559	-	1.31	0.90	Footwall Vein
<b>CDH-23-143</b>	345	348	3	100	-	0.20	0.50	D Vein
Includes	345.53	346.33	0.8	232	-	0.60	1.00	
And	361	361.55	0.55	109	-	0.07	0.70	Footwall Vein
And	393	394	1	460	-	0.30	1.70	Stockwork Veinlet System
<b>CDH-23-144</b>	96	106.63	10.63	108	-	-	-	D Vein
Includes	102.6	105.16	2.56	170	-	-	-	
Includes	103.3	104.4	1.1	255	-	0.10	-	
<b>CDH-23-145</b>	9	14.1	5.1	54	-	-	-	E Vein
And	148.74	149.42	0.68	177	-	-	-	Hanging Wall Vein
And	199.6	200.43	0.83	106	-	-	-	
And	208	230	22	174	-	v	-	D Vein + Stockwork
Includes	215	221	6	435	-	0.10	0.20	
Includes	215	216	1	592	-	-	0.10	
Includes	217	220	3	544	-	0.13	0.20	
Includes	219	220	1	814	0.24	0.10	0.20	
<b>CDH-23-146</b>	159	183.26	24.26	228	-	0.10	0.30	D Vein System
Includes	173	183.26	10.26	501	-	0.30	0.70	
Includes	177.82	179.36	1.54	2123	-	1.30	2.20	D Vein
Includes	178.82	179.36	0.54	4120	-	3.40	2.80	
<b>CDH-23-147</b>	157	185	28	219	-	-	0.30	D Vein System
Includes	165	182	17	338	-	0.10	0.40	
Includes	168	176.19	8.19	532	-	0.20	0.70	D Vein
Includes	172	173	1	914	-	0.30	0.70	
And	173	174	1	777	-	0.60	0.70	

## 10.7 2024 Drilling

Drilling in 2024 focused on testing extensions and gaps within the D, F, Lupe, B vein corridor drilling data sets in advance of the preparation of a mineral resource estimate for the Project. Step out and infill drilling on D vein extended drill coverage an additional 700 m along to the southeast from 2023. Pattern drilling coverage targeted 50 m hole spacing in much of the previously identified mineralized zones within the target structures while continuing to advance exploration efforts with 100 m step outs.

Drilling in 2024 totaled 17,775 meters in 55 holes (Figure 10-7). Highlights of the 2024 drilling are presented in Table 10-7.

**Figure 10-7 Location of 2024 Drillholes on the Columba Project and Resource Models****Table 10-7 Highlights of the 2024 Drilling**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-24-153</b>	275.5	316	40.5	183	-	0.01	0.22	D Vein System
Includes	300	311	11	481	-	0.02	0.68	D Vein
Includes	309	310.35	1.35	920	-	0.80	3.30	
<b>CDH-24-164</b>	391.3	490	98.7	211	-	0.10	0.40	Mineralized interval on D Vein Trend
Includes	394	432	38	358	-	0.20	0.50	Sub-interval on D trend
Includes	394	406	12	531	-	0.10	0.20	Upper zone in main sub-interval
Includes	402	403	1	826	-	0.10	0.20	
And	409.96	432	22.04	318	-	0.10	0.70	Lower zone in main sub-interval
Includes	424.1	424.5	0.4	980	-	1.30	3.30	
And	484.5	490	5.5	266	-	0.10	0.30	
<b>CDH-24-166</b>	298.9	327.5	28.6	176	-	0.10	0.40	D Vein System
Includes	300	301	1	1020	-	1.00	2.50	
Includes	312	321	9	303	-	0.20	0.70	
Includes	313	315.5	2.5	593	-	0.30	1.80	
Includes	315	315.5	0.5	1095	-	0.70	5.70	
<b>CDH-24-171</b>	256.4	259	2.6	1334	-	0.82	3.41	Veining within D-Vein system

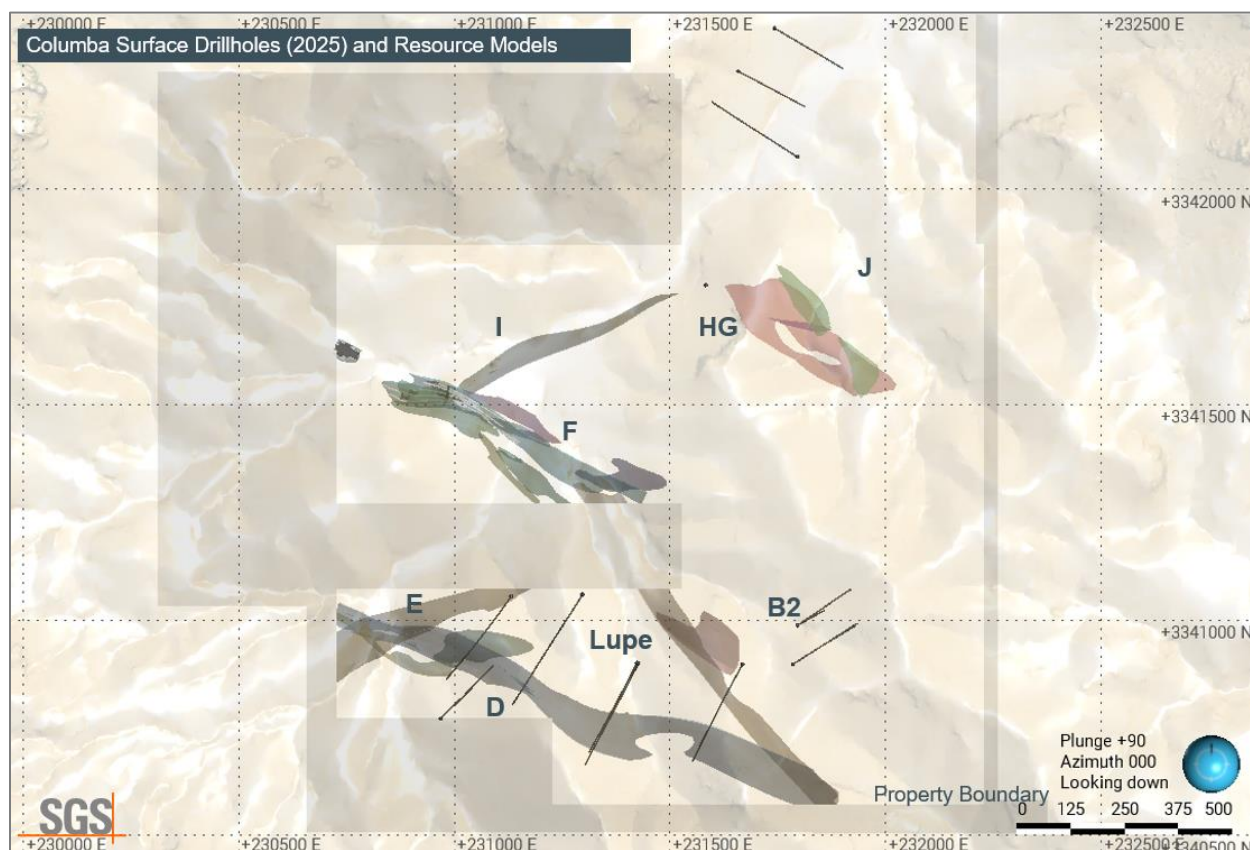
Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
Includes	257.5	258	0.5	2370	-	1.19	5.47	
And	263	266	3	117	-	1.08	0.34	
And	268.5	276.3	7.8	298	-	1.30	0.55	
Includes	272.5	275.6	3.1	627	-	2.47	0.53	
Includes	275	275.6	0.6	1525	-	1.31	0.24	
And	304	305.5	1.5	369	-	0.57	1.76	
Includes	304	304.5	0.5	976	-	1.50	4.81	
And	315	332	18	338	-	0.35	1.06	
Includes	315	326.21	11.21	484	-	0.49	1.42	
Includes	319.5	321	1.5	923	-	0.83	2.51	
And	339	342	3	487	-	0.47	1.13	
<b>CDH-24-174</b>	194	201	7	104	-	-	0.10	Unnamed Vein and Stockwork
And	240	246	6	99	-	-	0.10	
Includes	242.3	242.6	0.3	533	-	-	0.10	
And	296.8	338	41.2	233	-	0.10	0.30	B Vein incl. Stockwork
Includes	324	328	4	1100	-	0.40	0.30	B2 (F) Vein
Includes	352.1	326.2	1.1	3090	-	0.90	0.20	
<b>CDH-24-183</b>	120	152	32	210	-	0.14	0.44	F Vein
Includes	136.63	137.42	0.79	1440	-	0.46	2.55	
And	143.35	150	6.65	468	-	0.40	1.10	
Includes	144	145	1	811	-	0.62	1.85	
And	145	146	1	1.05	-	0.91	2.90	
And	218	234	16	82	-	0.05	0.12	FW to F Vein
Includes	218.85	219.23	0.38	905	-	0.56	0.27	
<b>CDH-24-196A</b>	192	276	84	123	0.05	0.09	0.25	D Vein Envelope
Includes	201.58	202.5	0.92	1525	0.01	1.23	3.27	Hanginwall Vein
And	206.8	207.74	0.94	794	0.01	0.74	6.92	
And	252	274.45	22.45	245	0.17	0.16	0.21	D Vein Stockwork & Vein
Includes	259	272.45	13.45	282	0.27	0.22	0.28	
Includes	270.33	272.82	2.49	460	0.78	0.49	0.66	
Includes	272	272.82	0.82	585	0.49	0.34	0.56	D Vein

## 10.8 2025 Drilling (to March 2025)

Drilling in 2025 continued until late March when it was suspended prior to the release of a mineral resource estimate for the Project. As in 2024, drilling continued to focused on testing extensions and gaps within the D vein corridor drilling data set for the inclusion in the mineral resource estimate. Exploration drilling was also completed targeting the Jupiter vein, 500 m north of the HG-J-Z vein corridor, and the eastern extension of the F vein.

Drilling in 2025 totaled 5,343 meters in 15 holes (Figure 10-8). Highlights of the 2025 drilling are presented in Table 10-8.

**Figure 10-8 Location of 2025 Drillholes (to March 2025) on the Columba Project and Resource Models**



**Table 10-8 Highlights of the 2025 Drilling (to March 2025)**

Hole ID	From (m)	To (m)	Interval (m)	Ag (gpt)	Au (gpt)	Pb (%)	Zn (%)	Geologic Intersection
<b>CDH-25-199</b>	405.5	422	16.5	620	0.31	1.01	3.61	D Vein System
And	405.5	411	5.5	1775	0.62	2.34	9.26	D Vein
Includes	406.45	407	0.55	2920	1.12	7.78	29.30	
Includes	407	407.6	0.55	7630	1.08	5.47	25.10	
Includes	407.55	408.1	0.5	5620	1.98	2.23	22.60	
<b>CDH-25-201</b>	157	157.5	0.5	294	0.01	0.12	0.18	Footwall to D Vein
And	278.89	279.44	0.55	260	0.01	0.76	0.99	
And	300	302	2	156	0.01	0.14	0.75	
And	392	416	24	72	0.02	0.15	0.35	D Vein System
Includes	406.8	414.3	7.5	107	0.03	0.19	0.62	D Vein
Includes	406.8	408.3	1.5	155	0.01	0.09	0.49	
<b>CDH-25-202</b>	288.25	290.85	2.6	156	0.01	0.11	0.43	G Vein
And	372.1	373.65	1.55	179	0.01	0.25	0.98	Footwall to D Vein
And	380.3	381.6	1.3	529	0.02	0.36	0.93	
And	496	509.65	13.65	118	0.07	0.10	0.76	D Vein System
Includes	500	501	1	180	0.08	0.04	0.46	D Vein
Includes	505	506	1	171	0.47	0.39	2.35	



## 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

### 11.1 Overview

Since initiating drilling on the Property in July 2019, Kootenay has maintained a comprehensive and consistent system for the sample preparation, analysis and security of all surface samples and drill core samples, including the implementation of an extensive QA/QC program. The current MRE is limited to drilling data collected by Kootenay since the acquisition of the Property as summarized in Table 11-1. The following describes sample preparation, analyses and security protocols implemented by Kootenay, with analytical labs and analysis methods summarized in Table 11-2.

Since 2019, all samples have been shipped to ALS Limited (ALS) in Chihuahua, Chihuahua, Mexico for sample preparation and transferred for analysis at the ALS laboratory in North Vancouver, BC, Canada. The ALS Chihuahua and North Vancouver facilities are ISO/IEC 17025 certified. Samples are dried, weighed, and crushed to at least 70% passing 2mm, and a 250 g split is pulverized to at least 85% passing 75 µm. Silver and base metals are analyzed using a four-acid digestion with an inductively coupled plasma (ICP) finish. Over-limit analyses for silver (>200 ppm), lead (>100,000 ppm), and zinc (>100,000 ppm) are re-assayed using an ore-grade four-acid digestion with an ICP finish. Samples with over-limit silver assays > 1500 ppm are fire assayed by gravimetric methods on 30 g sample pulps. Gold is assayed by 30-gram fire assay with atomic absorption (AA) spectroscopy finish. Control samples comprising certified reference samples, blank samples, and duplicates are systematically inserted into the sample stream and analyzed as part of the Company's QA/QC protocol. Check assaying of sample pulps has been completed by Bureau Veritas Commodities Canada Ltd. (BV) in Vancouver, BC, Canada, matching ALS methodology as closely as possible. The BV Vancouver facilities are ISO/IEC 17025 certified. ALS and BV are independent of Kootenay, the QPs, and SGS Geological Services.

**Table 11-1 Summary of Drilling Samples from the Property by Year**

Year	Company	Hole Type	Core Size	Drillhole Prefix	Drillhole Count	Length Drilled (m)	Sample Count
2019	Kootenay Silver	DDH	HQ/NQ	CDH-19	41	6,836.59	3,809
2020			HQ/NQ	CDH-20	43	9,114.90	5,319
2021			HQ/NQ	CDH-21	29	5,762.75	3,469
2022			HQ/NQ	CDH-22	22	5,592.00	3,444
2023			HQ/NQ	CDH-23	12	3,052.50	1,911
2024			HQ/NQ	CDH-24	55	17,774.62	7,970
2025			HQ/NQ	CDH-25	15	5,342.50	2,526
<b>Total</b>					<b>217</b>	<b>53,475.86</b>	<b>28,448</b>

*\*Re-entry and extension of older drillhole*

**Table 11-2 Summary of Drill Core Analytical Labs and Analysis Methods 2019 – 2025**

Year	Company	Lab & Location	Prep Code	Fire Assay Method	Fire Assay Code	Multi-element Method	Multi-element Code
2019-2025	Kootenay Silver	ALS Limited Chihuahua, Mexico (prep.) & North Vancouver, Canada (analysis)	PREP-31	Ag 30g FA-Gravimetric finish, Au 30g FA-AA finish,	Ag-GRA21, Au-AA23,	Intermediate Level Four Acid ICP-AES, Overlimit Ore Grade Four Acid ICP-AES	ME-ICP61a, ME-OG62

## 11.2 Sampling Methods

### 11.2.1 Rock Sampling

Surface rock samples were taken from potentially mineralized material collected as insitu composite chip or grab samples or as float samples. The lithology, alteration, and structure of outcrop is mapped to determine controls on mineralization. To the degree possible, channel samples were oriented perpendicular to mineralized structures and variations in mineralization are sampled separately. Samples are collected as continuous chip channel, with sample lengths ranging from 10 cm to 2.0 m. Samples were placed in a bag with a unique sample ID tag and packed, together with other rock samples, into larger bags for shipment to the lab.

### 11.2.2 Drill Core

Diamond drilling completed by Kootenay from 2019 to 2025 utilized man-portable drills utilizing a network of access trails to produce HQ size (63.5 mm diameter) and NQ size (47.6 mm diameter) and core.

Drill core is placed sequentially in core boxes with lids and marked with hole numbers at the drill by the drillers. A wooden block marker is inserted at the end of each core-run, recording the down-hole depth and recovered interval. Core is transported to the Columba camp for core logging and processing.

Core depth markers and box numbers are checked and the drill core is cleaned prior to being logged and photographed. The core is logged geotechnically on a 1.5 m run by run basis including core recovery, RQD, fracture density, weathering, and magnetic susceptibility. Any void intervals, either natural or associated with historical development, are accounted for and recorded in the geology logs.

The drill core is logged for lithology, alteration, mineralization, and structure, prior to marking out sample intervals. Lithological and sample logging is done digitally using MXDeposit software and database. Sample intervals are defined to honor vein, mineralization, alteration, and lithology contacts. Suspect high-grade intervals are sampled separately. Within mineralized zones, the nominal sample length is 1.0 m with a general maximum sample length of 2.0 m and a minimum sample length of 0.20 m. The core is photographed after logging but prior to sampling.

The sampler saws core in half, with half being submitted for analysis and half remaining in the core box as a record. Only one piece of core is removed from the core box at a time, and 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. Certified reference materials, blanks, and duplicates are inserted into the sample stream. Cut samples are weighed and sample number sequences are checked for quality control prior to dispatch.

## 11.3 Sample Security and Storage

All exploration samples taken were collected by Kootenay staff. Chain of custody (COC) of samples was carefully maintained from collection at the drill rig to delivery at the laboratories to prevent inadvertent contamination or mixing of samples and render active tampering as difficult as possible.

At the core processing facility, 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 control files are used to keep track of the time it takes to the samples to get to the lab, and time taken to receive assay certificates, the turn around time. The sample shipment is delivered to ALS in Chihuahua by Kootenay staff. ALS sends a confirmation email with detail of samples received upon delivery.

Drill core is stored at one of two facilities on the Property under a roof to preserve its condition. The plastic boxes containing the core are properly tagged with the corresponding drilling information and stored either of racks or pallets in an organized way and under acceptable conditions. All sample pulps, and selected sample coarse rejects, are returned to the Property for storage.

#### 11.4 Sample Preparation and Analyses

Sample preparation and reduction is carried out at ALS in Chihuahua, 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/IEC 17025 certified. Samples are dried, weighed, and crushed to at least 70% passing 2mm, and a 250 g split is pulverized to at least 85% passing 75 µm (ALS Method Code PREP-31).

Silver, base metals and pathfinder elements are analyzed using an intermediate level four-acid digestion method with an inductively coupled plasma (ICP) finish as part of a geochemical suite (ALS Method Code ME-ICP61a). Over-limit analyses for silver (>200 ppm), lead (>100,000 ppm), and zinc (>100,000 ppm) are re-assayed using an ore-grade four-acid digestion with inductively coupled plasma (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). Gold is fire assayed with an atomic absorption (AA) spectroscopy finish on 30 g sample pulps (ALS Method Code Au-AA23).

#### 11.5 Density

Specific gravity measurements made by Kootenay from 2019 to 2023 were collected using the water volume displacement method. The dry sample weight was recorded for each sample using an electronic scale. Volume estimation consists of filling a test tube with clean water, submersing the core sample in the test tube, and measuring the volume of displaced water in milliliters (or cubic centimeters). Each pair of measurements produces a specific gravity (SG) using the following equation:

$$SG = \frac{\text{Dry sample weight (g)}}{\text{Volume of sample (equivalent to the water displacement in cm}^3\text{)}}$$

In 2023 a selection of 24 duplicate core samples were submitted to ALS for specific gravity determinations using the weight in air, weight in water method (Code OA-GRA08). Results were comparable with the specific gravity results obtained by Kootenay using both water volume displacement and weight in air, weight in water methods.

Beginning in 2023 Kootenay switched to collecting specific gravity measurements on drill core using the weight in air, weight in water method for improved accuracy and precision. Selected 10 – 30 cm core samples are weighed using a high precision electronic scale, in air and suspended in a bucket of water. The scale is tared/zeroed before every measurement, and measurement will not proceed until the scale has stabilized at each reading. Each pair of measurements produces a specific gravity (SG) using the following equation:

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

#### 11.6 Data Management

Data are verified and double-checked by senior geologists on site for data entry verification, error analysis, and adherence to analytical quality-control protocols. All measured and observed data is collected digitally using MXDeposit software and database.

Each day, a daily report is sent with the meters drilled, updated geological section, and core photos. Every 15 days, a report is completed summarizing the completed drillholes and total meters drilled. Weekly Zoom meetings are held to review progress and coordinate plans for upcoming drillholes.

## 11.7 Quality Assurance/Quality Control

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). 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 coarse rejects and pulps at a second umpire laboratory.

Kootenay's QA/QC program comprises the systematic insertion of standards or certified reference materials (CRMs), blanks, field, coarse reject, and pulp duplicates. QC samples are inserted into the sample sequence and for the drilling completed to date the insertion frequency is approximately 1 sample per 40 samples for CRMs, 1 sample per 50 samples for blanks, 1 sample per 140 samples for field, coarse reject, and pulp duplicates. High grade or obviously mineralized zones trigger the automatic insertion of QC samples to ensure lab accuracy within the most significant portions of the drilling. The ratio of QC samples within mineralized zones are therefore higher than the ratios of QC samples within obviously barren rock. A total of 6.3% of samples assayed have been QC samples in the drilling programs from 2019 to 2025. Combined routine QC sample statistics for this period are presented in Table 11-3. All QC samples listed were analyzed by the primary analytical lab (ALS). Check sampling of selected pulps was completed at a secondary lab (BV, Vancouver, Canada) in 2021 and 2024. Results from check sampling undertaken on samples from the 2025 program were not yet available. The sampling and analysis flowsheet with QC sampling protocol for the Project is presented in Figure 11-1.

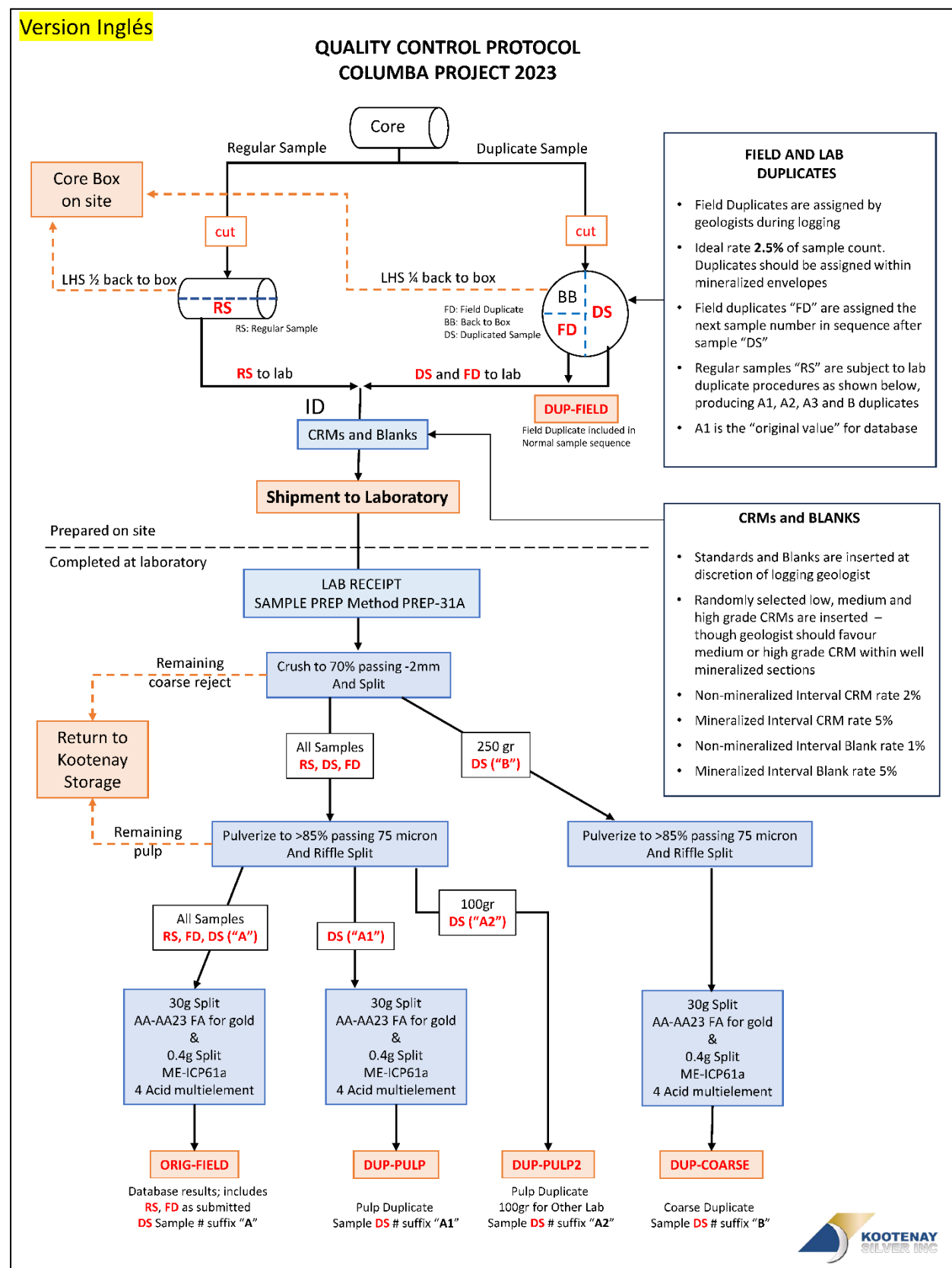
**Table 11-3 Routine QC Sample Statistics for Kootenay Core Sampling 2019 - 2025**

Original Samples	Standards	Blanks	Field Duplicates	Coarse Reject Duplicates	Pulp Duplicates	QC Sample Total	QC Sample %
28,448	711	580	212 pairs	205 pairs	205 pairs	1,913	6.3%

Sample batches with suspected cross-sample contamination or certified reference materials returning assay values outside of the mean  $\pm$  3SD control limits are considered analytical failures by the Company, and affected batches are re-analyzed to ensure data accuracy when deemed warranted.

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.



**Figure 11-1 Columba Sampling and Analysis Flowsheet with QC Sampling Protocol**

### 11.7.1 Certified Reference Material

A selection of five CRMs have been used to-date by Kootenay in the course of the Columba Project drill program: silver-gold standards produced for Northair by Smee & Associates Consulting in North Vancouver, B.C. (LCS-1 and LCS-2) and multi-element standards from CDN Resource Laboratories in Langley, B.C. (CDN-ME-1606, CDN-ME-2104, and CDN-ME-2202). 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  $\pm 2$  SD and  $\pm 3$  SD, and control limits/failures are indicated by a Z-score of greater than  $\pm 3$  SD from the certified mean. Sample batches with certified reference materials returning assay values outside of the mean  $\pm 3$ SD 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)  $\pm 1$  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 mineralized material grade analysis methods, laboratory benchmark standards are to achieve a precision and accuracy of plus or minus 5% (of the concentration)  $\pm 1$  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 mineralized material grade analysis.

CRM analytical results for the Kootenay drilling programs are summarized in Table 11-4 to Table 11-6 for Ag, Pb, and Zn to evaluate analytical accuracy (bias), precision (average coefficient of variation,  $CV_{AVR}$ ), warning rates, and failure rates. Shewhart CRM control charts for Ag, Pb, and Zn for the Kootenay drilling programs are presented in Figure 11-2 to Figure 11-14.

The QA/QC program from 2019 - 2025 included the insertion of a total of 711 CRM samples (Table 11-3). The combined CRM failure rates during this period were 0.7% for Ag, 1.6% for Pb, and 0.0% for Zn. CRM analytical results confirm acceptable analytical accuracy (bias less than  $\pm 5\%$ ) and acceptable analytical precision ( $CV_{AVR}\%$  within  $\pm 5\%$ ) for Ag, Pb, and Zn. The QP considers this CRM performance acceptable and within industry standards. Review of the Company's CRM QC program indicates that there are no significant issues with the drill core assay data.

**Table 11-4 CRM Sample Ag Performance at ALS for the 2019-2025 Drill Programs**

CRM Ag ppm	Certified Value		2019-2025							
	Mean	SD	Count	Mean	Bias %	CV <sub>AVR</sub> %	Warning # >2SD	Warning % >2SD	Failure # >3SD	Failure % >3SD
LCS-1	62.4	2.3	342	64.8	3.9	3.2	46	13.5%	1	0.3%
LCS-2	59.1	1.97	247	61.1	3.4	3.3	21	8.5%	4	1.6%
CDN-ME-1606	116	2.5	57	117.0	0.9	1.3	2	3.5%	0	0.0%
CDN-ME-2104	131	3.5	19	131.6	0.4	1.4	0	0.0%	0	0.0%
CDN-ME-2202	249	7	46	249.0	0.0	1.4	1	2.2%	0	0.0%
<b>Total</b>	-	-	<b>711</b>	-	-	-	<b>70</b>	<b>9.8%</b>	<b>5</b>	<b>0.7%</b>

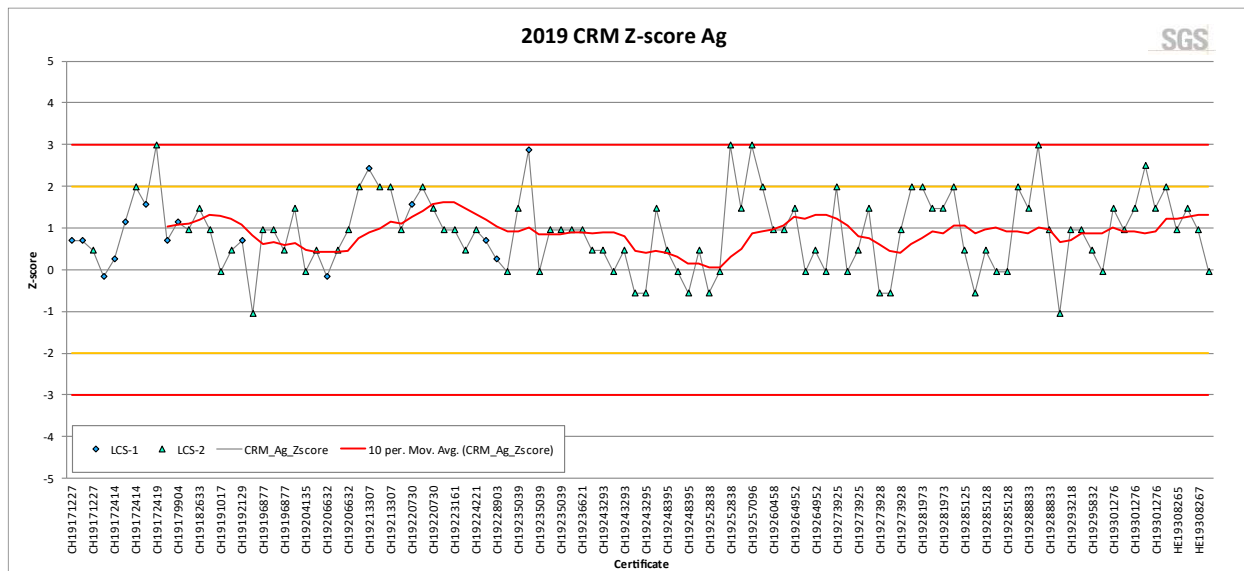
**Table 11-5 CRM Sample Pb Performance at ALS for the 2019-2025 Drill Programs**

CRM Pb ppm	Certified Value		2019-2025							
	Mean	SD	Count	Mean	Bias %	CV <sub>AVR</sub> %	Warning # >2SD	Warning % >2SD	Failure # >3SD	Failure % >3SD
LCS-1	-	-	-	1252	-	-	-	-	-	-
LCS-2	-	-	-	1456	-	-	-	-	-	-
CDN-ME-1606	17600	300	57	17137	-2.6	2.1	19	33.3%	2	3.5%
CDN-ME-2104	2900	60	19	2839	-2.1	1.8	0	0.0%	0	0.0%
CDN-ME-2202	11400	200	46	11264	-1.2	1.4	2	4.3%	0	0.0%
<b>Total</b>	-	-	<b>122</b>	-	-	-	<b>21</b>	<b>17.2%</b>	<b>2</b>	<b>1.6%</b>

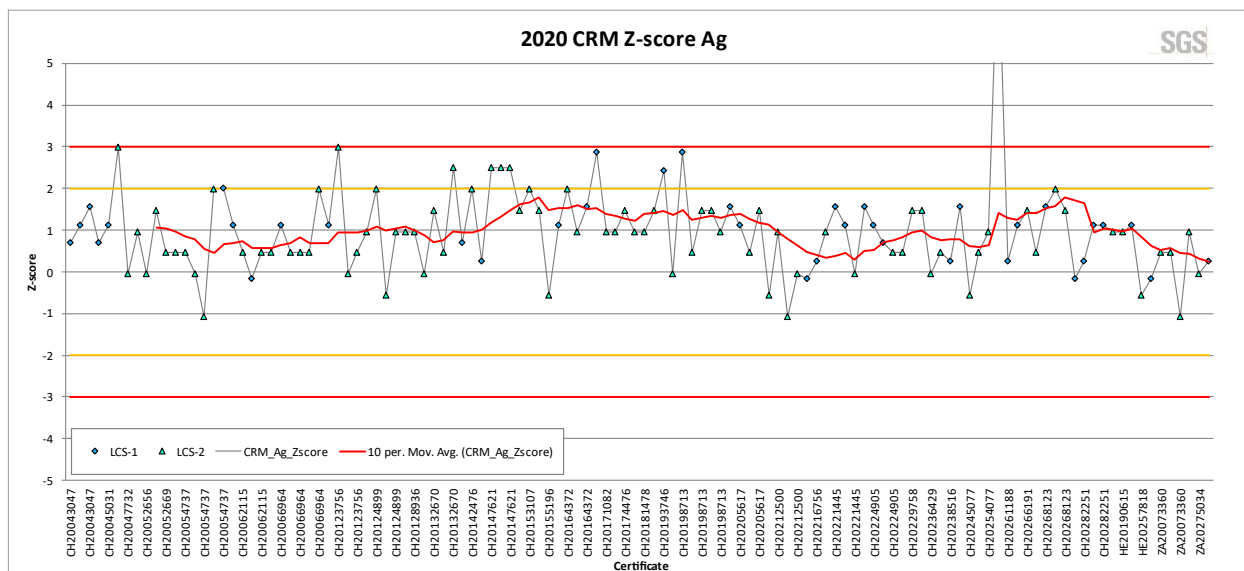
**Table 11-6 CRM Sample Zn Performance at ALS for the 2019-2025 Drill Programs**

CRM Zn ppm	Certified Value		2019-2025							
	Mean	SD	Count	Mean	Bias %	CV <sub>AVR</sub> %	Warning # >2SD	Warning % >2SD	Failure # >3SD	Failure % >3SD
LCS-1	-	-	-	1474	-	-	-	-	-	-
LCS-2	-	-	-	3385	-	-	-	-	-	-
CDN-ME-1606	6000	100	57	6076	1.3	1.3	7	12.3%	0	0.0%
CDN-ME-2104	5570	140	19	5561	-0.2	1.4	0	0.0%	0	0.0%
CDN-ME-2202	22600	500	46	22626	0.1	1.2	0	0.0%	0	0.0%
<b>Total</b>	-	-	<b>122</b>	-	-	-	<b>7</b>	<b>5.7%</b>	<b>0</b>	<b>0.0%</b>

**Figure 11-2 CRM Control Chart for Ag for the 2019 Drill Program**

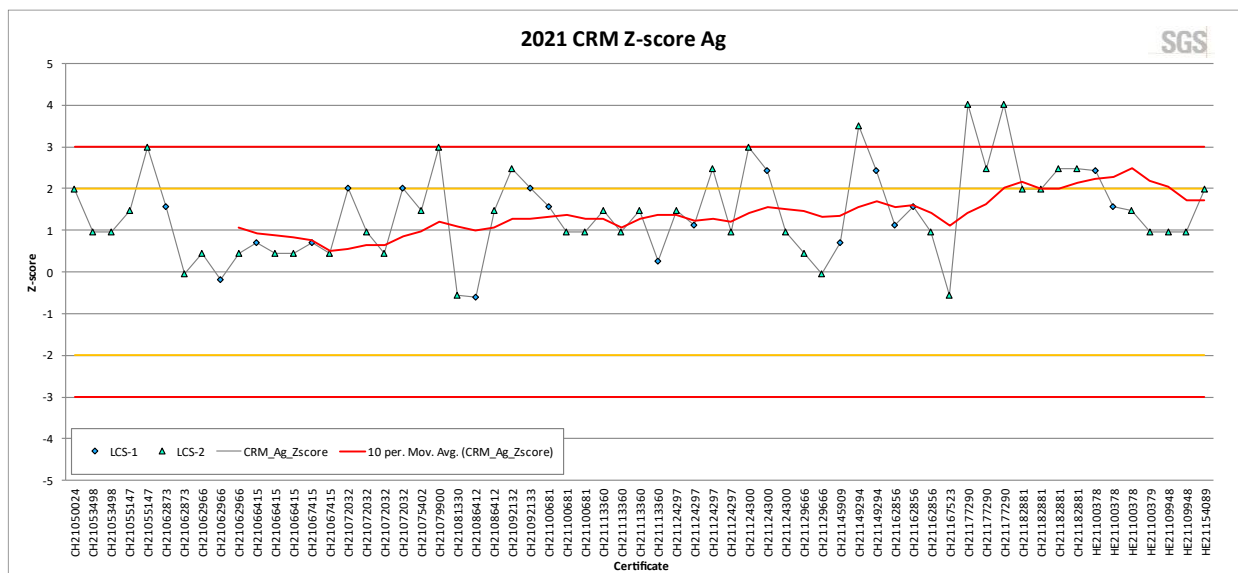


**Figure 11-3 CRM Control Chart for Ag for the 2020 Drill Program**

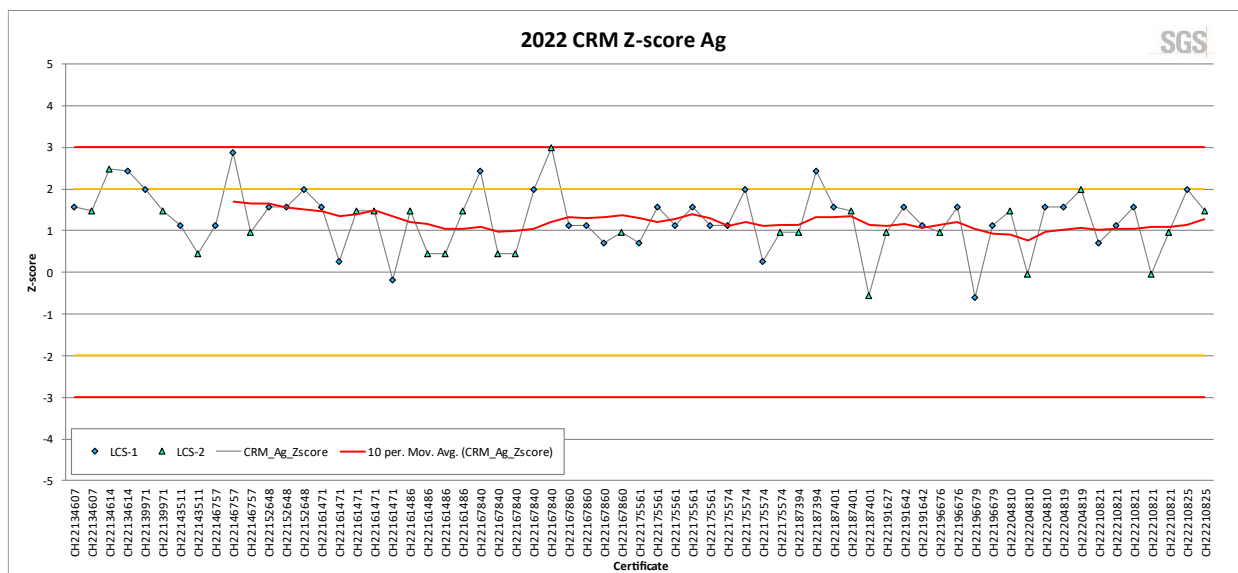




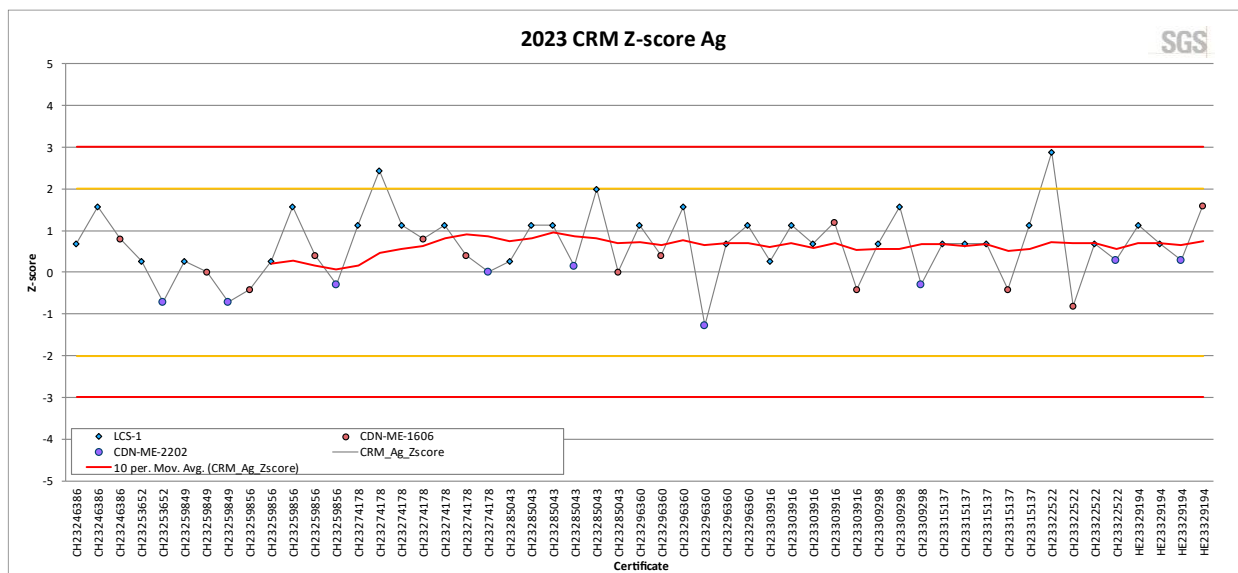
**Figure 11-4 CRM Control Chart for Ag for the 2021 Drill Program**



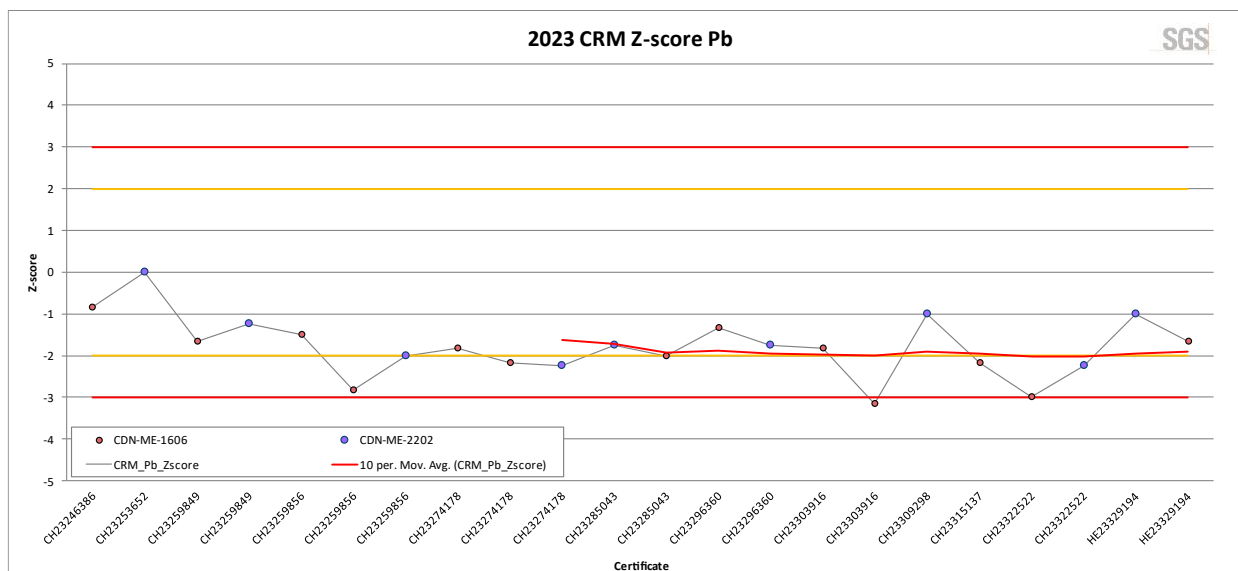
**Figure 11-5 CRM Control Chart for Ag for the 2022 Drill Program**



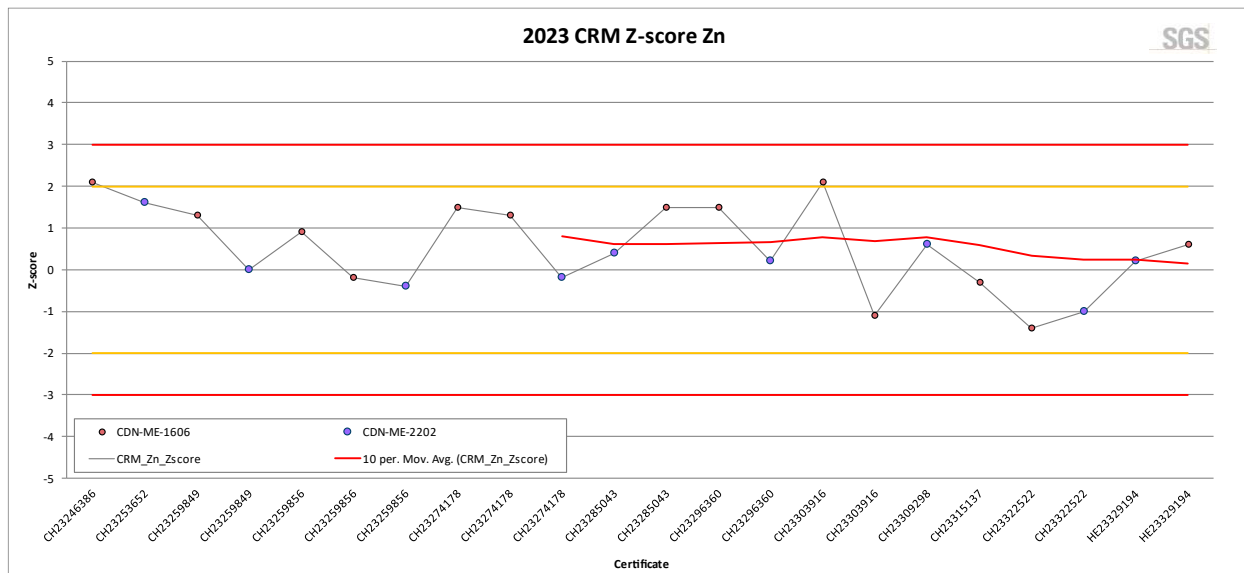
**Figure 11-6 CRM Control Chart for Ag for the 2023 Drill Program**



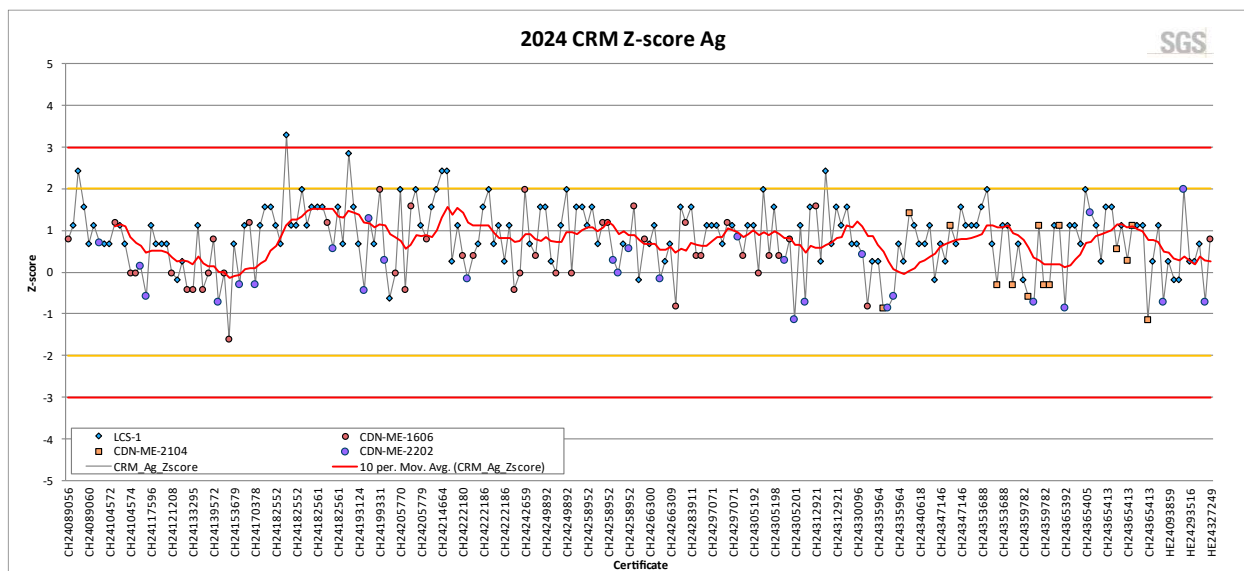
**Figure 11-7 CRM Control Chart for Pb for the 2023 Drill Program**



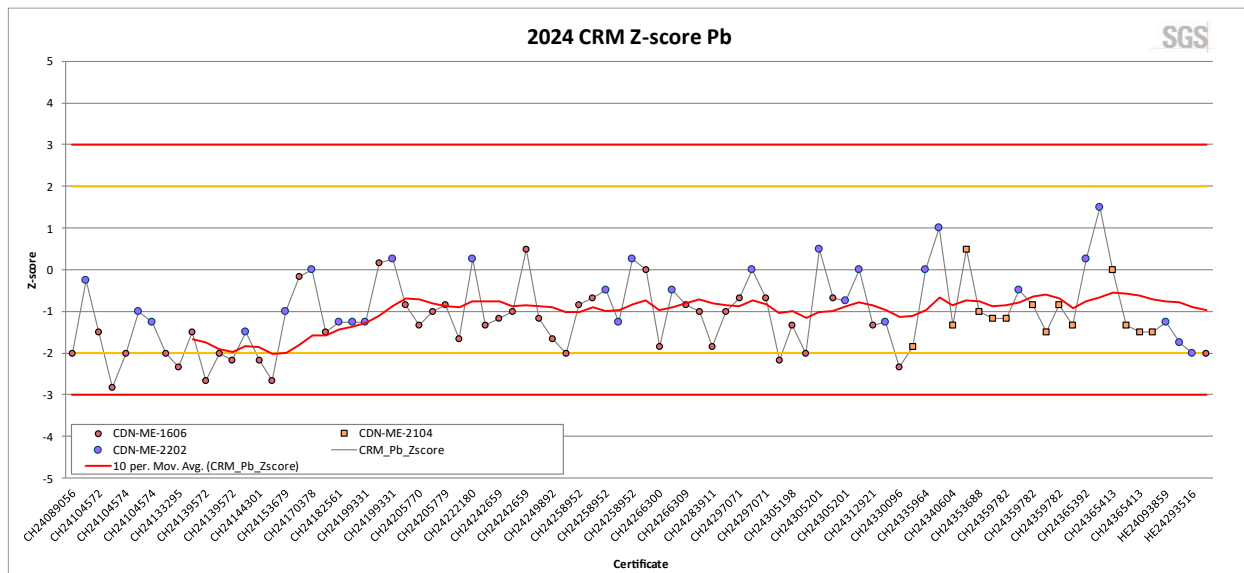
**Figure 11-8 CRM Control Chart for Zn for the 2023 Drill Program**



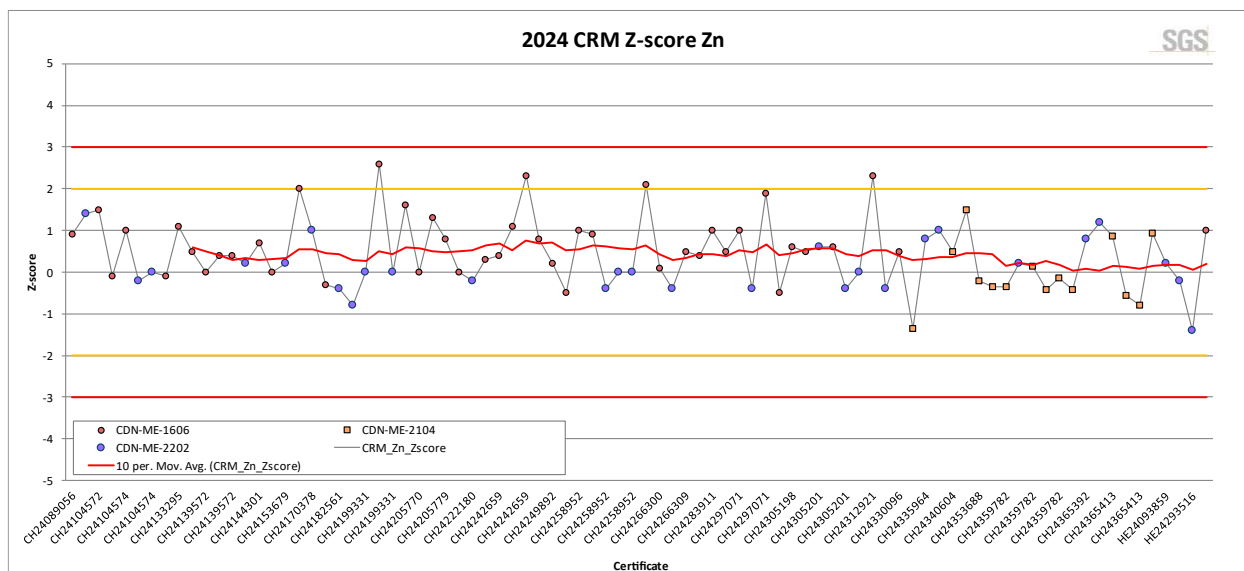
**Figure 11-9 CRM Control Chart for Ag for the 2024 Drill Program**



**Figure 11-10 CRM Control Chart for Pb for the 2024 Drill Program**

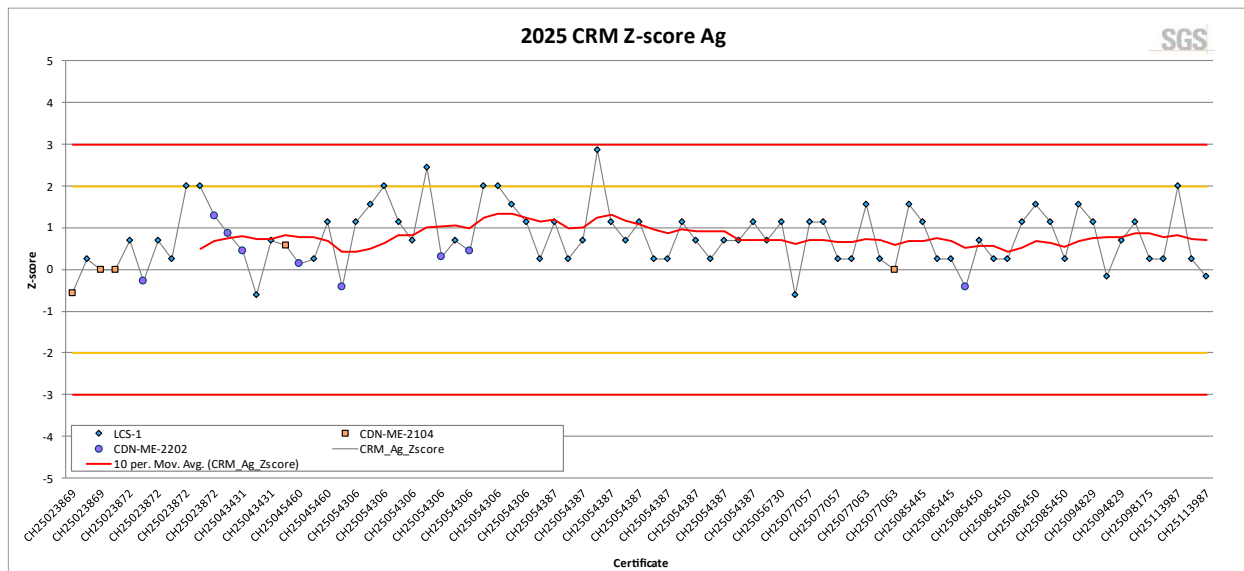


**Figure 11-11 CRM Control Chart for Zn for the 2024 Drill Program**

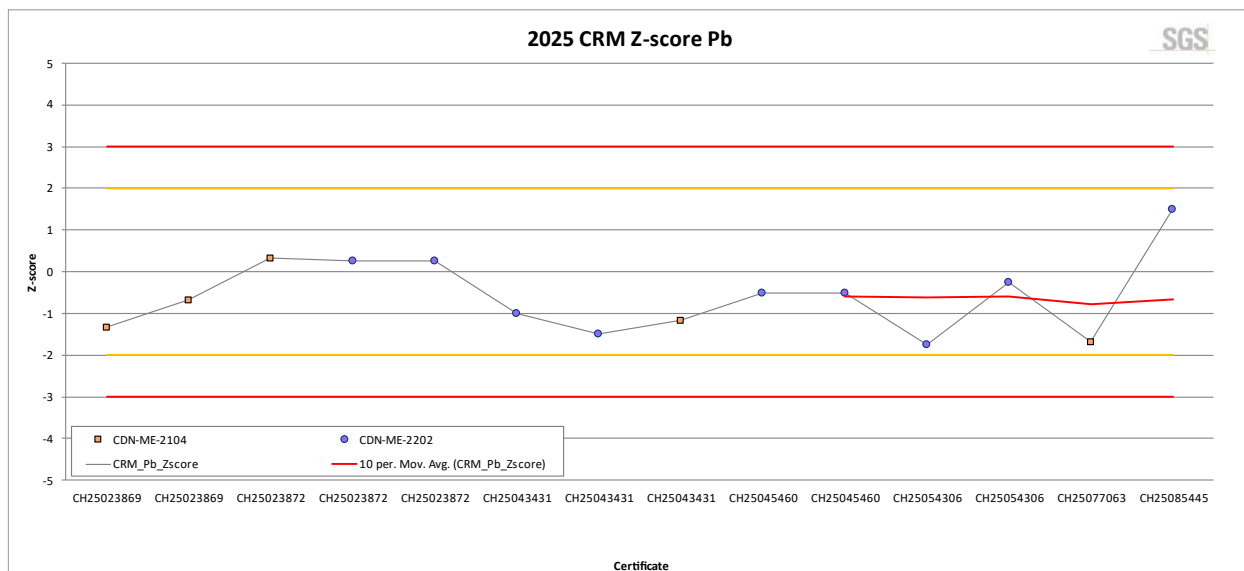


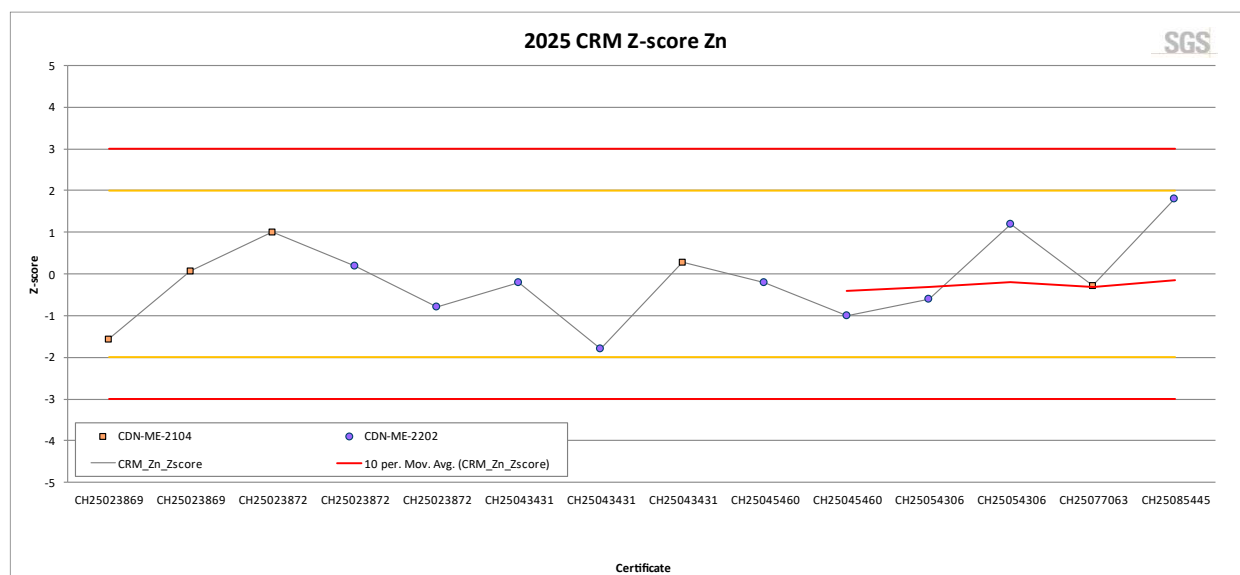


**Figure 11-12 CRM Control Chart for Ag for the 2025 Drill Program**



**Figure 11-13 CRM Control Chart for Pb for the 2025 Drill Program**



**Figure 11-14 CRM Control Chart for Zn for the 2025 Drill Program**

### 11.7.2 Blank Material

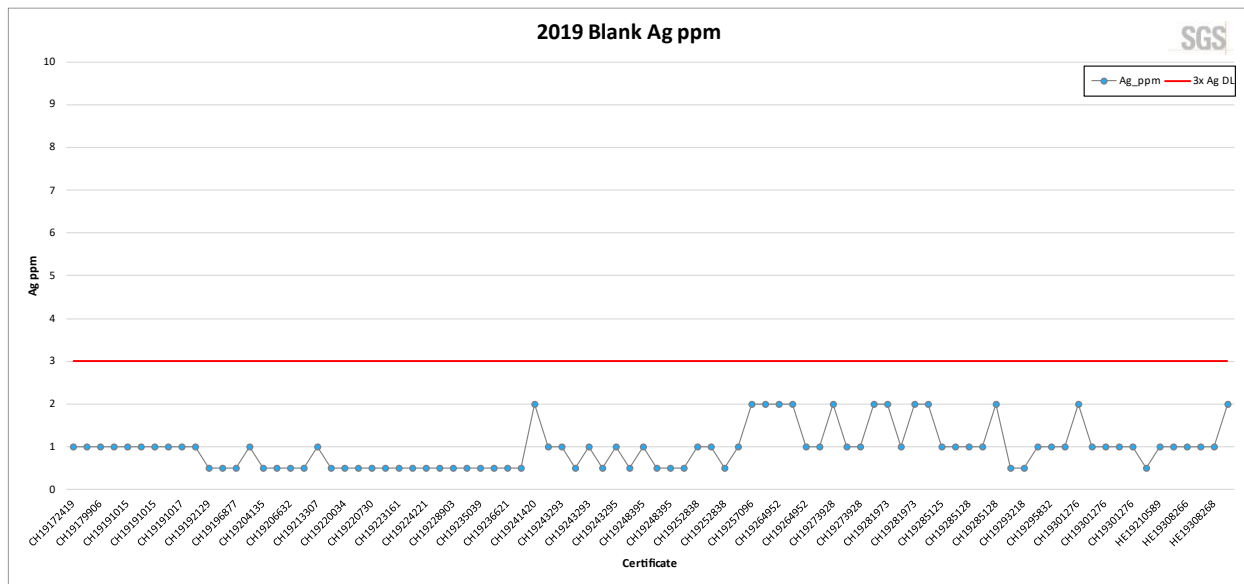
Blank samples comprising either cement (2019-2022) or obsidian (2023-2025) from local sources in were inserted into the sample stream in the field to determine the degree of sample carryover contamination after sample collection, particularly during the sample preparation process. This material does not have certified values established by a third party through round robin lab testing.

The QA/QC program from 2019 – 2025 included the insertion of a total of 580 blank samples (Table 11-3). For blank sample values, failure is more subjective. Some carryover within sample batches is to be expected in routine sample preparation. To minimize sample carryover within a batch, equipment is cleaned thoroughly with compressed air to remove any remaining loose material. For routine protocols, with samples of similar weights, sample carryover is usually considered acceptable if it is less than 1.0%. To ensure no batch-to-batch carryover occurs, standard quality control procedures include passing barren wash material through crushing and pulverising equipment at the start of each new batch of samples.

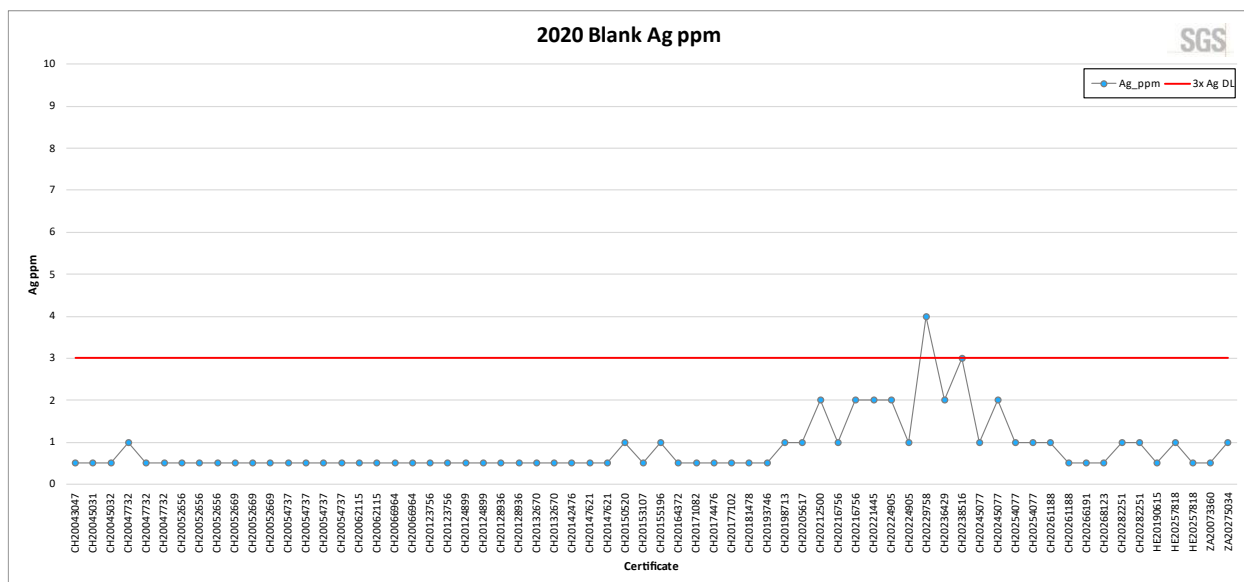
Evaluation of blank samples using a failure ceiling for Ag of 3 ppm (3x detection limit) indicates that the combined blank failure rate from 2019 – 2025 was 0.3%. The highest blank samples returned values of 2 ppm Ag (Figure 11-15 to Figure 11-21).

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

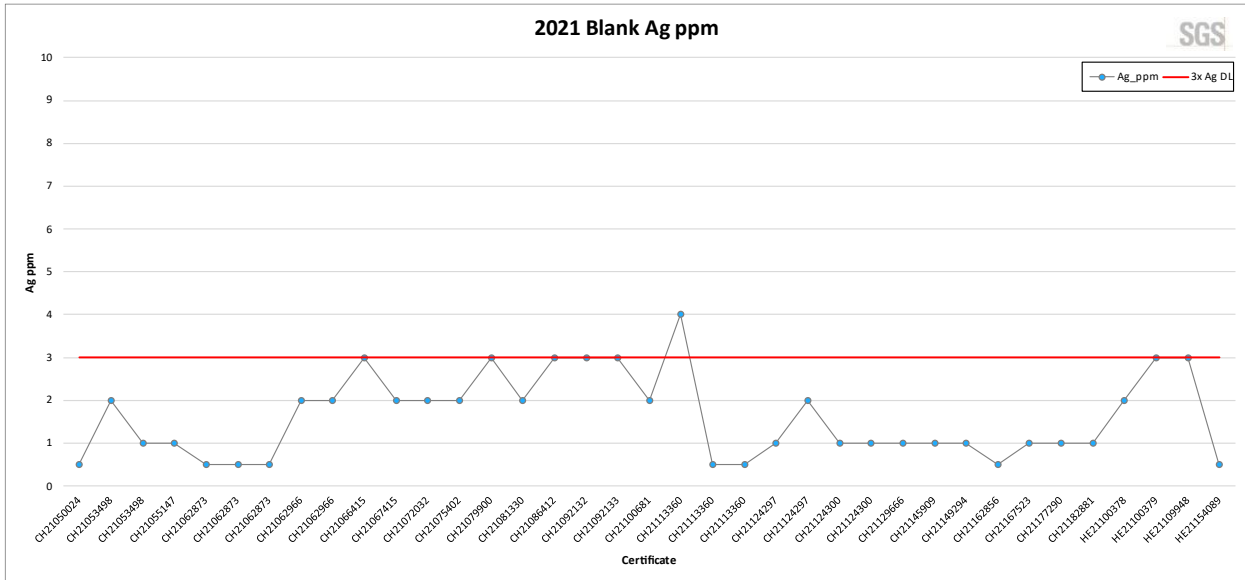
**Figure 11-15 Blank Sample Chart for Ag for the 2019 Drill Program**



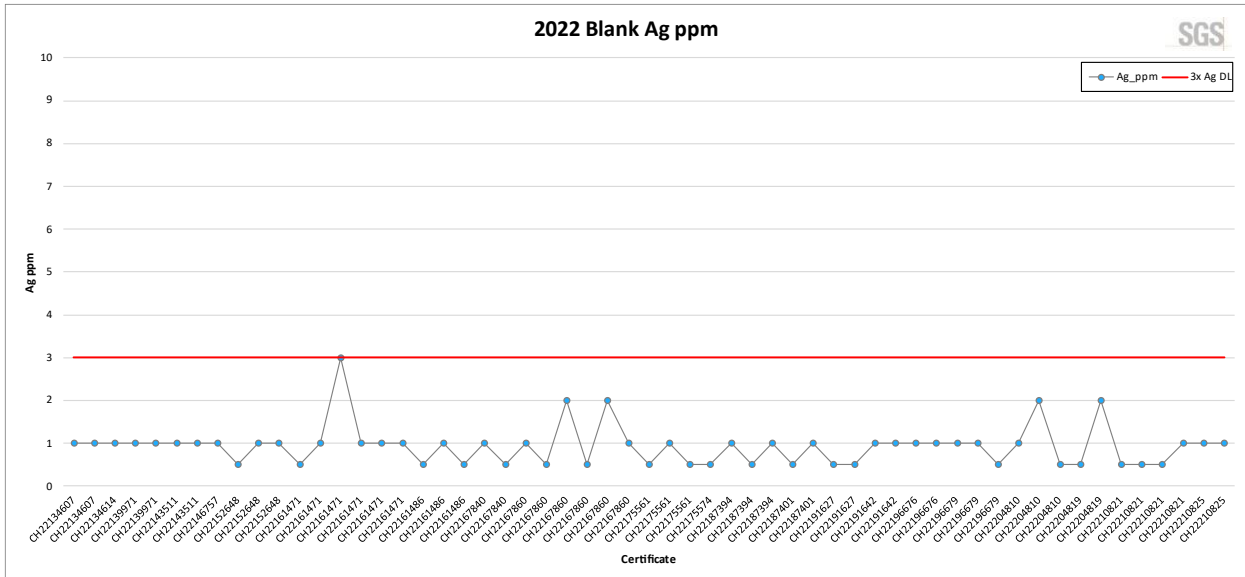
**Figure 11-16 Blank Sample Chart for Ag for the 2020 Drill Program**



**Figure 11-17 Blank Sample Chart for Ag for the 2021 Drill Program**

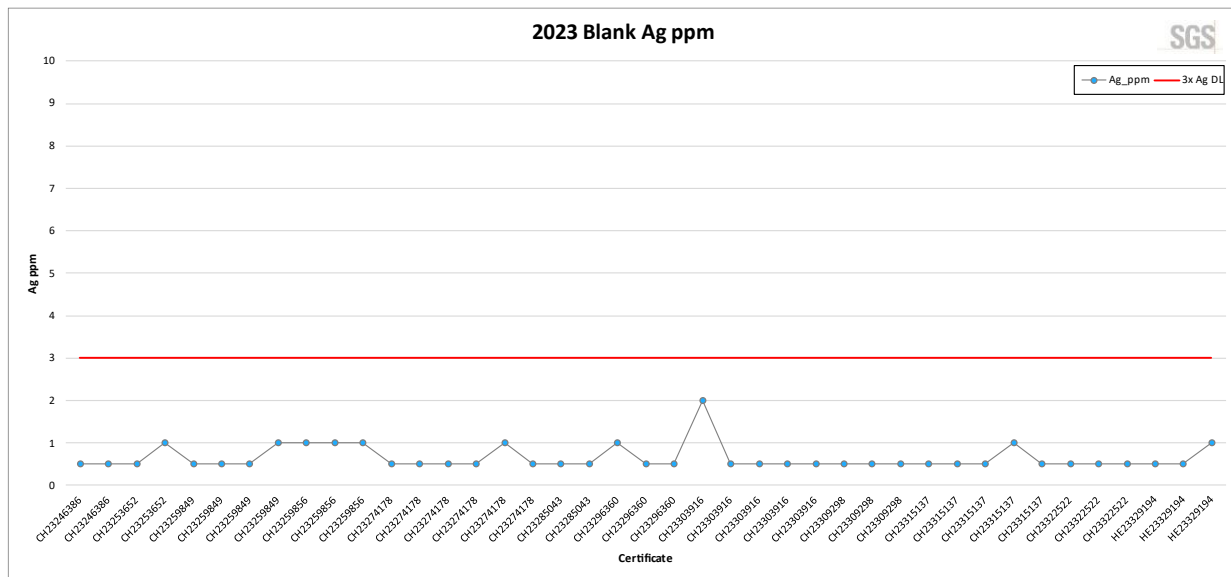


**Figure 11-18 Blank Sample Chart for Ag for the 2022 Drill Program**

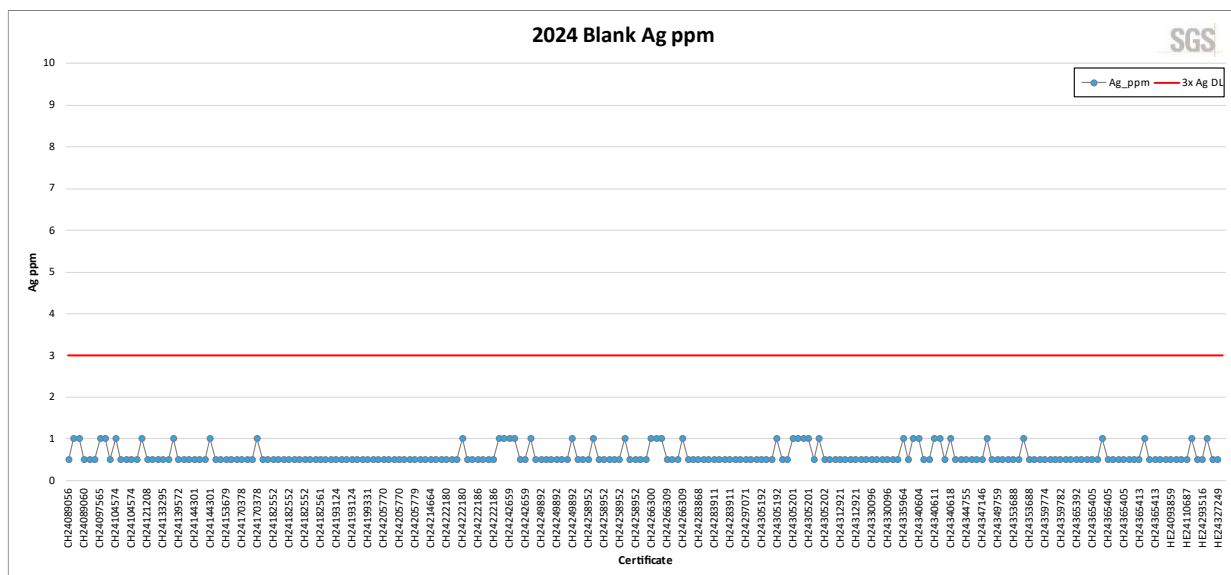


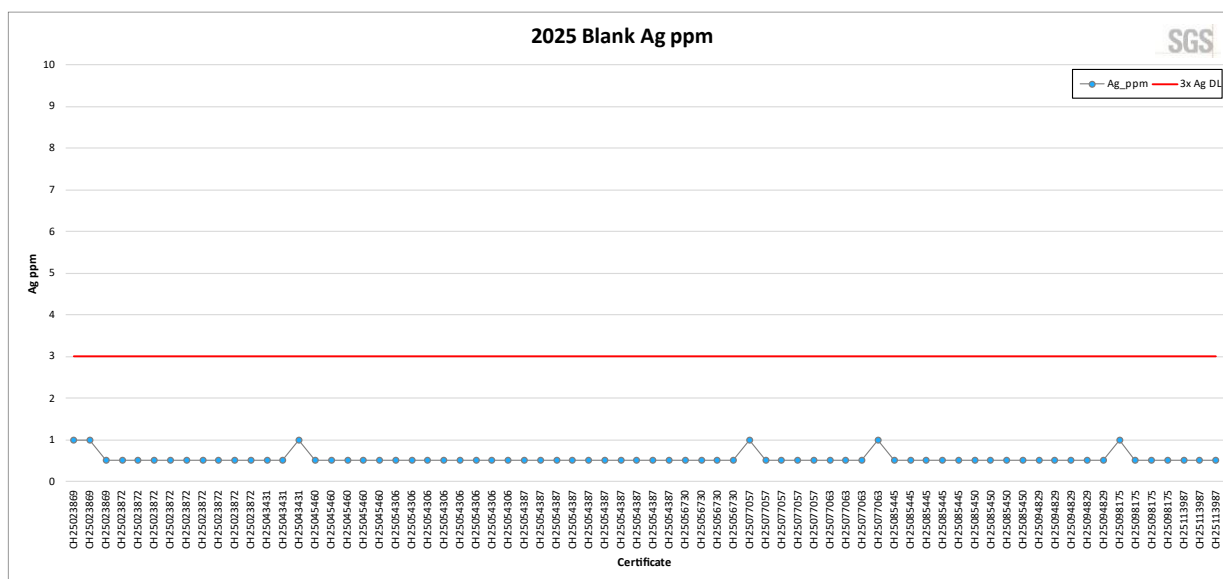


**Figure 11-19 Blank Sample Chart for Ag for the 2023 Drill Program**



**Figure 11-20 Blank Sample Chart for Ag for the 2024 Drill Program**



**Figure 11-21 Blank Sample Chart for Ag for the 2025 Drill Program**

### 11.7.3 Duplicate Material

Kootenay's QA/QC program from 2019 – 2025 included the insertion of field duplicate, coarse reject, and pulp duplicate samples. From 2019 – 2025 a total of 212 field duplicates (¼ core), 205 coarse reject duplicates, and 205 pulp duplicate samples were assayed (Table 11-3). Duplicate samples were analyzed at the primary lab (ALS) to evaluate analytical precision and sampling error.

Figure 11-22 to Figure 11-24 illustrate the comparative assay results and precision of duplicate sample analyses for Ag, Pb, and Zn.

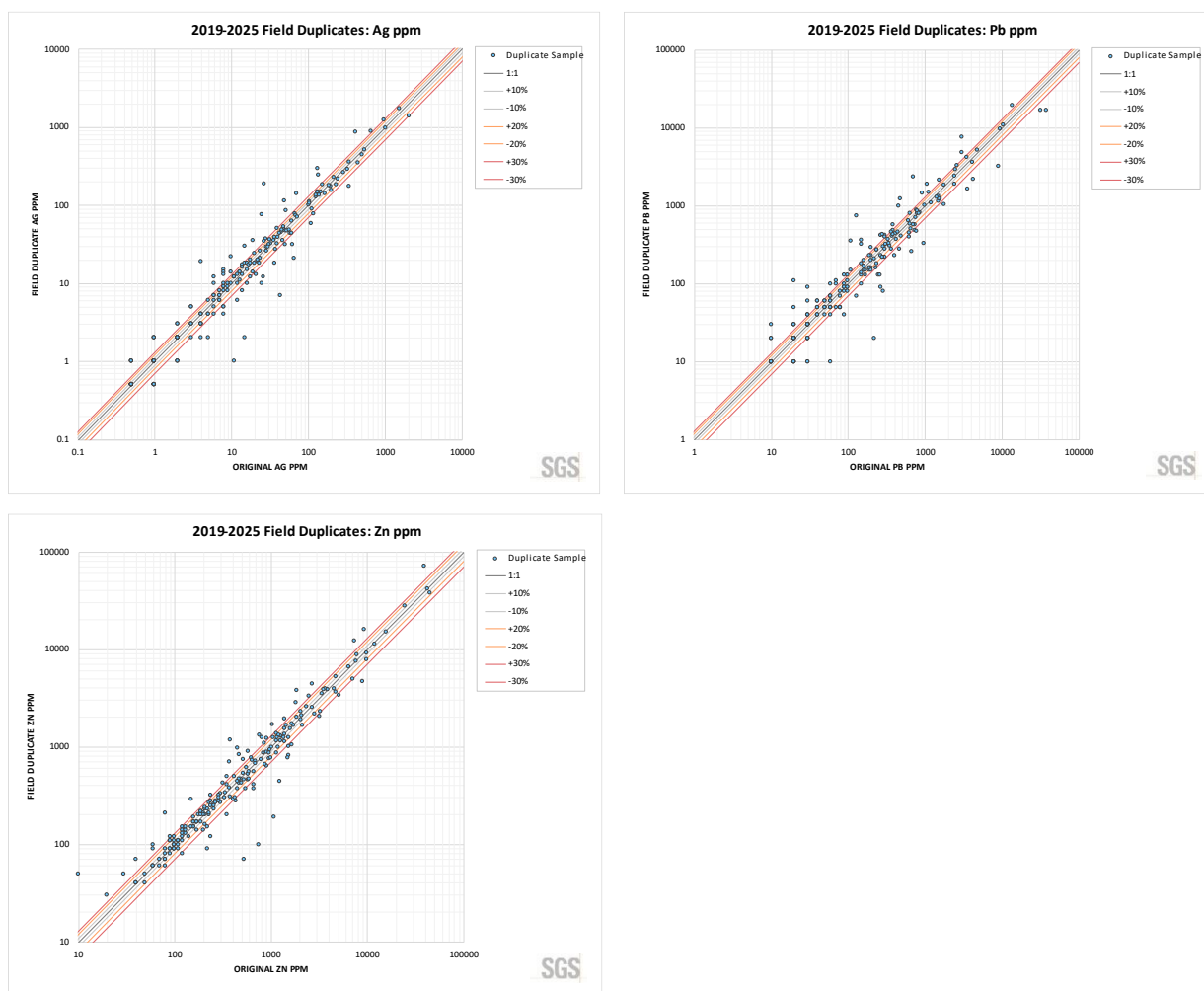
To obtain a relatively accurate estimate of the sampling precision or average relative error a large number of duplicate data pairs are required. Reliably determining the base metal data precision, which typically exhibits relatively small average relative errors (such as 5%), would require 500 – 1000 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).

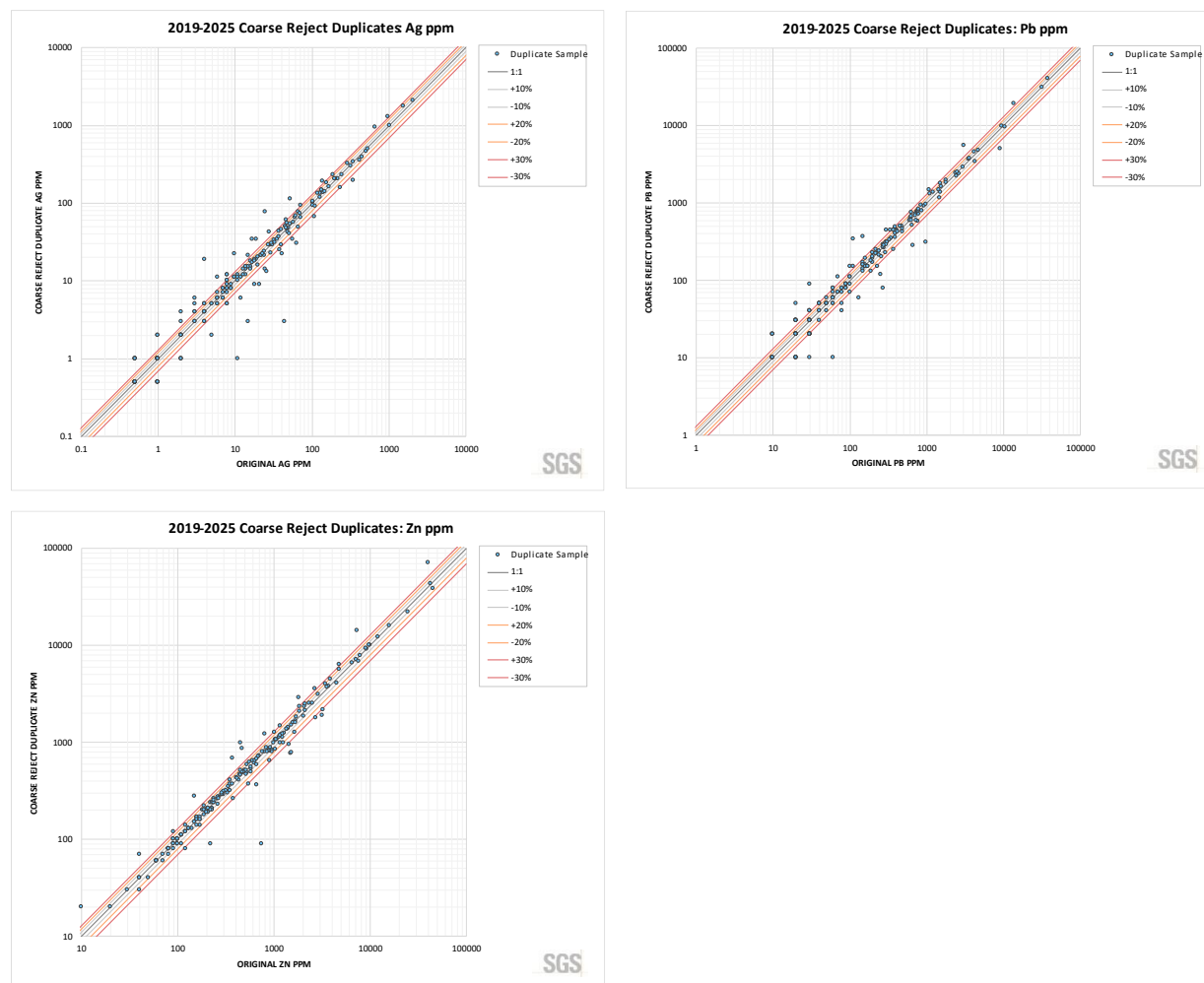
In the case of the Columba deposits, based on the current duplicate data set size for field, coarse reject, and pulp duplicates, analysis of the precision should be considered as preliminary for Pb and Zn, while it should be considered approximate in nature only for Ag until a larger dataset is available. The average relative error as quantified by the Average Coefficient of Variation ( $CV_{AVR}\%$ ) for Ag, Pb, and Zn is shown in Table 11-7, calculated using the root mean square coefficient of variation calculated from the individual coefficients of variation.

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

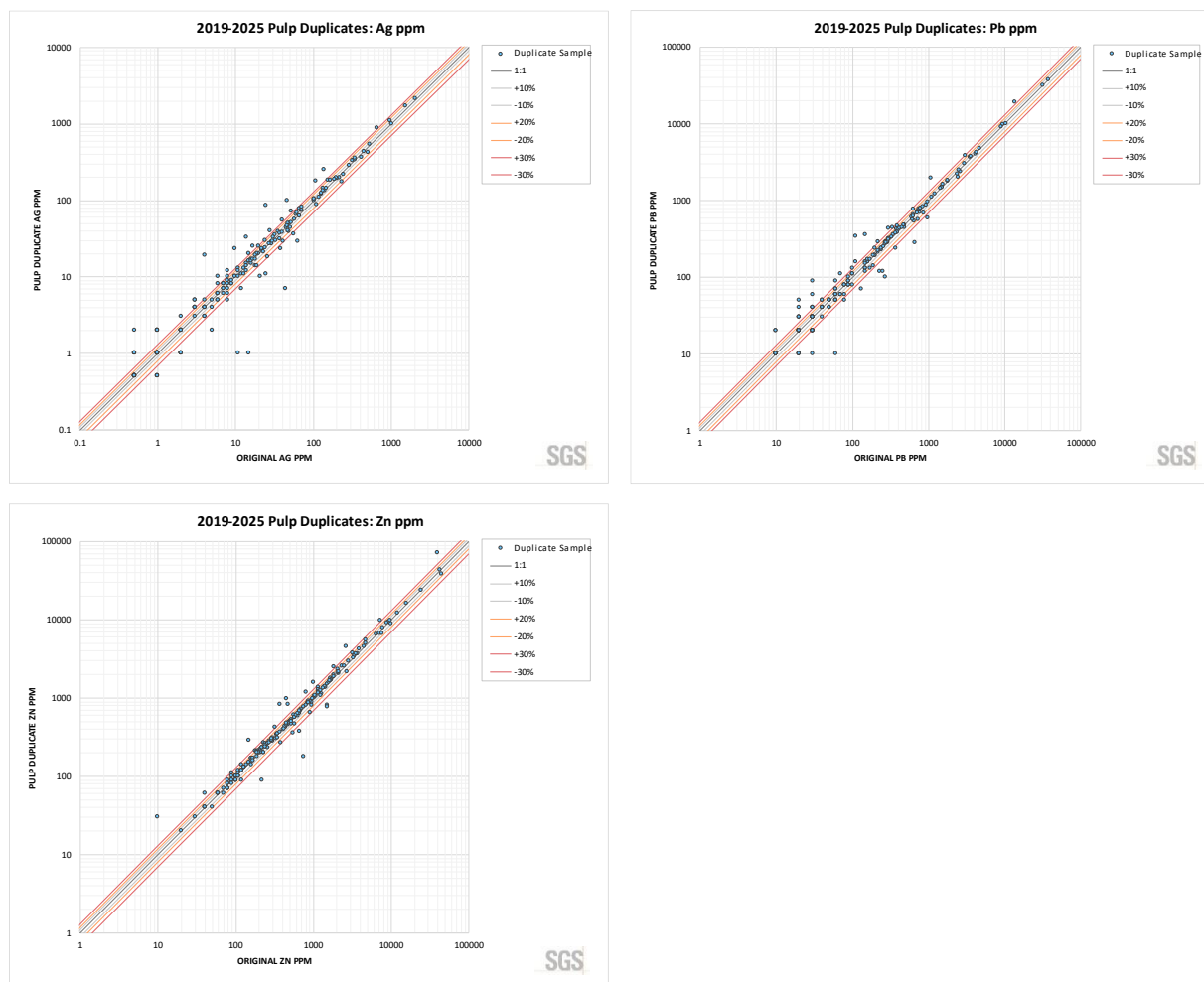
**Table 11-7 Average Relative Error of Duplicate Samples for Ag, Pb, and Zn from 2019-2025**

Drillhole Series	Duplicate Type	Count	Ag CV <sub>AVR</sub> %	Pb CV <sub>AVR</sub> %	Zn CV <sub>AVR</sub> %
2019-2025 Drilling	Field	212 duplicate pairs	29.6	31.0	24.3
2019-2025 Drilling	Coarse Reject	205 duplicate pairs	26.3	22.8	16.2
2019-2025 Drilling	Pulp	205 duplicate pairs	26.8	21.3	14.7

**Figure 11-22 Plots of Field Duplicate Samples for Ag, Pb, and Zn from the 2019-2025 Drill Programs**

**Figure 11-23 Plots of Coarse Reject Duplicate Samples for Ag, Pb, and Zn from the 2019-2025 Drill Programs**

**Figure 11-24 Plots of Pulp Duplicate Samples for Ag, Pb, and Zn from the 2019-2025 Drill Programs**



#### 11.7.4 Check Assaying

The use of a third-party laboratory for routine check assaying was employed by Kootenay in 2021 and in 2024 as an additional QA/QC measure to confirm the accuracy of the primary laboratory assays.

A selection of 67 mineralized pulp samples from the 2019-2021 drilling programs, originally assayed by ALS, were re-assayed at Bureau Veritas Commodities Canada Ltd. (BV) in Vancouver, BC, Canada in 2021. In 2024, 46 mineralized pulp samples from the 2022-2024 drilling programs, originally assayed by ALS, were re-assayed at BV. In total, 113 umpire check samples have been analysed at BV by Kootenay, matching ALS methodology as closely as possible. The BV Vancouver facilities are ISO/IEC 17025 certified. This check assaying represents 0.4% of the total original samples (28,448) collected by Kootenay during the 2019 – 2025 drill programs.

Table 11-8 details the relative bias, average relative error, and correlation coefficient of the umpire check sampling for Ag, and the log x-y plots in Figure 11-25 illustrate the comparative assay results and precision of duplicate sample analyses.

The 2019 to 2024 program umpire check assay results returned from BV, with respect to the corresponding original ALS analyses, indicate that Ag assay accuracy (relative bias) is acceptable and within industry

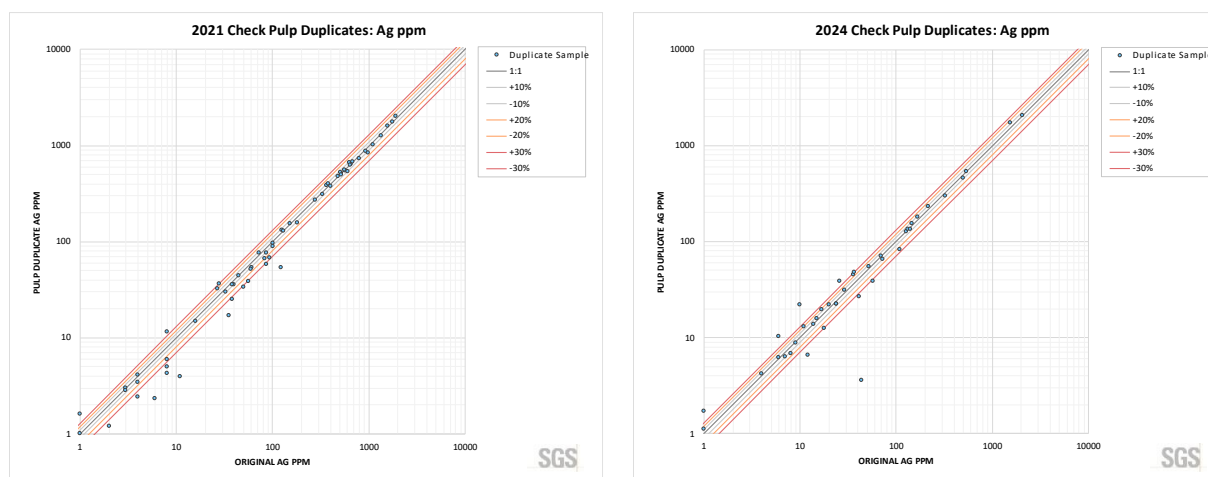


standards. The level of precision (average relative error) observed is considered reasonable for Ag for this style of mineralization.

**Table 11-8 Relative Bias, Average Relative Error, and Correlation Coefficient of Check Samples for Ag from 2021 and 2024**

Drilling Program	Duplicate Type	Primary Lab	Check Lab	Ag Count	Mean Ag ppm (Original)	Mean Ag ppm (Duplicate)	Ag Bias %	Ag CV <sub>AVR</sub> %	Ag r
2019, 2020, 2021	Pulp Duplicates	ALS	BV	67	306.0	292.2	-4.5	24.5	0.997
2022, 2023, 2024	Pulp Duplicates	ALS	BV	46	145.8	146.3	0.4	35.9	0.998

**Figure 11-25 Plots of BV Check Samples for Ag Assayed in 2021 and 2024**



## 11.8 QP's Comments

It is the QP'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 Inferred mineral resources.

## **12 DATA VERIFICATION**

### **12.1 Introduction**

The following section summarises the data verification procedures that were carried out and completed and documented by the Authors for this technical report, including verification of all drill data collected by Kootenay during their 2019 to 2025 drill programs, as of the effective date of this report.

### **12.2 Drill Sample Database**

An independent verification of the assay data in the drill sample database used for the current MRE was conducted. Approximately 20% of the digital assay records were randomly selected and checked against the available laboratory assay certificate reports. Assay certificates were available for all diamond drilling completed by Kootenay. The assay database was reviewed for errors, including overlaps and gapping in intervals, and typographical errors in assay values. In general, the database was in good condition 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. The database is considered of sufficient quality to be used for the current MRE.

The sample preparation, analyses, and security (see Section 11) completed by Kootenay for the Property was reviewed. Based on a review of all possible information, the sample preparation, analyses, and security used on the Project by Kootenay, 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 Inferred mineral resources.

### **12.3 Metallurgical Test Work**

Armitage reviewed the metallurgical work reports made available (see Section 13), for the Property deposits, 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 are reasonable.

### **12.4 Site Visit – Allan Armitage**

Armitage personally inspected the Property on May 24-25, 2024, accompanied by Dale Brittliffe, BSc. P. Geol., Vice President, Exploration of Kootenay Silver. During the site visit, Armitage inspected the core logging and core sampling facilities and core storage areas in camp. Armitage examined several selected mineralized core intervals from recently completed diamond drillholes from the Property. Armitage examined accompanying drill logs and assay certificates and assays were examined against the drill core mineralized zones, and inspected and reviewed current core sampling, QA/QC, and core security procedures.

As drilling and core logging was in progress during the time of the site visit, Armitage had the opportunity to review and discuss the entire path of the drill core, from the drill rig to the logging and sampling facility and finally to the laboratory. Armitage is of the opinion that current protocols in place, as have been described and documented by Kootenay, are adequate.

The Author participated in a field tour of the Property area including visits to several outcrops to review the local geology, the drill, and recent drill sites, and channel sample sites.

As a result of the current site visit, Armitage was able to become familiar with conditions on the Property, was able to review and gain an understanding of the geology and various styles of mineralization, was able

to verify the work done and, on that basis, can review and recommend to Kootenay an appropriate exploration program.

## 12.5 Site Visit – Ben Eggers

Eggers conducted a site visit to the Project on May 28, 2025, accompanied by Dale Brittliffe – Vice President, Exploration, Roberto Jordan – Project Geologist, and Luis Moya – Senior Exploration Geologist of Kootenay Silver. The site visit consisted of a field tour of the Property and inspection of the core logging and sampling facilities and core storage areas at the Project.

The field tour of the Property area included visits to several outcrops and surface excavations to review the local geology and recent drill sites. All areas were easily accessible by road and a series of walking trails. Validation checks of drillhole collar locations were completed for a selection of 10 holes spanning Kootenay drilling programs completed in 2019, 2021, 2022, 2023, 2024 at Columba. Collars were appropriately marked and labeled with concrete markers placed at drillholes denoting holeID, dip, azimuth, and hole length. Individual hole monuments were observed, and collar locations were validated with the use of a handheld GPS. Drillhole collar positions reported in the Company database were validated as surveyed, with minor discrepancies noted being within the handheld GPS instrumental error.

During the site visit selected mineralized core intervals were examined from 13 diamond drillholes intersecting D, F and J veins and spanning Kootenay drilling programs completed from 2019 to 2024 at Columba. The accompanying drill logs, long sections, and assays were examined against the drill core mineralized zones. Current core sampling, QA/QC and core security procedures were reviewed. Core boxes for drillholes reviewed are properly stored in the warehouse, easily accessible and well labelled. Sample tags are present in the boxes, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones.

The site visit to the Columba core logging, sampling, and storage facilities included the inspection of the areas used for the geologists to log and photograph core, the area used to measure density, the areas for cutting and sampling core, the sample storage area, the core storage areas, and the office area. Drilling had been suspended during the time of the site visit. The entire path of the drill core, from the drill rig to the logging and sampling facility and finally to the laboratory was reviewed and discussed. The QP is of the opinion that current protocols in place, as have been described and documented by the Company, are adequate.

As a result of the site visit, the QP was able to 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 the Company an appropriate exploration program.

The site visit completed in May 2025 is considered as current, per Section 6.2 of NI 43-101CP. To the Authors knowledge there is no new material scientific or technical information about the Property since that personal inspection. The technical report contains all material information about the Property.

## 12.6 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, Eggers is of the opinion that the database is of sufficient quality to be used for the current Inferred MRE.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

### 13.1 Introduction

Preliminary scoping level metallurgical test work has been conducted by Kootenay on mineralized material from the Columba project. Test work performed has included sample chemistry and mineralogy, comminution tests, whole ore cyanidation, and floatation/cyanidation. Test work completed by Kootenay to date is summarized in Table 13-1.

**Table 13-1 Metallurgical Test Work Summary Table**

Year	Laboratory/Location	Report no.	Deposit Analyzed	Test Work Performed
2024	McClelland Laboratories, Nevada	MLI4883	Columba	Sample chemistry and mineralogy, comminution tests, whole ore cyanidation, and floatation/cyanidation

### 13.2 Scoping Level Testing (McClelland Laboratories, 2024)

The following is extracted from the McClelland Laboratories Inc. (MLI) report dated October 4, 2024 (Olsen, 2024).

#### 13.2.1 Sample Origin and Composite Assembly

A total of 89 samples of quarter-sawn drill core comprising eight composites were received by MLI on January 26, 2023. Test material was sourced from 2020 and 2021 drilling on the D, F and J-Z zone vein systems identified as "CMet-001 - CMet004" (D Vein Samples), "CMet005 - CMet007" (F Vein Samples) and "CMet-008" (JZ Zone Samples). Upon receipt, the samples were designated by MLI as 4883-001 through 008 respectively. Composites weighed 13 to 23 kg. A master composite was prepared by combining 2 kg from each of the eight individual composites.

#### 13.2.2 Summary

A scoping metallurgical testing program was conducted to characterize eight variability composites from the Columba project and to determine amenability to cyanidation treatment for recovery of silver. Leaching procedures were optimized with a single master composite, prior to testing the eight individual composites. A single flotation/cyanidation test was also conducted on each individual composite.

One of the eight composites was relatively very high in grade and contained 762 g/t Ag, 3.16% Zn, and 1.06% Pb. Silver grades of the remaining composites ranged from 63 to 247 g/t Ag. Zinc grades were 0.715% or less and lead grades were 0.212% or less. Sulfide sulphur contents for all eight composites were 0.33% or less. Detailed mineralogy, conducted by ALS Metallurgy, indicated that the contained silver occurred primarily as acanthite/argentite or native silver. Most of the zinc and lead occurred as oxides. Aqua regia digestion/leach assays indicate that roughly 0-50% of the contained silver was locked in silicate minerals, which will not be recoverable in any conventional processing circuit. Nearly all of the silver in the highest grade composite (4883-004) was extractable by aqua regia, suggesting recovery from this composite was not limited by locking in silicate minerals. On average (grade-weighted average), results indicate that 16% of the contained silver was locked in silicate minerals. This value is skewed by the differing character and relatively high grade of composite 4883-004.

Master composite optimization testing results are presented in Table 13-2. Individual composite leaching results are presented in Table 13-3. Flotation/cyanidation testing results are included in the detailed report.

**Table 13-2 Summary Metallurgical Results, Bottle Roll Tests, Columba Master Composite MC-1**

Feed Size	NaCN Conc., g/L	Special Procedure	Ag Recovery, %	gAg/mt ore				Reagent Requirements, kg/mt ore	
				Ext'd.	Tail	Calc'd. Head	Head Assay	NaCN Cons.	Lime Added
80%-75µm	2.0	----	71.1	170	69	239	213	0.60	1.4
80%-38µm	2.0	----	73.7	165	59	224	213	0.57	1.5
80%-25µm	2.0	----	75.6	177	57	234	213	0.46	1.7
80%-75µm	0.5	----	71.6	159	63	222	213	0.32	1.7
80%-75µm	1.0	----	72.7	165	62	227	213	0.40	1.5
80%-75µm	1.0	1)	69.6	158	69	227	213	0.41	1.7
80%-75µm	2.0	2)	77.7	178	51	229	213	1.34	3.5
100%-1.7mm	1.0	----	42.2	98	134	232	213	0.33	1.5

1) 1.0 kg/mt Pb(NO<sub>3</sub>)<sub>2</sub> added.

2) Mn pre-leach.

Results show that the master composite was amenable to milling/cyanidation treatment. A silver recovery of 71.1% was observed at an 80%-75µm feed size and 2.0 gNaCN/L cyanide concentration. Recovery was only incrementally improved by grinding to 80%-38µm or 25µm. Adding lead nitrate was ineffective for improving silver recovery. One test was conducted with a reducing sulfuric acid leach (i.e. “Mn pre-leach”) prior to cyanidation. Recovery in this case was only incrementally improved.

Leach rates were moderate and extraction was substantially complete within the first 48 hours of leaching. Cyanide consumption was moderate and generally ranged from 0.32 to 0.60 kgNaCN/mt ore. Lime requirements for pH control generally were low and ranged from 1.4 to 1.7 kg/mt.

Recovery was much lower (42.2%) when the feed size was coarsened to 100%-1.7mm. This indicates that the master composite material would not be amenable to heap leaching treatment.

It should be noted that roughly half of the silver contained in the master composite came from the high-grade composite 4883-004, so master composite testing results are skewed by the differing character of this composite.

The individual variability composites generally were amenable to milling cyanidation treatment at the 80%-75µm grind size. Silver recovery ranged from 49.2% to 81.7% in 96 hours of leaching at a 2.0 gNaCN/L concentration. Recovery tended to be higher for the higher grade composites and the grade-weighted average silver recovery was 69.8% at the higher cyanide concentration.

The variability composites generally were somewhat sensitive to cyanide concentration and the grade-weighted average silver recovery was 8.2% lower at 0.5 gNaCN/L than at 2.0 gNaCN/L. This sensitivity to cyanide concentration was notably not observed for the high-grade composite (4883-004) or during testing of the master composite.

Variability composite leach rates were moderate and were consistently faster at the higher cyanide concentration. Extractions at the lower cyanide concentration would generally be incrementally improved by extending the leach cycle beyond 96 hours.

Cyanide consumption was generally low and averaged 0.48 kgNaCN/mt ore at the 2.0 gNaCN/L concentration. Consumption was higher for composite 4883-004 (1.06 to 1.34 kgNaCN/mt ore). The higher consumption in this case was primarily due to the high silver extraction. The stoichiometric cyanide requirements for leaching silver account for roughly half of the observed consumptions. Lime requirements for pH control were low and averaged 1.7 kg/mt.



**Table 13-3 Summary Metallurgical Results, Bottle Roll Tests, Columba Variability Composites, 80%-75µm Feed Size**

Composite	NaCN Conc., g/L	Ag Recovery, %	gAg/mt ore				Reagent Requirements kg/mt ore	
			Ext'd.	Tail	Calc'd. Head	Head Assay	NaCN Cons.	Lime Added
4883-001	0.5	42.5	34	46	80	81	0.18	1.9
4883-001	2.0	51.9	41	38	79	81	0.26	1.3
4883-002	0.5	61.2	158	100	258	247	0.39	1.9
4883-002	2.0	67.3	179	87	266	247	0.36	1.1
4883-003	0.5	44.4	28	35	63	64	0.14	1.6
4883-003	2.0	49.2	31	32	63	64	0.09	0.9
4883-004	0.5	76.2	575	180	755	764	1.06	2.4
4883-004	2.0	75.1	593	197	790	764	1.34	1.1
4883-005	0.5	45.3	101	122	223	217	0.31	1.8
4883-005	2.0	67.0	154	76	230	217	0.60	1.4
4883-006	0.5	53.8	35	30	65	63	0.22	2.0
4883-006	2.0	66.7	48	24	72	63	0.31	1.7
4883-007	0.5	59.5	125	85	210	192	0.33	3.3
4883-007	2.0	81.7	188	42	230	192	0.49	2.4
4883-008	0.5	44.7	97	120	217	212	0.33	1.6
4883-008	2.0	58.0	134	97	231	212	0.41	1.4
Average	0.5	61.6*	144	90	234	230	0.37	2.1
Average	2.0	69.8*	171	74	245	230	0.48	1.4

\* Grade-weighted averages.

Results from flotation are presented in the detailed report. The variability composites generally responded poorly to floatation concentration treatment. Flotation silver recoveries ranged from 43.6% to 64.8%. Combined rougher floatation and flotation tailings cyanidation silver recoveries ranged from 64.6% to 87.5%. These recoveries are higher than the whole ore cyanidation recoveries, but do not account for any silver losses expected to occur during flotation concentrate processing. Further testing, including concentrate cyanidation testing, would be required to estimate these potential losses.

### 13.2.3 Recommendations

It is recommended that both CN soluble assays and aqua regia digestion/leach assay be conducted on exploration samples to obtain preliminary information about silver liberation in the various Columba mineralization types.

Further testing may be warranted on the high-grade vein composites (particularly 4883-004 and 007). Results indicate that only minor portions of silver are encapsulated in silicates in the composites. The high aqua regia extractions from these composites suggest that recoveries may be improved with pressure

oxidation pre-treatment. In future testing programs, it is recommended that vein and wall-rock type material be tested separately.

## 14 MINERAL RESOURCE ESTIMATES

### 14.1 Introduction

The following section describes the MRE for the Columba deposit. Completion of the MRE involved the assessment of a validated drill hole database, which included all data for surface drilling completed between July 2019 and March 2025. Completion of the MRE also included the construction of three-dimensional (3D) mineral resource models (resource domains) and 3D models of historical underground workings, and the incorporation of 3D topographic surface models and available written reports.

The Inverse Distance Squared (“ID<sup>2</sup>”) calculation method restricted to mineralized domains was used to interpolate grades for Ag (g/t), Pb (ppm), and Zn (ppm) into block models for all deposit zones.

Inferred mineral resources are reported in the summary tables in Section 14.11. The MRE presented below takes into consideration that all deposits on the Property may be mined by underground mining methods.

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

### 14.2 Drillhole Database

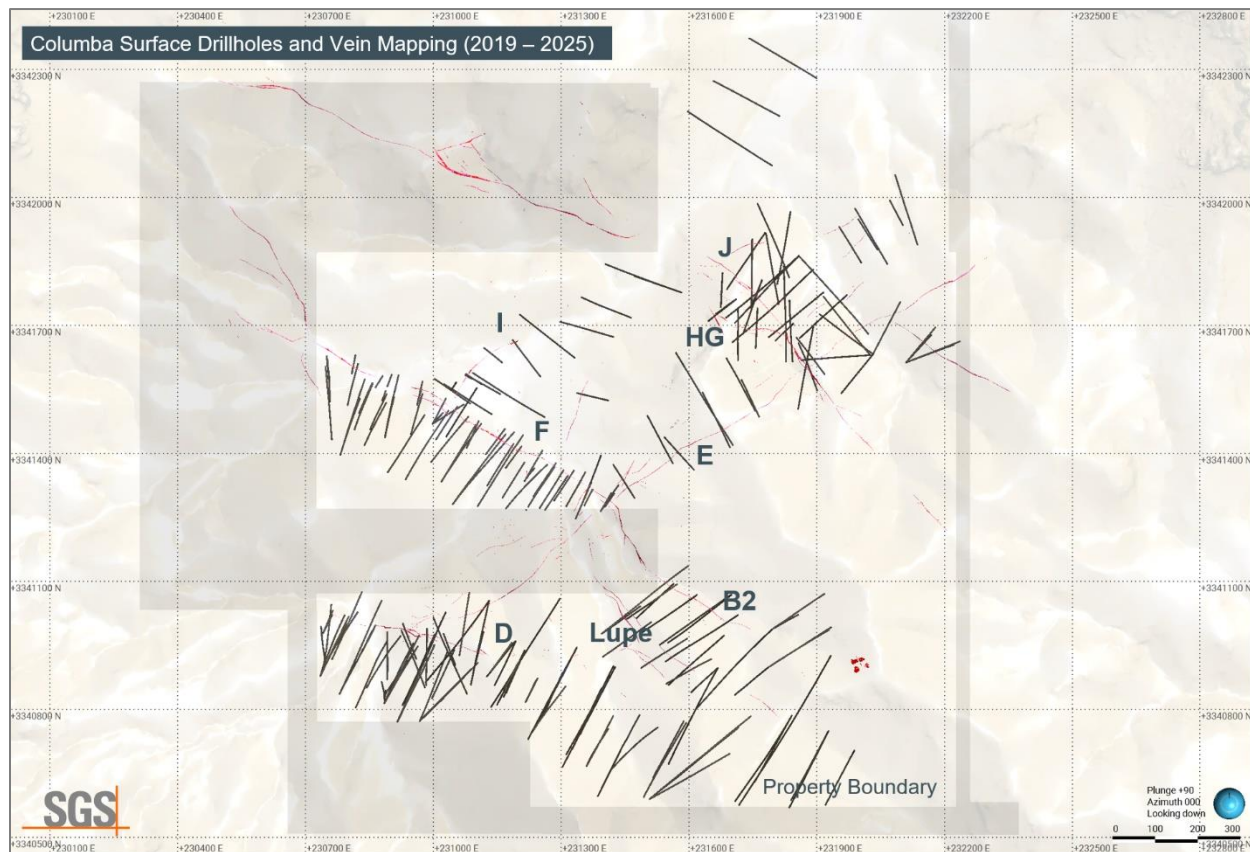
To complete the current MRE for the Property, a database comprising a series of comma delimited spreadsheets containing surface diamond drill hole information was provided by Kootenay for the Columba deposit. The database included hole location information, down-hole survey data, assay data for all metals 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), Pb (ppm), and Zn (ppm). After review of the database, the data was then imported into Leapfrog Geo version 2024.1.2 software (Leapfrog) for modelling of mineralization domains, statistical analysis, block modeling and resource estimation. No errors were identified when importing the data. The data was validated in Leapfrog and no erroneous data, data overlaps or duplication of data was identified.

The database provided by Kootenay for the MRE included data for 217 surface diamond drill holes, completed on the Property, totalling 53,476 m (Table 14-1) (Figure 14-1 and Figure 14-2). The database totals 28,448 assay intervals representing 45,805 m of drilling. The average assay sample length is 1.61 m.

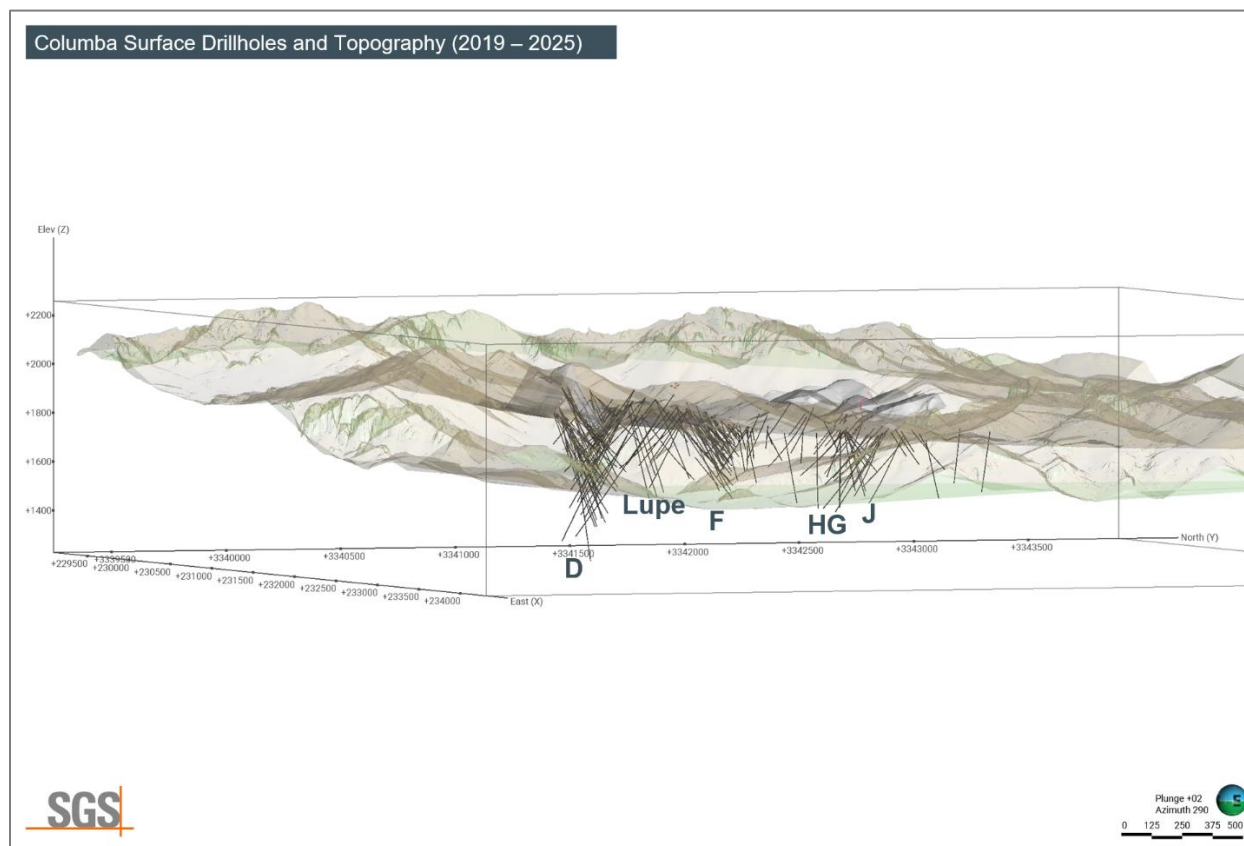
The database was checked for typographical errors in drill hole locations, down-hole surveys, lithology, assay values, and supporting information on source of assay values. Overlaps and gapping in survey, lithology, and assay values in intervals were checked. All assays had analytical values for Ag (g/t),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

**Table 14-1 Project Drillhole Database**

Deposit Area	Drill Holes	Drill Hole #	Total Length (m)	No. of Assays	Tot. Assay Length (m)	Avg. Assay Length (m)	No. of Density Measurements
Columba	217	CDH-19-001 to CDH-25-212	53,475.86	28,448	45,804.92	1.61	4,049

**Figure 14-1 Plan View: Distribution of Surface Drillholes on the Property on Topography (WGS 84)**

**Figure 14-2 Isometric View to Northwest: Distribution of Surface Drillholes on the Property on Topography (WGS84)**



### 14.3 Mineral Resource Modelling and Wireframing

For the current MRE, in collaboration with Kootenay, SGS constructed a total of 17 three-dimensional (“3D”) resource models and three lithology models (Table 14-2) (Figure 14-3 to Figure 14-5), constructed in Leapfrog Geo version 2025.1.0.

Lithology models were produced for the rhyolite and intrusive host rocks. The Columba vein system was modelled in its entirety (mineralized and non-mineralized portions) using the Leapfrog Geo Vein tool incorporating drilling data, surface mapping, and structural data. The vein system comprises three dominant structural orientations; 1) steeply dipping WNW-trending, 2) steeply dipping NNW-trending, and 3) moderately dipping ENE-trending structures. Orientation 2 structures are interpreted as terminating against orientation 1 structures. Orientation 3 structures are interpreted as crosscutting, or being crosscut by, all other structures. Mineralized veins crosscut both rhyolite and intrusive host rocks.

Individual vein mineralization models, the resource domains, were constructed using the Leapfrog Geo Vein tool from assays greater than 80 ppm Ag over a minimum down hole length of 1.9 m, with a minimum of 5 holes per domain.

A digital elevation surface model (LiDAR) was provided for the Property area. All 3D resource models were clipped to topography and limited to the Property boundary.



Resource and lithology models include:

- Resource Domains (17 models)
  - D vein zone (3 models), including D, DHW, and DFW veins
  - F vein zone (7 models), including F, FHW, FHW2, FFW, FFW2, FFW3, and S veins
  - Lupe vein zone (2 models), including Lupe and B2 veins
  - HG vein zone (3 models), including HG, J, and Z veins
  - E & I vein zone (2 models), including E and I veins
- Lithology Models (3 models)
  - Volcanic, intrusive, and vein (mineralization and non-mineralized)

Mineralization in the D vein zone extends for 1,200 m along strike and up to 450 m vertically (main D vein structure) and is primarily hosted in a single structure with minor hanging wall and foot wall splay structures. The main D vein structure dips at 79° towards 202° (SSW) with local variations in strike ( $\pm 15^\circ$ ) and dip ( $\pm 5^\circ$ ). The D vein hanging wall and foot wall splay structures have mineralized strike extents of 200 to 400 m with vertical extents of 150 to 250 m.

Mineralization in the F vein zone extends for 800 m along strike and up to 250 m vertically (main F vein structure) with multiple sub-parallel hanging wall and foot wall splay structures. The main F vein structure dips at 75° towards 208° (SSW) with local variations in strike ( $\pm 15^\circ$ ) and dip ( $\pm 5^\circ$ ). The D vein hanging wall and foot wall splay structures have mineralized strike extents of 200 to 300 m with vertical extents of 150 to 250 m.

Mineralization in the Lupe vein extends for roughly 900 m along strike and up to 250 m vertically, however the structure remains sparsely drill tested along significant portions of the interpreted strike and dip extent. The Lupe vein structure dips at 78° towards 232° (SW). Mineralization in the B2 vein extends for 150 m along strike and up to 200 m vertically within a structure that dips at 70° towards 217° (SW).

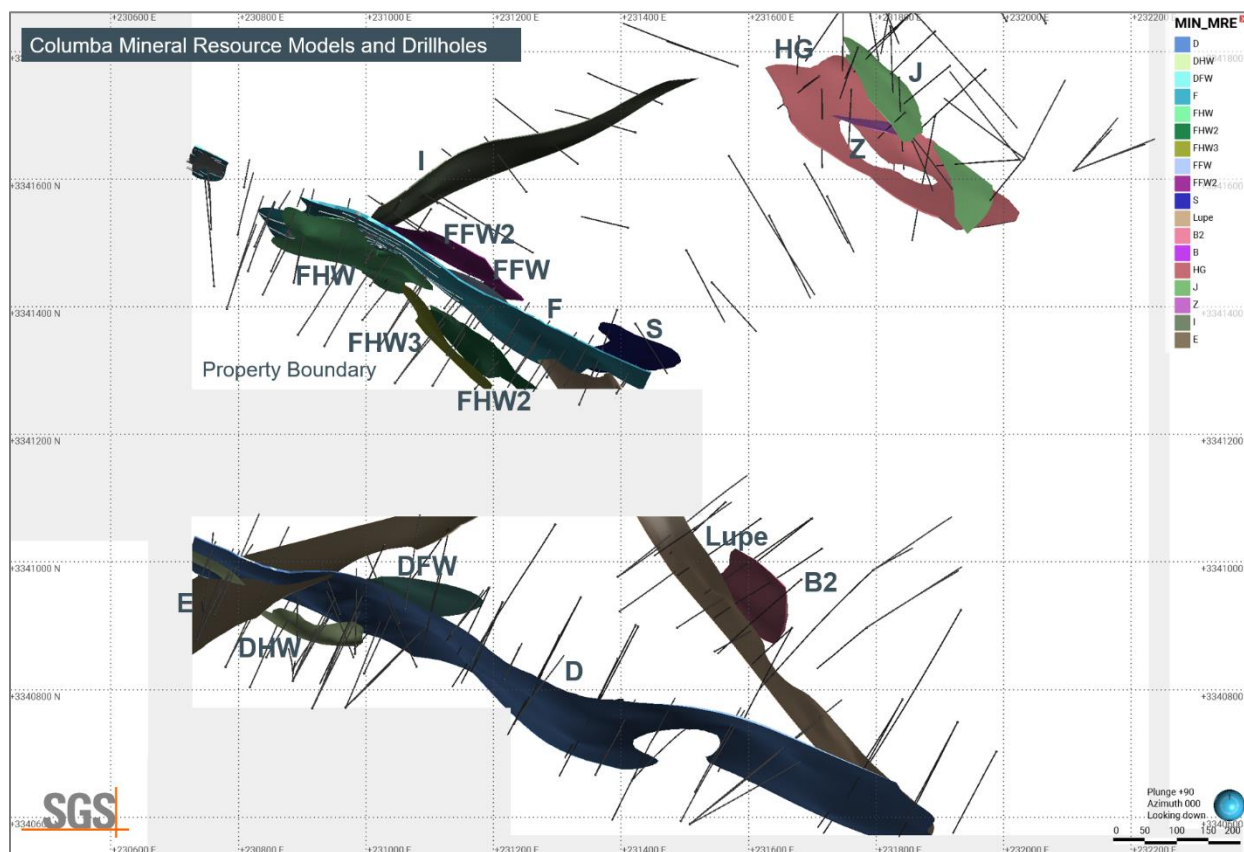
Mineralization in the HG zone differs from the previously mentioned zones in that it is hosted within structures that dip towards the northeast. Mineralization in the HG vein extends for 375 m along strike and up to 175 m vertically within a structure that dips at 65° towards 040° (NE), mineralization in the J vein extends for 300 m along strike and up to 175 m vertically within a structure that dips at 75° towards 050° (NE), and mineralization in the Z vein extends for up to 150 m along strike and up to 150 m vertically within a structure that dips at 80° towards 020° (NNE).

The E and I veins trend east-northeast and crosscut or are crosscut by the remainder of the mineralized structures. Mineralization in the E vein extends for 400 m along strike and up to 250 m vertically within a structure that dips at 65° towards 040° (NE), mineralization in the J vein extends for 300 m along strike and up to 175 m vertically within a structure that dips at 75° towards 335° (NNW), and mineralization in the I vein extends for up to 450 m along strike and up to 200 m vertically within a structure that dips at 77° towards 157° (SSE).

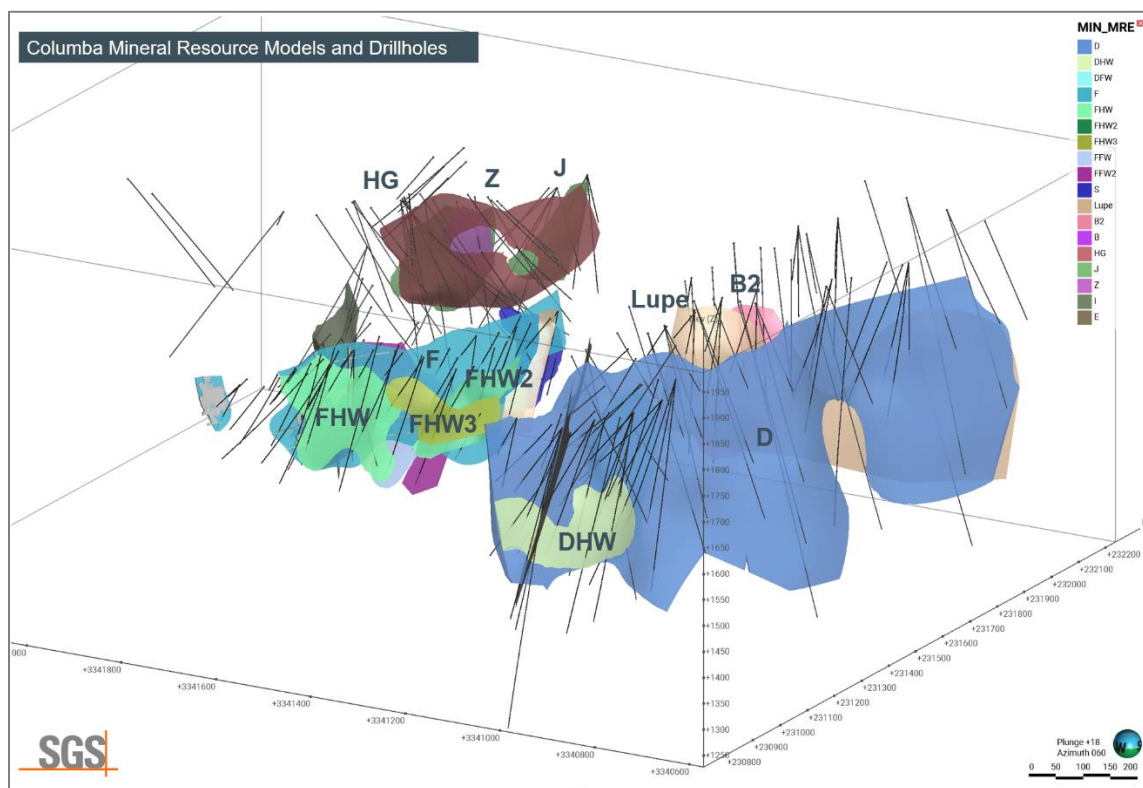
The Author has reviewed the resource models on plan view and in section view and in the Author's opinion the models are well constructed and appear to be representative of the main structures identified on the Property and the distribution of the Ag-Pb-Zn mineralization within these structures. Models were reviewed by Kootenay during the modelling process and refined by SGS before final resource estimation. 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 (a maximum of 100 m past drilling).

**Table 14-2 Property Domain Descriptions**

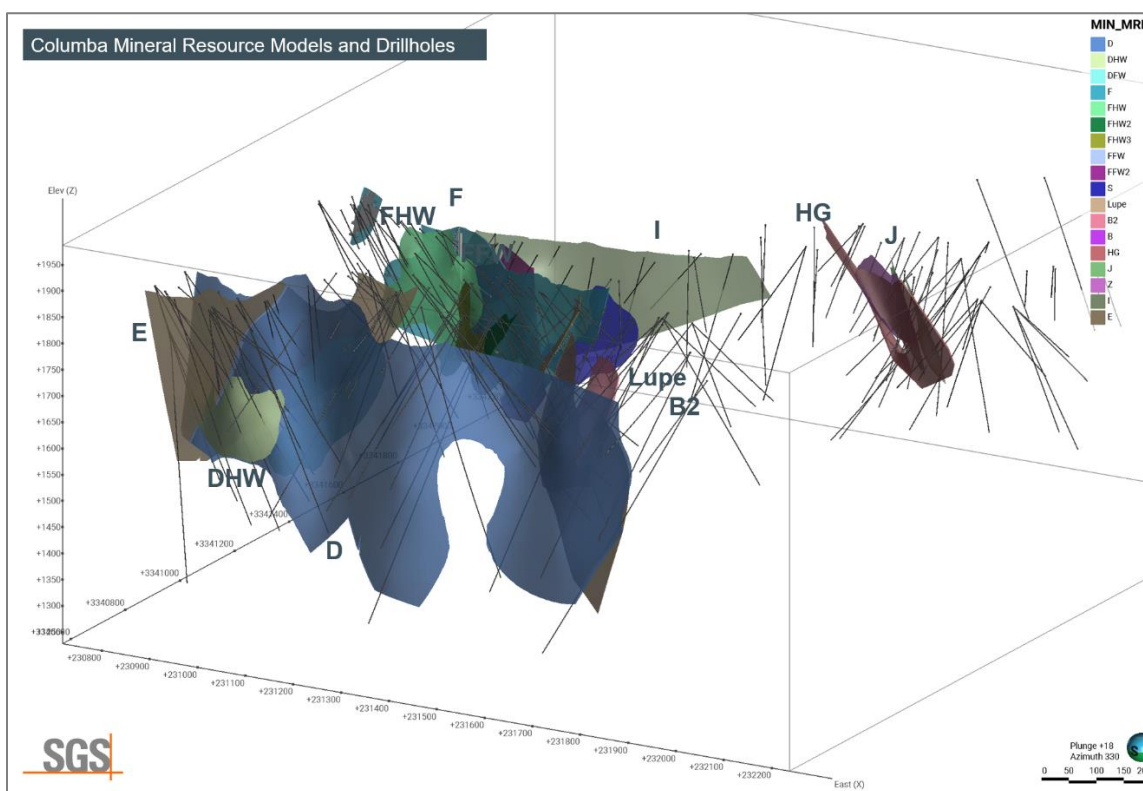
Model	Block Rock Code	Density (g/cm <sup>3</sup> )
D Vein	D	2.69
DHW Vein	DHW	2.69
DFW Vein	DFW	2.69
F Vein	F	2.69
FHW Vein	FHW	2.69
FHW2 Vein	FHW2	2.69
FHW3 Vein	FHW3	2.69
FFW Vein	FFW	2.69
FFW2 Vein	FFW2	2.69
S Vein	S	2.69
Lupe Vein	Lupe	2.69
B2 Vein	B2	2.69
HG Vein	HG	2.69
J Vein	J	2.69
Z Vein	Z	2.69
I Vein	I	2.69
E Vein	E	2.69
Lith - Volcanic (Waste)	V	2.50
Lith - Intrusive (Waste)	I	2.65

**Figure 14-3 Plan View: Property Mineral Resource Models and Drillholes**

**Figure 14-4 Isometric View to Northeast: Mineral Resource Models and Drillholes**



**Figure 14-5 Isometric View to Northwest: Mineral Resource Models and Drillholes**



## 14.4 Bulk Density

The author was provided with a database of 4,049 bulk density measurements for the current MRE.

Of the data collected, 306 samples are from mineralized material. Based on a review of the available density data, it was decided that a fixed value for mineralized material of 2.69 g/cm<sup>3</sup> be used for all resource models. The average density used by domain for the current MRE is presented in Table 14-2 above.

It is recommended that Kootenay continue to collect additional density data as drilling continues, collecting samples from the various structures, representing different styles of mineralization, ranges in grade of Ag, Pb, and Zn and at different depths of the deposits. It is recommended that Kootenay continue the current bulk density sampling program as the drill program continues.

## 14.5 Compositing

The assay sample database available for resource modelling totalled 28,448 samples representing 45,805 m of drilling (Table 14-1). A statistical analysis of the assay data from within the mineralized domains, by zone, is presented in Table 14-3. There are a total of 1,164 assays within the resource domains.

The average length of all assay sample intervals within the resource domains is 1.10 and ranges from 0.24 to 4.60 m. Of the 1,164 assays, approximately 7% are ≥1.5 m in length; 27% of the assays are ≥1.25 m; 34% 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 all areas, for the current MRE.

For the current MRE, composites for the Columba deposit were generated within each domain to a nominal length of 1.5 m. Composite residual lengths less than 1.0 m were distributed equally within the domain. Un-assayed intervals were given a value of 0.0001 for Ag, Pb, and Zn. The composites were constrained and grouped using mineral domain models for statistical analysis and capping studies in Leapfrog.

A total of 848 composite sample points occur within the resource models. A statistical analysis of the composite data from within the mineralized domains, by zone, is presented in (Table 14-3).

**Table 14-3 Statistical Analysis of the Drill Assay and Composite Data from Within the Deposit Mineral Domains – by Vein Zone**

Vein Zone	Dataset	Element	Count	Length	Mean	S.D.	C.V.	Var.	Min.	Q1	Median	Q3	Max.
D (D, DHW, DFW Veins)	Assays	Ag (g/t)	556	583	302	552	1.83	304,864	0.00	98	160	335	7,630
		Pb (%)	556	583	0.26	0.57	2.20	0.32	0.00	0.04	0.09	0.24	7.78
		Zn (%)	556	583	0.70	1.97	2.82	3.88	0.00	0.10	0.23	0.58	29.30
	Composites	Ag (g/t)	388	583	302	471	1.56	221,614	0.00	114	178	338	5,840
		Pb (%)	388	583	0.26	0.47	1.81	0.22	0.00	0.05	0.10	0.28	3.41
		Zn (%)	388	583	0.70	1.65	2.36	2.72	0.00	0.12	0.26	0.65	18.07
F (F, FHW, FHW2, FFW, FFW2, FFW3, S Veins)	Assays	Ag (g/t)	278	309	231	236	1.02	55,848	0.50	86	149	273	1,585
		Pb (%)	278	309	0.13	0.17	1.28	0.03	0.00	0.03	0.07	0.16	1.14
		Zn (%)	278	309	0.35	0.50	1.41	0.25	0.00	0.11	0.21	0.38	3.59
	Composites	Ag (g/t)	202	307	232	200	0.86	40,178	1.53	105	151	279	927
		Pb (%)	202	307	0.13	0.14	1.07	0.02	0.00	0.04	0.08	0.16	0.83
		Zn (%)	202	307	0.36	0.44	1.24	0.19	0.01	0.14	0.24	0.37	3.13
Lupe (Lupe, B2 Veins)	Assays	Ag (g/t)	112	130	259	377	1.46	142,495	4.00	95	138	261	3,090
		Pb (%)	112	130	0.10	0.12	1.27	0.02	0.00	0.02	0.06	0.12	0.86
		Zn (%)	112	130	0.27	0.27	1.00	0.07	0.01	0.13	0.19	0.29	1.84
	Composites	Ag (g/t)	85	130	259	306	1.18	93,721	24.33	106	154	262	1,803
		Pb (%)	85	130	0.10	0.10	1.06	0.01	0.00	0.03	0.06	0.12	0.56

Vein Zone	Dataset	Element	Count	Length	Mean	S.D.	C.V.	Var.	Min.	Q1	Median	Q3	Max.
HG (HG, J, Z Veins)	Assays	Zn (%)	85	130	0.27	0.26	0.95	0.07	0.04	0.14	0.19	0.31	1.67
		Ag (g/t)	116	141	272	810	2.98	656,474	10.00	91	140	198	9,840
		Pb (%)	116	141	0.10	0.23	2.37	0.05	0.00	0.03	0.05	0.09	2.59
		Zn (%)	116	141	0.25	0.69	2.82	0.48	0.03	0.10	0.15	0.27	9.13
	Composites	Ag (g/t)	92	141	272	611	2.25	373,120	10.50	107	135	195	5,785
		Pb (%)	92	141	0.10	0.18	1.87	0.03	0.01	0.03	0.06	0.09	1.54
		Zn (%)	92	141	0.25	0.52	2.13	0.27	0.04	0.10	0.16	0.25	5.06
	E & I (E, I Veins)	Ag (g/t)	102	121	123	165	1.34	27,142	0.00	13	54	191	1,005
		Pb (%)	102	121	0.10	0.18	1.70	0.03	0.00	0.01	0.04	0.10	1.43
		Zn (%)	102	121	0.25	0.42	1.72	0.18	0.00	0.03	0.11	0.26	3.09
	Composites	Ag (g/t)	81	121	123	138	1.13	19,176	0.00	16	73	178	760
		Pb (%)	81	121	0.10	0.14	1.37	0.02	0.00	0.02	0.05	0.12	0.63
		Zn (%)	81	121	0.24	0.34	1.38	0.11	0.00	0.04	0.14	0.31	2.37

## 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 14-3), histogram plots, and cumulative probability plots of the composite data. The statistical analysis was completed using Leapfrog and grade capping was applied on a global deposit basis.

After review, it is the opinion that capping of high-grade composites to limit their influence during the grade estimation is necessary for Ag, Pb, and Zn for all domains. A summary of grade capping values within the mineralized domains is presented in Table 14-4. 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 14-4 Composite Capping Summary – Global**

Zone	Total # of Comps.	Element	Capping Value	# Capped	Mean of Raw Comps.	Mean of Capped Comps.	C.V. of Raw Comps.	C.V. of Capped Comps.
All Veins	848	Ag (g/t)	1,500	6	261	245	1.56	1.03
		Pb (%)	2.0	7	0.18	0.17	1.90	1.61
		Zn (%)	6.0	5	0.48	0.44	2.44	1.68

## 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 single block model, within UTM coordinate space, was created for all Columba resource domains (Table 14-5 and Figure 14-6). Block model dimensions, in the x (east m), y (north m), and z (level m) directions were placed over the resource models (restricted to the Property), sub-blocks were generated to ensure appropriate block model volume reconciliation with resource domain models, and only sub-blocks with centroids inside the resource domains were recorded as part of the MRE. The block size for the block model was selected based on drillhole spacing, composite length, the geometry and shape of the mineralized domains, and the selected mining methods (underground). 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

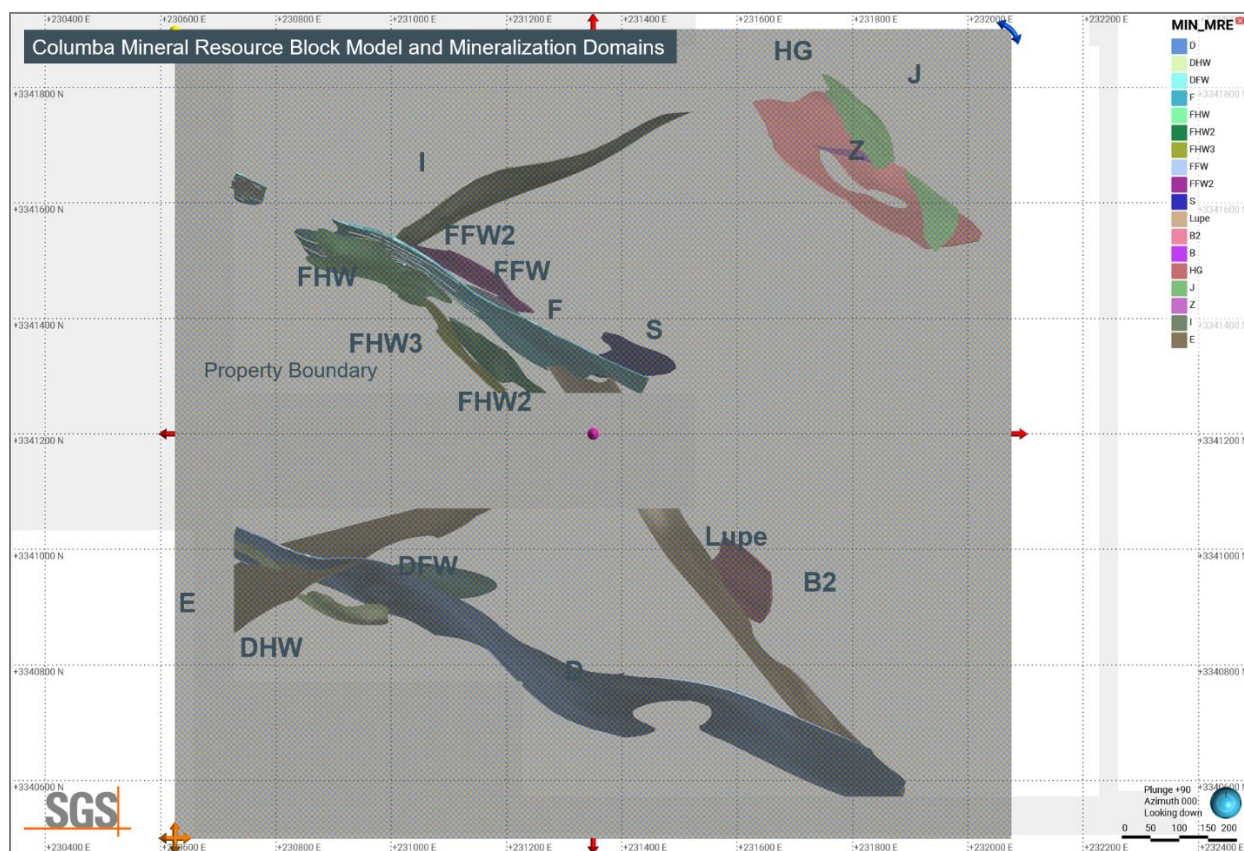


looking at higher cut-off grade distribution within the model. The models were intersected with surface topography to exclude blocks, or portions of blocks, that extend above the bedrock surface.

**Table 14-5 Deposit Block Model Geometry**

Block Model	Columba		
	X (East)	Y (North)	Z (Level)
Origin (WGS 84 UTM Zone 13)	230,625	3,340,500	2,100
Extent (blocks)	1,450	1,400	750
Parent Block Size (m)	5	5	5
Child Block Size (m)	1	1	1
Rotation (clockwise azimuth)	0°		

**Figure 14-6 Plan View: Mineral Resource Block Model and Mineralization Domains**



## 14.8 Grade Interpolation

Silver, lead, and zinc were estimated for each mineralization domain within the 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.

For all domains, the search ellipse used to interpolate grade into the resource blocks was interpreted based on orientation and size of the mineralized domains, and the distribution of data within each domain. The search ellipse axes were defined in Leapfrog using a variable orientation based on the vein resource models and 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 14-6).

Four passes were used to interpolate grade into all the blocks in the resource domains, depending on drill hole spacing (Table 14-6). All blocks were classified as Inferred category if they were populated with grade during pass 1 to pass 4 of the interpolation procedure.

Depending of the search pass procedure (Table 14-6), grades were interpolated into blocks using a minimum of 7 and maximum of 8 composites to generate block grades during pass 1 (maximum of 3 sample composites per drill hole), a minimum of 5 and maximum of 8 composites to generate block grades during pass 2 (maximum of 3 sample composites per drill hole), a minimum of 3 and maximum of 8 composites to generate block grades during pass 3 (maximum of 2 sample composites per drill hole), and a minimum of 3 and maximum of 8 composites to generate block grades during pass 4 (maximum of 8 sample composites per drill hole).

**Table 14-6 Grade Interpolation Parameters**

Parameter		Columba			
		Pass 1	Pass 2	Pass 3	Pass 4
		Inferred			
Calculation Method		Inverse Distance Squared (ID <sup>2</sup> )			
Ellipsoid Orientation (°)	Dip	Variable Orientation based on vein models			
	Dip Azimuth				
	Pitch				
Ellipsoid Range (m)	Max.	30	60	100	100
	Int.	30	60	100	100
	Min.	15	25	40	40
Min. Samples		7	5	3	3
Max. Samples		8	8	8	8
Min. Drill Holes		3	2	2	1

## 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 MRE into Inferred is 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”.

Following the 2014 CIM Definition Standards - For Mineral Resources and Mineral Reserves, Mineral Resources are 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. There are no Indicated or Measured Mineral Resources reported.

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 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 taking into account extraction scenarios and processing recoveries. To meet this requirement, the author considers that the deposits within the project area are amenable to underground extraction.

To determine the quantities of material offering “reasonable prospects for economic extraction” by underground mining methods, reasonable mining assumptions to evaluate the proportions of the block model (Inferred blocks) that could be “reasonably expected” to be mined from underground are used. Based on the location, depth from surface and depth extent, size, shape, general thickness, orientation and grade of the of the mineralized zones within the project area, it is envisioned that the deposits may be mined using a combination of underground mining methods including longhole stoping (LHS) and/or drift-and-fill (DAF). The underground parameters used, based on these potential mining methods, are summarized in Table 14-7. Underground Mineral Resources are reported at a base case cut-off grade of 150 g/t Ag. A base case cut-off grade of 150 g/t Ag is applied to identify blocks that will have reasonable prospects of eventual economic extraction.

The reporting of the underground resources is presented undiluted and in situ, constrained by continuous 3D wireframe models, and are considered to have reasonable prospects for eventual economic extraction. The underground 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 14-7 Parameters for Underground Cut-off Grade Calculation**

Parameter	Value	Unit
Silver Price	26.00	US\$ per oz
Underground Mining Cost	60	US\$ per tonne mined
Processing Cost (incl. crushing)	30	US\$ per tonne milled
Underground General and Administrative	15	US\$ tonne of feed
Silver Recovery	90	Percent (%)
Mining loss / Dilution (underground)	10 / 10	Percent (%) / Percent (%)
<b>Base Case Cut-off grade</b>	<b>150</b>	<b>g/t Ag</b>



## 14.11 Mineral Resource Statement

The MRE for the Project is presented in Table 14-8 and Table 14-9 (Figure 14-7 to Figure 14-9).

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

- The underground MRE includes, at a base-case cut-off grade of 150 g/t Ag, Inferred Mineral Resources estimated at 5.92 Mt grading 284 g/t silver, 0.19% lead, and 0.50% zinc. The Mineral Resource Estimate includes Inferred mineral resources of 54.1 Moz of silver, 25.2 Mlbs of lead, and 65.6 Mlbs of zinc. The MRE is exclusive of mined out material (F Vein).
- A total of 17 epithermal veins that comprise the Columba vein system were included in the Mineral Resource Estimate.

**Table 14-8 Columba Project Underground Mineral Resource Estimate, May 29, 2025**

Cut-off Grade	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
INFERRED							
150 g/t Ag	5.92	284	0.19	0.50	54,072	25.2	65.6

### Columba Property Mineral Resource Estimate Notes:

- (1) The mineral resource was estimated by Ben Eggers, MAIG, P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Eggers conducted a site visit to the Columba Property on May 28, 2025. The mineral resource was peer reviewed by Allan Armitage, Ph.D., P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Armitage conducted a site visit to the Columba Property on May 24-25, 2024.
- (2) The classification of the Mineral Resource Estimate into Inferred mineral resources is consistent with current 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. The effective date of the Columba Property Mineral Resource Estimate (MRE) is May 29, 2025. This is the close out date for the final mineral resource drilling database.
- (3) All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- (4) All mineral resources are presented undiluted and in situ, constrained by continuous 3D wireframe models (considered mineable shapes), and are considered to have reasonable prospects for eventual economic extraction. The mineral resource is exclusive of mined out material.
- (5) Mineral resources are not mineral reserves. 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 or Measured 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 or Measured Mineral Resources with continued exploration.
- (6) The Columba mineral resource estimate is based on a validated drillhole database which includes data from 217 surface diamond drill holes completed between July 2019 and March 2025. The drilling totals 53,476 m. The resource database totals 28,448 assay intervals representing 45,805 m of data.
- (7) The mineral resource estimate is based on 17 three-dimensional ("3D") resource models representing epithermal veins which comprise the Columba vein system. 3D models of mined out areas were used to exclude mined out material from the current MRE.
- (8) Grades for Ag, Pb, and Zn are estimated for each mineralization domain using 1.5 m 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.
- (9) Average density values were assigned to each domain based on a database of 4,049 samples.

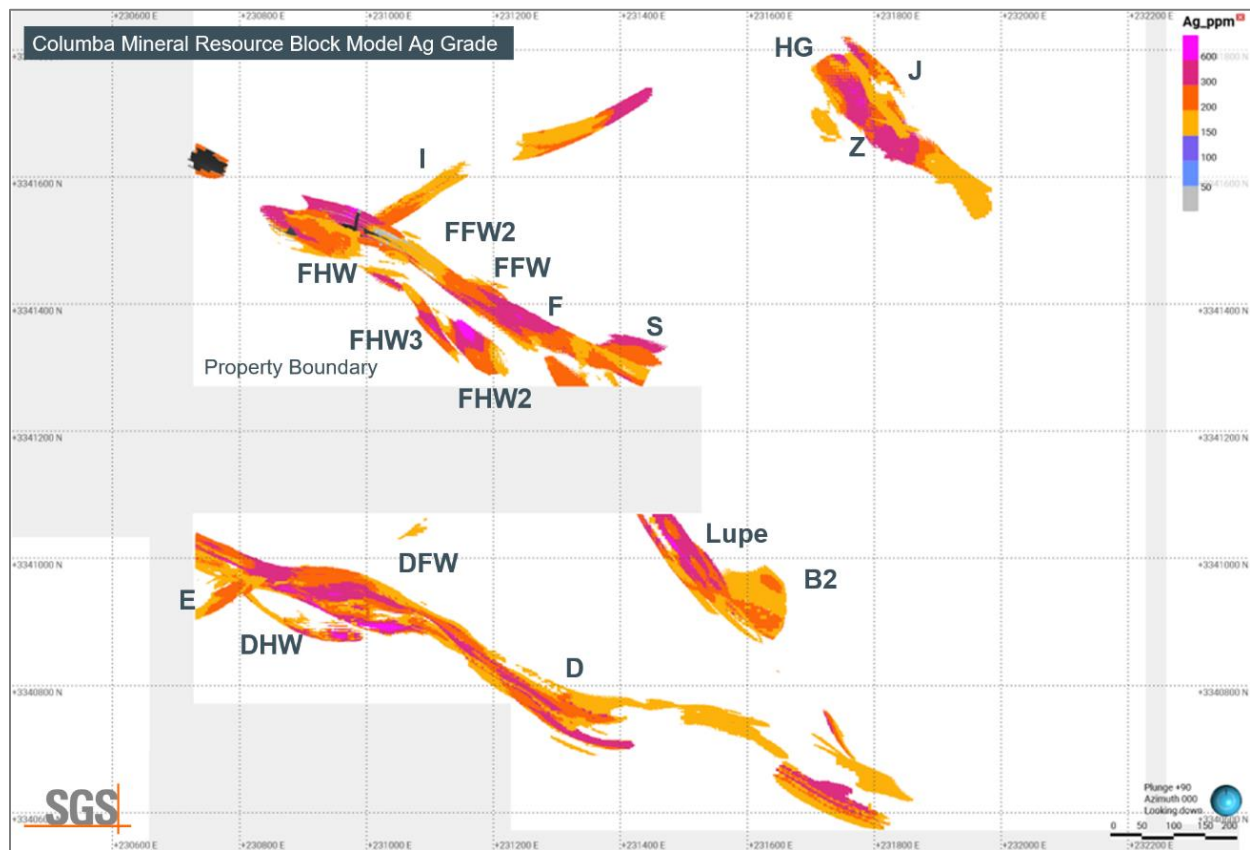


- (10) It is envisioned that the Columba Project deposits may be mined using underground mining methods. Mineral resources are reported at a base case cut-off grade of 150 g/t Ag. The mineral resource grade blocks were quantified above the base case cut-off grade, below surface and within the constraining mineralized wireframes.
- (11) The underground base case cut-off grade of 150 g/t Ag considers a metal price of US\$26.00/oz Ag and metal recovery of 90% for Ag.
- (12) The underground base case cut-off grade of 150 g/t Ag considers a mining cost of US\$60.00/t rock and a processing, treatment and refining, transportation and G&A cost of US\$45.00/t 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.

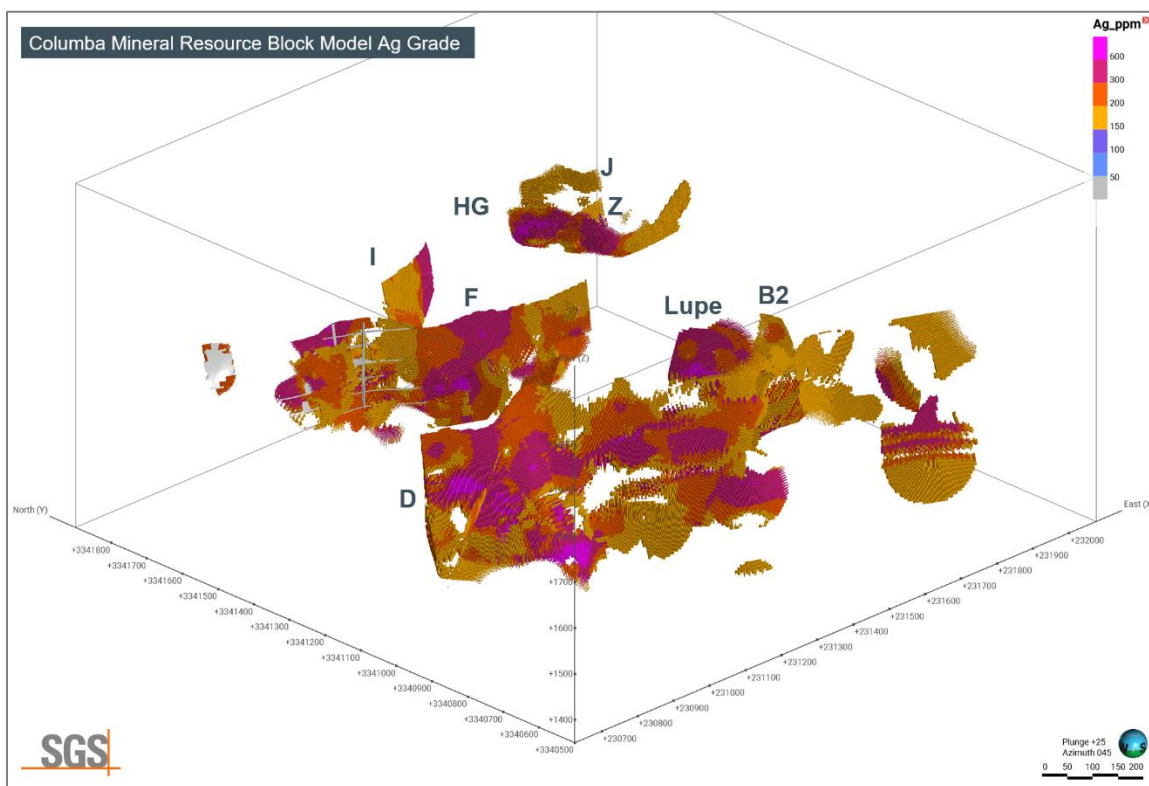
**Table 14-9 Columba Project Underground Mineral Resource Estimate by Vein, May 29, 2025**

Vein	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
<b>INFERRED</b>							
D	3.29	293	0.22	0.60	30,964	15.8	43.7
DHW	0.08	310	0.65	0.89	789	1.1	1.6
DFW	0.03	250	0.23	0.61	235	0.2	0.4
F	0.79	273	0.16	0.46	6,936	2.8	8.0
FHW	0.11	215	0.07	0.16	790	0.2	0.4
FHW2	0.05	310	0.17	0.32	517	0.2	0.4
FHW3	0.03	265	0.12	0.29	280	0.1	0.2
FFW	0.02	206	0.04	0.14	146	0.0	0.1
FFW2	0.00	160	0.20	1.23	23	0.0	0.1
S	0.05	260	0.16	0.43	407	0.2	0.5
Lupe	0.35	307	0.09	0.27	3,488	0.7	2.1
B2	0.31	262	0.14	0.31	2,593	1.0	2.1
HG	0.34	337	0.19	0.23	3,640	1.4	1.7
J	0.11	214	0.09	0.46	723	0.2	1.1
Z	0.01	165	0.06	0.53	46	0.0	0.1
I	0.31	225	0.20	0.39	2,264	1.4	2.7
E	0.04	189	0.17	0.62	229	0.1	0.5
<b>Total</b>	<b>5.92</b>	<b>284</b>	<b>0.19</b>	<b>0.50</b>	<b>54,072</b>	<b>25.2</b>	<b>65.6</b>

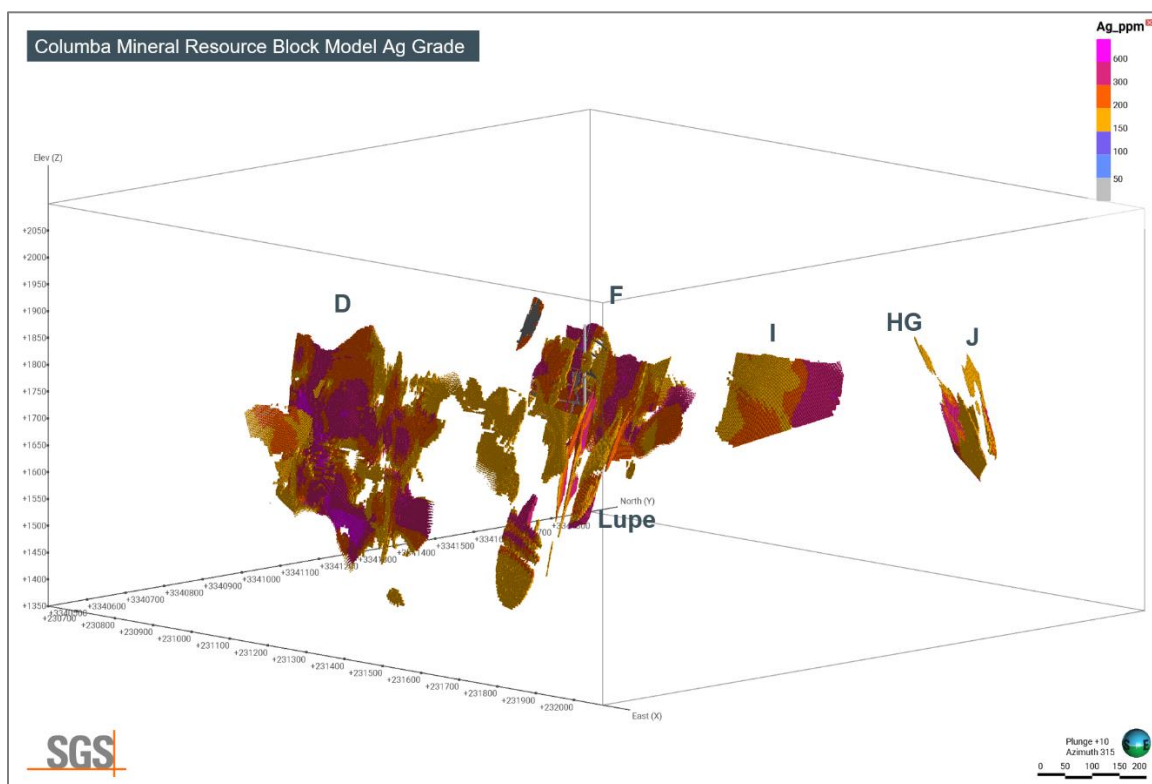
**Figure 14-7 Plan View: Columba Mineral Resource Ag Block Grades**



**Figure 14-8 Isometric View to Northeast: Columba Mineral Resource Ag Block Grades**



**Figure 14-9 Isometric View to Northwest: Columba Mineral Resource Ag Block Grades**



## 14.12 Model Validation and Sensitivity Analysis

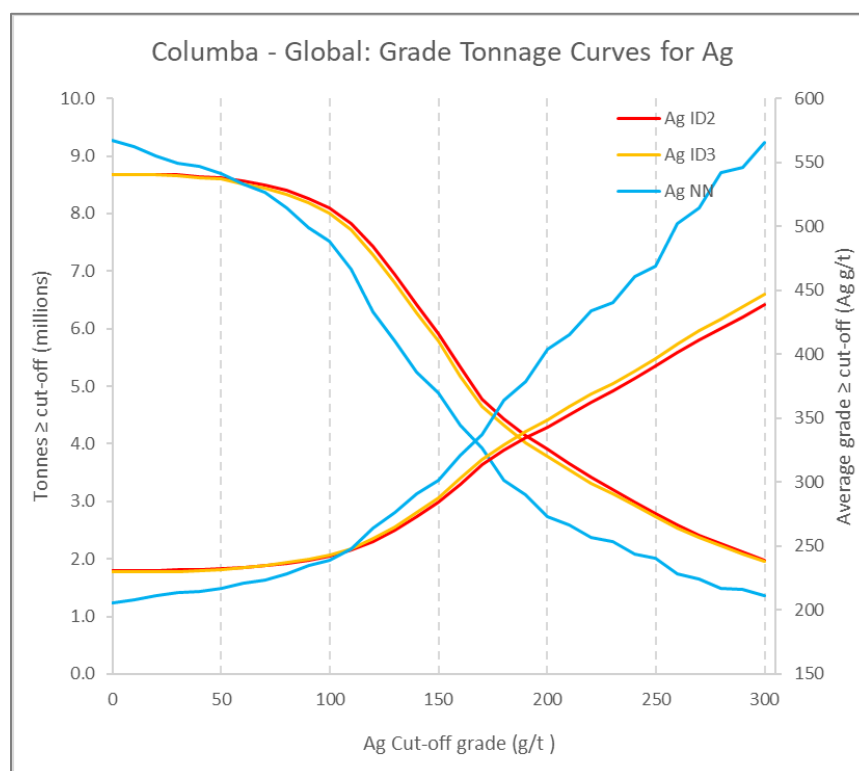
Visual checks of block grades against the composite data and assay data on vertical section showed good correlation between block grades and drill intersections.

A comparison of the average capped composite grades, average assay grades, and average block model grades by zone is shown in Table 14-10. The block model average grades compared well with the capped composite average grades.

For comparison purposes, additional grade models were generated using a varied inverse distance weighting (ID<sup>3</sup>) and nearest neighbour (NN) interpolation methods. The results of these models are compared to the chosen models (ID<sup>2</sup>) at various cut-off grades in a grade/tonnage graph shown in Figure 14-10. In general, the ID<sup>2</sup> and ID<sup>3</sup> 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<sup>2</sup> should yield very similar results to other interpolation methods such as ID<sup>3</sup> or Ordinary Kriging.

**Table 14-10 Comparison of Average Assay, Composite, and Block Model Grades**

Zone	Element	Assays	Composites Capped	Blocks
D (D, DHW, DFW Veins)	Ag (g/t)	302	278	242
	Pb (%)	0.26	0.24	0.19
	Zn (%)	0.70	0.61	0.52
F (F, FHW, FHW2, FFW, FFW2, FFW3, S Veins)	Ag (g/t)	231	232	224
	Pb (%)	0.132	0.132	0.129
	Zn (%)	0.355	0.355	0.364
Lupe (Lupe, B2 Veins)	Ag (g/t)	259	258	227
	Pb (%)	0.097	0.099	0.094
	Zn (%)	0.270	0.272	0.265
HG (HG, J, Z Veins)	Ag (g/t)	272	233	224
	Pb (%)	0.099	0.101	0.118
	Zn (%)	0.245	0.250	0.246
E & I (E, I Veins)	Ag (g/t)	123	120	164
	Pb (%)	0.105	0.100	0.139
	Zn (%)	0.245	0.241	0.304

**Figure 14-10 Grade Tonnage Curves for Ag: Comparison of ID<sup>2</sup>, ID<sup>3</sup>, and NN Models**

#### 14.12.1 Sensitivity to Cut-off Grade

The Project Mineral Resources have been estimated at a range of cut-off grades presented in Table 14-11 to demonstrate the sensitivity of the resources to cut-off grades. The current Mineral Resources are reported at a base-case cut-off grade of 150 g/t Ag (highlighted).

Note: Values in these tables reported above and below the base-case cut-off 150 g/t Ag for underground 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 14-11 Columba Project Mineral Resource Estimate Sensitivity Table at Various Ag Cut-off Grades, May 29, 2025**

Vein	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
Cut-off Grade	Mt	g/t	%	%	koz	Mlb	Mlb
INFERRED							
100 g/t Ag	8.09	242	0.17	0.45	62,985	30.0	79.6
120 g/t Ag	7.43	254	0.18	0.46	60,638	28.7	75.9
<b>150 g/t Ag</b>	<b>5.92</b>	<b>284</b>	<b>0.19</b>	<b>0.50</b>	<b>54,072</b>	<b>25.2</b>	<b>65.6</b>
200 g/t Ag	3.90	343	0.23	0.60	43,042	19.7	51.9
250 g/t Ag	2.79	391	0.26	0.68	34,991	16.0	41.7
300 g/t Ag	1.98	439	0.30	0.78	27,903	13.1	33.9



### 14.13 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 Authors are 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 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.

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## **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

### 25.1 Introduction

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

Kootenay Silver Inc. was incorporated under the Business Corporations Act (British Columbia) on November 9, 2006. The Company's principal business activity is the exploration of mineral properties. The Company currently conducts its operations in Mexico and Canada. It is trading on the TSX Venture Exchange ("TSXV") under the symbol KTN and the OTCQX under the symbol KOOYF. The head office and principal address of the Company is located at Suite 1125 595 Howe St., Vancouver, British Columbia, V6C 2T5.

The mining concessions comprising the Columba project are held 100% by Kootenay, through a wholly owned subsidiary, Grupo Northair de Mexico, S.A. De C.V., and were acquired through an Exploration with Option to Purchase Mining Concessions Agreement commencing in November 2018 with the final payment completed on May 12, 2023.

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

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in 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 MRE completed for Kootenay.

### 25.2 Exploration

Kootenay commenced exploration on the Project in late 2018 and has focused on delineating the strike, depth and thickness of known veins while employing first-principled surface exploration and drilling to locate and delineate previously unknown veins. Surface exploration to date has included geological mapping, rock geochemical sampling, geophysical surveys, and diamond drilling. Mapping and sampling has confirmed anomalous silver in numerous veins at surface mapped over strike lengths from 200 metres to 2 kilometres. Exploration channel sampling by Kootenay has returned grades ranging from 1 g/t to a high of 692 g/t silver over widths of 0.5 to 6 meters. Airborne geophysical surveys, including a drone magnetic and LiDAR topographic survey, have been used as tools to help identify new targets on the Columba Property. The LiDAR topographic model is used to find new vein outcrops and historical workings, while structural interpretation of the magnetic survey products is used to identify new property scale vein structures within the larger vein system.

### 25.3 Diamond Drilling

Kootenay initiated drilling on the Property in July 2019 and has continued to systematically explore the Columba vein system with a series of drill programs undertaken each year through to 2025. As of March 2025, Kootenay had completed 217 drill holes totaling 53,476 m and collected 28,488 assays.

Pattern drilling on target vein structures within the Columba vein system has primarily been completed on 100 m and 50 m centres. Drilling predominantly comprises angled holes (45° to -75° dips) completed on drill sections in a fan and fence pattern with holes collared in the hanging wall of and orthogonal to target structures. Terrain restrictions require drilling of target structures from the footwall side in some locations.

Drilling of the Columba vein system by Kootenay has begun to delineate mineralization in multiple structures (17 veins are included in the 2025 MRE). Mineralized strike lengths of the major structures have been tested for up to 1,200 m along strike and up to 450 m vertically (D vein), while several subsidiary hanging wall and footwall splay structures have confirmed mineralized strike lengths of 200 - 400 m and vertical extents of 150 – 250 m. Mineralized portions of veins that comprise the resource models vary in true thickness from 1.5 m to 10+ m and average ~ 5 m. Many of the mineralized veins and resource models remain open along strike and down dip.

Diamond drillholes are typically HQ diameter, with reduction to NQ diameter on deeper holes beyond 300 m or when ground conditions necessitate it. Drilling to date has been completed using man-portable drill rigs to limit surface disturbance on the Property. Maximum drilling depths obtained to date with these drills on the Property has been 340m in HQ and 750 m in NQ. Drillhole collars are positioned for drilling using handheld GPS and subsequently surveyed by Total Station surveying. Downhole orientations of drillhole azimuth, inclination, and total magnetic field are recorded by a magnetic survey instrument every 20 to 30 m downhole. Magnetic declination, adjusted annually, is used for correcting drillhole azimuths to true north values. Drillhole geology is recorded for lithology, alteration, mineralization, structures, and veins. Drillhole recovery and RQD are recorded for all drilled intervals and field density measurements are collected on selected intervals. Full hole geochemical sampling was completed from 2019 to 2023. Selective geochemical sampling was initiated in 2024. Logged mineralized intervals are sampled for geochemical assay at nominal 1 m intervals based on changes in lithology, alteration, mineralization, and structure.

### 25.4 Mineral Processing and Metallurgical Testing

Preliminary scoping level metallurgical test work has been conducted by Kootenay on mineralized material from the Columba project. Test work performed has included sample chemistry and mineralogy, comminution tests, whole ore cyanidation, and floatation/cyanidation.

A scoping metallurgical testing program was conducted to characterize eight variability composites from the Columba project and to determine amenability to cyanidation treatment for recovery of silver. Leaching procedures were optimized with a single master composite, prior to testing the eight individual composites. A single flotation/cyanidation test was also conducted on each individual composite.

One of the eight composites was relatively very high in grade and contained 762 g/t Ag, 3.16% Zn, and 1.06% Pb. Silver grades of the remaining composites ranged from 63 to 247 g/t Ag. Zinc grades were 0.715% or less and lead grades were 0.212% or less. Sulfide sulphur contents for all eight composites were 0.33% or less. Detailed mineralogy, conducted by ALS Metallurgy, indicated that the contained silver occurred primarily as acanthite/argentite or native silver. Most of the zinc and lead occurred as oxides. Aqua regia digestion/leach assays indicate that roughly 0-50% of the contained silver was locked in silicate minerals, which will not be recoverable in any conventional processing circuit. Nearly all of the silver in the highest grade composite (4883-004) was extractable by aqua regia, suggesting recovery from this composite was not limited by locking in silicate minerals. On average (grade-weighted average), results indicate that 16% of the contained silver was locked in silicate minerals. This value is skewed by the differing character and relatively high grade of composite 4883-004.

Results show that the master composite was amenable to milling/cyanidation treatment. A silver recovery of 71.1% was observed at an 80%-75µm feed size and 2.0 gNaCN/L cyanide concentration. Recovery was only incrementally improved by grinding to 80%-38µm or 25µm. Adding lead nitrate was ineffective for improving silver recovery. One test was conducted with a reducing sulfuric acid leach (i.e. "Mn pre-leach") prior to cyanidation. Recovery in this case was only incrementally improved.

Leach rates were moderate and extraction was substantially complete within the first 48 hours of leaching. Cyanide consumption was moderate and generally ranged from 0.32 to 0.60 kgNaCN/mt ore. Lime requirements for pH control generally were low and ranged from 1.4 to 1.7 kg/mt.

Recovery was much lower (42.2%) when the feed size was coarsened to 100%-1.7mm. This indicates that the master composite material would not be amenable to heap leaching treatment.

It should be noted that roughly half of the silver contained in the master composite came from the high-grade composite 4883-004, so master composite testing results are skewed by the differing character of this composite.

The individual variability composites generally were amenable to milling cyanidation treatment at the 80%-75µm grind size. Silver recovery ranged from 49.2% to 81.7% in 96 hours of leaching at a 2.0 gNaCN/L concentration. Recovery tended to be higher for the higher grade composites and the grade-weighted average silver recovery was 69.8% at the higher cyanide concentration.

The variability composites generally were somewhat sensitive to cyanide concentration and the grade-weighted average silver recovery was 8.2% lower at 0.5 gNaCN/L than at 2.0 gNaCN/L. This sensitivity to cyanide concentration was notably not observed for the high-grade composite (4883-004) or during testing of the master composite.

Variability composite leach rates were moderate and were consistently faster at the higher cyanide concentration. Extractions at the lower cyanide concentration would generally be incrementally improved by extending the leach cycle beyond 96 hours.

Cyanide consumption was generally low and averaged 0.48 kgNaCN/mt ore at the 2.0 gNaCN/L concentration. Consumption was higher for composite 4883-004 (1.06 to 1.34 kgNaCN/mt ore). The higher consumption in this case was primarily due to the high silver extraction. The stoichiometric cyanide requirements for leaching silver account for roughly half of the observed consumptions. Lime requirements for pH control were low and averaged 1.7 kg/mt.

Results from flotation are presented in the detailed report. The variability composites generally responded poorly to floatation concentration treatment. Flotation silver recoveries ranged from 43.6% to 64.8%. Combined rougher floatation and flotation tailings cyanidation silver recoveries ranged from 64.6% to 87.5%. These recoveries are higher than the whole ore cyanidation recoveries, but do not account for any silver losses expected to occur during flotation concentrate processing. Further testing, including concentrate cyanidation testing, would be required to estimate these potential losses.

## 25.5 Mineral Resource Estimate

Completion of the MRE involved the assessment of a validated drill hole database, which included all data for surface drilling completed between July 2019 and March 2025. Completion of the MRE also included the construction of three-dimensional (3D) mineral resource models (resource domains) and 3D models of historical underground workings, and the incorporation of 3D topographic surface models and available written reports.

The Inverse Distance Squared ("ID<sup>2</sup>") calculation method restricted to mineralized domains was used to interpolate grades for Ag (g/t), Pb (ppm), and Zn (ppm) into block models for all deposit zones.

The MRE presented below takes into consideration that all deposits on the Property may be mined by underground mining methods.

The reporting of the 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 MRE is consistent with the 2014 Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards (2014 CIM Definitions). In completing the MRE, the Author uses general procedures and methodologies that are consistent with industry standard practices, including those documented in the 2019 CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019 CIM Guidelines).

The MRE for the Project is presented in Table 25-1 and Table 25-2.

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

- The underground MRE includes, at a base-case cut-off grade of 150 g/t Ag, Inferred Mineral Resources estimated at 5.92 Mt grading 284 g/t silver, 0.19% lead, and 0.50% zinc. The Mineral Resource Estimate includes Inferred mineral resources of 54.1 Moz of silver, 25.2 Mlbs of lead, and 65.6 Mlbs of zinc. The MRE is exclusive of mined out material (F Vein).
- A total of 17 epithermal veins that comprise the Columba vein system were included in the Mineral Resource Estimate.

**Table 25-1 Columba Project Underground Mineral Resource Estimate, May 29, 2025**

Cut-off Grade	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
<b>INFERRED</b>							
<b>150 g/t Ag</b>	<b>5.92</b>	<b>284</b>	<b>0.19</b>	<b>0.50</b>	<b>54,072</b>	<b>25.2</b>	<b>65.6</b>

**Columba Property Mineral Resource Estimate Notes:**

- (1) The mineral resource was estimated by Ben Eggers, MAIG, P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Eggers conducted a site visit to the Columba Property on May 28, 2025. The mineral resource was peer reviewed by Allan Armitage, Ph.D., P.Geo. of SGS Geological Services, an independent Qualified Person as defined by NI 43-101. Armitage conducted a site visit to the Columba Property on May 24-25, 2024.
- (2) The classification of the Mineral Resource Estimate into Inferred mineral resources is consistent with current 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves. The effective date of the Columba Property Mineral Resource Estimate (MRE) is May 29, 2025. This is the close out date for the final mineral resource drilling database.
- (3) All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- (4) All mineral resources are presented undiluted and in situ, constrained by continuous 3D wireframe models (considered mineable shapes), and are considered to have reasonable prospects for eventual economic extraction. The mineral resource is exclusive of mined out material.
- (5) Mineral resources are not mineral reserves. 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 or Measured 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 or Measured Mineral Resources with continued exploration.
- (6) The Columba mineral resource estimate is based on a validated drillhole database which includes data from 217 surface diamond drill holes completed between July 2019 and March 2025. The drilling totals 53,476 m. The resource database totals 28,448 assay intervals representing 45,805 m of data.



- (7) The mineral resource estimate is based on 17 three-dimensional ("3D") resource models representing epithermal veins which comprise the Columba vein system. 3D models of mined out areas were used to exclude mined out material from the current MRE.
- (8) Grades for Ag, Pb, and Zn are estimated for each mineralization domain using 1.5 m 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.
- (9) Average density values were assigned to each domain based on a database of 4,049 samples.
- (10) It is envisioned that the Columba Project deposits may be mined using underground mining methods. Mineral resources are reported at a base case cut-off grade of 150 g/t Ag. The mineral resource grade blocks were quantified above the base case cut-off grade, below surface and within the constraining mineralized wireframes.
- (11) The underground base case cut-off grade of 150 g/t Ag considers a metal price of US\$26.00/oz Ag and metal recovery of 90% for Ag.
- (12) The underground base case cut-off grade of 150 g/t Ag considers a mining cost of US\$60.00/t rock and a processing, treatment and refining, transportation and G&A cost of US\$45.00/t 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 25-2 Columba Project Underground Mineral Resource Estimate by Vein, May 29, 2025**

Vein	Mass	Average Value			Material Content		
		Ag	Pb	Zn	Ag	Pb	Zn
	Mt	g/t	%	%	koz	Mlb	Mlb
<b>INFERRED</b>							
D	3.29	293	0.22	0.60	30,964	15.8	43.7
DHW	0.08	310	0.65	0.89	789	1.1	1.6
DFW	0.03	250	0.23	0.61	235	0.2	0.4
F	0.79	273	0.16	0.46	6,936	2.8	8.0
FHW	0.11	215	0.07	0.16	790	0.2	0.4
FHW2	0.05	310	0.17	0.32	517	0.2	0.4
FHW3	0.03	265	0.12	0.29	280	0.1	0.2
FFW	0.02	206	0.04	0.14	146	0.0	0.1
FFW2	0.00	160	0.20	1.23	23	0.0	0.1
S	0.05	260	0.16	0.43	407	0.2	0.5
Lupe	0.35	307	0.09	0.27	3,488	0.7	2.1
B2	0.31	262	0.14	0.31	2,593	1.0	2.1
HG	0.34	337	0.19	0.23	3,640	1.4	1.7
J	0.11	214	0.09	0.46	723	0.2	1.1
Z	0.01	165	0.06	0.53	46	0.0	0.1
I	0.31	225	0.20	0.39	2,264	1.4	2.7
E	0.04	189	0.17	0.62	229	0.1	0.5
<b>Total</b>	<b>5.92</b>	<b>284</b>	<b>0.19</b>	<b>0.50</b>	<b>54,072</b>	<b>25.2</b>	<b>65.6</b>

## 25.6 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.

### 25.6.1 Risks

#### 25.6.1.1 Mineral Resource Estimate

The contained metal of the deposit, at the reported cut-off grades for the 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.

#### 25.6.1.2 Mineral Processing and Metallurgical Testing

The Columba composites were tested using scoping level proposed processes of milling/cyanidation and milling/combined rougher floatation and flotation tailings cyanidation. Their metallurgical performance under subsequent designed process conditions may vary from the estimated response.

### 25.6.2 Opportunities

#### 25.6.2.1 Mineral Resource Estimate

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 2025 with a focus on extending the limits of known mineralization and testing other targets on the greater Columba Property.

#### 25.6.2.2 Mineral Processing and Metallurgical Testing

There may be opportunities to optimize the process through further metallurgical testing. Additional testing may identify leach conditions that provide faster silver leach kinetics, higher silver extractions and lower sodium cyanide consumptions.

## 26 RECOMMENDATIONS

The Columba Project deposits contain underground Inferred Mineral Resources that are associated with well-defined mineralized trends and models. All deposits are open along strike and at depth.

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

It is recommended that Kootenay conduct further exploration on the Project, 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 the next phase of work beginning in 2025, the Company plans to drill 30,000 m on known and new mineralized structures proximal to current resources to grow the resource base. Additional planned work to support the Columba Project includes advancing environmental, hydrological, metallurgical, and preliminary mining economics/engineering studies.

The total cost of the planned exploration work program by Kootenay is estimated at US\$10.1 million (Table 26-1).

**Table 26-1 Cost Summary for Recommended Future Work**

<b>Program Component</b>	<b>Estimated Total Cost (US\$M)</b>
Exploration and Drilling (30,000 m @ \$300/m)	9.00
Metallurgical Test work	0.25
Environmental and Hydrological initial studies	0.40
Mining and Engineering initial studies	0.30
MRE Update	0.10
Community Engagement	0.05
<b>Total</b>	<b>10.10</b>

## 27 REFERENCES

- Abzalov, M., 2008, Quality control of assay data: a review of procedures for measuring and monitoring precision and accuracy. *Exploration and Mining Geology*, Vol.17, No 3-4, p.131-144, ISSN 0964-1823
- Aguirre-Díaz, G.J. and Labarthe-Hernández, G., 2003, Fissure Ignimbrites: Fissure-Source Origin for Voluminous Ignimbrites of the Sierra Madre Occidental and its Relationship with Basin and Range Faulting: *Geology*, v. 31, p. 773-776.
- Aguirre-Díaz, G.J. and McDowell, F.W., 1991, The Volcanic Section at Nazas, Durango, Mexico, and the Possibility of Widespread Eocene Volcanism Within the Sierra Madre Occidental: *Journal of Geophysical Research*, v. 96, p. 13,373 – 13,388.
- Aguirre-Díaz, G.J. and McDowell, F.W., 1993, Nature and Timing of Faulting and Synextensional Magmatism in the Southern Basin and Range, Central-Eastern Durango, Mexico: *Geological Society of America Bulletin*, v. 105, p. 1435–1444.
- Andrews, G.D.M., Busby, C.J., Brown, S.R., Fisher, C.M., Davila-Harris, P., Strickland, A., Vervoort, J.D., Pettus, H.D., McDowell, F.W. and Murray, B.P., 2022, Petrogenesis of voluminous silicic magmas in the Sierra Madre Occidental large igneous province, Mexican Cordillera: Insights from zircon and Hf-O isotopes: *Geosphere*, v. 18, p. 946–984. doi: <https://doi.org/10.1130/GES02430.1>
- Bird, S., 2023, NI 43-101 Technical Report for the Columba Silver Property, Effective Date March 17, 2023, Report Date July 28, 2023 for Kootenay Silver Inc.
- Burcher, D.D., *unknown*, Field Report: Cia Minera San Joaquin, S.H. Operations: Internal Report.
- Camprubí, A., 2013, Tectonic and Metallogenetic History of Mexico: *in* Tectonics, Metallogeny, and Discovery: The North American Cordillera and Similar Accretionary Settings; Society of Economic Geologists Special Publication Number 17 (Eds. M. Colpron, T. Bissig, B. G. Rusk, J. F. H. Thompson), p. 201-243.
- Camprubí, A., Ferrari, L., Cosca, M. A., Cardellach, E. and Canals, A., 2003, Ages of Epithermal Deposits in Mexico: Regional Significance and Links with the Evolution of Tertiary Volcanism: *Economic Geology*, v. 98, p. 1029-1037.
- Canadian Institute of Mining, Metallurgy and Petroleum, 2019, CIM Estimation of Mineral Resources and Mineral Reserves – Best Practices Guidelines, November 2019.
- Canadian Institute of Mining, Metallurgy and Petroleum, 2014, CIM DEFINITION STANDARDS – For Mineral Resources and Mineral Reserves, CIM Standing Committee on Reserve Definitions, adopted May 10, 2014.
- Fink, W.N., 1960, Summary Report on La Fortuna including Fortuna, America and Julieta Mines: Cia. Minera San Joaquin, S.A. Internal Report.
- King, R.E., 1939, Geological Reconnaissance in Northern Sierra Madre Occidental of Mexico: *Bulletin of the Geological Society of America* v. 50, p. 1625-1722.
- Lerchen, F.H. and Parker, J.H., 1929, La Fortuna – America Silver Mines, Casas Grandes, Chihuahua, Mexico: Internal Report.
- McDowell, F.W., 2007, Geologic Transect Across the Northern Sierra Madre Occidental Volcanic Field, Chihuahua and Sonora, Mexico: Geological Society of America Digital Map and Chart Series 6. <https://www.geosociety.org/maps/2007-DMCH006/2007-DMCH006-TXT-E.pdf>
- McDowell, F.W. and Keizer, R.P., 1977, Timing of mid-Tertiary Volcanism in the Sierra Madre Occidental between Durango City and Mazatlan, Mexico: *Geological Society of America Bulletin*, v. 88, p. 1479-1487.
- McDowell, F.W. and McIntosh, W.C., 2012, Timing of Intense Magmatic Episodes in the Northern and Central Sierra Madre Occidental, Western Mexico: *Geosphere* v. 8, p. 1505-1526.

- Meyerhoff, H., 1959, Letter to D.D. Burcher dated August 7, 1959: Airmail letter to “Doc Burcher” summarising Meyerhoff conclusions regarding the Fortuna property: Internal Letter.
- Nieto-Obregón, J., Delgado-Argote, L. and Damon, P.E., 1981, Relaciones petrológicas y geocronológicas del magmatismo de la Sierra Madre Occidental y el Eje Neovolcánico en Nayarit, Jalisco y Zacatecas. Jalisco Y Zacatecas, Mem. Téc.. 14. 327-361.
- Nieto-Obregón, J., Delgado-Argote, L. and Damon, P.E., 1981, Geochronologic, Petrologic, and Structural Data Related to Large Morphologic Features Between the Sierra Madre Occidental and the Mexican Volcanic Belt: Geofísica Internacional, Special Volume on Mexican Volcanic Belt – Part 2 (Ed. S.P. Verma), v. 24-2, p. 623-663.
- Olsen, J.R., 2024, Report on Scoping metallurgical Testing – Columba Composites MLI Job No. 4663, October 4, 2024, McClelland Laboratories Inc. for Kootenay Silver Inc.
- Stanley, C., and Lawie, D., 2007, Average Relative Error in Geochemical Determinations: Clarification, Calculation, and a Plea for Consistency; Exploration and Mining Geology, Vol. 16, Nos. 3–4, p. 265–274
- Swanson, E.R. and McDowell, F.W., 1984, Calderas of the Sierra Madre Occidental Volcanic Field western Mexico: Journal of Geophysical Research, v. 89, p. 8,787-8,799.
- Thom, C. and Gisler, H.J., 1952, Ore Test No. DM-23014 dated October 18, 1952: Denver Equipment Company – Ore Testing Division, Cia. Minera La Fortuna, S.A.: Internal Report.
- Wark, D.A., Kempter, K.A. and McDowell, F.W., 1990, Evolution of Waning, Subduction-Related Magmatism, Northern Sierra Madre Occidental, Mexico: Geological Society of America Bulletin, v. 102, p. 1555-1564.



## 28 DATE AND SIGNATURE PAGE

This report titled “Mineral Resource Estimate for the Columba Ag-Pb-Zn Project, Chihuahua State, Mexico” dated August 1, 2025 (the “Technical Report”) for Kootenay Silver Inc. was prepared and signed by the following authors:

The effective date of the report is May 29, 2025.

The date of the report is August 1, 2025.

Signed by:

**Qualified Persons**

Ben Eggers, MAIG, P. Geo.

Allan Armitage, Ph. D., P. Geo.,

**Company**

SGS Geological Services (“SGS”)

SGS Geological Services (“SGS”)

August 1, 2025

## 29 CERTIFICATES OF QUALIFIED PERSONS

### QP CERTIFICATE – BEN EGGERS

To accompany the technical report titled “Mineral Resource Estimate for the Columba Ag-Pb-Zn Project, Chihuahua State, Mexico” with an effective date of May 29, 2025 (the “Technical Report”) prepared for Kootenay Silver Inc. (the “Company”).

I, Benjamin K. Eggers, MAIG, P.Geo. of 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 orogenic gold deposits, low, intermediate, and high sulphidation epithermal gold and silver deposits, porphyry copper-gold-silver deposits, volcanic and sediment hosted base metal massive sulphide deposits, albitite-hosted uranium deposits, and pegmatite lithium 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), I am a member of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) and use the designation (P.Geo.) (Licence No. L5818, 2024), 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 1.1, 1.2, 1.6, 1.8, 1.9, 2.0-2.2, 2.3.2, 2.4, 2.5, 3.1, 4, 10, 11, 12.1, 12.2, 12.5, 12.6, 14, 23, 25.1, 25.3, 25.5, 25.6, and 26. I have reviewed these sections and accept professional responsibility for these sections of the Technical Report.
8. I conducted a site visit to the Property on May 28, 2025.
9. I have had no prior involvement with the 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 August 1, 2025 at Tofino, British Columbia.

***“Original Signed and Sealed”***

*Ben Eggers, MAIG, P. Geo., SGS Canada Inc.*

## QP CERTIFICATE – ALLAN ARMITAGE

To accompany the technical report titled “Mineral Resource Estimate for the Columba Ag-Pb-Zn Project, Chihuahua State, Mexico” with an effective date of May 29, 2025 (the “Technical Report”) prepared for Kootenay Silver Inc. (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 low grade 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 following: 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), the Professional Geoscientists Ontario (P.Geo.) (Licence No. 2829; 2017), and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) (License No. L4375; 2019).
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 1.3-1.5, 1.7, 2.3.1, 5, 6, 7, 8, 9, 12.3, 12.4, 13, 25.2, and 25.4. I have reviewed these sections and accept professional responsibility for these sections of the Technical Report.
8. I conducted a site visit to the Property on May 24-25, 2024.
9. I have had no prior involvement with the 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 August 1, 2025 at Fredericton, New Brunswick.

***“Original Signed and Sealed”***

Allan Armitage, Ph. D., P. Geo., SGS Canada Inc.

## Appendix I. Summary of Drillholes Completed by Kootenay on the Columba Project from July 2019 to May 2025

HOLE-ID	HOLE TYPE	LOCATIONX	LOCATIONY	LOCATIONZ	DIP	AZIMUTH	LENGTH	DATE STARTED	DATE COMPLETED
CDH-19-001	DD	230754.581	3341571.738	1788.582	-47	356	80.8	7/7/2019	9/7/2019
CDH-19-002	DD	230754.571	3341571.543	1788.29	-64	357	100.89	9/7/2019	11/7/2019
CDH-19-003	DD	230,808.99	3341587.416	1781.25	-45	10	61	11/7/2019	12/7/2019
CDH-19-004	DD	230799.016	3341512.876	1800.24	-60	10	179.95	12/7/2019	15/07/2019
CDH-19-005	DD	230909.477	3341545.112	1773.95	-45	13	56.4	16/07/2019	17/07/2019
CDH-19-006	DD	230,887.11	3341438.812	1839.02	-60	13	178.4	17/07/2019	21/07/2019
CDH-19-007	DD	230947.44	3341444.511	1819.35	-55	15	176.9	22/07/2019	24/07/2019
CDH-19-008	DD	230962.032	3341513.477	1789.33	-45	15	80.85	25/07/2019	26/07/2019
CDH-19-009	DD	230886.654	3341437.718	1839.06	-60	8	224.15	26/07/2019	30/07/2019
CDH-19-010	DD	230994.779	3341379.28	1818.7	-60	35	260.8	30/07/2019	4/8/2019
CDH-19-011	DD	231123.191	3341397.587	1768.814	-55	35	131.15	4/8/2019	6/8/2019
CDH-19-012	DD	231045.556	3341280.366	1782.79	-50	37	300.45	6/8/2019	11/8/2019
CDH-19-013	DD	231086.664	3341516.887	1784.16	-45	300	141.85	11/8/2019	14/08/2019
CDH-19-014	DD	231137.173	3341491.669	1772.65	-55	300	219.6	14/08/2019	17/08/2019
CDH-19-015	DD	230893.349	3341356.071	1877.65	-65	35	379.75	19/08/2019	25/08/2019
CDH-19-016	DD	231112.655	3341562.336	1775.99	-50	300	67.4	27/08/2019	29/08/2019
CDH-19-017	DD	231156.879	3341538.967	1765.315	-50	300	139.6	29/08/2019	30/08/2019
CDH-19-018	DD	231161.338	3341613.014	1762.501	-45	305	76.25	30/08/2019	31/08/2019
CDH-19-019	DD	231251.388	3341579.976	1763.874	-50	310	160.1	31/08/2019	2/9/2019
CDH-19-020	DD	231261.246	3341485.029	1778.358	-52	300	300.4	2/9/2019	5/9/2019
CDH-19-021	DD	230892.267	3340900.062	1808.641	-50	0	120.45	6/9/2019	8/9/2019
CDH-19-022	DD	230959.897	3340918.117	1834.298	-45	340	120.45	9/9/2019	11/9/2019
CDH-19-023	DD	231061.385	3340926.224	1875.305	-45	10	207.4	12/9/2019	17/09/2019
CDH-19-024	DD	231845.173	3341704.098	1793.737	-45	230	82.35	18/09/2019	20/09/2019
CDH-19-025	DD	231915.569	3341777.119	1776.134	-45	230	245.5	20/09/2019	24/09/2019
CDH-19-026	DD	231892.603	3341698.723	1805.258	-50	190	280.6	24/09/2019	29/09/2019
CDH-19-027	DD	232032.485	3341632.448	1793.609	-45	220	170.8	29/09/2019	1/10/2019
CDH-19-028	DD	232025.536	3341630.265	1795.643	-50	265	251.6	2/10/2019	7/10/2019
CDH-19-029	DD	231771.675	3341806.282	1822.259	-50	200	201.3	8/10/2019	12/10/2019
CDH-19-030	DD	231771.675	3341806.282	1822.259	-70	200	196.7	12/10/2019	17/10/2019
CDH-19-031	DD	232025.536	3341630.265	1795.643	-45	320	233.3	18/10/2019	22/10/2019
CDH-19-032	DD	232032.485	3341632.448	1793.609	-60	305	294.3	22/10/2019	27/10/2019
CDH-19-033	DD	231918.828	3341585.05	1833.752	-50	320	170.8	28/10/2019	31/10/2019
CDH-19-034	DD	231857.167	3341658.89	1813.699	-45	160	167.75	31/10/2019	4/11/2019
CDH-19-035	DD	231393.667	3341394.846	1798.914	-45	200	195.6	4/11/2019	11/11/2019
CDH-19-036	DD	231515.753	3341053.047	1864.042	-45	235	108.3	12/11/2019	15/11/2019
CDH-19-037	DD	231514.032	3341051.996	1864.024	-45	55	100.65	15/11/2019	17/11/2019
CDH-19-038	DD	231697.923	3341067.719	1875.576	-45	235	266.85	18/11/2019	25/11/2019
CDH-19-039	DD	230808.921	3341587.269	1781.42	-45	10	24.4	26/11/2019	27/11/2019
CDH-19-040	DD	230909.243	3341544.612	1774.153	-45	13	25.9	27/11/2019	28/11/2019
CDH-19-041	DD	230962.032	3341513.477	1789.33	-45	15	54.9	28/11/2019	29/11/2019
CDH-20-042	DD	230998.933	3341469.78	1803.322	-45	25	95	18/02/2020	20/02/2020
CDH-20-043	DD	231077.947	3341412.307	1780.725	-45	25	100.65	21/02/2020	22/02/2020
CDH-20-044	DD	230864.348	3341554.656	1784.453	-50	30	50.3	23/02/2020	24/02/2020
CDH-20-045	DD	231170.148	3341365.932	1773.815	-50	35	93	25/02/2020	26/02/2020
CDH-20-046	DD	231214.5	3341335.149	1790.555	-45	30	112.85	27/02/2020	28/02/2020

HOLE-ID	HOLE TYPE	LOCATIONX	LOCATIONY	LOCATIONZ	DIP	AZIMUTH	LENGTH	DATE STARTED	DATE COMPLETED
CDH-20-047	DD	231214.183	3341334.677	1790.593	-75	30	129.6	29/02/2020	2/3/2020
CDH-20-048	DD	231170.887	3341271.098	1789.349	-60	35	242.45	2/3/2020	6/3/2020
CDH-20-049	DD	230934.946	3341338.505	1852.422	-60	25	330.9	7/3/2020	13/03/2020
CDH-20-050	DD	231019.498	3341334.168	1806.177	-45	35	224.15	14/03/2020	19/03/2020
CDH-20-051	DD	231104.427	3341276.334	1773.168	-50	35	300.4	19/03/2020	26/03/2020
CDH-20-052	DD	231283.841	3341289.579	1796.37	-60	35	166.2	5/6/2020	7/6/2020
CDH-20-053	DD	231249.53	3341271.305	1802.772	-60	35	201.3	7/6/2020	10/6/2020
CDH-20-054	DD	231334.365	3341246.798	1803.231	-45	25	135.7	10/6/2020	13/06/2020
CDH-20-055	DD	231308.349	3341182.123	1820.21	-50	23	230.25	14/06/2020	20/06/2020
CDH-20-056	DD	231285.6	3341116.398	1852.899	-50	23	199.75	21/06/2020	28/06/2020
CDH-20-057	DD	231108.366	3341211.909	1784.662	-50	35	309.55	29/06/2020	5/7/2020
CDH-20-058	DD	230757.341	3341521.404	1793.123	-55	356	117.5	5/7/2020	7/7/2020
CDH-20-059	DD	230761.785	3341432.108	1831.342	-50	356	254.65	7/7/2020	12/7/2020
CDH-20-060	DD	231857.86	3341862.839	1780.955	-45	220	297.35	12/7/2020	18/07/2020
CDH-20-061	DD	231858.1814	3341863.222	1780.955	-60	220	399.55	20/01/1900	26/07/2020
CDH-20-062	DD	231761.107	3341739.799	1830.424	-50	180	143.35	28/07/2020	30/07/2020
CDH-20-063	DD	231715.118	3341739.65	1854.237	-50	180	186.05	31/07/2020	4/8/2020
CDH-20-064	DD	231710.951	3341761.1	1851.915	-45	230	120.45	4/8/2020	7/8/2020
CDH-20-065	DD	231710.951	3341761.1	1851.915	-65	230	131.15	7/8/2020	10/8/2020
CDH-20-066	DD	231822.54	3341839.348	1798.12	-50	180	326.35	10/8/2020	17/08/2020
CDH-20-067	DD	231779.325	3341917.375	1792.7	-45	215	230.25	18/08/2020	22/08/2020
CDH-20-068	DD	231859.326	3341861.512	1781.021	-50	135	352.25	23/08/2020	29/08/2020
CDH-20-069	DD	231892.286	3341831.124	1772.543	-55	225	399.55	30/08/2020	7/9/2020
CDH-20-070	DD	231971.371	3341771.405	1771.28	-60	225	302	8/9/2020	15/09/2020
CDH-20-071	DD	231422.517	3341373.37	1805.615	-50	150	143.35	15/09/2020	19/09/2020
CDH-20-072	DD	231502.592	3341488.366	1842.788	-55	150	221.1	20/09/2020	25/09/2020
CDH-20-073	DD	231632.182	3341542.403	1899.775	-45	150	201.3	26/09/2020	30/09/2020
CDH-20-074	DD	231542.467	3341437.802	1852.383	-50	135	150.95	30/09/2020	3/10/2020
CDH-20-075	DD	231569.393	3341635.863	1837.548	-45	150	324.85	3/10/2020	9/10/2020
CDH-20-076	DD	231422.558	3341673.016	1773.659	-45	285	187.55	10/10/2020	13/10/2020
CDH-20-077	DD	231723.561	3341572.695	1856.484	-45	150	131.15	15/10/2020	18/10/2020
CDH-20-078	DD	231687.868	3341623.316	1881.126	-55	150	230.25	18/10/2020	24/10/2020
CDH-20-079	DD	230980.293	3340851.033	1841.652	-45	340	195.2	25/10/2020	30/10/2020
CDH-20-080	DD	231051.869	3340904.425	1863.648	-60	340	160.1	31/10/2020	3/11/2020
CDH-20-081	DD	231410.933	3341523.87	1798.985	-50	285	120.45	5/11/2020	7/11/2020
CDH-20-082	DD	231563.998	3341093.898	1836.412	-55	230	202.8	8/11/2020	13/11/2020
CDH-20-083	DD	231699.674	3341068.4	1876.372	-60	230	370.55	13/11/2020	19/11/2020
CDH-20-084	DD	231682.461	3340972.664	1884.066	-55	230	292.8	20/11/2020	27/11/2020
CDH-21-085	DD	231330.679	3341308.202	1799.317	-55	30	91.5	25/02/2021	27/02/2021
CDH-21-086	DD	231312.236	3341276	1796.4	-55	30	123.5	27/02/2021	1/3/2021
CDH-21-087	DD	231234.862	3341298.668	1797.192	-50	30	140.3	2/3/2021	6/3/2021
CDH-21-088	DD	231218.276	3341267.293	1799.557	-55	30	196.7	7/3/2021	11/3/2021
CDH-21-089	DD	231126.861	3341324.484	1774.434	-50	30	175.35	11/3/2021	14/03/2021
CDH-21-090	DD	231006.694	3341432.887	1807.751	-50	35	140.3	14/03/2021	17/03/2021
CDH-21-091	DD	231393.218	3341264.563	1798.643	-45	30	70.15	17/03/2021	19/03/2021
CDH-21-092	DD	231393.105	3341264.264	1798.643	-70	30	190.6	19/03/2021	23/03/2021
CDH-21-093	DD	230825.571	3341494.149	1815.62	-50	22	119.15	24/03/2021	26/03/2021
CDH-21-094	DD	230815.048	3341455.878	1833.195	-60	15	221.1	27/03/2021	31/03/2021
CDH-21-095	DD	230880.003	3341523.522	1789.722	-52	20	100.65	1/4/2021	3/4/2021
CDH-21-096	DD	230851.772	3341455.706	1838.442	-71	20	230.25	3/4/2021	7/4/2021



HOLE-ID	HOLE TYPE	LOCATIONX	LOCATIONY	LOCATIONZ	DIP	AZIMUTH	LENGTH	DATE STARTED	DATE COMPLETED
CDH-21-097	DD	232004.521	3341847.551	1786.279	-45	330	138.75	8/4/2021	10/4/2021
CDH-21-098	DD	232042.658	3341877.722	1792.909	-45	330	120.45	10/4/2021	12/4/2021
CDH-21-099	DD	232065.909	3341843.943	1801.619	-45	330	210.45	12/4/2021	15/04/2021
CDH-21-100	DD	232102.779	3341934.689	1784.229	-50	335	105.2	15/04/2021	16/04/2021
CDH-21-101	DD	232136.601	3341889.283	1799.329	-45	340	237.9	17/04/2021	22/04/2021
CDH-21-102	DD	231679.226	3341823.47	1825.433	-45	180	114.35	22/04/2021	25/04/2021
CDH-21-103	DD	231748.57	3341902.385	1803.528	-45	180	222.65	25/04/2021	2/5/2021
CDH-21-104	DD	231836.085	3341759.122	1791.737	-50	180	227.2	3/5/2021	9/5/2021
CDH-21-105	DD	231780.935	3341915.945	1793.259	-55	175	291.25	10/5/2021	15/05/2021
CDH-21-106	DD	231761.256	3341985.483	1761.921	-55	155	329.4	16/05/2021	20/05/2021
CDH-21-107	DD	231838.524	3341966.789	1752.592	-50	190	260.75	21/05/2021	24/05/2021
CDH-21-108	DD	231079.22	3340836.06	1893.455	-58	335	367.5	26/05/2021	4/6/2021
CDH-21-109	DD	230982.952	3340856.283	1841.6	-50	0	196.7	5/6/2021	12/6/2021
CDH-21-110	DD	230891.971	3340869.722	1811.492	-65	0	222.65	12/6/2021	18/06/2021
CDH-21-111	DD	231395.079	3340976.953	1847.984	-48	55	367.5	19/06/2021	26/06/2021
CDH-21-112	DD	231619.008	3341068.098	1850.73	-55	235	250.1	27/06/2021	2/7/2021
CDH-21-113	DD	231715.166	3341020.868	1868.605	-50	235	300.4	2/7/2021	9/7/2021
CDH-22-114	DD	230782.091	3341396.92	1849.101	-55	15	300	15/05/2022	19/06/2022
CDH-22-115	DD	230833.98	3340936.983	1813.946	-63	25	138	16/05/2022	19/05/2022
CDH-22-116	DD	230782.09	3341396.92	1849.1	-64	15	298.5	20/05/2022	23/05/2022
CDH-22-117	DD	230762.41	3340917.23	1817.6	-45	25	264	20/05/2022	28/05/2022
CDH-22-118	DD	230838.42	3341419.02	1861.82	-69	25	279	24/05/2022	28/05/2022
CDH-22-119	DD	230780.3	3340836.52	1834.53	-56	25	399	29/05/2022	7/6/2022
CDH-22-120	DD	231376.48	3341236.56	1812.86	-70	30	208.5	29/05/2022	3/6/2022
CDH-22-121	DD	231242.32	3341237.43	1811.58	-68	30	310.5	3/6/2022	8/6/2022
CDH-22-122	DD	230885.37	3340814.12	1823.08	-45	25	240	8/6/2022	14/06/2022
CDH-22-123	DD	231018.99	3341333.84	1806.28	-63	35	327	8/6/2022	13/06/2022
CDH-22-124	DD	231045.69	3341280.73	1782.95	-57	37	366	13/06/2022	19/06/2022
CDH-22-125	DD	230843.85	3340850.78	1816.68	-70	25	373.5	15/06/2022	23/06/2022
CDH-22-126	DD	230885.47	3340814.42	1823.1	-60	25	294	19/06/2022	25/06/2022
CDH-22-127	DD	230915.85	3340771.43	1843.99	-45	25	340.5	24/06/2022	2/7/2022
CDH-22-128	DD	230997.09	3340825.58	1852.86	-65	25	304.5	26/06/2022	2/7/2022
CDH-22-129	DD	231133.97	3340886.95	1905.59	-45	38	118.5	3/7/2022	5/7/2022
CDH-22-130	DD	231668.19	3340896.83	1929.59	-45	230	121.5	5/7/2022	7/7/2022
CDH-22-131	DD	231192.7	3340959.88	1863.78	-45	220	150	6/7/2022	8/7/2022
CDH-22-132	DD	231785.44	3340897.43	1927.67	-50	230	150	8/7/2022	11/7/2022
CDH-22-133	DD	231166.04	3340844.98	1930.98	-45	25	100.5	9/11/2022	11/7/2022
CDH-22-134	DD	231795.62	3340987.43	1892.89	-52	230	363	12/7/2022	19/07/2022
CDH-22-135	DD	231214.13	3340936.72	1875.74	-45	205	145.5	12/7/2022	14/07/2022
CDH-23-136	DD	230741.06	3340978.12	1825.46	-55	25	100.5	28/08/2023	30/08/2023
CDH-23-137	DD	230741	3340977.82	1825.46	-73	25	154.5	30/08/2023	2/9/2023
CDH-23-138	DD	230735.35	3340878.82	1825.54	-49	25	225	3/9/2023	6/9/2023
CDH-23-139	DD	230735.17	3340878.59	1825.52	-60	25	270	6/9/2023	10/9/2023
CDH-23-140	DD	230779.84	3340835.6	1834.52	-62	25	351	12/9/2023	23/09/2023
CDH-23-141	DD	230885.24	3340813.69	1822.99	-66	25	350.5	24/09/2023	2/10/2023
CDH-23-142	DD	230915.89	3340771.1	1843.99	-55	25	336	2/10/2023	11/10/2023
CDH-23-143	DD	230968.13	3340772.22	1870.6	-65	25	411	12/10/2023	19/10/2023
CDH-23-144	DD	231117.81	3340981.31	1882.01	-50	193	140	20/10/2023	23/10/2023
CDH-23-145	DD	231131.1	3341054.9	1832.73	-48	193	290	24/10/2023	30/10/2023
CDH-23-146	DD	231193.57	3340959.73	1863.88	-58	205	204	31/10/2023	5/11/2023

HOLE-ID	HOLE TYPE	LOCATIONX	LOCATIONY	LOCATIONZ	DIP	AZIMUTH	LENGTH	DATE STARTED	DATE COMPLETED
CDH-23-147	DD	231214.33	3340936.93	1875.75	-60	205	220	5/11/2023	10/11/2023
CDH-24-017	DD	231156.879	3341538.967	1765.315	-50	300	147.77	22/08/2024	23/08/2024
CDH-24-148	DD	231216.52	3340816.532	1949.737	-65	25	130.5	22/03/2024	25/03/2024
CDH-24-149	DD	231216.407	3340816.232	1949.773	-75	25	261	25/03/2024	
CDH-24-150	DD	231232.972	3340747.445	1985.883	-60	32	250.5	31/03/2024	6/4/2024
CDH-24-151	DD	231303.555	3340885.061	1911.68	-55	205	180	6/4/2024	10/4/2024
CDH-24-152	DD	231394.691	3340848.182	1882.018	-50	205	180	10/4/2024	12/4/2024
CDH-24-153	DD	231394.78	3340848.492	1881.954	-65	205	340.5	12/4/2024	18/04/2024
CDH-24-154	DD	231457.059	3340734.778	1914.816	-75	25	205.5	19/04/2024	22/04/2024
CDH-24-155	DD	231455.795	3340732.404	1914.997	-50	205	238.5	22/04/2024	26/04/2024
CDH-24-156	DD	231516.236	3340640.03	1959.733	-60	25	300	25/04/2024	1/5/2024
CDH-24-157	DD	231494.039	3340594.315	1970.137	-60	25	378	3/5/2024	15/05/2024
CDH-24-158	DD	231507.771	3340589.418	1970.242	-50	60	330	16/05/2024	22/05/2024
CDH-24-159	DD	231360.001	3340666.889	1966.89	-65	25	289.5	23/05/2024	28/05/2024
CDH-24-160	DD	231360.001	3340666.889	1966.89	-75	25	340.5	29/05/2024	3/6/2024
CDH-24-161	DD	231507.771	3340589.418	1970.242	-50	50	459	4/6/2024	17/06/2024
CDH-24-162	DD	231507.979	3340589.578	1970.187	-61	50	483	17/06/2024	3/7/2024
CDH-24-163	DD	231841.498	3340784.936	1967.076	-56	210	300	20/06/2024	29/06/2024
CDH-24-164	DD	231841.448	3340784.647	1967.019	-64	210	520.5	29/06/2024	13/07/2024
CDH-24-165	DD	231336.854	3340944.513	1885.98	-50	205	325.5	4/7/2024	14/07/2024
CDH-24-166	DD	231336.66	3340944.309	1885.969	-55	205	427.5	14/07/2024	27/07/2024
CDH-24-167	DD	231927.388	3340748.495	1925.846	-45	210	348	14/07/2024	25/07/2024
CDH-24-168	DD	231988.697	3340703.238	1893.463	-45	210	234	26/07/2024	31/07/2024
CDH-24-169	DD	231214.108	3340937.246	1875.664	-66	205	360	28/07/2024	6/8/2024
CDH-24-170	DD	231927.744	3340749.013	1926.109	-58	210	399	1/8/2024	10/8/2024
CDH-24-171	DD	230915.937	3340771.119	1843.858	-66	25	469.5	7/8/2024	21/08/2024
CDH-24-172	DD	231934.423	3340930.52	1951.064	-55	210	750	11/8/2024	30/08/2024
CDH-24-173	DD	230735.171	3340878.573	1825.565	-72	25	471	25/08/2024	4/9/2024
CDH-24-174	DD	231540.686	3340855.653	1922.743	-75	60	419.35	1/9/2024	13/09/2024
CDH-24-175	DD	230817.407	3340801.047	1834.474	-70	25	492	5/9/2024	17/09/2024
CDH-24-176	DD	231485.184	3340893.994	1895.647	-65	55	312.6	13/09/2024	21/09/2024
CDH-24-177	DD	231028.003	3341022.012	1856.311	-45	205	351	18/09/2024	27/09/2024
CDH-24-178	DD	231397.479	3340921.199	1863.809	-69	55	375.15	22/09/2024	29/09/2024
CDH-24-179	DD	231418.524	3340662.441	1953.402	-77	25	546	28/09/2024	15/10/2024
CDH-24-180	DD	231395.079	3340976.953	1847.984	-70	55	332.45	1/10/2024	8/10/2024
CDH-24-181	DD	231052.143	3341562.752	1784.145	-53	210	35	9/10/2024	9/10/2024
CDH-24-182	DD	231052.285	3341563.037	1784.853	-90	210	179.95	9/10/2024	11/10/2024
CDH-24-183	DD	230998.358	3341469.89	1803.238	-70	57	257.7	12/10/2024	16/10/2024
CDH-24-184	DD	230998.358	3341469.892	1803.237	-70	47	107.2	16/10/2024	17/10/2024
CDH-24-185	DD	231333.535	3341613.86	1766.83	-60	307	336	17/10/2024	21/10/2024
CDH-24-186	DD	231102.113	3341548.824	1779.558	-55	210	244	18/10/2024	21/10/2024
CDH-24-187	DD	232107.619	3341617.828	1799.227	-45	40	152.5	22/10/2024	24/10/2024
CDH-24-188	DD	231467.32	3341716.025	1769.519	-70	290	337.5	22/10/2024	28/10/2024
CDH-24-189	DD	232107.792	3341617.57	1799.208	-70	40	262.3	24/10/2024	27/10/2024
CDH-24-190	DD	232107.417	3341617.473	1799.193	-45	70	192.15	27/10/2024	30/10/2024
CDH-24-191	DD	232107.238	3341617.546	1799.105	-65	70	291.25	30/10/2024	3/11/2024
CDH-24-192	DD	231583	3341777	1789	-50	290	295.5	31/10/2024	5/11/2024
CDH-24-193	DD	232034.641	3341632.668	1793.758	-50	30	218.05	4/11/2024	7/11/2024
CDH-24-194	DD	231583	3341777	1789	-70	290	342	5/11/2024	9/11/2024
CDH-24-195	DD	230885.388	3340814.485	1823.114	-79	355	170.6	9/11/2024	28/11/2024

HOLE-ID	HOLE TYPE	LOCATIONX	LOCATIONY	LOCATIONZ	DIP	AZIMUTH	LENGTH	DATE STARTED	DATE COMPLETED
CDH-24-195A	DD	230885.402	3340814.47	1823.107	-80	360	176.2	10/11/2024	17/11/2024
CDH-24-195B	DD	230885.402	3340814.48	1823.116	-80	360	470.4	17/11/2024	27/11/2024
CDH-24-196	DD	230735.164	3340878.577	1825.55	-72	7	435	10/11/2024	13/12/2024
CDH-24-196A	DD	230735.14	3340878.563	1825.542	-70	15	330	12/11/2024	20/11/2024
CDH-24-196B	DD	230735.162	3340878.582	1825.547	-70	15	610.5	22/11/2024	6/12/2024
CDH-24-197	DD	230968.13	3340772.22	1870.6	-59	42	383	8/12/2024	16/12/2024
CDH-25-198	DD	230968.168	3340772.426	1870.544	-68	42	492.25	6/1/2025	17/01/2025
CDH-25-199	DD	231131.1	3341054.9	1832.73	-62	210	474	6/1/2025	17/01/2025
CDH-25-200	DD	231299.298	3341062.169	1865.906	-52	210	490.5	18/01/2025	28/01/2025
CDH-25-201	DD	231420.924	3340898.236	1866.516	-58	206	462.3	19/01/2025	
CDH-25-202	DD	231420.918	3340898.246	1866.517	-62	210	597.45	28/01/2025	8/2/2025
CDH-25-203	DD	231668.19	3340896.83	1929.59	-64	210	559.5	30/01/2025	13/02/2025
CDH-25-204	DD	231797.752	3340988.904	1892.699	-45	60	213	14/02/2025	17/02/2025
CDH-25-205	DD	231797.721	3340988.898	1892.683	-70	60	210	17/02/2025	19/02/2025
CDH-25-206	DD	231788.149	3340898.738	1927.684	-45	60	240	21/02/2025	25/02/2025
CDH-25-207	DD	231788.187	3340898.721	1927.694	-60	60	366	25/02/2025	4/3/2025
CDH-25-208	DD	231793.512	3342082.165	1743.952	-60	300	27	5/3/2025	6/3/2025
CDH-25-209	DD	231793.52	3342082.179	1743.943	-45	300	339	6/3/2025	9/3/2025
CDH-25-210	DD	231663.654	3342268.984	1780.681	-50	120	279	11/3/2025	13/03/2025
CDH-25-211	DD	231736.908	3342371.201	1774.902	50	120	301.5	14/03/2025	17/03/2025
CDH-25-212	DD	231580.472	3341780.714	1780.699	-50	0	291	18/03/2025	22/03/2025

All coordinates reported in WGS 84 / UTM zone 13N