



REPORT

SEC S-K 1300 Technical Report Summary

Southern Copper Corporation: Buenavista Copper

Submitted to:

Southern Copper Corporation

Submitted by:

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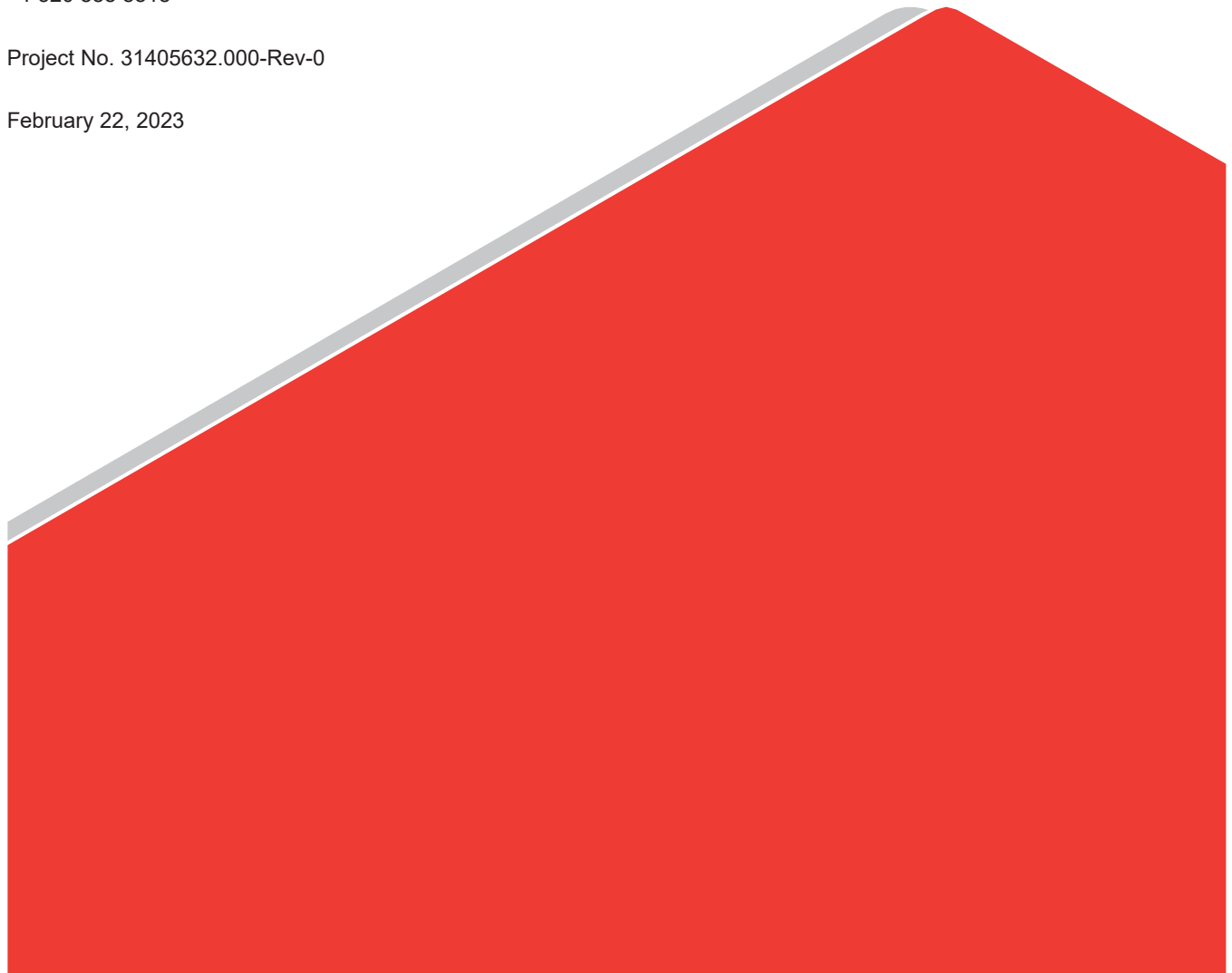


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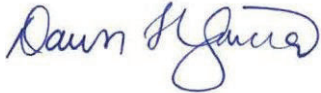



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DATE AND SIGNATURE PAGE

The effective date of the Mineral Resources and Mineral Reserves estimates was December 31, 2022.

Author	Section(s)	Signature
Ronald Turner (Golder)	1.2, 1.3, 1.5, 1.10, 2.4, 5.2, 6, 7.1-7.2, 8, 9.1, 11, 20, 22.1, 23.1	
Danny Tolmer (Snowden Optiro)	1.4, 1.6-1.8, 1.10, 2.1-2.3, 2.4, 2.5, 5.1, 5.3, 9.2, 12, 13, 18, 19, 21, 22.4, 23.5, 24, 25	
Dawn Garcia (Stantec)	1.1, 1.9, 2.4, 3, 4, 7.3, 17, 22.2, 23.2	
Jesus Romero (Golder)	2.4, 15.7	
Michael Pegnam (Golder)	7.4, 9.2.1, 13.2.1, 23.3	
Eugenio Iasillo (Process Engineering LLC)	2.4, 10, 14, 15.1-15.6, 22.3, 23.4	
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The qualifications and relevant experience of each QP are shown below.

- Ronald Turner:
 - Education:
 - Geologist, Universidad de Concepción, Chile, 1993
 - Postgraduate Studies in Geostatistical Estimation, Universidad de Chile, Santiago, Chile, 2007
 - Years of Experience:

- Has 29 years of experience in the mining industry with 13 years in geological and mineral resource and reserves reporting, 8 years in project development and mining and 8 years in exploration of base and precious metals.
- Relevant Experience:
 - Has been a Mineral Resource Group Leader with Golder Associates S.A. working on validation and construction of databases and QA/QC programs, interpretation and construction of 3D geological models, and resource estimation.
 - Has led and participated in Mineral Resources and Reserves audits and Due Diligence in mines and projects for a variety of commodities under different international codes.
 - Was a Mineral Resource Superintendent at Minera Escondida Ltda. responsible for the Resources, Geological and Geometallurgic models for Minera Escondida, including Escondida and Escondida Norte Deposits
- Professional Registration:

Is in good standing as a Member of the Australian Institute of Mining and Metallurgy (MAusIMM, CP,Geo)
- Danny Tolmer:
 - Education:
 - Is a Mining Engineer with a B.A.Sc. in Mining Engineering from the University of British Columbia, Vancouver, 2004.
 - Years of Experience:
 - Has 18 years of experience in the mining industry having worked in large coal and copper open pit mining operations.
 - Is the Regional Manager of North America at SnowdenOptiro. Provides consulting services for mining projects from preliminary economic assessments to feasibility and permitting. Has assisted mines around the globe with short-range, long-range, drill and blast, and other operational issues.
 - Relevant Experience:
 - Is a Principal Mining Engineer responsible for the mine planning and economic evaluations group in Vancouver, British Columbia.
 - Has completed numerous reserve estimates and audits, operational assistance, short-term mine plans, long-term mine plans, permit applications, and cashflow models.
 - As a mining engineer with Snowden has worked on economic pit shell analyses, training, and site assistance for numerous open pits as well as commissioned an open pit gold mine in Newfoundland, Canada.
 - Professional Registration:

-
- Registered Professional Engineer – British Columbia, EGBC Certificate
 - Registered Professional Engineer – Alberta, APEG Certificate
 - Registered Professional Engineer – Ontario, PEO Certificate
 - Registered Professional Engineer – Yukon, APEY Certificate
 - Registered Professional Engineer – Northwest Territories
- Dawn Garcia
- Education:
 - Is graduate of Bradley University with a bachelor’s degree in Geological Sciences in 1982 and a graduate of California State University, Long Beach, with a master’s degree in Geology in 1995
 - Years of Experience:
 - Practiced as an environmental geologist and hydrogeologist for over 35 years.
 - Over 20 years of experience in the mining industry.
 - Relevant Experience:
 - Acted as the Qualified Person for the Environmental, Permitting and Social section for 10 NI 43-101 technical reports and more than 20 detailed environmental and permitting reviews.
 - Conducted environmental, socio-economic, or water-related tasks for over 50 mineral development, mineral processing, and mining operations.
 - Professional Registration:
 - Licensed Professional Geologist (Arizona, License No. 26034)
 - Professional Geologist (CPG) with the American Institute of Professional Geologists (Membership Number 08313)
 - Registered member of the Society for Mining, Metallurgy & Exploration (Membership No. 4135993)

- Jesus Romero:
 - Education:
 - Is a Senior Consultant with a Master of Science (M.Sc.) in Planning from the University of Arizona (USA) and a Bachelor of Science (B.S.) in Civil Engineering from Universidad de Sonora in Mexico.
 - Years of Experience:
 - He has 22 years of experience in engineering services and project management in the consulting industry.
 - Relevant Experience:
 - His experience in tailings and mine waste projects in North America and, South America include, site geotechnical investigation, tailings dams design and construction, waste dumps design, geotechnical analyses and preparation of construction drawings and specifications.
 - Professional Registration:
 - Registered Professional Engineer - Arizona, U.S. (Registration No. 42771)

- Eugenio Iasillo:
 - Education:
 - Has a Bachelor of Science (B.S.) in Chemical Engineering from the University of Michoacán (Mexico). Completed Continuing Education certificate in Computer Science and Extractive Metallurgy from the University of Arizona.
 - Years of Experience:
 - Has 45 years of experience in the mining industry with 21 years in engineering and metallurgical research geared toward project development.
 - Has a strong background in operation and control of large mineral beneficiation plants and has been involved in engineering and start-up of pilot and industrial scale plants
 - Relevant Experience:
 - As Principal of Process Engineering LLC. provides consulting services for mining project development and mineral processing plants design. Development of metallurgical data, data analysis and development of plant design criteria.
 - Has been Technical Director/ Sr. Process Engineer with Metcon Research / K D Engineering, (Tucson, Arizona) responsible for technical, commercial and operational aspects of a metallurgical research facility with analytical capability.
 - Was a mill manager at Franklin Consolidated Mines, Inc. (Idaho Springs, Colorado); a mill superintendent at Au Magnetics Management Inc. (La Jolla, California); a Concentrator Metallurgist at

Sonora Mining Corp. (Sonora, California) and at Phelps Dodge Corp. (Morenci, Arizona); and a Process Engineer at Mexicana de Cobre, S.A. (Sonora, Mexico).

- Professional Registration:

- Registered Professional Engineer - Arizona, U.S. (Arizona Certificate/Registration No. 28209)
- Chemical Engineering, Mexico (Professional Registration, CEDULA No. 486768)

- Michael Pegnam:

- Education:

- Graduate of University of Arizona with a bachelor's degree in Geological Engineering
- Graduate of University of California Berkeley with a master's degree in Geotechnical Engineering

- Years of Experience:

- He has 28 years of experience in geotechnical engineering in the mining and civil engineering fields

- Relevant Experience:

- His relevant experience in slope engineering includes completing slope designs for open pit mines in North America, Mexico, and South America and highway cuts in rock in North America. He also has specialty expertise in rock and soil slope stability evaluation, installation of rock bolts, dowels, and pinned/draped mesh for rockfall mitigation

- Professional Registration:

- Registered Professional Engineer - Arizona, U.S. (Registration No. 33800)
- Registered Professional Engineer – New Mexico, U.S. (Registration No. 16267)
- Registered Professional Engineer – California, U.S. (Registration No. C56831)
- Registered member of the American Society of Civil Engineers since 1995 (Membership I.D. #321277)

1.0 EXECUTIVE SUMMARY

1.1 Property Description and Ownership

The Buenavista del Cobre property is an operating porphyry copper mine located within the Cananea mining district in the north-central part of the State of Sonora, Mexico. The property is located about 222 kilometers (km) northeast of the city of Hermosillo, Sonora and 150 km southeast of the city of Tucson, Arizona. The property covers an area of 89,220.5 hectares (ha) of mining concessions. The Cananea mining district is located at an altitude of between 1,600 and 2,485 meters (m) above mean sea level (amsl). The elevation of the mine is of the order of 1,604 m.

All the estimated Mineral Resources and Reserves lie within privately owned or possessed land under the name of Buenavista del Cobre SA de CV, or Proyecciones Urbanísticas S de RL de CV. Ownership is not required to explore or mine a concession; however, Southern Copper Corporation generally owns the land related to the Buenavista del Cobre operations. Additionally, Southern Copper Corporation stated that all the processing facilities of the Buenavista del Cobre operations and land on which they are built are owned by Southern Copper Corporation.

1.2 Geology and Mineralization

The Cananea mining district, where the Buenavista del Cobre porphyry copper deposit is located, lies within the eastern section of the Sonora Basin and Range Province of northern Mexico. Sustained magmatic activity along the North American Cordillera during the late Mesozoic through Paleogene resulted in the development of numerous porphyry copper deposits. The Precambrian Cananea Granite basement rocks are overlain by several Paleozoic sedimentary units ranging in age from the Cambrian Capote Quartzite through thick limestone sequence of Upper Paleozoic age. Overlying the Paleozoic sediments and Precambrian granite of Cananea are the Henrietta and Elenita formations which are Triassic to late Jurassic in age and are comprised of volcanic rocks of latite to andesite composition. The El Torre Syenite is of roughly the same age. The youngest volcanic units in the district are andesitic tuffs and rhyolites of the Mesa Formation.

The intrusions of diorite, granodiorite and quartz monzonite formed after the emplacement of the Mesa Formation. In the final stage of intrusive activity, diabase dikes intruded faults and fractures with a NW - SE trend. Pipe-like breccias formed as late-stage products of the quartz-monzonite porphyries. During the Cenozoic, alluvial and fluvial sediments were deposited as erosion of the Cananea Mountains occurred. Exhumation of the upper part of the Cananea mining district porphyry system resulted in the formation of a supergene enrichment and an oxidation overburden overlying the porphyry system.

The Buenavista del Cobre (BVC) deposit in the Cananea mining district is divided into two target zones, namely BVC and Buenavista Zinc (BVZ). The BVZ deposit conformably underlies the BVC deposit and is located to the northwest of the BVC deposit

1.3 Status of Exploration

The Cananea mining district has been subject to several historical and recent exploration campaigns targeting copper mineralization at the Project site. These exploration campaigns included channel and bulk sampling, exploration drilling, and geotechnical drilling. To date, 1,104,502 m of exploration drilling has been carried out, distributed in 6,239 drill holes. These exploration campaigns have been carried out by different mining companies since 1926. Since 1991 SCC has made significant investments in exploration work to quantify the Mineral Resources and Mineral Reserves of the BVC deposit.

The main objective of the exploration programs implemented at BVC have been to explore for new ore bodies as well as the increase of Proven and Probable Mineral Reserves. The achievement of these objectives has served as a basis to support planning and growth strategies as well as investment programs for the modernization of the mining unit.

1.4 Development and Operations

The BVC open pit mine has been in operation for more than 50 years. The ore at BVC is recovered using open-pit conventional truck and shovel mining methods due to the proximity of the ore to the surface and the physical characteristics of the deposit. Mining operations progress in a three-step process, which includes development, overburden removal, and ore production. In the development phase, drainage and water control are established, and then the required infrastructure consisting of power, pipelines, and roadways is established.

All required fixed and permanent infrastructure of power, pipelines and primary roadways, and Project access are established. Drainage, water controls, and mine access roads and ramps are established for current operations and will be expanded and continued as the pit progresses through its planned life of operations.

Since this is a well-established operation, the deposit, mining, beneficiation, and environmental aspects of the Project are very well understood. The knowledge for BVC is based on the collective experience of personnel from SCC site operations and technical disciplines gained during years of copper mining and ore beneficiation. This knowledge is supported by years of production data and observations from BVC personnel.

A life-of-mine (LOM) plan and pit design were developed for 2023 through 2050. LOM plan pit design is based on current geotechnical and hydrology designs, and extraction limits, which are dictated by mining recovery and dilution factors, cut-off grade (COG) estimation, and economic pit optimization analysis. Pit design includes detailed design factors for wall slopes, berm widths, pit bottom, and access ramp grades and widths.

The LOM plan includes annual forecasts of waste removal and transportation and ore extraction and beneficiation. Waste is hauled to one of the 2 ex-pit waste dumps, or overburden storage facilities (OSFs). Overburden material is loaded by 15 electric rope shovels loading 360-t haul trucks. Dozers assist the loading fleet with general clean-up and material removal, as necessary. Dozers are used to push overburden down the sides of the OSFs on an as-needed basis.

Ore is mined, transported, and crushed for processing to recover copper concentrate, molybdenum concentrate, and zinc concentrate. Two copper beneficiation plants, Concentrator 1 and Concentrator 2, are in operation at BVC. Concentrator 1 has been in operation since 1988 and Concentrator 2 since 2016. The two concentrators follow a conventional process of crushing, screening, ball milling and sequential flotation to separate copper and molybdenum concentrates. The differences between the two plants are size of the equipment and the number of machines dedicated to each unit operation, because Concentrator 2 was designed and built with modern equipment 30 years after Concentrator 1.

BVC processing facilities also include three leaching, solvent extraction and electrowinning (L-SX-EW) plants. The leachate facilities identified as Quebalix I to IV are located adjacent to leach pads. The leach pad at each Quebalix facility is fed with leached ore that is crushed, transported, and stacked with belt conveyors. The primary process for BVC is conventional milling/flotation of ore above a COG of around 0.30%Cu, however the mine is in the process of moving away from assigning a fixed COG and lowering the COG to an economic breakeven COG over the next few years. Low-grade ore COG is also being re-evaluated and reduced to an economic threshold, however the current practice is ROM between 0.15% and 0.30% total Cu that results from mining concentrator-

grade ore is leached as part of the secondary process. The L-SX-EW process is used to produce pure copper cathode.

Zinc and copper extracted from the BVZ sulfide ores mined from the BVZ area of the pit will be sent to the ZN concentrator or one of the Cu concentrators.

The LOM plan life is approximately 28 years, as of December 31, 2022, with Run-of-Mine (ROM) ore tonnages delivered to the beneficiation plants ranging from 73 to 200 Million tonnes per year (Mtpy) on a dry basis, resulting in the production of approximately 600 million pounds (Mlb) to 1,800 Mlb per year of concentrated copper.

The mining equipment fleet planned includes a range of 7 to 15 electric rope-shovels, 100 to 120 end-dump haul trucks, and mine support equipment to support the mine plan production requirements.

1.5 Mineral Resource Estimate

This sub-section contains forward-looking information related to Mineral Resource estimates for the Project. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant differences from one or more of the material factors or assumptions that were set forth in this sub-section including geological and grade interpretations and controls and assumptions and forecasts associated with establishing the prospects for economic extraction.

The Mineral Resource were estimated based on the long-standing exploration drilling and sampling completed at BVC since 1926. The drilling database used for the modeling was reviewed with the Qualified Person's (QP's) internal software (DataCheck®), which allows the detection of inconsistencies such as: overlapping intervals, excessive path deviation between measurement intervals, duplication of collars, sample depth greater than the depth of the collar, among others. Two different geological models were prepared for BVC, including a Lithology model and a Mineral Zone model, which were used to define estimation domains for the Resource model. Exploratory Data Analysis (EDA) and geostatistical analysis were completed on the raw and composite data sets to help define interpolation parameters and Mineral Resource classifications. The Mineral Resources were restricted based on an optimized pit limit that took into account economic cut-off value, price, mining costs, infrastructure limitations, and mineral licenses.

Mineral Resource estimates exclusive of Mineral Reserves are summarized in Table 1.1 on a 100% ownership basis. Mineral Resources presented in the table are in accordance with the definitions presented in S-K 1300. The effective date of the Mineral Resource estimate is December 31, 2022.

Table 1.1: In-Situ Mineral Resource Estimate, Exclusive of Mineral Reserves – 100% Ownership Basis

Process	Classification	Tonnes (Mt) ⁽⁴⁾	Grade			Contained Metal		
			Total Cu (%) ⁽²⁾	Mo (%) ⁽²⁾	Zn (%) ⁽²⁾	Cu (kt) ⁽⁵⁾	Mo (kt) ⁽⁵⁾	Zn (kt) ⁽⁵⁾
Plant Cu ⁽¹⁾⁽³⁾	Measured	-	-	-	-	-	-	-
	Indicated	764	0.34	0.005	0.07	2,569	40	536
	Measured + Indicated	764	0.34	0.005	0.07	2,569	40	536
	Inferred	13,015	0.21	0.004	0.03	25,666	490	3,669
Plant Zn ⁽¹⁾⁽³⁾	Measured	-	-	-	-	-	-	-
	Indicated	148	0.46	0.002	0.78	708	2	1,096
	Measured + Indicated	148	0.46	0.002	0.78	708	2	1,096
	Inferred	143	0.43	0.003	0.49	632	3	743
Leach ⁽¹⁾⁽³⁾	Measured	-	-	-	-	-	-	-
	Indicated	77	0.13	-	-	89	-	-
	Measured + Indicated	77	0.13	-	-	89	-	-
	Inferred	2,838	0.14	-	-	3,873	-	-

Notes:

1. Mineral Resources are reported on a 100% basis and are exclusive of Mineral Reserves.
2. Mineral Resources are reported on a break-even plant and leach profit basis.
3. The estimate was constrained to within the Resource pit based on a Cu price of US\$3.795/lb, Mo price of US\$11.50/lb and Zn price of US\$1.32/lb
4. Tonnes are reported on a dry basis
5. Contained Metal (CM) is calculated as follows:
CM = Tonnage (Mt) * Grade (%) * 10
6. Tonnage and contained metal have been rounded to reflect the accuracy of the estimate and numbers may not add exactly
7. The estimate was completed using a SG of 2.6
8. The estimate was constrained to within the Resource pit
9. The Mineral Resource estimates were prepared by Ronald Turner, CP. (who is the independent Qualified Person for these Mineral Resource estimates), reported using the S-K 1300 Definition Standards adopted December 26, 2018

The December 31, 2022, Mineral Resource estimate has been slightly decreased from the December 31, 2021, estimate, due to the updates to the Mineral Reserve ultimate pit based on revised cut-off grades as discussed in Section 12.2.4.

SCC has a 99.95% ownership in BVC through their main subsidiaries with the remainder being held through intermediate holding companies.

1.6 Mineral Reserve Estimate

This sub-section contains forward-looking information related to Mineral Reserve estimates for the Project. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant differences from one or more of the material factors or assumptions that were set forth in this sub-section including Mineral Resource model tonnes and grade, modifying factors including mining and recovery factors, production rate and schedule, mining equipment productivity, commodity market and prices and projected operating and capital costs.

A Mineral Reserve estimate has been prepared for BVC. Reserves are limited by a buffer of 500 m from the nearby town of Cananea, the remaining capacity of the New Tailings Storage Facility (TSF) and the ultimate pit designed for the LOM plan, which was limited with an economic optimized pit analysis.

The reserve estimate includes mining modifying adjustments for mining ore recovery, mining dilution, and process recovery factors. An economic cut-off value has been used to identify ore being routed to the leach pad and to the

zinc plant. For the copper concentrators a declining cut-off from years 1 to 5, and an economic cut-off has been used for the remaining LOM. Section 12.2.4 contains further details on cut-off grades.

For this Mineral Reserve estimate, Indicated Mineral Resources inside the ultimate pit were converted to Probable Mineral Reserve. The Mineral Reserve estimates are shown in Table 1.2 on a 100% ownership basis. The Mineral Reserves are estimated at a constant copper price of US\$3.30 per pound, molybdenum price of US\$10.00 per pound and zinc price of US\$1.15 per pound. The effective date of the Mineral Reserve estimate is December 31, 2022.

Table 1.2: Mineral Reserve Estimate (ROM) – 100% Ownership Basis

Classification	Destination	Tonnes (Mt)	Grades			Contained Metal		
			Total Cu (%)	Mo (%)	Zn (%)	Cu (Mlbs)	Mo (Mlbs)	Zn (Mlbs)
Probable	Sulfide ROM Mill Feed - Cu Plant	2,020	0.42	0.007	-	18,529	333	-
	Sulfide ROM Mill Feed - Zn Plant	96	0.39	-	1.43	824	-	3,018
	Sulfide ROM Mill Feed - Total	2,116	0.41	-	-	19,353	333	3,018
	Leach	1,132	0.22	-	-	5,456	-	-
	Waste	3,286						
	Total Material	6,533						
	Stripping Ratio ((W+L)/M)	2.19						
	Stripping Ratio (W/(M+L))	1.04						

Notes:

1. Mineral Reserves are reported effective December 31, 2022. The Qualified Person for the estimate is Mr. Danny Tolmer, P.Eng.
2. Mineral Reserves are the economic portion of the Mineral Resources selected for leach and/or concentrator recovery processes and includes considerations for modifying factors such as mining loss (2%) and dilution (1%), described in Section 13.3.1.
3. Strip ratio calculated with W = Waste, L = Leach, M = Mill Feed
4. Mineral Reserves are reported above a breakeven economic value based on the long range schedule (Section 13.4), inclusive of processing costs and transport streams. Details of the economic cut-off are provided in Section ..
5. Tonnages are reported in metric units. Contained copper, molybdenum, and zinc is reported in imperial units.
6. Numbers have been rounded to reflect appropriate accuracy and may result in apparent summation difference between tonnes, grade, and contained metal content.
7. Grades and contained metal are not reported if there is no value from the respective processing and transport streams
8. The projected December 31, 2022, topographic surface was used for the calculation of the Mineral Reserves and reconciled with the actual production data provided by BVC for October to December 31, 2022, was used to adjust this estimate.

The December 31, 2022, Mineral Reserve estimate has decreased from the December 31, 2021 estimate, due to mining and revised cut-off grade parameters as discussed in Section 12.2.4.

SCC has a 99.95% ownership in BVC through their main subsidiaries with the remainder being held through intermediate holding companies.

1.7 Capital and Operating Costs

This section contains forward-looking information related to capital and operating cost estimates for the Project. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant differences from one or more of the material factors or assumptions that were set forth in this section including prevailing economic conditions continue such that projected capital costs, labor and equipment productivity levels and that contingency is sufficient to account for changes in material factors or assumptions.

The annual production estimates were used to determine annual estimates of capital and operating costs. All cost estimates were in Q4 2022 US\$. Total capital costs are estimated to be about US\$5.2 billion including new mine equipment, major maintenance and components and special projects. Annual operating costs were based on historical operating costs, material movements and estimated unit costs. They included costs for mining, crushing

and conveying, milling, leaching, SX-EW, molybdenum plant, zinc plant, freight and marketing costs and estimates of accretion and closure. Annual total operating costs varied from US\$4.93 per tonne to US\$7.69 per tonne of total material moved, with an average total cost of US\$5.93 per tonne of total material moved.

1.8 Economic Analysis

This section contains forward-looking information related to economic analysis for the Project. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant differences from one or more of the material factors or assumptions that were set forth in this sub-section including estimated capital and operating costs, project schedule and approvals timing, availability of funding, projected commodities markets and prices.

All costs were assumed to be at Q4 2022 US\$.

For the economic analysis, a Discounted Cashflow (DCF) model was developed. SCC requested that the following commodity prices be considered for the economic analysis: Copper at US\$3.30/lb, Molybdenum at US\$10.00/lb and Zinc at US\$1.15/lb. The QP is of the opinion that these prices reasonably reflect current market prices and are reasonable to use as forecast of future prices for the purpose of the economic analysis for this Study.

The discounted cashflow establishes that the Mineral Reserves estimate provided in this report are economically viable. The base case NPV₁₀ is estimated to be US\$4.6 B. The Net Present Value for this study is most sensitive to copper price.

The QP considers the accuracy and contingency of cost estimates to be within a Prefeasibility Study (PFS) standard and sufficient for the economic analysis supporting the Mineral Reserve estimate for BVC.

1.9 Permitting Requirements

This sub-section contains forward-looking information related to permitting requirements for the Project. The material factors that could cause actual results to differ materially from the conclusions, estimates, designs, forecasts or projections in the forward-looking information include any significant differences from one or more of the material factors or assumptions that were set forth in this sub-section including regulatory framework is unchanged for Study period and no unforeseen environmental, social or community events disrupt timely approvals.

The most recent mine operations are under an environmental license; older operations precede the environmental permitting regulations. However, BVC is planning to submit a regional Environmental Impact Statement that will include all other historical mining facilities and activities that were not included in the current environmental license. The timing of the submittal of the regional environmental impact statement was not provided to the QP, nor is it known whether the Mexican environmental agency has established a due date.

Mexico has established environmental laws and regulations that apply to the development, construction, operation and closure of mining projects. The operations generate mining wastes in the form of tailings, waste rock and spent ore, which have all been characterized as potentially acid generating (PAG). Geochemistry static testing has also indicated high levels of arsenic, antimony and lead that could exceed permissible limits. No kinetic testing has been carried out to determine metals leaching scenarios over time. The slag was classified as non-hazardous waste; however, the historic smelter area contains soils contaminated with arsenic and lead. There are active violations, primarily associated with the New TSF, that have proposed compliance plans.

Due to the age of the historic operations, no environmental studies were completed prior to the start of operations; however subsequent environmental baseline studies have been prepared to characterize the environmental conditions of the area, including climate, fauna, flora, and hydrology. The operations are not deemed to be within a protected area decreed by state, federal, or municipal agencies.

The operations have established environmental monitoring programs to comply with Mexican regulations. Of particular importance are the air, surface water and groundwater quality monitoring programs. Surface water quality in the region has been impacted from the historic mining operations and from the town of Cananea. In addition, air quality results from 2022 have indicated impacts in the town of Cananea.

Contaminants related to the mining operations have been detected in surface water downstream from the TSF No. 3 (Sonora River basin) during the baseline studies; however more recent water quality data as part of the environmental monitoring program indicated that none of the results exceeded Mexican permissible limits for surface water discharges. Water quality data from 2022 were not provided for the QP's review.

There are no naturally occurring surface water bodies at the mine site and the streams are ephemeral. Recent groundwater quality data indicated that permissible limits were exceeded for some constituents when compared to surface water discharge standards and additional constituents based on Mexican standards for human consumption.

Mexico has not established a specific mine closure regulation. No written closure plan has been developed for the BVC operations. A 2020 Asset Retirement Obligation estimated at about US\$440 million was developed but does not currently include a mine closure plan. A detailed closure plan must be developed.

Stakeholders identified in 2020 were local ejidos, neighborhoods, institutions, groups, communication media, formal and informal leaders, and government. The community has a dependence on BVC for employment. Health and environmental aspects are high concerns. A high-profile spill of copper sulfate from a leaching pond that impacted the Sonora River in 2014 has continued to be a factor in stakeholder perception and there are lawsuits that have not been resolved. The Mexican environmental agency determined that the remediation, repair and compensation of damages to the environment and human health were satisfactory in 2017 and the environmental file was closed. Social license is a potential risk for the operations.

1.10 Qualified Person's Conclusions and Recommendations

As the BVC Mine is an active mine with more than 50 years of operational experience and data, it is the QP's opinion that the relevant technical and economic factors necessary to support economic extraction of the Mineral Resource have been appropriately accounted for at the Mine. Some additional work has been identified, and is being implemented by the site teams, to improve the classification categories of the mineral resources but is not deemed to influence the prospect of economic extraction for the Mineral Resources stated in this TRS.

The 2022 Mineral Resource estimate may be materially impacted by any future changes in the breakeven economic cut-off value, potentially resulting from changes in mining costs, processing recoveries, or metal prices or from changes in geological knowledge as a result of new exploration data.

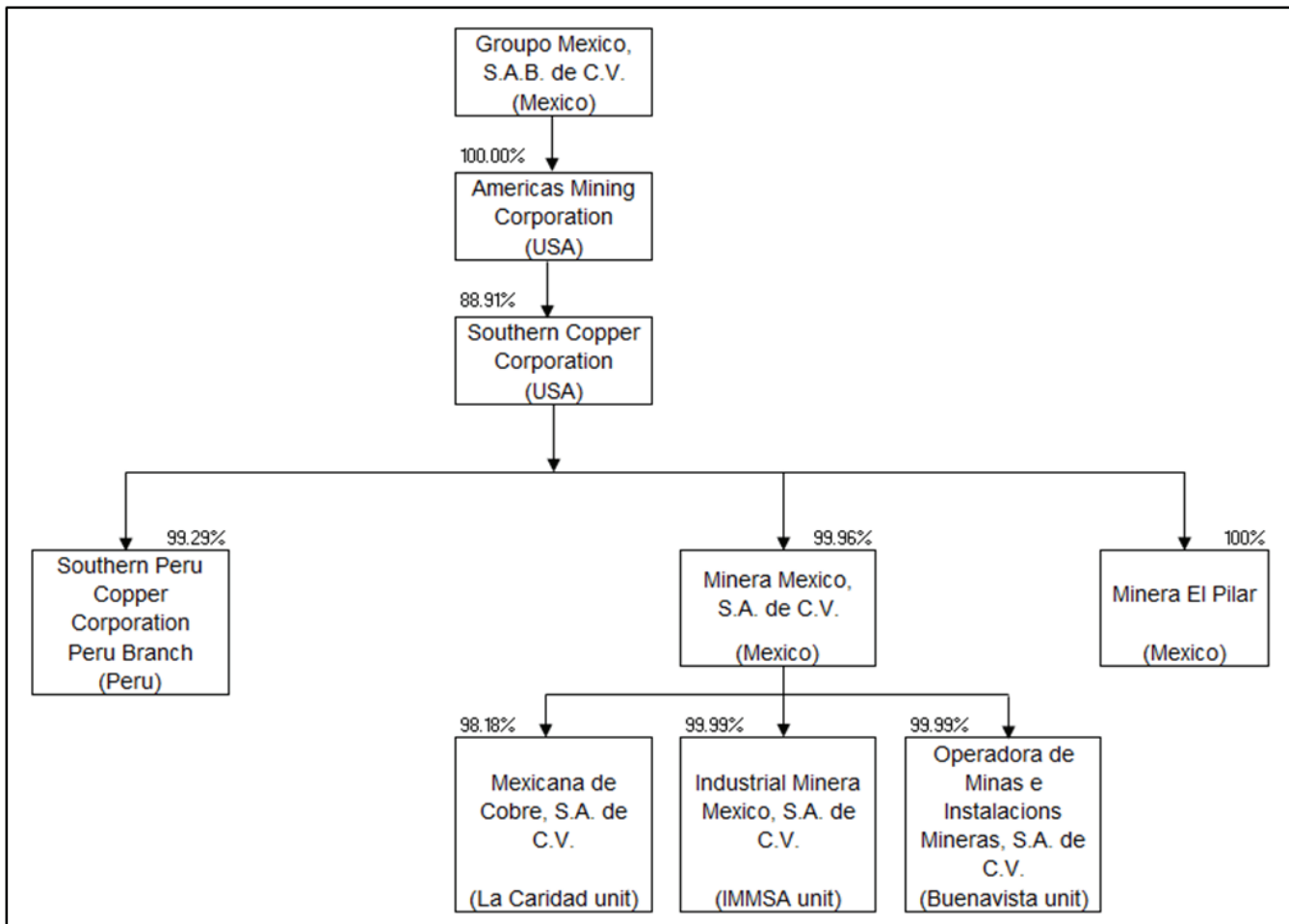
In the QP's opinion, the operational and mine planning data, process recovery testing and modeling, LOM Plan, and estimation are carried out in a manner that both represents the data and operational experience and methodology well and mitigates the likelihood of material risk in the estimate of Mineral Reserves.

2.0 INTRODUCTION

Southern Copper Corporation (SCC) is an indirect subsidiary of Grupo Mexico S.A.B. de C.V. (Grupo Mexico) which, as of December 31, 2022, owns 88.9% of SCC through its wholly-owned subsidiary Americas Mining Corporation (AMC). SCC’s operations in Mexico are conducted through its subsidiary, Minera Mexico, S.A. de C.V. (Minera Mexico), which SCC acquired in 2005 from Americas Mining Corporation. SCC owns 99.6% of Minera Mexico.

Minera Mexico is a holding company and operates through three main subsidiary units namely, Operadora de Minas e Instalaciones Mineras, S.A. de C.V. (the Buenavista unit), Mexicana de Cobre, S.A de C.V. (the La Caridad unit) and Industrial Minera Mexico, S.A. de C.V. (the IMMSA unit). The corporate organization structure is shown in Figure 2.1. The Buenavista unit includes an open-pit copper mine, two copper concentrators and two Solvent Extraction and Electrowinning (SX-EW) plants.

Figure 2.1: Southern Copper Corporation Organization Structure



Source: SCC

The chart describes the organizational structure and identifies SCC’s main subsidiaries and does not include their intermediate holding companies.

2.1 Registrant Information

This Technical Report Summary (TRS) for the BVC property located in the north-central part of the State of Sonora, Mexico, was prepared by Golder Associates USA Inc. (Golder), (as of January 1, 2023, Golder is now WSP USA Inc.), for SCC. As noted on the Date and Signature Page, several QPs were involved in the technical work summarized in this TRS.

2.2 Terms of Reference and Purpose

The effective date of this TRS report was February 22, 2023, while the effective date of the Mineral Resource and Mineral Reserves estimates was December 31, 2022. It is the Qualified Person's opinion that there are no known material changes impacting the Mineral Resource and Mineral Reserve estimates between December 31, 2022, and February 22, 2023.

This TRS uses US English spelling and a combination of Metric and Imperial units of measure. Ore grades are presented in weight percent (wt.%), while metals quantities are stated in pounds. All other values are presented in Metric units of measure. Costs are presented in constant US Dollars as of December 31, 2023.

Except where noted, coordinates in this TRS are presented in metric units using the World Geodetic System (WGS) 1984 Universal Transverse Mercator (UTM) ZONE 12 North (12N).

The purpose of this TRS is to report Mineral Resources and Mineral Reserves for SCC's Buenavista operation.

Key Acronyms and definitions for this Report include those items listed in Table 2.1.

2.3 Sources of Information

Much of the information and data used in the development of this TRS was provided by BVC and SCC as well as sourced from publicly available information.

Most of the technical documents related to the tailings storage facilities were received when Golder personnel visited Grupo Mexico's office in Mexico City on October 14, 2021, and October 15, 2021.

A detailed list of cited reports is noted in Section 24.0 of this TRS.

Table 2.1: Key Acronyms and Definitions

Abbreviation/Acronym	Definition
%	percent
°	degrees
12N	ZONE 12 North
3D	three-dimensional
A	ampere
AA	Atomic Absorption
AFC	Antigua Fundación" (historical smelter) of Cananea
Ag	silver
AMC	Americas Mining Corporation
amsl	above mean sea level
As	arsenic
Au	gold
Bi	bismuth
Bm ³	Billion cubic meters
Bt	Billion tonnes
BVC	Buenavista Copper
BVZ	Buenavista Zinc
Cd	Cadmium
CD	Contingency Dam or Presa de Contingencia
CESCA	Centro de Estudios, Servicios y Consultorias Ambientales
CFE	Comision Federal de Electricidad, or federal electricity commission
CIQ	China Inspection and Quarantine Services
cm/pixel	centimeter per pixel
CNA	Comision Nacional del Agua or National Water Commission
CNI	Call & Nicholas, Inc.
COFEPRIS	Comision Federal para la Proteccion contra Riesgos Sanitarios
COG	cut-off grade
CONAGUA	Mexican Water Commission
CRM	certified reference material
Cu	copper
CuCN	soluble copper cyanide
Cug/L or g Cu/L	grams of copper per liter
Cu-Mo	copper-molybdenum
CuO	copper oxide
CuSol	copper soluble
DDH	diamond drill hole
DGM	Direccion General de Mina
dmtpd	dry metric tonnes per day
dmtph	dry metric tonnes per hour
DSR	Dam Safety Review
DTH	Down-the-Hole
EOR	engineer of record
EU	Estimation Units
F	Fluorine
Fe	iron
FRED	Federal Reserve Economic Data
FOS	Factor of Safety
FS	Feasibility Study
ft	feet
ft ³	cubic feet
g	gram
GERD	Servicios y Soluciones de Ingenieria y Logistica
GIL	geological information limit
Golder	Golder Associates USA Inc.
GPS	Global Positioning System

Abbreviation/Acronym	Definition
Grupo Mexico	Grupo Mexico S.A.B. de C.V.
H2	second half
ha	hectare
Hg	Mercury
HYR	high yield restrictions
ICP-OES	Inductively Coupled Inductively Coupled Plasma-Optical Emission Spectrometry
IMMSA unit	Industrial Minera Mexico, S.A. de C.V.
INEGI	National Institute of Statistics and Geography
ITRB	Independent Tailings Review Board
kg	kilogram
km	kilometers
Kt	kilotonnes
kV	kilovolt
kW/t	kilowatt hour per tonne
L/h/m ²	liters per hour per square meter
La Caridad unit	Mexicana de Cobre, S.A de C.V.
liters per minute per hectare	L/m/ha
LME	London Metal Exchange
LO	loaded organic
LOM	life-of-mine
lps	liters per second
L-SX-EW	Leach-Solvent Extraction and Electrowinning
m	meter
M	million
m/d	meters per day
m ²	square meter
m ³	cubic meter
m ³ /h	cubic meters per hour
m ³ /s	cubic meters per second
Ma	million years ago
masl	meters above sea level
MASP	MASP Mexico SC
Mdmtpy	Million dry metric tonnes per year
MGE	Mexico Generadora de Energia S. de R. L.
Minera Mexico	Minera Mexico, S.A. de C.V.
mm	millimeters
Mm ³	Million cubic meters
Mo or moly	molybdenum
MS	Microsoft
Mt	million tonnes
Mtpa	million tonnes per annum
Mtpa	million tonnes per year
MW	megawatt
MXN\$	Mexican Peso
NAG	non acid generating
NE	northeast
NPV	net present value
NW	northwest
NW-SE	northwest-southeast
OBO	Golder's proprietary software, OBO V11.05®
OK	Ordinary Kriging
OREAS	ORE Research & Exploration Pty Ltd
OSF	overburden storage facility
PAG	potentially acid generating
parts per billion	ppb
Pb	lead

Abbreviation/Acronym	Definition
pcf	pounds per cubic foot
PEMEX	Petroleos Mexicanos
PFM	potential failure mode
PLS	pregnant leach solutions
PRI	primary sulfide unit
QA/QC	quality assurance and quality control
QCg	Polymictic Conglomerate
QP	Qualified Person
RC	reverse circulation
RE	rich electrolyte
REPDA	Registro Publico de Derechos de Agua (Public Registry of Water Rights)
RF	revenue factor
ROM	run-of-mine
RQD	rock quality designation
RTK	real-time kinematic
S	sulfur
SAG	semi-autogenous
Sb	antimony
SCC	Southern Copper Corporation
SE	southeast
SE	spent electrolyte
SEMARNAT	Secretaria de Media Ambiente y Recursos Naturales (Mexican environmental agency)
S-K 1300	United States Security and Exchange Commission's regulation Subpart S K 1300
Sonora Sample	Sonora Sample Preparations, S.A. de C.V.
SRB	
SX-EW	Solvent Extraction and Electrowinning
t/m ³	tonnes per cubic meter
TARPS	triggering action response plan(s)
TC/RC	Treatment and Refining Charges
TCS	Triaxial Compressive Strength
TEM	Transient Electromagnetic
the Buenavista unit	Operadora de Minas e Instalaciones Mineras, S.A. de C.V.
tpd	tonnes per day
tph	tonnes per hour
tpy	tonnes per year
TRS	Technical Report Summary
TSF	tailings storage facility
UCS	Uniaxial Compressive Strength
US\$	United States Dollars
UTM	1984 Universal Transverse Mercator
WGS	World Geodetic System
WNW	west-northwest
wt. %	weight percent
y/y	year-over-year
Zn	zinc

2.4 Personal Inspection Summary

A site visit and inspection of the Buenavista del Cobre mining operation was completed on August 24 and August 25, 2021, by Golder's QPs responsible for the preparation of this TRS. The QPs present at the site visit included Mr. Ronald Turner, Mr. Danny Tolmer, P.Eng., Ms. Dawn Garcia, CPG, Mr. Jesus Romero, P.E. and Mr. Eugenio lasillo, P.E. Mr. Tolmer and Mr. Romero conducted an additional site visit to Buenavista del Cobre mining operation on October 24 to October 26, 2022.

The Golder team that conducted the site visit was provided with a site safety orientation, introduced to key mine personnel who conducted the guided tours of specific site areas. Golder QPs visited key areas of the open pit, including active mining areas, crusher locations, waste storage facilities, ROM and crushed leach pads, process facilities, core shack, dispatch, security gate, administration, historical smelter, and other infrastructure. The site visit also included the tour of the No. 3 TSF and the New TSF.

2.4.1 Ronald Turner

The independent QP, as defined in S-K 1300, responsible for the preparation of the Mineral Resources provided in this TRS is Mr. Ronald Turner (MAusIMM), Senior Resource Geologist. Mr. Turner visited BVC on August 24 and August 25, 2021.

During the site visit, Mr. Turner visited and inspected the mining operations, data capture facilities and the current conditions for sample storage. He inspected representative core of the deposit, sample cutting and logging areas. Mr. Turner also conducted discussions with site personnel regarding the geology and mineralization and how such controls are included in the resource model and reviewed geological interpretations with staff.

2.4.2 Danny Tolmer

The independent QP, as defined in S-K 1300, responsible for the preparation of the Mineral Reserves provided in this TRS is Mr. Danny Tolmer (P.Eng), Principal Mining Engineer. Mr. Tolmer visited the Buenavista operations on August 24 and August 25, 2021, and again on October 24, 2022, to October 26, 2022.

During the site visit, Mr. Tolmer visited and observed the open pit operation, material handling facilities, leach pads, and overburden storage facilities. Mr. Tolmer visited various areas of the open pit, including the phase 8, 9, 10, 11 areas, which were being mined at the time of the visit. Mr. Tomer also conducted discussions with site personnel responsible for the QBlix 4 crusher, dispatch, tailings, geology, security, and management of the site.

2.4.3 Dawn Garcia

The independent QP, as defined in S-K 1300, responsible for the preparation of the summary of the hydrogeologic, environmental, permitting, and social aspects provided in this TRS is Ms. Dawn Garcia, CPG, Senior Consultant at Stantec. Ms. Garcia visited BVC on August 24 and August 25, 2021.

During the site visit, Ms. Garcia met with site personnel and toured the operating mine, including various water management facilities, tailings storage facilities, leaching operations and the historic smelter. Ms. Garcia also held discussions with the water management team to understand the freshwater supply infrastructure and concessions.

2.4.4 Eugenio Iasillo

The independent QP, as defined in S-K 1300, responsible for the preparation of the mineral processing sections provided in this TRS is Mr. Eugenio Iasillo PE, Principal, Process Engineering LLC. Mr. Iasillo visited BVC on August 24 and August 25, 2021.

During the site visit, Mr. Iasillo visited and observed the following processing areas: Crushing, Grinding, Flotation, Thickening, and Hydrometallurgy (Leaching and SX-EW).

2.4.5 Jesus Romero

The independent QP, as defined in S-K 1300, responsible for the preparation of the Tailings Section provided in this TRS is Mr. Jesus Romero P.E., MSc. in Planning. Mr. Romero visited the new TSF and TSF No. 3 at Buenavista mine on August 24, 2021, and August 25, 2021. During the site visit, Mr. Romero visited and observed three areas of the embankments along the crest and toe. Mr. Romero also conducted discussions with site personnel during the site visit. Mr. Romero also conducted discussions with the Grupo Mexico tailings manager during the visit of Grupo Mexico's office in Mexico City on October 14, 2021, and October 15, 2021, and again on October 24, 2022, to October 26, 2022.

2.5 Previously Filed Technical Report Summary Reports

This is the second TRS being filed for the BVC mine site. The first TRS was filed on March 08, 2022, as part of the Form 10-K Annual Report filing for 2021.

3.0 PROPERTY DESCRIPTION

3.1 Property Location

As shown on Figure 3.1, the Buenavista del Cobre property is in the north-central part of the State of Sonora, Mexico, about 222 km northeast of the city of Hermosillo, Sonora and 150 km southeast of the city of Tucson, Arizona. The property covers an area of 89,220.5 ha of mining concessions.

The geographical location of the Cananea mining district is between latitudes 30° 42' and 31° 16' north and longitude meridians 109° 51' and 110° 33' west. The Cananea mining district is located at an altitude of between 1,600 and 2,485 meters (m) above mean sea level (AMSL). The elevation of the city is of the order of 1,604 m AMSL.

3.2 Mineral Rights

3.2.1 Legal Framework in Mexico of Mineral Mining Rights

Mining and exploration rights in Mexico are controlled by the federal government. Prior to 2006, exploration and mining rights were assigned to third parties by the granting of “exploration” and “exploitation” concessions, each with differing validity periods and tax and assessment obligations. Mining law reform in December 2005 simplified the concession regime, and all new concessions are “mining concessions,” which are valid for a 50-year period and are renewable. Upon enactment of the mining law reform, all previously issued “exploration” and “exploitation” concessions automatically converted to “mining concessions” with the effect date of title the same as that of the previously titled “exploration” or “exploitation” concession. The mining concessions are administered by the Direccion General de Mina (DGM), a sub-secretariat of the cabinet-level Secretary of Economy. To maintain concessions in good legal standing, concession holders are obligated to pay semi-annual tax payments and to annually file documentation of exploration or development work at the concession.

3.2.2 Mineral Concessions

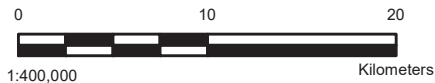
The BVC operations consists of 43 mining concessions covering in aggregate 89,220.5 Ha. Concessions controlled by BVC are summarized in Table 3.1 and shown in Figure 3.2. All these concessions are in good legal standing as reported by SCC and valid for a term of 50 years from the date the concessions were granted. The concession can be renewed for an additional 50 years.

Holding fees for mining concessions vary from US\$0.36 to US\$7.92 per Ha, depending on the start date of the mining concession. As reported by SCC, fees paid during 2020, 2019, and 2018 were approximately US\$6.6 million (M), US\$7.1 M, and US\$6.3 M, respectively.



LEGEND

- Cultural Areas
- Site Location
- Highway
- Railway
- Towns and Cities



NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 12N
2. IMAGERY
 AIRBUS, USGS, NASA, CGIAR, NCEAS, NLS, OS, NMA, GEODATASTYRELSEN, GSA, GSI AND THE GIS USER COMMUNITY
 SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT



PROJECT

BUENAVISTA MINE

TITLE

PROPERTY LOCATION MAP

CONSULTANT



YYYY-MM-DD 1/25/2023

DESIGNED JW

PREPARED TBH

REVIEWED -

APPROVED -

PROJECT NO.
31405632.000

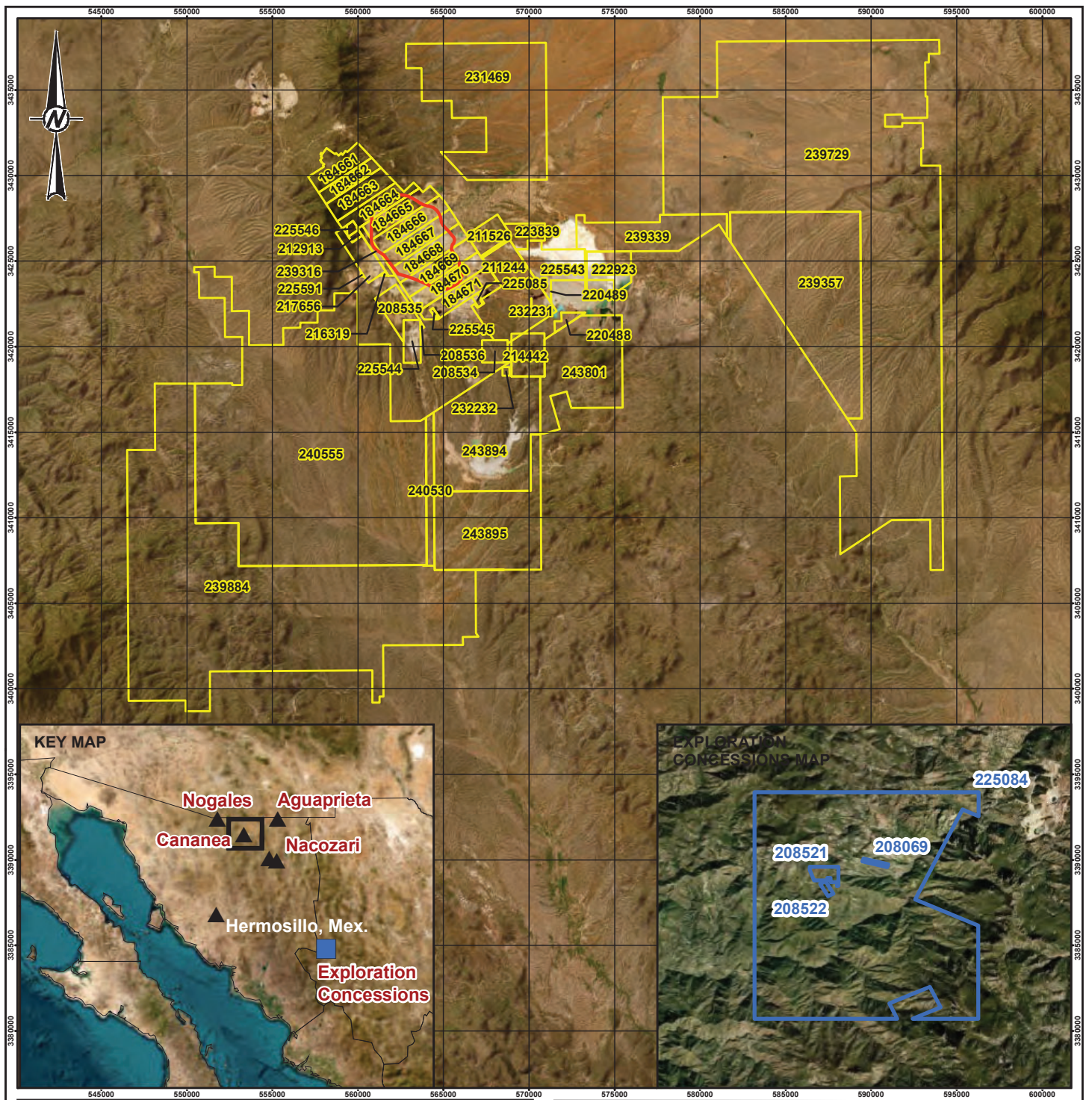
CONTROL
-

REV.
-

FIGURE
3.1

Table 3.1: Mineral Concessions

Concession Number	Concession Name	Municipality	Province	Date Granted	Expiry Date	Area (ha)
184661	CANANEA	Cananea	Sonora	10-11-1989	09-11-2039	463.1
184662	CANANEA II	Cananea	Sonora	10-11-1989	09-11-2039	302.7
184663	CANANEA III	Cananea	Sonora	10-11-1989	09-11-2039	475.1
184664	CANANEA IV	Cananea	Sonora	14-11-1989	13-11-2039	416.0
184665	CANANEA V	Cananea	Sonora	14-11-1989	13-11-2039	449.4
184666	CANANEA VI	Cananea	Sonora	09-11-1989	08-11-2039	479.0
184667	CANANEA VII	Cananea	Sonora	10-11-1989	09-11-2039	480.0
184668	CANANEA VIII	Cananea	Sonora	09-11-1989	08-11-2039	480.0
184669	CANANEA IX	Cananea	Sonora	10-11-1989	09-11-2039	480.0
184670	CANANEA X	Cananea	Sonora	14-11-1989	13-11-2039	480.0
184671	CANANEA XI	Cananea	Sonora	10-11-1989	09-11-2039	453.0
208534	FRACCION I MARIA 46-1	Cananea	Sonora	24-11-1998	23-11-2048	195.0
208535	FRACCION II MARIA 46-1FRACCION I	Cananea	Sonora	24-11-1998	23-11-2048	354.5
208536	FRACCION II MARIA 46-1FRACCION II	Cananea	Sonora	24-11-1998	23-11-2048	5.5
211244	FRACCION III MARIA 46-1	Cananea	Sonora	18-04-2000	17-04-2050	1,523.4
211526	MARTA	Cananea	Sonora	31-05-2000	30-05-2050	324.4
212913	TROYA 4	Cananea	Sonora	12-02-2001	11-02-2051	28.0
214442	EL SALTO	Cananea	Sonora	05-09-2001	04-09-2051	483.3
216319	EL PREMIO 2 FRACC. I	Cananea	Sonora	06-05-2002	05-05-2052	7.3
217656	TROYA 2	Cananea	Sonora	05-08-2002	04-08-2052	350.0
220488	EL CARACOL FRACC. I	Cananea	Sonora	11-08-2003	10-08-2053	83.9
220489	EL CARACOL FRACC. II	Cananea	Sonora	11-08-2003	10-08-2053	1.6
222923	LA PRESA FRACCION I	Cananea	Sonora	20-09-2004	19-09-2054	479.1
223839	MARIA 49	Cananea	Sonora	23-02-2005	22-02-2055	281.2
225085	LA PRIMAVERA	Cananea	Sonora	11-07-2005	10-07-2055	28.7
225543	LA PRESA FRACCION II	Cananea	Sonora	20-09-2005	19-09-2055	721.3
225544	SANTA ISABEL	Cananea	Sonora	20-09-2005	19-09-2055	250.0
225545	COBRE RICO	Cananea	Sonora	20-09-2005	19-09-2055	12.2
225546	EL PREMIO	Cananea	Sonora	20-09-2005	19-09-2055	36.5
225591	EL PREMIO 2 FRACC. II	Cananea	Sonora	22-09-2005	21-09-2055	1.6
231469	CANANEA	Cananea	Sonora	27-02-2008	26-02-2058	4,729.2
232231	MARIA 54	Cananea	Sonora	08-07-2008	07-07-2058	1.4
232232	MARIA 55	Cananea	Sonora	08-07-2008	07-07-2058	20.0
239316	TROYA 3	Cananea	Sonora	13-12-2011	12-12-2061	112.3
239339	SALSIPUEDES	Cananea	Sonora	13-12-2011	12-12-2061	1,468.1
239357	SALSIPUEDES 2	Cananea	Sonora	13-12-2011	12-12-2061	5,704.4
239729	SALSIPUEDES 3	Cananea	Sonora	15-02-2012	14-02-2062	23,929.3
239884	AZUL 3	Cananea	Sonora	29-02-2012	28-02-2062	16,896.3
240530	AZUL 2	Cananea	Sonora	12-06-2012	11-06-2062	396.4
240555	AZUL	Cananea	Sonora	14-06-2012	13-06-2062	16,667.5
243801	MARIA 47 RED. ALACRAN	Cananea	Sonora	05-12-2014	04-12-2064	2,400.8
243894	MARIA 47 DIV 1 ALACRAN	Cananea	Sonora	09-01-2015	08-01-2065	3,698.3
243895	MARIA 47 DIV 1 F2	Cananea	Sonora	09-01-2015	08-01-2065	3,070.8
Total						89,220.5



LEGEND

- Current Pit Extent Boundary
- Concessions and Mining Rights
- Exploration Concessions

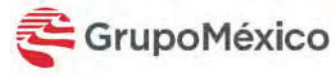


NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 12N
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT



PROJECT

BUENAVISTA MINE

TITLE

MINING CONCESSIONS

CONSULTANT



YYYY-MM-DD	1/25/2023
DESIGNED	JW
PREPARED	TBH
REVIEWED	-
APPROVED	-

PROJECT NO.	CONTROL	REV.	FIGURE
31405632.000	-	-	3.2

3.3 Description of Property Rights

All the estimated Mineral Resources and Reserves lie within privately owned or possessed land under the name of Buenavista del Cobre SA de CV, or Proyecciones Urbanísticas S de RL de CV. The parcels are shown in Figure 3.3 and the parcel identification, owner name and surface area for the 97 parcels that encompass the BVC mining unit are shown in Table 3.2.

Ownership is not required to explore or mine a concession; however, SCC generally owns the land related to the BVC operations. Additionally, SCC stated that all the processing facilities of the BVC operations and land on which they are built are owned by SCC.

3.4 Royalty Payments

As per regulations enacted by the Mexican government, a mining royalty of 7.5% is due to the government on earnings before taxes with an additional royalty charge of 0.5% over gross income from sales of gold, silver and platinum. These charges are effective January 2014 and are deductible for income tax purposes. As per SCC, no other royalty payments are due.

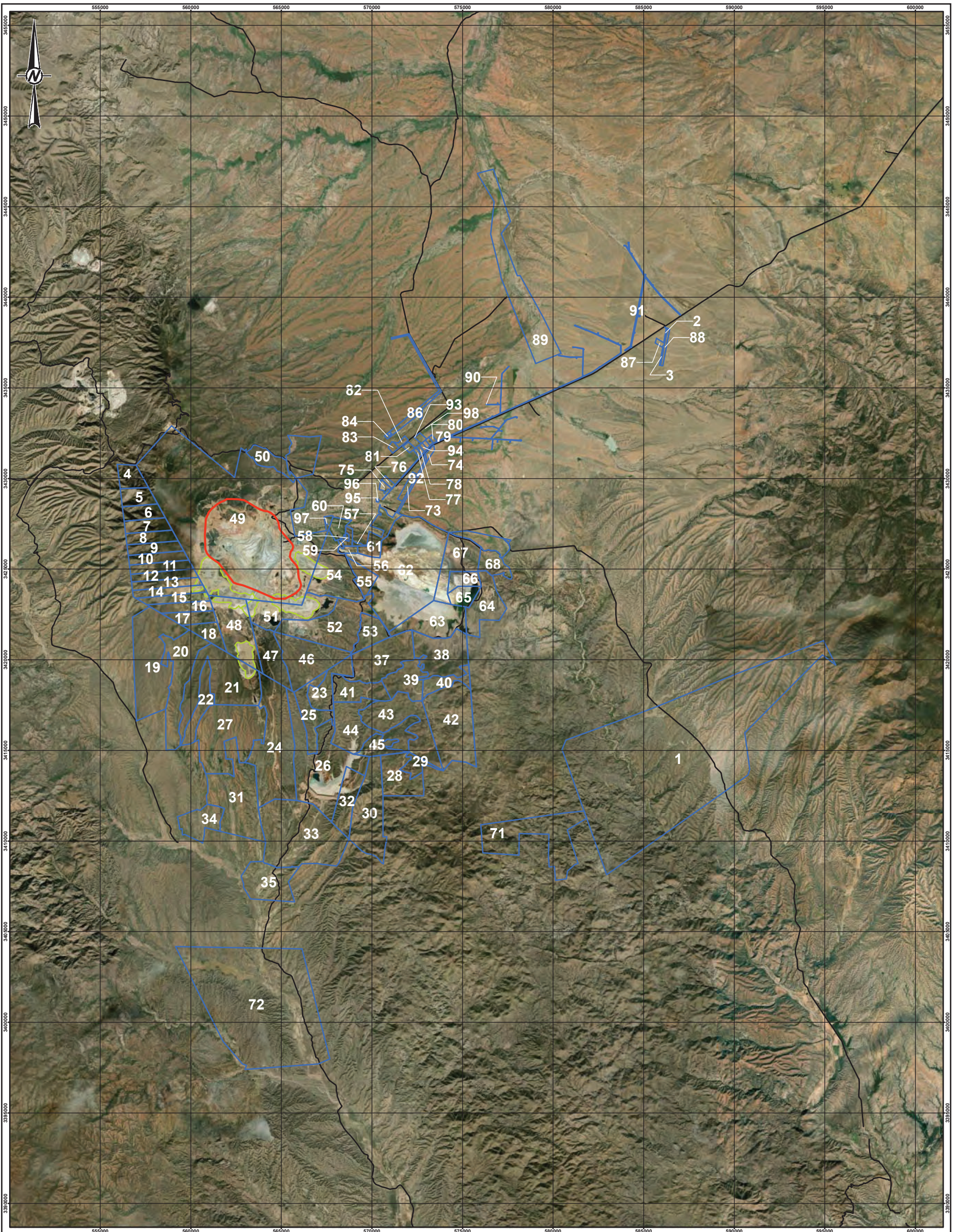
3.5 Environmental Liabilities and Other Encumbrances

Environmental permitting in the mining industry in Mexico is mainly administered by the federal environmental authority (SEMARNAT), which is the regulatory agency that establishes the minimum standards for environmental compliance. Applicable environmental permitting requirements are further discussed in Section 17.0.

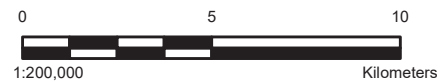
Historic mining operations pre-date the establishment of the Mexican environmental requirements and a number of older facilities at the mine have not been permitted. BVC has begun a process to bring the entire mining complex into compliance with Mexico's Ecology Law, which requires that potential environmental impacts be identified, prevented, and mitigated, plus that compensation measures be made. BVC is planning to submit a regional Environmental Impact Statement that will include all other mining facilities and activities. The "in progress" and proposed permit submittals are discussed in Section 17.0.

3.5.1 Historical Smelter Remediation

In 1989, Compañía Minera de Cananea declared bankruptcy, suspending its operations for almost 3 months. The workshops, machinery, and pits were abandoned, and the smelting furnace was abruptly shut down, which allowed the liquid metals to solidify inside the smelting furnace and cause permanent damage. The smelter is subject to remediation and permanent closure. BVC has developed a remediation program for this area, which is referred to as the "Antigua Fundación" (historical smelter) of Cananea (AFC) (Grupo Mexico Minería, 2020, Programa de remediación ambiental de la Antigua Fundación de Cobre). The area consists of 63.65 ha, as per a draft remediation program document that was provided to Golder.



- LEGEND**
- Current Pit Extent Boundary
 - Highways
 - Operating ROM Crushed Leach Limit Facilities
 - Parcels



NOTE(S)

REFERENCE(S)
 1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 12N
 2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT

PROJECT
 BUENAVISTA MINE

TITLE
 LAND OWNERSHIP PARCELS

CONSULTANT	YYYY-MM-DD	1/25/2023
	DESIGNED	JW
	PREPARED	TBH
	REVIEWED	-
	APPROVED	-

Table 3.2: BVC Parcels

Polygon Number	Parcel Name	Owner/Deed Holder	Area (Ha)
1	MBC-094 PREDIO LA CHUREA	Buenavista del Cobre S.A de C.V.	7,391.3
2	MBC 096 AMPLIACION 1-AERÓDROMO	Buenavista del Cobre S.A de C.V.	4.9
3	MBC 097 AMPLIACION 2-AERÓDROMO	Buenavista del Cobre S.A de C.V.	5.6
4	MBC-001 Parcela 21 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
5	MBC-002 Parcela 22 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
6	MBC-003 Parcela 23 Z P2/2	Buenavista del Cobre S.A de C.V.	169.8
7	MBC-004 Parcela 24 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
8	MBC-005 Parcela 25 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
9	MBC-006 Parcela 26 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
10	MBC-007 Parcela 27 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
11	MBC-008 Parcela 28 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
12	MBC-009 Parcela 29 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
13	MBC-010 Parcela 30 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
14	MBC-011 Parcela 31 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
15	MBC-012 Parcela 32 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
16	MBC-013 Parcela 33 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
17	MBC-014 Parcela 34 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
18	MBC-015 Parcela 35 Z1 P2/2	Buenavista del Cobre S.A de C.V.	169.8
19	MBC-016 Parcela 1 Z1 P1	Buenavista del Cobre S.A de C.V.	1,131.0
20	MBC-017 Parcela 2 Z1 P1	Buenavista del Cobre S.A de C.V.	732.7
21	MBC-018 Parcela 3 Z1 P1	Buenavista del Cobre S.A de C.V.	1,037.4
22	MBC-019 Parcela 4 Z1 P1	Buenavista del Cobre S.A de C.V.	278.5
23	MBC-020 Parcela 5 Z1 P1	Buenavista del Cobre S.A de C.V.	302.3
24	MBC-021 Parcela 6 Z1 P1	Buenavista del Cobre S.A de C.V.	1,241.2
25	MBC-022 Parcela 7 Z1 P1	Buenavista del Cobre S.A de C.V.	354.5
26	MBC-023 Parcela 8 Z1 P1	Buenavista del Cobre S.A de C.V.	1,296.5
27	MBC-024 Parcela 9 Z1 P1	Buenavista del Cobre S.A de C.V.	1,068.4
28	MBC-025 Parcela 10 Z1 P1	Buenavista del Cobre S.A de C.V.	420.9
29	MBC-026 Parcela 11 Z1 P1	Buenavista del Cobre S.A de C.V.	115.1
30	MBC-027 Parcela 12 Z1 P1	Buenavista del Cobre S.A de C.V.	773.5
31	MBC-028 Parcela 13 Z1 P1	Buenavista del Cobre S.A de C.V.	1,010.3
32	MBC-029 Parcela 14 Z1 P1	Buenavista del Cobre S.A de C.V.	345.1
33	MBC-030 Parcela 15 Z1 P1	Buenavista del Cobre S.A de C.V.	1,418.2
34	MBC-031 Parcela 16 Z1 P1	Buenavista del Cobre S.A de C.V.	319.9
35	MBC-032 Parcela 18 Z1 P1	Buenavista del Cobre S.A de C.V.	512.9
37	MBC-033 Parcela 1 Z-1 P-2	Buenavista del Cobre S.A de C.V.	653.6
38	MBC-034 Parcela 2 Z-1 P-2	Buenavista del Cobre S.A de C.V.	621.0
39	MBC-035 Parcela 3 Z-1 P-2	Buenavista del Cobre S.A de C.V.	361.4
40	MBC-036 Parcela 4 Z-1 P-2	Buenavista del Cobre S.A de C.V.	182.2
41	MBC-037 Parcela 5 Z-1 P-2	Buenavista del Cobre S.A de C.V.	342.6
42	MBC-038 Parcela 6 Z-1 P-2	Buenavista del Cobre S.A de C.V.	995.9
43	MBC-039 Parcela 7 Z-1 P-2	Buenavista del Cobre S.A de C.V.	765.9
44	MBC-040 Parcela 8 Z-1 P-2	Buenavista del Cobre S.A de C.V.	700.1
45	MBC-041 Parcela 9 Z-1 P-2	Buenavista del Cobre S.A de C.V.	180.3
46	MBC-042 Fusion Predio Chapultepec	Buenavista del Cobre S.A de C.V.	670.8
47	MBC-043 Campo Frio II o Potrero La Viejita o Hierbabuena	Mexicana de Cananea S.A. de C.V.	389.4
48	MBC-044 Fraccion Occidental Campo Frio o La Yerbabuena	Mexicana de Cananea S.A. de C.V.	664.2
49	MBC-045 Las Pefitas	Mexicana de Cananea S.A. de C.V.	6,292.3

Table 3.2: BVC Parcels (cont.)

Polygon Number	Parcel Name	Owner/Deed Holder	Area (Ha)
50	MBC-046 Las Peñitas Fraccion Sur	Buenavista del Cobre S.A de C.V.	194.6
51	MBC-047 Fraccion Occidental Campo Frio	Proyecciones Urbanisticas S. de R.L. de C.V.	572.1
52	MBC-048 La Mexicana	Mexicana de Cananea S.A. de C.V.	822.4
53	MBC-049 El Jaralito o La Cuchilla	Mexicana de Cananea S.A. de C.V.	247.9
54	MBC-050 Hotel Aposentos del Real	Proyecciones Urbanisticas S. de R.L. de C.V.	643.2
55	MBC-051 Predio Varela 102 Has	Buenavista del Cobre S.A de C.V.	152.0
56	MBC-052 La Matanza	Buenavista del Cobre S.A de C.V.	40.0
57	MBC-053 Fraccion Numero 5, Predio Ojo de Agua	Buenavista del Cobre S.A de C.V.	11.9
58	MBC-054 Fraccion Numero 4, Predio Ojo de Agua	Buenavista del Cobre S.A de C.V.	38.3
59	MBC-055 Casa de Visita y Baldio Numero 2, Fraccion 1 y 2	Proyecciones Urbanisticas S. de R.L. de C.V.	8.1
60	MBC-057 Colonia Campestre	Proyecciones Urbanisticas S. de R.L. de C.V.	97.4
61	MBC-058 Fraccion Numero 6, Predio Ojo de Agua	Buenavista del Cobre S.A de C.V.	241.7
62	MBC-059 Fraccion de 1,944 Has., Presa de Jales o Demasias Ojo de Agua de Arvallo	Buenavista del Cobre S.A de C.V.	1,936.1
63	MBC-060 El Mosco	Proyecciones Urbanisticas S. de R.L. de C.V.	543.5
64	MBC-061 Ojo Agua de Arvallo Pur-013-T	Proyecciones Urbanisticas S. de R.L. de C.V.	431.0
65	MBC-062 El Tiano	Mexicana de Cananea S.A. de C.V.	150.3
66	MBC-063 Fraccion de 146 Has. Presa de Jales o Demasias Ojo de Agua de Arvallo	Buenavista del Cobre S.A de C.V.	146.0
67	MBC-064 Fraccion de 478 Has. Presa de Jales o Demasias Ojo de Agua de Arvallo	Buenavista del Cobre S.A de C.V.	478.0
68	MBC-065 Fraccion Ojo de Agua de Arvayo Seccion B o Presas de Jales, Ampliacion	Proyecciones Urbanisticas S. de R.L. de C.V.	184.5
71	MBC-067 El Potrillo Poligono 5	Buenavista del Cobre S.A de C.V.	994.5
72	MBC-068 La Cabellera	Buenavista del Cobre S.A de C.V.	3,966.2
73	MBC-069 Intermodal Poligono P1	Buenavista del Cobre S.A de C.V.	51.0
74	MBC-070 Intermodal Poligono P2	Buenavista del Cobre S.A de C.V.	19.7
75	MBC-071 Rancho Tres Puertas Lote 30	Buenavista del Cobre S.A de C.V.	24.5
76	MBC-072 Plaza Comercial Predio 1	Buenavista del Cobre S.A de C.V.	22.5
77	MBC-073 Rancho Tres Puertas Lote 19	Buenavista del Cobre S.A de C.V.	11.0
78	MBC-074 Rancho Tres Puertas Lote 18	Buenavista del Cobre S.A de C.V.	10.4
79	MBC-075 Rancho Tres Puertas Lote 15	Buenavista del Cobre S.A de C.V.	9.9
80	MBC-076 Rancho Tres Puertas Lote 14	Buenavista del Cobre S.A de C.V.	10.1
81	MBC-077 Rancho Tres Puertas Lote 05	Buenavista del Cobre S.A de C.V.	20.4
82	MBC-078 Los Alisos y Lecheria Lote 03	Buenavista del Cobre S.A de C.V.	19.5
83	MBC-079 Los Alisos y Lecheria Lote 02	Proyecciones Urbanisticas S. de R.L. de C.V.	19.5
84	MBC-080 El Barrilito Poligono 03	Buenavista del Cobre S.A de C.V.	4.8
86	MBC-082 El Barrilito Poligono 01	Buenavista del Cobre S.A de C.V.	125.8
87	MBC-083 Parcela 65 Aeropuerto	Buenavista del Cobre S.A de C.V.	13.0
88	MBC-084 Parcela 63 Aeropuerto	Buenavista del Cobre S.A de C.V.	27.5
89	MBC-085 Reserva de Pozos Empresa Minera	Buenavista del Cobre S.A de C.V.	1,082.9
90	MBC-086 Servidumbre de Paso de Sistema de Bombeo en Ejido Emiliano Zapata	Posesion derivada Buenavista del Cobre	73.1
91	MBC-087 Servidumbre de Paso de Sistema de Bombeo Ejido Zaragoza	Posesion derivada Buenavista del Cobre	49.7
92	MBC-088 FRACCION "M" RANCHO TRES PUERTAS	Buenavista del Cobre S.A de C.V.	35.6
93	MBC-089 LOTE 07, LOS PATOS	Buenavista del Cobre S.A de C.V.	20.4
94	MBC-090 LOTE 17, LOS PATOS	Buenavista del Cobre S.A de C.V.	10.0
95	MBC-091 Lote 06 Fraccionamiento Buenavista	Buenavista del Cobre S.A de C.V.	1.0
96	MBC-092 Lote 05 Fraccionamiento Buenavista	Buenavista del Cobre S.A de C.V.	1.0
97	MBC-093 Lote 02,Manzana 116-A	Buenavista del Cobre S.A de C.V.	0.2
98	MBC-095 Fraccion 2 Lote 08	Buenavista del Cobre S.A de C.V.	1.9
Total			48,691.5

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 Topography and Land Description

The Cananea region is in the Sierra Madre Occidental physiographic province and Northern Mountains and Valleys sub-province, which is characterized by parallel mountains that are oriented northwest-southeast (NW-SE), separated by intermountain valleys. This basin and range structure represents geologic blocks displaced by normal faults, causing an alternation of raised and sunken blocks (horst and graben that reflect major tectonic stress events. The principal mountains in the region are the La Elenita, Los Ajos, El Caracola, Azul, El Cipres, and La Mariquita, which are all at elevations above 2,000 m AMSL. Depending on the rock type of the mountain, the steepness of the slopes can vary between 15% to 25%.

The Cananea mining district is located at an altitude of between 1,600 m and 2,485 m AMSL. The elevation of the city is of the order of 1,604 m AMSL. The local terrain has topography of mountains and valleys. The lithology of intrusive rocks and volcanic rocks forms the steepest and most resistant slopes of the Cananea Mountains. The major rock types that outcrop are volcanic rocks of acidic to intermediate composition, of Tertiary age, with a minor percentage of granitic rock of upper Cretaceous age.

The drainage pattern is controlled by joint and fault patterns in the Cananea Mountains and is considered to exhibit dendritic characteristics, with parallel tributaries that in general are first order streams. The streams divide and reconnect downslope as a result of a shallow slope gradient.

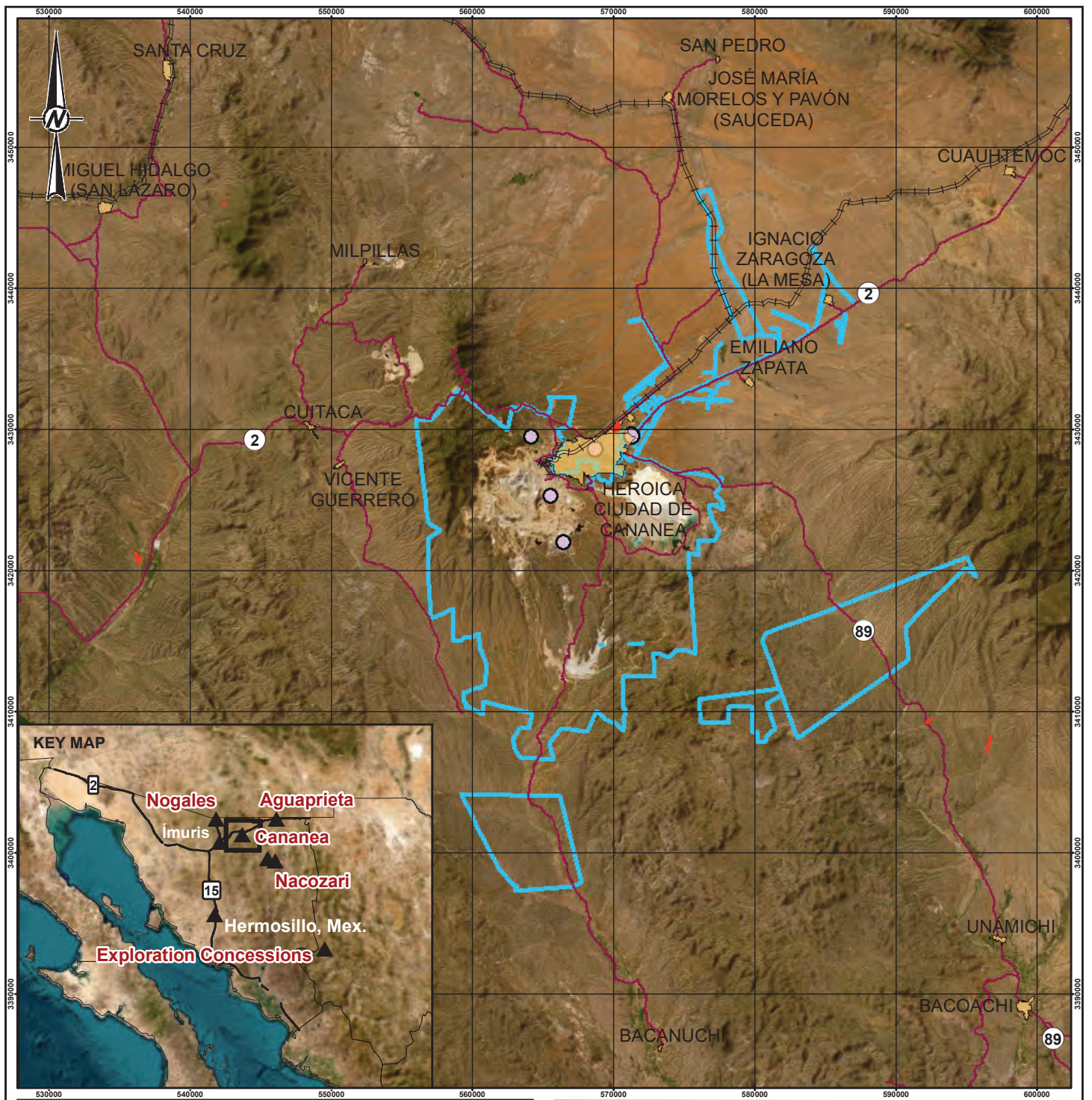
Valleys and low hills are located between the mountain ranges. The valley are sub-basins filled with clastic sedimentary material, with hill slopes generally less than 5%. These sub-basins are bounded by normal faults.

4.2 Access to the Property

The Buenavista mining unit is located on the outskirts of the city of Cananea, Sonora (see Figure 4.1). It is about 40 km south of the Arizona (United States) border with Mexico. The mine access is via paved highways to the border city of Agua Prieta to the northeast, to the town of Nacozari to the southeast and to the town of Imuris to the west.

From Hermosillo, the capital of Sonora, the main communication route is federal highway No. 15, Hermosillo-Nogales section for 208 km north to Imuris, then continuing east along federal highway No. 2 Imuris – Cananea for 81 km. The railroad lines transport copper concentrate and copper anodes from the mine to Nogales, Naco-Agua Prieta and Nacozari, which are all towns in northern Sonora. The railroad has a spur that enters the plant site.

There is a municipal airport located approximately 20 km to the northeast of BVC. There is an international airport in Hermosillo, Sonora.



LEGEND

- Airport
- Towns and Cities
- Highway
- Mine Boundary
- Railway
- Hospitals



NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 12N
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT



PROJECT

BUENAVISTA MINE

TITLE

SITE ACCESS

CONSULTANT



YYYY-MM-DD 1/25/2023

DESIGNED JW

PREPARED TBH

REVIEWED -

APPROVED -

PROJECT NO.
31405632.000

CONTROL
-

REV.
-

FIGURE
4.1

4.3 Climate Description

Mining operations at BVC are year-round. The climate in Cananea varies from humid and dry subtropical elevations between 1,600 m and 2,200 m to semi-arid conditions below 1,600 m. Average annual rainfall is 550 mm, much of which falls during the months of July and August. Occasionally, the higher elevations receive some snow and sleet during the winter months. The monthly average temperature is about 24°C in July and about 10°C in December, which indicates that the temperature changes in the area can be extreme. From June to August are the hottest and most humid months. December is the coldest month. The Mexican National Meteorological Service operates a weather station in the city of Cananea.

According to the Köppen-Geiger climatic classification system, 91.85% of the study area, which includes areas reporting to the San Pedro and Sonora Rivers, is temperate, semi-dry climate, while 7.50% of the study area is a temperate dry climate. The remaining area is subhumid temperate climate. The annual mean temperature of a temperate semi-dry climate is typically 12 to 18 degrees C.

4.4 Vegetation and Land Use

There are multiple vegetation zones in the region due to the range of elevations. Vegetation changes from the Sonoran high desert zone of scrub and grasses at lower elevations to a zone of coniferous forests at higher elevations, with a transitional oak and pinion forest zone in between. The BVC operations are primarily in the Sonoran high desert vegetation zone.

Land use in Sonora has traditionally been agricultural activities and cattle ranching. Cattle are typically free-grazing, due to the abundance of grasses. A forest and soil inventory prepared by the Mexican National Forestry Commission reports that about 50% of the region is natural grassland dominated by grass species. Overgrazing of livestock and extraction of non-timber species has led to soil vulnerability and erosion. The inventory indicates that oak forest represents about 33% of the region and that up to 200 species of oaks are present. The rest of the natural vegetation identified in the inventory was táscate forest, microphyllous desert scrub, mesquite forest, oak pine forest, and desert mesquite.

4.5 Availability of Required Infrastructure

According to the results of the intercensal survey carried out in 2015 by the National Institute of Statistics and Geography (INEGI), the total registered population of Cananea was 31,560 inhabitants. Infrastructure services in the city include drinking water, drainage, telephone, and electricity. Most of the roads within the urbanized area are paved. Mining is the main source of income and employment, followed by commerce and livestock.

Electrical power is supplied to the site from the utility grid via 230 kilovolts (kV) overhead transmission lines. The bulk of the demand is supplied by Mexico Generadora de Energia S. de R. L. (MGE), a subsidiary of Grupo Mexico, the majority stockholder of Southern Copper. A minor portion of the site demand is supplied by Comision Federal de Electricidad (CFE), the state's electrical power producer. Power is stepped down to 34.5-kV for distribution secondary substations.

The site has a concession from the Comision Nacional del Agua (the National Water Commission, or the CNA) to pump water from wells drilled around the Cananea area. The wells pump approximately 35 million cubic meters (Mm³) annually and are connected to a distribution piping network that feeds water to different consumers. The site has plans in place for freshwater conservation by reducing the consumption and recycling for reuse, when possible.

The site uses natural gas for firing boilers and emergency in-situ power generators. The site uses diesel oil to fuel mining and haulage fleets and other mobile equipment and as back up fuel to natural gas. Natural gas is available to the area via a pipeline that extends from Douglas (Arizona) to Nacozari (Sonora) to feed the Southern Copper smelter. Diesel oil is available through direct contracts with Petroleos Mexicanos (PEMEX), the state's petroleum producer and other alternative distributors.

The site is equipped with all necessary facilities required to sustain its operation. This includes buildings for office space, laboratories, training rooms, canteens, security, and first aid; shops for truck wash, lube and repair, and workshops for general maintenance; and warehouses for storage of products, consumables, and spare parts.

5.0 HISTORY

5.1 Mining History of the Area

The Cananea mining district has experienced mining activity from the 18th century to approximately the year 1760, when Jesuit missionaries carried out the first exploitation working the “Cobre Grande Mine” from which they extracted minerals rich in gold and silver. These mining activities were sporadic due to the lack of good processing techniques and the lack of transport and communication routes. In 1899, William C. Greene, acquired rights according to the laws of the Mexican Republic and established “The Cananea Consolidated Copper Company”. The 1906 strike in this mining district marked the beginning of the Mexican Revolution. In 1917, The Anaconda Mining Company acquired control of The Cananea Consolidated Copper Company and began a partnership with Cananea that lasted until 1982. In 1926 the high-grade La Colorada deposit was discovered, containing an estimated 7 Mt of ore with an average grade of 6.0% copper, 0.40% molybdenum and significant amounts of gold and silver.

In 1944, the construction of a new concentrator of 12,000 tonnes per day (tpd) was completed. Underground mining continued in parallel with open pit operation until 1964 when the decision was made to close the underground mines and since then the open pit mining capacity has gradually increased. In 1950 the concentrator had its capacity increased to 16,000 tpd and the blister copper was sold to the Cobre de México refinery. The exploitation of the Tajo Cananea mine began in 1960. In 1971, The Cananea Consolidated Copper Company was converted to Mexican government holding 51% of the capital stock and changing its name to Compañía Minera de Cananea S.A. In 1973, a program to modernize existing equipment and facilities, as well as production techniques, was initiated. In 1976 the smelter capacity was increased to 70,000 tonnes of blister copper.

Another important aspect of mining at Cananea has been its supergenic copper leaching operation that began in the 1940s with a form of in-situ leaching of old stopes and abandoned underground mines. Significant large-scale landfill leaching began in the early 1950s and is today an important and integral part of the mining operation. The leach pads are currently built with crushed and ROM materials extracted from the mine. Cathode copper production started in 1980 when the first SX-EW plant was built with a capacity of 30 tpd. In 1986 the operation of a Concentrator Plant with a capacity of 62,500 tpd began.

A second SX-EW plant with a capacity of 60 tpd was commissioned in 1989, and a further expansion of 60 tpd to this last facility completed in 2001, the total cathode production capacity increased to 165 tpd. There are currently three solvent extraction plants which have a capacity to produce 175,200 tonnes of cathode copper per year (480 tpd).

As a consequence of the economic problems in Mexico at the end of the 1980s, Compañía Minera de Cananea opted for a bankruptcy declaration that became effective on August 20, 1989. This action caused the interruption of the mining operation for approximately two months and was resumed by court order. The person appointed by the Court administered the mining company until September 30, 1990.

Cananea's re-privatization process culminated when Industrial Minera México (Grupo México) in association with Belgic Acec Union Miniere were selected as winners of the tender. The name of the mining company was changed to Mexicana de Cananea, S.A. de C.V., and on October 1, 1990, the new administration assumed responsibility for the mining operation.

The management of Mexicana de Cananea, after a thorough review of the mining development plan, approved significant capital investments for Cananea with the objectives of increasing copper production and improving efficiency.

In 1994, the first crushing and transport system for leaching material started with Quebalix I, with a capacity of 13.0 Mtpy (2,200 tph). In 1997 the Quebalix II started and was redesigned in 2016 to reach a maximum capacity of 24.75 Mtpy (4,300 tph). In 2013, the Quebalix III with a capacity of 19.2 Mtpy (3,200 tph) was put into operation and during 2016 Quebalix IV began operations with a design capacity of 70 Mtpy (12,000 tph). Currently there are four breakers and leachable belts in operation with a crushing capacity of about 127 Mtpy.

There are two ore crushers in operation with an annual capacity of the order of about 73 Mtpy to process ore in the concentrator. The total annual material movement including ore and waste is of the order of about 300 Mtpy.

5.2 Drilling Exploration History

Exploration drilling programs targeting Cu mineralization on the project have been undertaken over many years, from 1926 to 2018. Several different drilling techniques have been implemented, including diamond drill holes (DDH), percussion, reverse circulation (RC), and rotary drilling. From 1926 to 2018, 6,204 drill holes, totaling 1,079,637 m, have been drilled at BVC. Table 5.1 summarizes the drilling by type and year of drilling.

Additional details on the exploration history can be found in Section 7.0.

Table 5.1: Summary of Exploration Drilling by Type and Year Drilled

Year	DDH		Percussion		RC		Rotary (All Types)		No. of Drill Holes	Total Meterage
	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage		
Pre-1990	1,846	307,061	113	28,018					1,959	335,079
1990	99	20,201							99	20,201
1991					23	3,851			23	3,851
1992	99	21,880			89	13,073			188	34,953
1993					168	29,026			168	29,026
1994	95	32,011			171	26,788			266	58,799
1995					225	36,152			225	36,152
1996					254	46,857			254	46,857
1997					55	13,670			55	13,670
1998	99	45,886			59	9,329			158	55,215
1999	84	33,167			13	2,457			97	35,624
2000	107	50,121			3	738			110	50,859
2001					38	2,754			38	2,754
2002	17	7,204			137	15,588			154	22,792
2003	33	19,200			55	4,137			88	23,337
2004	14	2,409							14	2,409
2005	126	29,837							126	29,837
2006	45	10,284			25	3,807			70	14,091
2007	123	41,239			21	3,525			144	44,764
2011	12	6,853							12	6,853
2012	29	12,003							29	12,003
2013	67	15,132							67	15,132
2014	10	3,233							10	3,233
2015	63	24,118							63	24,118
2016	27	11,125							27	11,125
2017	18	9,984							18	9,984
2018	13	8,259							13	8,259
No information	883	59,779	226	27,723			620	41,156	1,729	128,658
Total	3,909	770,988	339	55,741	1,336	211,752	620	41,156	6,204	1,079,637

5.3 Historical Production

The last four years of production as published by SCC in its 2021 Annual Report is shown in Table 5.2.

Table 5.2: Production Statistics for BVC (2018 through 2021)

Item	Unit	Year			
		2021	2020	2019	2018
Mine annual operating days		365	366	365	365
<i>Mine</i>					
Total ore mined	(kt)	74,234	72,895	70,323	70,464
Copper grade	(%)	0.527	0.527	0.554	0.537
Leach material mined	(kt)	139,070	128,118	141,096	145,253
Leach material grade	(%)	0.196	0.211	0.216	0.242
Stripping ratio	(kt/kt)	0.52	0.29	0.37	0.38
Total material mined	(kt)	324,860	259,860	288,882	297,718
<i>Concentrator</i>					
Total material milled	(kt)	74,302	73,011	70,371	70,328
Copper recovery	(%)	87.18	86.72	86.66	86.02
Copper concentrate	(kt)	1,465	1,398	1,421	1,371
Copper in concentrate	(kt)	341	334	338	325
Copper concentrate average grade	(%)	23.29	23.88	23.80	23.70
<i>SX-EW Plant</i>					
leach recovery	(%)	30.03	36.32	32.85	25.39
SX EW cathode production	(kt)	81.80	98.20	100.10	89.30
<i>Molybdenum</i>					
Molybdenum grade	(%)	0.010	0.011	0.013	0.012
Molybdenum recovery	(%)	68.97	67.26	65.63	58.44
Molybdenum concentrate	(kt)	10.20	10.44	11.80	9.62
Molybdenum concentrate average grade	(%)	51.21	52.39	51.83	51.13
Molybdenum in concentrate	(kt)	5.23	5.47	6.12	4.92

(Source: SCCO)

Notes:

- kt = thousand tonnes
- kt/kt = Stripping ratio obtained dividing waste by leachable material plus ore mined
- The copper and molybdenum grade are total grade.

6.0 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT

6.1 Regional Geology

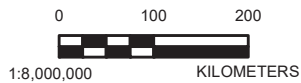
The Cananea mining district, where the Buenavista del Cobre porphyry Cu deposit is located, lies within the eastern section of the Sonora Basin and Range Province of northern Mexico. Sustained magmatic activity along the North American Cordillera during the late Mesozoic through Paleogene resulted in the development of numerous porphyry Cu deposits. The porphyry Cu systems of México, as well as associated skarn and hydrothermal breccia pipe deposits, occur within the Laramide Belt, a NW-SE oriented region situated along the western side of the country (Valencia Moreno et al, 2007), as shown in Figure 6.1.

The Cananea mining district constitutes the most important mining district of México and is recognized as one of the principal porphyry Cu districts in the world (Bushnell, 1988). It is in northern Sonora state, approximately 250 km to the northeast of Hermosillo and ~160 km south of Tucson, Arizona, USA. (Figure 6.1).



LEGEND

- Approximate Site Location
- Approximate Location of Porphyry Copper Deposits
- City
- International Border
- "Great Cluster" of Porphyry Deposits
- Mexico
- United States of America



NOTE(S)

1. THE SHADED ZONE REPRESENTS THE SO-CALLED "GREAT CLUSTER" OF THE PORPHYRY COPPER DEPOSITS OF THE WESTERN CORDILLERA OF NORTH AMERICA, INDICATING THE MOST SIGNIFICANT DEPOSITS SOURCE: MORENO ET AL., 2007.

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 WEB MERCATOR AUXILIARY SPHERE

CLIENT



PROJECT

BUENAVISTA DEL COBRE

TITLE

REGIONAL COPPER PORPHYRY MAP

CONSULTANT



YYYY-MM-DD 2023-01-25

DESIGNED JS

PREPARED TBH

REVIEWED -

APPROVED -

PROJECT NO. 31405632.000

CONTROL -

REV. -

FIGURE 6.1

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The immediate basement underlying the Cananea mining district comprises an approximately 1,000-m thick sequence of Precambrian to Carboniferous quartzite and carbonate rocks. This sequence includes the Bolsa, Abrigo, Escabrosa, and Martin formations, which are underlain by a Proterozoic granite (Anderson and Silver, 1977). These units are unconformably overlain by a thick sequence of felsic to intermediate tuffs and flows of Triassic through Jurassic age, known as the Elenita and Henrietta formations (Valentine, 1936).

This magmatic period concluded at the end of the Jurassic, when the accretion of an andesitic arc in what is now Baja California, resulted in regional structural adjustments and a change in the style of subduction (Gastil et al., 1978). In the Cananea mining district there was a significant period of deformation following the emplacement of the El Torre Syenite and the Elenita and Henrietta volcanic formations. High-angle structures, including the Elisa, Capote Pass and Tinaja Creek faults (strike N 60° W to N 80° W), cut the above units, but do not affect the overlying Cretaceous rocks.

During the early Cretaceous, subduction of northwestern Mexico is represented by eastward episodes of volcanism and plutonism (Silver et al., 1975; Clark et al., 1978; Gastil et al., 1978), beginning 180 million years ago (Ma) in present-day Baja California and progressing eastward into Sonora by 60 ma. These volcanic rocks consisted primarily of andesitic tuffs and flows intruded by large equigranular syngenetic plutons of diorite to quartz monzonite. These plutons are abundant in the state of Sonora (Anderson and Silver, 1974) and in numerous localities are associated with contact metamorphism and Cu- or tungsten-bearing skarns.

In the Cananea mining district, Cretaceous volcanism is represented by the Mesa Formation, which consists of andesitic tuffs, lahars, flows and agglomerates, which discordantly overlies the Jurassic units. The Laramide volcanism was accompanied by a series of contemporary intrusive pulses that include the Tinaja diorite, the Cuitaca granodiorite, and the Chivato Monzodiorite. The final intrusive stage is represented by a series of basic dykes and the Diabasa Mariquita Formation along two dominant structural zones; one trending N 40° E and the other N 60° - 80° W.

Within the Capote Basin is the most complete section of the Paleozoic marine platform sedimentary sequence. This sequence was associated with similar formations in southeastern Arizona by various authors (Mulchay and Velasco 1954, Meinert 1982). The sequence in the Capote Basin is important as they are the host rocks for skarn mineralization.

Some skarn-type deposits dominated by bornite and chalcopryrite were mined in Puertecitos, northwest of the BVC mine.

6.2 Local and Property Geology

The Precambrian basement in the Cananea mining district is the Cananea Granite. The Cananea Granite comprises several porphyritic-textured granitic phases and pegmatitic phases. The Precambrian basement in the Cananea mining district is equivalent to the basement rocks found in southern Arizona and other parts of northern Sonora.

Unconformably overlying the Cananea Granite is the Cambrian-aged Capote Quartzite (Valentine, 1936). The Capote Quartzite has a mean thickness of 150 m (Mulchay and Velasco, 1954). Overlying the Capote Quartzite is the Esperanza Limestone (Emmons, 1910). This formation has thinly stratified clayey siltstones interbedded with carbonate rocks (Mulchay and Velasco, 1954). It is 80 m thick in the district. On top of the Cambrian Esperanza Limestone, the lower Crystalline Zone extends discordantly (Mulchay and Velasco, 1954). It has a thickness of 60 to 75 m with a thick crystalline lithology. The upper Mississippian Crystalline Zone is approximately 15 m to

30 m thick (Mulchay and Velasco, 1954). Above the upper Crystalline Zone is the 15 m to 30-m thick Chivatera Zone. Both the upper Crystalline Zone and the Chivatera Zone have poorly preserved Mississippian fossils, and may be equivalent in part to the Escabrosa Formation in Arizona. The thickest sedimentary unit in the Cananea mining district is Puertecitos limestone (Emmons, 1910). It measures approximately 610 m thick and is Pennsylvanian in age.

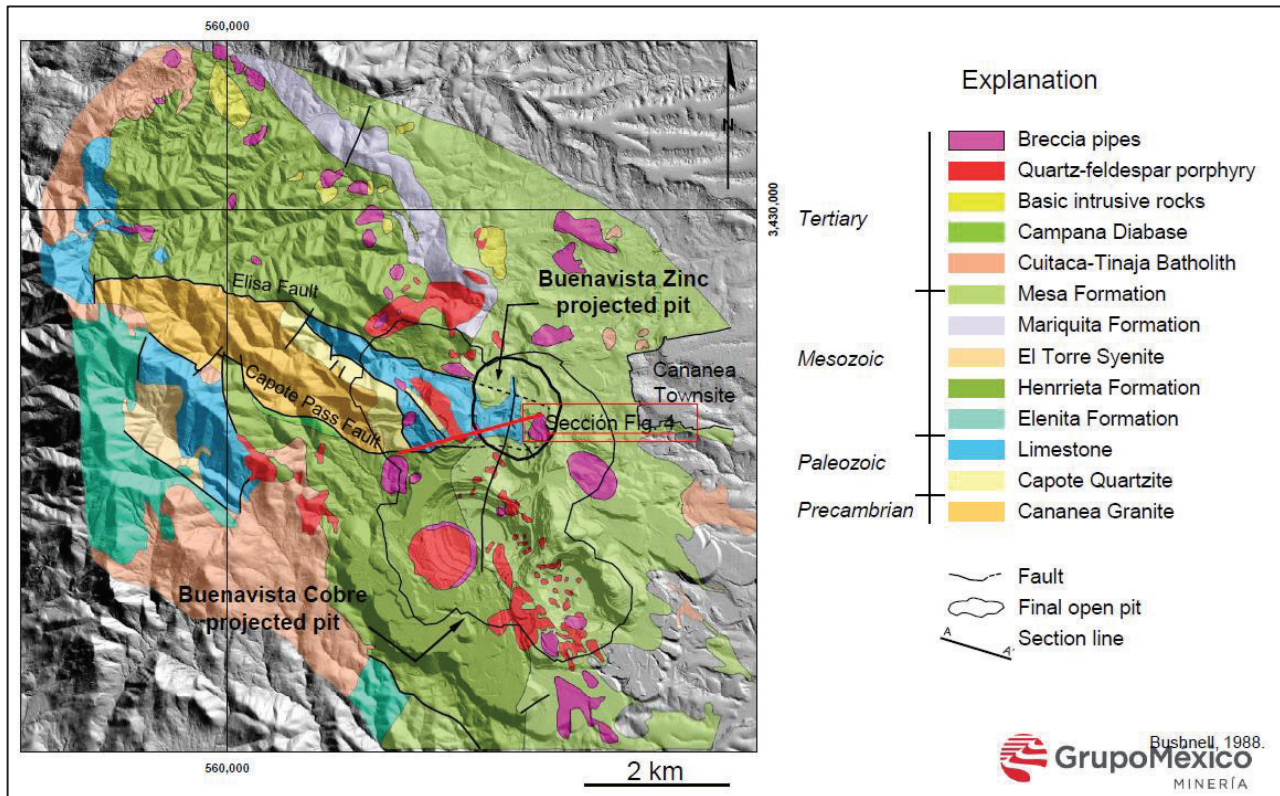
Overlying the Paleozoic sediments and Precambrian granite of Cananea are the Henrietta and Elenita formations which are Triassic to late Jurassic in age (Mulchay and Velasco, 1954). Their composition ranges from latite to andesite. The El Torre Syenite at the Cananea mining district is also of similar age. The youngest volcanic units in the district are andesitic tuffs and rhyolites of the Mesa Formation.

The intrusions of diorite, granodiorite and quartz monzonite formed after the emplacement of the Mesa Formation. In the final stage of intrusive activity, diabase dikes intruded faults and fractures with a NW - SE trend. Pipe-like breccias formed as late-stage products of the quartz-monzonite porphyries.

During the Cenozoic, alluvial and fluvial sediments were deposited as erosion of the Cananea Mountains occurred. Exhumation of the upper part of the Cananea mining district porphyry system resulted in the formation of a supergene enrichment and an oxidation overburden overlying the porphyry system.

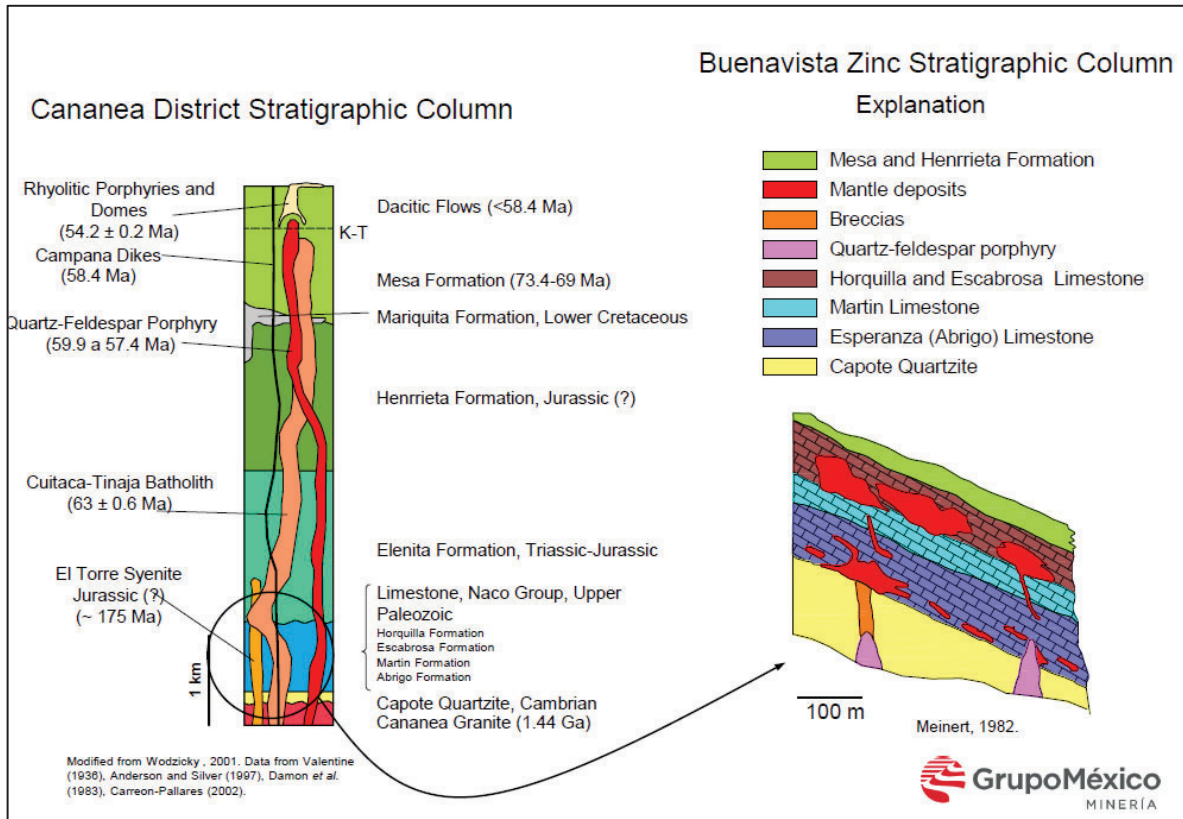
The BVC deposit in the Cananea mining district is divided into two target zones, namely BVC and BVZ. The BVZ deposit conformably underlies the BVC deposit and is located to the northwest of the BVC deposit (Figure 6.2). Figure 6.3 illustrates the stratigraphic column at BVC and includes BVC on the left and BVZ on the right.

Figure 6.2: Local Geological Showing BVC and BVZ Projected Pits



Source: BVC internal geology document, May 2021

Figure 6.3: Cananea District Regional Stratigraphic Column



Source: BVC internal geology document, May 2021

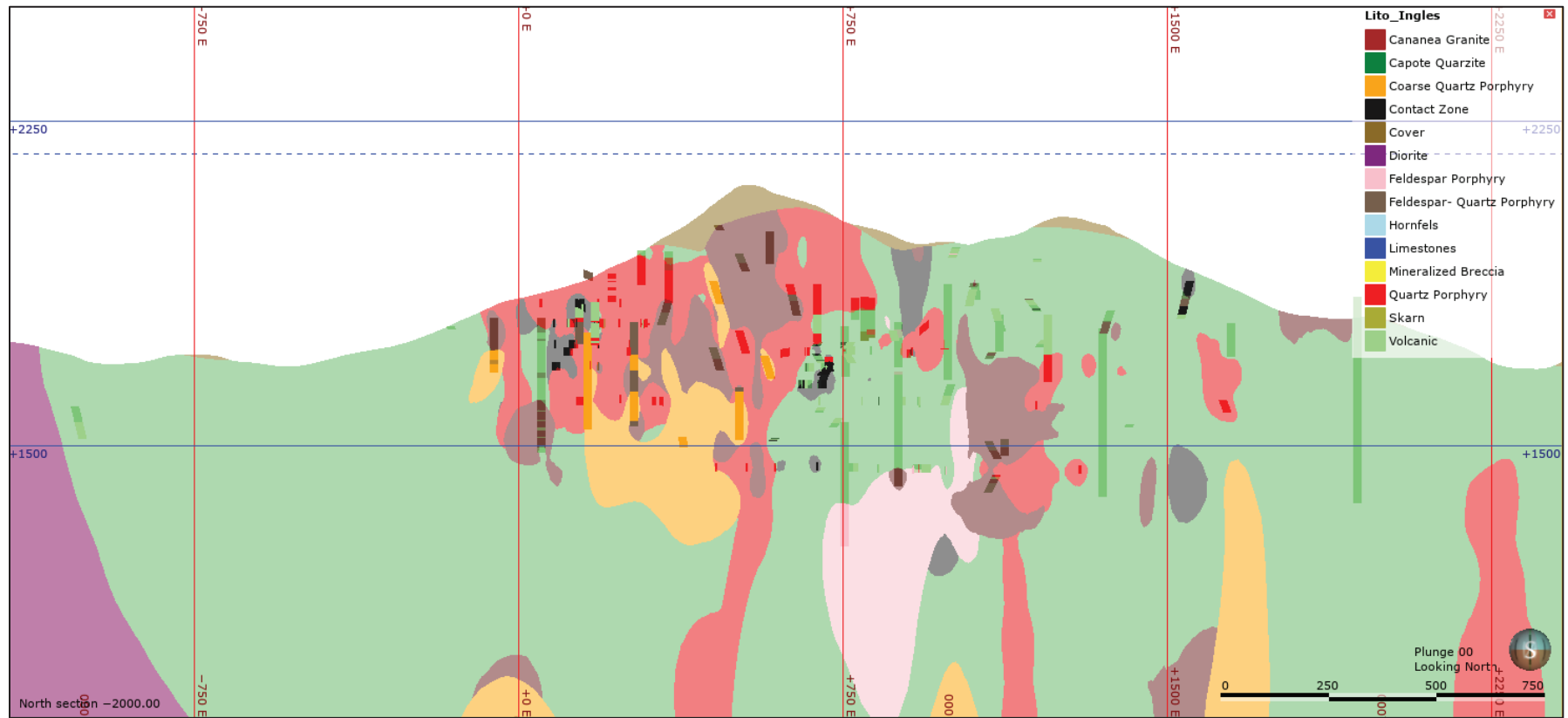
Several types and styles of mineralization are present in the BVC deposit, including magmatic-hydrothermal breccias (Cu-molybdenum [Mo]), skarn (Cu-zinc [Zn]), and sulfides (Cu-Mo).

The BVC deposit is underlain by the volcanic units of the Henrietta and Mesa Formations (Figure 6.4). The Henrietta Formation is widely distributed towards the western portion of the operational areas, while the volcanic sequences of the Mesa Formation extend to the east of the mining operation. These volcanic units are intruded by a series of porphyritic dykes that are located in the central and deep portion of the mining phases.

The predominant alteration in the main lithologies is phyllic alteration, characterized by the development of sericite, quartz, and pyrite. The Capote Quartzite only exhibits sericite between the quartz grains that constitute the rock. The alteration in the rocks of the Henrietta Formation is characterized by the presence of silica, sericite, pyrite, and chlorite as an alteration product of the ferromagnesian minerals. The volcanic rocks of the Mesa Formation have a higher proportion of sericite. The coarse-grained quartz-feldspar porphyry in the west slope expansion shows strong silicification. Volcanic rocks in the southeastern portion of the operation show moderate concentrations of sericite.

Diabase dykes with strikes N60°W to 80°W and N40°E, cut the volcanic and porphyry units in the area of the mine workings. Mineralized breccias in the BVC pit (Breccia 301), on the east slope of the Phase 8 development are the remnants of the La Colorada Breccia. All these breccia structures occur near the porphyry intrusion. Contact zones between porphyry and volcanic rocks throughout the district contain economic supergene and hypogene mineralization.

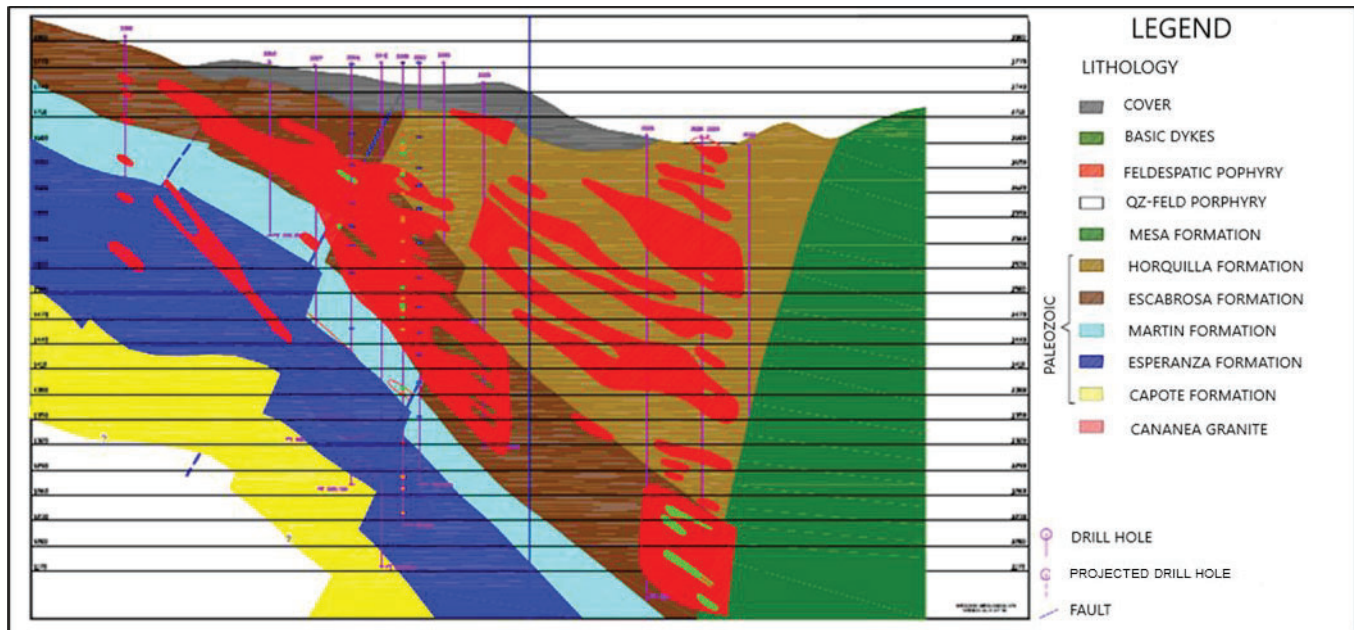
Figure 6.4: BVC Cross Section – Section Line 2000



The BVZ deposit (Figure 6.2), is found within the Paleozoic sequence, comprising skarn-type mineralization hosted mainly in the Horquilla and Escabrosa formations.

The skarn zone is delimited to the north by the Elisa Fault, with a west-northwest (WNW) orientation, and to the south by the Capote Pass Fault (Meinert, 1982), forming a monocline with a NW-SE direction and a dip of 40 to 60 to the NE. The skarn zone is also present in the Esperanza Formation (Figure 6.5)

Figure 6.5: BVZ Cross Section



Source: BVC internal geology document, May 2021

6.3 Alteration and Mineralization

6.3.1 Alteration

As described previously, the predominant alteration type observed in the Cananea mining district is phyllic alteration, in which significant deposits of supergene and hypogene mineralization are hosted. Pervasive hypogene alteration of quartz-sericite in the porphyritic and volcanic cap rocks is widely evident along the NW - SE axis of the district which extends for approximately 10 km. Towards the Capote Basin, prograde and retrograde alteration occurs, which is related to metamorphic and metasomatic events in the sedimentary formations. Propylitic alteration surrounds the areas of phyllic alteration in the district, where the main alteration products are chlorite and epidote. The effects of potassic alteration at surface in the BVC mining district are scarce, although the incipient presence of potassic alteration minerals can be observed at depth, related to the emplacement in areas of important mineralized structures (e.g., La Colorada breccia). Quartz-sericite alteration, associated with incipient potassic alteration, has been found at a depth of more than 1,000 m (Ayala, 2007). The quartz porphyry of La Colorada, exhibit prominent fresh potassic feldspars and biotite of secondary origin. Argillic alteration occurs in the upper levels of the ore bodies, generally related to supergene enrichment zones in contact zone structures, breccias and faults. Kaolinite, halloysite, and alunite constitute most of the argillic alteration, as well as replacements of sericite by kaolin and minor pyrophyllite.

6.3.2 Mineralization

Much of the Cu mineralization in the Cananea mining district is found in disseminated form and in veinlets in stockwork zones in the volcanic and intrusive rocks. Higher Cu grades are hosted in breccia structures, contact zones and some replacement bodies. Supergene enrichment constitutes important zones of Cu mineralization in the Cananea mining district, formed by chalcocite - covellite - digenite, generally replacing pre-existing primary minerals (pyrite - chalcopyrite). The distribution of mineralization in this zone is in disseminated form associated with volcanic rocks and porphyries of quartz-monzonite composition; in the replacement zone the occurrence of mineralization is in disseminated, nodular (patchy) form by cavity filling and replacement along the bedding planes. Below the supergene enrichment is primary mineralization consisting mainly of chalcopyrite with a small amount of bornite. The distribution of mineralization is predominantly in veinlets, in disseminated form occurring in very fine grains with abundant occurrence of chalcopyrite-based copper minerals. Above the supergene enrichment is a coating of goethite - hematite - jarosite.

A layer of hematite - goethite - jarosite oxides rests above the supergene enrichment between elevations 2,200 m to 1,800 m. The presence of native limonite in this layer suggests early enrichment cycles. The chalcocite-based supergene enrichment zone lies between elevations 1,800 m to 1,650 m amsl. The zone of supergene chalcocite and hypogene chalcopyrite mixed sulfides is between elevations 1,650 m to 1,400 m amsl. The occurrence of mineralization in the mixed zone is in two forms: disseminated and veinlets. As one goes deeper, disseminated mineralization decreases and veinlet mineralization increases. In this zone calcocite – chalcopyrite coexists.

Hypogenic primary chalcopyrite mineralization occurs below elevation 1,400 m and is known up to an elevation of 400 m amsl. In some unique geological structures (fault 8-125), it is common to observe the presence of iron oxides and supergene minerals at depths of more than 300 m from the current surface.

Extraction of skarn hosted mineralization has constituted much of the historical production in the Cananea mining district (Skillings, 1972). Most of the important skarn mineralization occurs in the Capote basin (Meinert, 1980). Other skarn mineralization occurs in the Elisa and Puertecitos mining areas. Both prograde and retrograde skarns occur in the district (Meinert, 1980). Progressive skarns are the most abundant, however, retrograde skarns contain all of the economic Cu and Zn mineralization

6.4 Deposit Types

The BVC mine, formerly the Cananea Mine, is a porphyry Cu deposit, considered to be the largest in Mexico. Primary Cu mineralization in the Cananea mining district is centered around porphyry intrusions of quartz monzonite and some breccia chimneys. The main production centers at the district level are concentrated in brecciated bodies with high Cu grades. La Colorada Breccia hosts significant Cu, Au, and Ag mineralization. Other important brecciated structures are: El Capote, Oversight Cananea-Duluth, La Demócrata, El Kirk, Henrietta, América Bonanza, and Veta 5. In general, these breccia structures are related to intrusive trunk domes. They are characterized by their verticality and circular or oval shape in horizontal section with a depth extension of hundreds of meters. The rock fragments are angular or semi-rounded and are found in a matrix of massive sulfides and quartz.

Northwest of the BVC deposit is the BVZ deposit, a poly-metallic deposit containing mainly Zn, Cu, and Ag. Carbonate rocks of the Capote Basin and Puertecitos area show alteration and mineralization effects associated with multiple events of granitic intrusive rocks and quartz monzonitic porphyry. The skarn deposits at Puertecitos and the Elisa mine are related to favorable replacements in mantles. In contrast, the Capote Basin ore bodies occur in zones with pyrite and silica associated with brecciated chimneys. The predominant mineralization at

Puertecitos and Elisa consists of bornite and chalcopyrite with minor sphalerite. Secondary Cu enrichment occurred locally. In the Capote Basin, mineralization is associated with silicified zones with pyrite and calcite. The hypogene ore sulfides are chalcopyrite, sphalerite, and locally, chalcocite.

7.0 EXPLORATION

7.1 Exploration Work

As presented in Section 5.2 of this TRS, the Project area has been subject to several historical and recent exploration campaigns targeting Cu mineralization at the Project site. These exploration campaigns included channel and bulk sampling, exploration drilling, and geotechnical drilling. To date, 1,104,502 m of exploration drilling has been carried out, distributed in 6,239 drill holes. These exploration campaigns have been carried out by different mining companies since 1926, and there is no document that describes how the historical information was collected. Since 1991 SCC has made significant investments in exploration work to quantify the Mineral Resources and Mineral Reserves of the BVC deposit.

The main objective of the exploration programs implemented at BVC have been to explore for new ore bodies as well as the increase of Proven and Probable Mineral Reserves. The achievement of these objectives has served as a basis to support planning and growth strategies as well as investment programs for the modernization of the mining unit.

7.1.1 Surface Exploration

Limited non-drilling surface exploration work has been conducted at BVC, which comprised channel and bulk sampling. A summary of the surface exploration work completed on BVC is presented in Table 7.1. Channel and bulk samples were completed between 1920 and 1960. No geophysical surveys have been completed.

Table 7.1: Summary of Surface Exploration

Exploration Sample Type	Number of Samples	Total Meterage
Channel Sample	1,695	83,881
Bulk Sample	82	14,985
Total	1,777	98,866

7.1.2 Topographic Survey

At BVC, photogrammetric flights are used to update the topography and infrastructure of the deposit. Prior to 2008, this practice was carried out every five years, with a flight performed by Cooper Aerial Survey based in Tucson, Arizona. Starting in 2011, periodic drone flights of specific areas of the mine were performed depending on the work requirements in that area. In October and November 2020, photogrammetric compilation work was carried out with Ebee Plus Drone equipment, Sensefly Geobase GNNS L1/L2 and GLONASS. For the horizontal and vertical control, a real-time kinematic (RTK) link was used for positioning and photogrammetric restitution. Each flight covered an 80-ha polygon at a flight altitude of 120 m, with a mean resolution of 3.0 centimeters per pixel (cm/pixel).

Daily topographic surveys are undertaken for the shovel movements and location of blast and exploration holes. Measurements are taken with a Trimble S7 5" DR PLUS total station and a Trimble Global Positioning System (GPS) system, GNSS Base R7 with TDL450H radio, located in the control tower. The mobile systems are GNSS Trimble R8 and R10 with Trimble TSC3 controllers. Prior to the GPS system, theodolites (Pentax pts-v5) and prism-supported distance meters were used for topographic surveys of the mine.

Daily topographic surveys of the mine are carried out in local coordinates and photogrammetric flights are handled in local and UTM coordinates.

7.2 Geological Exploration Drilling

7.2.1 Exploration Drilling Methods and Results

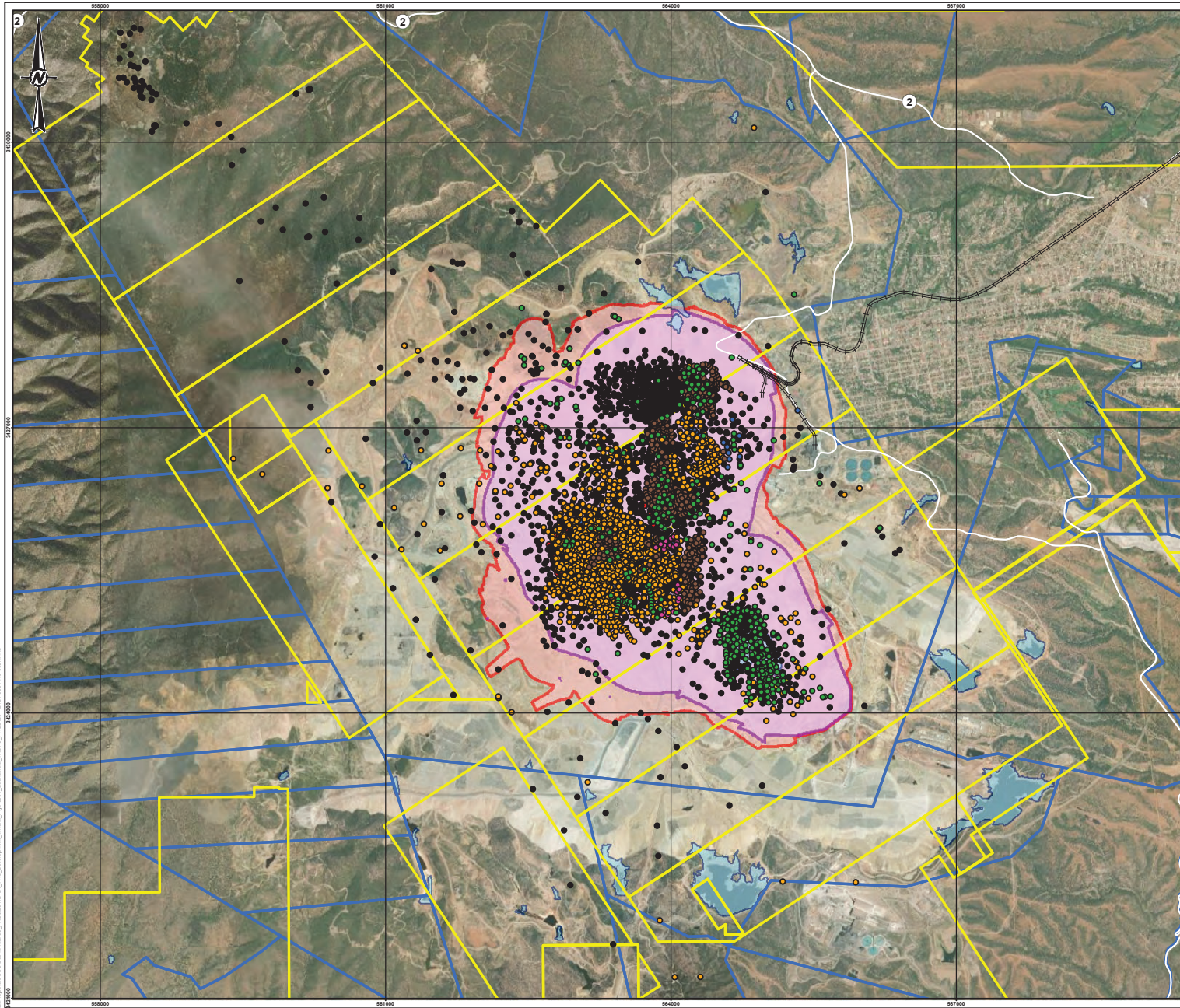
Exploration drilling programs targeting Cu mineralization on the project have been undertaken over many years, spanning from 1926 to 2018. Several different drilling techniques have been implemented, including diamond drilling (DDH), percussion, reverse circulation (RC), and rotary drilling. From 1926 to 2018, 6,204 drill holes, totaling 1,079,637 m, have been drilled at BVC. Table 7.2 summarizes the total number of drill holes and meters drilled by drilling type, and Table 7.3 summarizes the drilling by year. Figure 7.1 illustrates the drilling completed at BVC from 1926 to 2018 and Figure 7.2 illustrates an example cross section through the deposit with the pit shown as the black outline. An additional 35 drill holes totaling 24,658 m were drilling in 2022. These drill holes were not included in the drill hole database or the geological model.

Table 7.2: Summary of Exploration Drilling by Type of Drill Hole

Drill Hole Type	No. of Drill Holes	Total Meterage
DDH	3,118	742,565
DDH (Mine Level)	826	53,288
Percussion	339	55,741
RC	1,336	211,752
Rotary (Exploration)	21	885
Rotary (Machine T4)	517	30,051
Rotary (15 m samples)	82	10,220
Total	6,239	1,104,502

Table 7.3: Summary of Exploration Drilling by Year Drilled

Year	DDH		Percussion		RC		Rotary (All Types)		No. of Drill Holes	Total Meterage
	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage	No. of Drill Holes	Total Meterage		
Pre-1990	1,846	307,061	113	28,018					1,959	335,079
1990	99	20,201							99	20,201
1991					23	3,851			23	3,851
1992	99	21,880			89	13,073			188	34,953
1993					168	29,026			168	29,026
1994	95	32,011			171	26,788			266	58,799
1995					225	36,152			225	36,152
1996					254	46,857			254	46,857
1997					55	13,670			55	13,670
1998	99	45,886			59	9,329			158	55,215
1999	84	33,167			13	2,457			97	35,624
2000	107	50,121			3	738			110	50,859
2001					38	2,754			38	2,754
2002	17	7,204			137	15,588			154	22,792
2003	33	19,200			55	4,137			88	23,337
2004	14	2,409							14	2,409
2005	126	29,837							126	29,837
2006	45	10,284			25	3,807			70	14,091
2007	123	41,239			21	3,525			144	44,764
2011	12	6,853							12	6,853
2012	29	12,003							29	12,003
2013	67	15,132							67	15,132
2014	10	3,233							10	3,233
2015	63	24,118							63	24,118
2016	27	11,125							27	11,125
2017	18	9,984							18	9,984
2018	13	8,259							13	8,259
2022	35	24,865							35	24,865
No information	883	59,779	226	27,723			620	41,156	1,729	128,658
Total	3,944	795,853	339	55,741	1,336	211,752	620	41,156	6,239	1,104,502



LEGEND

Drill Hole Type

- DDH
- DDH (Mine Level)
- Percussion
- RC
- Rotary (Exploration)
- Rotary (Machine T4)
- Rotary (15 m samples)

- Highway
- Railway
- ▭ Concessions and Mining Rights
- ▭ Current Pit Extent
- ▭ LOM Pit Extent
- ▭ Property Limit
- ▭ Surface Water Bodies


0 1 2
1:40,000 Kilometers

NOTE(S)

REFERENCE(S)

1. COORDINATE SYSTEM: WGS 1984 UTM ZONE 12N
2. IMAGERY SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

CLIENT




PROJECT

BUENVISTA DEL COBRE

TITLE

EXPLORATION DRILL HOLE LOCATION MAP

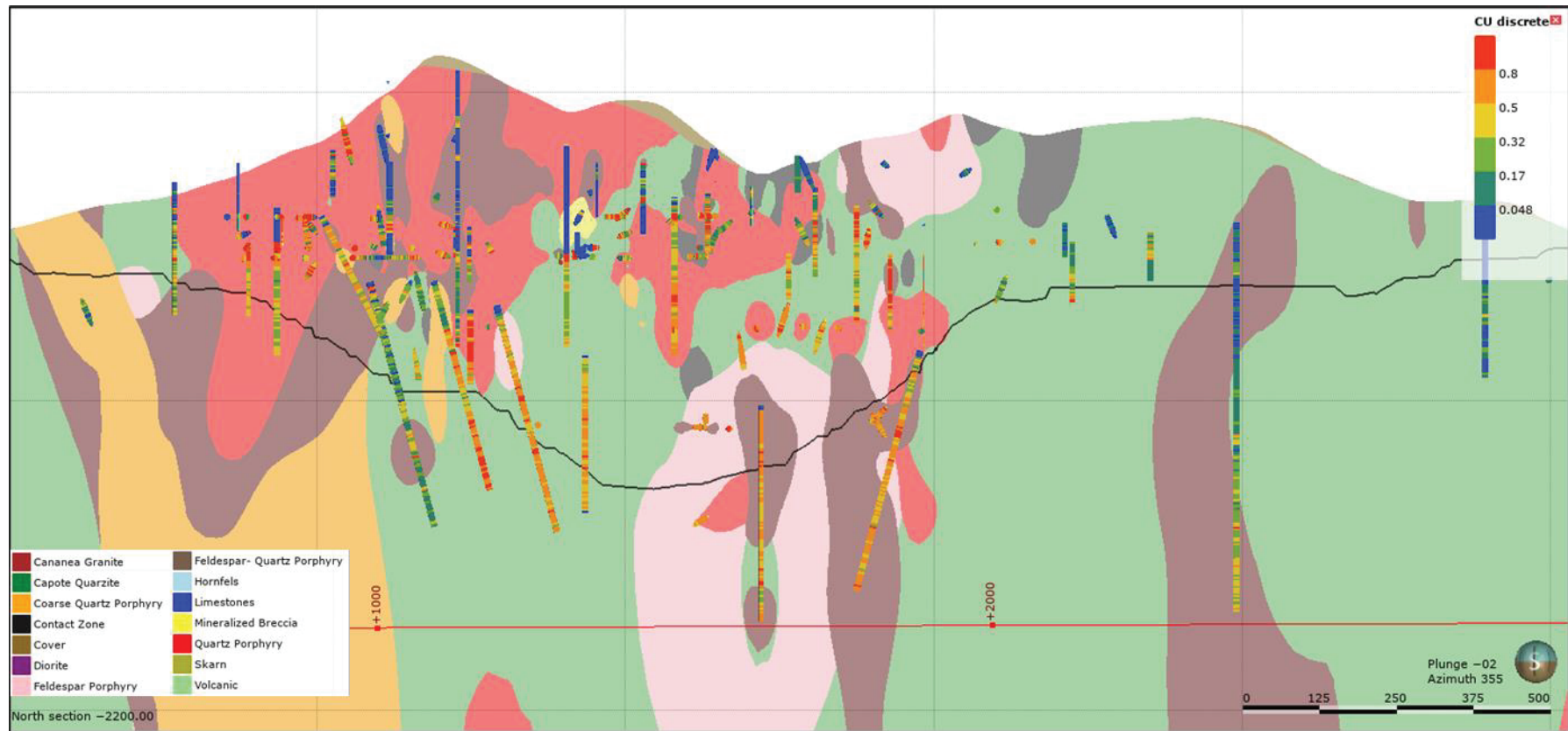
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		DESIGNED	JS
		PREPARED	TBH
		REVIEWED	-
		APPROVED	-

PROJECT NO.	CONTROL	REV.	FIGURE
31405632.000	-	-	7.1

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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN INDICATED FROM ANS B

Figure 7.2: Example Cross Section – Line - 2200, Looking North



In 2020, two exploration drilling projects were initiated within the LOM design limits at BVC. The projects, currently in progress, expect to complete a total of 75,000 m of exploration DDH and RC drilling. As of the effective date of this TRS, 113 DDH and 36 RC drill holes have been completed, totaling 79,017 m. Table 7.4 summarizes the 2020 to 2022 exploration drilling to date.

Table 7.4: Summary of 2020 to 2022 Exploration Drilling by Type (to date)

Drill Hole Type	No. of Drill Holes	Total Meterage
DDH	113	74,291
RC	36	4,726
Total	149	79,017

The 2020 to 2022 exploration projects are aimed at increasing the reliability of the Mineral Reserves, as well as increasing Mineral Resources. Future exploration programs will focus on defining the mineralization in, around and at depth of the LOM design, as well as other targets within the BVC properties and the potential within the district.

None of the 2020 to 2022 drilling was included in the geological model and Mineral Resource estimate. The 2020 to 2022 drilling program was an infill drilling campaign and was intended to improve the certainty of the Mineral Resources for the next several years of production. As of the date of the Resource estimate, the drilling campaign was still ongoing, therefore data collected was not available to be used in the Mineral Resource estimation. Once the drilling campaign is completed and all the information has been collected and reviewed, it will be necessary to update the BVC geological model and the Mineral Resource model. Figure 7.3 illustrates the ongoing 2020 to 2022 exploration drilling program, with drill holes completed to date shown in addition to the 1926 to 2018 drilling.