

# Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile

Report Prepared for  
**Lundin Mining Corporation**

**lundin mining**



Report Prepared by

 **srk** consulting

SRK Consulting (Canada) Inc.  
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## Lundin Mining Corporation

Suite 2200, 150 King Street West  
Toronto, Ontario, Canada  
M5H 1J9  
E-mail: [info@lundinmining.com](mailto:info@lundinmining.com)  
Website: [www.lundinmining.com](http://www.lundinmining.com)  
Tel: +1 416 342 5560  
Fax: +1 416 348 0303

## SRK Consulting (Canada) Inc.

Suite 1500, 155 University Avenue  
Toronto, Ontario, Canada  
M5H 3B7  
E-mail: [toronto@srk.com](mailto:toronto@srk.com)  
Website: [www.srk.com](http://www.srk.com)  
Tel: +1 416 601 1445

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## Authored by:

[“signed and sealed”]  
Souvik Banerjee, PGeo  
Principal Consultant  
(Resource Geology)

[“signed and sealed”]  
Benny Zhang, PEng  
Principal Consultant  
(Mine Engineering)

[“signed and sealed”]  
Cameron C. Scott, PEng  
Associate Consultant  
(Geotechnical Engineering)

[“signed and sealed”]  
Colleen MacDougall, PEng  
Principal Consultant  
(Mine Engineering)

[“signed and sealed”]  
Adrian Dance, PEng  
Principal Consultant  
(Mineral Processing)

## Reviewed by:

[“signed and sealed”]  
Glen Cole, PGeo  
Principal Consultant  
(Resource Geology)

Cover: Graphic Showing Punta Padrones Desalination Plant / Port Facilities.

## IMPORTANT NOTICE

This Technical Report (Technical Report) was prepared as a National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (National Instrument 43-101) Technical Report for Lundin Mining Corporation (LMC or the company) by the qualified persons indicated in this Technical Report who are each consultants employed by SRK Consulting (Canada) Inc. (SRK). The information, conclusions, and estimates contained herein are based on i) information available at the time of preparation, ii) data supplied by outside sources as identified in this Technical Report, and iii) the assumptions, conditions, and qualifications set forth in this Technical Report. The authors have reviewed such information, conclusions, and estimates and have used all means necessary in their professional judgement to verify it and have no reasons to doubt its reliability and have determined it to be adequate for the purposes of this Technical Report. The authors do not disclaim any responsibility for the information, conclusions, and estimates contained in this Technical Report.

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## Executive Summary

The Candelaria Copper Mining Complex (CCMC) comprises two adjacent copper operations producing copper concentrates from open pit and underground mines located near Copiapó in the Atacama Region, Region III of Chile: Compañía Contractual Minera Candelaria (Minera Candelaria or Candelaria) and Compañía Contractual Minera Ojos del Salado (Minera Ojos del Salado or Ojos del Salado). Minera Candelaria is an open pit and underground mine providing copper ore to an on-site concentrator with a capacity of 75,000 tonnes per day. Minera Ojos del Salado comprises two underground mines, Santos and Alcaparrosa. The Santos mine provides copper ore to an on-site concentrator with a capacity of 3,700 tonnes per day and 1,400 tonnes per day to the Minera Candelaria mill, while all ore from the Alcaparrosa mine is treated at the Minera Candelaria mill.

The Candelaria Copper Mining Complex is indirectly owned by Lundin Mining Corporation (LMC or the Company) (80%) and Sumitomo Metals Mining Co., Ltd. and Sumitomo Corporation (collectively, Sumitomo) (20%). For clarity, references to “Candelaria Copper Mining Complex” or “CCMC” in this Technical Report refer to both the Minera Candelaria and Minera Ojos del Salado properties.

Lundin Mining Corporation is a diversified Canadian base metals mining company with operations and projects in Argentina, Brazil, Chile, Portugal, Sweden, and the United States of America, primarily producing copper, zinc, gold and nickel. LMC is a Canadian public company with its head office in Toronto, Canada and its common shares are listed on the Toronto Stock Exchange (symbol LUN) and the NASDAQ Stockholm (symbol LUMI).

In June 2022, LMC retained the services of SRK Consulting (Canada) Inc. (SRK) to visit the Candelaria Copper Mining Complex and to compile this Technical Report pursuant to National Instrument 43-101 Standards of Disclosure for Mineral Projects and Form 43-101F1. This Technical Report updates the November 28, 2018, Technical Report entitled “Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile”. It summarizes the technical information that is relevant to support the disclosure of the updated Mineral Resources and Mineral Reserves estimates (as of December 31, 2022) contained herein prepared using revised economic parameters and the positive results of recent exploration programs.

Since acquiring Freeport-McMoRan Inc.’s 80% interest in the CCMC in November 2014, LMC has actively grown the annual reported Mineral Resources and Mineral Reserves by a combination of factors. Although this growth was primarily driven by exploration success, other factors including Mineral Resource modelling optimizations, operational efficiencies and innovation and the reduction of reporting cut-off grades also contributed to this growth. Although drilling exploration expenditure targeting Mineral Resource expansion has decreased in recent years, with reported Mineral Resources and Reserves having plateaued, LMC has managed to comfortably replace depleted Mineral Reserves on an annual basis. CCMC exploration staff will continue to define and upgrade underground and open pit Mineral Resource estimates on the property but will also turn their attention to evaluate the considerable exploration potential in areas external to the current mine plan.

This Technical Report also summarizes changes to the open pit phase design and new underground production schedules, based on these updated Mineral Reserves, as well as operational improvement initiatives designed to reduce operational costs and improve efficiencies.

## Property Description, Location and Access

The Candelaria Copper Mining Complex is in Chile's Atacama Region, Region III, approximately 20 kilometres south of the city of Copiapó and adjacent to the community of Tierra Amarilla all of which are approximately 650 kilometres north of Santiago (Figure i and Figure ii). The properties are easily accessed using the public road system. Copiapó is a modern city with all the regular services and a population of approximately 170,000. Personnel employed by the Candelaria Copper Mining Complex are primarily from the Atacama region. The Candelaria and Ojos del Salado mines receive electrical power through long-term contracts with AES Andes S.A., a nation-wide energy company.

The primary water supply comes from a desalination plant, which was commissioned in 2013 and is located at the Punta Padrones port facility at the nearby seaport of Caldera. Both the desalination plant and the Punta Padrones port are owned by Minera Candelaria. The copper concentrate is trucked from site to local customers or shipped from Punta Padrones to world markets.

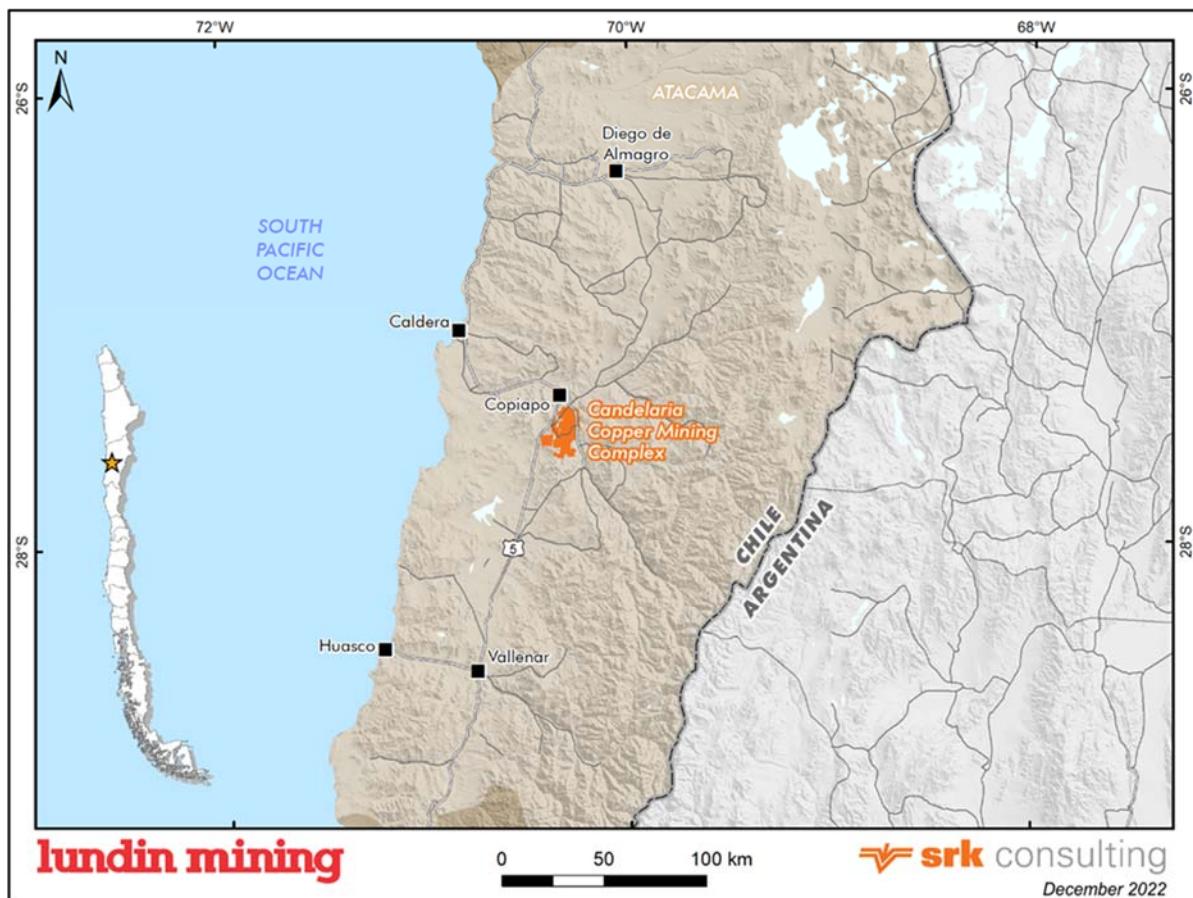


Figure i: Location of the Mines Comprising the Candelaria Copper Mining Complex

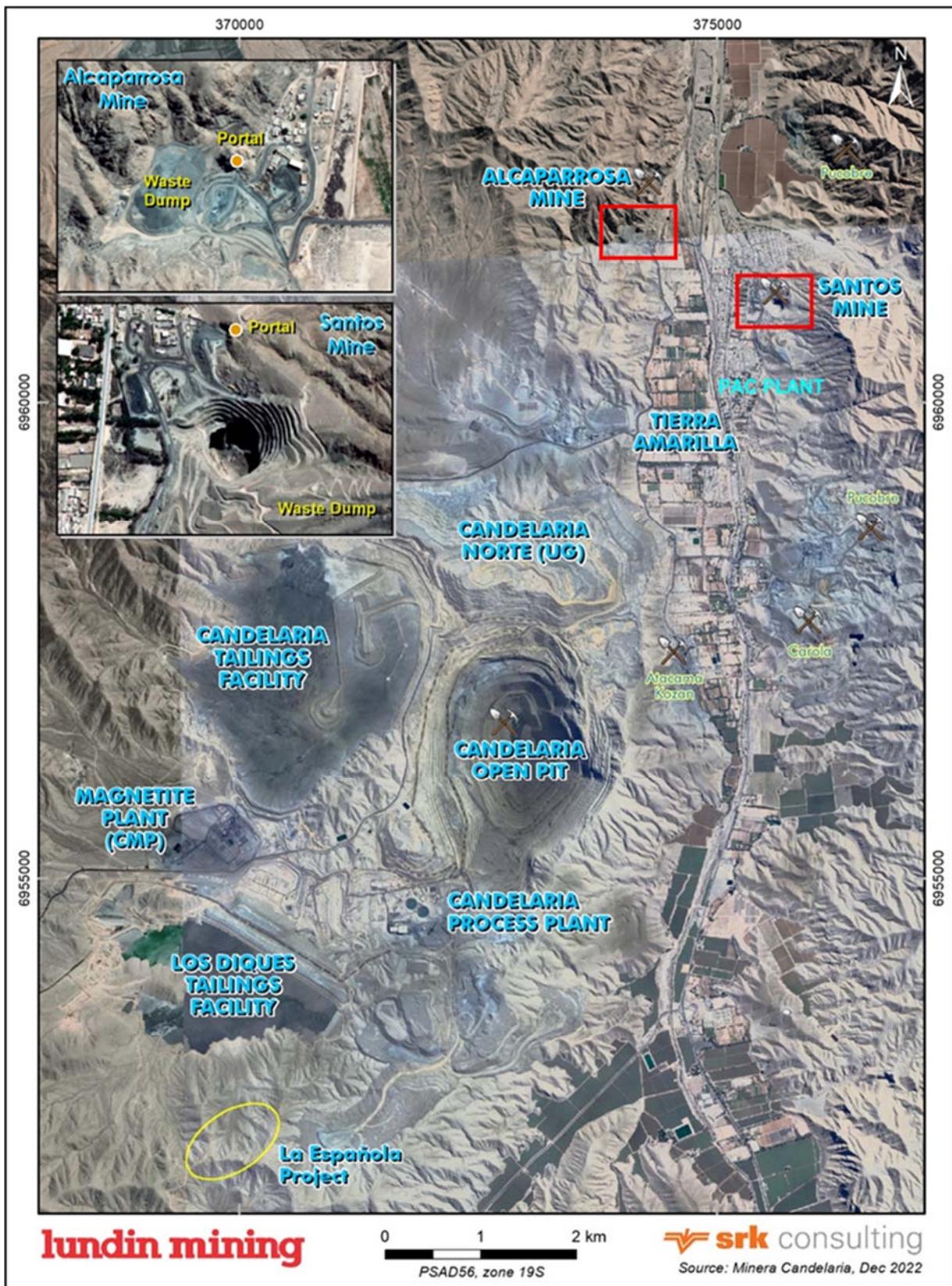


Figure ii: The Local Infrastructure of the Candelaria Copper Mining Complex

Copiapó has a desert climate with mild temperatures year-round. Winters are mild with warm temperatures. Annual precipitation averages approximately 17 millimetres, the majority of which falls in the winter months. The elevation of the mining operations does not exceed 800 metres above sea level. The climate and relatively low elevation allow for year-round mining and exploration activities.

The Minera Candelaria property comprises inside Candelaria District 220 mining exploitation concessions (approximately 6,094 hectares) and 29 mining exploration concessions (approximately 6,680 hectares) (Figure 2 and Appendix A) and outside Candelaria District 51 mining exploitation concessions (approximately 5,966 hectares) and 11 mining exploration concessions (approximately 1,300 hectares). The tenements are free of mortgages, encumbrances, prohibitions, injunctions, and litigation. The tenements containing the active and future mining activities are not affected by royalties. The Candelaria Copper Mining Complex holds certain surface and underground water use rights and certain surface water use rights, all free of mortgages, encumbrances, prohibitions, injunctions, and litigation.

There are no known factors or risks that may affect access, title, or the right or ability to perform work on the Candelaria Copper Mining Complex.

## History

The Candelaria sulphide deposit was discovered by Phelps Dodge Corporation (Phelps Dodge) in 1987. A feasibility study was completed in 1990, and, following approval by the Chilean government, construction started in October of 1992. Sumitomo acquired a 20% stake in the property in 1992. Production commenced in early 1995. In 1997, Phelps Dodge completed the expansion of the concentrator throughout with the installation of a second semi-autogenous grinding (SAG) mill, additional mining facilities and new and expanded concentrator facilities.

Mine site and district exploration programs have been active since the discovery of the Candelaria deposit. This work resulted in the discovery of the Alcaparrosa, Candelaria Underground (both North and South Sectors), and Española deposits. Both sectors in Candelaria Underground are now in active production.

In 2007, property ownership changed when Freeport-McMoRan Inc. (Freeport) acquired Phelps Dodge.

During 2011, a pipeline was completed to bring water purchased from a nearby sewage treatment facility to the Candelaria mine. A desalination plant at the port of Caldera was built and commissioned in 2013 at a capacity of 500 litres per second.

The Santos underground mine has been in production since 1929, with processing taking place at what is now called the Pedro Aguirre Cerda (PAC) plant. Phelps Dodge became sole owner of Minera Ojos del Salado and the Santos mine and PAC plant in 1985. The PAC plant has been expanded several times to its current capacity of 3,800 tonnes per day. Sumitomo acquired its 20% interest in Minera Ojos del Salado in 2005.

In early 1996, production from the Alcaparrosa underground mine commenced. Due to low copper prices the PAC plant was shut down from 1998 to 2004.

In November 2014, LMC acquired Freeport's interest in the CCMC.

The Candelaria Copper Mining Complex has been a significant producer of copper since the mid-1990s. Between 2017 and 2021, annual contained copper and gold metals in concentrates have averaged approximately 143 kilotonnes and 84 kilo ounces, respectively.

During 2015, the Candelaria 2030 project received environmental approval. Key permits were received during 2016 for the construction of the new Los Diques tailings storage facility and major civil works began in August 2016 and construction continued through 2017.

During 2017 permits were granted to allow the Candelaria Underground operations to expand production from 6,000 to 14,000 tonnes per day.

In 2018, the new Los Diques tailings management facility was commissioned and received its first tailings. In addition, initial Mineral Resources and Mineral Reserves were declared for the recent Española surface discovery.

In 2019, the Candelaria Underground South Sector started production.

In 2020, LMC submitted the Environmental Impact Assessment (EIA) 2040 documentations to the authority to extend Candelaria's life of mine (LOM) and to execute various infrastructure projects included under the EIA. The review process is ongoing and will continue in 2023.

## **Geology, Mineralization, and Deposit Types**

### **Regional, Local, and Property Geology**

The Candelaria sulphide deposit is located at the boundary between the Coastal Cordillera and the Copiapó Precordillera. The Coastal Cordillera of Chañaral and Copiapó is composed of Permian to Lower Cretaceous intrusions within a basement of metasedimentary rocks of Devonian to Carboniferous age. Volcanic, volcaniclastic, and marine carbonate rocks represent intra- and back-arc sequences that were deposited during Early to Mid-Cretaceous.

The Candelaria, Santos and Alcaparrosa mines and the Española deposit are located in the district of Punta del Cobre. The polymetallic sulphide deposits are hosted in volcanic rocks of the Punta del Cobre Formation. Polymetallic sulphide deposits in the Punta del Cobre district are located to the east of the main branches of the Atacama fault zone, a subduction-linked, strike-slip fault system stretching over 1,000 kilometres along the Chilean coast and active at least since the Jurassic. The dominant structural elements of the Punta del Cobre area are the northeast-trending Tierra Amarilla Anticlinorium, a southeast-verging fold-and-thrust system and a series of north-northwest- to northwest-trending high-angle faults.

Calcareous, sedimentary, and volcaniclastic rock of the Abundancia and Punta del Cobre formations are exposed within the open pit of the Candelaria mine. The lowermost unit in the Candelaria mine and Candelaria Underground is the Lower Andesite, a compact succession of porphyritic to massive andesite and volcaniclastic breccias with intense biotite-quartz-magnetite-albite alteration. The Santos mine is located in the eastern limb of the north-northeast-trending Tierra Amarilla anticline, and the rocks of the Santos mine are comprised mainly of the Punta del Cobre and Abundancia Formations. The Alcaparrosa mine is located in the northern part of the Punta del Cobre mining district, with the Punta del Cobre Formation subdivided into a Lower Andesite unit, which is succeeded by volcanoclastic breccias, albitophyre and pyroxene- scapolite hornfels interbedded with garnetites. The Española deposit is in the south portion of Candelaria-Punta del Cobre district, and occurs in the contact aureole between the Copiapó batholith and sedimentary and volcano-sedimentary rocks of the Chañarcillo Group and the Punta del Cobre Formation in a tectonically depressed block controlled by San Gregorio fault system.

## Mineralization

The copper-gold sulphide mineralization found at the Candelaria Copper Mining Complex is generally referred to as iron oxide copper gold (IOCG) mineralization. The sulphide mineralization occurs in breccias, stockwork veinlets, disseminations in andesite, and as an internal tuff unit. There are also some localized controls to mineralization in the form of faults, breccias, veins, and foliation. Candelaria has become an exploration model for Andean-type IOCG deposits that display close relationships to the plutonic complexes and broadly coeval fault systems. Depending on lithology and the structural setting, the polymetallic sulphide mineralization can occur as veins, hydrothermal breccias, replacement mantos, and calcic skarns. The Candelaria IOCG system lies within the thermal aureole of the Lower Cretaceous magmatic arc plutonic suite in the Candelaria-Punta del Cobre district.

The main mineralized body at the Candelaria mine is up to 400 metres thick in its central part and thins towards the edges. In east-west sections, the mineralization has a lenticular, downward concave shape with a steep eastern limb and a shallowly dipping western limb. The shape of the mineralized body in north-south section is irregular. In plan view, the extent of the mineralization in Candelaria is approximately 1,400 metres by 2,400 metres. The mineralized body was folded after its formation. The north-northeast-trending fold axis corresponds to the Tierra Amarilla Anticline.

In the Santos mine, three styles of mineralization are observed: veins, mantos, and breccia bodies. An important vein in the Santos Mine is the Isabel Vein, which has a northwest striking orientation, and extends over 1 kilometre in length and between 4 and 30 metres in width. Manto-type mineralization occurs as tabular bodies located at two sedimentary horizons located in the floor and roof of the albitophyre. The manto mineralization is characterized by variable iron contents with magnetite common in the north and deeper areas, and specular hematite in the south. Mineralization occurs within breccia bodies, which are typically contained with the albitophyre and lower andesite units and the mineralization generally forms steeply west-dipping and north-northwest- to northwest-striking bodies.

Mineralization at the Alcaparrosa mine principally occurs as mantos that trend to the northeast and dip to the west. Ore mineralogy consists of chalcopyrite, pyrite, and magnetite, with trace pyrrhotite, molybdenite, and arsenopyrite. Mineralization at the Alcaparrosa mine also occurs as veinlets defining dense stockwork, breccias as well as fine dissemination in biotite meta-andesites. High-grade bodies are also found in massive veins striking north-northwest, north, and east.

In the Española project area, mineralization occurs within mantos hosted mainly in a brown garnet skarn, and in lesser proportions within silica hornfels. Chalcopyrite is the primary copper sulfide mineral found as clusters and in disseminated form, commonly associated with brown garnet porphyroblasts. Near the surface and down to a depth of approximately 70 m, the mineralization is oxidized, characterized by the presence of chrysocolla, malachite, native copper, diogenite and bornite.

### **Deposit Types**

The copper-gold sulphide mineralization present at the Candelaria Copper Mining Complex is generally referred to as iron oxide copper gold (IOCG). Depending on lithology and the structural setting, the polymetallic sulphide mineralization can occur as veins, hydrothermal breccias, replacement mantos, and calcic skarns.

The Candelaria IOCG deposit lies within the metamorphic aureole of the Lower Cretaceous magmatic arc plutonic complex that is located within the Candelaria-Punta del Cobre district, Atacama Region, northern Chile. IOCG deposits are primarily defined by their elevated magnetite and / or hematite with elevated copper and gold contents.

### **Exploration**

Ongoing exploration is conducted by the Candelaria Copper Mining Complex with the primary purpose of supporting mining and increasing the estimated Mineral Resources and Mineral Reserves available for mining. Exploration is focused on the known mantos, veins, and breccia masses in proximity to existing open pit and underground infrastructure. Historically, this strategy has proven very effective in defining new Mineral Resources available for underground mining. Much of the exploration is conducted from underground, requiring significant underground development to provide adequate drilling stations. Regional exploration is also undertaken on the large properties surrounding the mines to identify targets and define new areas with Mineral Resource potential.

From 2010 to the end of June 2022, Minera Candelaria and Minera Ojos del Salado have together invested more than US\$267M in exploration to expand the Mineral Resources primarily below the Candelaria Open Pit, to the north and south of the pit, and at the three underground mines (Candelaria Underground, Santos and Alcaparrosa). During this period, 3,780 core boreholes (1,051,068 metres) were drilled requiring over 15,000 metres of underground development to provide access for drilling.

In 2015, a new exploration and resource development tool, Mineral Inventory Range Analysis (MIRA), was initiated with the purpose to understand the potential mineral inventory remaining in the mines as well as within the Candelaria land holdings. Brownfield exploration drilling began late in 2017 with surface drilling commencing in the south district of the Candelaria land concession in an area called Espa ola. A new Mineral Resource model was constructed with this data to support Mineral Resource estimation. The Mineral Resource model was updated again in 2019, following additional drilling of 8,027 metres in 34 boreholes that was carried out in 2019. The recent aggressive exploration program has resulted in significant new discoveries with a positive impact particularly on the life of the three underground mines.

Building on this exploration success, future exploration for the period 2023 to 2027 will focus on maintaining operational fronts in the mines, targeting the lateral extensions of the areas investigated since 2010 and exploring district targets to the north and south of mining infrastructure within the Minera Candelaria and Minera Ojos del Salado land holdings. The planned exploration program includes approximately 1,160 metres of underground development, 171,500 metres of core drilling, and continued geophysical campaigns at a total estimated combined cost of US\$48.0M.

The exploration potential of the Candelaria Copper Mining Complex remains excellent. The qualified person is of the opinion that continued exploration programs and the MIRA exploration and Mineral Resource development initiative will continue to expand the underground Mineral Resource estimates.

## **Drilling**

Mineral Resources are estimated from information obtained from surface and underground boreholes. From 1990 to June 30, 2022, 4,689 core and percussion boreholes (1,361,873 metres) were drilled in and around the Candelaria mine. Approximately 96% of all drilling comprised core boreholes.

From 1990 to 2004, there were five exploration diamond drill holes drilled in Espa ola totaling 2,861 metres. No exploration work occurred between 2005 and 2016. From July 2017 to the end of June 2022, 154 new diamond drill holes were completed totaling 44,952 metres. To date, Espa ola has 159 drill holes with 47,813 metres in total. In the Santos mine, a total 1,604 core boreholes (323,591 metres) were drilled from underground and surface stations from 1988 until June 30, 2022. The borehole data base for the Alcaparrosa mine contains 1,165 boreholes (283,133 metres) drilled from surface and underground locations from 1990 to June 30, 2022.

The drilling and sampling procedures are consistent with generally recognized industry best practices. The qualified person concludes that the samples are representative of the source materials and there is no evidence that the sampling process introduced a bias.

## **Sampling, Analysis, and Data Verification**

Analytical samples informing the Candelaria Mineral Resource estimates were prepared and assayed at the Candelaria mine laboratory that is accredited to ISO17025 for the analyses of copper,

iron, zinc, and silver. The laboratory is not independent from Minera Candelaria and is managed by the Candelaria Processing Department. Intertek and Geolaquim in the Paipote Sector of Copiapó, Chile have been used as umpire laboratories, which are independent of Minera Candelaria.

Analytical samples informing the Ojos del Salado Mineral Resource estimates were prepared and assayed by Intertek (formerly Vigalab). Intertek is a global group operating 13 laboratories in Chile with a management system accredited to ISO9001. Intertek's laboratories are independent from Minera Ojos del Salado. Since 2016, the Candelaria laboratory has been used as an umpire laboratory.

The sample analyses used for the Mineral Resource reporting for the Española project were prepared by Geolaquim Ltda. (Geolaquim) (80%) and Intertek I (20%). Geolaquim is certified under regulation ISO 17025 by the INN for concentrated minerals and others (soluble copper, total copper, iron and gold).

The sample preparation and analytical methodologies used for assaying Candelaria, Ojos del Salado and Española samples are similar. Upon reception, sample details are recorded and insertion points for quality control samples in the sample stream are determined. Sample preparation includes drying at 105 degrees Celsius in a forced air furnace, primary crushing to 100% passing 5 millimetres, and secondary crushing cycle to 90% passing 1.68 millimetres (12 mesh). Grinding tests are conducted on every 40th sample. From the crushed material two 1-kilogram samples are prepared using a rotary splitter. Both samples are pulverized separately to 95% passing 0.106 millimetres (140 mesh), and further subdivided into subsamples, including those used for quality control and those kept for future reference or as backup should more sample material be required.

Conventional preparation and assaying procedures were used. Copper is analyzed by multi acid digestion and atomic absorption spectroscopy. Gold is assayed using a fire assay procedure. Specific gravity is systematically measured every 2 metres over the full sample interval. Assay data are loaded directly from digital assay result files into the final database in order to minimize entry errors.

All drilling assay samples are collected by a contractor under the direct supervision of a mine geologist. Samples from Candelaria are processed at the mine site. Samples from Ojos del Salado are shipped directly from the property to the Intertek laboratory in Paipote. In each case, established procedures were used to ensure the security of samples during transportation between the drill rig and the laboratories, including through maintaining the chain of custody of samples to prevent inadvertent contamination or mixing of samples and rendering active tampering as difficult as possible.

The Candelaria Copper Mining Complex implements analytical quality control measures consistent with generally accepted industry best practices. The analytical quality control program includes the use of control samples inserted with all samples submitted and check assaying by umpire laboratories. The analytical quality control data are routinely monitored and audited.

In the opinion of the authors of this Technical Report, the analytical results delivered by the primary laboratories used are sufficiently reliable to inform Mineral Resource estimates. The sampling preparation, security, and analytical procedures used are consistent with generally accepted industry best practices and are therefore adequate to support Mineral Resource estimation.

## Mineral Processing and Metallurgical Testing

The Candelaria Copper Mining Complex maintains regular metallurgical testing programs that are incorporated with historical testing results and mill performance into statistical models to predict and improve processing performance for mill throughput, recovery and final concentrate grade. Metallurgical tests are generally conducted at specialized facilities such as the Universidad de Atacama and at commercial third-party laboratories in Chile, including SGS Mineral Services. Metallurgical testing focuses on rock hardness, mineralogy and bench scale flotation tests to predict mill throughput and metallurgical performance. The internal test work conducted by Candelaria includes comminution and flotation testing for routine characterization and ongoing development of geometallurgical models.

Candelaria Copper Mining Complex maintains a copper recovery model, last updated in 2018. This model includes factors for geological units, stockpiled material and copper and zinc head grades. This model is updated regularly based on metallurgical testing and operations data. The most important factors impacting recovery are copper grade, throughput and feed particle size.

## Mineral Resource and Mineral Reserve Estimates

The Mineral Resource estimates discussed herein are informed from core drilling information stored in a secured central database and were evaluated using a geostatistical block modelling approach. Six Mineral Resource models were prepared for the areas comprising the Candelaria Open Pit mine and Española open pit project and the four underground mines (Candelaria Underground North Sector, Candelaria Underground South Sector, Santos, and Alcaparrosa) using slightly different methodologies and assumptions. The block models comprising the Candelaria Underground, Santos and Alcaparrosa underground deposits have been integrated since 2017.

SRK reviewed and audited the Mineral Resource models prepared by Minera Candelaria and Minera Ojos del Salado personnel. In the opinion of the authors, the Mineral Resource estimation reported herein is a reasonable representation of the Mineral Resources found at the Candelaria Copper Mining Complex at the current level of sampling. The Mineral Resources have been estimated in conformity with generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines* (November 29, 2019) and are reported in accordance with National Instrument 43-101. The consolidated audited Mineral Resource Statement for the Candelaria Copper Mining Complex, effective as of December 31, 2022, is presented in Table i. Mineral Resources include Mineral Reserves.

Since acquiring the Candelaria Copper Mining Complex in November 2014, the aggressive exploration programs undertaken by LMC has significantly expanded the Mineral Resource estimates of Minera Candelaria and Minera Ojos del Salado. Since the previous Mineral Resource

model update in 2018, exploration continued in all the Candelaria and Ojos del Salado deposits and this led to an increase, in contained copper metal, of about 21% of the global Measured and Indicated Mineral Resources, compared to 2018 update. Other factors driving this increase include lowering of the reporting cut-off grades. In 2022, the La Española Open Pit cut-off grade was reduced from 0.20 to 0.17% copper, and for the underground Mineral Resources, the cut-off grade was lowered from 0.55% to 0.40% copper for the Candelaria and from 0.55% to 0.45% copper for the Ojos del Salado. The increase in the Indicated Mineral Resource for the Candelaria Underground (North and South sectors) contributes bulk of the (about 90%) increase in copper metal in 2022.

Open pit and underground Mineral Resource models (long-term models) for each deposit are compared to their respective grade control models (short term models) and to the production reports (as mined) on a monthly basis. Generally, the comparison between the long and short-term models is reasonable, but some significant differences do occur that should be analysed by CCMC staff. These reconciliations have been undertaken for copper, gold and silver.

**Table i: Consolidated Audited Mineral Resource Statement\*, Candelaria Copper Mining Complex, SRK Consulting (Canada) Inc., effective December 31, 2022 (100% Basis)**

Classification	Quantity ('000 t)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>District Open Pit</b>							
Measured	478,190	0.44	0.10	1.46	2,090	1,514	22,464
Indicated	88,645	0.34	0.07	0.67	301	200	1,912
<b>Measured and Indicated</b>	<b>566,835</b>	<b>0.42</b>	<b>0.09</b>	<b>1.34</b>	<b>2,391</b>	<b>1,714</b>	<b>24,377</b>
Inferred	87,330	0.30	0.05	0.31	258	140	883
<b>Candelaria WIP**</b>							
Measured	77,830	0.28	0.09	1.47	220	214	3,686
Indicated							
<b>Measured and Indicated</b>	<b>77,830</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>220</b>	<b>214</b>	<b>3,686</b>
Inferred							
<b>District Underground</b>							
Measured	270,673	0.86	0.19	2.82	2,332	1,644	24,547
Indicated	316,913	0.79	0.17	2.75	2,494	1,764	28,012
<b>Measured and Indicated</b>	<b>587,586</b>	<b>0.82</b>	<b>0.18</b>	<b>2.78</b>	<b>4,826</b>	<b>3,407</b>	<b>52,558</b>
Inferred	62,253	0.80	0.17	2.34	498	345	4,688
<b>WIP Ojos del Salado</b>							
Measured	146	1.06	0.23	2.47	2	1	12
Indicated							
<b>Measured and Indicated</b>	<b>146</b>	<b>1.06</b>	<b>0.23</b>	<b>2.47</b>	<b>2</b>	<b>1</b>	<b>12</b>
Inferred							
<b>District Total</b>							
Measured	826,839	0.56	0.13	1.91	4,644	3,373	50,708
Indicated	405,558	0.69	0.15	2.29	2,795	1,963	29,924
<b>Measured and Indicated</b>	<b>1,232,397</b>	<b>0.60</b>	<b>0.13</b>	<b>2.04</b>	<b>7,439</b>	<b>5,337</b>	<b>80,632</b>
Inferred	149,583	0.51	0.10	1.16	756	485	5,570

\* Reported within the boundaries of the Compañía Contractual Minera Candelaria and Compañía Contractual Ojos del Salado properties. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources include Mineral Reserves. Open pit Mineral Resources are reported at a cut-off grade of 0.15% copper for the Candelaria Open Pit and 0.17% copper for the La Española project, within conceptual pit shells based on metal prices of US\$4.02 per pound of copper and US\$1,600 per ounce of gold and current topography. Underground Mineral Resources are reported at a cut-off grade of 0.40% and 0.45% copper for the Candelaria North and South sectors and Ojos del Salado, respectively.

\*\* Work-in-progress (WIP) stockpiles

Mineral Reserves are derived from Measured and Indicated Mineral Resources after applying economic parameters. The Mineral Reserves are derived and classified according to the following criteria:

- Proven Mineral Reserves are the economically mineable part of the Measured Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.
- Probable Mineral Reserves are those Measured and Indicated Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.

The consolidated audited Mineral Reserve Statement for the Candelaria Copper Mining Complex is presented in Table ii. Mineral Reserves are included in Mineral Resources.

**Table ii: Consolidated Audited Mineral Reserve Statement\*, Candelaria Copper Mining Complex, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity ('000 t)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Candelaria Open Pit + Española</b>							
Proven	369,830	0.45	0.11	1.40	1,652	1,249	16,602
Probable	59,205	0.35	0.08	0.66	207	152	1,260
<b>Total</b>	<b>429,035</b>	<b>0.43</b>	<b>0.10</b>	<b>1.29</b>	<b>1,859</b>	<b>1,402</b>	<b>17,862</b>
<b>Total District Underground</b>							
Proven	64,918	0.83	0.19	3.10	538	392	6,472
Probable	83,369	0.77	0.18	3.05	642	470	8,166
<b>Total</b>	<b>148,287</b>	<b>0.80</b>	<b>0.18</b>	<b>3.07</b>	<b>1,180</b>	<b>862</b>	<b>14,638</b>
<b>WIP Candelaria &amp; Ojos del Salado</b>							
Proven	77,976	0.28	0.09	1.47	222	215	3,697
Probable							
<b>Total</b>	<b>77,976</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>222</b>	<b>215</b>	<b>3,697</b>
<b>District Total</b>							
Proven	512,724	0.47	0.11	1.62	2,412	1,857	26,772
Probable	142,574	0.60	0.14	2.06	849	622	9,426
<b>Total</b>	<b>655,298</b>	<b>0.50</b>	<b>0.12</b>	<b>1.72</b>	<b>3,261</b>	<b>2,479</b>	<b>36,198</b>

Notes:

1. All figures have been rounded to reflect the relative accuracy of the estimates.
2. The standard adopted in respect of the reporting of Mineral Reserves for the CCMCt, following the completion of required technical studies, is in accordance with the NI 43-101 guidelines and the 2014 CIM Definition Standards, and have an effective date of December 31, 2022.
3. Mineral Reserves have been prepared using metal prices of US\$3.35 per pound of copper, US\$1,600 per ounce of gold, and US\$22.00 per ounce of silver.
4. Mineral Reserves for open pit are reported at a cut-off grade of 0.15% copper for Candelaria and 0.17% copper for the Española Project. Underground Mineral Reserves for Candelaria are reported at cut-off of 0.44% copper. Underground Mineral Reserves for Santos are reported at cut-off of 0.51% copper.
5. The average dilution factor applied is 3.84% for the LOM for Candelaria Open Pit and Española Project.

## Mining Methods

The Candelaria Copper Mining Complex will operate with an overall mining rate of approximately 205,000 tonnes per day over the next 23 years including an average of 76,800 tonnes per day of ore sent to the processing plants together with substantial quantities of ore recovered from the WIP

stockpiles. The average grade of the ore that will be mined from the open pits over the remaining LOM is estimated at 0.43% copper, while stockpiled work-in-progress material is estimated to have an average grade of 0.28% copper. The mine currently operates five electric shovels, 55 haulage trucks, seven production drills, and a fleet of support equipment. A major open pit mine equipment re-capitalization program will see 14 trucks and one shovel replaced over the next three years. The Candelaria Underground mine is forecasting a combined production of 14,000 ore tonnes per day, approximately 10,000 tonnes and 4,000 tonnes from the North and South sectors, respectively. The combined production from both sectors will allow the mine to maintain this peak production up until 2046. The average LOM grade is 0.78% copper. The Santos mine will continue to produce at its current rate of production of 5,500 tonnes per day of ore to 2026 then decrease to 3,800 tonnes per day of ore from 2027-2033 with an average LOM grade of 0.88% copper. The mining method used in both underground mines is sublevel open stoping.

Production from the Alcaparrosa mine is currently suspended due to a sinkhole incident which occurred in late 2022. Mineralized materials from the mine have been excluded from the LOM plan and Mineral Reserves documented in this report. Candelaria is executing a workplan to remediate the sinkhole and return the Alcaparrosa mine to service. The project scope broadly involves the filling of the sinkhole, stabilizing the stopes, managing water infiltration and sealing the aquifer permeation, and expelling excess water accumulated in the mine, and managing stakeholder relations, legal processes and permit applications. The project is approved by LMC and includes a budget of \$22.5M. Depending on permit timelines and subject to a favorable response from the authorities, the Alcaparrosa mine may return to services within three years. The Company will work with the authorities and various experts to evaluate and ensure that re-opening of the mine is feasible and that this can be executed safely.

The LOM plan for the Candelaria Copper Mining Complex is largely driven by supplying ore to the Candelaria processing plant from the Candelaria and Espanola open pits although higher grade underground sources are of increasing importance. Surface WIP stockpiles are fed to the plant once the open pit Mineral Reserves have been depleted. The work-in-progress stockpile Proven and Probable Mineral Reserves are estimated at 78 million tonnes at an average grade of 0.28% copper, 0.09 gram of gold per tonne, and 1.47 grams per tonne silver.

The Candelaria open pit was designed to be mined in several phases of development. Based on the December 2022 LOM, four phases of development remain in the LOM plan (Phases 10 to 13). The overall strip ratio is expected to be 2.09:1 including ore that is initially delivered to stockpiles. The total in-pit waste is 753.6 million tonnes and the overall life of the open pit mine is 19 years. Candelaria has been planning a substantial mine equipment recapitalization program to replace the aged mining equipment fleet and a change in the loading methodology to increase capacity and efficiency while improving equipment availability and reliability.

For La Espanola open pit, the total in-pit waste is 138.9 million tonnes and the overall life estimated at 13 years.

The three underground mines (Candelaria Underground North/South sectors, Santos and Alcaparrosa) utilize a sublevel stoping mining method for ore extraction. This method is ideal for relatively large, vertical, as well as thick deposits with favorable and stable host rock. Stopes can typically be up to 180 metres high with sublevels at 20 to 60 metre intervals. The length of the stopes is generally 40 to 100 metres with widths varying between 20 to 30 metres. Stopes are drilled down from the sublevel drilling drifts as benches using 114 to 130 millimetres diameter bit down-the-hole holes. The holes are loaded and blasted in vertical slices towards an open face created by the slot blasting. The blasted ore gravitates to the bottom of the stope and is collected in draw points at the production level below. This lower level also consists of the haulage (transport) drift. The undercut levels, which feed the draw points, are 15 to 20 metres high and inclined at 50 to 60 degrees to allow the blasted ore to flow easily by gravity. An Epiroc Simba tophammer rig drills 64 millimetres upholes within the undercut, which are loaded and blasted with the downholes. Once the stope is mined, a remaining rib pillar, which can be another 20 to 30 metres wide, may be blasted into the stope to increase the extraction tonnage. Typically, a 20-metre structural pillar remains between each stope and no backfill is used at these operations. Mucked ore is dumped into 60 tonne underground trucks (owned by Candelaria) and 30 or 40 tonne highway type trucks (owned by contractors) and hauled up the ramp to a surface stockpile for subsequent re-handling and processing.

The current life of the Candelaria Underground and Santos mines is 24 and 12 years, respectively.

For 2022, the Candelaria Copper Mining Complex produced contained metals in concentrate (100% basis) of 152 kilotonnes of copper, 86 kilo ounces of gold and 1.6 million ounces of silver. Over the remaining LOM plan (to 2046), the average annual contained metal production is estimated to be 123 kilotonnes of copper, 73 kilo-ounces of gold and 1.2 million ounces of silver. This is an improvement over those metrics reported in 2018 Technical Report in terms total contained copper metals and the overall project economics. Over the 10-year period from 2023 to 2032, the average annual production is estimated to be 151 kilotonnes of copper, 87 kilo-ounces of gold and 1.4 million ounces of silver.

## Recovery Methods

Candelaria Copper Mining Complex operates two processing plants: Candelaria and Pedro Aguirre Cerda (PAC). The Candelaria processing plant receives ore from the Candelaria open pit, Candelaria underground North and South Sector and part of Santos underground mines and has a nameplate capacity of 75,000 tonnes per day. The PAC processing plant receives ore exclusively from the Santos underground mine and has a design capacity of 3,800 tonnes per day.

The annual throughput of Minera Candelaria from 2005 to late 2022 averaged 26 Mtpa, equivalent to 70,800 tonnes per day at a plant utilization of 92%. The average process plant recoveries for copper, gold and silver during this period were 93%, 72% and 83% respectively. Copper head grades are forecast to be between 0.5% to 0.7% until 2035 before falling to below 0.4% at the end of mine life. Reclaimed stockpiles and Candelaria Underground will be the only mill feed source at the end of mine life.

In 2020, CCMC initiated the Candelaria Mill Optimization Project (CMOP) phase 3, also called debottlenecking project, to increase concentrator throughput by an expected 2,000 tonnes per day.

This project scope included conversion of the existing ball mill N°6 to rod milling, will allow all the crushed and milled pebbles to advance towards secondary grinding, liberating room for incremental fresh feed to SAG milling. The project is expected to be completed in September 2023.

The PAC concentrator of Minera Ojos del Salado has been in operation since 1929. The concentrator processes 3,800 tonnes per day of fresh feed from the Santos underground mine with an average head grade of 0.85% copper achieving a recovery of 94%. Final flotation tailings from the PAC plant are pumped to a new line to Los Diques, installed in 2019.

Copper concentrates are trucked to the port at Punta Padrones, near Caldera. Concentrate grade has averaged 30% copper since 2019. Candelaria produces a clean concentrate containing no penalty elements, with payable gold and silver. Gold content in the concentrate has been consistently 5 to 6 g/t with silver between 80 to 100 g/t. Zinc grades in the concentrate since 2019 averaged 0.6%, which is below penalty levels. For the PAC processing plant, copper concentrate has averaged 30% copper, 5 g/t gold, and 67 g/t silver since 2004. Gold and silver recoveries are slightly lower than Candelaria, at 72% each.

Minera Candelaria has an agreement with a third-party company to process Candelaria's flotation tailings and produce a magnetite concentrate as an additional source of by-product revenue.

## Project Infrastructure

The Minera Candelaria infrastructure includes:

- Candelaria Open Pit and underground with a capacity of approximately 202,000 tonnes of rock per day over the next 23 years.
- Surface waste dumps located to the north and southwest of the Candelaria and La Española Open Pit.
- Candelaria processing plant with a capacity of 70,000 – 77,000 tonnes per day. A series of process improvements (on going) have been scheduled for 2023 and 2024.
- Candelaria Underground (North and South Sector) with a current production ore capacity of 14,000 tonnes per day.
- The active Los Diques tailings storage facility located to the south-east of the open pit and mine facilities.
- The inactive Candelaria tailings storage facility located to the north-west of the open pit.
- The closed San Esteban tailings storage facility.
- Ancillary mine services and administrative buildings and road accesses.
- Off-site Punta Padrones port located at Caldera with a 45,000-wet metric tonne designed storage capacity and 1,000 wet metric tonnes per hour loading capacity.
- Desalination plant adjacent to the port facility commissioned in January 2013 with a capacity of 500 litres per second and the related pipeline to connect to the Bodega pump station (80 kilometres).
- Pipeline from the Bodega pump station to the Candelaria plant site (40 kilometres).

The Minera Ojos del Salado infrastructure includes:

- Alcaparrosa underground mine. The mine is currently being suspended. Historically, the mine had an ore capacity of 4,400 tonnes per day and, if approved to re-start the production, is expected to sustain the same level of throughput in the future.
- Santos underground mine with an ore capacity of 5,100 tonnes per day.
- PAC processing plant with a capacity of 3,800 tonnes per day.
- The closed Ojos del Salado tailings storage facilities.
- Ancillary surface service buildings and road accesses.

## Market Studies

The quality of the product produced at Candelaria / Ojos is marketable worldwide. The low level of elements detrimental to copper smelting and refining makes the concentrate a valued quality for the feed mix for many smelters. The concentrate is shipped to the Far East (Japan, South Korea and China) and Europe.

The copper concentrate production is predominantly sold under long term contracts directly to smelters and some traders. On a yearly basis, up to 15% of the annual copper concentrate production is sold on a spot basis through a tender process allowing for some production fluctuations.

Franco-Nevada (Barbados) Corporation owns a gold and silver stream on production from the Candelaria operation. The stream covers 68% of the payable gold and silver from 100% of the mine which reduces to 40% after 720,000 ounces of gold and 12 million ounces of silver have been delivered to Corporation (Franco-Nevada). As of December 31, 2022 CCMC has delivered 484.koz of gold and 7.8Moz of silver. Based on the 2023 LOM production estimates, the change from 68% to 40% of production is expected to occur in year 2027.

In addition to copper concentrate sales, there is an agreement with Compañía Minera del Pacífico S.A. (CMP) to process Candelaria's flotation tailings to produce a magnetite concentrate and this process creates an additional source of by-product revenue.

## Environmental Studies, Permitting, and Social or Community Impact

The Candelaria Copper Mining Complex is located at approximately 450 metres above sea level in the southern margins of the Atacama Desert, south of the major regional center of Copiapó and a few kilometres from the community of Tierra Amarilla. The Punta Padrones facilities are located adjacent to the coastal community of Caldera, approximately 110 kilometres from the mine and mill. The arid climate and proximity to communities and agricultural areas and fishing zones constitute the major environmental and social constraints on project development and mine operation.

Chile has in place a comprehensive regulatory framework for mining and other industrial activities, dating from the mid-1990s and most recently updated in 2013. Although the Candelaria Copper Mining Complex was permitted and developed prior to the modern framework being in place, it holds numerous environmental approvals stemming from modifications to the original developments. In

addition, the complex holds more than 1,000 permits for construction and operation of the mining and milling facilities, and related infrastructure.

The most recently completed major environmental permitting effort was the “Candelaria 2030” EIA which included, among other things, an extension to the mine life and the development of the Los Diques tailings storage facility. The SEA (Environmental Assessment Service) approved the EIA via RCA No. 133/ in July 2015. Construction of the initial phases of Los Diques tailings storage facility is now complete and the facility is operational.

The EIA 2040 is in process of review by the SEA. The EIA documents were submitted for approval in February 2020 and have gone through various stages of consultations with the Chilean authority. Approval of the new EIA is expected in late 2023 or early 2024 and has been used as the basis of the 2023 LOM plan. The new EIA will allow CCMC to continue its operations to 2040.

The Candelaria Copper Mining Complex implemented the updated standard ISO 14001/2015 for Minera Candelaria and Minera Ojos del Salado. An external audit was performed in January 2021 and the certification with the updated standard was granted for three years.

The CCMC's operations currently have two potentially significant open legal cases with the Environmental Superintendent (Superintendencia de Medio Ambiente, or SMA):

- Case Blasting: In July 2021, the SMA notified Minera Candelaria of six charges to Candelaria RCAs. The SMA consider three of these charges to be serious with a potential fine of up to 5,000 annual tax units (US\$2.2M) for each charge.
- Case Sinkhole: As a result of the sinkhole that occurred on Minera Ojos del Salado's property in July 2022, the SMA notified the Company of four charges for non-compliance with the RCA. According to the SMA, these charges can lead to fines up to \$15M. The Company is considering its options and strategies for addressing the infraction notice. In addition to the SMA infractions, the National Geology and Mining Service (*Servicio Nacional de Geología y Minería*, or SERNAGEOMIN) requested the temporary stoppage of the Alcaparrosa mine and Water Directorate (Dirección General de Agua, DGA) has imposed a fine to Compañía Contractual Minera Ojos del Salado of about US\$140K (maximum fine) stating that the operation of the Alcaparrosa mine has caused the perforation of the Copiapó aquifer causing permanent damage. The Company expects additional regulatory, administrative (CDE) and civil/constitutional claims (Tierra Amarilla, local residents, other aquifer users, etc.) are likely to be forthcoming in the months / years ahead. Further, the Company anticipates that it will be required to remediate the damage to the aquifer and, eventually, fill the sinkhole.

CCMC is actively working to strengthen trust with Tierra Amarilla and local and regional authorities through extensive engagement and transparent communications, following the sinkhole. In November 2022, the Company launched the Integrated Plan for the Alcaparrosa Mine, outlining six focus areas to address the environmental and social impacts generated by the sinkhole.

The Candelaria Copper Mining Complex has social initiatives mainly focused on the communities nearest to its mines and port site, namely Tierra Amarilla, Copiapó and Caldera. Following Lundin

Mining Standards, CCMC has implemented a formal Stakeholder Engagement Plan, a Social Investment Strategy, and a Grievance / suggestions mechanism. The Company operates community liaison offices in Tierra Amarilla, Copiapó and Caldera.

Based on the LMC's Responsible Mining Management System (RMMS) and its associated Social Performance Standards, the Company has developed a consistent and holistic five-year Corporate Social Performance Strategy anchored on strengthening internal skills and competencies, enhancing data-driven decision making, integrating social performance into enterprise-wide strategy and advancing development of social initiatives and targets.

In 2022, CCMC updated its Annual Social Performance Plan, focuses on enhancing impact mitigation efforts through more extensive and proactive engagement and the expansion of participatory monitoring activities that build capacity and awareness in the community. The plan also prioritized reigniting direct collaboration with neighborhoods and community organizations mainly in Tierra Amarilla and Caldera to plan and execute community investment projects.

## **Capital and Operating Costs**

The average open pit mining cost over the next five years, excluding capitalized waste stripping, is forecasted to be US\$2.50 per tonne of material moved. Costs have increased from the previous forecast due to higher inflation and additional mining equipment leasing in 2023 and 2024.

The average underground mining cost over the next five years at Candelaria Underground is estimated to be US\$16.05 per tonne, with overall costs falling as development requirements decrease in the last year of operations. Contractor costs account for 44% of the total mining costs. The forecast average Ojos del Salado unit underground mining cost over the next five years is estimated at approximately US\$22.10 per tonne. The mine life at Santos has been extended to 2034.

The forecast average unit processing cost for Minera Candelaria over the next five years is estimated to be US\$5.05 per tonne, decreasing from US\$5.60 in 2023 to US\$4.79 in 2027 as a newly negotiated electricity rate takes effect.

The average processing cost for Minera Ojos del Salado over the next four years is estimated to be US\$10.67 per tonne. This is a combination of the costs for treating the Santos ore at the PAC plant and a small amount of Santos ore at the Candelaria plant.

Minera Candelaria unit general and administrative cost (G&A) over the next five years is estimated to be US\$2.19 per tonne. For Minera Ojos del Salado, the average unit G&A cost over the next five years is expected to be US\$4.04 per tonne which the increase is mainly driven by suspension of Alcaparrosa mine.

At Minera Candelaria, total capital expenditures over the period 2023 to 2027, excluding capitalized waste stripping, are forecasted at US\$732M and at Minera Ojos del Salado the forecast for the next five years is US\$61M, totaling a combined cost of US\$793M. In the Candelaria Open Pit, the replacement program that commenced in 2018 continues (new trucks, shovels and ancillary

equipment), of which approximately \$154M is expected to be spent in the next five years. Capital costs for the Candelaria Underground mine have increased over previous forecasts and represent the development and supporting mine infrastructure for the expanded production of Candelaria North Sector and South Sector of the mine. The forecast capital expenditure for Candelaria Underground over the next five years is US\$238M. Candelaria mill capital costs are forecasted at US\$71M over the next five years, forecast estimated for upgrade items such as CMOP Phase 3, Power System Upgrade SAG, courier replacement, mill monitoring systems, ball mill crown pinion replacement, transformers and building major repairs.

During the production phase of the Candelaria Open Pit mine, waste stripping costs which provide probable future economic benefits and improved access to the orebody are capitalized to mineral properties. LMC capitalizes waste stripping costs when experienced strip ratios are above the average planned strip ratio for each open pit phase under development. Capitalized waste stripping from the Candelaria open pit and the Espanola open pit project is forecasted to be US\$578M for the period 2023 to 2027 and US\$1,066M over the life of mine.

## Conclusions and Recommendations

The Candelaria Copper Mining Complex is a significant class, long-life, copper mining operation. In 2023, the complex is expected to produce contained metal in concentrate (100% basis) of 145-155 kilotonnes of copper and 85-90 kilo ounces of gold. Based on the December 31, 2022, Mineral Reserves, the projects are expected to support operations until 2046.

Aggressive ongoing Mineral Resource expansion exploration since acquisition may have the potential to extend the mine life beyond 2046 and to further change the projected copper production profile by replacing low grade open pit and deferring stockpile mill feed with higher grade ore extracted from the expanding underground mines and deferring depletion of the low-grade stockpiles. There are also opportunities to optimize the efficiency of the Candelaria plant through ongoing improvement initiatives currently under implementation and modifications to the grinding circuits. Various ongoing onsite innovation / optimization initiatives with certain disciplines (including MIRA, CMOP, Candelaria South development, mining equipment upgrades and various infrastructure upgrades) are progressing well, with each having the potential to have a positive and material impact on operational efficiencies and to the life of mine.

Although currently experiencing re-organization with several new team members recently joined the Company, technical information about the CCMC is extensive and attests to the overall high quality of the exploration, mine planning, and design work completed by site personnel. Although Mineral Resource and Mineral Reserve growth through exploration success has decreased in recent years, operational efficiencies, a reduction in reporting cut-off grades, continued Mineral Resource model integrations and the incorporation of material from the expanding Espanola open pit project have made significant contributions to mine growth. Based on the results from the audit, the qualified persons concludes that the Mineral Resource and Mineral Reserve Statements for the CCMC as of December 31, 2022, are appropriately categorized and free of material errors. Financial information examined by the qualified persons confirms that the Mineral Reserves are economic under the assumptions considered.

The EIA 2040 is in process of review by the SEA. The EIA documents were submitted to the SEIA in February 2020. The EIA, if approved, will allow CCMC to continue its operations to 2040.

The Candelaria Copper Mining Complex's future actions should be oriented towards addressing current SMA charges and to mitigate and compensate for the damage potentially caused by the sinkhole, prevent future related issues, and to regain the trust of the community and authorities.

The qualified persons strongly recommends that LMC continues its effective exploration strategy that has been very successful in increasing the Mineral Resources and the Mineral Reserves of the CCMC. Combined with recent surface brownfield discoveries, underground exploration continues to expand known sulphide bodies and yield new discoveries highlighting the exceptional exploration potential of the CCMC.

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## 1 Introduction and Terms of Reference

The Candelaria Copper Mining Complex (CCMC) comprises two adjacent copper operations producing copper concentrates from open pit and underground mines located near Copiapó in the Atacama Region, Region III of Chile: Compañía Contractual Minera Candelaria (Minera Candelaria or Candelaria) and Compañía Contractual Minera Ojos del Salado (Minera Ojos del Salado or Ojos del Salado). Minera Candelaria is an open pit and underground mine providing copper ore to an on-site concentrator with a capacity of 75,000 tonnes per day. Minera Ojos del Salado comprises two underground mines, Santos and Alcaparrosa. The Santos mine provides copper ore to an on-site concentrator with a capacity of 3,800 tonnes per day and 1,400 tonnes per day to the Minera Candelaria mill, while all ore from the Alcaparrosa mine is treated at the Minera Candelaria mill.

The Candelaria Copper Mining Complex is indirectly owned by Lundin Mining Corporation (LMC) (80%) and Sumitomo Metals Mining Co., Ltd. and Sumitomo Corporation (collectively, Sumitomo) (20%). For clarity, references to Candelaria Copper Mining Complex or CCMC in this Technical Report refer to both the Minera Candelaria and Minera Ojos del Salado properties.

LMC is a diversified Canadian base metals mining company with operations and projects in Argentina, Brazil, Chile, Portugal, Sweden, and the United States of America, primarily producing copper, zinc, gold and nickel. LMC is a Canadian public company with its head office in Toronto, Canada and its common shares are listed on the Toronto Stock Exchange (symbol LUN) and the NASDAQ Stockholm (symbol LUMI).

Since acquiring Freeport-McMoRan Inc.'s 80% interest in the CCMC in November 2014, LMC have actively grown the annual reported Mineral Resources and Mineral Reserves by a combination of factors. Although this growth was primarily driven by exploration success, other factors including Mineral Resource modelling optimizations, operational efficiencies and innovation and the reduction of reporting cut-off grades also contributed to this growth. Although drilling exploration expenditure targeting Mineral Resource expansion has decreased in recent years, with reported Mineral Resources and Mineral Reserves having plateaued, LMC has managed to comfortably replace depleted Mineral Reserves on an annual basis. CCMC exploration staff will continue to define and upgrade underground and open pit Mineral Resource estimates on the property but will also turn their attention to evaluate the considerable exploration potential in areas external to the current mine plan.

In June 2022, LMC retained the services of SRK Consulting (Canada) Inc. (SRK) to visit the Candelaria Copper Mining Complex and to compile a new Technical Report pursuant to National Instrument 43-101 Standards of Disclosure for Mineral Projects and Form 43-101F1. This Technical Report updates the November 28, 2018, Technical Report entitled "Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile". It summarizes the technical information that is relevant to support the disclosure of updated Mineral Resources and Mineral Reserves estimates (as of December 31, 2022) prepared using revised economic parameters and the positive results of recent exploration programs. The report also summarizes changes to the open

pit phase design and new underground production schedules, which are integrated in the updated Mineral Reserves. Various operational improvement initiatives are also described in this Technical Report.

This Technical Report is based on an inspection of the properties by a team of qualified persons conducted on October 4 and 5, 2022, a review of technical information made available by LMC, and discussions with LMC technical personnel. The qualified persons have reviewed such technical information and determined it to be adequate to support Mineral Resource and Mineral Reserve Statements pursuant to National Instrument 43-101.

## 1.1 Terms of Reference

The scope of work was defined in an engagement letter executed between LMC and SRK on June 24, 2022. The scope involves mobilizing a team of qualified persons to visit the subject mineral assets to review the technical information relevant to supporting Mineral Resources and Mineral Reserves estimates prepared by Minera Candelaria and Minera Ojos del Salado personnel.

The objective of this review is to provide an independent opinion about the Mineral Resources and Mineral Reserves of the Candelaria Copper Mining Complex as of December 31, 2022, and to compile a Technical Report pursuant to National Instrument 43-101 to support the disclosure of Mineral Resource and Mineral Reserve Statements for the complex.

## 1.2 Qualification of SRK

The SRK Group comprises more than 1,400 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is ensured by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, Technical Reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies, and financial institutions worldwide. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The Technical Report was compiled by a group of independent qualified persons from SRK. In accordance with National Instrument 43-101 guidelines, three of the qualified persons visited the Candelaria Copper Mining Complex during October 4-5, 2022, as shown in Table 1.

The review of the geology and Mineral Resources aspects was completed by full-time SRK employees Glen Cole, PGeo and Souvik Banerjee, PGeo. The review of the underground mining aspect was completed by Benny Zhang, PEng, whereas the review of the open pit aspect was undertaken by Carlos Castro under the supervision of Colleen MacDougall, PEng, all full-time employees of SRK.

The review of the mineral processing and metallurgical testing and recovery methods aspects was completed by Dr. Adrian Dance, PEng, supported by Hamid Hatami, both full-time employees of SRK.

The review of the environmental, social, and permitting aspects was completed by Maria Ines Vidal, MAusIMM, an employee of SRK Consulting (Chile) S.A., under the supervision of Cameron C. Scott, PEng, a full-time employee of SRK.

A team of five SRK consultants comprising Messrs. Cole, Banerjee, Castro and Zhang and Mrs. Ines Vidal visited the site during October 4-5, 2022.

**Table 1: Qualified Persons**

Company	Qualified Person	Site Visit	Responsibility
SRK	Glen Cole, PGeo (APGO #1416)	June 16-18, 2014 December 14-16, 2016 November 8-9, 2017 October 30-31, 2018 October 4-5, 2022	Overall responsibility on behalf of SRK. Project Management, Geology Executive Summary, Sections 1 to 8, 18, 22, 23, 24, 25, 26
SRK	Souvik Banerjee, PGeo (APGO #2861)	October 4-5, 2022	Mineral Resources Executive Summary, Sections 9, 10, 11, 13, 24 and 25
SRK	Adrian Dance, PEng (APEGBC#37151)	No Visit	Mineral Processing Executive Summary, Sections 12, 16, 20.1.2, 20.2, 24 and 25
SRK	Benny Zhang, PEng (PEO #100115459)	December 14-16, 2016 November 8-9, 2017 October 4-5, 2022	Underground Mining and Mineral Reserves Executive Summary, Sections 14.1, 14.2.3, 14.3, 14.4, 15.1, 15.3, 15.4, 15.5, 15.6.2, 15.7, 17, 20.1.1, 20.1.3, 20.1.4, 20.2, 21, 24, 25, and 26
SRK	Colleen MacDougall, PEng (PEO #100530936)	No Visit	Open Pit Mining and Mineral Reserves Executive Summary, Sections 14.1, 14.2.1, 14.2.2, 14.2.3, 14.4, 15.1, 15.2, 15.5, 15.6.1, 15.7, 20.1.1, 20.2, 24, 25, and 26
SRK	Cameron C. Scott, PEng (APEGBC#11523)	No Visit	Environmental and Social and Permitting Executive Summary, Section 19, 24, 25 and 26

### 1.3 Basis of Technical Report

This Technical Report is based on information made available to SRK by LMC, Minera Candelaria, and Minera Ojos del Salado in an electronic data room, and on information collected during the site visit. Other information was obtained from the public domain. The authors have reviewed such information and used all means necessary in their professional judgement to verify it and have no reasons to doubt its reliability and have determined it to be adequate for the purposes of this Technical Report. The authors do not disclaim any responsibility for the information contained herein.

This report is based on the following sources of information:

- Information provided by LMC, Minera Candelaria, and Minera Ojos del Salado.
- Site visit conducted by SRK consultants Souvik Banerjee, Maria Ines Vidal, Carlos Castro, Benny Zhang and Glen Cole during October 4 to 5, 2022.
- Discussions with LMC, Minera Candelaria, and Minera Ojos del Salado personnel.

The qualified persons have reviewed such technical information and have no reasons to doubt the reliability of the information provided by LMC, Minera Candelaria, and Minera Ojos del Salado and have determined it to be adequate for the purposes of this Technical Report. The qualified persons do not disclaim any responsibility for this information.

## 1.4 Declaration

The qualified persons' opinion contained herein, and effective December 31, 2022 is based on information collected by the qualified persons throughout the course of their investigations. The information in turn reflects various technical and economic conditions as of such date. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the qualified persons do not consider them to be material.

SRK is not an insider, associate or an affiliate of Lundin Mining Corporation, Minera Candelaria, or Minera Ojos del Salado. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

## 1.5 Forward Looking Information

### 1.5.1 Forward-Looking Information

This Technical Report contains "forward-looking information" and "forward-looking statements" within the meaning of applicable Canadian and the United States securities legislation which involve a number of risks and uncertainties. Forward-looking information and forward-looking statements include, but are not limited to, statements with respect to the future prices of copper, gold and silver, the estimation of mineral resources and reserves, the realization of mineral estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs (including capital costs, operating costs and other costs) and timing of the LOM, rates of production, annual revenues, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, limitations on insurance coverage and timing and possible outcome of pending legal or regulatory proceedings.

Often, but not always, forward-looking statements can be identified by the use of words such as “plans”, “expects”, or “does not expect”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “does not anticipate”, or “believes”, or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

Forward-looking statements are based on the opinions, estimates and assumptions of contributors to this Technical Report. Certain key assumptions are discussed in more detail. Forward looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of LMC to be materially different from any other future results, performance or achievements expressed or implied by the forward-looking statements.

Such factors include, among others: the actual results of current development activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of copper, gold, silver and other metals; possible variations in ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; shortages of labour and materials, the impact on the supply chain and other complications associated with pandemics, including the COVID-19 (coronavirus) pandemic; as well as those risk factors discussed or referred to in this Technical Report and in LMC’s documents filed from time to time with the securities regulatory authorities in Canada.

There may be other factors than those identified that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers are cautioned not to place undue reliance on forward-looking statements. Unless required by securities laws, the authors undertake no obligation to update the forward-looking statements if circumstances or opinions should change.

### **1.5.2 Non-GAAP Measures**

This Technical Report contains certain non-GAAP (Generally Accepted Accounting Principles) measures such as cash cost. Such measures have non-standardized meaning under GAAP and may not be comparable to similar measures used by other issuers. See “Non-GAAP and Other Performance Measures” in LMC’s Management’s Discussion & Analysis for the year ended December 31, 2022, for a discussion of non-GAAP measures used in this Technical Report, including equivalent historical non-GAAP measure comparatives, which is incorporated by reference into this Technical Report and the full text of which is available on the Company’s profile on SEDAR at [www.sedar.com](http://www.sedar.com).

## 2 Reliance on Other Experts

SRK has not performed an independent verification of the legality of land titles, tenements and ownership status of the Candelaria Copper Mining Complex (including the Minera Candelaria and Minera Ojos del Salado properties) as summarized in Section 3 of this Technical Report, and accordingly relied on a report provided by LMC dated January 24, 2023 for this purpose. The reliance applies solely to the legal status of the rights disclosed in Section 3 of this Technical Report. The qualified persons take responsibility for all other scientific and technical content of this Technical Report and believe it is accurate and complete in all material aspects.

### 3 Property Description and Location

The Candelaria Mining Complex is in Chile's Atacama Region, Region III, approximately 20 kilometres south of the city of Copiapo and adjacent to the community of Tierra Amarilla, all of which are approximately 650 kilometres north of Santiago. The Minera Candelaria and Minera Ojos del Salado properties are connected to the well-maintained Chilean road system (Figure 1). The properties are located at approximately 27 degrees 30 minutes latitude south and 70 degrees, 15 minutes longitude west.

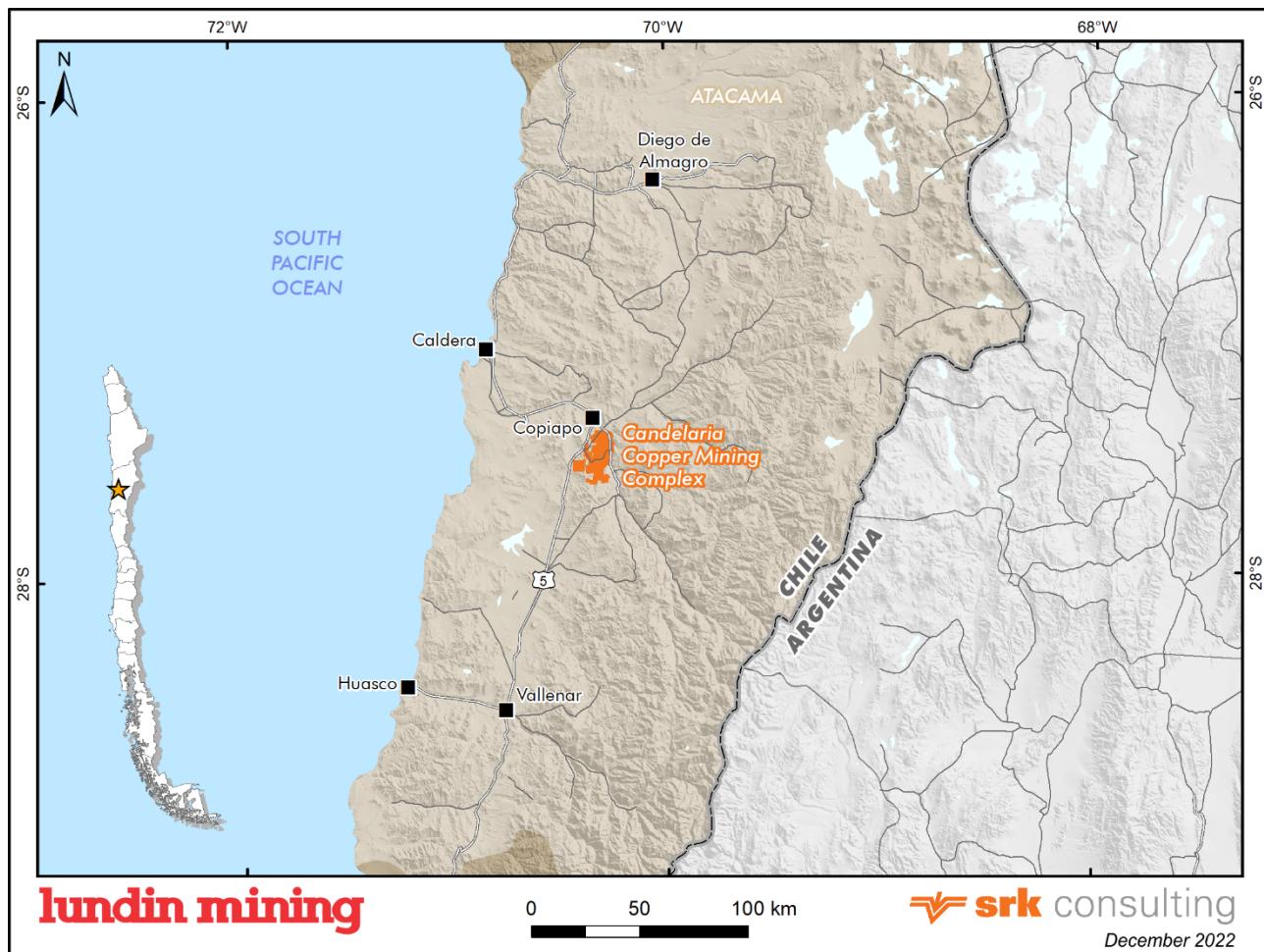


Figure 1: Location of the Mines of the Candelaria Copper Mining Complex

## 3.1 Mineral Tenure

### 3.1.1 Minera Candelaria

The Minera Candelaria property within the Candelaria district comprises 220 mining exploitation concessions (approximately 6,094 hectares) and 29 mining exploration concessions (approximately 6,680 hectares) (Figure 2 and Appendix A). External to the Candelaria district, the property comprises 51 mining exploitation concessions (approximately 5,966 hectares) and 11 mining exploration concessions (approximately 1,300 hectares). The concessions have either been granted or are in the process of being granted.

A complete list of tenements is provided in Appendix A. The tenements are free of mortgages, encumbrances, prohibitions, injunctions, and litigation. The tenements are not affected by any material royalties except for those listed in Table 2. No mining is currently taking place on these tenements, nor are they contemplated in the current life of mine plan.

See Section 3.3 Mineral Rights in Chile for additional information regarding the exploitation and exploration concessions and related maintenance obligations and surface rights. Other than disclosed herein, there are no other known factors or risks that may affect access, title, or the right or ability to perform work on the property.

**Table 2: Royalty Characteristics for Candelaria Tenements**

Tenement Name	Tenement Type	Royalty Description
Santa Gemita II Uno al Veinte	Mining Exploitation Concession	US\$0.01 per pound of fine copper produced from minerals extracted from these mining concessions. Royalty payment obligation starts once Minera Candelaria has extracted from these concessions' ore equivalent to an amount greater than 300 pounds of fine copper.
Santa Gemita III Uno al Veinte	Mining Exploitation Concession	
Santa Gemita IV Una al Cinco	Mining Exploitation Concession	
Santa Gemita V Una al Diez	Mining Exploitation Concession	
Brisa 41 a Brisa 45	Mining Exploitation Concession	

### 3.1.2 Minera Ojos del Salado

The Minera Ojos del Salado property within the Candelaria district comprises 206 mining exploitation concessions (approximately 9,305 hectares) and 51 mining exploration concessions (approximately 11,050 hectares) (Figure 2 and Appendix A). External to the Candelaria district, the property comprises 10 mining exploitation concessions (approximately 1,731 hectares). The concessions either have been granted or are in the process of being granted.

A complete list of tenements is provided in Appendix A. The tenements are free of mortgages, encumbrances, prohibitions, injunctions, and litigation.

See Section 3.3 Mineral Rights in Chile for additional information regarding the exploitation and exploration concessions and related maintenance obligations and surface rights. There are no other known factors or risks that may affect access, title, or the right or ability to perform work on the property.

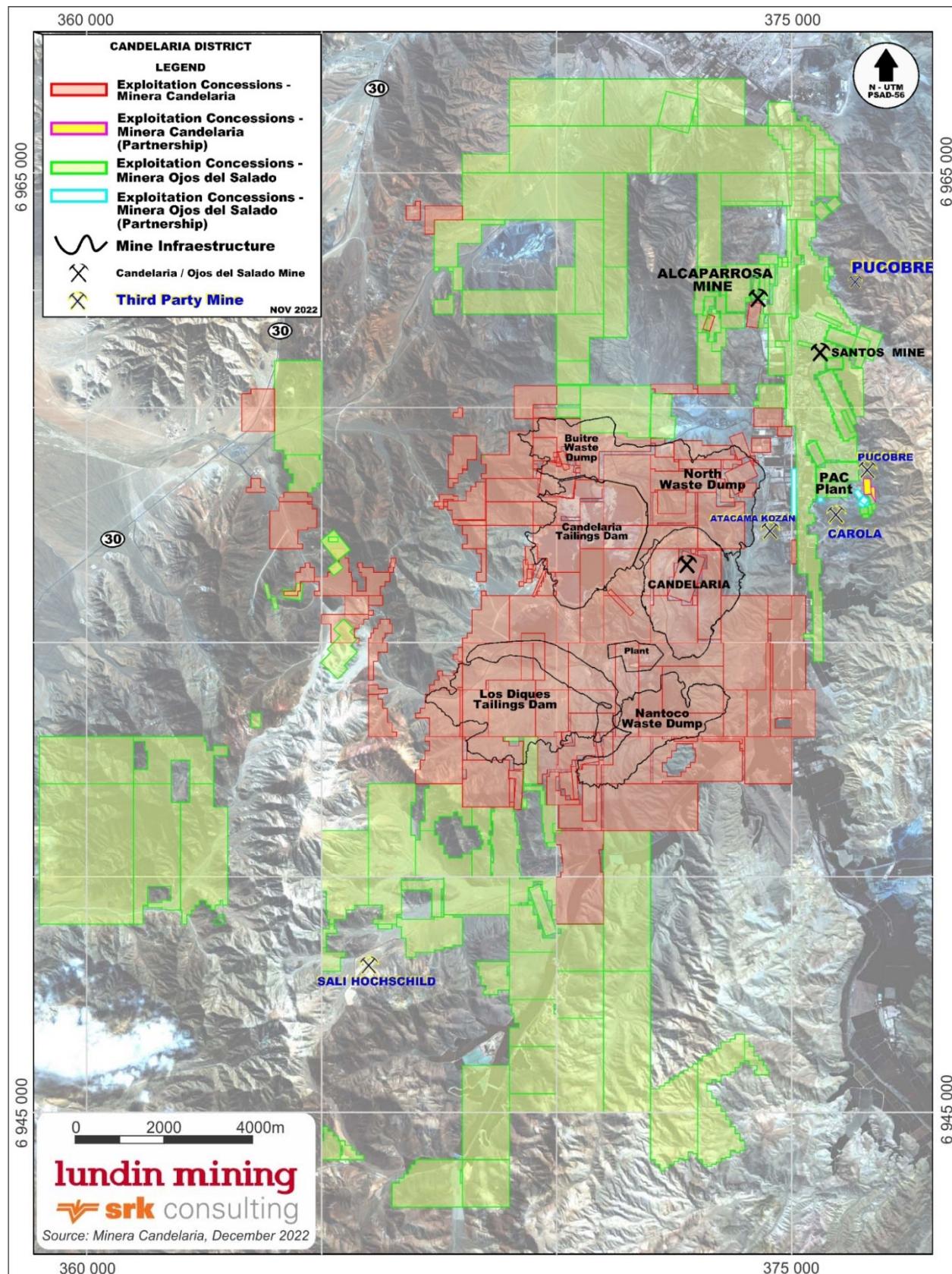


Figure 2: Candelaria and Ojos del Salado Land Tenure Map

## 3.2 Water Use Rights

Minera Candelaria is the owner of underground water use rights of consumptive and permanent use for approximately 1,046 litres per second. The underground water use rights are legally registered in the name of Minera Candelaria, free of mortgages, encumbrances, prohibitions, injunctions, and litigation.

Minera Candelaria is the property owner of superficial water use rights that are equivalent to approximately 47 litres per second. The superficial water use rights are legally registered in the name of Minera Candelaria, free of mortgages, encumbrances, prohibitions, injunctions and litigation.

Minera Ojos del Salado is the property owner of underground water use rights of consumptive and permanent use for a total of 50 litres per second. The underground water use rights are legally registered in the name of Minera Ojos del Salado, free of mortgages, encumbrances, prohibitions, injunctions, and litigation.

Minera Ojos del Salado is the property owner of superficial water use rights in the Las Rojas Channel that are equivalent to approximately 3 litres per second. The superficial water use rights are legally registered in the name of Minera Ojos del Salado, free of mortgages, encumbrances, prohibitions, injunctions, and litigation.

With the commissioning of a desalination plant located at the Punta Padrone port site in early 2013, the Candelaria Copper Mining Complex ceased extracting process water from underground water sources in November 2013. The underground water rights remain active and are used for potable and emergency purposes only.

## 3.3 Mineral Rights in Chile

There are two types of mining concessions in Chile: exploration concessions and exploitation concessions.

In accordance with the Chilean Mining Code, the owner of a mining concession can explore, exploit and benefit from all minerals within the boundaries of the relevant concessions, except for hydrocarbon and lithium, without additional administrative concessions or operation agreements.

Every titleholder of a mining concession, whether exploitation or exploration, has the right to establish an occupation easement over the surface properties required for the comfortable exploration or exploitation of its concession. If the surface property owner does not voluntarily agree to the granting of the easement, the titleholder of the mining concession may request such easement before the Courts of Justice, which shall grant the same upon determination of due compensation for losses.

All mining exploration and exploitation concession applications are submitted to the Chilean court and granted through a court procedure. Once the court procedure is completed, the court issues a final ruling decision. If the decision is supportive of the application, the ruling decision acts as the legal title of the concession, which is then registered in the national mining registrar. The application to court decision process typically takes six to eight months for an exploration concession and 12 to 15 months for an exploitation concession.

The main characteristics of exploration and exploitation concessions are described in the following subsections.

### **3.3.1 Exploration Concessions**

The titleholder of an exploration concession has the right to carry out all types of mining exploration activities within the area of the concession. Exploration concessions can overlap or be granted over the same area of land; however, the rights granted by an exploration concession can only be exercised by the titleholder with the earliest dated exploration concession over a particular area.

For each exploration concession, the titleholder must pay an annual fee of approximately US\$4 per hectare to the Chilean Treasury. Exploration concessions have a duration of four years. At the end of this period, they may be converted, totally or partially, into exploitation concessions.

A titleholder with the earliest dated exploration concession has a preferential right to an exploitation concession in the area covered by the exploration concession, over any third parties with a later dated exploration concession for that area or without an exploration concession at all and must oppose any applications made by third parties for exploitation concessions within the area for the exploration concession to remain valid.

### **3.3.2 Exploitation Concessions**

The titleholder of an exploitation concession is granted the right to explore and exploit the minerals located within the area of the concession and to take ownership of the minerals that are extracted. Exploitation concessions can overlap or be granted over the same area of land; however, the rights granted by an exploitation concession can only be exercised by the titleholder with the earliest dated exploitation concession over a particular area.

Exploitation concessions are of indefinite duration and an annual fee is payable to the Chilean Treasury of approximately US\$7 per hectare with activity and US\$27 per hectare without activity.

Where a titleholder of an exploration concession has applied to convert the exploration concession into an exploitation concession, the application for the exploitation concession and the exploitation concession itself are backdated to the date of the exploration concession.

A titleholder to an exploitation concession must apply to annul or cancel any exploitation concessions that overlap with the area covered by its exploitation concession within a certain time period for the exploitation concession to remain valid.

## 4 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The CCMC properties are located in the Atacama Region, Region III of northern Chile, at an elevation of approximately 650 metres above sea level and approximately 20 kilometres south of the city of Copiapó and 5 kilometres west of the town of Tierra Amarilla.

### 4.1 Accessibility

The CCMC properties are accessible by two maintained dirt roads, one coming through the Tierra Amarilla community and the other branching off of Route 5, the Pan-American Highway, a well-maintained multi-lane highway. Copiapó regional airport is serviced by regional flights from Santiago and other destinations on a daily basis. The regional airport is located approximately midway between Copiapó in the south and Caldera in the north. Copiapó itself is strategically located on the Pan-American Highway.

### 4.2 Local Resources and Infrastructure

Copiapó is a modern city with all regular services and a population of approximately 170,000. Numerous mining-related businesses are in the city. Personnel employed by the Candelaria Copper Mining Complex come from the Copiapó region. The Candelaria and Ojos del Salado mines receive electrical power through long-term contracts with AES Andes S.A., a local energy company. The main line to the Candelaria mine is rated at 220 kilovolts at 745 amperes. Ojos del Salado is serviced by a 23-kilovolt line with 235 amperes. Previously, 100% of the power was generated from coal-fired power plants. Starting in January 2023, it is expected that 80% of power generation will come from photovoltaic source and only 20% from the coal-fired thermal power. The current contract with AES Andes S.A. expires in December 2035.

The mines' water supply comes from a desalination plant (Figure 3B) owned by Minera Candelaria via a pipeline that were both completed in 2013, as well as from a nearby wastewater treatment facility. The commissioning of the desalination plant has enabled the mines to cease drawing ground water from the Copiapó aquifer, the historic source of water, except in emergency situations and for potable water supply. Concentrate is being shipped from the Company-owned Punta Padrones port facility at the port of Caldera (Figure 3B). The facility has a storage capacity of 45,000 wet metric tonnes and can handle ships with a capacity of up to 67,000 tonnes and a draft of 12.4 metres. The port has a total annual capacity of some 3.5 million wet metric tonnes, well in excess of current and planned production. The new tailings storage facility, Los Diques, to the southwest of the open pit and plant sites has been designed to replace the Candelaria tailings storage facility. The Los Diques facility has an approximate designed capacity of 600 million tonnes, to a final crest elevation of 873 metres above sea level. A Prefeasibility Study has recently been completed to increase the TSF capacity to approximately 710 million tonnes. This additional capacity will be sufficient to support the current projected mine life. Key mine infrastructure is shown in Figure 4.

## 4.3 Climate

Copiapó has a desert climate with mild temperatures year-round. Winters are mild with warm temperatures; mid-winter maximums in July reach approximately 20 degrees Celsius. Winter night-time temperatures average approximately 7 degrees Celsius. Summers are warm with a January average of 22 degrees Celsius. Annual precipitation is approximately 17 millimetres, of which the majority falls in the winter months. Exploration and mining can occur year-round.

## 4.4 Physiography

The project area is mountainous with a relief varying between 200 and 1,000 metres above sea level (Figure 3A-D). Vegetation is minimal outside of inhabited valleys where irrigation is used to support vegetation that can withstand the desert environment. The mines are in an active seismic zone.



**Figure 3: Infrastructure and Landscape in the Project Area**

- A: Mining activities within the Candelaria Open Pit
- B: Punta Padrones Desalination Plant
- C: Minera Candelaria Process Plant
- D: Los Diques Tailings Storage Facility

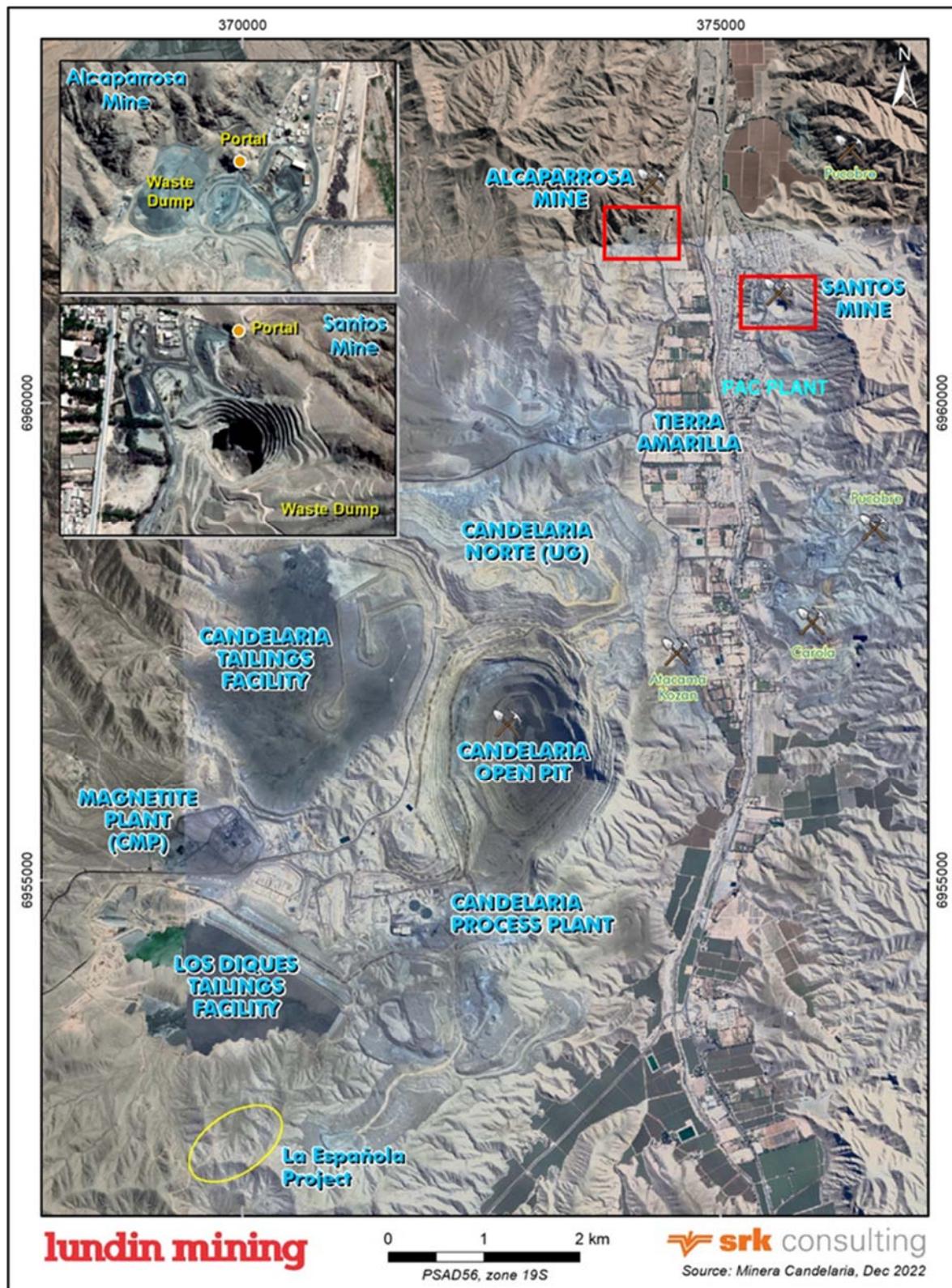


Figure 4: Candelaria Copper Mining Complex and Related Local Infrastructure

## 5 History

Information about the exploration history of the Minera Candelaria and Minera Ojos del Salado mines is scarce. Information presented in this section was extracted from public databases.

The Candelaria deposit was discovered by the Phelps Dodge Corporation (Phelps Dodge) in 1987. A feasibility study was completed in 1990, and construction started in October 1992. Production commenced in early 1995. In 1996, Phelps Dodge announced plans to expand the concentrator throughput with the installation of a second semi-autogenous grinding (SAG) mill. The expansion also included additional mining facilities and new and expanded concentrator facilities. This upgrade was completed in 1997. Sumitomo Corporation acquired a 20% stake in the property in 1992.

Mine site and district exploration programs have been active since the discovery of the Candelaria deposit. This work resulted in the discovery of the Alcaparrosa, Candelaria Underground (both North and South Sectors), and La Espanola deposits. Both sectors in Candelaria Underground are now in active production.

In 2007, property ownership changed when Freeport-McMoRan Inc. (Freeport) acquired Phelps Dodge. Operations at the Candelaria Copper Mining Complex continued uninterrupted.

During 2011, a pipeline was completed to bring water purchased from a nearby wastewater treatment facility to the Candelaria mine.

A desalination plant at the port of Caldera was commissioned in 2013 at a capacity of 500 litres per second.

The Santos mine has been in production since 1929. At that time, the operation was known as Planta Punta de Cobre and was owned by Caja de Crédito Minero (CACREMI). The plant started with an initial throughput capacity of 250 tonnes per day. It was later renamed the PAC plant. In 1978, the PAC plant was acquired by private individuals from Empresa Nacional de Minería, legal successor to CACREMI. The Santos mine and Resguardo claims were also acquired, which together formed Minera Ojos del Salado. The processing capacity was increased to 650 tonnes per day. Phelps Dodge acquired 10% of Minera Ojos del Salado in 1983 and became sole owner of the property in 1985. The PAC plant was expanded for a second time in 1988, increasing capacity to 1,700 tonnes per day. Subsequent upgrades have increased the plant capacity to the current 3,800 tonnes per day. Sumitomo acquired its 20% interest in Minera Ojos del Salado in 2005.

In 1995, construction of a second underground operation at the Alcaparrosa mine commenced, with production starting in early 1996.

In November 2014, LMC acquired Freeport's 80% interest in the Candelaria Copper Mining Complex.

The Candelaria Copper Mining Complex has been a significant producer of copper since the mid-1990s. Table 3 shows the contained copper and gold metal in concentrates produced since 2012. A summary of the development history of the Candelaria Copper Mining Complex is presented in Table 4.

**Table 3: Contained Payable Metal in Concentrate (100% Basis)**

Metal	Unit	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Q2-2022
Copper	kt Cu	147	191	157	175	161	177	130	141	122	147	78
Gold	koz Au	83	101	87	95	90	99	75	84	73	88	43

Source: Freeport (2012-2013) and LMC (2014-Q2-2022)

**Table 4: Summary Development History of the Candelaria Copper Mining Complex**

Date	Event or Milestone
1927	Minera Ojos del Salado is built under the name Planta Punta de Cobre and owned by CACREMI. Production started in 1929 with an initial throughput capacity of 250 tonnes per day. It was later renamed the PAC plant.
1978	PAC plant was acquired by private individuals from Empresa Nacional de Minería, legal continuer of CACREMI. The Santos mine and Resguardo claims were also acquired, which together formed Minera Ojos del Salado. The creation of the new mining company generated an expansion, increasing its processing capacity to 650 tonnes per day.
1983	North American company Phelps Dodge acquired 10% of the shares of Minera Ojos del Salado.
1985	Phelps Dodge acquired total control of Minera Ojos del Salado.
1987	Phelps Dodge discovered the Candelaria deposit.
1988	Phelps Dodge tunneled 396 metres into the Candelaria sulphide deposit.
1988	The PAC plant was expanded for the second time to 1,700 tonnes per day.
1989	Candelaria feasibility study started. By August, Phelps Dodge had spent US\$8M on the project.
1990	Candelaria feasibility work was completed.
1991	The Chilean government approved a request by Minera Candelaria to invest US\$1.5 billion in the project over a 12-year period.
1992	Sumitomo acquired a 20% interest in Minera Candelaria for US\$40M, plus Sumitomo's share of the total equity capital required to finance construction and development.
1993	Minera Candelaria began stripping Phase 1 of the open pit at 35 kilotonnes per day.
1994	The Candelaria processing plant start-up, three months ahead of schedule.
1995	Minera Candelaria first shipment loaded at port facility.
1997	The Export-Import Bank (Exim) of Japan agreed to provide a US\$150M loan to assist in financing the expansion at Minera Candelaria. Phelps Dodge completed the expansion project eight months ahead of schedule and at a cost of US\$320M, 10% below budget. The expansion included additional mining facilities, the construction of a second SAG mill, and new and expanded concentrator facilities to 70 kilotonnes per day.
1997	Minera Candelaria mill expansion completed to 70 kilotonnes per day.
1998	The PAC processing plant operations were stopped due to a low copper price.
2004	The PAC processing plant operations were resumed due to the improved copper price outlook.
2005	Sumitomo acquired 20% interest in Minera Ojos del Salado. The Candelaria Underground (North Sector) started production.
2007	Freeport acquired Phelps Dodge gaining ownership of both Minera Candelaria and Minera Ojos del Salado.
2011	Construction of the desalination plant commenced at Punta Padrones.
2013	Completion and full operation of desalination plant.
2014	On October 6, LMC announced an agreement to acquire Freeport's 80% interest in Minera Candelaria and Minera Ojos del Salado. The transaction closed on November 3, 2014.
2015	The Candelaria 2030 project (including the new Los Diques tailings storage facility) receives environmental approval following two years of review by Chilean regulators.
2016	Construction initiated on the Los Diques tailings storage facility after receipt of major construction permits.
2017	Permits granted to allow the Candelaria Underground operations to expand production from 6,000 to 14,000 tonnes per day.
2018	Commissioning of the Los Diques tailings storage facility. First declaration of Mineral Resources and Mineral Reserves for the new open pit Espanola project.
2019	Candelaria Underground South Sector started production.
2020	Submission of Environmental Impact Assessment (EIA) 2040 documentations to the authority to extend Candelaria's life of mine and to execute various infrastructure projects included under the EIA.

## 6 Geological Setting and Mineralization

### 6.1 Regional Geology

The Candelaria deposit is in the Atacama Region, Region III in northern Chile, at the boundary between the Coastal Cordillera and the Copiapó Precordillera. The Coastal Cordillera of Chañaral and Copiapó is composed of Permian to Lower Cretaceous intrusions within a basement of metasedimentary rocks of Devonian to Carboniferous age (Dallmeyer et al., 1996). Volcanic, volcanioclastic, and marine carbonate rocks represent intra- and back-arc sequences that were deposited during Early to Mid-Cretaceous (Arévalo et al., 2006).

In the Copiapó Precordillera the oldest exposed rocks are Early Carboniferous in age and correlate with metasedimentary basement rocks in the Coastal Cordillera. They are overlain by Permian to Jurassic sedimentary and volcanic rocks. Permian granitic plutonic complexes in the Precordillera are associated with extensive crustal melting and rifting. Volcanic and sedimentary rocks of the Punta del Cobre Formation, the Bandurrias Formation, and marine carbonate rocks of the Chañarcillo Group are prominently exposed as a belt of calcareous, volcanic, and volcanioclastic rocks in the western Precordillera. They are overlain by the Cerrillos Formation of epiclastic to volcanioclastic rocks. At the base, the Cerrillos Formation contains fluvial sandstone and conglomerate, as well as freshwater limestone. Volcanic breccias and lava flows are more dominant higher in the sequence.

The Candelaria-Punta del Cobre polymetallic sulphide deposits are located to the east of the Atacama fault zone, which extends over 1,000 kilometres along the Chilean coast. The Atacama fault zone is a subduction-linked arc-parallel strike-slip fault system that has been active at least since the Jurassic (Marschik and Fontboté, 2001).

### 6.2 Local Geology

The Candelaria, Santos, and Alcaparrosa mines and Española project are in the mining district of Punta del Cobre. The polymetallic sulphide deposits are hosted in the volcanic rocks of the Punta del Cobre Formation (Figure 5). The Punta del Cobre Formation is overlain by Cretaceous marine calcareous rocks of the Lower Cretaceous Chañarcillo Group. The Chañarcillo Group comprises, from the bottom up, the Abundancia, Nantoco, Totoralillo, and Pabellón Formations.

In the north and northwest, the rocks of the Chañarcillo Group are interlayered with continental volcano-sedimentary rocks of the Bandurrias Formation, also of Lower Cretaceous age. The rocks of the Chañarcillo Group were deposited in the back-arc facies of a volcanic arc, which is represented by the rocks of the Bandurrias and Punta del Cobre formations.

Intrusive rocks of the Coastal Batholith are located mainly to the west of the Punta del Cobre district (Figure 5) and are age dated at between 123 and 111 million years. The development of a contact aureole to this batholith affected, with decreasing intensity to the east, all the Lower Cretaceous rocks in the Punta del Cobre district. At the latitude of the Candelaria mine, the Coastal Batholith forms a tabular multi-phase plutonic complex formed, from oldest to youngest, by the La Brea diorite, the San Gregorio monzodiorite, the tonalitic to granodioritic Los Lirios pluton, and the Ojancos and El Granate microgranite (Figure 5). The largest area is covered by the La Brea pluton.

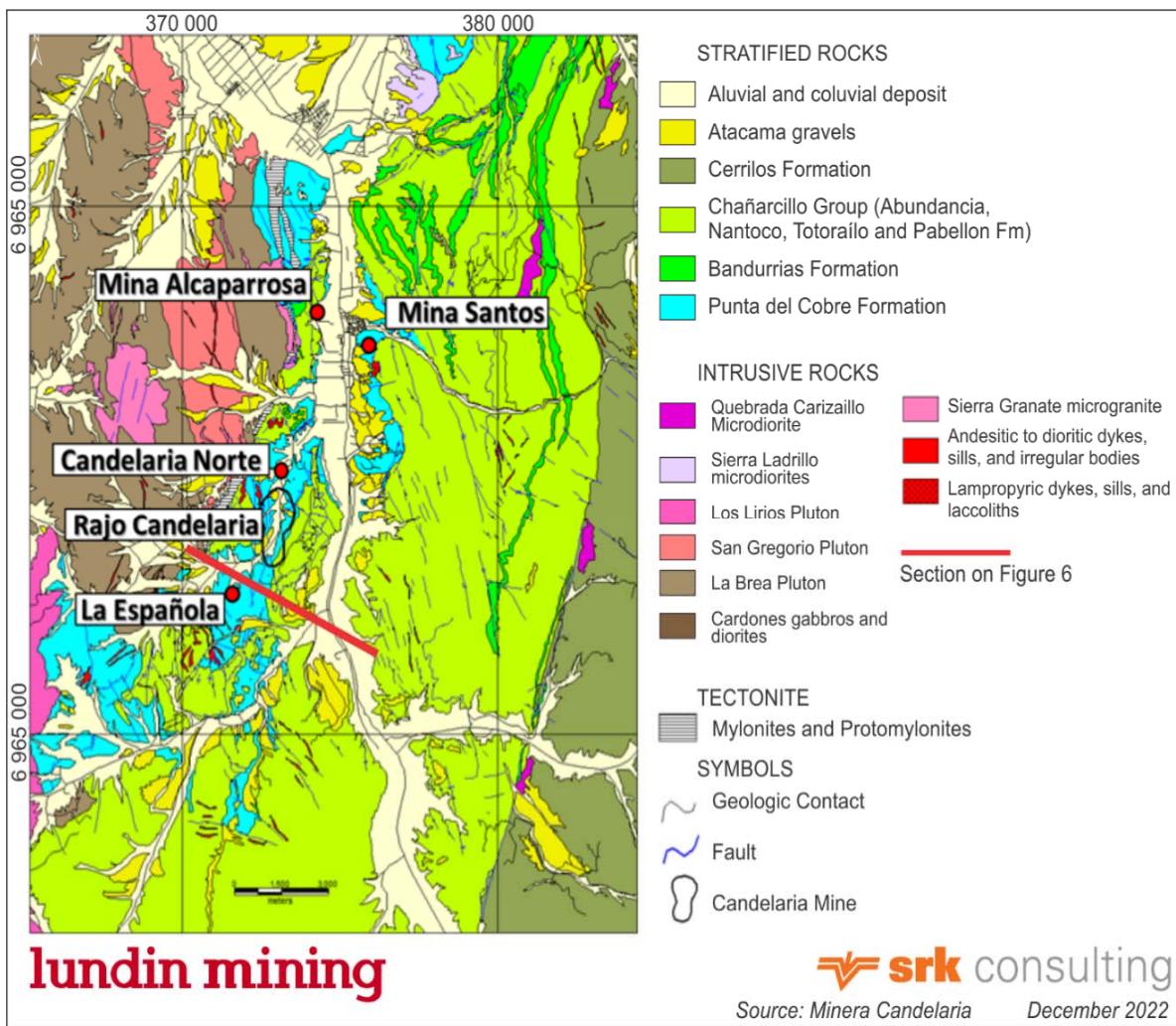


Figure 5: Regional Geology Setting Around the Candelaria, Alcaparrosa, and Santos Mines

The dominant structural elements in the Candelaria-Punta del Cobre area are a large northeast-trending antiform (Tierra Amarilla Anticlinorium), a southeast verging fold-and-thrust system and a dense set of north-northwest to northwest-trending high-angle sinistral transcurrent faults (Marschik and Fontbote, 2001). This fold is part of the Paipote Fold and Thrust System comprising a set of north-northeast-trending folds and thrust sheets (Arévalo et al., 2006). One of the folds in the Candelaria mine area is the northeast-trending Tierra Amarilla Anticline, which has affected all Lower Cretaceous sedimentary and volcanic rock.

Northeast-striking reverse faults parallel to the Tierra Amarilla Anticline are part of the Paipote fold and thrust belt. Mylonitic shear zones and cataclastic rocks locally form the contact between the intrusive rocks and Early Cretaceous host rocks. Ductile deformation is recorded in the Ojancos, Candelaria, and Florida shear zones. Both the Tierra Amarilla Anticline and the Ojancos-Florida Shear Zone are displaced by north-northwest-trending brittle faults (Figure 5). The Lar, San Gregorio, and Ojancos Faults show sinistral strike-slip displacement. The rocks located between the major north-northwest-striking faults also appear displaced by shorter faults of northwest- to north-northwest-strike orientation.

## 6.3 Property Geology

### 6.3.1 Geology of the Candelaria Mine

Calcareous, sedimentary, and volcaniclastic rock of the Abundancia and Punta del Cobre formations are exposed within the open pit of the Candelaria mine. Due to the closer proximity to the Coastal Batholith, rocks in the open pit of the Candelaria mine show stronger metasomatism and metamorphism than in other sulphide deposits of the Punta del Cobre district (Figure 6).

The lowermost unit in the Candelaria mine and Candelaria Underground is the Lower Andesite, a compact succession of porphyritic to massive andesite and volcaniclastic breccias with intense biotite-quartz-magnetite-albite alteration (Figure 7 and Figure 8). The Lower Andesite is overlain by a succession of stratified volcaniclastic rocks including tuffs, which are further sub-divided by alteration and mineralisation into pink garnet skarn and magnetite breccia. The Upper Andesite of the Punta de Cobre Formation consists of a homogenous succession of undifferentiated volcaniclastic and andesitic rock. The biotite-bearing andesite exhibits alteration varying from quartz-pyroxene hornfels to pyroxene-scapolite-garnet skarns.

The Abundancia Formation of the Chañarcillo Group in the Candelaria mine consists of fine-grained biotite-, silica-, or clinopyroxene-bearing calcareous metasandstone and mudstone. The stratified rocks are cut by dacite and lamprophyre dikes. The hydrothermally altered dacite porphyry dikes and sills locally contain copper mineralization. The youngest rocks in the Candelaria mine are post-mineralization lamprophyre dikes.

At the Candelaria mine a low angle shear zone, located at the confluence of ductile to brittle high-angle faults, marks synplutonic brittle-to-ductile extensional deformation (Arévalo et al., 2006).

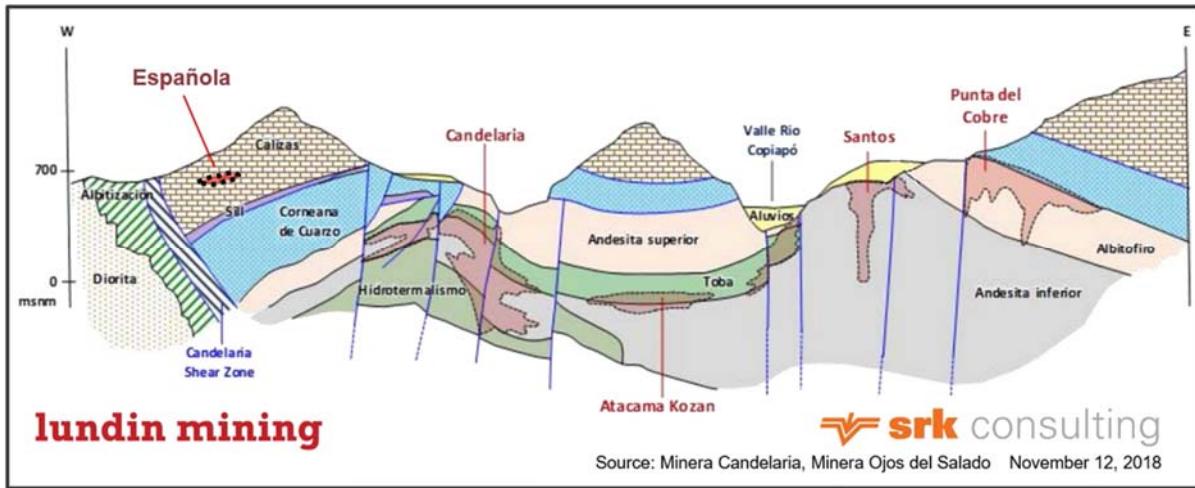


Figure 6: Schematic Vertical Section Showing the Location of the Candelaria and Santos Mines (see Figure 5 for section location)

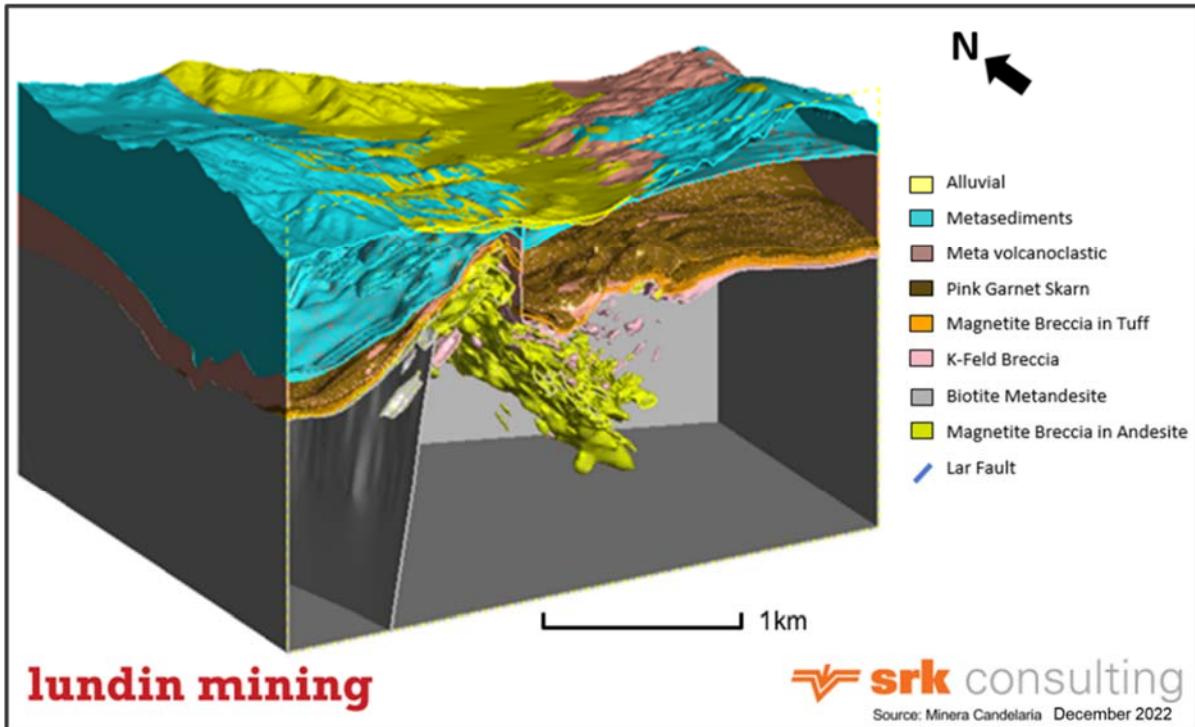


Figure 7: Local Geology Setting of the Candelaria Mine

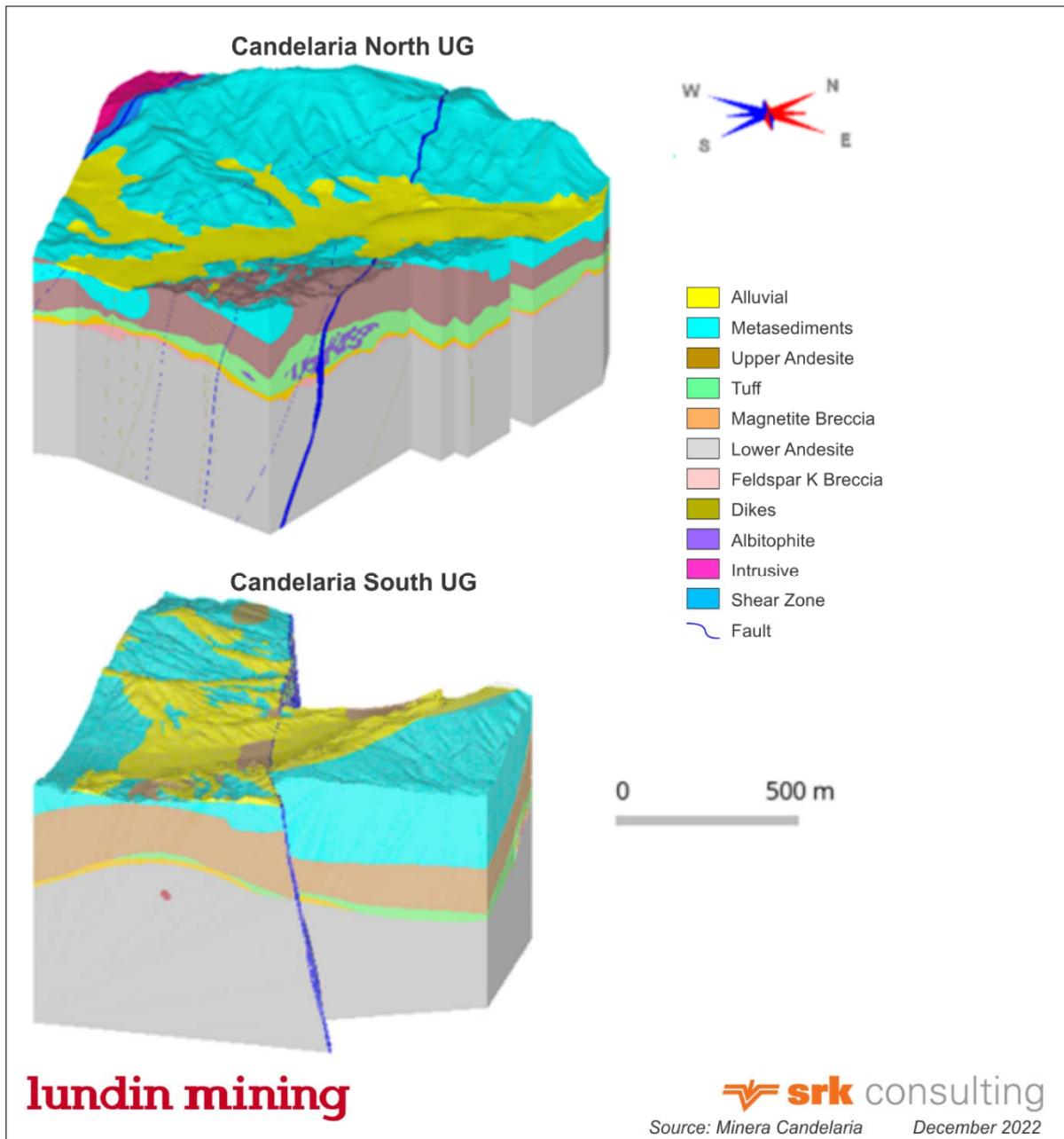


Figure 8: Geological Setting of Candelaria Underground

### 6.3.2 Geology of the Espa ola Project

The Espa ola project is in the south portion of Candelaria-Punta del Cobre district, 2.5 kilometres southwest from the Candelaria open pit (Figure 4Figure 5 and Figure 9Figure 5). It occurs in the contact aureole between the Copiap  batholith and sedimentary and volcano-sedimentary rocks of the Cha arcillo Group and the Punta del Cobre Formation in a tectonically depressed block controlled by San Gregorio fault system (Figure 9). The copper mineralization (oxides, sulphides and

mixed) is hosted mainly in brown garnet skarn levels and in quartz hornfels in the upper part of the stratigraphic sequence (Abundancia Formation) with mantos characteristics.

The main lithological types on surface are assigned to the Abundancia Formation and were affected by different metamorphic processes during emplacement of the Copiapó batholith. In the eastern portion of the area, there is a fault contact with the volcanic and volcanoclastic rocks of the Punta del Cobre Formation.

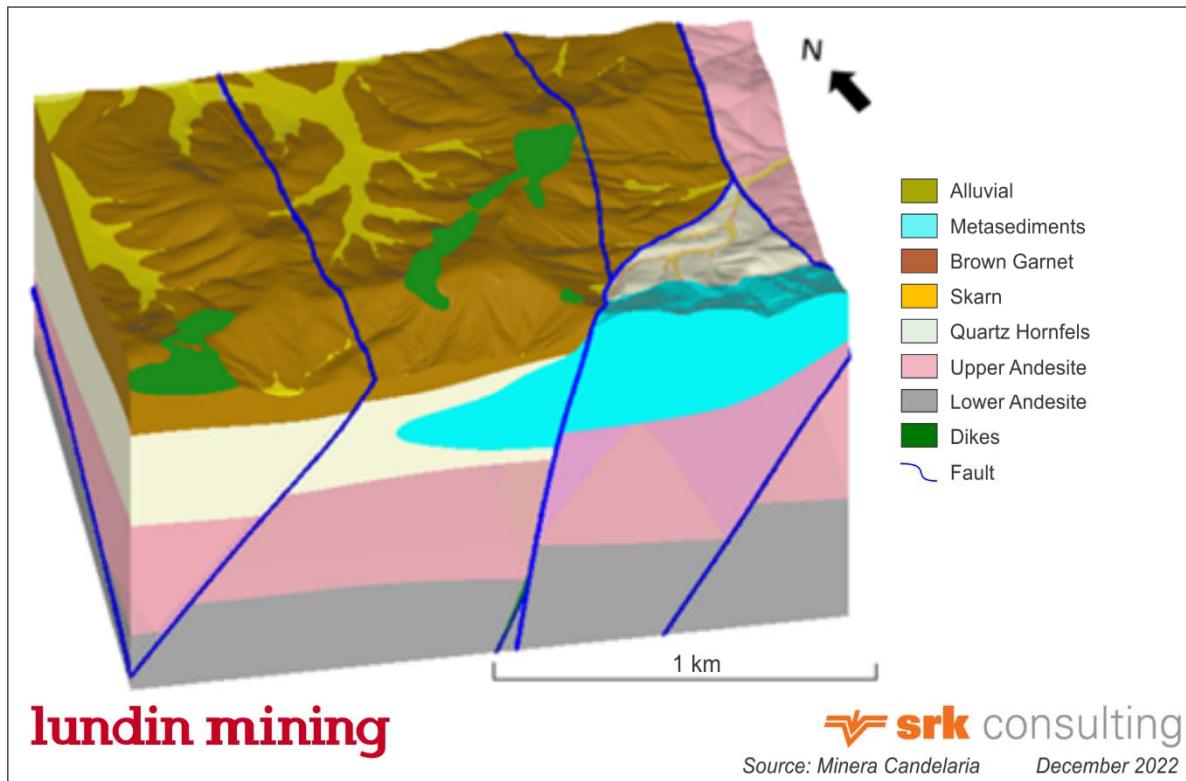


Figure 9: Geological Setting of the Espanola Project

### 6.3.3 Geology of the Santos Mine

The rocks of the Santos mine are comprised mainly of the Punta del Cobre and Abundancia Formations. A typical section showing the geology of the Santos mine is shown in Figure 10.

The lowermost rocks of the Punta del Cobre Formation are porphyritic to aphanitic andesite of the Lower Andesite. The Lower Andesite is conformably overlain by dacitic domes hydrothermally altered to an albitic-pyritic assemblage that is overlain by a succession of volcanoclastic breccias with interbedded layers of siltstone and sandstone. The basal portion of this unit (locally termed albitoforo) hosts manto-type copper mineralization. Conformably overlying the breccias are fine grained clastic rocks and Upper Andesite basaltic andesite flows. Intercalations of lenticular limestone, polymict breccias, volcanic tuffs, sandstone and iron-rich chert also occur within the Upper Andesite. The overlying Abundancia Formation comprises well stratified marine sedimentary rock, mainly calcareous sandstone. The rocks of the Abundancia Formation do not contain significant mineralization.

Intrusive rocks in the Santos mine are represented by a hornblende diorite, which intrudes the Punta del Cobre Formation and the lower Abundancia Formation. Dikes cut various stratigraphic levels of the Punta del Cobre Formation and some layers of the Abundancia Formation. Andesitic dikes trend northwest and are up to 4 metres thick. Dacitic dikes occur in variable orientations ranging from northwest to northeast trends and are up to 5 metres thick. Dikes post-date the mineralization.

The Santos mine is located in the eastern limb of the north-northeast-trending Tierra Amarilla anticline. The stratigraphic contacts in the eastern limb of the fold dip approximately 25 degrees to the east.

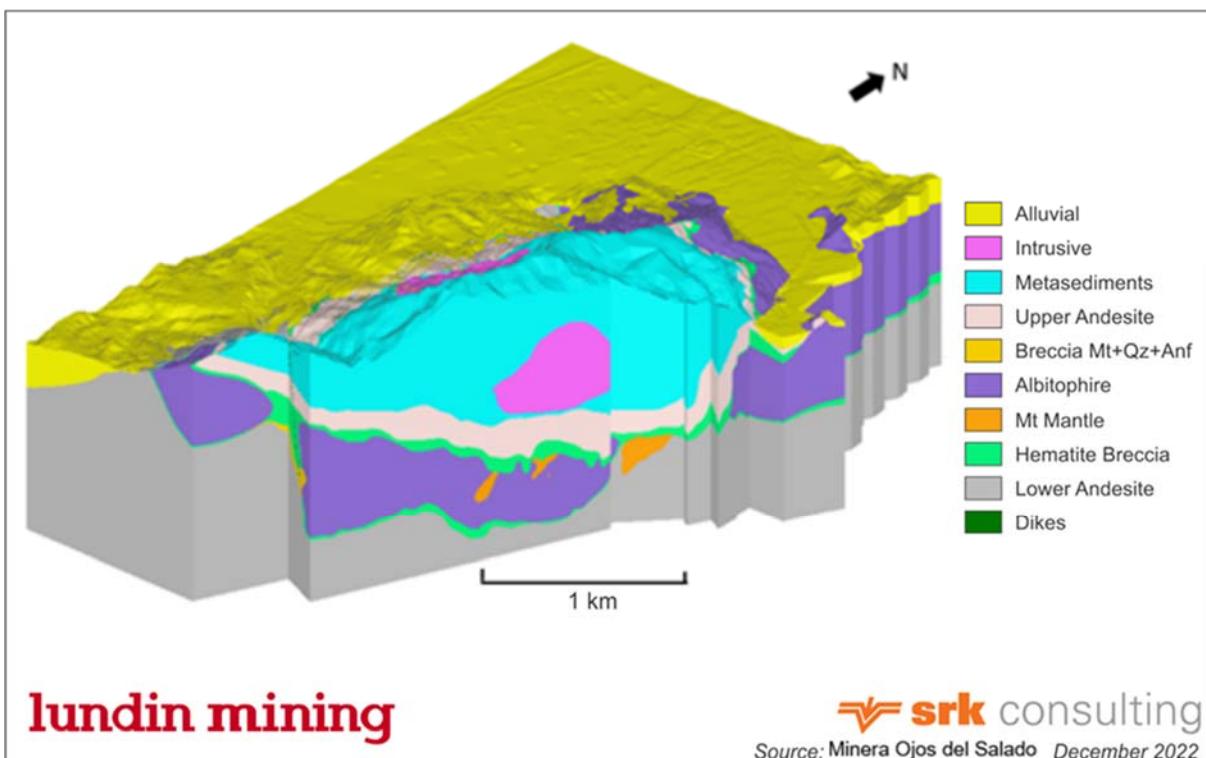


Figure 10: Geological Setting of the Santos Mine

### 6.3.4 Geology of the Alcaparrosa Mine

The Alcaparrosa mine is located in the northern part of the Punta del Cobre mining district (Figure 5), in the west flank of Copiapó valley. A typical section of the mine stratigraphy is shown in Figure 11. Punta del Cobre Formation is subdivided into a Lower Andesite unit, which is succeeded by volcanoclastic breccias, albitophyre and pyroxene- scapolite hornfels interbedded with garnetites. The Lower Andesite consist of aphanitic, porphyritic, blastoporphyritic and brecciated dark grey andesites. The albitophyre is a light grey porphyritic dacite with phenocrysts of plagioclase and occasionally "quartz eyes" in an aphanitic silica groundmass. The volcanoclastic breccia contains porphyritic rock clasts altered to potassic feldspar in a matrix with high contents of magnetite. Hornfels and garnetites are concordant located over the albitophyre and correspond to the

metamorphosed equivalents of the upper part of Punta de Cobre Formation and Abundancia Formation. In the southern central part of the mine a granodiorite stock cuts the whole sequence. The metasedimentary unit overlying the Punta del Cobre Formation likely corresponds to the Abundancia Formation. The metasedimentary unit is divided into the following two sub-units: a quartz hornfels, and a pyroxene-scapolite-garnet skarn with metasomatic banding.

Intrusive rocks are andesitic, granitic, dioritic and monzodioritic dikes, and a diorite stock. The diorite stock is a post-mineral intrusion with equigranular texture composed of plagioclase and hornblende phenocrysts. The diorite stock is cut by dikes. Andesite dikes are porphyritic in texture and do not contain any mineralization. Granitic dikes have aplitic to porphyritic texture and show disseminated traces of pyrite and magnetite, although they do not contain any copper mineralization. Dioritic dikes are fine-grained equi-granular and barren. Monzodioritic dikes contain xenoliths of magnetite and chalcopyrite veinlets.

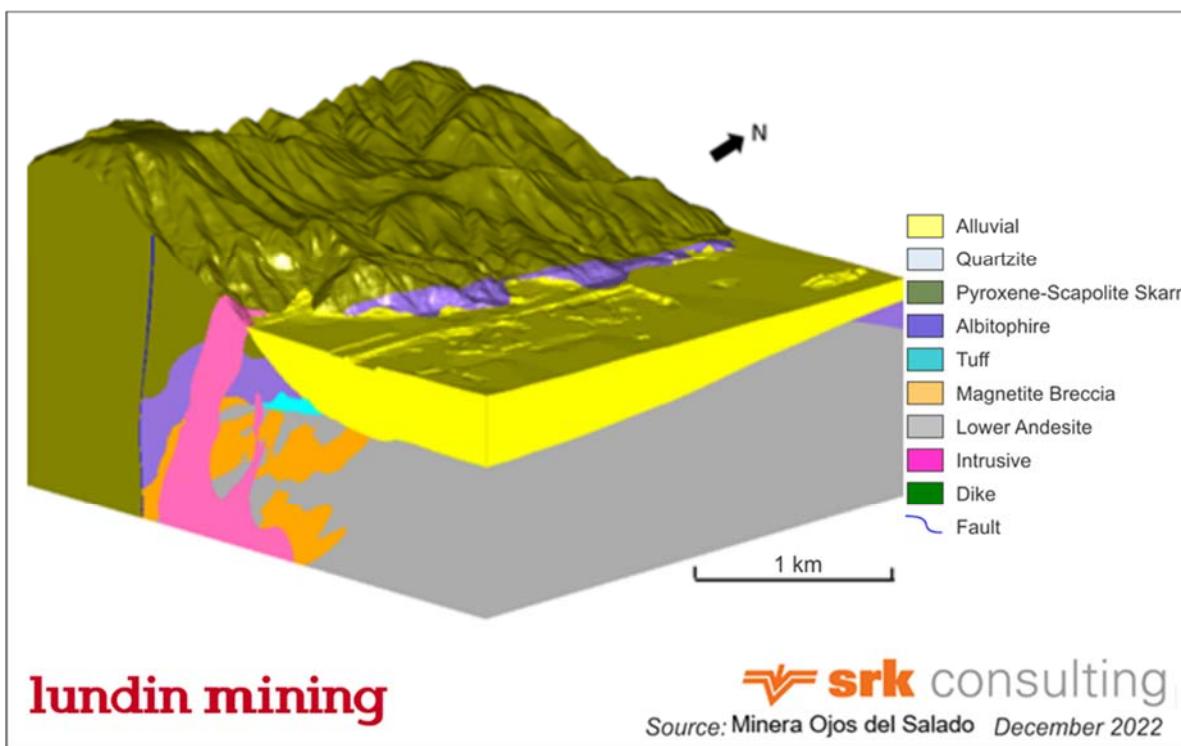


Figure 11: Geological Setting of the Alcaparrosa Mine

## 6.4 Mineralization

### 6.4.1 Mineralization at the Candelaria Mine

The main mineralized body at the Candelaria mine is hosted in rocks of the Punta del Cobre Formation. Specifically, the host rocks are massive andesite and andesite breccias of the Lower Andesite, and volcanic tuffs and volcaniclastic rocks comprising the base of the Upper Andesite. In the metasedimentary rock unit, the mineralization is confined to a few isolated layers (mantos).

The mineralized body is up to 400 metres thick in its central part and thins towards the edges. In east-west sections, the mineralization has a lenticular, downward concave shape with a steep eastern limb and a moderately steep dipping western limb. The shape of the mineralized body in north-south section is irregular. In plan view, the extent of the mineralization is approximately 1,400 metres by 2,400 metres. The mineralized body was folded after its formation. The north-northeast-trending fold axis corresponds to the Tierra Amarilla Anticline.

The mineralization assemblage in the Candelaria mine consists of chalcopyrite, magnetite, pyrite, pyrrhotite, and sphalerite. Biotite, calc-silicate minerals, and potassium feldspar constitute the gangue minerals. Pervasive potassic alteration is associated with the mineralization.

Dominant copper mineralization styles are mantos, veins, breccia bodies, and veinlets along foliation planes. Gold occurs within chalcopyrite grains and along fractures surface in pyrite. Chalcopyrite and pyrite also occur in secondary northwest and north-northwest-striking faults.

#### **6.4.2 Mineralization at the Española Project**

In the Española project area, the primary dominant copper sulphide is chalcopyrite found as clusters and in disseminated form commonly associated with brown garnet porphyroblasts. Gangue minerals are pyrite and iron oxides (magnetite-hematite). Near the surface and down to a depth of approximately 70, the mineralization is oxidized, characterized by the presence of chrysocolla, malachite, native copper, diogenite and bornite.

The mineralized bodies are arranged as mantos and are hosted mainly in the brown garnet skarn and in less proportion in silica hornfels. Locally in the south part of the project veins and veinlets of metric thicknesses are observed that were interpreted in parallel to the Española vein-fault.

#### **6.4.3 Mineralization at the Santos Mine**

Chalcopyrite is the only primary copper sulphide present in the Santos mine. In addition to copper mineralization, there are economic values of gold. Most frequent gangue minerals are pyrite, magnetite, actinolite, potassic feldspar, chlorite, biotite and hematite.

In the Santos mine, three styles of mineralized bodies are observed: veins, mantos, and breccia bodies. An important vein in the Santos mine is the Isabel Vein, which is oriented northwest-striking, and extends over 1 kilometre in length and between 4 and 30 metres in width. Manto-type mineralization occurs as tabular bodies located at two sedimentary horizons located in the floor and roof of the albitophyre. The manto mineralization is characterized by variable iron contents with magnetite common in the north and deeper areas, and specular hematite in the south. Mineralization occurs within breccia bodies is typically contained with the albitophyre and lower andesite and is formed by steeply west-dipping and north-northwest- to northwest-striking bodies.

#### **6.4.4 Mineralization at the Alcaparrosa Mine**

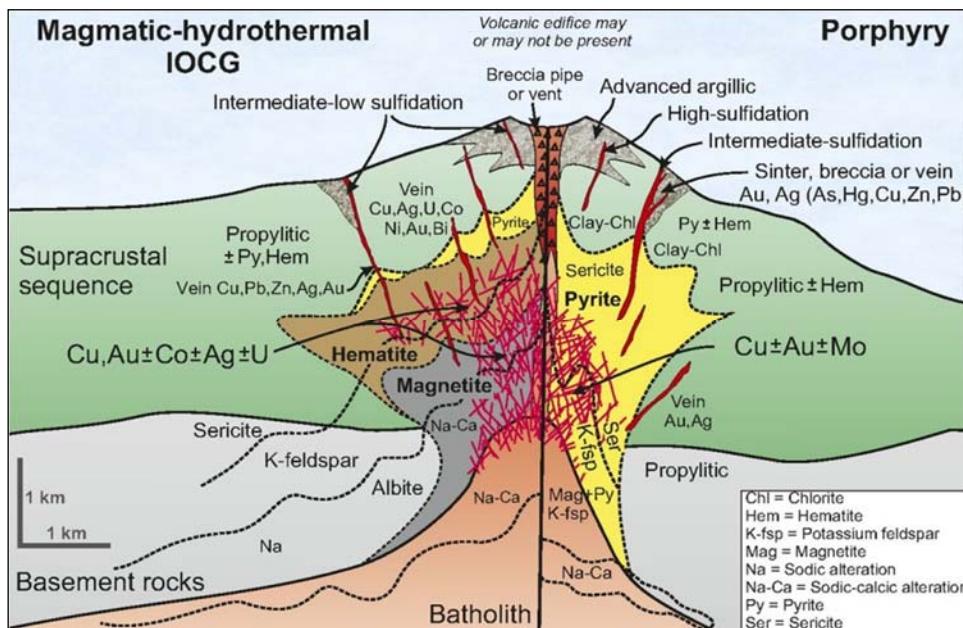
Mineralization at the Alcaparrosa mine principally occurs as mantos that trend to the northeast and dip to the west. Ore mineralogy consists of chalcopyrite, pyrite, and magnetite, with trace pyrrhotite, molybdenite, and arsenopyrite. Mineralization at the Alcaparrosa mine also occurs as veinlets defining dense stockwork, breccias (hydrothermal potassium feldspar and magnetite) as well as fine dissemination in biotite meta-andesites. High-grade bodies are also found in massive veins striking north-northwest, north, and east.

## 7 Deposit Types

The copper-gold sulphide mineralization present at the Candelaria Copper Mining Complex is generally referred to as iron oxide copper gold (IOCG). Depending on lithology and the structural setting, the polymetallic sulphide mineralization can occur as veins, hydrothermal breccias, replacement mantos, and calcic skarns (Sillitoe, 2003).

The Candelaria IOCG deposit lies within the metamorphic aureole of the Lower Cretaceous magmatic arc plutonic complex that is located within the Candelaria-Punta del Cobre district, Atacama Region, northern Chile. IOCG deposits are primarily defined by their elevated magnetite and / or hematite with elevated copper and gold contents (Sillitoe, 2003). The IOCG belt located in the Coastal Cordillera of northern Chile and southern Peru is part of a volcano-plutonic arc of Jurassic to Early Cretaceous age. The arc is characterized by voluminous tholeiitic to calc-alkaline plutonic complexes of gabbro to granodiorite composition and primitive, mantle-derived parentage. Major arc-parallel fault systems developed in response to extension and transtension induced by subduction roll-back at the retreating convergent margin.

Most of the sulphide mineralization at Candelaria and Ojos del Salado occurs in breccias, stockwork veinlets, and disseminations in andesite, especially where the rocks are strongly foliated. Higher-grade copper mineralization is controlled by stratigraphy in mantos and by faults, trending predominantly northwest. The host rocks are thermally metamorphosed (hornfels and skarn) in the aureole of the Copiapó Batholith, within 1 kilometre from the intrusion. The top of the mineralization system consists of magnetite-amphibole skarn within calcareous meta-tuff mineralized with pyrrhotite, pyrite and chalcopyrite (Figure 12).



**Figure 12: Schematic Section Through IOCG and Magmatic Systems**

Source: Richards and Mumin (2013)

## 8 Exploration

### 8.1 General Overview

Candelaria and Ojos del Salado (Santos and Alcaparrosa) are active mine operations that comprise the Candelaria Copper Mining Complex. Exploration work completed prior to commencement of mining is not relevant to this Technical Report.

Ongoing exploration is conducted by Minera Candelaria and Minera Ojos del Salado with the primary purpose of supporting mine operations and increasing Mineral Resource estimates. The exploration strategy is focused on tracing known mantos and vein targets as extensions from current orebodies utilizing host rock and alteration features down dip and along strike from existing open pit and underground infrastructure. Historically, this strategy has proven very effective in defining new Mineral Resources available for underground mining. Exploration work is completed by mine personnel.

Much of the exploration is conducted from underground, requiring significant underground development to provide adequate drilling stations. Regional exploration is also undertaken on the large properties surrounding the mines to identify new targets and define new Mineral Resource areas for more detailed Mineral Resource exploration.

From 2010 to the end of June 2022, Minera Candelaria and Minera Ojos del Salado have together invested more than US\$267M in exploration to expand the Mineral Resources primarily below the Candelaria Open Pit, to the north and south of the pit, and at the three underground mines (Candelaria Underground, Santos and Alcaparrosa). During this period, 3,780 core boreholes (1,051,068 metres) were drilled requiring over 15,000 metres of underground development to provide access for drilling. Since LMC purchased the CCMC in late 2014 to the end of June 2022, there has been an investment in exploration of approximately US\$177M. During this period 2,336 core boreholes (678,070 metres) were drilled requiring over 4,000 metres of underground development.

At Minera Candelaria, the Measured and Indicated Mineral Resources increased significantly during the June 2022 reporting period. Increases are attributed to the discovery of new mineralization, model integration, and changes in reporting cut-off grades. While mineralization at La Espanola had been previously identified by drilling between 1990 and 2004, it became a target of renewed interest after the results of a large-scale geophysical study identified a pronounced anomaly in the area. In 2018, 77 additional drillholes for a total of 22,694 metres were drilled at La Espanola. In 2019, an additional 34 holes (8,027 metres) were drilled. Other increases are attributed to the extensive drilling program that occurred from 2018 to 2022. Mineral Resource growth occurred in Candelaria UG South (Figure 13), Candelaria UG North (Figure 14), as well as the Santos and Alcaparrosa mines.

Overall, since 2014, Measured and Indicated Mineral Resources at Minera Candelaria have increased by 92% due to the combination of drilling program success, model integration and adjustment as well as changes in reporting cut-off grade.

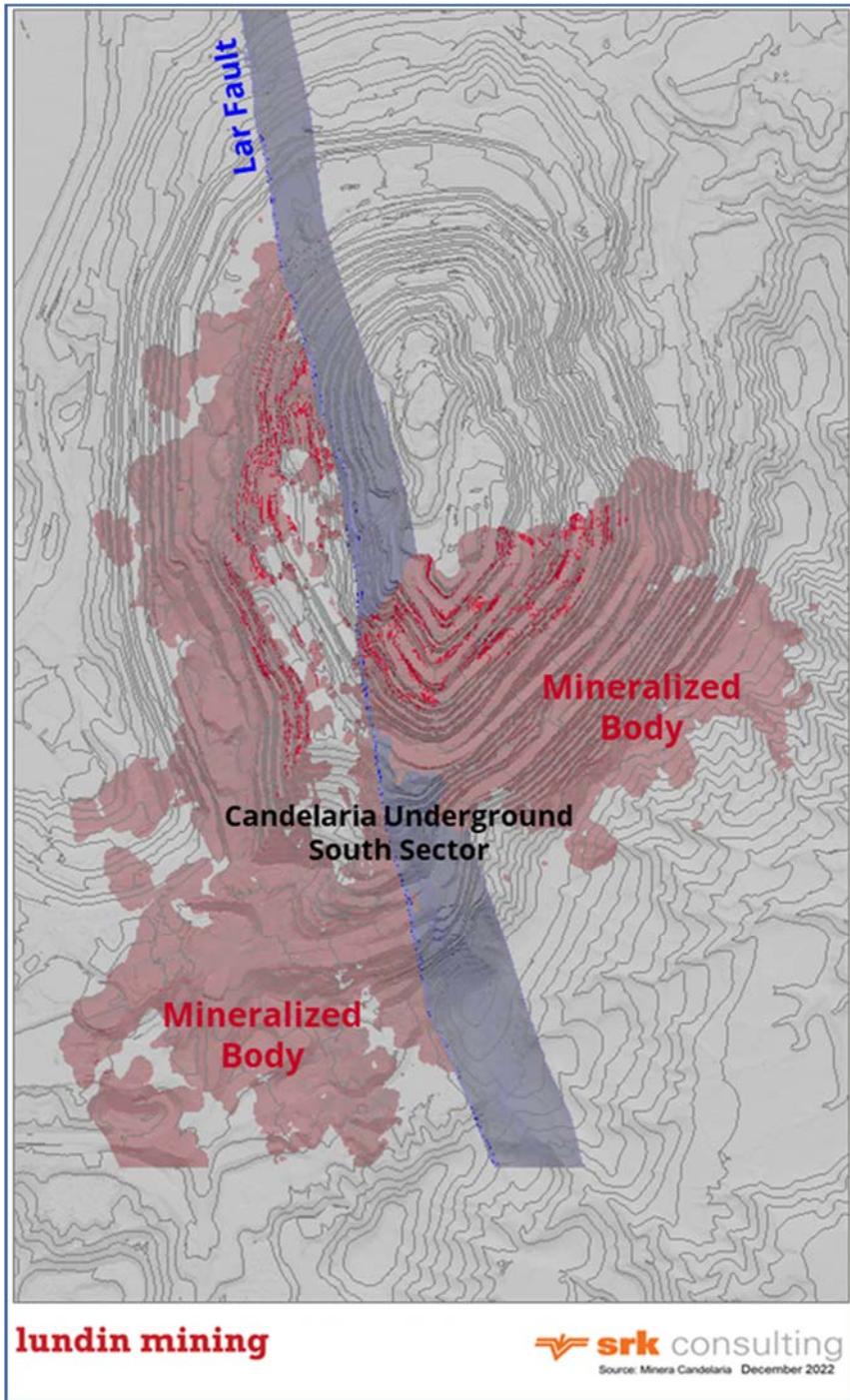


Figure 13: Plan Showing Exploration Areas at the Candelaria Underground (South Sector)

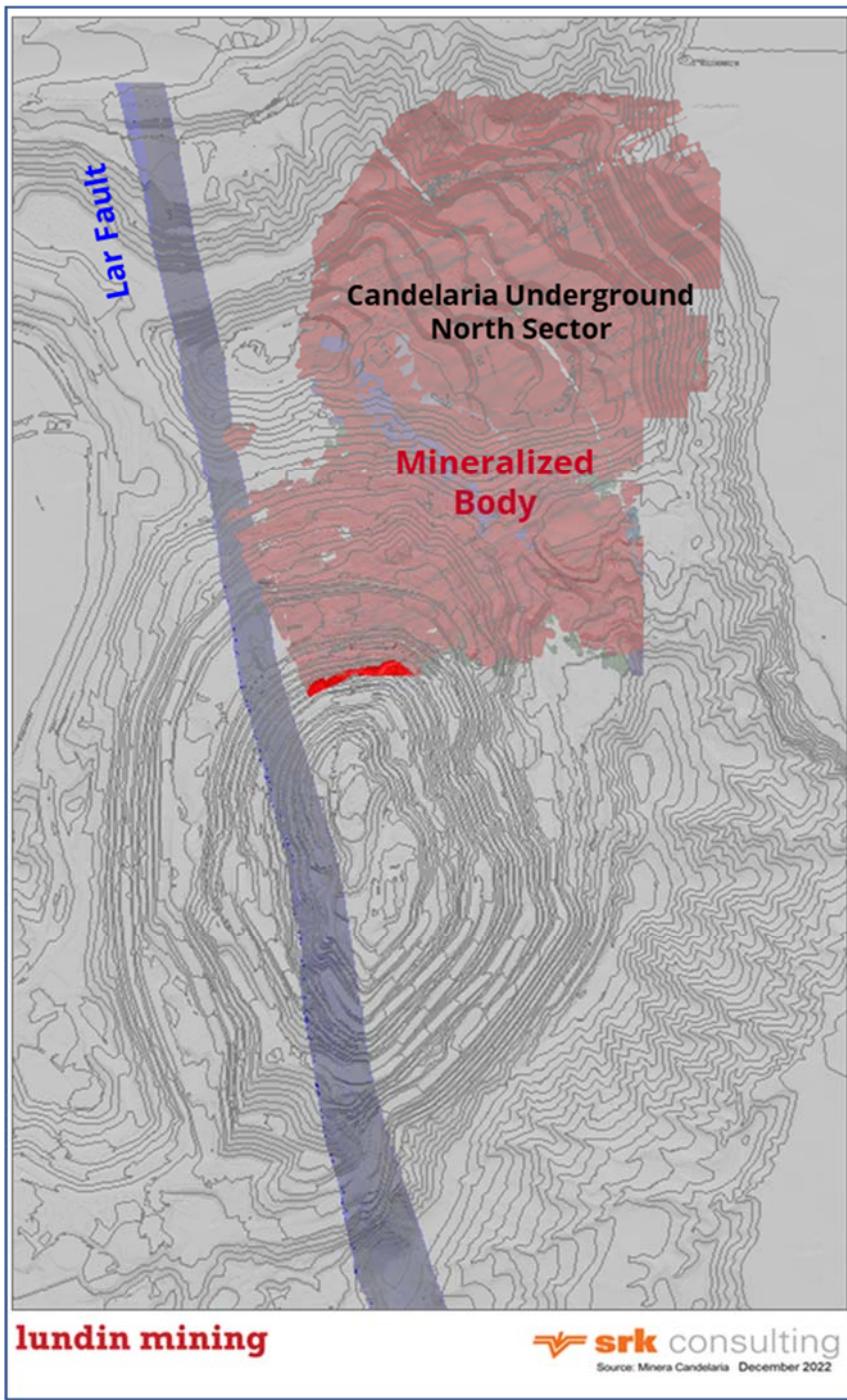


Figure 14: Plan Showing Exploration Areas at the Candelaria Underground (North Sector)

At Minera Ojos del Salado, new Mineral Resource and Mineral Reserve estimates were prepared in the first half of 2018, extending the life of the Santos mine to 2028. The Measured and Indicated Mineral Resources increased by more than 70% over the year 2018 in Santos due to drilling, the consolidation of two independent block models into one (Santos: Figure 15) and lowering the underground cut-off grade from 0.60 to 0.55 and again to 0.45% copper.

At the Alcaparrosa mine, Mineral Resources increased by 46% due to drilling, the integration of seven block models into one (Alcaparrosa: Figure 16) and lowering the underground cut-off grade from 0.60 to 0.55 and again to 0.45% copper. Mineralization remains open to the southwest and further potential exists in the east central and west central zones outside of the current model. Wide spaced extension and infill drilling is ongoing and will improve the confidence in the continuity of the sulphide mineralization in both the Alcaparrosa and Santos mines.

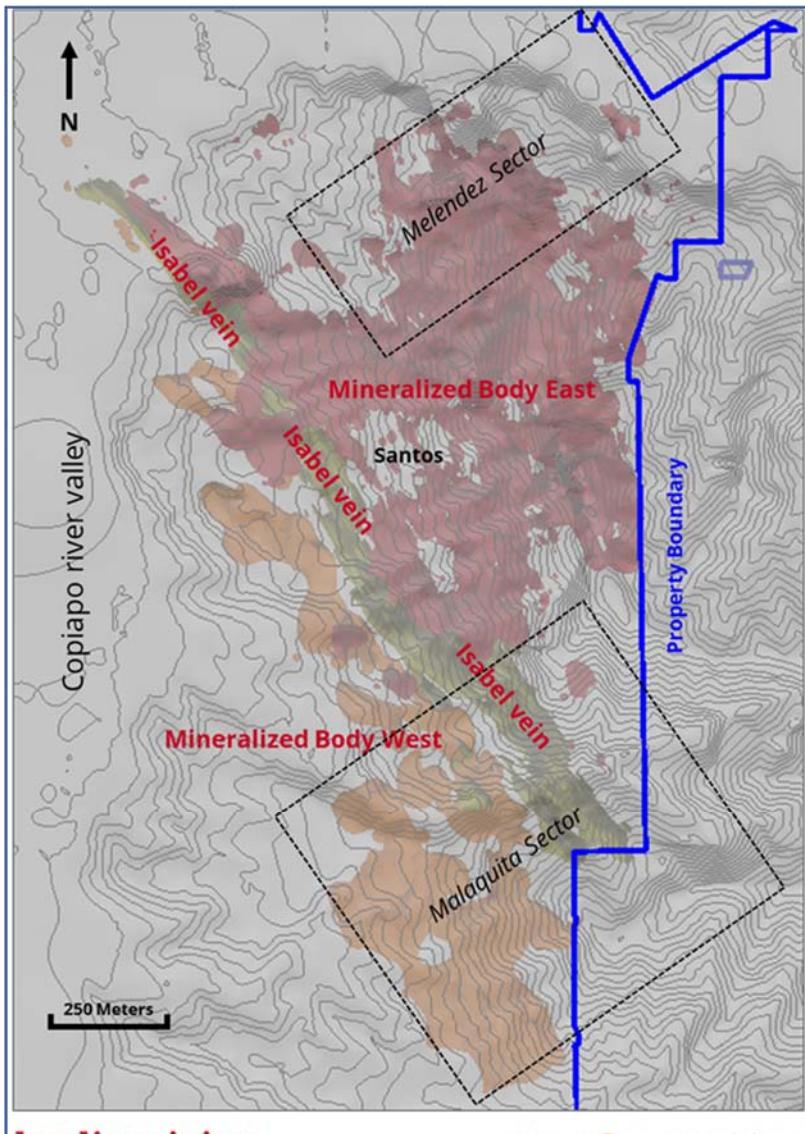
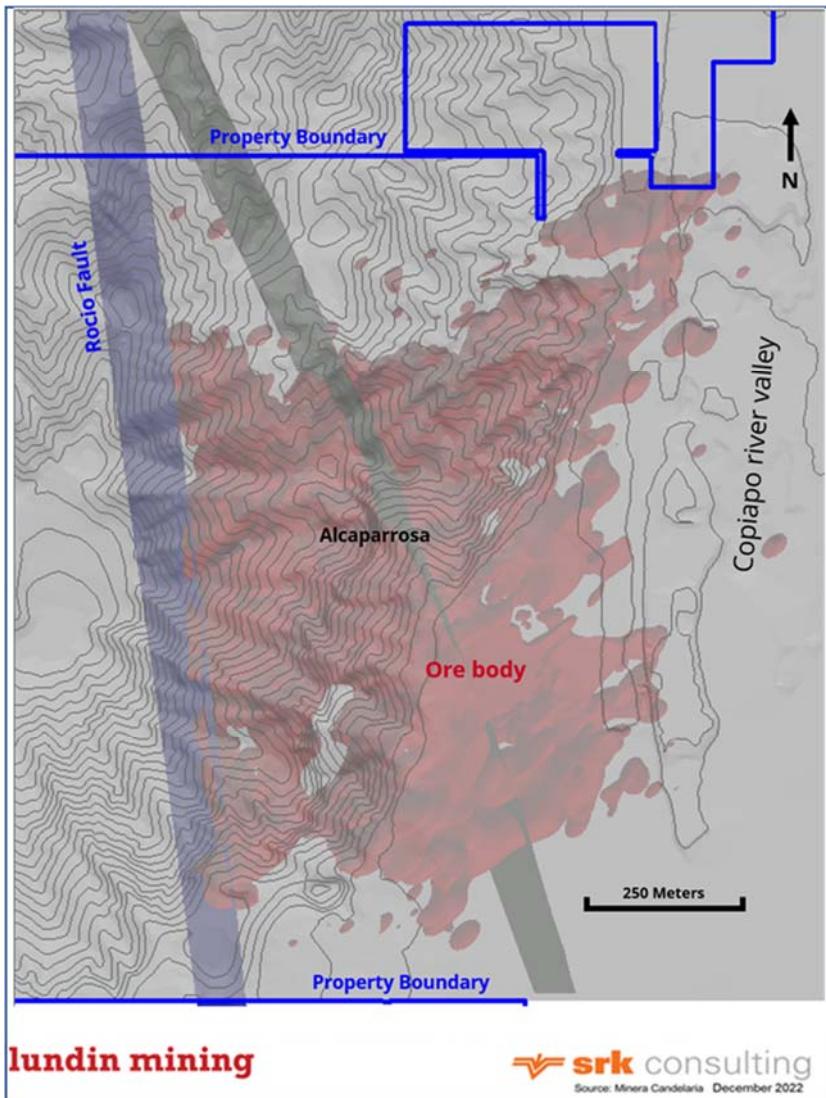


Figure 15: Plan Showing Exploration Areas at the Santos Mine



**Figure 16: Exploration Areas at the Alcaparrosa Mine**

In the Santos mine to the north of the Melendez sector, sulphide mineralization was confirmed to continue to the north. To the south, in the Malachita sector, sulphide mineralization was confirmed in deeper horizons. In addition, during 2022, a NS&SAMT (Natural Source and Controlled Source Audio Magneto-Telluric) geophysical survey was performed to the southern extents of Santos, the survey was performed to map structures which could be controlling the location/formation of vein type mineralization known to be adjacent to the area. Drilling has since commenced over the area with positive results within the low resistivity zones.

Brownfield exploration drilling began late in 2017 with surface drilling commencing in the south district of the Candelaria land concession in an area called España. The España project is an area approximately 2.5 kilometres south of the Candelaria Open Pit. Geophysical surveys performed in 2016 showed a gravimetric, apparent chargeability and conductivity anomaly coincident with a historic magnetic anomaly (Figure 17Figure 17). Further investigation of the area found three shallow

historical boreholes intersected low grade mineralization, 0.20% to 0.49% copper from 24 to 165 metres in length. A drilling campaign was developed in September 2017 to test the extent of the mineralization. When more mineralization was encountered, further drilling continued with the objective to delimit the mineralized body. In total, 79 drill platforms and roads were developed during the 2017 and 2018 drilling campaign, and 92 exploration and infill core boreholes totaling 31,370 metres were drilled. A new Mineral Resource model was constructed with this data to support Mineral Resource estimation. The Mineral Resource model was updated again in 2019, following additional drilling of 8,027 metres in 34 boreholes that was carried out in 2019.

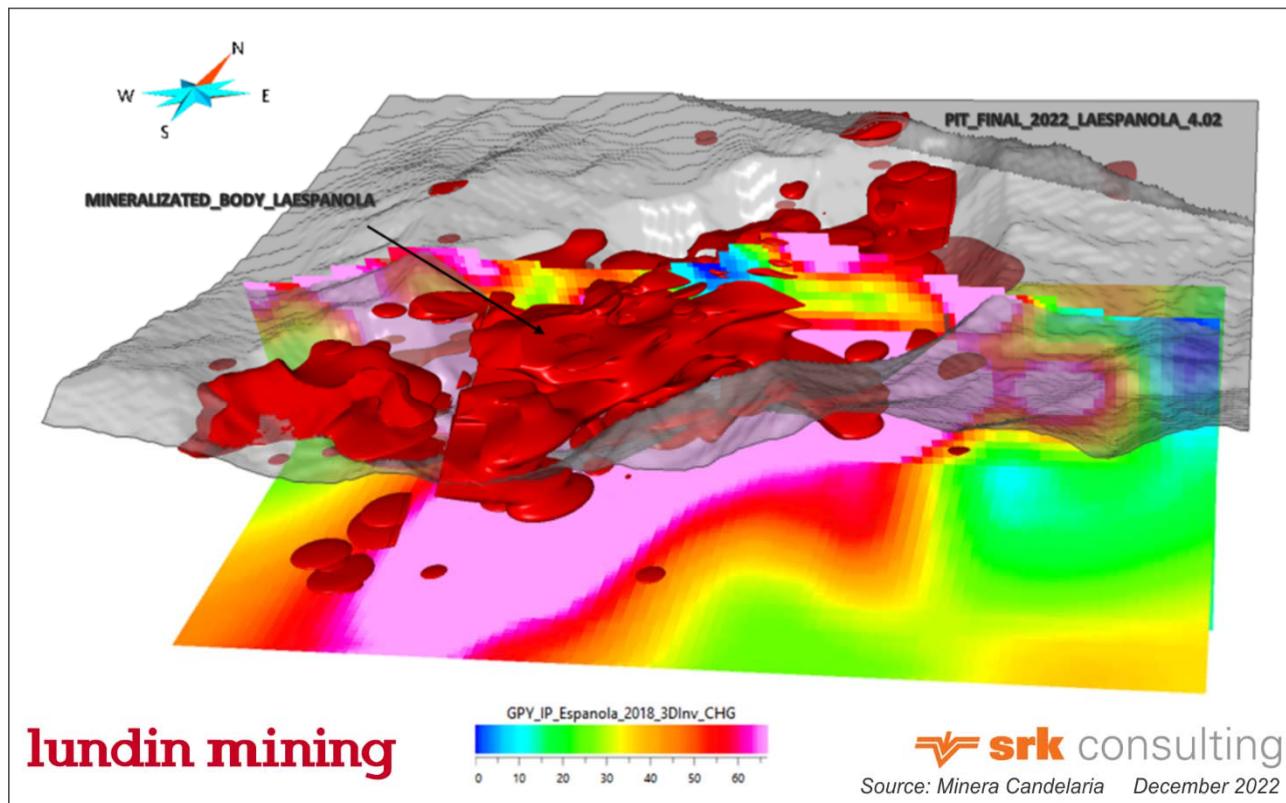


Figure 17: State of Data Before Discovery of España

Building on this success, an exploration program is planned for the period 2023 to 2027, maintaining operational fronts in the mines, targeting the lateral extensions of the areas investigated since 2010 and exploring district targets to the north and south of mining infrastructure within the Minera Candelaria and Minera Ojos del Salado land holdings.

The planned exploration program (Table 5) includes approximately 1,160 metres of underground development, 171,500 metres of core drilling, and continued geophysical campaigns at a total estimated combined cost of US\$48.0M. The 5-year exploration budget has decreased compared to previous years due to the significant increase in Mineral Resources within each of the mines, extending the life of the Candelaria Mining Complex substantially for mine operations; therefore, decreasing pressure to sustain annual exploration drilling. Step out drilling will continue within the mines; however, drilling will focus on regional exploration within the district.

**Table 5: Summary of Exploration Program (2019 to 2023)**

Zone	Sector	2023	2024	2025	2026	2027
Far North	UG Exploration Surface Exploration Resource	8,000	6,000	5,000	2,000	1,000
Candelaria Norte	UG Exploration Surface Exploration Resource	4,300	3,300	3,300	2,300	2,300
Candelaria Sur	UG Exploration Surface Exploration Resource	6,000	5,000	4,000	4,000	4,000
La Espanola	UG Exploration Surface Exploration Resource	2,000	2,000	2,000	2,000	1,000
Ojos District	UG Exploration Surface Exploration Resource	3,000	3,000	2,000	2,000	2,000
Candelaria District	UG Exploration Surface Exploration Resource	6,000	6,000	4,000	4,000	4,000
Santos	UG Exploration Surface Exploration Resource	4,000	3,000	3,000	3,000	2,000
Alcaparrosa	UG Exploration Surface Exploration Resource	2,300	2,300	2,300	2,300	2,300
Combined	Total Drilling (m) Drifting (m) US\$ (millions)	44,900 500 13	38,900 350 11	32,900 310 9	28,900 0 8	25,900 0 7

The objective of this exploration program is three-fold: to define and upgrade the classification of additional higher-grade Mineral Resources in the underground mines to replace the processing of lower grade feed from the open pit or surface stockpiles and improve the life of mine copper production; to understand the Mineral Resource potential remaining in the underground mines; and, to explore the Candelaria District to supplement the depletion of Mineral Resources in the mines.

The aggressive exploration program initiated in 2010 has resulted in significant new discoveries, with a positive impact on the life of the three underground mines. In 2015, a new exploration and Mineral Resource development tool, Mineral Inventory Range Analysis (MIRA) was initiated with the purpose to understand the potential mineral inventory remaining in the mines as well as identify the potential mineral inventory within the Candelaria land holdings. Since 2015, mineral inventories have increased across the Candelaria district as a result of the aggressive exploration programs (drilling and geophysical surveys), block model integrations, and new discoveries in Santos, Alcaparrosa and Candelaria mines, and the new district discovery of Espanola. Confidence has grown with the positive results received by utilizing the MIRA tool in the exploration programs. It is expected that the Mineral Resources will continue to grow within the current mines and district.

At Candelaria, 109,549 metres of underground core were drilled, and 1,582 metres of underground development were completed since July 2018. This includes exploring the southern extensions of Mariana, Damiana, and Santa Gemita (24,541 metres of core drilling), definition of the northern extensions of mineralization in Candelaria Underground (North Sector and Wedge Gap, 58,956 metres), and to explore open pit potential from both the surface and underground (85,008 metres).

At the Santos mine, the 2018 exploration program included 122 metres of underground development, and a total of 16,534 metres of underground core drilling divided between the Helena, Melendez North, Malaquita Deep sectors, and on the surface in Isabel Oeste, and Santos Sur (Figure 15).

At the Alcaparrosa mine, the 2018 exploration program included 348 metres of underground development, and a total of 16,521 metres of core drilling in the West Central area (Figure 16).

In the district, additional core drilling was conducted at Pirata Rincon (789 metres), Cora Kaiser (1,052 metres), and Ojancos Sur (1,564 metres; Figure 18).

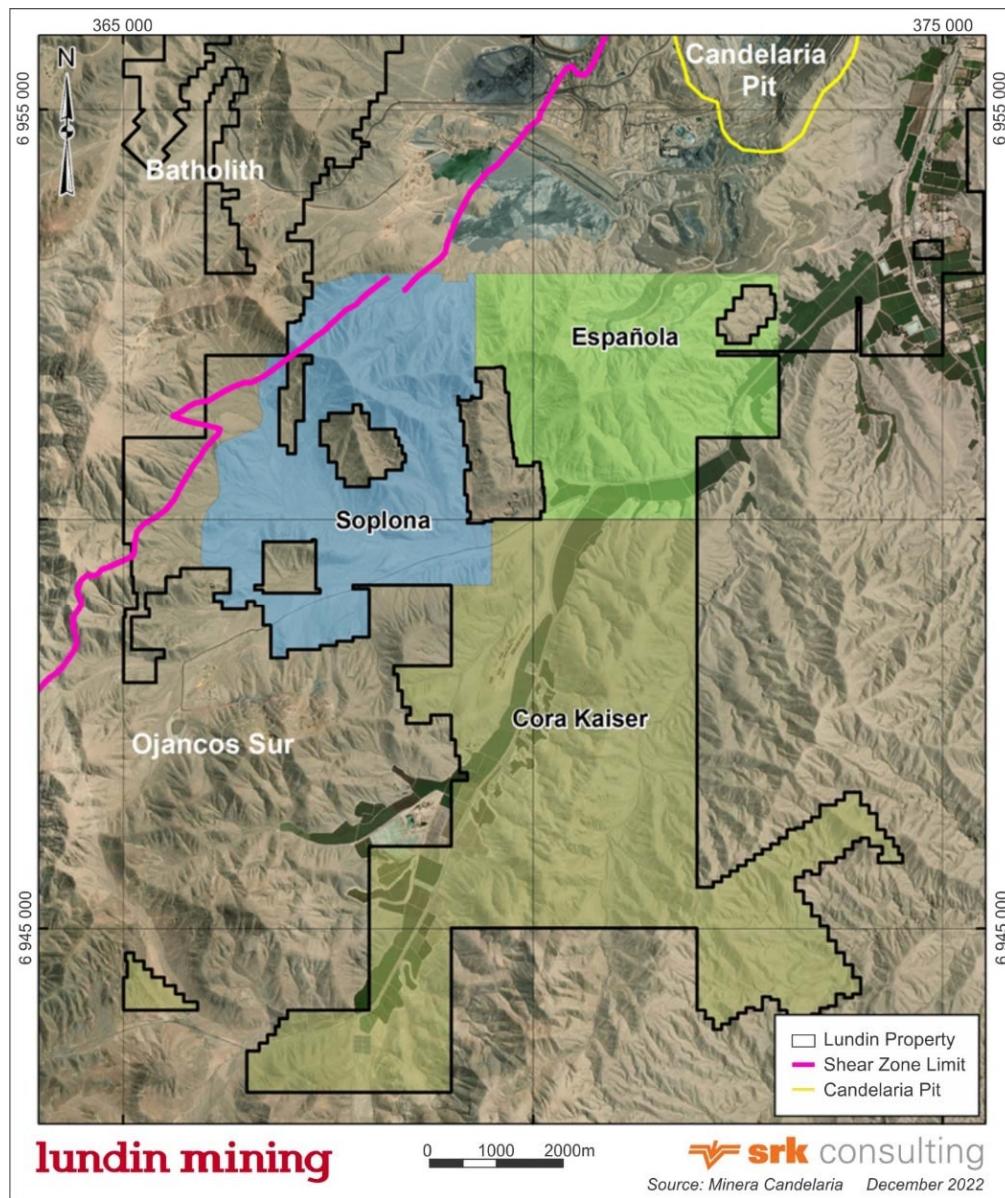


Figure 18: Plan Showing the South District Surface Drilling

In addition to the underground exploration programmes, various geophysical surveys were conducted to guide drilling programs within the Candelaria District. A 3D DCIP Survey was conducted in the south district over the Española area. A CSAMT survey was performed over the south surface of Santos, with the objective of defining structures which could be controlling the location / formation of vein type mineralization known to be adjacent to Santos. An airborne magnetic/radiometric survey was flown over the entire district. Since completion of the larger, district-scale airborne geophysical surveys in 2018, only limited, more local geophysical surveys have been carried out. Physical property measurements have been combined with geophysical data using the Common Earth Model (CEM).

Magnetic susceptibility and conductivity measurements and down-hole physical property logging have continued since 2018 to present and were used to assist interpreting geophysical data and map magnetic susceptibility of lithological units and improve geological modelling.

## 8.2 Exploration Performance 2018 to 2022

Since acquiring the Candelaria Copper Mining Complex in late 2014, LMC has invested approximately US\$177M in exploration (to the end of June 2022). These investments have significantly increased the Mineral Resources at all mines and extended the life of the operations by 10 years to 2046.

The current forward-looking exploration strategy is to:

- Continue the development of the underground headings within the existing mine infrastructure ahead of operations.
- Test the extensions of mantos and veins, as well as exploring for deep seated mineralization.
- Test high potential MIRA targets both within the mining infrastructure as well as in the district; explore outside the boundaries of sulfide mineralization and review oxide potential.
- Apply additional tools including new geophysical applications; statistical analysis to geochemical sample results.
- Continued use of the 3D targeting modelling tool that integrates, geophysical survey data, geochemistry, structural components, field mapping, and drill hole information to assist in optimal drill hole targeting throughout the district.

## 8.3 SRK Comments

The considerable investment in exploration at Minera Candelaria and Minera Ojos del Salado since 2014 (approximately US\$177M) has continued to demonstrate the excellent potential for extending the sulphide zones in the three underground mines and the generation of new discoveries amenable for underground mining in other areas of the properties.

Step-out and infill drilling programs have resulted in the discovery of new mineralization extensions throughout the property particularly at Candelaria Underground (North and South Sectors), Alcaparrosa and Santos.

The period 2014 to 2022 has witnessed exploration success combined with operational efficiencies (cut-off grade reductions), and Mineral Resource estimation innovations (Mineral Resource model consolidations) which have significantly increased reported Mineral Resources and Mineral Reserves amenable to underground extraction. Recent exploration in the district also highlights the potential of increasing Mineral Resources and Mineral Reserves amenable to open pit extraction, as witnessed by the Espa ola project.

A new 5-year exploration program (2023 to 2027) has been developed, which will target lateral extensions of the areas investigated since 2010 and exploring district targets to the north and south of mining infrastructure within Minera Candelaria land holdings. This aggressive exploration program should continue to define and upgrade underground and open pit Mineral Resource estimates on the property.

The exploration potential of the Candelaria Copper Mining Complex is excellent. The authors of This Report are of the opinion that the MIRA exploration and Mineral Resource development strategy will continue to complement the exploration program in the future, which should result in a continuous growth in Mineral Resources within the current mines and elsewhere in the district.

The authors strongly support the development of the 3D targeting modelling tool that integrates, geophysical survey data, geochemistry, structural components, field mapping, and borehole information to assist in optimal drill hole targeting throughout the district.

## 9 Drilling

### 9.1 Drilling at Candelaria

From 1990 to June 30, 2022, 4,689 core and percussion boreholes (1,361,873 metres) were drilled in and around the Candelaria mine. Approximately 96% of all drilling comprised core boreholes.

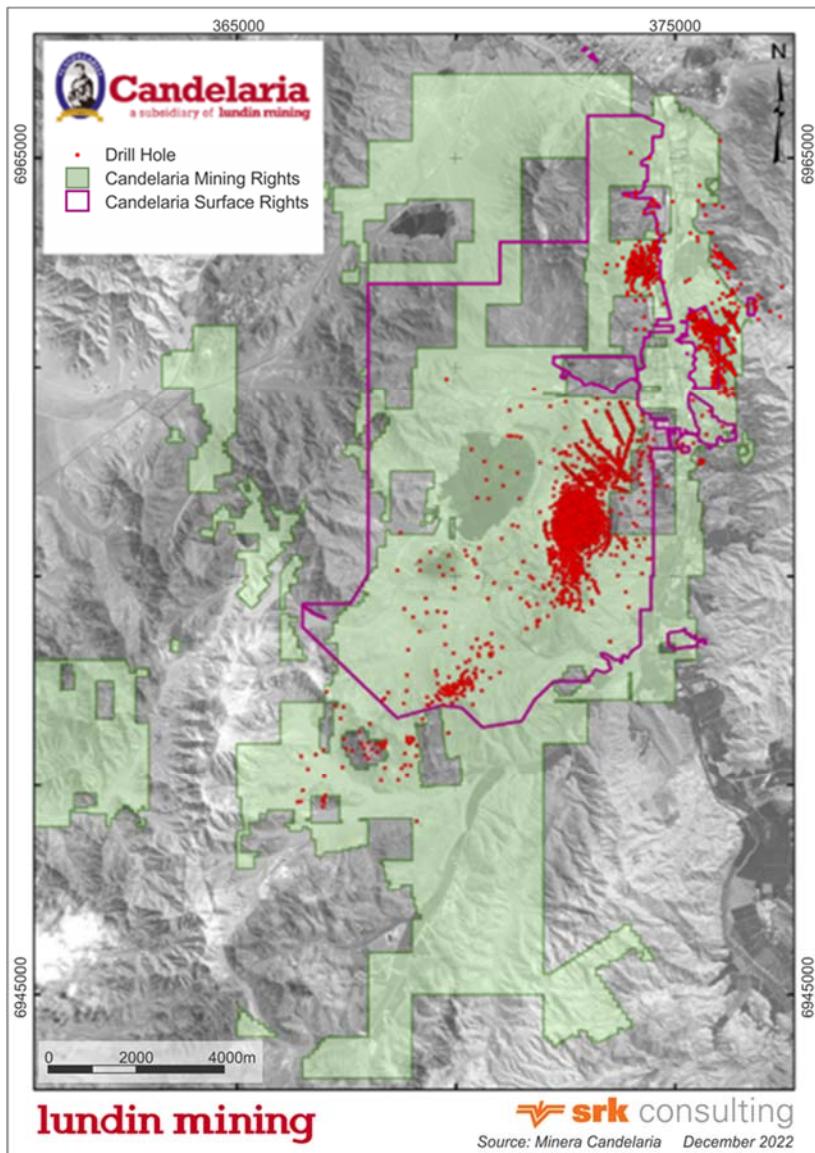
Approximately 80% of all core boreholes were drilled using NQ equipment, the residual using HQ equipment. Initially, drilling was completed by Geotech Boyles Bros. S.A. Later, drilling services were provided by Connors Drilling, LLC and finally from 2012, Boart Longyear was contracted to complete all drilling. In 2020, drilling was completed by Coruro Drilling and Arctic Drilling. In 2021, drilling was completed by Georock and Boggioni Drilling. Throughout 2022, drilling has been carried out by Coruro Drilling and Boggioni Drilling.

**Table 6: Summary of Drilling Data for the Candelaria Mine (Open Pit and Underground) Applied for Mineral Resource Reporting**

Year	RC		Surface		Geotechnics		Underground		Total	
	Number	Metres	Number	Metres	Number	Metres	Number	Metres	Number	Metres
1990	-	-	325	125,369	-	-	-	-	325	125,369
1991	-	-	-	-	-	-	-	-	0	0
1992	-	-	-	-	-	-	-	-	0	0
1993	23	4,041	-	-	-	-	-	-	23	4,041
1994	-	-	88	21,482	5	1,236	-	-	93	22,718
1995	-	-	71	32,417	-	-	-	-	71	32,417
1996	-	-	70	32,848	-	-	-	-	70	32,848
1997	-	-	38	12,174	4	1,459	-	-	42	13,632
1998	-	-	37	14,661	-	-	-	-	37	14,661
1999	-	-	60	16,736	-	-	-	-	60	16,736
2000	-	-	69	20,788	2	1,016	-	-	71	21,804
2001	-	-	126	51,026	-	-	-	-	126	51,026
2002	-	-	83	26,455	-	-	2	461	85	26,917
2003	47	3,627	88	30,441	-	-	89	11,984	224	46,052
2004	-	-	78	34,291	4	1,361	248	34,443	330	70,094
2005	-	-	112	53,130	1	71	30	6,398	143	59,599
2006	109	3,482	156	11,742	2	547	7	1,051	274	16,821
2007	-	-	131	38,568	-	-	79	14,294	210	52,862
2008	-	-	63	22,516	1	225	95	17,627	159	40,368
2009	-	-	53	13,773	-	-	23	4,541	76	18,315
2010	-	-	29	9,696	5	2,246	161	26,219	195	38,161
2011	-	-	69	36,433	4	200	95	17,424	168	54,057
2012	-	-	90	47,725	4	1,205	136	30,430	230	79,361
2013	-	-	45	24,483	2	859	208	47,115	255	72,457
2014	-	-	37	13,873	10	4,305	118	29,242	165	47,419
2015	-	-	59	31,393	-	-	248	66,694	307	98,086
2016	-	-	27	14,617	-	-	153	42,447	180	57,064
2017	-	-	63	39,635	-	-	216	66,576	279	106,210
2018	-	-	45	18,761	-	-	180	48,544	225	67,304
2019	-	-	4	2,107	-	-	71	15,427	75	17,534
2020	-	-	-	-	14	2,625	84	30,759	98	33,384
2021	22	2,313	6	2,455	11	741	54	19,048	93	24,556
2022*	-	-	-	-	-	-	-	-	0	0
<b>Total</b>	<b>201</b>	<b>13,463</b>	<b>2,122</b>	<b>799,591</b>	<b>69</b>	<b>18,095</b>	<b>2,297</b>	<b>53,0724</b>	<b>4,689</b>	<b>1,361,873</b>

\* No drilling from 2022 is included in the 2022 Mineral Resource Model

Until 2011, boreholes were surveyed by mine personnel. No information exists on instruments or methodologies used for these surveys. Since 2011, SG Drill Servicios Geol (SG Drill) based in Copiapó, has been contracted to complete down-hole surveys. SG Drill uses a Reflex tool with readings at 3-metre intervals. Most of the boreholes were drilled with an azimuth of 065 or 245 degrees with inclinations between -90 and +90 degrees. Table 6 summarizes the drilling information for Candelaria. The collars of the boreholes drilled within the Candelaria Copper Mining Complex is shown in Figure 19.



**Figure 19: Location of Collars of Boreholes Drilled on the Candelaria Copper Mining Complex**

Core recovery is routinely measured and typically exceeds 90%. Borehole spacing in the Mineral Resource areas is approximately 35 metres and wider along the edges of the Mineral Resource areas and beyond.

## 9.2 Drilling at Española

Since 1990 to 2004, there were five exploration diamond drill holes drilled in Española totaling 2,861 metres. From July 2017 to the end of June 2022, 154 new diamond drill holes were completed totaling 44,952 metres. No exploration work was carried out between 2005 and 2016. To date, Española has totals 159 drill holes with 47,813 metres in total.

Most of drill holes had azimuth 0° to 358° and slopes between -54° and -90°. SG Drill surveyed deviations using Reflex with readings every 3 interval metres. Table 7 summarizes drilling information at the Española project.

**Table 7: Summary of Drilling Data for the Española Project Applied for Mineral Resource Reporting**

Year	Dust		Surface		Geotechnics		Underground		Total	
	Number	Metres	Number	Metres	Number	Metres	Number	Metres	Number	Metres
1990	-	-	1	456	-	-	-	-	1	456
1991	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-
1993	-	-	-	-	-	-	-	-	-	-
1994	-	-	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	-	-	-	-
1997	-	-	3	1,390	-	-	-	-	3	1,390
1998	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-
2004	-	-	1	1,015	-	-	-	-	1	1,015
2005	-	-	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-	-	-
2007	-	-	-	-	-	-	-	-	-	-
2008	-	-	-	-	-	-	-	-	-	-
2009	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	-	-	-	-
2012	-	-	-	-	-	-	-	-	-	-
2013	-	-	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	-	-	-	-
2015	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-
2017	-	-	15	8,676	-	-	-	-	15	8,676
2018*	-	-	77	22,694	-	-	-	-	77	22,694
2019	-	-	34	8,027	-	-	-	-	34	8,027
2020	-	-	-	-	-	-	-	-	-	-
2021	-	-	28	4,852	-	-	-	-	-	-
2022*	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	<b>159</b>	<b>47,813</b>	-	-	-	-	<b>159</b>	<b>47,813</b>

\* No drilling from 2022 is included in the 2022 Model

## 9.3 Drilling at Ojos del Salado

### 9.3.1 Santos Mine

In the Santos mine, a total 1,604 core boreholes (323,591 metres) were drilled from underground and surface stations from 1988 until June 30, 2022. Since July 2017 drilling has occurred underground in sectors Meléndez Norte, Helena, and Malaquita, and from the surface drilling occurred over Isabel Oeste and South Santos. Most of the boreholes were drilled with an azimuth of 65 or 245 degrees with inclinations between -82 and +90 degrees. Borehole lengths vary between 40 and 728 metres. Down-hole deviations are monitored at regular intervals using Reflex tools. Starting in 2019, downhole survey equipment was changed from Reflex to Axis Busca. Table 8 shows a summary of the drilling activities completed for the Santos mine.

**Table 8: Summary of Drilling Data for the Santos Mine Applied for Mineral Resource Reporting**

Year	Dust		Surface		Geotechnics		Underground		Total	
	Number	Metres	Number	Metres	Number	Metres	Number	Metres	Number	Metres
1988	-	-	96	15,464	-	-	32	4,944	128	20,108
1989	-	-	17	3,651	-	-	49	5,773	66	9,424
1990	-	-	9	1,455	-	-	24	2,617	33	4,072
1991	-	-	-	-	-	-	17	3,327	17	3,327
1992	-	-	23	11,019	-	-	28	4,637	51	15,656
1993	-	-	32	12,766	-	-	26	2,978	58	15,744
1994	-	-	-	-	-	-	129	14,463	129	14,463
1995	-	-	-	-	-	-	18	1,520	18	1,520
1996	-	-	-	-	-	-	10	2,099	10	2,099
1997	-	-	-	-	-	-	22	5,398	22	5,398
1998	-	-	-	-	-	-	3	654	3	654
1999	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-
2004	-	-	-	-	-	-	30	5,549	30	5,549
2005	-	-	-	-	-	-	52	11,764	52	11,764
2006	-	-	21	7,972	-	-	74	15,318	95	23,291
2007	-	-	6	1,261	-	-	90	16,156	96	17,417
2008	-	-	-	-	-	-	109	22,128	109	22,128
2009	-	-	-	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	-	-
2011	-	-	-	-	-	-	92	15,818	92	15,818
2012	-	-	-	-	-	-	77	18,845	77	18,845
2013	-	-	-	-	-	-	85	21,923	85	21,923
2014	-	-	-	-	-	-	35	7,121	35	7,121
2015	-	-	-	-	-	-	91	15,949	91	15,949
2016	-	-	-	-	-	-	69	17,791	69	17,791
2017	-	-	-	-	-	-	92	22,432	92	22,432
2018*	-	-	18	6,510	-	-	69	16,330	87	22,840
2019	-	-	-	-	-	-	-	-	0	0
2020	-	16	5,007	-	-	-	10	1,539	26	6,546
2021	-	17	5,740	-	-	-	15	3,495	32	9,236
2022*	-	1	347	-	-	-	-	-	1	347
<b>Total</b>	-	-	<b>256</b>	<b>71,193</b>	-	-	<b>1,348</b>	<b>261,017</b>	<b>1,604</b>	<b>332,210</b>

\* Includes drilling up to March 31, 2022

All boreholes are collared with HQ-sized equipment; boreholes size was reduced in long boreholes or in fracture zones. All drilling in the Santos mine was originally completed by the Connors Drilling Group. More recent drilling was completed by Boart-Longyear.

### 9.3.2 Alcaparrosa Mine

The borehole data base for the Alcaparrosa mine contains 1,165 boreholes (283,133 metres) drilled from surface and underground locations from 1990 to June 30, 2022. Since July 2017 drilling has occurred in the west central sector of Alcaparrosa. Most of the boreholes were drilled with an azimuth of 65 and 245 degrees with inclinations between -82 degrees and +90 degrees. Borehole lengths vary between 70 and 600 metres. Down-hole deviations are monitored at regular intervals using Reflex tools.

**Table 9: Summary of Drilling Data Completed for the Alcaparrosa Mine Applied for Mineral Resource Reporting**

Year	Dust		Surface		Geotechnics		Underground		Total	
	Number	Metres	Number	Metres	Number	Metres	Number	Metres	Number	Metres
1990	-	-	31	15,381	-	-	-	-	31	15,381
1991	-	-	15	7,854	-	-	-	-	15	7,854
1992	-	-	19	7,706	-	-	-	-	19	7,706
1993	-	-	34	11,392	-	-	45	14,129	79	25,521
1994	-	-	14	3,817	-	-	28	6,653	42	10,470
1995	-	-	-	-	-	-	-	-	-	-
1996	-	-	-	-	-	-	2	247	2	247
1997	-	-	-	-	-	-	50	7,025	50	7,025
1998	-	-	-	-	-	-	-	-	-	-
1999	-	-	-	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-
2003	-	-	14	6,004	-	-	4	1,672	18	7,677
2004	-	-	8	5,552	-	-	27	6,071	35	11,623
2005	-	-	7	6,753	-	-	20	6,959	27	13,712
2006	-	-	3	1,378	-	-	-	-	3	1,378
2007	-	-	-	-	-	-	66	7,783	66	7,783
2008	-	-	-	-	-	-	26	4,278	26	4,278
2009	-	-	-	-	-	-	85	12,261	85	12,261
2010	-	-	-	-	-	-	81	16,449	81	16,449
2011	-	-	10	5,932	-	-	95	13,914	105	19,846
2012	-	-	9	4,277	-	-	35	9,049	44	13,326
2013	-	-	-	-	-	-	112	22,755	112	22,755
2014	-	-	-	-	-	-	28	7,161	28	7,161
2015	-	-	-	-	-	-	81	22,130	81	22,130
2016	-	-	5	2,397	-	-	19	3,200	24	5,597
2017	-	-	-	-	-	-	59	12,659	59	12,659
2018	-	-	-	-	-	-	85	18,619	85	18,619
2019	-	-	-	-	-	-	23	6,430	23	6,430
2020	-	-	-	-	-	-	-	-	0	0
2021	-	-	-	-	-	-	21	4,564	21	4,564
2022*	-	-	-	-	-	-	5	1,235	5	1,235
<b>Total</b>	-	-	<b>168</b>	<b>77,892</b>	-	-	<b>997</b>	<b>205,242</b>	<b>1165</b>	<b>283,133</b>

\* Includes drilling up to February 28, 2022

Commencing in 2019, downhole survey equipment was changed from Reflex to Axis Busca. Table 9 shows a summary of the drilling activities completed for the Alcaparrosa mine.

## 9.4 Sampling Method and Approach

Logging and sampling procedures at Minera Candelaria and Minera Ojos del Salado operations follow similar approaches using documented protocols. Geology logging records information about rock type, mineralogy, textures, structures, mineralization, and alteration. Geotechnical logging records information about core recovery, rock quality designation (RQD), hardness, and the number and nature of fractures. Samples are regularly collected for geomechanical testing by lithological type at selected intervals for uniaxial, triaxial and disc tension compression analysis. In addition, point load tests were performed at selected intervals. Until January 2012, geotechnical logging was performed by mine personnel, after this date that work was contracted. Core photographs were initially taken of uncut core of selected drill holes. During 2017, core photography was implemented for all drill holes, and the subsequent information is loaded and stored into the AcQuire database.

In the Candelaria pit, before 2007, samples were taken at 1-metre intervals. After 2007 onward, sample intervals for the open pit were increased to 2 metres. Analytical samples were taken from core cut lengthwise using a diamond saw. Half of the core is retained in core boxes for reference. For the Candelaria Open Pit, core was sampled from two bench heights above known mineralization to the bottom of the borehole. For the underground mines, core is sampled based on visible sulphides. The top parts of boreholes were not sampled. Sampling is carried out by a contractor under the supervision of mine personnel. At Candelaria, in late 2016, in the underground mines, core sample length was increased from 1 to 2 metres in length. Sampling procedures are carried out by a contractor under the supervision of personnel from Mina Candelaria's Exploration group.

Before 2014, primary information such as collar coordinates, survey data, as well as geological and geotechnical logging data was entered into Microsoft® Excel sheets and later aggregated into a final database by authorized personnel from the geology team. Since 2015 logging information is captured digitally and transferred to the main project AcQuire database automatically.

## 9.5 SRK Comments

The authors of this Technical Report have witnessed drilling and sampling activities on the operations on numerous occasions and believes that the drilling and sampling procedures adopted by the Candelaria Copper Mining Complex are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to interpret the geometry and the boundaries of the copper and gold mineralization with confidence. Core samples were collected by competent personnel using procedures meeting generally accepted industry best practices. The process is undertaken or supervised by suitably qualified geologists.

The authors conclude that the samples are representative of the source materials and there is no evidence that the sampling process introduced a bias.

## 10 Sample Preparation, Analyses, and Security

### 10.1 Historical Samples

The borehole sampling preparation, analyses, and security procedures utilized by ENAMI and its predecessors between 1929 and 1985 are unknown.

### 10.2 Core Samples (1985 to Present)

#### 10.2.1 Overview

Analytical samples informing the Candelaria Open Pit Mineral Resources were prepared and assayed at the Candelaria mine site. In 2014, the laboratory was certified to International Standards Organization (ISO)17025 by the National Institute of Standardization (INN) of Chile for the analyses of copper, iron, zinc, and silver. Compliance to the ISO standard is being verified yearly by the INN. The laboratory is not independent from Minera Candelaria. It is managed by the Candelaria Processing Department.

Analytical samples informing the Ojos del Salado Mineral Resources were prepared and assayed by Intertek (formerly Vigalab) in Paipote, Chile. Intertek is a global group operating 13 laboratories in Chile with a management system accredited to ISO9001. Intertek's laboratories are independent from Minera Ojos del Salado.

Minera Candelaria uses Intertek and Geolaquim in the Paipote Sector of Copiapo, Chile as an umpire laboratory. These laboratories are independent of Minera Candelaria.

The sample analyses used for the Mineral Resource reporting for the Espanola project were prepared by Geolaquim Ltda. (Geolaquim) (80%) and Intertek I (20%). Geolaquim is certified under regulation ISO 17025 by the INN for concentrated minerals and others (soluble copper, total copper, iron and gold).

Prior to 2006, Minera Ojos del Salado used Geolab as an umpire laboratory. As far as SRK was able to determine, Geolab is independent from Minera Ojos del Salado. After 2006, Minera Ojos del Salado used ALS Limited (ALS) laboratory in Coquimbo as an umpire laboratory. The management system of the ALS Minerals Group laboratories is accredited to ISO-9001:2000 by QMI Management Systems. ALS is independent from Minera Ojos del Salado. Since 2016, the Candelaria laboratory has been used as an umpire laboratory.

The sample preparation and analytical methodologies used for assaying Candelaria, Espanola, and Ojos del Salado samples are similar.

Upon reception, sample details are recorded and insertion points for quality control samples in the sample stream are determined. Sample preparation includes drying at 105 degrees Celsius in a forced air furnace, primary crushing to 100% passing 5 millimetres, and secondary crushing cycle to 90% passing 1.68 millimetres (12 mesh). Grinding tests are conducted on every 40th sample.

From the crushed material two 1-kilogram samples (Sample A and B) are prepared using a rotary splitter. Coarse rejects are retained and kept in storage. Both samples A and B are pulverized separately to 95% passing 0.106 millimetres (140 mesh). Sample A is subdivided into four subsamples: one subsample with approximately 200 grams, and three subsamples weighing approximately 100 grams each (A1, A2, and A3) and are used for quality control. Sample B is subdivided into two subsamples: one weighing approximately 200 grams and the other (B1) approximately 100 grams. The two heavier subsamples are kept for future reference or as backup should more sample material be required.

Copper, silver, zinc, and iron are analyzed by multi acid digestion and atomic absorption spectroscopy (AAS). Copper assays greater than 6% are re-analyzed systematically. Gold is also assayed in 30-gram aliquots by fire assay with AAS finish. Minera Ojos del Salado began assaying for zinc in January 2015.

Assay data are loaded directly from digital assay result files into the final database in order to minimize entry errors.

### 10.3 Specific Gravity Data

Specific gravity (SG) is measured systematically over the full sample intervals. For each sample interval, all core fragments larger than 5 centimetres in length are collected and used to measure specific gravity using a water displacement method without paraffin coating. Measurements are duplicated every 20 measurements and the scale is checked frequently using a 2-kilogram weight.

### 10.4 Quality Assurance and Quality Control Programs

Quality assurance and quality control programs are typically set in place to ensure the reliability and trustworthiness of the exploration data. They include written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management, and database integrity. Appropriate documentation of quality control measures and regular analysis of quality control data are important as a safeguard for the project data and form the basis for the quality assurance program implemented during exploration.

Analytical control measures typically involve internal and external laboratory control measures implemented to monitor the precision and accuracy of the sampling, preparation, and assaying. They are also important to prevent sample mix-up and monitor the voluntary or inadvertent contamination of samples. Assaying protocols typically involve regular duplicate and replicate assays and insertion of quality control samples. Check assaying is typically performed as an additional reliability test of assaying results. This typically involves re-assaying a set number of rejects and pulps at a second umpire laboratory.

#### **10.4.1 Historical Analytical Quality Control at Alcaparrosa**

No information exists about the analytical quality control procedures at Alcaparrosa between 1929 and 1985.

#### **10.4.2 Analytical Quality Control (1985 to Present)**

##### **Minera Candelaria and España**

The analytical quality control program implemented at Candelaria includes the use of control samples (coarse and pulp duplicate samples and reference material samples) inserted within all samples submitted for assaying. Pulp duplicate samples are inserted at a rate of one every 20 samples. Preparation duplicate samples from the B samples (see Section 10.2) are inserted at a rate of one every 40 samples. Pulp sample duplicates A (A1, A2, A3) are inserted in a range of one every 20 samples (A2) in the same laboratory. A duplicate every 20 metres (A3) is sent to an umpire laboratory. Duplicates for sample preparation B (B1) are inserted in a range of one every 40 samples.

Prior to 2015, six different reference materials were created from Candelaria samples and certified for copper and gold by round robin testing under the supervision of ALS Minerals in Copiapó. Copper grades of the reference material range from 0.50 to 3.69% copper. Reference material samples were inserted at a rate of one every 20 samples.

Since 2015, reference materials have been prepared by INTEM laboratory. New reference materials were created for copper and gold of low grade, medium grade, high grade and blanks. Ten laboratories are used in the round robin process to define the recommended grade and variance of the reference materials.

After sample preparation, pulps are relabeled. A duplicate and approximately 5% of the samples are sent to the umpire laboratory.

Analytical quality control procedures were improved during 2016. Four reference materials were prepared (In-PT-5301 procedure) at the INTEM laboratory in Antofagasta, Chile following the ISO-34 guide (General Requirements for the Competence of Reference Material Producers). The four reference material samples are:

- IN-BMF-233: Blank 2016, (0.004% copper, 1.0 parts per million (ppm) silver, 0.01 ppm gold)
- IN-C080-230: Low grade 2016 (0.293% copper, 2.2 ppm silver, 0.079 ppm gold)
- IN-C080-231: Medium grade 2016 (0.658% copper, 2.8 ppm silver, 0.138 ppm gold)
- IN-C080-232: High grade 2016, (1.373% copper, 3.1 ppm silver, 0.275 ppm gold)

During 2018 new reference material samples were prepared by INTEM laboratory according to procedure IN-PT-5301:

- IN-BMF-333: Blank 2018, (0.004% copper, < 1.0 ppm silver, < 10 ppb gold)
- IN-C080-316: Low Grade 2018, (0.208% copper, 0.9 ppm silver, 0.041 ppm gold)
- IN-C080-317: Average Grade 2018, (0.572% copper, 2.5 ppm silver, 0.155 ppm gold)
- IN-C080-318: High Grade 2018, (1.465% copper, 8.0 ppm silver, 0.346 ppm gold)

Since 2016, exploration data are managed through an AcQuire database, which include quality control management features for sample coordinates from borehole surveys and data management tools. Sample numbering and labelling is controlled through AcQuire, including insertion of quality control samples and consignment notes to the primary laboratories. Analytical results are received electronically and managed through AcQuire with quality control filters. Samples outside defined limits are rejected by AcQuire and flagged for further investigation. The AcQuire system includes features for reporting analytical results and preparing bias charts and time series plots.

### **Minera Ojos del Salado**

Prior to 2006, the analytical quality control program at Ojos del Salado consisted of the use of control samples (pulp duplicate samples) and the use of check assaying at an umpire laboratory. No field duplicates, standard reference material, or blank material were submitted prior to 2006.

Analysis of quality control data during this time by AMEC (2013b) highlighted the poor performance of the pulp duplicate samples, especially for copper. Because the duplicate samples performed better for gold, AMEC (2013b) concluded that the overall performance of the quality control data was satisfactory.

Starting in 2006, Minera Ojos del Salado changed the analytical quality control procedures to replicate those in use at Candelaria.

Since 2016, Minera Ojos del Salado samples are now also managed through the AcQuire system similarly to Minera Candelaria.

## **10.5 Sample Security**

Information about the sample security in the historical exploration period prior to Minera Candelaria and Minera Ojos del Salado's involvement is unavailable.

All drilling assay samples are collected by a contractor under the direct supervision of a mine geologist. Samples from Candelaria are processed and analyzed entirely at the mine site. Samples from Ojos del Salado are shipped directly from the property to the Intertek laboratory in Paipote.

Assay samples are collected by appropriately qualified staff at the laboratories. Sample security involved maintaining the chain of custody of samples to prevent inadvertent contamination or mixing of samples and rendering active tampering as difficult as possible.

During the site visit, the qualified persons found no evidence of active tampering or inadvertent contamination of assay samples collected either on the Candelaria or Ojos del Salado properties.

## 10.6 SRK Comments

The qualified persons reviewed the field procedures and analytical quality control measures used at the Candelaria Copper Mining Complex operations. In the opinion of the authors of this Technical Report, company personnel used care in the collection and management of the field and assaying exploration and production data. Based on historical reports and data available, the authors have no reason to doubt the reliability of exploration and production information provided by the CCMC.

The introduction of the AcQuire database / analytical data management system in 2016 has further enhanced the integrity exploration data and analytical quality control procedures at Minera Candelaria and Minera Ojos del Salado. The reports and analytical results examined by authors suggest that the analytical results delivered by the primary laboratories used by the CCMC are free of apparent bias.

In the opinion of the qualified persons, the sampling preparation, security, and analytical procedures used by the CCMC are consistent with generally accepted industry best practices and are therefore adequate to support Mineral Resource estimation.

## 11 Data Verification

### 11.1 Verifications by the Candelaria Copper Mining Complex

Exploration and production work completed by the Candelaria Copper Mining Complex was conducted using documented procedures and involved extensive verification and validation of exploration and production data prior to them being considered for geological modelling and Mineral Resource estimation. During drilling, experienced mine geologists implemented industry standard measures designed to ensure the reliability and trustworthiness of the exploration data.

Candelaria Copper Mining Complex technical staff monitor analytical quality control data on a real-time basis. Exploration data are managed through an AcQuire database, which includes extensive quality control features and tools to facilitate ongoing monitoring and reporting. Quality control failures are investigated, and appropriate actions are taken when necessary, including requesting re-assaying of certain batches of samples.

### 11.2 Verifications by SRK

#### 11.2.1 Site Visits

Technical consultants from SRK have visited the Candelaria and Ojos del Salado properties on numerous occasions (Table 1). In accordance with National Instrument 43-101 guidelines, a team of professionals under the supervision of SRK visited the Candelaria and Ojos del Salado properties from June 10 to 12, 2014 and from June 14 to 16, 2014, accompanied by representatives of LMC. The team included Glen Cole, PGeo; Gary Poxleitner, PEng; and Maria Ines Vidal, MAusIMM from SRK, and Daniel Sepulveda, and John Nilsson, PEng, both independent consultants.

SRK conducted another site visit from July 6 to July 10, 2015. The team included Jean-Francois Couture, PGeo; Gary Poxleitner, PEng; and Maria Ines Vidal, MAusIMM, from SRK, and John Nilsson, PEng, an independent consultant. Jean-Francois Couture, Gary Poxleitner, and John Nilsson are qualified persons pursuant to National Instrument 43-101.

SRK returned to the Candelaria Copper Mining Complex from December 14 to 16, 2016. The team included Glen Cole, PGeo, Benny Zhang, PEng, Maria Ines Vidal, MAusIMM, from SRK and John Nilsson, PEng, an independent consultant.

On November 8 and 9, 2017 Glen Cole, PGeo, Benny Zhang, PEng, Maria Ines Vidal, MAusIMM, from SRK visited the Candelaria Copper Mining Complex. John Nilsson, PEng, an independent consultant, also visited the mine complex from October 9 to 13, 2017.

On October 30 and 31, 2018 a team of SRK consultants comprising Glen Cole, PGeo; Sean Kautzman, PEng; Maria Ines Vidal, MAusIMM, from SRK visited the Candelaria Copper Mining Complex. John Nilsson, PEng, an independent consultant, also visited the mine complex at this time.

The most recent site was undertaken by a team of four SRK consultants comprising Messrs. Cole, Banerjee, Castro and Zhang and Ms. Ines Vidal visited the site during October 4 and 5, 2022.

The site visits took place during active drilling and production activities. Aspects that could materially impact the integrity of the data informing the Mineral Resources (core logging, sampling, analytical results, and database management) were reviewed with Minera Candelaria and Minera Ojos del Salado staff. SRK also interviewed mine staff to ascertain exploration and production procedures and protocols.

The qualified persons examined core from several boreholes and found that the logging information accurately reflects actual core. The lithology contacts checked by the qualified persons match the information reported in the core logs.

On October 5, 2022, SRK consultants toured the Candelaria Norte underground mine, one of the three underground operations. The underground mine tour included inspections of underground infrastructure, mine development and sub-level stoping activities. An inspection of the Española open pit project and the Los Diques tailings facility was also undertaken. SRK also met with technical discipline heads to discuss aspects of the latest Mineral Resource and Mineral Reserve estimates.

### **11.2.2 Review of Exploration Data and Mineral Resource Models**

The qualified persons reviewed the borehole databases, Mineral Resource models, documented Mineral Resource estimation procedures and digital mine infrastructure wireframes. For the preparation of this Technical Report, the qualified persons were able to reproduce block model estimates for a representative sample of the block models to a satisfactory degree.

The qualified persons also completed statistical comparison of the global block models grade against the informing drilling data and visually compared on plans and sections the block models against the informing composites to confirm that the various models are generally an adequate representation of the distribution of the copper, gold, and silver mineralization.

The Candelaria Open Pit Mineral Resource model is routinely compared against the production model derived from blasthole samples and the Mineral Resource estimation parameters are periodically adjusted accordingly. On average, the Mineral Resource model under evaluates the metal content of a bench by a few percent relative to the blasthole model.

After comparing the open pit and underground Mineral Resource models against the informing composites and the statistics of the production model (long and short-term models), the authors conclude that the Candelaria Copper Mining Complex estimation approach produces a reasonable and reliable model adequate to support open pit mining and which adequately reconciles to monthly production data.

## 12 Mineral Processing and Metallurgical Testing

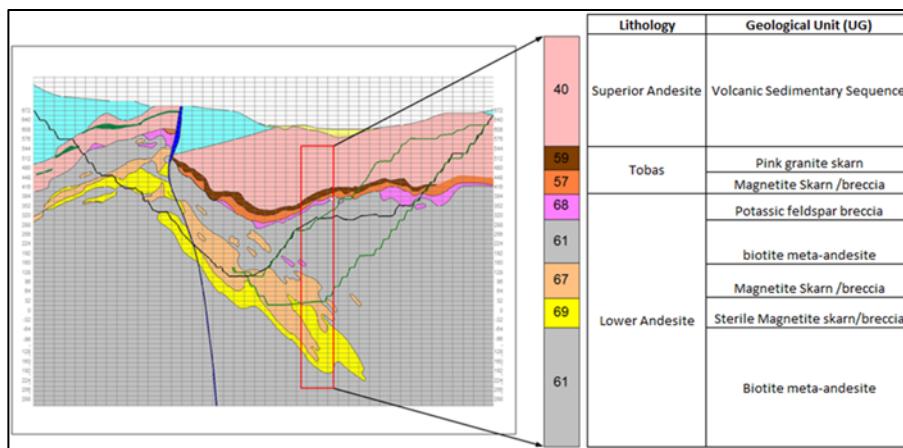
The Candelaria Copper Mining Complex is a mature operation. Metallurgical test work results completed prior to commissioning of the Candelaria and PAC processing plants are not relevant to this Technical Report. Both processing plants have been in operation for many years and produce copper concentrates sold to customers worldwide (see Section 18). A summary of both processing plant performance is provided in Section 16 of This Report. Metal recovery estimates have been derived for each ore type based on historical plant performance. Other than those stated in Sections 16 and 18, there are no other processing factors or deleterious elements that might have a significant impact on economic extraction.

As part of the ongoing operations, both processing plants undertake ongoing testing programs.

### 12.1 Ore Types

The Candelaria deposit is classified as an iron oxide copper gold (IOCG). The polymetallic sulfide mineralization occurs as veins, hydrothermal breccias, replacement mantos and calcic skarns. The sulfide deposits are hosted in volcanic rocks of the Punta del Cobre formation.

Figure 20 illustrates the position of the geological units (Undidad Geologica or UG) relative to the pit. Some of the softer material UG 67 being at the bottom of the pit and currently being mined. Major mineral phases present in Candelaria's ores are biotite, K-feldspar, quartz, and plagioclase. UGs 57 and 67 contain up to 40% magnetite which is being recovered from the plant tailings.



**Figure 20: Location of Main Geological Units in Candelaria Deposit**

Source: CCMC, 2022

There are four geological units defined by CCMC that affect grinding performance. They are classified as Ultra Soft, Soft, Intermediate, Hard and Ultra Hard ranging in grinding specific energy from 6.5 kWh/t to 10 kWh/t (see Table 10).

**Table 10: Rock Hardness Classification by UG**

Hardness Category	UG	UCS (MPa)	Specific Energy(kWh/t)
Extra Hard	77	180 to 240	Not tested
Hard	57, 59	140 to 180	~10.0
Intermediate	40, 68	100 to 140	~8.6
Soft	61	20 to 100	~7.8
Ultra Soft	67	Not tested	~6.5

Source: CCMC, 2022

The sulphide mineralization is dominated by pyrite, while copper is present as chalcopyrite. Chalcopyrite is present across all size fractions with the majority in the 38 to 150 µm range. Similarly, the dominant mineralogy species (including iron oxides) maintain their presence across all particle sizes. Gold and silver are associated with sulphide minerals, primarily chalcopyrite and pyrite. Varying gold content in the pyrite is associated with gold losses to flotation tailings.

## 12.2 Metallurgical Testing

Minera Candelaria maintains regular metallurgical testing programs that are incorporated into statistical models to predict metallurgical performance of mill throughput, metal recovery and final concentrate grade. Metallurgical tests conducted prior to 2018 have been summarized in the previous Technical Report. Metallurgical tests are generally conducted at specialized facilities such as the Universidad de Atacama and at commercial third-party laboratories in Chile, including SGS Mineral Services.

Internal test work includes SAG Power Index (SPI), SAG Mill Comminution (SMC) and Bond Ball Mill (BWi) testing along with laboratory flotation tests for routine characterization and ongoing adjustment / development of geometallurgical models. SPI testing is being superseded by SMC tests as a reference of SAG mill-related ore hardness. The SPI methodology was found to be less sensitive in characterising Hard and Extra Hard ore types (UGs 57, 59 and 77). Table 11 summarizes comminution tests completed from 2019 to 2022. For example, 143 samples from Phases 10 to 12 were BWi, SMC and PLI tested while only 30 samples from these regions were SPI tested.

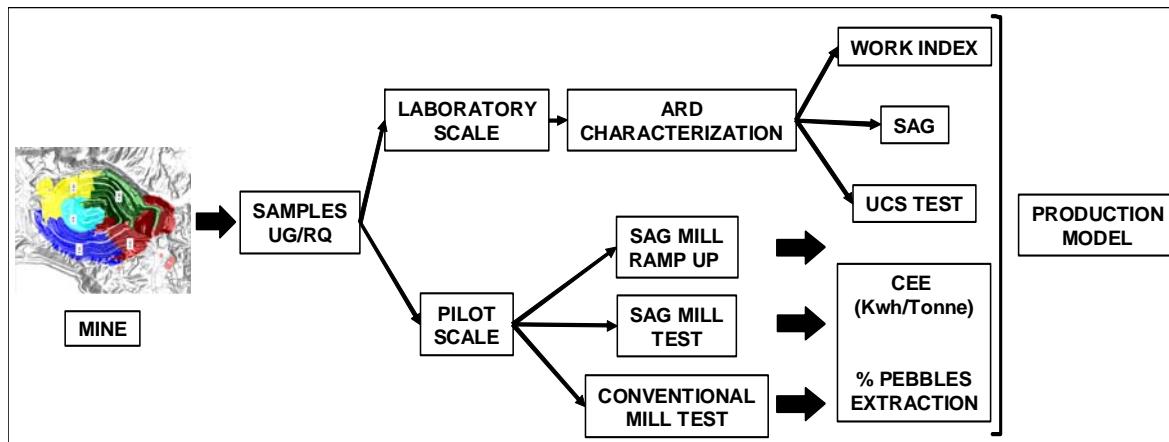
**Table 11: Comminution Testing 2019-2022**

Range of Tests	# of Samples	Region
Bond BWi	143	Phase 10, 11 and 12, Candelaria Underground North Sector
SMC	36	Candelaria Underground South Sector
Point Load Index	19	Alcaparrosa
	18	Santos
	22	
SPI	30	Phase 10, 11 and 12, Candelaria Underground North Sector
	21	Candelaria Underground South Sector
	14	Alcaparrosa
	13	Santos
	17	

Source: CCMC, 2022

## 12.3 Plant Performance Estimates

CCMC maintains throughput and copper recovery forecasting models that are updated and maintained by Candelaria personnel. Figure 21 shows the structure of the throughput forecasting model that uses UGs, laboratory-measured specific energy (kWh/t), Rock Quality Designation (RQD), weight fraction of -25 millimetres after blasting and pebble production rate to predict grinding circuit power requirements and plant capacity (for an assumed mill availability).



**Figure 21: Throughput Forecasting Model (Schematic)**

Source: CCMC, 2022

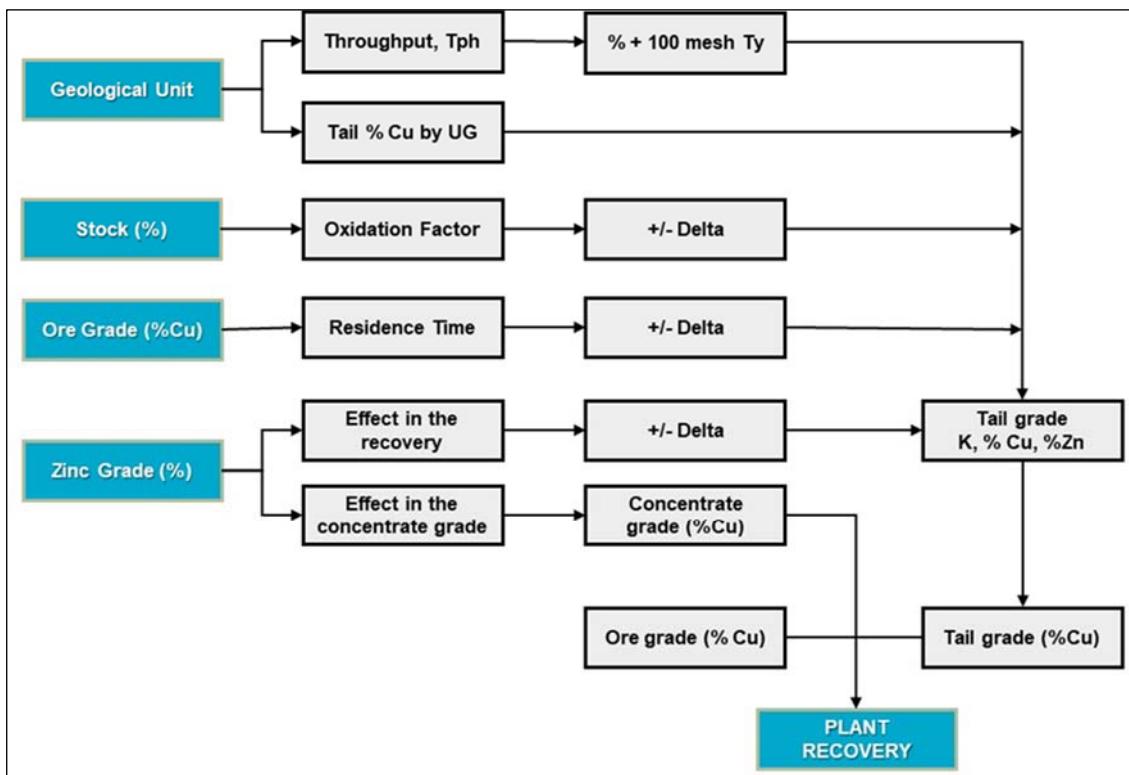
CCMC also maintains a copper recovery model last updated in 2018, that includes factors for UG, stockpile material, copper and zinc head grades. A schematic of the model is shown in Figure 22, where copper tails grade is estimated to calculate plant recovery from the estimated copper concentrate grade. Geological units with different corresponding hardness influence throughput and coarseness of the grinding circuit product. Aging in stockpiles before processing potentially oxidizes sulfide minerals resulting in lower flotation recovery. Higher zinc in the feed reduces final copper recovery by diluting the final concentrate grade. The effects of secondary copper minerals like chalcocite and covellite are not included in the copper recovery model.

Gold and silver recoveries are not related to UG and estimated using the values shown in Table 12, based on gold and silver feed grade. This model was generated by CCMC using recent operating results. It can be seen that both gold and silver recovery have a very narrow range with limited effect of head grade.

**Table 12: Gold and Silver Recovery Model**

Au, g/t	Au Recovery, %	Ag, g/t	Ag Recovery, %
< 0.14	69.9	< 1.59	79.91
0.14 - 0.16	71.8	1.59 - 2.17	81.43
0.16 - 0.19	73.2	2.17 - 2.76	82.16
> 0.19	74.1	> 2.76	83.75

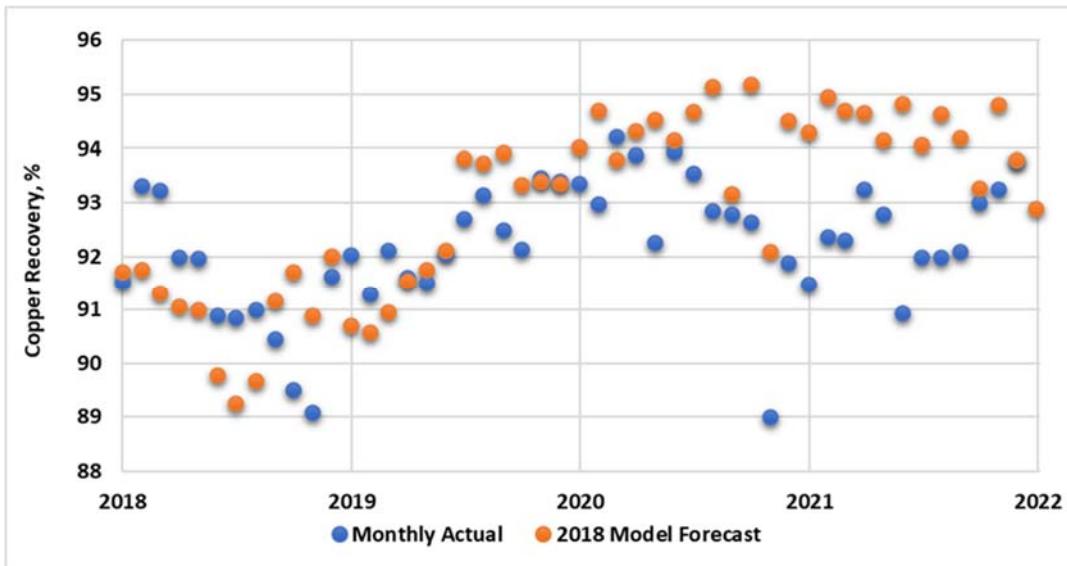
Source: CCMC, 2022



**Figure 22: Copper Recovery Forecasting Model (Schematic)**

Source: CCMC, 2022

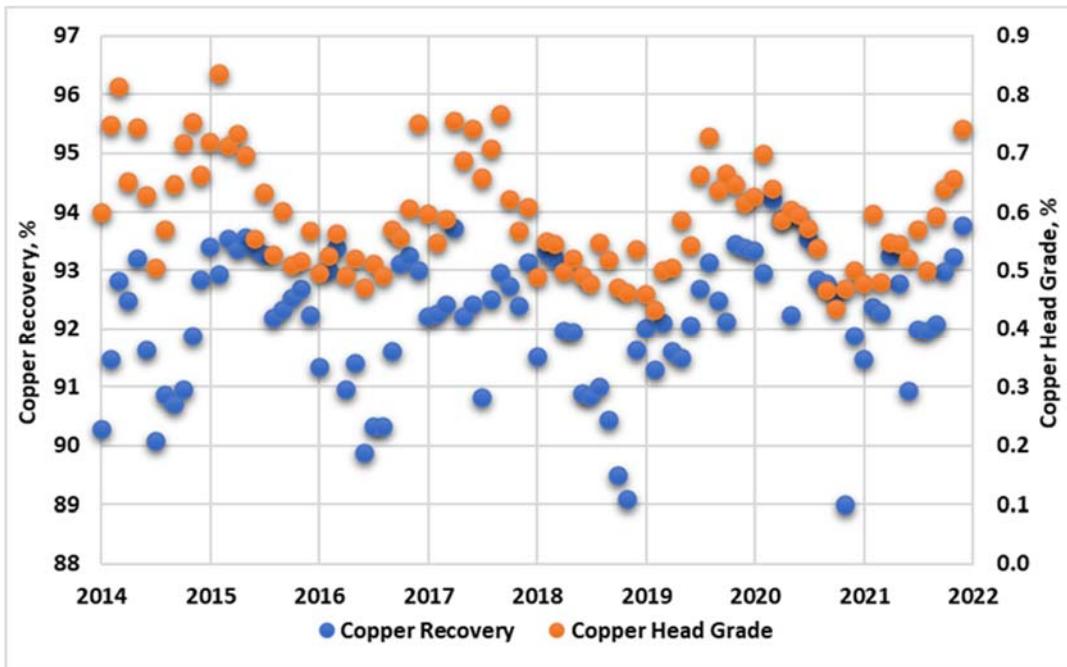
Figure 23 shows monthly copper recovery from 2018 to 2022 compared with model forecasts. The forecast model compares well with actual recoveries from 2018 to mid-2020. After this point, the model overestimates recoveries by up to 2%. It is to be noted that the forecast is prepared with an indication of the ore sourcing (including reclaimed low-grade stockpile material), ore types and respective feed grades, as per the mine plan. Any deviation from this plan are likely to contribute to a differential between the forecast and the actual recoveries realized.



**Figure 23: Copper Recovery (Actual Monthly and 2018 Model Forecast)**

Source: SRK, 2022

Figure 24 shows CCMC plant recovery and feed copper grade on a monthly basis since 2014. Based on operating results, copper grade is the most influential factor on copper recovery followed by throughput and grind size.



**Figure 24: Copper Recovery and Head Grade (Actual Monthly 2014 to 2022)**

Source: SRK, 2022

## 12.4 SRK Comments

The copper recovery model used by CCMC has not been updated for a number of years and since 2020, the model estimates are deviating from actual plant results. It is the authors' opinion that the CCMC recovery model be reviewed and updated to reflect recent plant performance and potentially the greater amount of stockpiled material being processed. (Currently, all stockpiled material is applied the same, discounted recoveries.) Factors such as zinc grade and stockpile ageing may have a greater effect on copper recovery compared to when the model was originally developed.

It is author's opinion that CCMC can improve their recovery and concentrate grade forecasting models, based on recent plant operating data.

## 13 Mineral Resource Estimates

### 13.1 Introduction

Mineral Resource models discussed in this section are updates to 2018 models, documented in the SRK (2018) Technical Report. The Mineral Resources for Minera Candelaria comprise, primarily, the Candelaria iron oxide copper gold deposit. The central area of this deposit is mined by open pit methods and its northeast, south and west flanks are currently mined or planned to be mined by underground methods (Figure 4). The northeast flank of the Candelaria Pit, called Candelaria Underground North Sector, is currently mined by underground methods. In 2018 a new sector, the Wedge Gap, was included. It is located between the Candelaria Underground North Sector and the ultimate limits of the Candelaria Open Pit and will be eventually mined by underground mining methods. In the 2022 update, the Wedge Gap was included in the Candelaria Underground North Mineral Resource model. The Damiana, Susana, Mariana and West areas are located, clockwise in that order, from the south to the west flanks of the Candelaria Open Pit are jointly known as the Candelaria Underground South Sector (Figure 7), being mined by underground methods. In 2018, Mineral Resources were delineated for the first time at the Española project, which is a satellite deposit located 4 kilometres southwest of the Candelaria Open Pit. This area will be mined by open pit methods, starting in 2026.

The Mineral Resources for Minera Ojos del Salado comprise two deposits, Alcaparrosa and Santos, currently being mined by underground mining methods.

Since 2016, the Mineral Resource models are generated by the Resource Definition Department of the Candelaria Copper Mining Complex. The Mineral Resource models for the Candelaria Underground South and North sectors are separated from the Mineral Resource model for the Candelaria Open Pit. These Mineral Resource models of Candelaria Open Pit, Candelaria Underground sectors and Española were updated in 2022 with new drilling information available to December 31, 2021.

The integrated Mineral Resource model for the Santos deposit was expanded in 2018 to include the areas of Veta Isabel (Malaquita SE) and Cuerpo Nuevo. In 2018, the new integrated Mineral Resource model for the Alcaparrosa deposit comprises the seven areas modelled and reported separately until 2017. These Minera Ojos del Salado Mineral Resource models for Alcaparrosa and Santos were updated in 2022 with recent drilling information available to February 28, 2022, and March 31, 2022, respectively.

The authors of this Technical Report reviewed and audited the Mineral Resource models generated by the personnel of the Resource Definition Department of the Candelaria Complex. This section outlines the Mineral Resource estimation methodology and summarizes the key assumptions considered for the preparation of the open pit and underground Mineral Resource models during the third quarter of 2022. Table 13 tabulates the block models updated in 2022.

In the opinion of the qualified person, the Mineral Resource evaluation reported herein is a reasonable representation of the Mineral Resources found at the CCMC at the current level of sampling as of December 31, 2021 for the Candelaria models and March 31, 2022 for the Minera Ojos del Salado models. The Mineral Resources were estimated in conformity with generally accepted *CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines* (November 2019) and are reported in accordance with Canadian Securities Administrators' National Instrument 43-101. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves.

## 13.2 Mineral Resource Estimation and Classification Procedures

In 2022, a similar estimation methodology was adopted for both the Candelaria Open Pit and the Candelaria Underground models (the North Sector and the South Sector). The estimation methodology for the Candelaria Open Pit is discussed in addition to the methodologies for the Candelaria Underground and for the Española project and the Minera Ojos del Salado (Alcaparrosa and Santos) deposits. In the 2022 update, the methodology is largely unchanged from the previous update in 2018. Table 13 below is a tabulation of the different block models with their respective data cut-off and completion dates.

**Table 13: Comparison between 2017 and 2018 Block Models**

Mineral Resource Models 2022	Latest Informing Data	Model Completion Date
Candelaria Open Pit	31/12/2021	31/03/2022
Candelaria Underground South Sector	31/12/2021	11/03/2022
Candelaria Underground North Sector	31/12/2021	31/03/2022
Española Project	31/12/2021	03/03/2022
Integrated Alcaparrosa Underground Model	28/02/2022	22/04/2022
Integrated Santos Model including the Veta Isabel and Cuerpo Nuevo areas	31/03/2022	13/05/2022

### 13.2.1 Minera Candelaria Open Pit and Underground Sectors

The Candelaria Underground South Sector Mineral Resource model includes four areas: Damiana, Susana, Mariana, and West. The Mineral Resource model for the Candelaria Underground North Sector comprises 19 areas (Candelaria Norte, Norte, Lila 1, Lila 2, Lila 3, Lila 4, Lila 5, Lila 6, Lila 7, Lila 8, Lila 9, Lila 10, West North, West Central, West South, Elisa, Elisa North, Elisa North 2, and the Wedge Gap).

The global database available for the 2022 Mineral Resource estimation of the Candelaria Open Pit and the Underground (North and South sectors) include 2,112 (799,591 metres) surface and 2,297 (530,724 metres) underground core boreholes. Percussion drilling and geotechnical holes were not considered for the Mineral Resource estimation. All exploration data are securely managed within the Candelaria Copper Mining Complex Acquire database. Table 14 summarizes the data effectively used for building the different Mineral Resource models of Candelaria Open Pit and Underground Sectors.

At the database cut-off date December 31, 2021, the data informing the Mineral Resources of the Candelaria Open Pit and the Underground South Sector comprised 3,814 core and percussion boreholes (1,128,357 metres). This includes 213 core boreholes (64,315 metres) drilled since 2018. The number of samples effectively used is different for both sectors because the different domains considered in the Open Pit and Underground South Sectors. The data used for the Mineral Resource estimation of the Candelaria Underground North sector is a subset of the total Candelaria district drilling database comprising 2,262 core boreholes (558,067 metres). This includes 398 core boreholes (118,456 metres), drilled since 2018.

The Candelaria Open Pit block model consists of 10- by 10- by 16-metre cells encompassing all the Candelaria Open Pit area and includes the Candelaria Underground South Sector and a portion of the Candelaria Underground North Sector. The block models generated for the Candelaria Underground South, and the Candelaria Underground North, sectors, consist of 5- by 5- by 4-metre cells.

Coded drilling data were used to generate 35-metre spaced transversal (southwest-northeast) sections for the geology and grade boundaries. 35-metre spaced longitudinal (southeast-northwest) sections and 16-metre spaced plans were built for the grade boundaries only. The lithological sections and plans were modelled within MineSight software as polyline files and were used together with the coded drilling data to build the lithological solids through implicit modelling in MineSight and Leapfrog software. The resulting solids were used to code the blocks within the different lithological units. The modelled surface of the Lar fault was used to divide the Open Pit block model in the East and West sectors. Two mineralization types viz. mantos, and veins were also modelled by interpretation on sections and plans. The grade boundaries in sections and plans were used to code all block models as three categories (less than 0.2%, above 0.2%, and above 1.5% copper) called ‘ore types. The combination of the lithological units, mineralization types and three ore types generate the ‘geological units’ or domains coded in the block models.

The individual samples were composited to a 16-metre length, which corresponds to the open pit bench height, for the Open Pit Mineral Resource model, and to a 4-metre length for the Underground Mineral Resource models. The composite copper, gold, silver and zinc grades, and magnetite contents were obtained as averages weighted by the specific gravity and the length of individual samples. The composites were also coded by the geological and ore type codes.

The assessment and modelling of spatial continuity of copper, gold, silver and zinc composites, magnetite content, and specific gravity was performed using the Snowden Supervisor software within geological units and for the East and West sectors separately. All these variables were normal score transformed to analyze their corresponding anisotropy directions through variogram maps and to generate experimental variograms along such directions. The anisotropy directions were verified against the observed grade continuity in blast hole data within the different geological units. The variogram models fitted on the experimental normal scores variograms were back transformed for their use in the estimation of the variables.

The nearest neighbour kriging algorithm (NNK) was used for the estimation of all variables in all Candelaria Mineral Resource models, except for specific gravity where ordinary kriging (OK) was used in the Candelaria Open Pit and the Candelaria Underground South Sector Mineral Resource models. Estimation was performed in two passes. For all metals in all geological units, the first pass used a 100- by 100- by 50-metre search box oriented according to the copper variogram model. The dimensions and orientation of the second pass search ellipsoid for in each geological unit was guided by the second structure of their corresponding copper variogram. For both passes, the minimum and maximum number of composites, and maximum number of composites per borehole were 2, 16 and 3, respectively. This configuration of informing data applied for all Candelaria models, metals, and domains, except for the waste rock mineral type (outside the 0.2% copper grade shell) in the Candelaria Underground North sector, where a minimum of one composite was used. Differently from the metals, the estimation of specific gravity was performed using a spherical search with a minimum of two composites and a maximum of 12, with a maximum of 3 composites per borehole for each lithological type.

Under the NNK estimation process, an outlier search restriction to a distance equivalent to one and a half the lateral cell size (15 metres for the open pit models, 7.5 metres for the Candelaria South Sector and variable distances for different metals and domains for the Candelaria North Sector) was applied to the copper, gold, silver and zinc, and magnetite content exceeding the 97.8 percentile of their corresponding populations within each lithological unit. No outlier restriction was applied for the estimation of the specific gravity in any sector.

The Lar fault surface was used as a hard boundary for the estimation of all variables in the Candelaria Open Pit Mineral Resource model. In all models, Open Pit and Underground, the estimation of copper, gold and silver were constrained by the ore type and the lithological codes. The estimation of zinc, magnetite content and specific gravity was constrained only by the lithological units.

The 0.2% and the 1.5% copper grade shells defining the three main ore types were used as soft and hard boundaries, respectively. The boundaries between lithological units were considered as hard. In Candelaria North, a hard boundary was used between manto and vein types of mineralization. Table 14 summarizes the data and estimation strategy used to build the four different Candelaria Open Pit and Underground Mineral Resource models.

The Mineral Resource models were validated against short-term models generated using blasthole data.

**Table 14: Interpolation Data and Parameters for Candelaria Open Pit and Underground Sectors**

Parameter	Candelaria Open Pit	Candelaria South Susana, Damiana, Mariana, Candelaria West	Candelaria North Integrated Model
<b>Last model date</b>	<b>31/03/2022</b>	<b>11/03/2022</b>	<b>31/03/2022</b>
<b>Drilling</b>			
Type	Core drilling	Core drilling	Core drilling
Number <sup>(1)</sup>	3,814	1,413	2,262
Metres	1,128,357	506,342	558,067
<b>Data</b>			
Samples <sup>(2)</sup>	771,148	301,822	406,328
Compositing	16 m	4 m	4 m
No. Composites	55,888	80,388	116,437
Outlier treatment	Restricted search at 1 ½ the block size for high grades above the 97.8 percentile		
Wireframes	14 Lithological units	12 Lithological units	12 Lithological units
	2 grade shells (0.2% and 1.5% Cu)		
<b>Interpolation</b>			
Domaining	Estimation domains for Cu, Au and Ag built combining lithology and grade shells. Lithology units and the 0.2% Cu grade shell are used as hard boundaries. The 1.5% Cu grade shell is used as a soft boundary. SG, Magnetite and Zn estimated using only lithological domains.		
Variables	Cu, Au, Ag, Zn, Magnetite, SG		
Block model extent (m)	2,600 X 5,100 Y 1,472 Z	2,600 X 2,900 Y 1,700 Z	2,300 X 2,700 Y 1,700 Z
Block size (m)	10 x 10 x 16	5 x 5 x 4	5 x 5 x 4
<b>Method</b>			
Cu, Au, Ag	NNK	NNK	NNK
SG	OK	OK	NNK
Zn	NNK	NNK	NNK
Magnetite	NNK	NNK	NNK
Classification	Measured, Indicated, Inferred	Measured, Indicated, Inferred	Measured, Indicated, Inferred

<sup>(1)</sup> Includes only the boreholes effectively used in the model

<sup>(2)</sup> Includes only samples with copper values and domain assignation

Estimation method: ID = Inverse distance OK = Ordinary Kriging NNK = Nearest Neighbour Kriging

The Mineral Resource classification criteria for all the four Candelaria Open pit and underground models are comparable to those used in 2018. They include the distance to the informing composites and the minimum number of boreholes used for their estimation. In the case of the Candelaria Open Pit, the distance criterion is the distance to the nearest informing composite, whereas for the Candelaria Underground North, and the Candelaria Underground South sectors models, it is the average distance of all informing composites.

Table 15 summarizes the classification criteria for all Candelaria models. Based on these criteria, the final limits between the different categories were smoothed manually to ensure the continuity of the Mineral Resources for the underground models.

**Table 15: Classification Parameters for Candelaria Open Pit and Underground Mineral Resources**

Classification	Number of Informing Boreholes	Distance <sup>1,2</sup> to Informing Composites (m)
Measured	3 or more	Less than 35
Indicated	3 or more	35 to 70
	2	Less than 70
Inferred	1	Less than 100
	2 or more	More than 70

<sup>1</sup> Distance to the nearest informing composites for Candelaria Open Pit

<sup>2</sup> Average distance to informing composites for Candelaria Underground South and Candelaria Underground North.

### 13.2.2 España Project

At the data cut-off date December 31, 2021, the data informing the Mineral Resource model update of the España Project comprised 159 core boreholes (47,437 metres) which included 30,497 assay samples (Table 16). A grade shell at 0.2% total copper was constructed using implicit modelling, as well as solids for 12 lithological units.

The raw assay samples were composited to 8-metre length with the composite grades calculated as averages weighted by the length and specific density of the raw samples. The variogram models were fitted on the experimental covariances of copper, gold, silver, magnetite and zinc and specific gravity per lithological units.

The block model for the España project consists of 10- by 10- by 8-metre cells coded by lithological units, mineral types, and their position inside or outside the grade shell. The NNK algorithm was used for the estimation of all variables using two estimation passes informed by a minimum of three composites, a maximum of 14 and a restriction of at most three composites per borehole. The first pass search consisted of a 150- by 150- by 50-metres box, whereas the dimensions and orientation of second pass search ellipsoid was guided by the ranges and orientation of the second variogram model structure for each variable and lithological unit.

In the estimation process, the influence of high grades exceeding the 97.8 percentile of the population in each lithological unit was restricted to a distance equivalent to one and a half the dimension of the individual blocks, this is 15 metres. The 0.2% copper grade shell encompassing the “Mantos” domain was used as a hard boundary. The lithologic units contacts were considered as soft.

**Table 16: Interpolation Data and Parameters for the Española Project**

Parameter	Española Project
Last Model Date	03/03/2022
<b>Drilling</b>	
Type	Core drilling
Number <sup>(1)</sup>	159
Metres	47,437
<b>Data</b>	
Samples <sup>(2)</sup>	30,497
Compositing	8 m
No. Composites	5,403
Outlier treatment	Restricted search at 1 ½ the block size for high grades above the 97.8 percentile
Wireframes	12 Lithological units, 1 grade shells (0.2% Cu)
<b>Interpolation</b>	
Domaining	Mineral types and the 0.2% Cu grade shell are used as hard boundaries. Lithologic units are considered hard boundaries
Variables	Cu, CuS Au, Ag, Zn, Magnetite, SG
Block model extent (m)	3,600 X 2,600 Y 1,312 Z
Block size (m)	10 x 10 x 8
<b>Method</b>	
Cu, CuS, Au, Ag	NNK
SG	NNK
Zn	NNK
Magnetite	NNK
Classification	Measured, Indicated, Inferred

<sup>(1)</sup> Includes only the boreholes effectively used in the model

<sup>(2)</sup> Includes only samples with copper values and domain assignation

Estimation method: ID = Inverse distance OK = Ordinary Kriging NNK = Nearest Neighbour Kriging

The classification criteria for the Española project are also based on the number of informing boreholes and the average distance of all the informing composites. The average distance thresholds for Measured and Indicated blocks are related to the variogram ranges of first and second structures, respectively, fitted for copper grades in the Mantos domain.

The Mineral Resource Classification criteria for the Española project are summarized in Table 17.

**Table 17: Classification Parameters for the Española Project**

Classification	Number of Informing Boreholes	Average Distance to Informing Composites (m)
Measured	3 or more	Less than 50
Indicated	3 or more	50 to 75
	2	Less than 75
Inferred	1	Less than 100
	2 or more	More than 75

### 13.2.3 Minera Ojos del Salado Underground

Minera Ojos del Salado comprises the Santos and Alcaparrosa underground mines. The 2022 Mineral Resource model update continues to use the integrated model for the Alcaparrosa,

comprising seven sectors, that was adopted in the 2018 update. The seven Alcaparrosa sectors that were modelled separately until 2017 are Alcaparrosa, Caserón 11, North, Northeast, Central, Southwest-Southeast-Central East and Viviana. In 2017, six sectors of the Santos mine, including Melendez North, Melendez Central, Melendez South, Supernova, Helena, and Helena Sur, were integrated into a single Mineral Resource model. In 2018, the integrated Santos model has been expanded to include the areas of Cuerpo Nuevo and Veta Isabel (also known as Malaquita SE).

At the data cut-off date (February 28, 2022), the Alcaparrosa integrated database comprised 1,165 core boreholes (283,133 metres), including 146 infill boreholes (35,206 metres) drilled since 2018 update. For the integrated 2022 Santos Mineral Resource model, the informing database comprises 1,604 boreholes (332,210 metres), including 341 infill boreholes (71,200 metres) drilled since 2018 update. Table 18 presents a summary and estimation strategy used to build the Mineral Resource models for Santos and Alcaparrosa mines.

The methodology used to build the Mineral Resource models for the Santos and Alcaparrosa mines is very similar to what was outlined for the Minera Candelaria Underground sectors. The compositing length (4 metres) and the block size (5- by 5- by 4-metres) are the same as those used for the Candelaria Underground North and South sectors. The main differences include:

- For the Santos mine, drilling information was used to interpret geological and grade sections that were subsequently used to build fault surfaces, nine lithological models, and the 0.2% and 1.5% copper grade shells using implicit modelling within MineSight software. For the Alcaparrosa mine, the drilling information was used directly to build the fault surfaces, nine lithological models, and the 0.2% and 1.5% grade shell by implicit modelling within Leapfrog software. The Santos and Alcaparrosa block models were coded according to the resulting solids.
- The search for outliers, defined as grades exceeding the 97.8 percentile, was restricted to 7.5 metres for the Alcaparrosa and 15 metres and 7.5 metres for manto and vein mineralization, respectively, for the Santos model.
- In both the Alcaparrosa and Santos, copper, gold, silver and zinc and magnetite content were estimated using the NNK algorithm, whereas specific gravity was estimated using OK.
- Between the 0.2% and 1.5% grade shells (medium grade domain), the lithological units work as hard boundaries. However, the lithological solids are treated as soft boundaries outside the 0.2% and within the 1.5% grade shells.
- The 0.2% copper grade shell is considered a soft boundary in the Santos model, but hard in the Alcaparrosa model.
- The estimation of zinc, magnetite content and specific gravity considers only lithological domains and treats their contacts as hard boundaries.
- Similar to the Candelaria models, estimation is performed in two passes. The first pass uses a 100- by 100- by 50-metre box search and the second pass uses a search ellipsoid of size and orientation corresponding to the second structure of the copper variogram model. A minimum of two and a maximum of 16 composites are used to inform the estimation of each block within the search volumes. A maximum of three informing composites per borehole are permitted.

**Table 18: Underground Interpolation Data and Parameters for Santos and Alcaparrosa Mines**

Parameter	Santos Integrated Model	Alcaparrosa Integrated Model
Model Completion Date	13/05/2022	22/04/2022
<b>Drilling</b>		
Type	Core drilling	Core drilling
Number (1)	1,604	1,165
Metres	332,210	283,133
<b>Data</b>		
Samples (2)	258,889	208,435
Compositing	4 m	4 m
No. Composites	73,893	58,592
Outlier treatment	Restricted search at 1 ½ the block size for high grades above the 97.8 percentile	8 Lithological units
Wireframes	10 Lithological units	2 grade shells (0.2 and 1.5% Cu)
<b>Interpolation</b>	Estimation domains for Cu, Au and Ag grades built combining lithology and mineralization. Lithology units and the 0.2% Cu grade shell are used as hard boundaries. The 1.5% Cu grade shell is used as a soft boundary.	
Domaining	SG, Magnetite and Zn estimated using only lithological domains.	
Variables	Cu, Au, Ag, Zn, Magnetite, SG	
Block model extent (m)	3,000 X 3,500 Y 1,500 Z	2,500 X 4,000 Y 2,000 Z
Block size (m)	5 x 5 x 4	5 x 5 x 4
<b>Method</b>		
Cu, Au, Ag	NNK	NNK
SG	OK	OK
Zn	NNK	NNK
Magnetite	NNK	NNK
Classification	Measured, Indicated, Inferred	Measured, Indicated, Inferred

<sup>(1)</sup> Includes only the boreholes effectively used in the model

<sup>(2)</sup> Includes only samples with copper values and domain assignation

Estimation method: ID = Inverse distance OK = Ordinary Kriging NNK = Nearest Neighbour Kriging

Similarly, to the Candelaria Underground North Sector Mineral Resource models, the block models for the Ojos del Salado underground mines were classified based on the average distance of the informing composites to the centres of the blocks and the minimum number of boreholes used to estimate a block (Table 19).

**Table 19: Classification Parameters for Minera Ojos del Salado Underground Mineral Resources, (Alcaparrosa and Santos Mines)**

Classification	Number of Informing Boreholes	Average Distance to Informing Composites (m)
Measured	3 or more	Less than 25
Indicated	3 or more 2	25 to 50 Less than 50
Inferred	1 2 or more	Less than 100 More than 50

### 13.3 SRK Comments

Since acquiring the Candelaria Copper Mining Complex in November 2014, the aggressive exploration programs undertaken by LMC have significantly expanded the Mineral Resource estimates of Minera Candelaria and Minera Ojos del Salado. Since the previous Mineral Resource model update in 2018, exploration continued in all the Candelaria and Ojos del Salado deposits and this led to an increase, in contained copper metal, of about 21% of the global Measured and Indicated Mineral Resources, compared to 2018 update. Other factors driving this increase include lowering of the reporting cut-off grades. In 2022, the La Española Open Pit cut-off grade was reduced from 0.20 to 0.17% copper, and for the underground Mineral Resources, the cut-off grade was lowered from 0.55 to 0.40% copper for the Candelaria and from 0.55 to 0.45% copper for the Ojos del Salado. The increase in the Indicated Mineral Resource for the Candelaria Underground (North and South sectors) contributes bulk of the (about 90%) increase in copper metal in 2022.

All of the four models for the underground deposits have now been completely integrated and expanded to extend over future areas of exploration. Since 2017, all new or updated Mineral Resource models for Minera Candelaria and Minera Ojos del Salado have been built by the Resource Definition Department of the Candelaria Copper Mining Complex. This centralization has resulted in a more consistent Mineral Resource estimation methodology applied to the different deposits. The integration of the models and the standardization of the estimation methodology across all mines and for most variables represents an important milestone that will undoubtedly prove helpful for future exploration for the extensions of the sulphide mineralization. The success of the exploration programs has had a positive impact on the life of the operations, particularly at the underground mines. The Resource Definition Department has a continuous improvement plan in place, for the Mineral Resource modelling practices, as new exploration and production data become available.

The qualified person is of the opinion that the exploration program proposed for the period 2023 to 2027 has the potential to expand further the Mineral Resources of the Candelaria Copper Mining Complex amenable to both underground and open pit extraction, with a likely positive impact on the LOM.

### 13.4 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) defines a Mineral Resource as:

*“A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”*

According to the *CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* (November 2019) the “reasonable prospects for eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade that considers extraction scenarios and processing recoveries.

To demonstrate “reasonable prospects for eventual economic extraction (RPEEE)”, reported open pit Mineral Resources have been constrained within the limit of an optimized pit shell. For reported underground Mineral Resources, the spatial continuity of the mineralization was evaluated using different stope volumes with minimum of 2,500 cubic metres. Volumes of continuous cluster of blocks, above different threshold stope volumes, were compared. The qualified person confirmed that 99% of reported underground Mineral resources are confined to clusters of blocks having volume more than 10,000 cubic metre, which would satisfy minimum mining volume constraints. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. Although the qualified person is satisfied that the reported Mineral Resources amenable for underground extraction satisfy the RPEEE criteria, it is recommended that continuously updated constraining volumes be created at each underground mine based on operational data to proactively manage reported underground Mineral Resources.

There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves.

The audited Mineral Resource Statement for Minera Candelaria is presented in Table 20. Open pit Mineral Resources are reported within a conceptual Lerchs-Grossman pit shell based on metal prices of US\$4.02 per pound of copper and US\$1,600 per ounce of gold and at a cut-off grade of 0.15% copper for the Candelaria Open pit and 0.17% copper for the Espanola project. Underground Mineral Resources from Candelaria Underground (North Sector) and Candelaria Underground (South Sector) are reported at a cut-off grade of 0.40% copper.

Table 20 also includes a contribution from various operational work-in-progress stockpiles and depleted based on actual production until November 30, 2022 and forecast production for the month of December 2022. Mineral Resources are reported inclusive of Mineral Reserves.

**Table 20: Audited Mineral Resource Statement\*, Compañía Contractual Minera Candelaria, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity Tonnes (000s)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Candelaria Open Pit</b>							
Measured	442,494	0.44	0.10	1.55	1,947	1,423	22,051
Indicated	35,579	0.28	0.07	1.12	100	80	1,281
<b>Total Measured and Indicated</b>	<b>478,073</b>	<b>0.43</b>	<b>0.10</b>	<b>1.52</b>	<b>2,047</b>	<b>1,503</b>	<b>23,332</b>
Inferred	5,556	0.23	0.05	0.82	12.78	9	146
<b>La Española</b>							
Measured	35,696	0.40	0.08	0.36	143	92	413
Indicated	53,066	0.38	0.07	0.37	202	119	631
<b>Total Measured and Indicated</b>	<b>88,762</b>	<b>0.39</b>	<b>0.07</b>	<b>0.37</b>	<b>344</b>	<b>211</b>	<b>1,044</b>
Inferred	81,774	0.30	0.05	0.28	245	131	736
<b>Candelaria WIP**</b>							
Measured	77,830	0.28	0.09	1.47	220	214	3,686
Indicated							
<b>Total Measured and Indicated</b>	<b>77,830</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>220</b>	<b>214</b>	<b>3,686</b>
Inferred							
<b>Candelaria Underground</b>							
Measured	178,354	0.84	0.19	3.56	1,504	1,077	20,430
Indicated	238,212	0.78	0.17	3.12	1,848	1,316	23,867
<b>Total Measured and Indicated</b>	<b>416,566</b>	<b>0.80</b>	<b>0.18</b>	<b>3.31</b>	<b>3,352</b>	<b>2,393</b>	<b>44,296</b>
Inferred	38,373	0.75	0.17	2.44	288	208	3,011
<b>Candelaria Total</b>							
Measured	734,374	0.52	0.12	1.97	3,814	2,806	46,580
Indicated	326,857	0.66	0.14	2.45	2,150	1,515	25,779
<b>Total Measured and Indicated</b>	<b>1,061,231</b>	<b>0.56</b>	<b>0.13</b>	<b>2.12</b>	<b>5,964</b>	<b>4,321</b>	<b>72,359</b>
Inferred	125,703	0.43	0.09	0.96	546	349	3,894

\* Reported within the boundaries of the Minera Candelaria property. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources include Mineral Reserves. Open pit Mineral Resources are reported at a cut-off grade of 0.15% copper for the Candelaria Open Pit and 0.17% copper for the La Española Project, within conceptual pit shells based on metal prices of US\$4.02 per pound of copper and US\$1,600 per ounce of gold and current topography. Underground Mineral Resources are reported at a cut-off grade of 0.40% copper.

\*\* Work-in-progress (WIP) stockpiles.

The audited Mineral Resource Statement for Minera Ojos del Salado is presented in Table 21. The Mineral Resources for the underground Santos and Alcaparrosa mines are reported at a cut-off grade of 0.45% copper.

**Table 21: Audited Mineral Resource Statement\*, Compañía Contractual Minera Ojos del Salado, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Tonnes (000s)	Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Santos Underground</b>							
Measured	48,027	0.94	0.21	1.91	451	324	2,949
Indicated	48,622	0.87	0.20	2.07	423	313	3,236
<b>Measured and Indicated</b>	<b>96,649</b>	<b>0.90</b>	<b>0.20</b>	<b>1.99</b>	<b>874</b>	<b>637</b>	<b>6,185</b>
Inferred	22,445	0.87	0.18	2.25	195	130	1,624
<b>Alcaparrosa Underground</b>							
Measured	44,292	0.85	0.17	0.82	376	242	1,168
Indicated	30,079	0.74	0.14	0.94	223	135	909
<b>Measured and Indicated</b>	<b>74,371</b>	<b>0.81</b>	<b>0.16</b>	<b>0.87</b>	<b>599</b>	<b>377</b>	<b>2,077</b>
Inferred	1,435	0.99	0.14	1.15	14	6	53
<b>WIP** Ojos del Salado</b>							
Measured	146	1.06	0.23	2.47	2	1	12
Indicated							
<b>Measured and Indicated</b>	<b>146</b>	<b>1.06</b>	<b>0.23</b>	<b>2.47</b>	<b>1.55</b>	<b>1</b>	<b>12</b>
Inferred							
<b>Total Ojos del Salado</b>							
Measured	92,465	0.90	0.19	1.39	829	567	4,129
Indicated	78,701	0.82	0.18	1.64	646	448	4,145
<b>Measured and Indicated</b>	<b>171,166</b>	<b>0.86</b>	<b>0.18</b>	<b>1.50</b>	<b>1,475</b>	<b>1,015</b>	<b>8,273</b>
Inferred	23,880	0.88	0.18	2.18	209	136	1,677

\* Reported within the boundaries of the Minera Ojos del Salado property. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. Mineral Resources include Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates. Reported at a cut-off grade of 0.45% copper, based on metal price of US\$4.02 per pound of copper and US\$1,600 per ounce of gold.

\*\* Work-in-progress (WIP) stockpiles

The audited combined Mineral Resource Statement for the Candelaria Copper Mining Complex is presented in Table 22.

**Table 22: Consolidated Audited Mineral Resource Statement\*, Candelaria Copper Mining Complex, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity Tonnes (000s)	Copper (%)	Grade Gold (g/t)	Silver (g/t)	Contained Metal Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>District Open Pit</b>							
Measured	478,190	0.44	0.10	1.46	2,090	1,514	22,464
Indicated	88,645	0.34	0.07	0.67	301	200	1,912
<b>Measured and Indicated</b>	<b>566,835</b>	<b>0.42</b>	<b>0.09</b>	<b>1.34</b>	<b>2,391</b>	<b>1,714</b>	<b>24,377</b>
Inferred	87,330	0.30	0.05	0.31	258	140	883
<b>Candelaria WIP**</b>							
Measured	77,830	0.28	0.09	1.47	220	214	3,686
Indicated							
<b>Measured and Indicated</b>	<b>77,830</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>220</b>	<b>214</b>	<b>3,686</b>
<b>District Underground</b>							
Measured	270,673	0.86	0.19	2.82	2,332	1,644	24,547
Indicated	316,913	0.79	0.17	2.75	2,494	1,764	28,012
<b>Measured and Indicated</b>	<b>587,586</b>	<b>0.82</b>	<b>0.18</b>	<b>2.78</b>	<b>4,826</b>	<b>3,407</b>	<b>52,558</b>
Inferred	62,253	0.80	0.17	2.34	498	345	4,688
<b>WIP Ojos del Salado</b>							
Measured	146	1.06	0.23	2.47	2	1	12
Indicated							
<b>Measured and Indicated</b>	<b>146</b>	<b>1.06</b>	<b>0.23</b>	<b>2.47</b>	<b>2</b>	<b>1</b>	<b>12</b>
<b>District Total</b>							
Measured	826,839	0.56	0.13	1.91	4,644	3,373	50,708
Indicated	405,558	0.69	0.15	2.29	2,795	1,963	29,924
<b>Measured and Indicated</b>	<b>1,232,397</b>	<b>0.60</b>	<b>0.13</b>	<b>2.04</b>	<b>7,439</b>	<b>5,337</b>	<b>80,632</b>
Inferred	149,583	0.51	0.10	1.16	756	485	5,570

\* Reported within the boundaries of the Minera Candelaria and Ojos del Salado properties. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources include Mineral Reserves. Open pit Mineral Resources are reported at a cut-off grade of 0.15% copper for the Candelaria Open Pit and 0.17% copper for the España project, within conceptual pit shells based on metal prices of US\$4.02 per pound of copper and US\$1,600 per ounce of gold and current topography. Underground Mineral Resources are reported at a cut-off grade of 0.40% and 0.45% copper for the Candelaria North and South sectors and Ojos del Salado, respectively.

\*\* Work-in-progress (WIP) stockpiles

## 13.5 Reconciliation

The Candelaria Open Pit Mineral Resource model (the Long-Term model) is compared to grade control models (the Short-Term model) and to the production reports (as mined) monthly. Grade control models are generated from closely spaced blast hole data, whereas Mineral Resource models are derived from exploration core drilling data. The tonnages in mine production reports are estimated from the number and capacity of trucks operating in the different mines and the grades are taken from the grade control model.

A monthly reconciliation between the Mineral Resource model (Long-Term), the grade control model (Short-Term) and As Mined for the Candelaria Open Pit for the period of June 2018 to June 2022 is presented in Table 23. Over that period, the long-term and short-term models are in close agreement. The minor decrease in overall tonnes and grade in the short-term model may be due to dilution.

Monthly reconciliation is also undertaken between underground Mineral Resource models (Long-Term) and Short-Term models, estimated from down-the-hole boreholes sampling, which is used for production grade control. Table 24, Table 25 and Table 26 present the monthly reconciliation between the Mineral Resources, the grade control models for the Candelaria Underground (North Sector), Santos and Alcaparrosa underground mines for the period of July 2018 to December 2020. Over that period the long and short-term models for the Candelaria Underground North Sector and Alcaparrosa mine are in close agreement, overall. The Santos long-term model, however, is slightly optimistic when compared to the short-term model in terms of copper grades. The larger tonnages and lower grades generally reported for the three underground mines in relation to the long-term model can largely be attributed to external dilution during mining.

From January 2021 to present, monthly reconciliation for Candelaria Underground, Santos and Alcaparrosa was halted. CCMC staff plan to resume tracking monthly reconciliation for these sections starting in 2023.

**Table 23: Monthly Reconciliation between Long Term and Short-Term Models and the Production for the Candelaria Open Pit, Compañía Contractual Minera Candelaria (June 2018 to July 2022)**

Period	Long Term (LP)			Short Term (LP)			As Mined		
	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)
Jun-18	132	1.01	1.3	109	0.86	0.9			
Jul-18	211	0.9	1.9	205	0.69	1.4			
Aug-18	444	0.69	3.1	452	0.66	3			
Sep-18	555	0.71	4	532	0.72	3.8			
Oct-18	485	0.54	2.6	381	0.56	2.1			
Nov-18	431	0.48	2.1	328	0.53	1.7			
Dec-18	451	0.53	2.4	416	0.55	2.3			
Jan-19	333	0.44	1.5	297	0.49	1.5			
Feb-19	353	0.69	2.4	346	0.7	2.4			
Mar-19	840	0.55	4.7	926	0.68	6.3	1,024	0.67	6.9
Apr-19	659	0.6	4	812	0.68	5.5	917	0.68	6.3
May-19	1,335	0.73	9.7	1,524	0.72	10.9	1,213	0.64	7.8
Jun-19	937	0.51	4.8	1,009	0.66	6.7	1,085	0.54	5.9
Jul-19	2,178	0.62	13.6	2,322	0.72	16.8	1,827	0.84	15.4
Aug-19	2,164	0.6	13	2,157	0.67	14.5	1,451	0.84	12.2
Sep-19	2,017	0.54	10.9	2,194	0.61	13.4	1,234	0.65	8.1
Oct-19	1,418	0.71	10	1,338	0.77	10.3	1,265	0.66	8.4
Nov-19	1,894	0.6	11.3	1,517	0.63	9.6	1,319	0.60	7.9
Dec-19	2,071	0.56	11.6	1,980	0.54	10.6	1,984	0.50	9.9
Jan-20	1,413	0.54	7.7	1,472	0.61	8.9	1,468	0.56	8.3
Feb-20	1,357	1.02	13.8	1,542	0.74	11.4	1,640	0.66	10.8
Mar-20	1,207	0.67	8.1	1,223	0.63	7.7	996	0.58	5.7
Apr-20	1,100	0.64	7.1	1,278	0.61	7.7	1,114	0.55	6.1
May-20	1,070	0.93	10	1,112	0.82	9.1	1,621	0.54	8.7
Jun-20	1,154	0.7	8.1	859	0.72	6.2	1,139	0.59	6.7
Jul-20	1,480	0.62	9.2	1,421	0.54	7.7	1,543	0.56	8.6
Aug-20	608	0.6	3.6	422	0.48	2	560	0.46	2.6
Sep-20	547	0.61	3.3	464	0.42	1.9	515	0.40	2.1
Oct-20	77	0.43	0.3	91	0.4	0.4	167	0.40	0.7
Nov-20	1	0.7	0	1	0.54	0	9	0.43	0.0
Dec-20	795	0.58	4.6	640	0.44	2.8	691	0.39	2.7
Jan-21	711	0.53	3.8	707	0.52	3.7	854	0.53	4.5
Feb-21	613	0.72	4.4	686	0.69	4.8	714	0.72	5.2
Mar-21	443	0.52	2.3	579	0.57	3.3	578	0.60	3.4
Apr-21	561	0.63	3.5	591	0.7	4.1	709	0.66	4.7
May-21	507	0.76	3.9	621	0.7	4.4	550	0.66	3.6
Jun-21	449	0.66	3	553	0.64	3.5	597	0.68	4.1
Jul-21	855	0.6	5.1	1,049	0.59	6.2	1,005	0.56	5.6
Aug-21	931	0.61	5.7	933	0.63	5.9	966	0.63	6.1
Sep-21	806	0.63	5.1	803	0.65	5.2	813	0.63	5.1
Oct-21	900	0.7	6.3	1,090	0.67	7.3	1,186	0.66	7.8
Nov-21	1,261	0.68	8.6	1,241	0.72	9	1,326	0.73	9.7
Dec-21	1,473	0.73	10.8	1,530	0.76	11.7	1,702	0.74	12.7
Jan-22	1,140	0.83	9.5	1,188	0.77	9.1	1,155	0.77	9.0
Feb-22	690	0.67	4.6	705	0.66	4.7	823	0.62	5.1
Mar-22	880	0.65	5.7	723	0.68	4.9	1,017	0.68	7.0
Apr-22	1,260	0.78	9.8	1,233	0.66	8.1	1,435	0.66	9.4
May-22	793	0.88	7	769	0.78	6	1,208	0.65	7.8
Jun-22	1,155	0.57	6.6	1,056	0.66	7	1,435	0.63	9.1
Jul-22	1,213	0.64	7.8	1,055	0.73	7.7	1,590	0.66	10.5
<b>Total</b>	<b>46,358</b>	<b>0.66</b>	<b>304.2</b>	<b>46,482</b>	<b>0.66</b>	<b>306.1</b>	<b>44,446</b>	<b>0.63</b>	<b>282.0</b>
Overall relative difference *				-0.27%	-0.53%	-0.62%	4.12%	3.18%	7.30%

\*Measured against Long Term Model

**Table 24: Monthly Reconciliation between Long and Short-Term Models for the Candelaria Underground (North Sector), Minera Candelaria (June 2018 to December 2020)**

Period	Long Term (LP)			Short Term (LP)			As Mined		
	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)
Jun-18	239	1.19	2.8	239	0.99	2.4	279	0.92	2.6
Jul-18	243	1.01	2.4	243	0.86	2.1	277	0.84	2.3
Aug-18	249	1.02	2.5	249	1.14	2.8	281	1.04	2.9
Sep-18	230	1.03	2.4	230	1.07	2.5	303	1.00	3.0
Oct-18	248	1.24	3.1	248	1.11	2.8	288	0.89	2.6
Nov-18	222	0.96	2.1	222	1.07	2.4	280	0.96	2.7
Dec-18	255	0.97	2.5	255	1.09	2.8	315	0.99	3.1
Jan-19	253	0.98	2.5	253	1.14	2.9	320	1.05	3.4
Feb-19	265	0.83	2.2	265	1.11	2.9	308	1.02	3.1
Mar-19	290	0.8	2.3	290	1.06	3.1	351	1.01	3.5
Apr-19	255	0.8	2	255	1.03	2.6	314	0.99	3.1
May-19	264	0.75	2	264	0.85	2.2	314	0.80	2.5
Jun-19	274	1.13	3.1	274	1.03	2.8	324	0.96	3.1
Jul-19	267	1.14	3	267	0.94	2.5	337	0.91	3.1
Aug-19	282	1.12	3.2	282	1.19	3.4	339	1.08	3.7
Sep-19	286	1.15	3.3	286	1.14	3.3	337	1.05	3.5
Oct-19	329	1.21	4	329	1.11	3.7	383	1.06	4.1
Nov-19	317	1.26	4	317	1.22	3.9	404	1.12	4.5
Dec-19	361	1.29	4.7	361	1.07	3.8	433	0.98	4.2
Jan-20	343	1.35	4.6	343	1.14	3.9	413	0.95	3.9
Feb-20	306	1.35	4.1	306	1.11	3.4	384	1.01	3.9
Mar-20	355	1.3	4.6	355	1.07	3.8	423	0.99	4.2
Apr-20	353	1.39	4.9	353	1.07	3.8	433	0.98	4.3
May-20	338	1.56	5.3	338	1.19	4	435	1.04	4.5
Jun-20	314	1.04	3.3	314	0.79	2.5	417	0.84	3.5
Jul-20	334	0.85	2.8	334	1.1	3.7	441	1.00	4.4
Aug-20	343	0.78	2.7	343	0.78	2.7	448	1.17	5.3
Sep-20	348	0.89	3.1	348	0.89	3.1	394	0.86	3.4
Oct-20	159	1.01	1.6	159	1.01	1.6	195	0.93	1.8
Nov-20	33	0.98	0.3	33	0.98	0.3	37	0.93	0.3
Dec-20	355	0.94	3.3	355	0.94	3.3	432	0.87	3.8
<b>Total</b>	<b>8,710</b>	<b>1.09</b>	<b>94.7</b>	<b>8,710</b>	<b>1.04</b>	<b>91</b>	<b>10,639</b>	<b>0.98</b>	<b>104.3</b>
Overall relative difference *				0.00%	4.2%	3.9%	-22.1%	6.0%	--14.6%

\*Measured against Long Term Model

**Table 25: Monthly Reconciliation between Long and Short -Term Models for the Santos Mine, Minera Ojos del Salado (June 2018 to December 2020)**

Period	Long Term (LP)			Short Term (LP)			As Mined		
	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)
Jun-18	151	1.19	1.8	151	1.09	1.6	157	1.13	1.8
Jul-18	158	1.27	2	158	1.23	1.9	169	1.18	2.0
Aug-18	165	1.01	1.7	165	0.97	1.6	165	0.97	1.6
Sep-18	150	1	1.5	150	0.91	1.4	149	0.93	1.4
Oct-18	158	0.98	1.5	158	1.02	1.6	161	1.01	1.6
Nov-18	142	1.11	1.6	142	1.19	1.7	153	1.16	1.8
Dec-18	143	1.09	1.6	143	1.14	1.6	141	1.15	1.6
Jan-19	151	0.92	1.4	151	1.05	1.6	157	1.03	1.6
Feb-19	123	0.92	1.1	123	1.04	1.3	129	1.02	1.3
Mar-19	147	1.23	1.8	147	1.04	1.5	154	1.03	1.6
Apr-19	126	1.16	1.5	126	1.11	1.4	141	1.04	1.5
May-19	144	1.24	1.8	144	1.14	1.6	156	1.02	1.6
Jun-19	135	1.24	1.7	135	1.1	1.5	146	1.01	1.5
Jul-19	138	1.22	1.7	138	1.06	1.5	144	1.04	1.5
Aug-19	158	1.27	2	158	1.11	1.8	163	1.12	1.8
Sep-19	146	1.3	1.9	146	1.16	1.7	148	1.10	1.6
Oct-19	151	1.31	2	151	1.18	1.8	157	1.10	1.7
Nov-19	155	1.2	1.9	155	1.22	1.9	156	1.16	1.8
Dec-19	158	1.11	1.8	158	1.17	1.8	164	1.11	1.8
Jan-20	154	1.1	1.7	154	1.16	1.8	160	1.10	1.8
Feb-20	146	1.06	1.6	146	1.04	1.5	149	0.89	1.3
Mar-20	154	1.08	1.7	154	0.99	1.5	157	0.83	1.3
Apr-20	152	1.08	1.6	152	1.03	1.6	153	0.93	1.4
May-20	153	1.01	1.5	153	0.94	1.4	165	0.96	1.6
Jun-20	151	0.95	1.4	151	0.95	1.4	161	0.94	1.5
Jul-20	163	1.05	1.7	163	1.04	1.7	166	1.04	1.7
Aug-20	165	1.18	1.9	165	1.18	1.9	165	1.09	1.8
Sep-20	165	1.2	2	165	1.2	2	165	1.05	1.7
Oct-20	145	1.08	1.6	145	1.11	1.6	145	1.00	1.5
Nov-20	126	1.36	1.7	126	1.31	1.6	126	1.12	1.4
Dec-20	153	1.15	1.8	153	1.16	1.8	153	1.15	1.8
<b>Total</b>	<b>4,626</b>	<b>1.13</b>	<b>52.5</b>	<b>4,626</b>	<b>1.10</b>	<b>50.6</b>	<b>4,775</b>	<b>1.05</b>	<b>49.9</b>
Overall relative difference *			0.00%	2.9%	3.6%	-3.2%	4.7%	1.4%	

\*Measured against Long Term Model

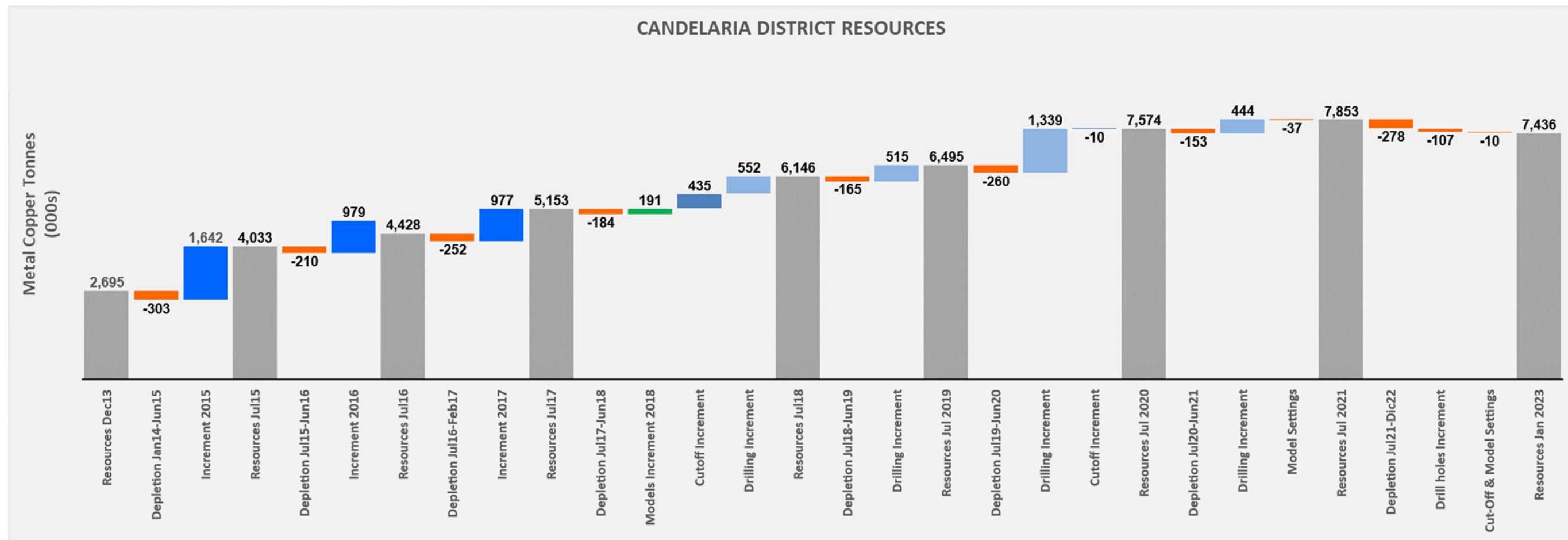
**Table 26: Monthly Reconciliation between Long and Short-Term Models for the Alcaparrosa Mine, Minera Ojos del Salado (June 2018 to December 2020)**

Period	Long Term (LP)			Short Term (LP)			As Mined		
	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)	Quantity 000(t)	Grade TCu (%)	Metal Cu (kt)
Jun-18	130	0.75	1	130	0.75	1	143	0.74	1.1
Jul-18	120	0.9	1.1	120	0.85	1	140	0.81	1.1
Aug-18	120	1.29	1.5	120	0.95	1.1	136	0.89	1.2
Sep-18	118	1.08	1.3	118	0.97	1.1	141	0.91	1.3
Oct-18	120	0.91	1.1	120	0.91	1.1	138	0.88	1.2
Nov-18	122	0.86	1	122	1.05	1.3	140	0.99	1.4
Dec-18	126	1.03	1.3	126	1.06	1.3	146	0.99	1.4
Jan-19	124	1.01	1.2	124	1.03	1.3	142	0.98	1.4
Feb-19	111	0.92	1	111	1.12	1.2	133	1.03	1.4
Mar-19	124	0.88	1.1	124	1.05	1.3	142	0.96	1.4
Apr-19	125	0.76	1	125	0.96	1.2	137	0.90	1.2
May-19	129	0.87	1.1	129	0.95	1.2	145	0.89	1.3
Jun-19	124	1.03	1.3	124	0.85	1.1	146	0.80	1.2
Jul-19	120	0.77	0.9	120	0.79	1	138	0.74	1.0
Aug-19	123	0.78	1	123	0.78	1	143	0.75	1.1
Sep-19	114	0.77	0.9	114	0.89	1	133	0.88	1.2
Oct-19	113	0.91	1	113	0.92	1	137	0.88	1.2
Nov-19	110	0.87	1	110	0.9	1	134	0.83	1.1
Dec-19	131	1.12	1.5	131	1.12	1.5	147	0.95	1.4
Jan-20	122	1.03	1.3	122	0.91	1.1	141	0.90	1.3
Feb-20	109	0.87	0.9	109	0.82	0.9	136	0.80	1.1
Mar-20	127	0.78	1	127	0.91	1.2	135	0.87	1.2
Apr-20	119	0.66	0.8	119	0.81	1	137	0.75	1.0
May-20	131	0.74	1	131	0.75	1	142	0.77	1.1
Jun-20	123	0.74	0.9	123	0.77	0.9	138	0.76	1.1
Jul-20	125	0.97	1.2	125	0.97	1.2	136	0.92	1.3
Aug-20	143	0.91	1.3	143	0.91	1.3	143	0.89	1.3
Sep-20	142	0.87	1.2	142	0.87	1.2	142	0.94	1.3
Oct-20	78	0.83	0.7	78	0.83	0.7	78	0.91	0.7
Nov-20	44	0.8	0.4	44	0.8	0.4	22	0.85	0.2
Dec-20	161	0.94	1.5	161	0.94	1.5	168	0.91	1.5
<b>Total</b>	<b>3,728</b>	<b>0.90</b>	<b>33.5</b>	<b>3,728</b>	<b>0.91</b>	<b>34.1</b>	<b>4,179</b>	<b>0.87</b>	<b>36.7</b>
Overall relative difference *				0.00%	-2.0%	-1.8%	-12.1%	4.3%	-7.6%

\*Measured against Long Term Model

The waterfall charts in Figure 25 summarizes the sources of the changes observed from December 2013 to December 2022 in the combined Measured and Indicated Mineral Resources for Minera Candelaria, Minera Ojos del Salado, and the entire district plus the stockpiles (WIP).

Measured and Indicated Mineral Resources have been steadily increasing since 2014 primarily due to the sustained exploration and infill drilling. During 2017-2020, there was a substantial increment in Measured and Indicated Mineral Resources. In 2018, the exploration efforts have resulted in the addition of the Española project to Minera Candelaria Mineral Resources and the expansion of the Santos and Alcaparrosa Mineral Resource models for Minera Ojos del Salado. The lowering of the underground and open pit cut-off grades for both companies in 2022 have resulted in gains that largely exceed the loses of Measured and Indicated Mineral Resources by depletion. In 2020, underground drilling efforts resulted in a significant increase in Mineral Resources for Candelaria UG Norte, Alcaparrosa and Santos areas.



**Figure 25: Waterfall Charts Showing Variation in Measured and Indicated Mineral Resources Between 2013 and 2022**

Measured and Indicated Mineral Resources (expressed as copper metal content) in the Candelaria Open Pit, the Española project, Candelaria Underground (North and South Sectors), Alcaparrosa and Santos mine.

## 14 Mineral Reserve Estimates

### 14.1 Commercial Orientation

Mineral Reserves of the CCMC were estimated by the Candelaria Copper Mining Complex Technical Services Open Pit and Underground Departments. The Mineral Reserves are based on the December 31, 2022 Measured and Indicated Mineral Resources.

The mining costs correspond to the average of the last three years of operating costs of the mine and processing plant. Diesel and energy costs were provided by the Company's supplies department including sustaining capital and general administration expenses.

The Mineral Reserve estimate is based on the December 2022 LOM production plan. The optimized pit design will be mined in Phases 10 through 13 and new design of the España open pit. The plan includes Candelaria underground North and South sectors and also the Santos mines. Mineralized materials from the Alcaparrosa mine have been excluded from the LOM plan and Mineral Reserves documented in this Technical Report due to a sinkhole incident which occurred in late 2022.

The exchange rate and metal price assumptions for copper and co-products silver and gold are shown in Table 27.

**Table 27: LMC Metal Price Assumptions for Mineral Reserves, December 31, 2022**

Metal Prices	Unit	Dec 2022
Copper	US\$/lb	3.35
Silver	US\$oz	22.00
Gold	\$/oz	1,600
Exchange Rates	Unit	
Chilean Peso	Peso/US\$	700

### 14.2 Minera Candelaria

#### 14.2.1 Candelaria Open Pit Mineral Reserves

The Candelaria Open Pit Mineral Reserve estimates were prepared by the Technical Services Open Pit Department and are based on the Measured and Indicated Mineral Resources. The Mineral Reserve estimates are based on a LOM plan and open pit designs developed using modifying parameters including metal prices, metal recovery based on performance of the processing plant, operating cost estimates, and sustaining capital cost estimates based on the production schedule and equipment requirements.

The Mineral Reserve estimation process involved the following tasks:

- Selection of optimization parameters
- Pit optimization to define optimum pit limit using the Lerchs-Grossman algorithm
- Selection of mining cut-off grade
- Preparation of a pit design, including pit phases
- Preparation of a LOM production schedule
- Tabulation of Mineral Reserve Statement

Table 28 summarizes the optimization parameters used for the disclosure of Mineral Reserves for December 31, 2022.

**Table 28: Summary of Pit Optimization Parameters as of December 31, 2022**

<b>Basic Design Parameters</b>	<b>Units</b>	<b>Parameter Value</b>
Copper	US\$/lb-Cu	3.35
Gold	US\$/oz-Au	1,600
Silver	US\$/oz-Ag	22.00
Discount Rate	%	10.0%
Average vertical advance rate	bench/yr/PB	8
Long term power cost assumption	US\$/kWh	0.08
Long term diesel cost assumption (delivered)	US\$/US Gal.	2.39
<b>Mining</b>		
Mining costs (no haulage)	US\$/dmt-Mined	1.74
Stockpile re-handling costs (no haulage)	US\$/dmt-Mined	0.874
Haulage increment/dmt/bench	US\$/dmt-Mined	0.026
Fixed mill ore haulage cost	US\$/dmt-Mined	0.31
Fixed waste haulage cost	US\$/dmt-Mined	0.64
Mine equipment capital annuity	US\$/dmt-Mined	0.12
<b>Milling Rate</b>	<b>ktpd</b>	<b>75</b>
Crushing cost	US\$/dmt-Milled	0.24
Milling cost	US\$/dmt-Milled	5.95
Mill sustaining capital allowance	US\$/dmt-Milled	0.18
G&A assigned to mill	US\$/dmt-Milled	2.09
<b>Total Cost</b>	<b>US\$/dmt-Milled</b>	<b>8.45</b>
<b>Downstream Costs</b>		
Concentrate moisture	%	9.5
Concentrate copper grade	%-Cu	30.20
Freight cost	US\$/wmt	49.50
Freight cost (concentrate)	US\$/dmt-Concentrate	54.70
Smelting	US\$/dmt- Concentrate	90.00
Refining	US\$/lb-Cu	0.09
Transportation loss allowance	%-loss	0.20
Net smelter payment incl. trans loss	%-payable	96.5
By-product credits gold, silver, iron	US\$/lb-Cu	0.530
<b>Costs /lb W/ By-product Credits</b>	<b>US\$/lb-Cu</b>	<b>(0.212)</b>
<b>w/o Credits</b>	<b>US\$/lb-Cu</b>	<b>0.318</b>
<b>Royalty</b>	<b>US\$/lb-Cu</b>	<b>n/a</b>
<b>By Product Credits</b>		
Gold content in copper concentrate	g/dmt	5.46
Gold payable term	%	96.0
Gold refining cost	US\$/oz	5.00
Silver content in copper concentrate	g/dmt	87.8
Silver payable term	%	90.0
Silver refining cost	US\$/oz	0.35
Payable gold	US\$/lb-Cu	0.419
Payable silver	US\$/lb-Cu	0.087
Other credits	US\$/lb-Cu	0.024
<b>By-Product Credits</b>	<b>US\$/lb-Cu</b>	<b>0.530</b>
<b>Downstream Costs</b>	<b>US\$/lb-Cu</b>	
Concentrate freight	US\$/lb-Cu	0.085
Smelting	US\$/lb-Cu	0.140
Refining	US\$/lb-Cu	0.090
Freight to market & sales costs	US\$/lb-Cu	0.003
<b>Total Before By-Product Credits</b>	<b>US\$/lb-Cu</b>	<b>0.318</b>
<b>Cut-off Value</b>		
Cu(Candelaria)	%	0.15
Cu(Española)	%	0.17

PB: per bench; dmt: dry metric tonne; wmt: wet metric tonne; ktpd: kilotonnes per day;

G&A: general and administrative

For the December 31, 2022, Mineral Reserves, site operating costs used for the pit optimization were based on actual average operating costs for the previous three years, 2019 through 2021, and long-term forecasts for fuel at US\$2.39 per gallon, power at US\$0.08 per kilowatt hour, in accordance with the forecast LOM average, tires at US\$36,700 and an exchange rate of 700 pesos per US dollar.

Base mining costs excluding haulage are estimated at US\$1.74 per tonne. Stockpile re-handle costs excluding haulage are estimated at US\$0.874 per tonne. The haulage increment per 16-metre bench is estimated at US\$0.026 per tonne per bench to depth. The fixed milling ore and waste haulage costs are estimated at US\$0.31 and US\$0.64 per tonne, respectively. An equipment annuity of US\$0.12 per tonne mined was applied to account for equipment replacement. Discounting was applied to all block values in the model for the purposes of pit optimization. The discount rate applied was 10.0% and the sinking rate assumed was eight benches per year resulting in an effective discount factor of 1.25% per bench.

Processing cost estimates include US\$0.24 per tonne for crushing and US\$5.95 per tonne for milling. A mill sustaining capital allowance of US\$0.18 per tonne was included. The general and administrative costs of US\$2.09 per tonne were assigned to the ore milled. The total processing costs are estimated at US\$8.45 per tonne milled.

Copper recovery estimates are based on a model developed by the metallurgical group at the CCMC. This model takes input data for geology, mineralogy, process throughput, grind size, oxidation and zinc to concentrate as part of the process that provides estimates of final tailings and concentrate grades and resultant overall copper recovery. The Candelaria plant average LOM copper recovery is estimated to be 90.6%. Gold and silver recoveries were assigned for a series of grade ranges. The average LOM gold and silver recoveries are estimated to be 70.6% and 81.1%, respectively.

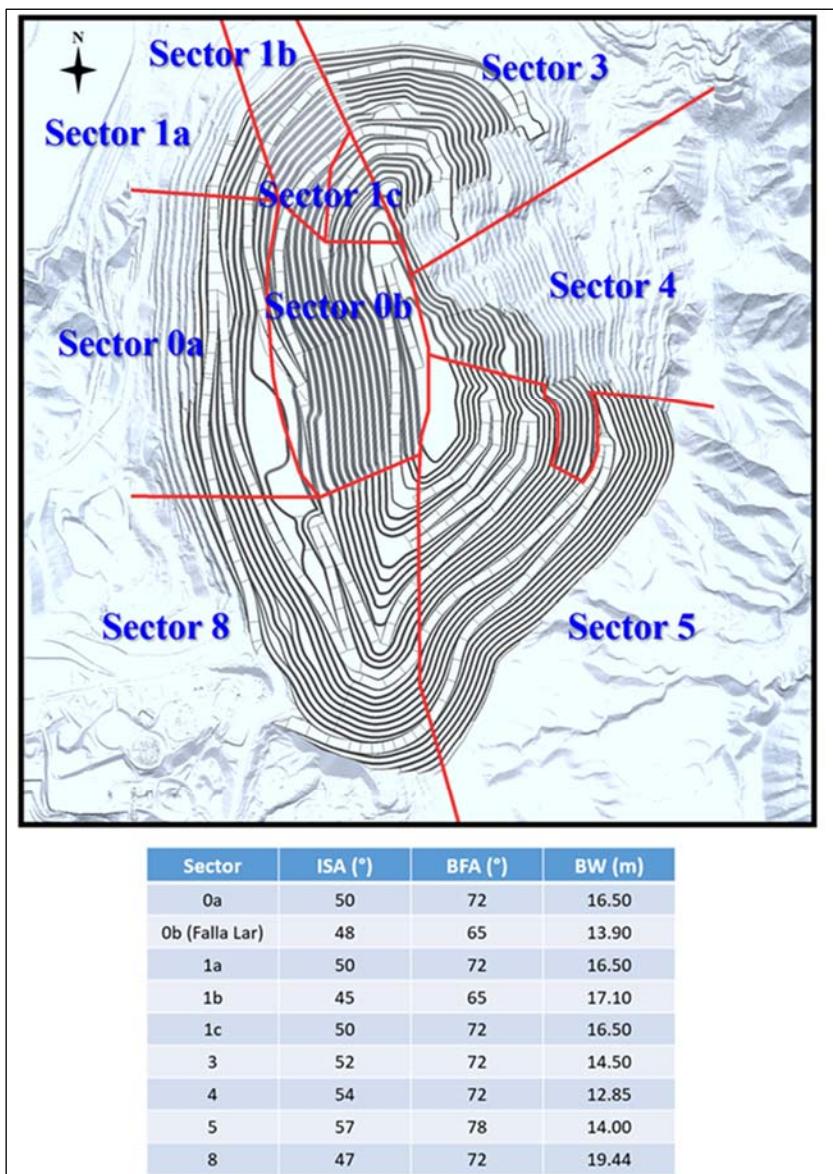
The copper concentrate is assumed to have a copper grade of 30.20% with a moisture content of 9.5%. For the pit optimization, the concentrate was assumed to be “clean” with no applicable smelter penalties. Transportation costs for the concentrate are estimated at US\$49.50 per wet metric tonne or US\$54.20 per dry metric tonne. Smelting and refining charges are estimated to be US\$90.00 per dry metric tonne and US\$0.09 per payable pound of copper, respectively. Based on a 30.20% concentrate grade, the copper pay factor is estimated at 96.5%.

The payable gold in concentrate is estimated at 96.0% with a refining charge of US\$5.00 per ounce. The payable silver in concentrate is estimated at 90.0% with a silver refining charge of US\$0.35 per ounce.

The pit optimization was undertaken using the Mineral Resource block model expanded in all directions to cover the maximum extent of the ultimate pit. A mining block model was populated in MineSight and Datamine NPV Scheduler. Additional block model items were added for slope angles, concentrate grades, metallurgical recovery, rock hardness, mining restriction near the tailings impoundment and the property boundary on the east side of the open pit. No additional mining dilution or losses were applied to the pit optimization. The average dilution grade factor applied in the

LOM is 3.84% and no loss were applied to the Mineral Reserves. A 100-metre offset pit limit restriction was applied at the toe of the existing tailings storage facility. A boundary restriction was applied on the east side of the open pit.

Open pit wall slope recommendations were provided by Call Nicolas International Company (CNI), based on comprehensive geo-mechanical studies to support the current operating pits. Inter-ramp slopes angles range from 45 to 57 degrees. Nine slope sectors were defined with different inter-ramp slope angles, bench face angles, berm intervals, and berm widths (Figure 26). A hard rock surface was used to control the slope angle in overburden and fill areas in the upper part of the deposit.



**Figure 26: Candelaria Open Pit Sectors Geotechnical Design Recommendations**

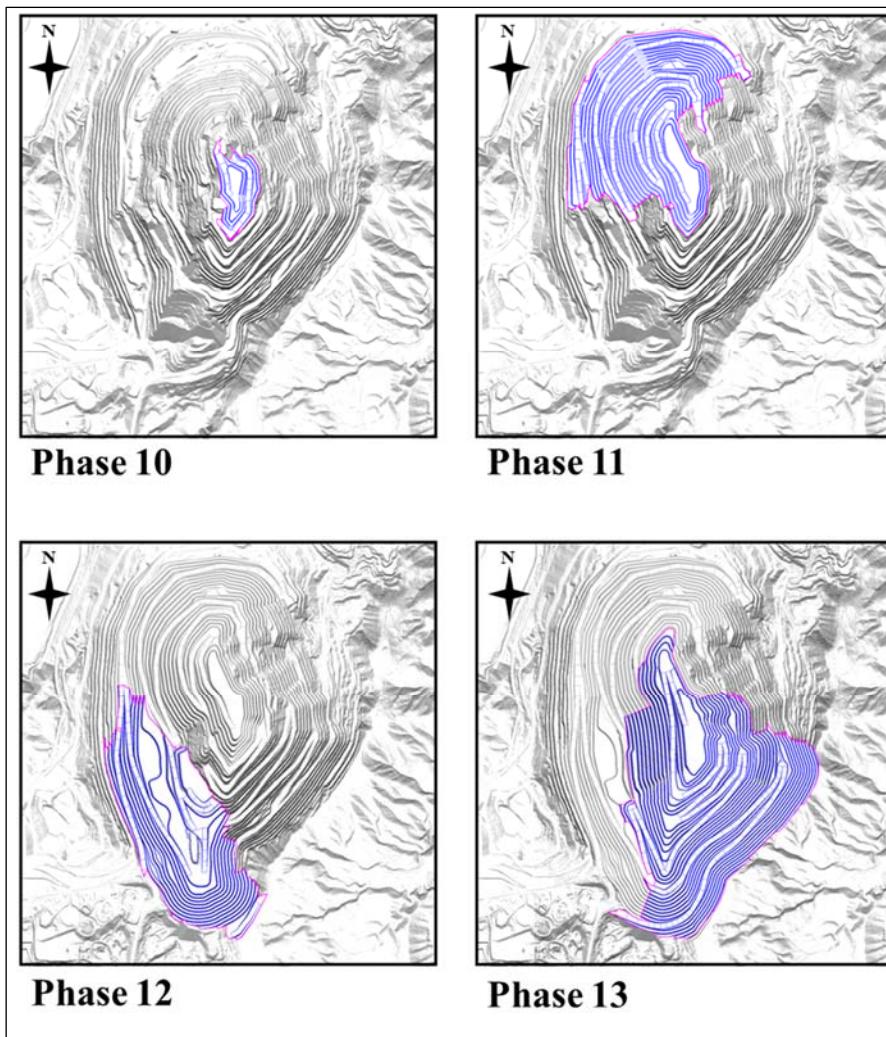
ISA: Inter-ramp slope angle, BFA: bench face angle, BW: bench width

Source: Call & Nicolas International Company

The US\$3.35 per pound of copper Lerchs-Grossman pit was used as a guide to develop the ultimate pit design, which represents revenue factor 0.86. Design parameters include:

- Sixteen-metre bench with double benches between catchment berms.
- Planned mining widths in the design phases exceeding 100 metres but pinching down to 40 to 60 metres locally where ramps and phase interfaces come together.
- Haulage allowances of 35 metres; in practice, the ramp width provides adequate room for berms and two-way traffic with the 240-tonne class trucks used at Candelaria.
- Mining Phases 10 through 13.

The final pit design was used to report the Candelaria Open Pit Mineral Reserves, using a topographic profile as of December 31, 2022. The pit design mining phases are shown in Figure 27. For the open pit LOM plan that supports the open pit Mineral Reserves direct mill feed is scheduled at a variable cut-off grade averaging approximately 0.31% copper. The material below that cut-off grade but above a grade of 0.15% copper is stockpiled.



**Figure 27: Candelaria Open Pit Mining Phases**

The updated 2022 overall design has shown a decrease in Mineral Reserves of 7.2% relative to 2021 of contained copper. The change is primarily due to depletion and new design and a change in block model, which has resulted in a decrease in the overall pit size and material above cut-off.

The open pit mine design has been expanded beyond current environmental permit boundaries. A new EIA documentation was submitted in early 2020 and expected to be approved by Q1-2024. CCMC considers the permit application approval to be a reasonable expectation. The waste dumps have also been expanded beyond current environmental permit boundaries. A new EIA document is being prepared for which there is a reasonable expectation of approval.

#### **14.2.2 España Open Pit Mineral Reserves**

The España project is an addition to the Mineral Reserves in the Candelaria District. The deposit will be exploited using open pit mining methods like those currently applied at the Candelaria open pit.

The España project is considered to contain medium to low grade ore. Its most important contribution to the mining plan will be associated with the replacement of ore from low-grade stockpiles previously scheduled for processing.

The operating cost estimates used for España have been adapted from the Candelaria open pit. The main differences can be found in mine base costs for a lower mining rate and the transportation costs, since these depend entirely on the distance from the pit to the dumps, stockpiles and crusher.

Mineral Reserves for the España open pit are based on Measured and Indicated Mineral Resources within a pit design defined by the economic limits of mining.

Given certain geological similarities with the current Candelaria Open Pit, logarithmic regressions have been generated, which have been used to estimate the metallurgical copper recoveries. Gold and silver recoveries are estimated using the same criteria as the copper recovery, supported by a regression and reduced as copper solubility increases.

Metallurgical recovery for copper, gold and silver were estimated using a similar methodology to Candelaria. In the weathered zone an adjustment was made to each recovery based upon the solubility ratio (copper sulphide: total copper).

The mining base operating cost, excluding haulage, was estimated at US\$1.77 per tonne mined. The ore extraction rate will be variable. For the purposes of pit optimization, a mining rate of 50 kilotonnes per day was assumed at España.

Primary loading units in ore and waste will be the Caterpillar 6040 and 6020 backhoes. Stockpile re-handling, excluding haulage, costs have been estimated at US\$ 0.91 per tonne.

The incremental cost per bench (every 8 metres) has been estimated at US\$0.01 per tonne per bench.

Fixed transportation costs for ore hauled directly to the plant and to the dump are estimated at US\$ 0.85 per tonne and US\$ 0.58 per tonne, respectively, and are in line with the latest pit cost estimate. CAT 793-F trucks will be the primary haulage units.

The sustaining capital for equipment amortization has been included at US\$0.12 per tonne mined and is directly related to equipment replacement and major repairs. This cost has been developed for the Candelaria open pit.

The plant operating cost has been estimated at US\$8.45 per tonne and reflects the latest adjustments to the Candelaria cost of power. The plant operating cost includes crushing, grinding, general and administrative expenses, plant sustaining capital and an allowance for the Los Diques tailings storage facility sustaining capital.

The 10% discount rate applied in pit optimization which is the same as the Candelaria pit. The sink rate applied was 6 benches per year with a corresponding bench discount factor of 1.67%.

The cut-off grade applied for Mineral Reserve reporting at Española is 0.17% total copper. The soluble copper ratio was considered for both pit optimization and Mineral Reserve reporting for scheduling. Mineral Resources with greater than 10% soluble copper were not considered for pit limit definition. Mineral Resources with greater than 20% soluble copper were not reported for Mineral Reserves and production scheduling.

A geomechanical pre-feasibility analysis of the Española project design was undertaken by mine site engineers. This review considered the design angles (i.e. bench face angle (BFA), inter-ramp angle (ISA) and containment berm width (CB)). Identification of potential planar failures and/or wedges as well as reviewing the geotechnical parameters of the lithology present in the Española deposit was completed.

The current Española project design parameters are summarized below:

- Bench face angle (BFA): 70 degrees
- Inter-ramp slope angle (ISA): 48 degrees
- Width of berm (BW): 8.6 metres
- Bench height: 16 metres
- Ramp width: 35 metres

The design of the Española open pit is mainly in metasedimentary rock (UG30) which shows a high uniaxial compressive strength (UCS between 96 and 167 megapascals). The pit optimization overall wall slope was assumed to be 49 degrees.

The Mineral Reserve estimates are based on the mine design developed using an optimized pit limit defined by applying the modifying factors described above. The positive economics of the Mineral Reserves are supported by the financial analysis of the LOM Plan.

The updated 2022 overall design of the Española has shown an increase in the Mineral Reserves of contained copper of 10.4% relative to the 2021 Mineral Reserves. The change is primarily due to an updated design, block model, and cut-off due to the difference in metal prices. The average dilution factor applied in the LOM is 3.7% and no loss were applied to the Mineral Reserves.

Environmental permit for the La Española Mineral Reserves extraction is part of EIA 2040. Based on the information provided by the EIA team regarding the anticipated timeframe for the permitting process, the environmental permits are expected be approved by Q1-2024 with the sectorial permits in the same year. Extraction of the Española material is currently scheduled to commence in 2024.

#### 14.2.3 Mineral Reserves of the Candelaria Underground Mine

The Candelaria Underground mine Mineral Reserve estimates were prepared by the Candelaria Copper Mining Complex Underground Technical Service Department. The Mineral Reserves are based on the estimated December 31, 2022, Measured and Indicated Mineral Resources defined for the underground mine.

The Candelaria Underground Mine includes both the Candelaria Underground North and South Sectors. The newly added areas in the North sector include Consuelo and Cristina. In the South sector, the stopes are in the Susana, Mariana and Damiana areas.

The Mineral Reserve estimates for the Candelaria Underground Mine are defined by the 2023 LOM plans and the stopes were designed and developed using modifying parameters summarized in Table 29.

**Table 29: Summary of Mineability Factors Applied for Mineral Reserve Estimation – Candelaria Underground and Santos Mines**

Parameter	Units	Candelaria UG	
		June 2021	December 2022
<b>Mining ore recovery by stope setting</b>			
Vertical	%	95	95
Inclined	%	95	95
Rib	%	95	95
Pillar	%	95	95
Structural pillar	%	95	95
<b>Mining ore dilution by stope setting</b>			
Vertical	%	18	18
Inclined	%	30	30
Rib	%	50	50
Pillar	%	40	40
Structural pillar	%	50	50
<b>Dilution material*</b>			
Copper	%	0.30	0.30
Gold	g/t	0.07	0.07
Silver	g/t	1.00	1.00
Magnetite	%	5.00	5.00

\* Default dilution material grades. Some in-production stope dilution grades applied are based on detailed dilution solid analysis performed by geologists and geotechnical engineers

It should be noted that mineability factors applied in 2022 were verified based on back-analysis from historical mined-out stope cavity monitoring system data. When compared to 2021 Mineral Reserve figures (SRK did not audit the 2021 Mineral Reserves), the Mineral Reserve tonnage has decreased by 2.1%, copper grade has decreased by 4.9%, resulting in contained copper, gold, silver decrease by 6.8%, 6.5%, 5.9% respectively. The decreases are a combination of 2021-2022 production depletion, cut-off grade reduction, open pit redesign, and the success of the exploration program.

The conversion of Mineral Resources to Mineral Reserves at Minera Candelaria is initiated at the formal transfer of the Mineral Resource block models from the resource modeler to the underground mine planning group.

The metal grades of the Inferred Mineral Resources in the Mineral Resource block model were re-coded to zero. For the Candelaria North sector, preliminary stope layouts were generated by first utilizing Deswik Stope Optimizer (DSO) software with predefined stope design parameters. These preliminary stope designs were reviewed and refined to achieve optimal stope geometries. The specific geotechnical recommendations were also considered for each case including, where necessary, for pillars left between the underground mine and the open pit. The final stope designs, grades and tonnes were internally audited before reporting.

Preliminary stope layouts at Candelaria South were also generated by utilizing the DSO with predefined stope parameters. These initial designs were reviewed to ensure mineability, after which drifting layouts were developed to access the stopes. The mining sequence was scheduled using the Deswik software and reviewed to ensure achievability of the plan and considers the interaction with the open pit mining sequence. All designs were reviewed and confirmed to be outside of the ultimate pit design.

Stope in-situ data were reported using an Excel spreadsheet, and mining dilution and recovery factors were applied to the final calculations of tonnage and grade.

The cut-off grade calculated for the Candelaria Underground Mine is calculated at a net smelter return (NSR) of \$31/t, which corresponds to approximately 0.44% copper after by-product credits, was based on 3-year historical costs and Mineral Reserve parameters provided annually by LMC corporate to site.

Dilution and recovery parameters vary depending on certain attributes for an individual stope, including geotechnical condition, geometry, and location in the mining sequence.

All economical stopes and related development are included in this Technical Report.

### **14.3 Mineral Reserves of Minera Ojos del Salado**

Minera Ojos del Salado consists currently of the Santos underground mine only. The Mineral Reserves for the Santos mine were prepared by the Underground Technical Services Department and were based on the estimated December 31, 2022, Measured and Indicated Mineral Resources.

The Mineral Reserve estimates for the Santos mine are based on their 2023 LOM plans and the stopes were designed using modifying parameters tabulated in Table 29.

The conversion of Mineral Resources to Mineral Reserves at the Santos mine followed the same process applied for the Candelaria Underground Mine.

The cut-off grade calculated for the Santos mine is at NSR of \$35/t which correspond to approximately 0.51% copper after by-product credits, was based on 3-year historical costs and Mineral Reserve parameters provided annually by LMC corporate to site.

## 14.4 Mineral Reserve Statement

Mineral Reserves are derived from Measured or Indicated Mineral Resources after applying economic parameters. Mineral Reserves are classified using the following criteria:

- Proven Mineral Reserves are the Measured Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.
- Probable Mineral Reserves are those Measured and Indicated Mineral Resources where development work for mining and information on processing/metallurgy and other relevant factors demonstrate that economic extraction is achievable.

The audited Mineral Reserve Statements for Minera Candelaria and Minera Ojos del Salado are tabulated in Table 30 and Table 31, respectively. The consolidated Mineral Reserve Statement for the Candelaria Copper Mining Complex is presented in Table 32.

**Table 30: Audited Mineral Reserve Statement, Compañía Contractual Minera Candelaria, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity ('000 t)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Candelaria Open Pit</b>							
Proven	338,085	0.452	0.11	1.49	1,527	1,163	16,245
Probable	23,576	0.29	0.08	1.08	69	60	819
<b>Total</b>	<b>361,661</b>	<b>0.441</b>	<b>0.105</b>	<b>1.47</b>	<b>1,596</b>	<b>1,223</b>	<b>17,064</b>
<b>Española Project</b>							
Proven	31,745	0.39	0.08	0.35	125	86	358
Probable	35,629	0.39	0.08	0.39	138	93	441
<b>Total</b>	<b>67,374</b>	<b>0.39</b>	<b>0.08</b>	<b>0.37</b>	<b>263</b>	<b>179</b>	<b>799</b>
<b>Candelaria WIP</b>							
Proven	77,830	0.28	0.09	1.47	220	214	3,686
Probable							
<b>Total</b>	<b>77,830</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>220</b>	<b>214</b>	<b>3,686</b>
<b>Candelaria Underground</b>							
Proven	55,163	0.82	0.18	3.29	452	327	5,828
Probable	76,330	0.76	0.17	3.14	579	424	7,703
<b>Total</b>	<b>131,492</b>	<b>0.78</b>	<b>0.18</b>	<b>3.20</b>	<b>1,032</b>	<b>751</b>	<b>13,531</b>
<b>Minera Candelaria Total</b>							
Proven	502,823	0.46	0.11	1.62	2,325	1,791	26,116
Probable	135,535	0.58	0.13	2.06	786	576	8,963
<b>Total</b>	<b>638,358</b>	<b>0.49</b>	<b>0.12</b>	<b>1.71</b>	<b>3,111</b>	<b>2,367</b>	<b>35,079</b>

Notes:

1. All figures have been rounded to reflect the relative accuracy of the estimates.
2. The standard adopted in respect of the reporting of Mineral Reserves for the CCMC, following the completion of required technical studies, is in accordance with the NI 43-101 guidelines and the 2014 CIM Definition Standards, and have an effective date of December 31, 2022.
3. Mineral Reserves have been prepared using metal prices of US\$3.35 per pound of copper, US\$1,600 per ounce of gold, and US\$22.00 per ounce of silver.
4. Mineral Reserves for open pit are reported at a cut-off grade of 0.15% copper for Candelaria and 0.17% copper for the Española Project. Underground Mineral Reserves for Candelaria are reported at cut-off of 0.44% copper.
5. The average dilution factor applied is 3.84% for the life of mine for Candelaria Open Pit and Española Project.

**Table 31: Audited Mineral Reserve Statement, Compañía Contractual Minera Ojos del Salado, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity ('000 oz)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Santos Underground</b>							
Proven	9,755	0.88	0.21	2.05	86	65	644
Probable	7,039	0.89	0.20	2.05	63	46	463
<b>Total</b>	<b>16,795</b>	<b>0.88</b>	<b>0.21</b>	<b>2.05</b>	<b>148</b>	<b>111</b>	<b>1,107</b>
<b>Alcaparrosa Underground</b>							
Proven	0	0.00	0.00	0.00	0	0	0
Probable	0	0.00	0.00	0.00	0	0	0
<b>Total</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>WIP</b>							
Proven	146	1.06	0.24	2.20	2	1	10
Probable							
<b>Total</b>	<b>146</b>	<b>1.06</b>	<b>0.24</b>	<b>2.20</b>	<b>2</b>	<b>1</b>	<b>10</b>
<b>Combined Mining</b>							
Proven	9,901	0.88	0.21	2.06	87	66	655
Probable	7,039	0.89	0.20	2.05	63	46	463
<b>Total</b>	<b>16,940</b>	<b>0.89</b>	<b>0.21</b>	<b>2.05</b>	<b>150</b>	<b>112</b>	<b>1,118</b>

Notes:

1. All figures have been rounded to reflect the relative accuracy of the estimates.
2. The standard adopted in respect of the reporting of Mineral Reserves for the CCMC, following the completion of required technical studies, is in accordance with the NI 43-101 guidelines and the 2014 CIM Definition Standards, and have an effective date of December 31, 2022.
3. Mineral Reserves have been prepared using metal prices of US\$3.35 per pound of copper, US\$1,600 per ounce of gold, and US\$22.00 per ounce of silver.
4. Underground Mineral Reserves for Santos are reported at cut-off of 0.51% copper.

**Table 32: Consolidated Audited Mineral Reserve Statement, Candelaria Copper Mining Complex, SRK Consulting (Canada) Inc., December 31, 2022 (100% Basis)**

Classification	Quantity ('000 t)	Grade			Contained Metal		
		Copper (%)	Gold (g/t)	Silver (g/t)	Copper ('000 t)	Gold ('000 oz)	Silver ('000 oz)
<b>Candelaria Open Pit + Española</b>							
Proven	369,830	0.45	0.11	1.40	1,652	1,249	16,602
Probable	59,205	0.35	0.08	0.66	207	152	1,260
<b>Total</b>	<b>429,035</b>	<b>0.43</b>	<b>0.10</b>	<b>1.29</b>	<b>1,859</b>	<b>1,402</b>	<b>17,862</b>
<b>Total District Underground</b>							
Proven	64,918	0.83	0.19	3.10	538	392	6,472
Probable	83,369	0.77	0.18	3.05	642	470	8,166
<b>Total</b>	<b>148,287</b>	<b>0.80</b>	<b>0.18</b>	<b>3.07</b>	<b>1,180</b>	<b>862</b>	<b>14,638</b>
<b>WIP Candelaria &amp; Ojos del Salado</b>							
Proven	77,976	0.28	0.09	1.47	222	215	3,697
Probable							
<b>Total</b>	<b>77,976</b>	<b>0.28</b>	<b>0.09</b>	<b>1.47</b>	<b>222</b>	<b>215</b>	<b>3,697</b>
<b>District Total</b>							
Proven	512,724	0.47	0.11	1.62	2,412	1,857	26,772
Probable	142,574	0.60	0.14	2.06	849	622	9,426
<b>Total</b>	<b>655,298</b>	<b>0.50</b>	<b>0.12</b>	<b>1.72</b>	<b>3,261</b>	<b>2,479</b>	<b>36,198</b>

Notes:

1. All figures have been rounded to reflect the relative accuracy of the estimates.
2. The standard adopted in respect of the reporting of Mineral Reserves for the CCMC, following the completion of required technical studies, is in accordance with the NI 43-101 guidelines and the 2014 CIM Definition Standards, and have an effective date of December 31, 2022.
3. Mineral Reserves have been prepared using metal prices of US\$3.35 per pound of copper, US\$1,600 per ounce of gold, and US\$22.00 per ounce of silver.
4. Mineral Reserves for open pit are reported at a cut-off grade of 0.15% copper for Candelaria and 0.17% copper for the Española Project. Underground Mineral Reserves for Candelaria are reported at a cut-off of 0.44% copper. Underground Mineral Reserves for Santos are reported at cut-off of 0.51% copper.
5. The average dilution factor applied is 3.84% for the life of mine for Candelaria Open Pit and Española Project.

A comparison of Mineral Reserves reported in June 30, 2021 statement and in December 31, 2022 statement disclosed in this Technical Report indicate that:

- The Candelaria Open Pit Mineral Reserves have decreased by 124 kilotonnes of contained copper, considering the extraction from June 2021 through December 2022.
- The Candelaria WIP shows a decrease of 40 kilotonnes of contained copper due to the depletion of the Stockpile in 2022.
- Candelaria Underground Mineral Reserves have decreased by 76 kilotonnes of contained copper, primarily due to the depletion from June 2021 to December 2022.
- Ojos del Salado Mineral Reserves have decreased by 108 kilotonnes of contained copper. This reduction is the result of a decrease of 5 kilotonnes from Santos due to production depletion and due to the complete removal Mineral Reserves from Alcaparrosa mine which was estimated at 103kt based on June 30, 2021 Mineral Reserves statement.
- Española contributes an additional 25 kilotonnes of contained copper to the Candelaria Mineral Reserves in 2022 relative to 2021.

The Mineral Reserves stated in Table 32 are approximately 1.1 million tonnes with 0.8 kilotonnes of contained copper higher than those included in the LOM plan in Section 15. This is due to differences in the actual mine production of 2022 compared to the forecast used in the LOM planning for the Mineral Reserves. The qualified persons do not believe that this change is material to the LOM plan.

The Mineral Reserves changes above are based on the reported Mineral Reserves statements as of December 31, 2022, and June 30, 2021. SRK was not involved in the preparation of and has not audited the 2021 Mineral Reserves statement.

## 15 Mining Methods

### 15.1 Introduction

Minera Candelaria consists of the Candelaria Open Pit, La Española Open Pit and the Candelaria Underground mines. Minera Ojos del Salado consists of the Santos and Alcaparrosa Underground mines. In response to a sinkhole that occurred near the Alcaparrosa mine on July 30, 2022 and a subsequent infraction notice from the Superintendencia de Medio Ambiente (SMA) alleging four environmental permit breaches and a subsequent request from SERNAGEOMIN for a temporary stoppage of the Alcaparrosa mine, mineralized material from the Alcaparrosa mine have been excluded from the LOM plan and Mineral Reserves documented in this Technical Report.

The Candelaria and the Minera Ojos del Salado operations are located close to each other, resulting in shared surface infrastructure such as the concentrator and tailings dam, as well as a common management structure. The ore from the Candelaria Open Pit, Candelaria Underground is processed at the Candelaria processing plant. Ore from the Santos mine is hauled to the PAC processing plant located on the Minera Ojos del Salado property. Any ore above the capacity of the PAC plant is sent to the Candelaria plant for processing. Ore from the Española open pit will be transported to the Candelaria processing plant.

This section describes the open pit and underground mining methods used at the CCMC.

The open pits will operate with an overall mining rate of approximately 294,000 tonnes per day for the next 10 years. As the final Candelaria Phase 13 waste stripping is completed the overall mining rate will decline. A stockpile strategy has been developed to maximize the grade of material going to the processing facility. Direct milling ore will average 0.61% copper from Candelaria and 0.43% copper from Española. A lower grade stockpile ore will be recovered to meet plan capacity as required. The mine operates five electric shovels and five hydraulic shovels, and will require a fleet of 55 haulage trucks, seven production drills, and a fleet of support equipment.

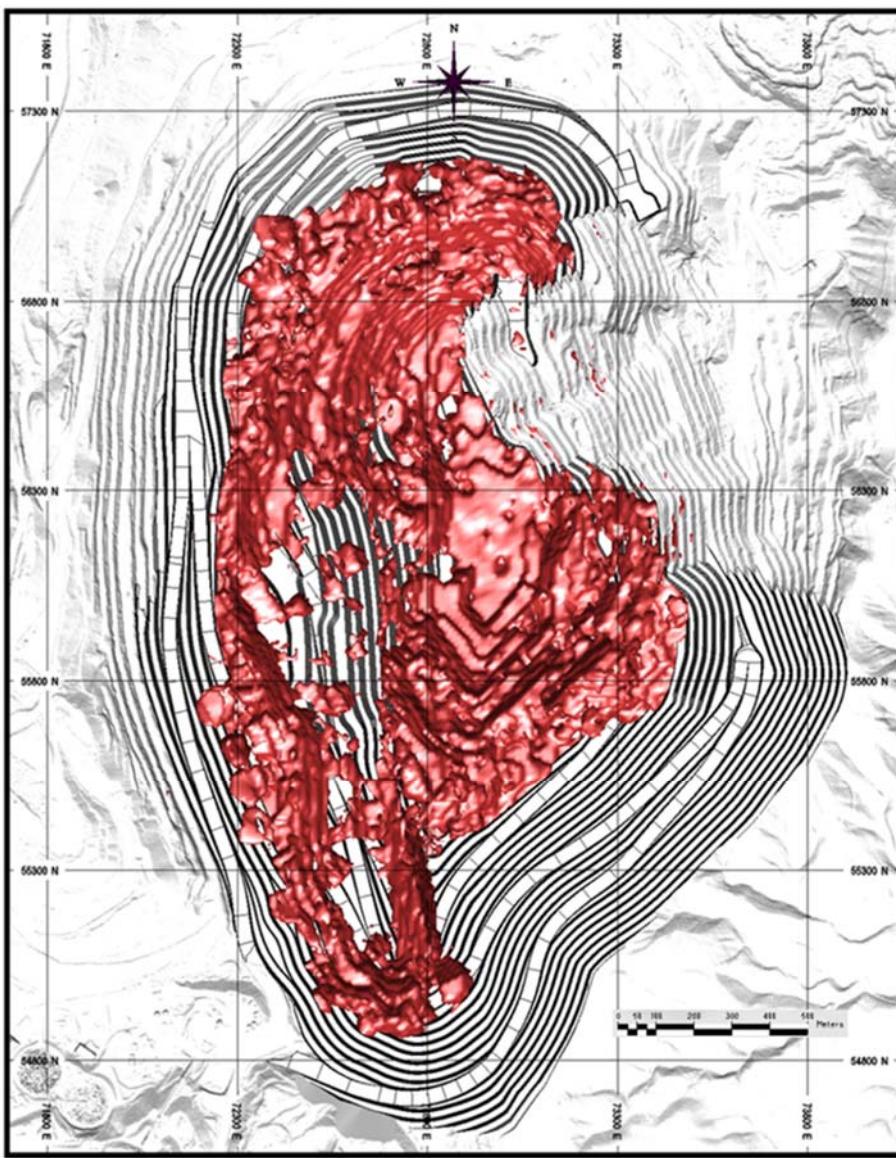
The Candelaria Underground mine has been producing a steady state production rate of up to 14,000 tonnes of ore per day by 2022 as per the LOM plan. The average LOM grade is 0.78% copper. The Santos mine will continue to produce at its current rate of production of 5,100 tonnes per day of ore to 2025 then decrease to 3,700 tonnes per day of ore from 2026-2033 with an average LOM grade of 0.88% copper. The mining method employed in all three underground mines is sublevel open stopping.

### 15.2 Open Pit Mine Design and Consolidated Production Schedule

A LOM plan for Minera Candelaria is based on the Mineral Reserves reported in Section 14. The plan is largely driven by supplying ore to the Candelaria processing plant from the open pit mine and surface stockpiles once the open pit Mineral Reserves have been depleted. The current combined open pit Candelaria, open pit Española and work-in-progress stockpile Mineral Reserves are

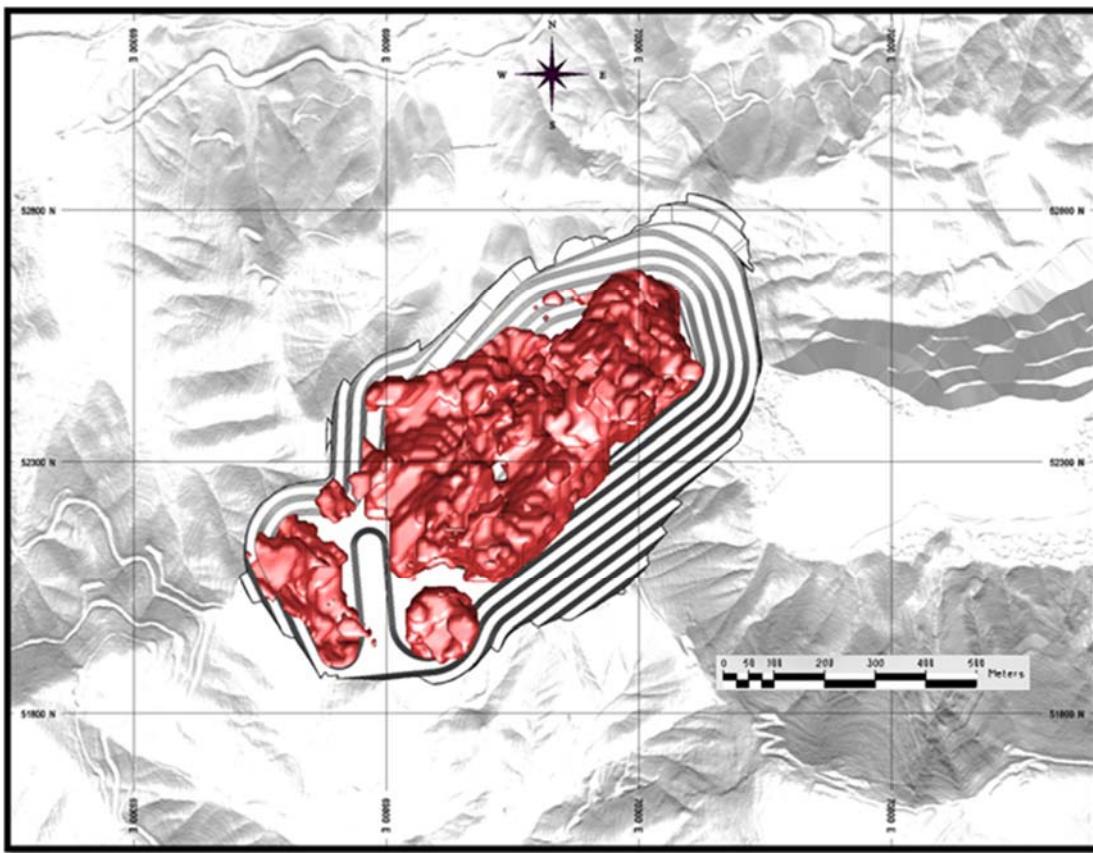
estimated at 506.9 million tonnes at an average grade of 0.41% copper, 0.10g/t gold, and 1.32g/t silver. The open pit and work-in-progress stockpile Mineral Reserves are reported at a cut-off grade of 0.15% copper for Candelaria and 0.17% copper for Espanola.

The Candelaria open pit was designed to be mined in several phases of development. As of December 2022, four phases of development remain in the LOM plan (Phases 10 to 13). The overall strip ratio is expected to be 2.09:1 including ore that is initially delivered to stockpiles. The total in-pit waste is 753.6 million tonnes and the overall life of the open pit mine is 19 years. The final pit design and an outline of the overall Mineral Reserves are shown in Figure 28. The Espanola total in-pit waste is 138.9 million tonnes and the overall life estimated at 13 years (Figure 29).



**Figure 28: Summary of Candelaria Open Pit Mine Development**

Source: Minera Candelaria , Author: Minera Candelaria, Date: Dec 31, 2022



**Figure 29: Summary of Candelaria and Española Open Pit Mine**

Source: Minera Candelaria , Author: Minera Candelaria, Date: Dec 31, 2022

The open pit design is based upon the following key considerations:

- Phase development to smooth ore and waste scheduling with stockpile material available to supplement direct mill feed from the mine.
- Overall and inter-ramp slope recommendations provided by Call Nicolas International Company (CNI) including use of pre-split drilling and blasting.
- Operating constraints of the equipment available for mining.
- Minimum mining width defined by double side loading of trucks with allowance for an access ramp.
- Bench height achievable and within the safe operating reach of the primary loading units.
- Minimum haulage road operating width and maximum effective grade within the operating limitations of the primary haulage units.

The primary components for the open pit slope design include bench geometry, inter-ramp, and overall slope angles (Figure 30). The current pit dimensions are 2,500 metres by 2,000 metres with a depth of 790 metres. Current inter-ramp slope angles range from 45 to 50 degrees in the west wall and from 52 to 57 degrees in the east wall. Bench face angles range from 65 to 78 degrees.

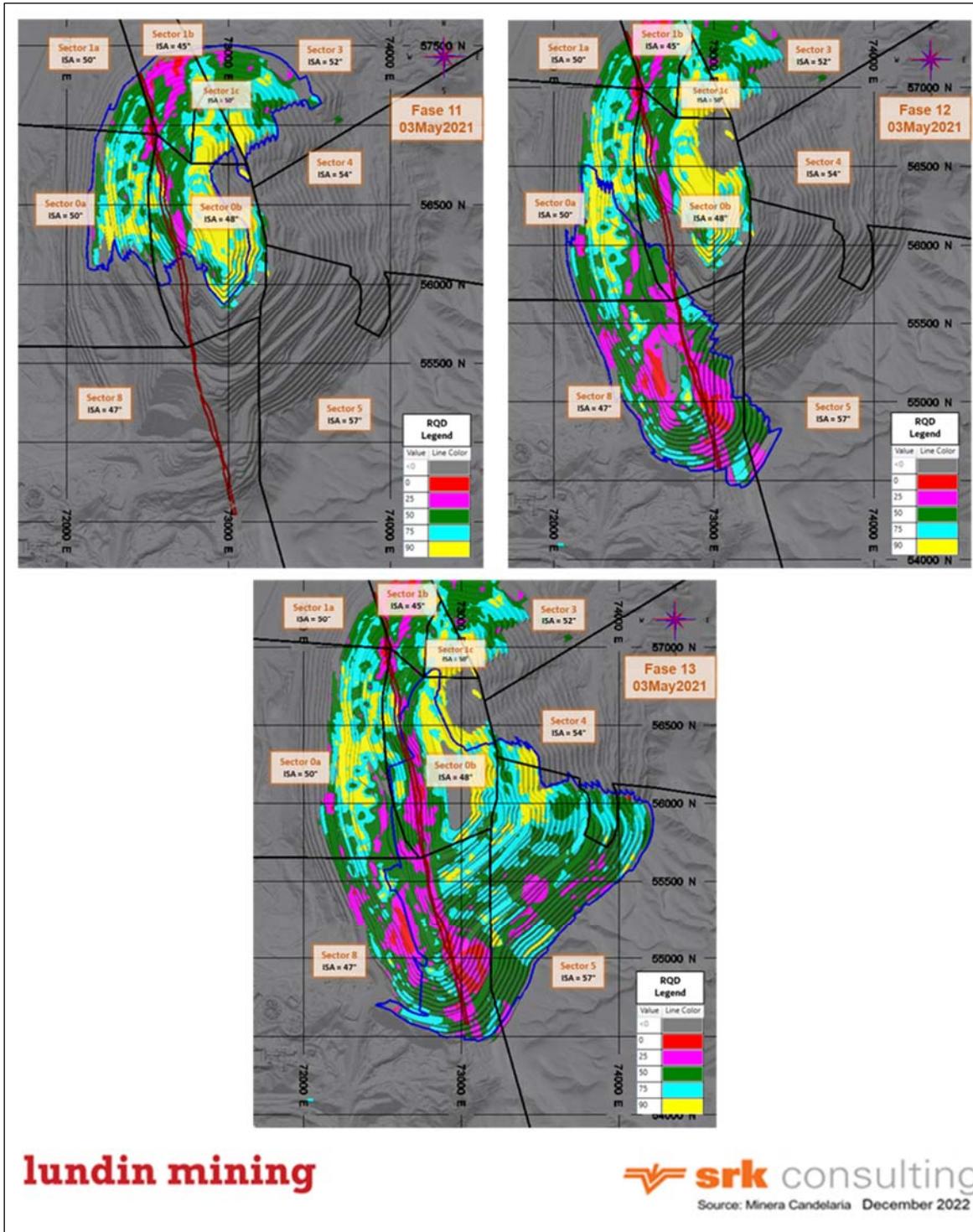


Figure 30: Slope Sectors Rock Quality Designation for Phase 11, 12 and 13

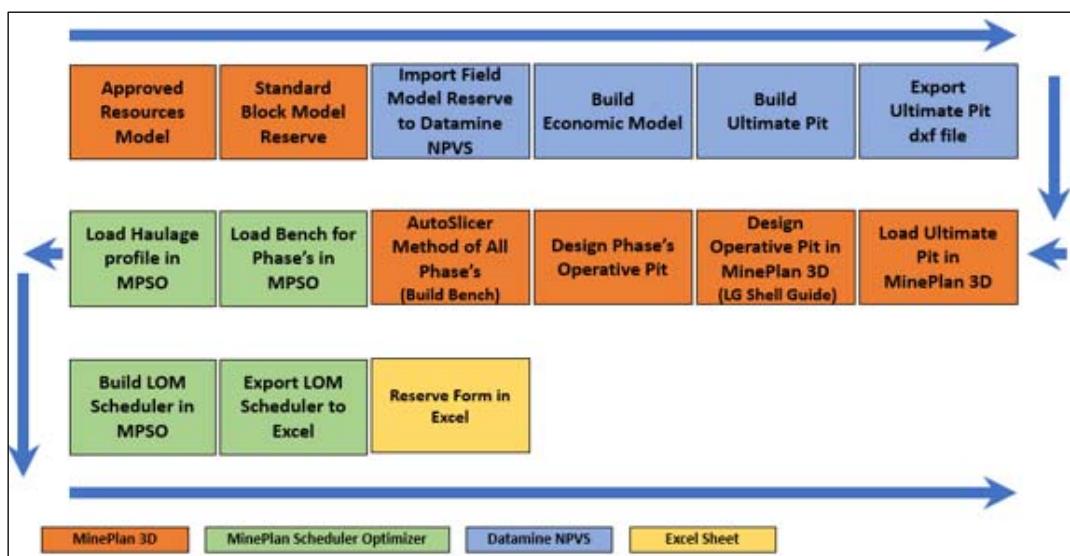
The rock at Candelaria has a typical uniaxial compressive strength of over 140 megapascals and is considered “hard rock”. With respect to the instabilities, the most complex ones develop on the East and Southeast wall, being of the planar failure and wedge type, while on the west wall it is strongly

influenced by the fault LAR and the intersections with the different structural systems, likewise in north wall the failures are associated with rock mass conditions and the interaction with the water flows coming from the tailings (especially in the northwest sector). Open wall slope recommendations have been provided by CNI.

Slope monitoring is carried out in the mine on a continuous basis using robotized monitoring systems, including two robotic prism monitoring stations Leica TM60 (100 prism), one SlideMinder extensometers, three Ground Probe SS radar units and two Ibis Radar, eight vibrating wire piezometers, and three web cameras.

The Candelaria Open Pit is relatively dry owing to its location in an arid region. The northeast wall appears to be receiving some seepage from the toe of the tailings dam. Horizontal drain holes have been drilled up to 400 metres into the wall to reduce pore pressures in the area of the Lar fault.

The pit designs include allowances for 32- to 35-metre-wide roads including ditches and berms. Haul roads within the pit limits have a maximum gradient of 10%. The final pit design is shown in Figure 28. The flowsheet for the design and scheduling of the Minera Candelaria LOM plan is shown in Figure 31.



**Figure 31: Candelaria Life of Mine Plan Development Process**

Source: Minera Candelaria

The LOM plan was developed using MineSight and Datamine NPVS software packages. The Mineral Resource model and standard mining block model were developed in MineSight. This standard mining model was then imported to NPVS to calculate economic value items and to develop Lerchs-Grossman pit limits. A final pit design was developed in MineSight. NPVS was used to develop potential pushback limits. Detailed phase designs were then completed in MineSight, and schedule optimization was undertaken in NPVS. Once a cut-off grade was estimated and a stockpile strategy was completed, MineSight Schedule Optimizer was used to create the final detailed schedule.

The mine production schedule for Minera Candelaria and Minera Ojos del Salado for the period 2023 to 2046 shown in Table 33, displays the material sent to the Candelaria and PAC plants, and the forecast processing plant recoveries together with the concentrate and contained copper, gold, and silver metals. The LOM plan was prepared based on the actual production up to May 2022 and included production forecast for the remaining year 2022. The Mineral Reserves stated in Table 32 are approximately 1.1 million tonnes with 0.8 kilotonnes of contained copper higher than those included in the LOM plan. This is due to differences in the actual mine production of 2022 compared to the forecast used in the LOM planning for the Mineral Reserves. The qualified persons does not believe that this change is material to the LOM plan. Low grade material from the open pit is initially transferred to WIP stockpiles and later withdrawn as WIP re-handle feed for the plant. The current mine production forecast is shown graphically in Figure 32. Examples of annual development plans are shown in Figure 33 to Figure 36. Espa ola is expected to begin ore delivery to the Candelaria processing plant during the second half of 2026.

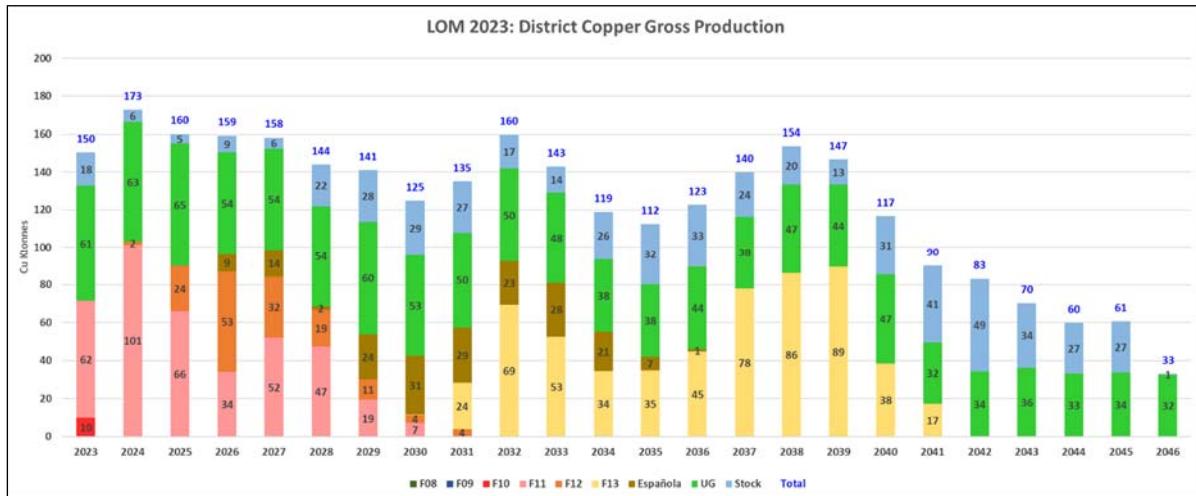
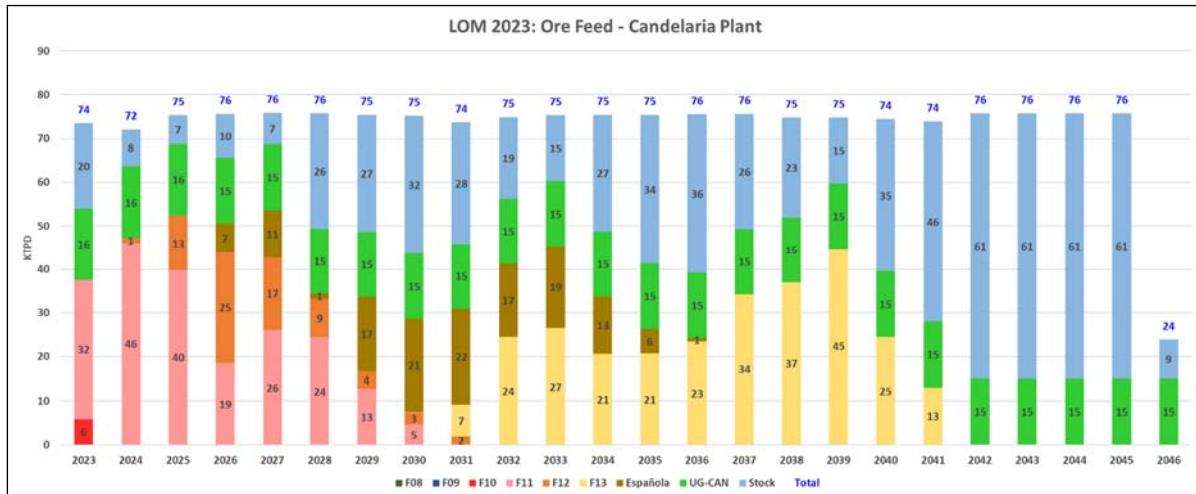
For 2023, the CCMC is forecasted to produce concentrates containing 145-155 kilotonnes of copper, 85-90 kilo-ounces of gold and 1.37 million ounces of silver. Over the remaining LOM plan (2024 to 2046), the average annual production is estimated to be 122 kilotonnes of copper, 72 kilo-ounces of gold and 1.2 million ounces of silver. Over the 10-year period, 2024-2033, the average annual production is estimated to be 150 kilotonnes of copper, 86 kilo-ounces of gold and 1.4 million ounces of silver.

**Table 33: Candelaria Copper Mining Complex Mine Consolidated Production Schedule (100% Basis)**

Mine Production Plan	Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	Total	
Open pit Ore fed to mill	Tonnes (kt)	13,723	17,280	19,122	16,053	15,601	12,155	6,100	2,725	3,343	8,965	9,686	7,530	7,571	8,568	12,517	13,499	16,352	8,973	4,771	-	-	-	-	-	204,535	
	Cu (%)	0.57	0.64	0.51	0.58	0.58	0.59	0.54	0.46	0.91	0.84	0.59	0.49	0.50	0.57	0.69	0.76	0.65	0.54	0.55	-	-	-	-	-	0.61	
	Au (g/t)	0.13	0.16	0.12	0.13	0.13	0.13	0.12	0.11	0.20	0.19	0.15	0.13	0.12	0.13	0.15	0.17	0.14	0.12	0.13	-	-	-	-	-	0.14	
	Ag (g/t)	1.46	2.74	2.03	1.80	1.71	1.94	1.49	1.26	2.73	2.29	1.55	1.19	1.14	1.22	1.70	2.40	2.24	1.53	1.27	-	-	-	-	-	1.86	
Española	Tonnes (kt)	-	-	-	2,395	3,965	424	6,162	7,707	7,927	6,143	6,855	4,792	2,049	290	-	-	-	-	-	-	-	-	-	-	-	48,708
	Cu (%)	-	-	-	0.42	0.40	0.43	0.42	0.44	0.40	0.41	0.45	0.47	0.40	0.40	-	-	-	-	-	-	-	-	-	-	0.43	
	Au (g/t)	-	-	-	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	-	-	-	-	-	-	-	-	-	-	0.09	
	Ag (g/t)	-	-	-	0.35	0.37	0.36	0.33	0.36	0.40	0.56	0.40	0.37	0.34	0.28	-	-	-	-	-	-	-	-	-	-	0.39	
Open pit + Española Low grade to WIP	Tonnes (kt)	4,610	12,464	13,998	19,387	13,281	13,553	10,012	7,480	4,394	6,158	10,541	12,189	11,421	7,643	6,220	5,775	5,192	7,136	2,872	-	-	-	-	-	-	174,326
	Cu (%)	0.20	0.22	0.23	0.24	0.25	0.29	0.24	0.23	0.25	0.22	0.24	0.21	0.21	0.21	0.22	0.21	0.22	0.21	0.22	-	-	-	-	-	-	0.23
	Au (g/t)	0.06	0.07	0.06	0.07	0.07	0.07	0.06	0.06	0.07	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	-	-	-	-	-	-	0.06
	Ag (g/t)	0.95	1.26	1.07	1.25	0.98	0.75	0.83	0.67	0.73	0.95	0.75	0.65	0.56	0.60	0.59	0.98	1.24	0.73	0.65	-	-	-	-	-	-	0.89
WIP Rehandle	Tonnes (kt)	7,133	3,106	2,395	3,673	2,612	9,639	9,784	11,540	10,162	6,818	5,475	9,725	12,427	13,286	9,623	8,312	5,475	12,778	16,730	22,170	22,170	22,231	22,170	3,235	252,670	
	Cu (%)	0.28	0.23	0.24	0.26	0.24	0.25	0.31	0.27	0.29	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.20	0.17	0.17	0.17	0.25	
	Au (g/t)	0.08	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.08	0.06	0.05	0.05	0.05	0.07	
	Ag (g/t)	1.20	1.06	1.06	0.94	1.10	1.14	0.71	1.19	1.24	1.23	1.22	1.21	1.21	1.20	1.20	1.19	1.19	0.65	1.19	1.01	0.93	0.93	0.93	1.07		
From Candelaria UG	Tonnes (kt)	5,462	5,490	5,475	5,475	5,505	5,490	5,475	5,475	5,490	5,475	5,475	5,475	5,475	5,490	5,475	5,475	5,490	5,475	5,475	5,475	5,475	5,475	5,475	5,475	131,507	
	Cu (%)	0.87	0.91	0.93	0.81	0.82	0.81	0.95	0.86	0.79	0.78	0.75	0.68	0.74	0.85	0.74	0.92	0.86	0.91	0.62	0.67	0.71	0.64	0.65	0.63	0.79	
	Au (g/t)	0.20	0.20	0.20	0.19	0.22	0.19	0.20	0.19	0.19	0.19	0.17	0.16	0.17	0.18	0.16	0.19	0.18	0.21	0.15	0.16	0.16	0.15	0.15	0.15	0.18	
	Ag (g/t)	3.69	3.34	2.78	3.00	2.66	2.86	4.37	3.68	3.39	3.46	2.79	2.14	2.96	4.28	3.53	3.08	3.00	3.13	2.92	3.18	3.64	3.05	3.23	2.72	3.20	
From Santos	Tonnes (kt)	511	512	511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,534
	Cu (%)	0.85	0.83	0.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.85
	Au (g/t)	0.18	0.19	0.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19
	Ag (g/t)	1.74	2.03	2.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.94
From Alcaparrosa	Tonnes (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cu (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Au (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Ag (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total Ore to Candelaria Plant	Tonnes (kt)	26,829	26,389	27,503	27,597	27,683	27,707	27,520	27,446	26,908	27,417	27,491	27,522	27,521	27,635	27,615	27,287	27,302	27,240	26,976	27,645	27,721	27,645	8,710	638,955		
	Cu (%)	0.56	0.65	0.58	0.57	0.57	0.52	0.51	0.45	0.50	0.59	0.53	0.45	0.44	0.48	0.56	0.64	0.61	0.49	0.39	0.35	0.30	0.26	0.27	0.46	0.49	
	Au (g/t)	0.13	0.16	0.13	0.13	0.13	0.12	0.11	0.11	0.12	0.14	0.13	0.11	0.11	0.13	0.14	0.14	0.12	0.10	0.09	0.08	0.07	0.07	0.11	0.12		
	Ag (g/t)	1.85	2.65	2.10	1.80	1.65	1.82	1.52	1.46	1.61	1.87	1.45	1.24	1.47	1.81	1.89	2.17	2.18	1.69	1.22	1.58	1.53	1.35	1.39	2.06	1.71	
Open																											

**Table 33: Candelaria Copper Mining Complex Mine Consolidated Production Schedule (100% Basis) (continued 2/2)**

Plant Production Plan	Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	Total
Candelaria Plant Recoveries	% Cu	92.1%	92.9%	93.1%	92.8%	93.0%	92.5%	92.2%	93.0%	93.1%	92.2%	92.4%	93.1%	93.1%	92.2%	91.2%	88.0%	87.5%	87.5%	85.5%	86.1%	85.0%	81.9%	82.6%	82.6%	
	% Au	70.9%	72.2%	71.8%	71.8%	71.8%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	71.8%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	69.9%	
	% Ag	81.5%	82.7%	82.2%	81.4%	81.4%	81.4%	79.9%	79.9%	81.4%	81.4%	79.9%	79.9%	81.4%	81.4%	82.6%	82.6%	81.4%	79.9%	79.9%	79.9%	79.9%	79.9%	79.9%	81.4%	
Candelaria Plant Concentrate	Tonnes (kt)	459	535	491	488	488	441	434	387	418	500	444	385	375	409	467	512	489	389	301	277	235	199	202	110	<b>9,433</b>
	Cu (%)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
	Au (g/t)	5.5	5.5	5.3	5.3	5.5	5.3	5.0	5.3	5.3	5.5	5.6	5.6	5.4	5.3	5.5	5.3	5.7	6.1	6.4	6.4	6.8	6.6	6.1	5.5	
	Ag (g/t)	87.9	108.3	96.5	82.9	76.2	93.1	77.3	82.8	84.6	83.7	71.5	86.3	99.6	91.0	95.4	100.6	96.6	87.7	126.3	143.9	150.6	151.8	132.4	94.1	
Candelaria Contained Metal	Cu (kt)	138	160	147	146	147	132	130	116	126	150	133	115	112	123	140	154	147	117	90	83	70	60	61	33	2,830
	Au (koz)	81	95	84	84	86	75	70	66	72	85	78	69	67	71	79	90	83	71	59	57	48	43	43	22	1,678
	Ag (koz)	1,298	1,862	1,523	1,299	1,196	1,319	1,078	1,030	1,138	1,345	1,021	879	1,040	1,309	1,366	1,572	1,581	1,207	848	1,124	1,085	964	986	469	28,537
PAC Plant Recoveries	% Cu	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	93.5%	
	% Au	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	
	% Ag	82.0%	82.6%	82.6%	82.6%	82.6%	82.6%	81.4%	81.4%	79.9%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	81.4%	
PAC Plant Concentrate	Tonnes (kt)	42	41	43	43	39	39	37	30	32	32	32	11	-	-	-	-	-	-	-	-	-	-	-	-	<b>422</b>
	Cu (%)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	-	-	-	-	-	-	-	-	-	-	-	-	30.0
	Au (g/t)	5.2	5.5	5.4	5.4	5.6	5.7	5.5	5.6	5.8	5.5	5.5	5.5	-	-	-	-	-	-	-	-	-	-	-	-	5.5
	Ag (g/t)	53.7	64.8	61.6	64.1	73.1	59.3	58.4	53.9	58.1	61.2	61.2	61.2	-	-	-	-	-	-	-	-	-	-	-	-	61.1
PAC Contained Metal	Cu (kt)	13	12	13	13	12	12	11	9	10	10	10	3	-	-	-	-	-	-	-	-	-	-	-	-	127
	Au (koz)	7	7	8	7	7	7	7	5	6	6	6	2	-	-	-	-	-	-	-	-	-	-	-	-	75
	Ag (koz)	73	86	86	89	91	75	69	51	60	63	63	22	-	-	-	-	-	-	-	-	-	-	-	-	828
Total Concentrate Production	Tonnes (kt)	501	576	534	530	527	480	470	417	450	532	477	396	375	409	467	512	489	389	301	277	235	199	202	110	<b>9,855</b>
	Cu (%)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
	Au (g/t)	5.4	5.5	5.3	5.3	5.5	5.4	5.1	5.3	5.4	5.3	5.5	5.6	5.6	5.4	5.3	5.5	5.3	5.7	6.1	6.4	6.4	6.8	6.6	6.1	5.5
	Ag (g/t)	85.0	105.1	93.7	81.4	76.0	90.3	75.9	80.7	82.7	82.3	70.8	70.8	86.3	99.6	91.0	95.4	100.6	96.6	87.7	126.3	143.9	150.6	151.8	132.4	92.7
Total Contained Metal	Cu (kt)	150	173	160	159	158	144	141	125	135	160	143	119	112	123	140	154	147	117	90	83	70	60	61	33	<b>2,956</b>
	Au (koz)	88	102	92	91	93	83	77	71	78	91	84	71	67	71	79	90	83	71	59	57	48	43	43	22	1,752
	Ag (koz)	1,371	1,948	1,609	1,388	1,288	1,394	1,147	1,081	1,197	1,408	1,084	902	1,040	1,309	1,366	1,572	1,581	1,207	848	1,124	1,085	964	986	469	29,366



**Figure 32: Candelaria Copper Mining Complex Consolidated Mine Production Schedule**

Top: Total ore to Candelaria plant (kilotonnes per day)

Bottom: Contained copper production (kilotonnes)

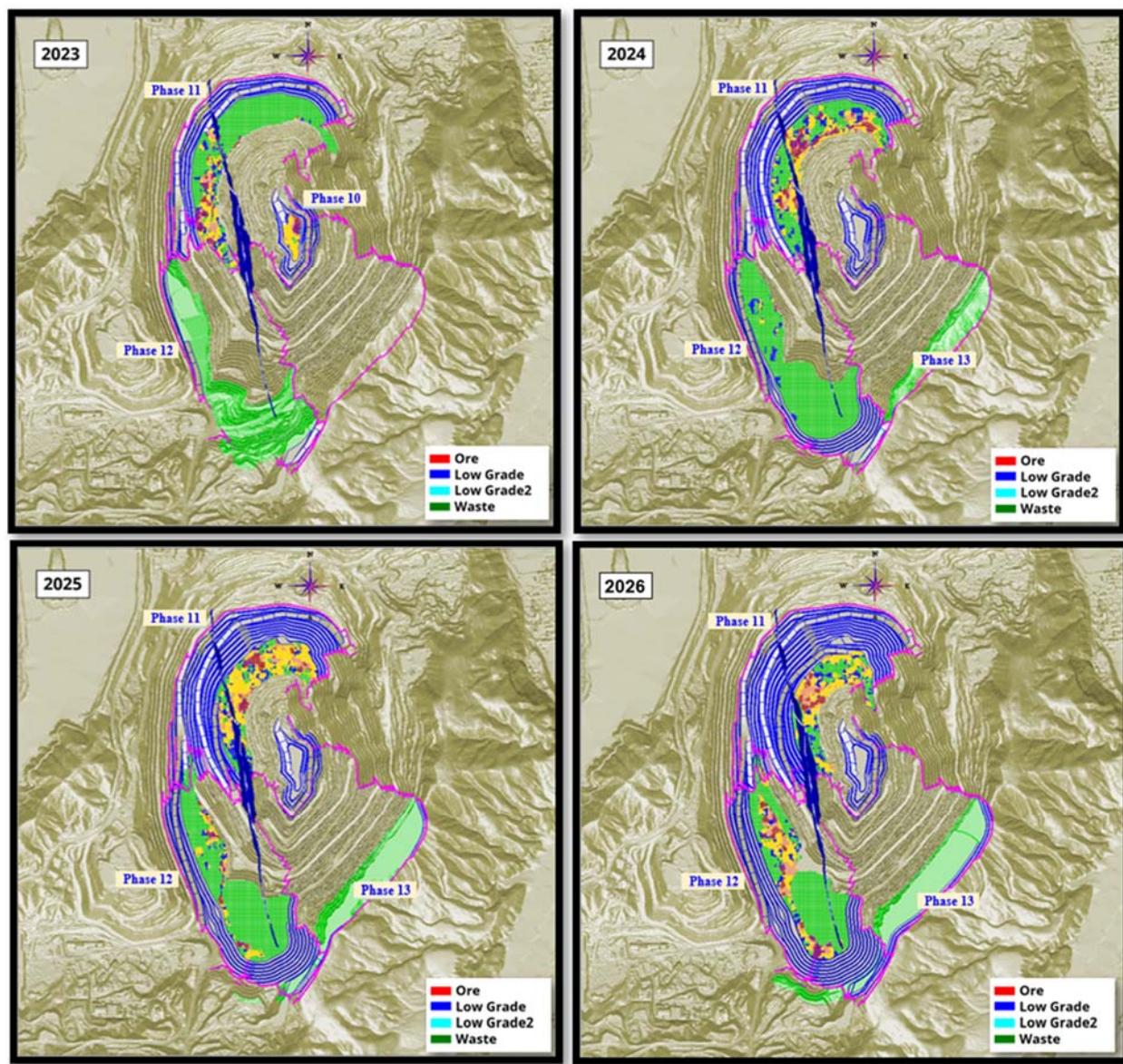


Figure 33: Annual Development Plan for 2023 to 2026

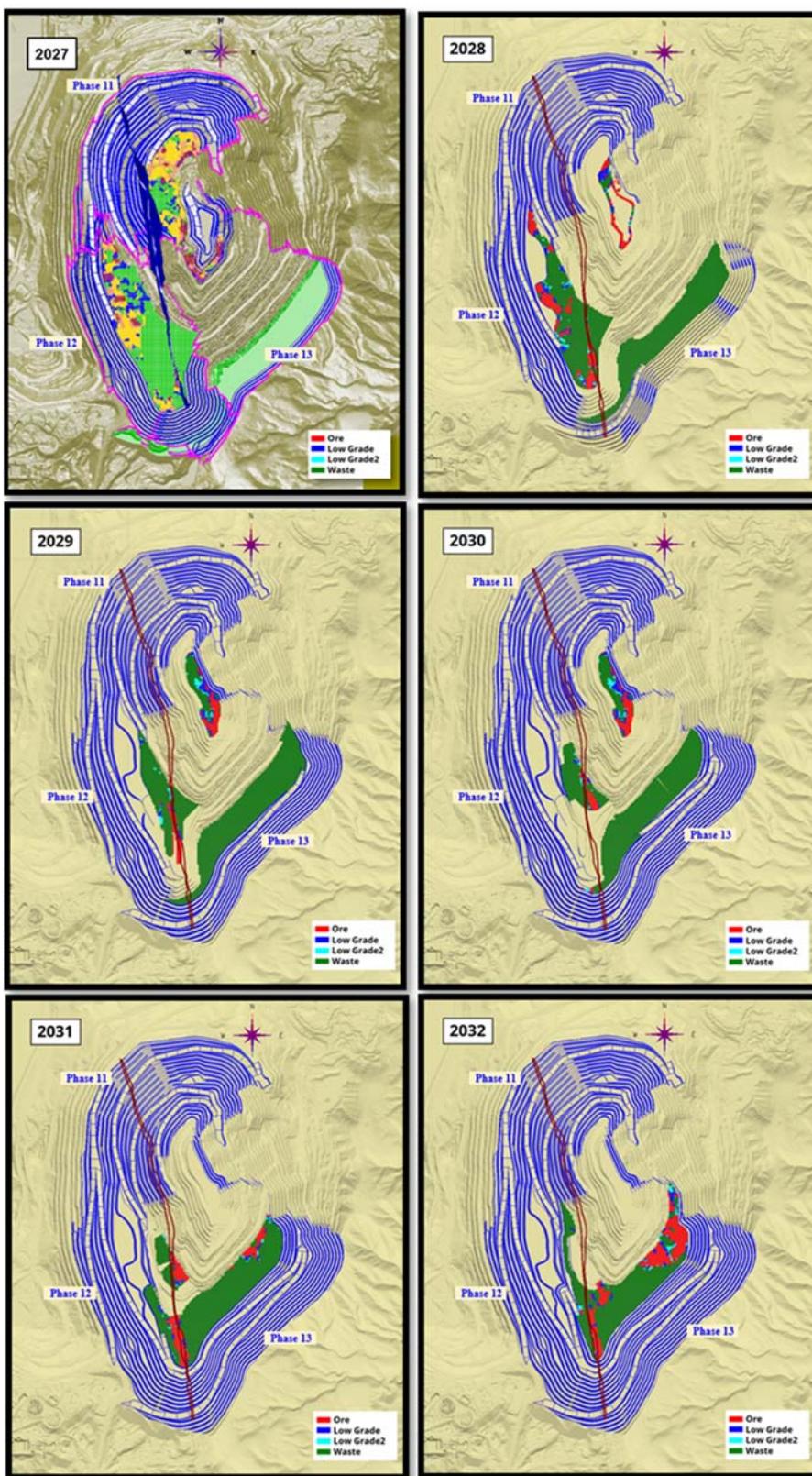


Figure 34: Annual Development Plan for 2027 to 2032

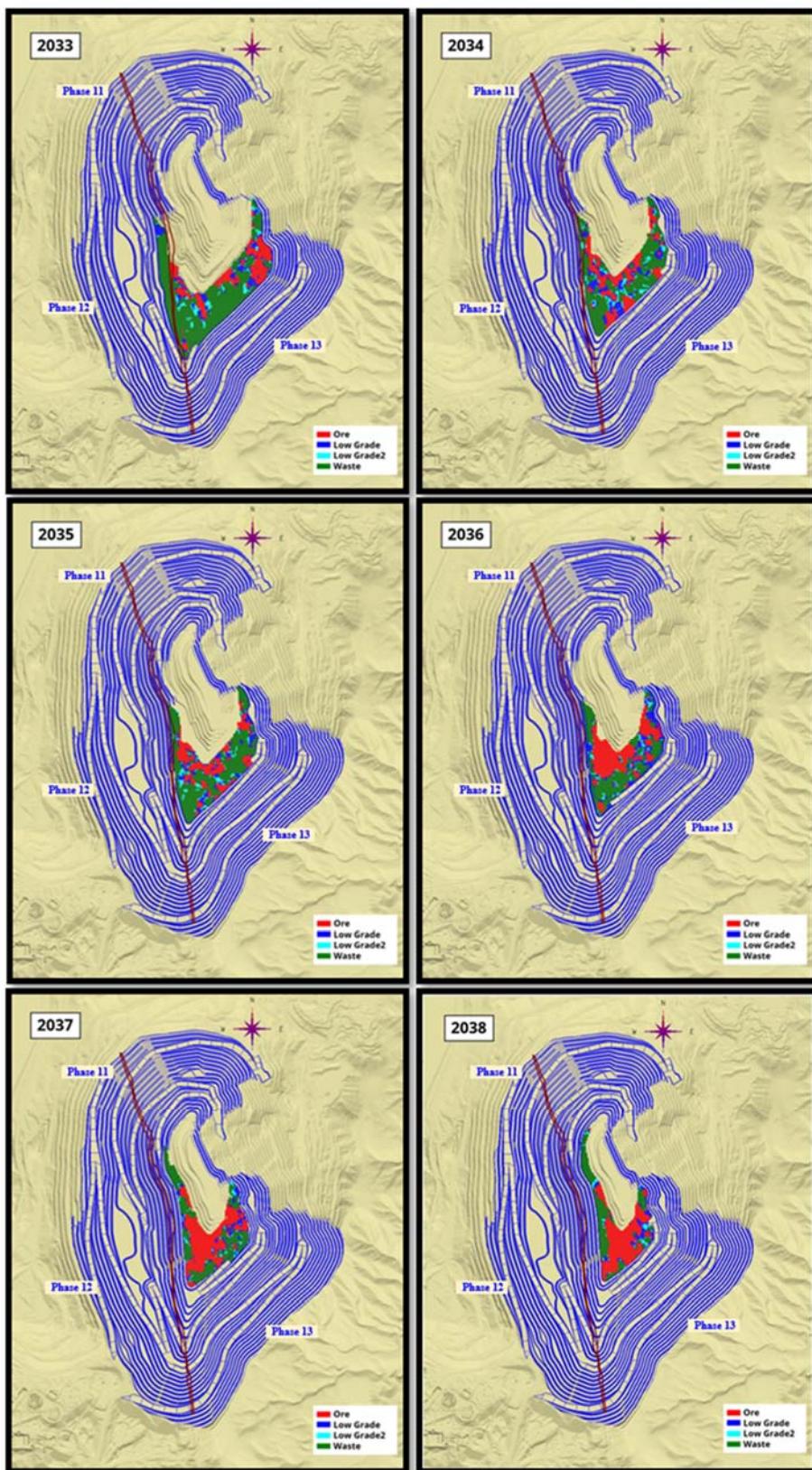


Figure 35: Annual Development Plan for 2033 to 2038

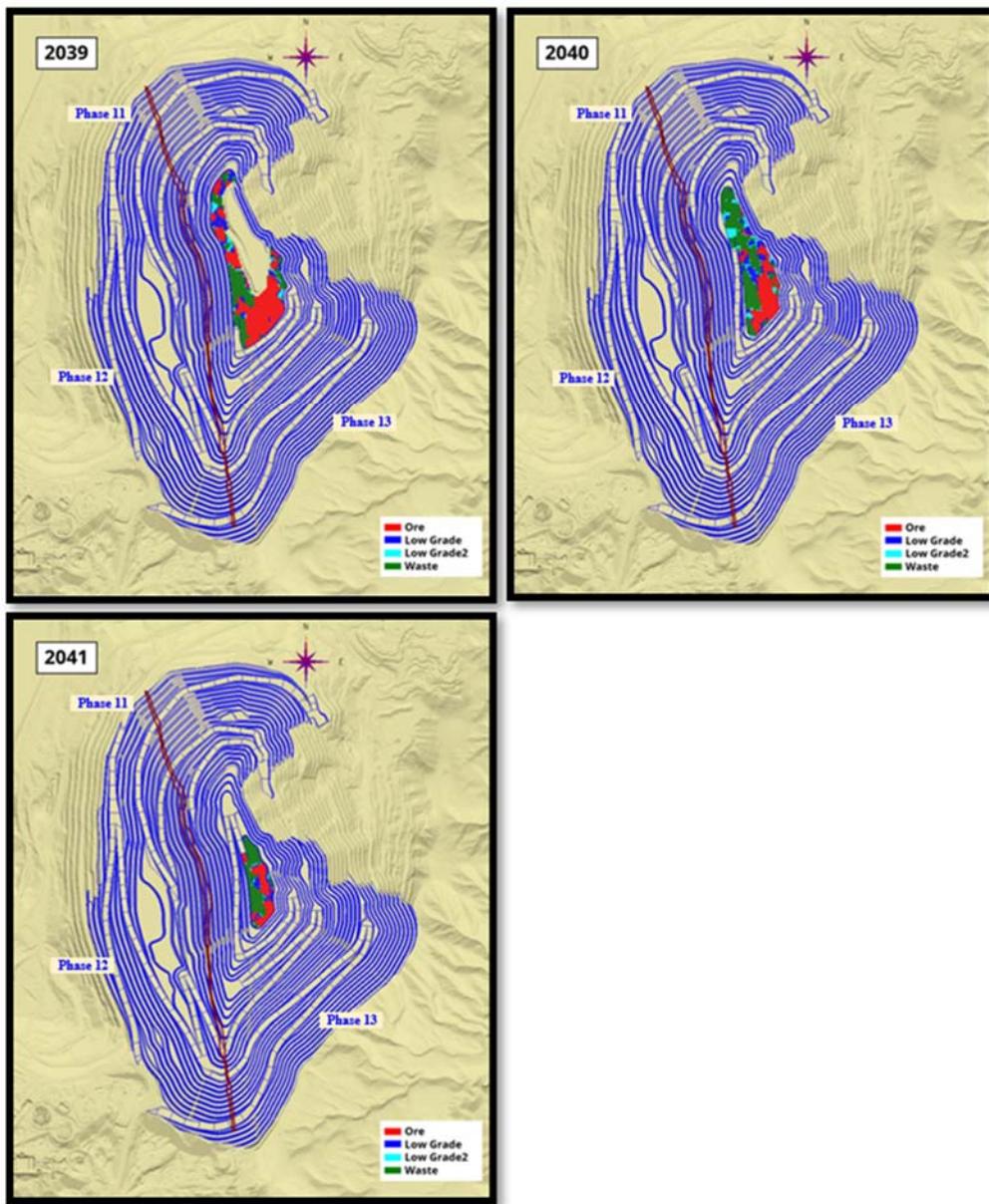


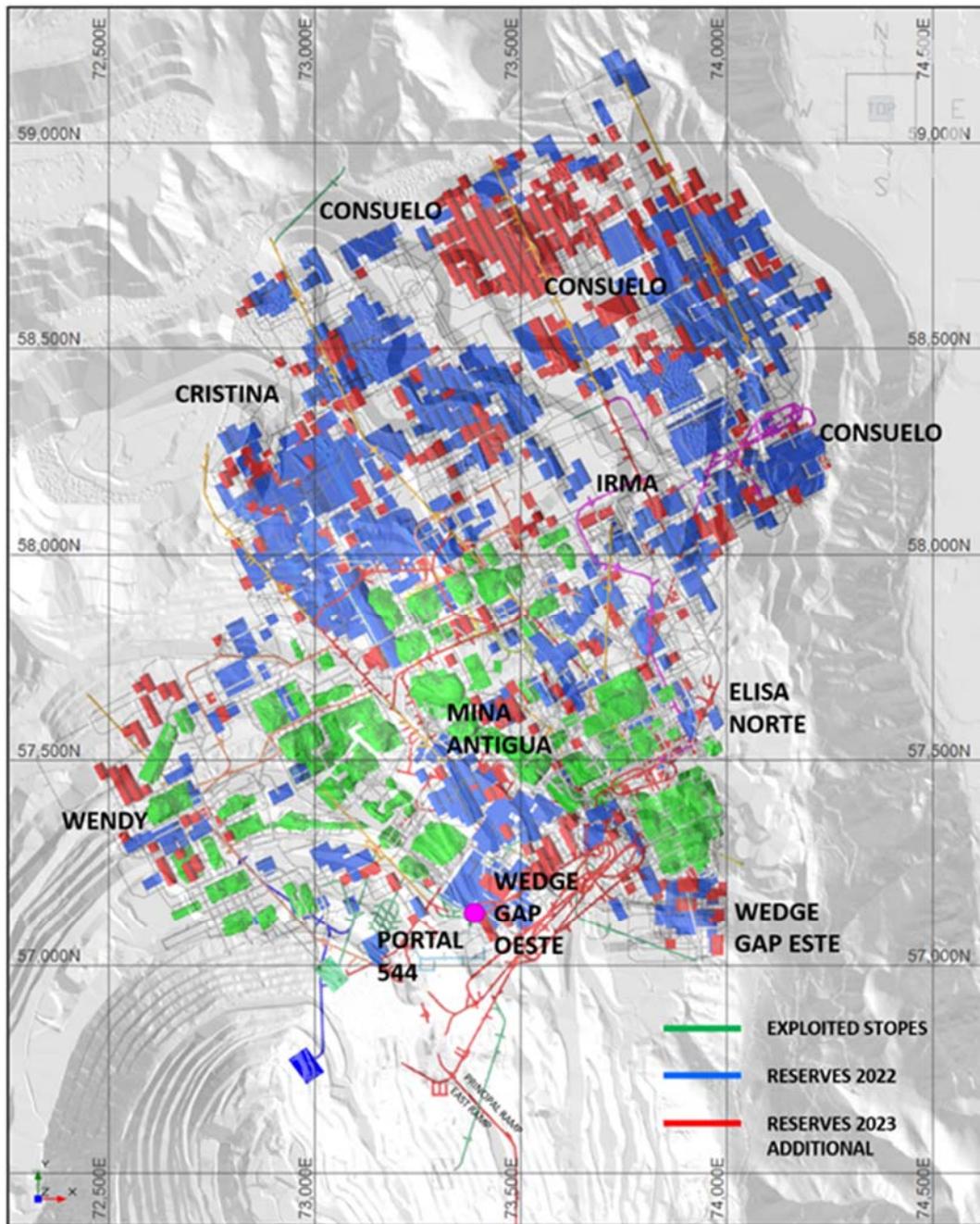
Figure 36: Annual Development Plan for 2039 to 2041

### 15.3 Underground Mine Design and Production Schedule

Each of the three underground mines and its associated facilities is accessed by a surface portal and ramp. Figure 37, Figure 38, and Figure 39 show the basic layout of Candelaria Underground (North Sector), Candelaria Underground (South Sector), and the Santos mine, respectively.

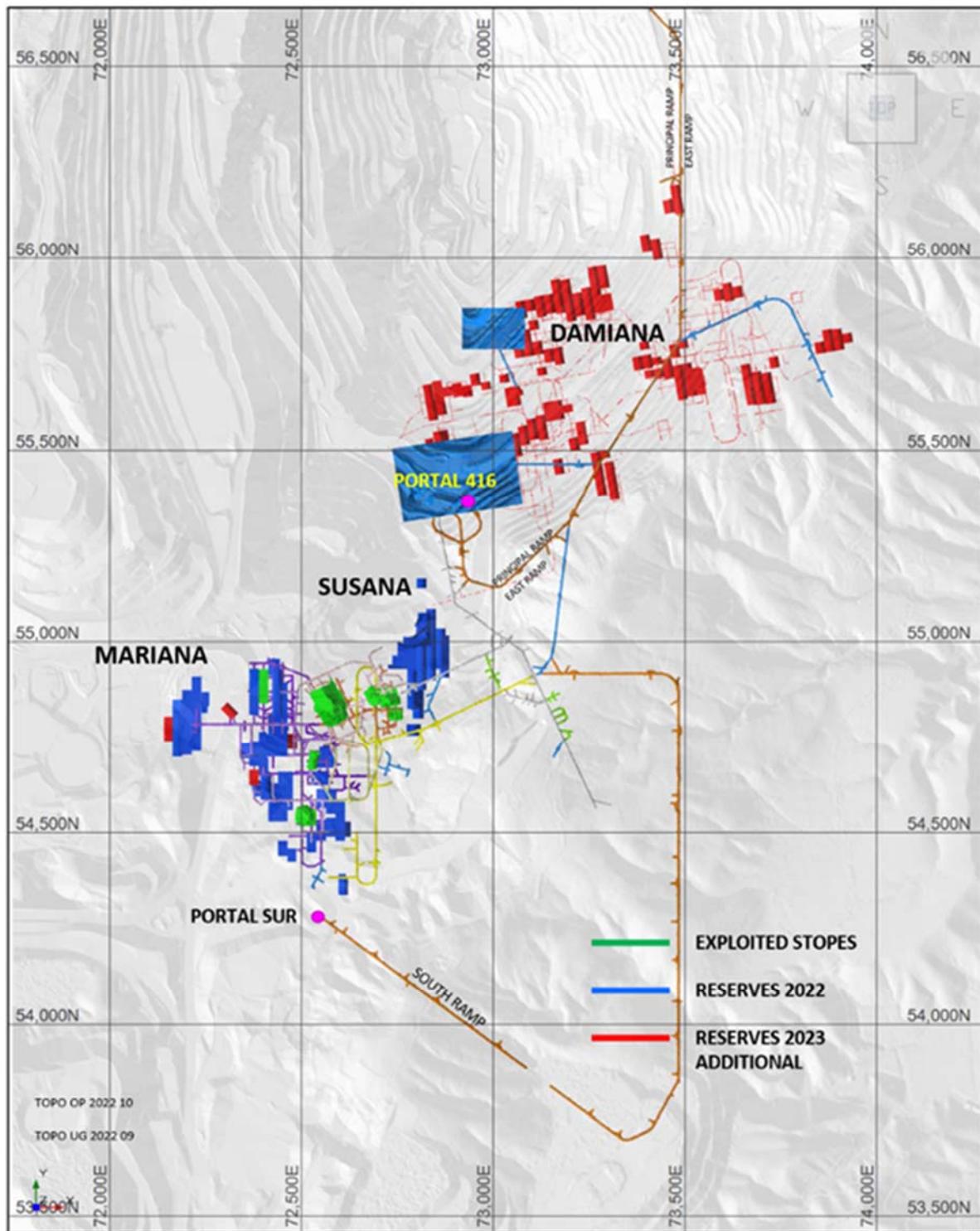
The underground mine Technical Services Group employs geological, geotechnical, planning and surveying personnel. The mines follow detailed production and development plans and schedules, with the mining activities conducted under the guidance and oversight of the Technical Services' Director.

The operational activities at the mines are largely performed by contractors with oversight by Minera Candelaria and Minera Ojos del Salado management. At Candelaria Underground, both North and South sectors, the owner's team is responsible for production loading and hauling operations. In addition, production drilling at South sector has recently been internalized and performed by CCMC. The contractors employ and manage the mines' labour force and they own and maintain the mining equipment for the areas for which they are responsible.



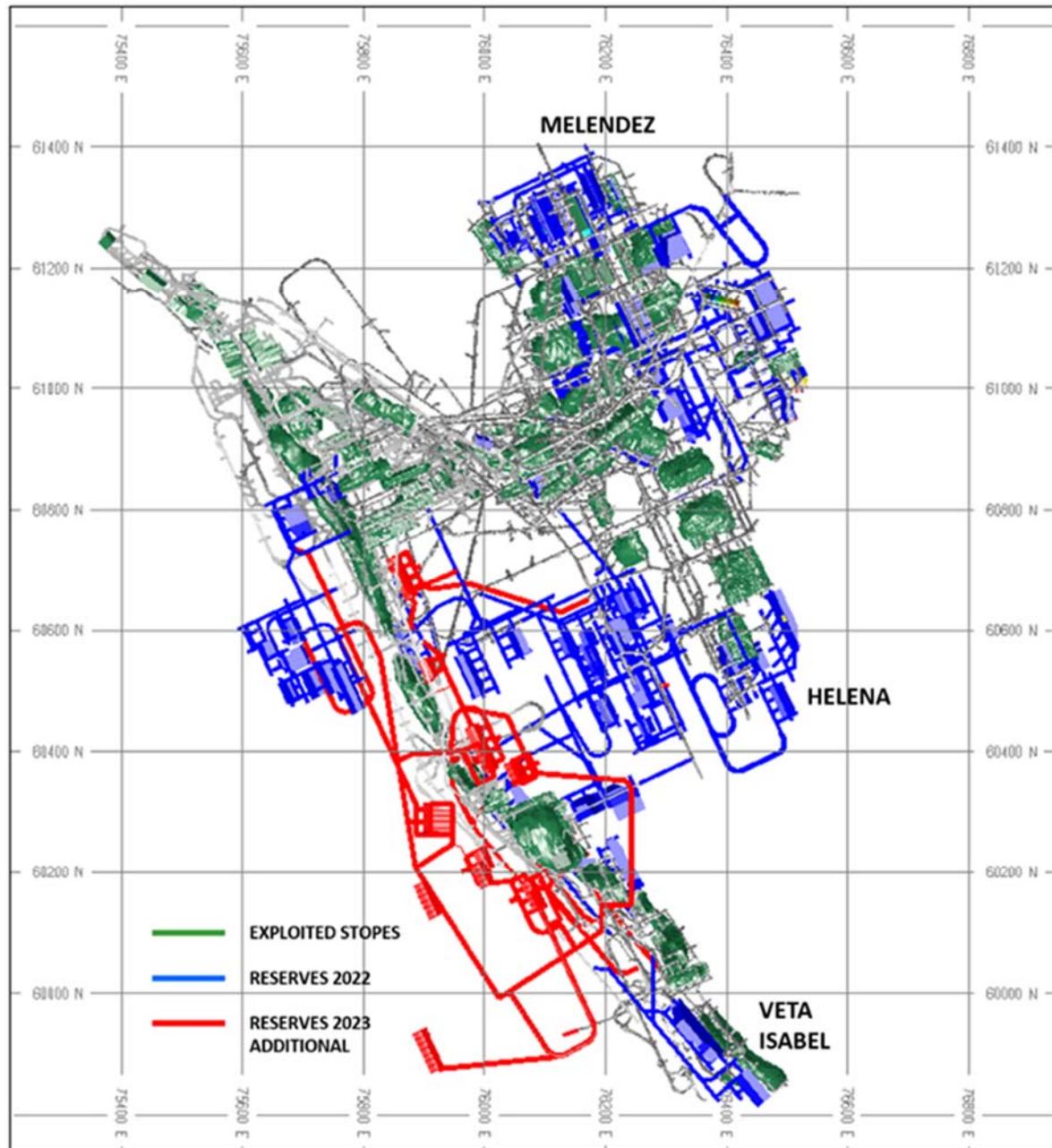
**Figure 37: Layout of the Candelaria Underground Mine (North Sector)**

Source: Minera Candelaria



**Figure 38: Layout of the Candelaria Underground Mine (South Sector)**

Source: Minera Candelaria



**Figure 39: Layout of the Santos Underground Mine**

Source: Minera Ojos del Salado

The underground mines are relatively dry owing to their location in an arid region. Geotechnical rock mass characterization was completed from core logging, detailed mapping of geological structures, testing of intact material properties and measuring in-situ stresses. Empirical open stope design methodologies were used to determine roof and wall stability and the size of pillars. Numerical analysis simulation tools for mine sequencing analysis were also applied.

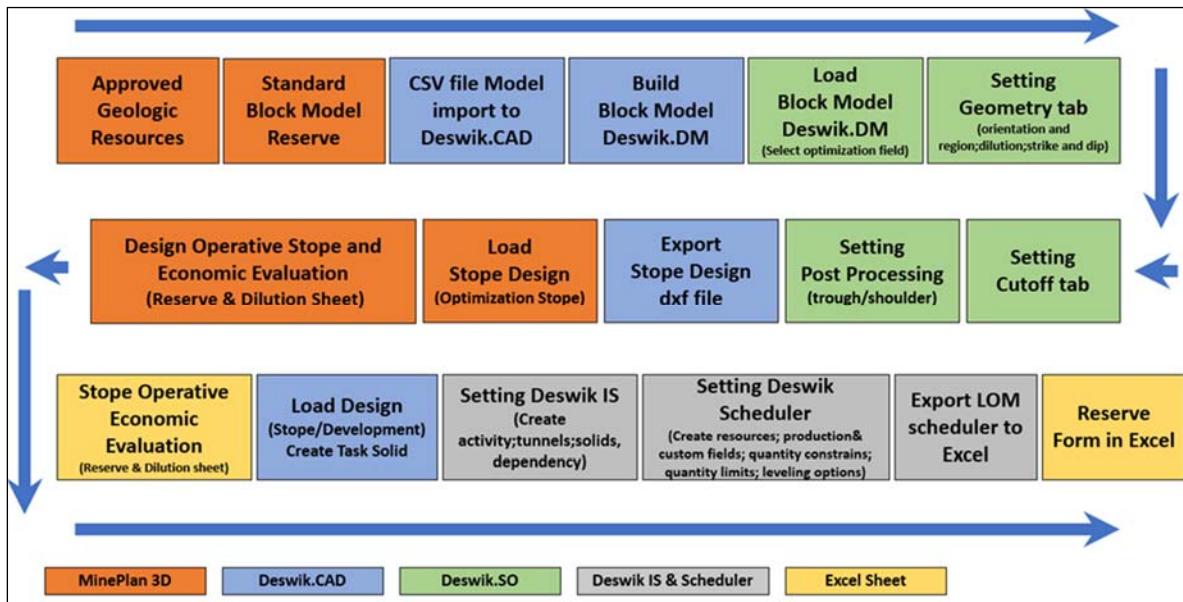
External consultants undertook budget and global stability analysis of the planned open stoping operations for all two underground mines between 2018-2022, which are documented in the following Technical Reports:

- March-June 2018 – “Capacitación en modelamiento numérico y sismicidad inducida” – GMT
- November 2018 – “Capacitación geomecánica Ground Control” – GMT
- Feb 2019 –“Análisis interacción Fase10 Rajo Candelaria con Rampa principal Esta mina Candelaria subterránea” – GMT
- Jan 2019 – “Overall stability analysis of the phase 11 design” - CNI
- June 2019 – “South wall phase 10-57’ inter-ramp slope angle” - CNI
- March – December 2019 – “Estudio geomecánico de prefactibilidad para el proyecto de expansión de mina Candelaria subterránea (CUGEP)” – GMT
- Jan 2020-April 2021 – “Análisis de estabilidad geomecánico de corto plazo de los diseños de caserones año 2020 Budget por sectores. Análisis de sismicidad inducida” - GMT
- May-June 2020, Candelaria East Wall and Phase-11 Design Modification – CNI
- March 2020-Jan 2021 – “Estudio geomecánico de factibilidad para el proyecto de expansión de mina Candelaria subterránea (CUGEP)” – GMT
- July 2022 - “Análisis de macrobloque Candelaria OP” - GMT

The authors of this Technical Report are of the opinion that the stopes that support the proposed LOM plan for the Candelaria and Santos underground mines can be mined as expected.

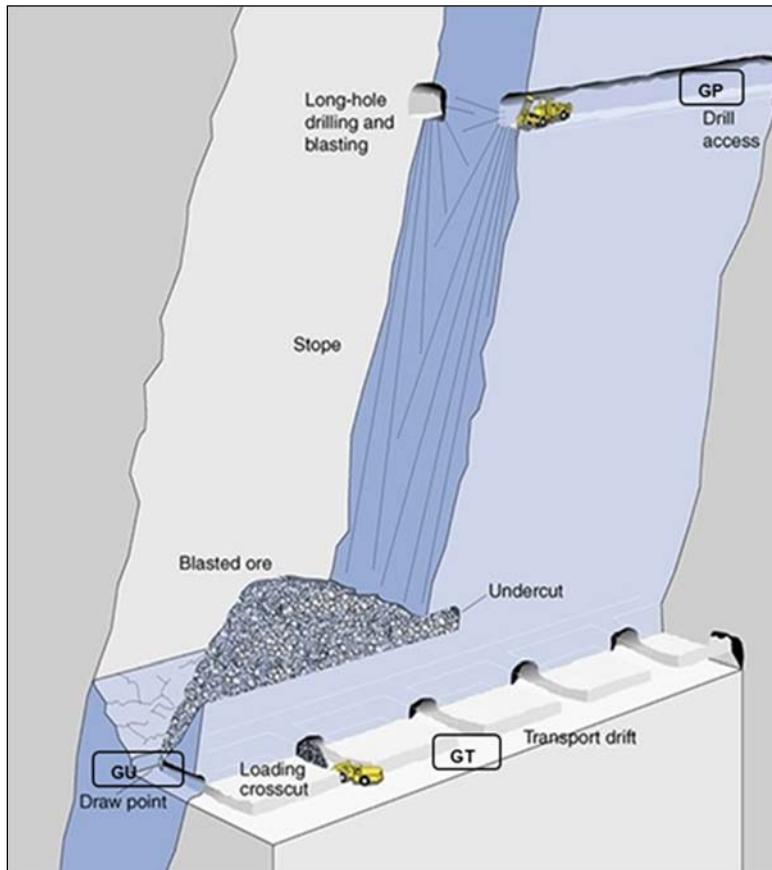
The flowsheet for the design and scheduling of the underground Mineral Reserves in the mine plan is shown in Figure 40. The two underground mines utilize a sublevel open stoping mining method for ore extraction. This method is ideal for relatively large, vertical, thick deposits with favourable (stable) host rock (Figure 41).

Stope excavations can typically be up to 180 metres high with sublevels at 20 to 60 metre intervals. The length of the stopes ranges from 40 to 100 metres, with widths varying between 20 to 30 metres. A Redbore RB50 or down-the-hole (DTH) drill is used to create a slot at one end of the stope, which will provide the relief necessary when blasting commences. Stope blastholes are drilled downwards from the sublevel drilling drifts as benches, using 114-to-130-millimetre diameter holes. The holes are loaded and blasted in vertical slices towards the open face created by the slot blasting. The blasted ore gravitates to the bottom of the stope and is collected in draw points at the production level below. This lower level also consists of the haulage (transport) drift.



**Figure 40: Candelaria Life of Mine Plan Development Process**

Source: Minera Candelaria



**Figure 41: Depiction of the Sublevel Open Stoping mining method**

The undercut levels, which feed the draw points, are 15 to 20 metres high and inclined at 50 to 60 degrees to allow the blasted ore to flow easily by gravity. An Epiroc Simba top hammer rig drills 64-millimetre up holes within the undercut, which are loaded and blasted with the down holes. Once the stope is mined, a remaining rib pillar, which can be another 20 to 30 metres wide, may be blasted into the stope to increase the extraction tonnage. Typically, a 20-metre structural pillar remains between each stope and no backfill is used at these operations.

Ore is mucked from the draw points using surface-type front-end loaders and load-haul-dump (LHD) vehicles. The mucked ore is dumped into 37-tonne, highway-type trucks and hauled up the ramp to a surface stockpile for subsequent re-handling and processing. At Candelaria Underground, the highway-style trucks have been replaced with 60-tonne low-profile articulated trucks.

Some mineralized material may not be recoverable at stope completion, while other mineralized material is left as support pillars, lowering the overall mining recovery. The overall mining recovery varies depending on the type of stope and its geometry. The amount of dilution also varies depending on the stope setting. Dilution typically contains mineralized material with low metal grades. Typical mining recovery and dilution factors are tabulated in Table 34.

**Table 34: Summary of Stope Setting**

Stope Type	Dilution (%)	Recovery (%)
Vertical	18	95
Inclined	30	95
Rib	50	95
Pillar	40	95
Structural pillar	50	95

A Scoping Study to determine the economic viability of adding cemented paste tailings backfill to the underground workings, in anticipation of providing greater extraction tonnages, was completed in 2019. The results of the study showed that recovering remnant supporting pillars is potentially viable. However, this option has been put on hold and not prioritized for further investigation as the district still has a long mine life.

## 15.4 Underground Mine Plan

The current scheduled annual production for the Candelaria Underground (North and South Sectors) and Santos mines is summarized in Table 35.

The Candelaria Underground mine is planned 14,000 ore tonnes per day by approximately 10,000 tonnes and 4,000 tonnes from North and South sectors, respectively. The combined production from both sectors will allow the mine to maintain this peak production up until 2046. Between 2029-2037, production from the Candelaria South will temporarily be stopped due to the interaction with the open pit. The underground mining activities in the South sector will resume once the open pit is complete. During this stoppage period production from the standalone Candelaria North is planned to sustain the production rate of 14,000 tonnes per day.

Candelaria operations currently uses an existing portal located on the 416-pit bench to access the underground mine. The North and South Sectors are connected through the East Ramp. There are two new ramps currently under construction for future accesses: the South Ramp and 544L Portal and Ramp.

The South Ramp is located in the South, outside of the open pit area, and is intended to be a haulage route for the South Sector and an alternative emergency egress for the sectors. This ramp was completed by the end of 2022. The new 544L portal is located inside the ultimate pit limit. This ramp is a replacement for the existing 416L portal and scheduled to be in service in early 2023.

**Table 35: Underground Mineral Reserve Schedule**

Mine Production Plan	Unit	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	Total	
From Candelaria UG	Tonnes (kt)	5,462	5,490	5,475	5,475	5,505	5,490	5,475	5,475	5,490	5,475	5,475	5,475	5,475	5,490	5,475	5,475	5,490	5,475	5,475	5,475	5,475	5,490	5,475	5,475	131,507	
	Cu (%)	0.87	0.91	0.93	0.81	0.82	0.81	0.95	0.86	0.79	0.78	0.75	0.68	0.74	0.85	0.74	0.92	0.86	0.91	0.62	0.67	0.71	0.64	0.65	0.63	0.79	
	Au (g/t)	0.20	0.20	0.20	0.19	0.22	0.19	0.20	0.19	0.19	0.19	0.17	0.16	0.17	0.18	0.16	0.19	0.18	0.21	0.15	0.16	0.16	0.15	0.15	0.15	0.18	
	Ag (g/t)	3.69	3.34	2.78	3.00	2.66	2.86	4.37	3.68	3.39	3.46	2.79	2.14	2.96	4.28	3.53	3.08	3.00	3.13	2.92	3.18	3.64	3.05	3.23	2.72	3.20	
From Santos	Tonnes (kt)	1,823	1,841	1,838	1,348	1,358	1,354	1,351	1,351	1,351	1,351	1,351	480	-	-	-	-	-	-	-	-	-	-	-	-	-	16,795
	Cu (%)	0.98	0.95	1.00	1.02	0.92	0.93	0.87	0.70	0.76	0.76	0.76	0.76	-	-	-	-	-	-	-	-	-	-	-	-	-	0.88
	Au (g/t)	0.21	0.22	0.23	0.23	0.22	0.22	0.20	0.17	0.19	0.18	0.18	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21
	Ag (g/t)	2.00	2.33	2.33	2.47	2.54	2.11	1.95	1.48	1.69	1.79	1.79	1.79	-	-	-	-	-	-	-	-	-	-	-	-	-	2.05
From Alcaparrosa	Tonnes (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cu (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Au (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ag (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Ore from UG	Tonnes (kt)	7,285	7,331	7,313	6,823	6,863	6,844	6,825	6,825	6,826	6,841	6,826	5,955	5,475	5,490	5,475	5,475	5,475	5,490	5,475	5,475	5,475	5,475	5,490	5,475	5,475	148,302
	Cu (%)	0.90	0.92	0.95	0.85	0.84	0.83	0.93	0.83	0.79	0.77	0.75	0.69	0.74	0.85	0.74	0.92	0.86	0.91	0.62	0.67	0.71	0.64	0.65	0.63	0.80	
	Au (g/t)	0.20	0.20	0.21	0.20	0.22	0.19	0.20	0.19	0.19	0.19	0.17	0.17	0.17	0.18	0.16	0.19	0.18	0.21	0.15	0.16	0.16	0.15	0.15	0.15	0.18	
	Ag (g/t)	3.26	3.08	2.67	2.90	2.63	2.71	3.89	3.24	3.05	3.13	2.59	2.11	2.96	4.28	3.53	3.08	3.00	3.13	2.92	3.18	3.64	3.05	3.23	2.72	3.07	

To support the planned production, Candelaria Underground will reach peak development rates up to 13 kilometres per year. Table 36 shows combined annual development rates for Candelaria Underground mine.

**Table 36: Underground Development Schedule**

<b>Candelaria Underground</b>	<b>Unit</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>
Development OpeX	m	3,359	4,823	4,801	3,488	3,413	4,267	4,725	4,015	5,502	4,349
Development Capex	m	5,641	7,777	7,801	9,112	9,187	8,933	8,475	9,185	7,698	8,251
Total	m	9,000	12,600	12,601	12,600	12,600	13,200	13,200	13,200	13,200	12,600
	m/month	750	1,050	1,051	1,050	1,050	1,100	1,100	1,100	1,100	1,050
<b>Candelaria Underground</b>	<b>Unit</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
Development - opeX metres	m	4,417	4,454	3,561	4,388	5,483	4,588	6,420	6,420	6,420	6,420
Development - capex metres	m	5,183	5,146	6,031	5,212	8,917	7,912	2,940	2,940	2,940	2,940
Total	m	9,600	9,600	9,601	9,600	14,400	12,500	9,360	9,360	9,360	9,360
	m/month	800	800	801	800	1,200	1,042	780	780	780	780

The Santos mine will maintain its current production rate of approximately 5,100 tonnes per day until 2025. Production will decrease to 3,700 tonnes per day from 2026-2033 and ends in year 2034. This will be achieved by developing 400 metres per month until 2025 when the development rate will be reduced gradually. The development rate varies from 200 to 100 metres per month from 2026 to 2031.

## 15.5 Waste Dumps

The capacity of each of the waste dumps is summarized in Table 37. The waste dump surface area will be increased with the new waste dumps El Buitre and Sur-Sur by approximately 775 hectares with an expanded capacity of approximately 1,020 million tonnes. The dumps will be constructed in 20-metre lifts and 32-metre-wide access ramps.

The waste dump remaining capacity at Nantoco as of Oct 31, 2022, was 265 million tonnes. The North and Buitre dumps had 200 and 790 million-tonne capacities, respectively. The LOM plan shows a total waste production of 892 million tonnes, 753 million tonnes from the Candelaria Open Pit and 139 million tonnes from Española, indicating that the dump designs available now are not sufficient for the current LOM plan. However, for this purpose, new EIA documentation is being prepared, adding more lifts in the Nantoco and Buitre waste dumps, for which there is a reasonable expectation of approval.

**Table 37: Waste Dump Capacity**

Waste Rock Dump	Currently Approved (Mt)	Additional Project (Mt)	Total (Mt)	Currently Approved Elevation (m.a.s.l.)	Projected Elevation (m.a.s.l.)	Final Projected Surface Area (hectare)
North	2,270	92	2,069	880	880	490
Nantoco	455	150	605	940	940 (Nth) 1080 (Sth)	357
El Buitre		795	795		875	610
South		225	225		1,160	165

Source: Minera Candelaria

## 15.6 Mine Equipment

### 15.6.1 Open Pit Mine Equipment

The Candelaria Open Pit is a conventional truck and shovel operation. The unit operations are drilling, blasting, grade control, loading and hauling. The primary loading units are electric cable shovels; however, the sustaining capital plan does allow for a gradual implementation of hydraulic loading units. The primary drills are rotary diesel-powered units. Support equipment provides development access, road maintenance and equipment servicing capability. The open pit mine operates 24 hours per day, 365 days per year. Shift employees work 12-hour shifts. The overall mining rate for the Candelaria Copper Mining Complex is approximately 205,000 tonnes per day for the next 23 years. Total primary crusher throughput is variable based upon hardness averaging 76,800 tonnes per day combined open pit and underground ore.

The primary production blasthole drills are rotary machines capable of single pass drilling on a 16-meter bench. The current drill fleet consists of seven PV-351 diesel units. Drill mechanical availability for the fleet averages 80% and utilization averages 80%. Drill penetration rates are variable ranging from 15 metres per hour in ultra-hard rock to 30 metres per hour in ultraweak rock. The fleet will be expanded to a total of 10 drills over the next year including 7 Pit Vipers and 5 Roc drills for wall control blasting.

The rock at the Candelaria Open Pit is hard and fine fragmentation is required in most areas of the pit to maximize throughput to the concentrator. As a result, drill patterns are relatively tight resulting in powder factors ranging from 0.50 to 0.75 kilogram per tonne.

The wall control blasting includes line holes drilled for presplitting. There are five Atlas Copco Roc L8 drills dedicated to line hole drilling. The line holes are normally drilled on 2-metre centres at the recommended bench face angle on a double bench.

Blasting is carried out with heavy ammonium nitrate / fuel oil. Blasthole cuttings are sampled and assayed for copper only for grade control.

The primary loading fleet currently consists of two P&H 4100 (43 cubic metres), three P&H 2800 (28 cubic metres) electric cable shovels. A PC 5500 (12 cubic metres) hydraulic excavator is also being used in narrow operating areas. Rental units are planned in the short term until new machines can be delivered. Support units include two Cat 994F (16 cubic metres) and one Cat 994K (9 cubic metres) wheel loader. The P&H 4100 and P&H 2800 shovels mine stockpiles, ore, and waste. The CAT 6020 re-handles ore from the Candelaria Underground North Sector to large haulage trucks for transportation to the primary crusher. The shovel fleet has an average availability of 81% and utilization of 80%.

Under a major mine equipment re-capitalization program, new hydraulic excavators/shovels will replace the cable shovels, during 2024. A P&H 4100 electric shovel will be replaced, and a new CAT 6060 hydraulic shovel will be acquired for the La Española project.

The Minera Candelaria haulage fleet currently consists of 55 Cat 793F mechanical drive trucks. These trucks use light boxes and typically carry loads of between 232 and 237 tonnes. Road conditions in the mine are very good and the tire life is 90,000 kilometres. A truck rebuild program is also in place at the Candelaria Open Pit, and trucks are overhauled at 100,000 hours with an extended life expectancy of 75,000 hours. The truck fleet availability is 87% and utilization is 86%. Loading times for the trucks range from 10.0 minutes with a PC2000 to 1.6 minutes with a P&H 4100. The truck fleet requirement in the LOM plan is expected to peak at 60 units. Rebuilds are planned for 14 Cat 793C trucks; four in 2021, 2022 and 2023 and two in 2024, while the remainder of the fleet will be phased out and replaced with newer technology Cat 793F trucks; however, the Cat 793F trucks will also be rebuilt. The LOM plan assumes 6 trucks will be rebuilt between 2029 to 2035. A total of 38 new trucks will be purchased over the next four years under the mine equipment re-capitalization program.

The open pit mine has an extensive fleet of support equipment. The track dozer fleet includes six Cat D10 and two Cat D11 models, which are used on dumps, stockpiles, and in the pit for bench maintenance. Under the re-capitalization program this dozer fleet will be upgraded with newer models. There are five Cat 824-wheel dozers for road and bench maintenance. In the future, Cat 834-wheel dozers will be introduced. The grader fleet includes three Cat 16M and one Cat 24M models. Replacements for graders are also planned.

The mine support equipment fleet includes five Cat 773 and one Cat 777 water trucks for watering roads and working faces prior to loading to control dust. Replacement Cat 777G water trucks are planned. The excavator fleet includes two Cat 385 models that are used for wall scaling and ditching as required.

A dispatch system is used in the mine. High precision GPS locators are used on shovels and drills. Lower precision systems are used on trucks and auxiliary equipment.

The open pit mine major equipment additions and replacements under the four-year mine recapitalization program are summarized in Table 38.

**Table 38: Combined Open Pit and Underground Mine Equipment Additions and Replacements to 2023 - 2027**

Unit Cost US\$M	Equipment	2023 FY		2024 FY		2025 FY		2026 FY		2027 FY		Total 2023 - 2027	
		Units	US\$M	Units	US\$M	Units	US\$M	Units	US\$M	Units	US\$M	Units	US\$M
<b>I. Open Pit</b>													
2.5	Bucket Shovel 4100	-	-	1	2.5	-	-	-	-	-	-	1	2.5
0.8	Roc L8 Drilling (2021)	-	-	-	-	-	-	2	1.7	-	-	2	1.7
2.3	Bulldozer D11	-	-	-	-	-	-	1	2.3	-	-	1	2.3
1.9	Water Truck 777G	-	-	1	1.9	-	-	1	1.9	-	-	2	3.7
0.3	Estanques 777	2	0.6	-	-	-	-	-	-	-	-	2	0.6
4.1	Purchase Haul Truck Cat793 - 2022 - 2023	14	56.8	-	-	-	-	-	-	-	-	14	56.8
36.8	Shovel 4100 (2023)	-	-	1	36.8	-	-	-	-	-	-	1	36.8
3.1	Rebuild Hydraulic Shovel Pala 60	-	-	1	3.1	-	-	-	-	-	-	1	3.1
3.4	Rebuild Hydraulic Shovel Pala 61	-	-	-	-	1	3.4	-	-	-	-	1	3.4
1.2	Hydraulic Shovel 6020 Rebuild	-	-	-	-	-	-	1	1.2	-	-	1	1.2
7.8	New Drill Pit Viper 351 (2022 - 2025)	-	-	-	-	2	15.6	-	-	-	-	2	15.6
0.9	Loader CAT 968	-	-	1	0.9	-	-	-	-	-	-	1	0.9
0.6	Loader CAT 966 (2022/2023)	-	-	2	1.2	-	-	-	-	-	-	2	1.2
1.5	Bulldozer D10	-	-	-	-	-	-	3	4.4	1	1.5	4	5.8
1.2	Excavator 390 (2026)	-	-	-	-	-	-	1	1.2	-	-	1	1.2
<b>Total Open Pit</b>		<b>16</b>	<b>57.5</b>	<b>7</b>	<b>46.3</b>	<b>3</b>	<b>19.0</b>	<b>9</b>	<b>12.6</b>	<b>1</b>	<b>1.5</b>	<b>36</b>	<b>136.8</b>
<b>II. La Española</b>													
5.1	New Haul Truck CAT 793F La Española	-	-	-	-	-	-	1	5.1	-	-	1	5.1
7.8	Drills Pit Viper La Española	-	-	-	-	-	-	1	7.8	-	-	1	7.8
12.1	Komatsu PC5500 La Española	1	12.1	-	-	-	-	-	-	-	-	1	12.1
<b>Total La Española</b>		<b>1</b>	<b>12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>25.0</b>
<b>III. Underground</b>													
2.0	Replacement Cand UG Trucks	-	-	-	-	2	4.0	-	-	-	-	2	4.0
1.0	1 Simba Drill (Replace)	-	-	-	-	-	-	-	-	1	1.0	1	1.0
1.6	1 Truck AD63 Cand UG	1	1.6	-	-	-	-	-	-	-	-	1	1.6
<b>Total Underground</b>		<b>1</b>	<b>1.6</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>4.0</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1.0</b>	<b>4</b>	<b>6.6</b>
<b>Total Mine</b>		<b>18</b>	<b>71.2</b>	<b>7</b>	<b>46.3</b>	<b>5</b>	<b>23.0</b>	<b>11</b>	<b>25.5</b>	<b>2</b>	<b>2.5</b>	<b>43</b>	<b>168.5</b>

## 15.6.2 Underground Mine Equipment

All two underground mines utilize conventional surface and underground equipment designed for hard-rock mining environments. LHDs and front-end loaders are used for mucking ore from the stope draw points and development headings. Several of the LHDs have remote-control capability, which allows the unit to travel past the brow and increase ore recovery, whereas the front-end loaders do not. Blasted ore is mucked into 45-tonne, highway-type trucks at Santos and 60-tonne underground haul trucks at Candelaria, which transport the muck to a surface stockpile. For production ore, typically three to four trucks are assigned to one loader depending on the haul distance. For stope drilling, down-the-hole drills with 114 to 130-millimetre diameter bits are used in the sublevels. Atlas Copco Simba top hammer drills are utilized for draw point drilling. Twin-boom jumbos drill off the development headings and drill holes for installing the bolts used for ground support. Aerial-lifts are used for the installation of services and bolts.

The overall mining rate is currently 14,000 tonnes per day for the Candelaria Underground mine. The mine will maintain this peak production rates until year 2046. Ore production from the Santos mine will be at 5,100 tonnes per day until 2025 and will ramp down to 3,700 tonnes per day until 2033 and conclude in 2034 with an average production rate of 1,300 tonnes per day.

The primary mining equipment currently used at the Candelaria Underground and Santos mines is summarized in Table 39. At the Candelaria Underground mine, Minera Candelaria owned and operated loading and hauling equipment which are mainly consists of 17-tonne LHDs and 60-tonne underground haul trucks.

All underground mining equipment at Santos and most of the development and support equipment at Candelaria underground are owned and operated by contractors. The equipment fleet will remain constant for the next couple of years as the mine has reached a steady state production.

**Table 39: Current Underground Equipment**

Equipment	Owner		Contractor	
	Candelaria UG	Candelaria UG	Santos	
LHD's (Production)	7			
Truck AD 60-61	19			
Tophammer Drills	3			
Jumbos (Development)		11	4	
LHD's (Development)		4	4	
Front-end Loaders		3	4	
Truck (30 tonnes)		8		
Truck (40 tonnes for UG)			12	
Truck (40 tonnes for Surface)			4	
Jumbo ITH		4	2	
Jumbo DTH		1		
Simba			1	
Aerial Lifts		15	5	

## 15.7 Mining Opportunities

Continued exploration programmes and open pit re-optimizations have been successful in increasing the Mineral Resources and Mineral Reserves at the Candelaria Copper Mining Complex, resulting in a significant increase in the complex's operating life, particularly in the two underground mines. In anticipation of further positive exploration results continuing to enlarge the Mineral Resources and Mineral Reserves, the Candelaria Copper Mining Complex continues examining potential mine expansion options.

Since the mine has achieved its production objective of 14,000 tonnes per day, studies are continuing both Candelaria Underground North and South sectors with a view to further increase production levels. A Feasibility Study for Candelaria Underground Expansion was completed in 2020 and updated in 2021. The expansion was intended to increase total throughput from Candelaria underground to 26,000 tonnes per day. The expansion project is currently under basic engineering stage and will be further evaluated once the changes in the Chilean tax regime and mining royalties are finalized.

## 16 Recovery Methods

CCMC operates two processing plants: Candelaria PAC. The Candelaria processing plant receives ore from Candelaria open pit, Candelaria Underground North and South Sector, currently suspended Alcaparrosa and part of Santos underground mines. The PAC processing plant receives ore exclusively from the Santos mine.

### 16.1 Minera Candelaria Plant

The Minera Candelaria plant is a mature operation that started producing in 1995. It has a nominal capacity of 75,000 tonnes per day of fresh feed and produces a copper concentrate with gold and silver credits. Additionally, CCMC has an agreement with Compañía Minera del Pacífico S.A. (CMP) to process Candelaria's flotation tails and recover a magnetite concentrate for which CCMC receives some of the revenues associated, as an additional by-product credit.

In 2020, CCMC initiated the CMOP phase 3 to increase concentrator throughput by an expected 2,000 tonnes per day. This project scope included conversion of the existing ball mill N°6 to rod milling, will allow all the crushed and milled pebbles to advance towards secondary grinding, liberating room for incremental fresh feed to SAG milling. The project is expected to be completed in September 2023.

#### 16.1.1 Processing Flowsheet

Minera Candelaria operates a conventional plant flowsheet incorporating crushing, two parallel lines of grinding and copper flotation with final concentrate filtration and shipping to the port at Punta Padrones. Process water is reclaimed from the tailings storage facility after thickening and deposition. Figure 42 shows the complete Minera Candelaria process flowsheet with Table 40 tabulating major equipment and their sizes.

Run-of-mine ore is trucked to a primary gyratory crusher. The crushed product is transported using an overland conveyor belt to a coarse ore stockpile with a total capacity of 500,000 tonnes. Semi-autogenous grinding mills are followed by ball mills with crushing of the SAG mill generated pebbles. A portion of the crushed pebbles are sent to a dedicated grinding mill, with the remainder returned to the SAG mills. The ball mills are operated in closed-circuit with hydrocyclones ahead of flotation.

A multi-stage flotation circuit using an arrangement of mechanical cells, regrind mills and column cells produces a final copper concentrate with gold and silver credits. Final concentrate is thickened, filtered and stored on site before being transported to Minera Candelaria's shipping port at Punta Padrones, near Caldera. Final flotation tails are thickened and disposed of in a rockfill embankment tailings storage facility.

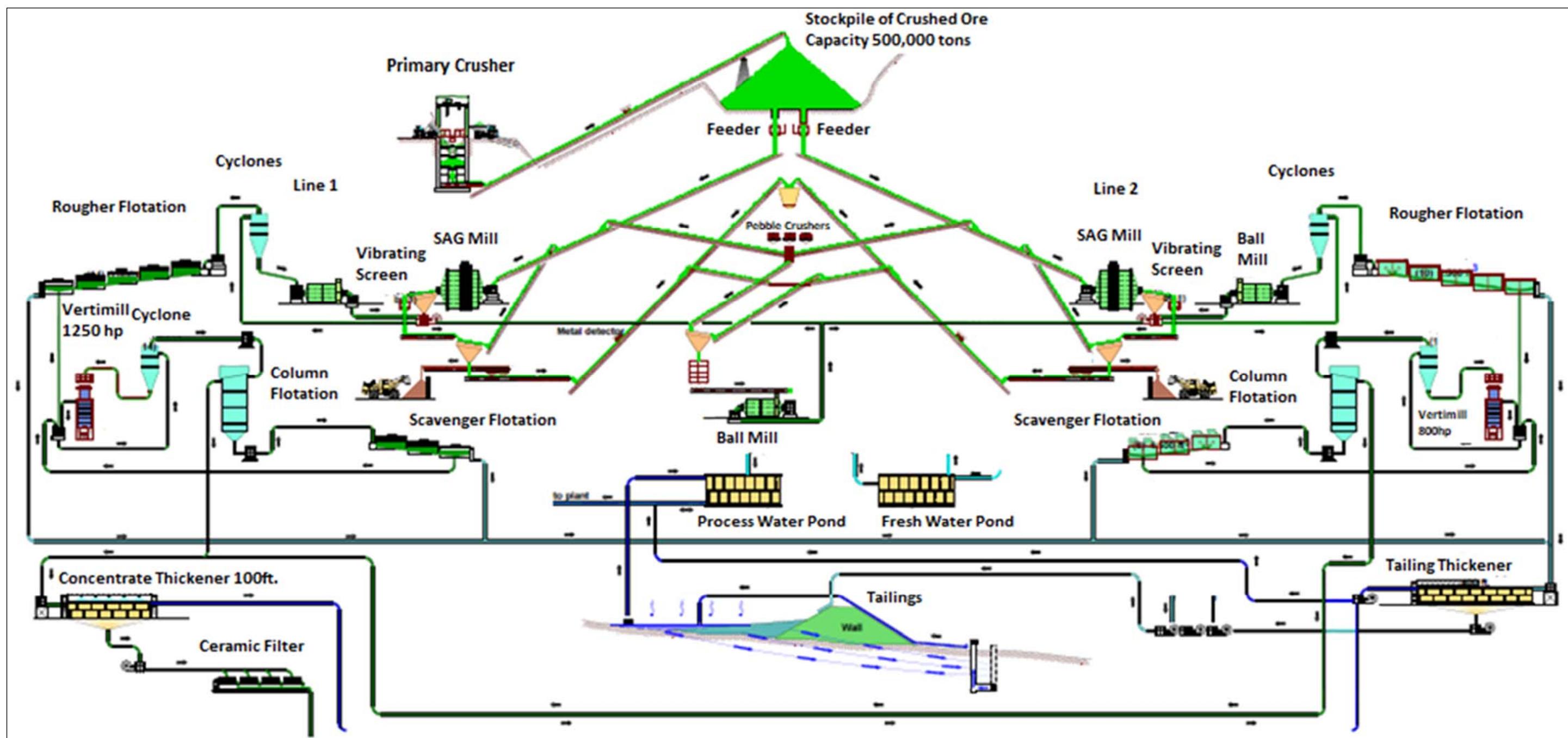


Figure 42: Minera Candelaria Flowsheet

Source: CCMC, 2022

**Table 40: Minera Candelaria Major Processing Equipment**

<b>Area</b>	<b>Unit process</b>	<b>Equipment Details (imperial units)</b>
Crushing	Primary crusher	Gyratory 60 in x 89 in
	Coarse ore stockpile	500,000 tonnes total capacity
Pebble crushing		3 x pebble crushers
		1 x ball mill 14 ft x 22.5 ft
Mill processing Line 1	Grinding	SAG mill 36 ft. x 15 ft. 2 x ball mills 20 ft. x 30 ft.
	Flotation	2 x clusters x 10 hydrocyclones 14 x rougher cells 3000 ft <sup>3</sup> 1 x vertical regrind mill 1250 HP 4 x column cells 3 x flotation cells 3000 ft <sup>3</sup>
Mill processing Line 2	Grinding	SAG mill 36 ft. x 15 ft. 2 x ball mill 20 ft. x 30 ft.
	Flotation	2 x clusters x 10 hydrocyclones 10 x rougher cells 4500 ft <sup>3</sup> 1 x vertical regrind mill 800 HP 4 x column cells 6 x flotation cells 4500 ft <sup>3</sup>
Final tails	Tailings thickener	2 x 400 ft. diameter
Final concentrate	Concentrate thickener	3 x 100 ft. diameter
	Filtration	8 x ceramic filters
Port	Storage	5,000 tonnes total capacity
	Concentrate storage	45,000 tonnes total capacity
Water supply	Ocean water	500 l/s desalination plant at Punta Padrones and pipeline to mine site water tank

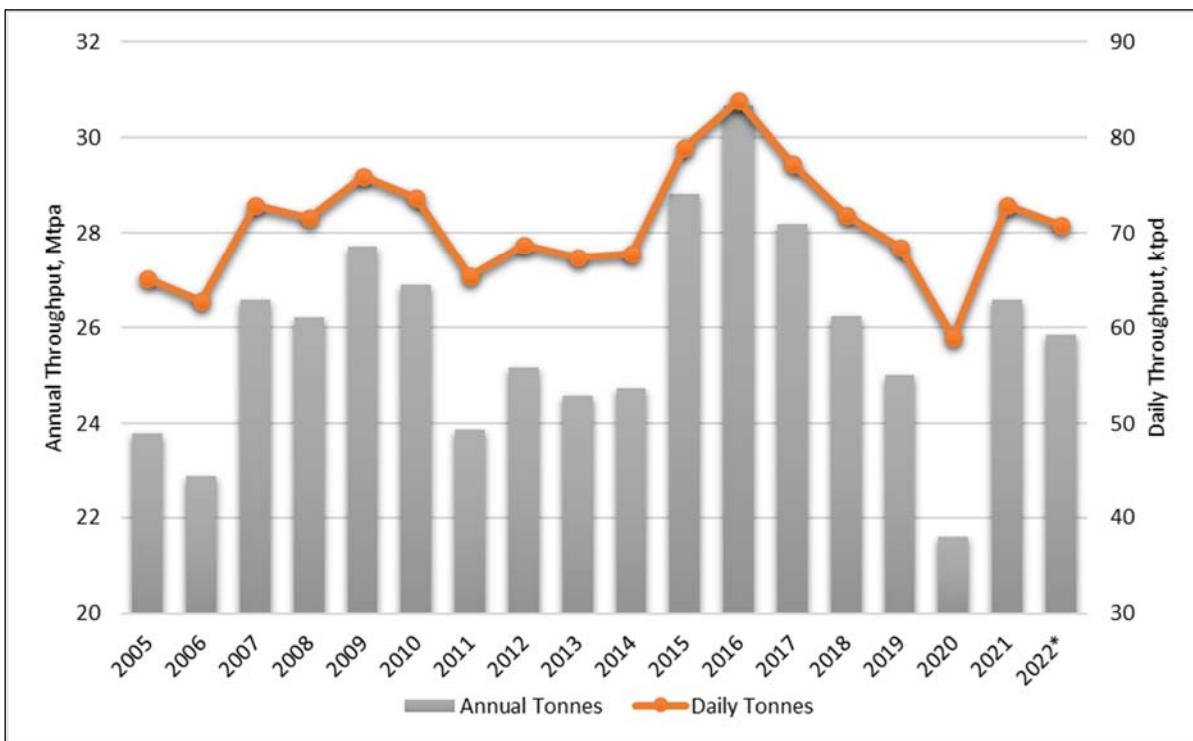
Source: CCMC, 2022

### 16.1.2 Historical Performance

The average annual throughput of Minera Candelaria from 2005 to late 2022 was 26 Mtpa, equivalent to 70,800 tonnes per day at a plant utilization of 92% as shown in Figure 43. Production dropped to 21.6 Mtpa in 2020 due to a 36-day strike.

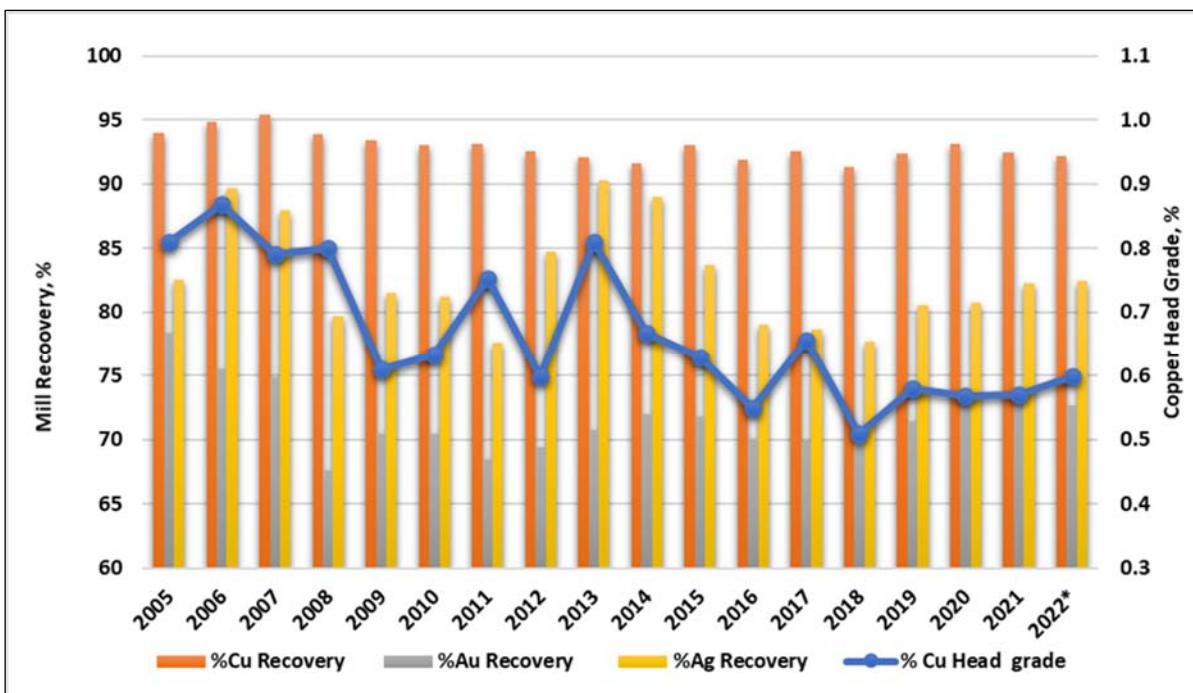
Between 2005 and late 2022, copper, gold and silver recoveries averaged 93%, 72% and 83% respectively (see Figure 44). Feed copper grade has steadily dropped from 0.9% to a range of 0.5% to 0.6% from 2016 onwards. CCMC's plant availability has been very steady from 2005 to 2021 at between 91% and 96% with an average of 93.5% (see Figure 45).

The average concentrate grade since 2019 was 30% copper. The Candelaria processing plant produces a clean concentrate containing no penalty elements with payable gold and silver. Gold content in the concentrate has been consistently 5 to 6 g/t with silver between 80 to 100 g/t. Zinc grades in the concentrate since 2019 averaged 0.6%, which is below penalty levels.



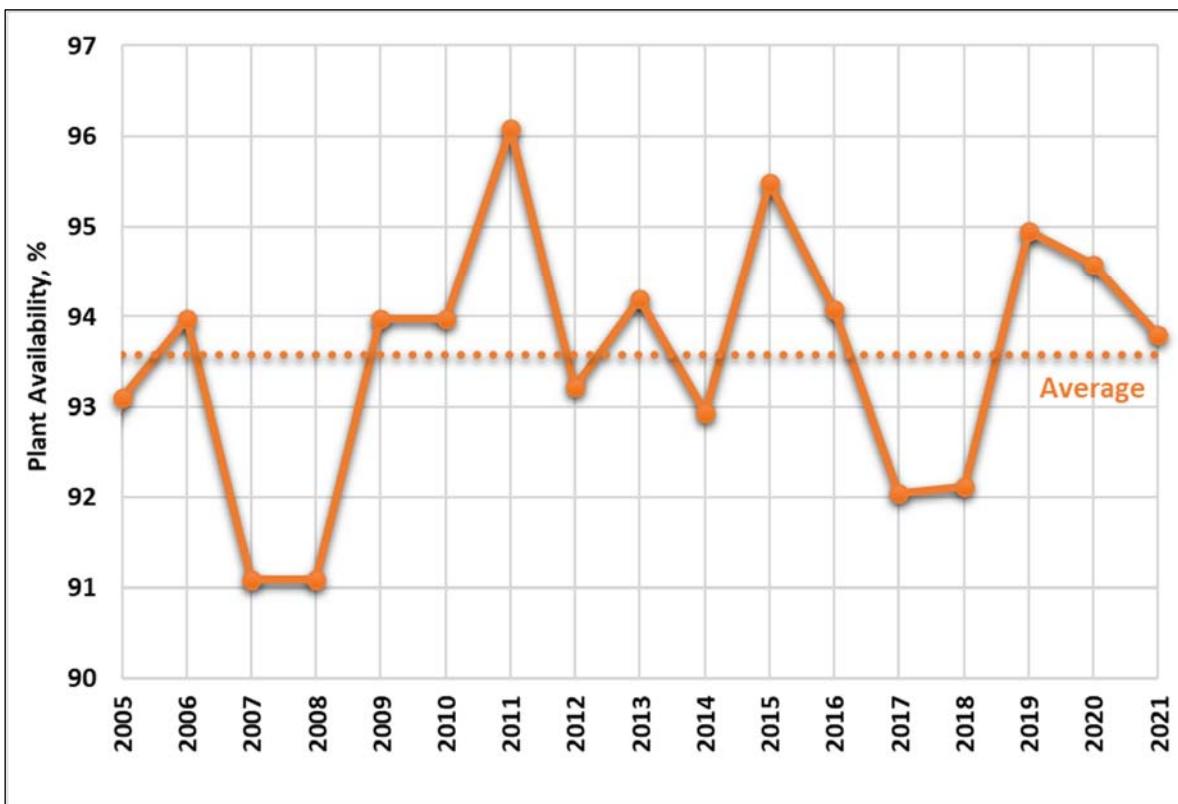
**Figure 43: Candelaria Process Plant Capacity (Annual 2005 to October 2022)**

Source: SRK, 2022



**Figure 44: Candelaria Metallurgical Performance (2005 to October 2022)**

Source: SRK, 2022



**Figure 45: Candelaria Plant Availability (2005 to 2021)**

Source: SRK, 2022

### 16.1.3 Reagents and Consumables

Minera Candelaria use a number of reagents for copper flotation and dewatering both flotation concentrate and final tailings. Table 41Table 41 lists reagents used and average consumption from 2018 to 2021. Plant trials have been conducted using an alternative secondary collector “Aerophine 3418A” to increase gold recovery without affecting copper recovery. Results of this trial have not been provided by CCMC.

**Table 41: List of Processing Plant Consumables (2022)**

Reagent	Commercial Name	Manufacturer	Range (g/t)	Consumption (g/t) Average
Primary collector	AP3894	Solvay	6.6 - 8.7	7.4
Secondary collector	Hostaflot-Lib K	Sansil-Clariant	3.8 - 4.7	4.2
Frother	Nalflote 9837	Nalco	4.5 - 5.6	4.4
Lime		Inacal	425 - 558	444
Concentrate flocculant	Optimer 9876	Nalco	1.0 - 5.0	4.0
Tailings flocculant	SNF 228	SNF	5.0 - 10.0	8.0
SAG Mill Media	5.5" NG	Moly Cop	287 - 400	334
Ball Mill Media	80 mmCR	Moly Cop	188 - 301	240

Source: CCMC, 2022

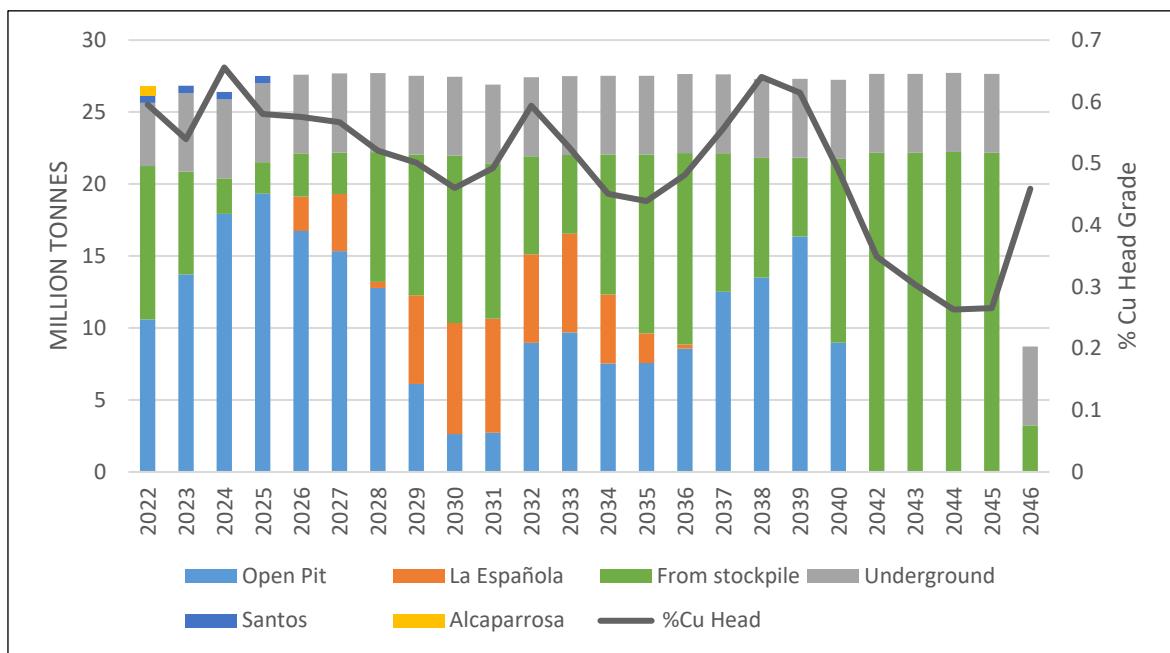
### 16.1.4 Magnetite Recovery

Since 2008, tailings from the Minera Candelaria processing plant have been treated under an agreement with CMP to produce a saleable magnetite concentrate. The CMP magnetite recovery plant is located to the west of the Candelaria plant site area and south of the old tailings storage facility. Magnetite concentrate from the plant is transferred via pipeline to CMP's port near Caldera and the remaining non-magnetic material is deposited in the Candelaria tailings storage facility.

Magnetite concentrate provides an additional source of by-product revenue to CCMC, subject to global iron ore prices and as a result, may vary in the future. The contractual agreement includes payment for rental of the CMP plant site area from CCMC. To reach an approved iron concentrate production rate of 3 Mtpa, CMP can process material other than Candelaria tailings but must pay a per tonne fee for the disposal of third-party tails as part of the agreement. The Candelaria mine production plan includes 1.3 to 1.8 million tonnes of annual magnetite content until 2035, with a magnetite iron content of 6.5 to 11.9%.

### 16.1.5 Candelaria Forecasted Performance

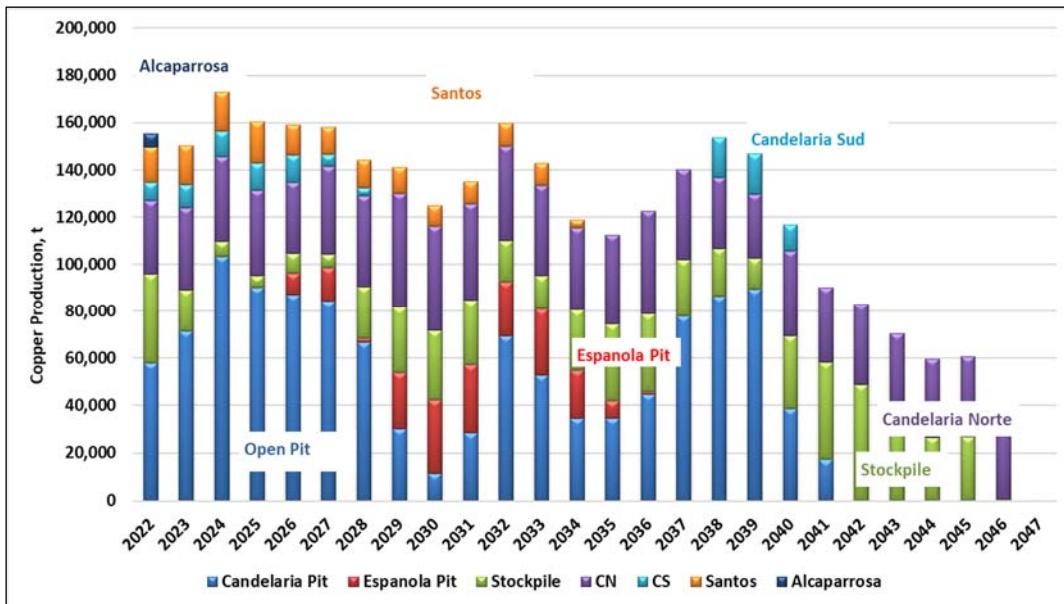
Figure 46 shows forecasted feed sources and average copper grades for the Candelaria process plant. This forecast includes the expected outcomes of CMOP Phase 3 and Candelaria Underground Expansion Plan (CUGEP). Copper head grades will remain between 0.5% to 0.7% until 2035 before falling to below 0.4% at the end of mine life. Reclaimed stockpiles and Candelaria Underground will be the only mill feed source at the end of mine life.



**Figure 46: Candelaria Forecasted Plant Feed by Source**

Source: SRK, 2022

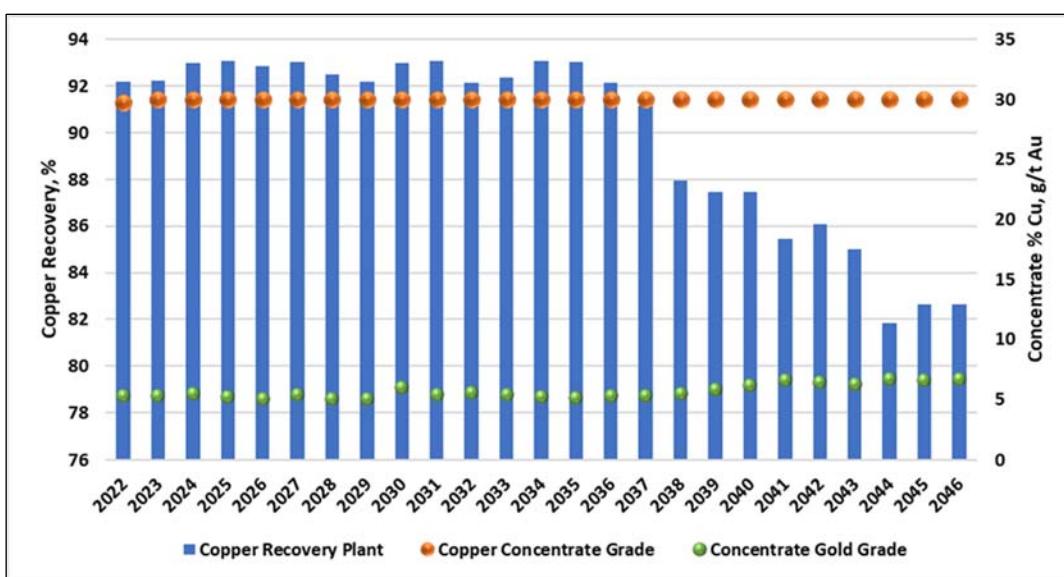
Forecasted copper production from each source is shown in Figure 47. Most of the copper will be produced from the Candelaria Pit and Candelaria Norte during life of mine. Candelaria Pit is expected to stop production after 2037.



**Figure 47: Candelaria Forecasted Copper Production**

Source: SRK, 2022

Figure 48 shows forecasted copper recovery and final concentrate grades. Copper recovery is expected to drop after 2041 as stockpiled material becomes a greater percentage of plant feed. Copper mineralogy is not expected to change and consequently, forecasted copper in concentrate is very stable.



**Figure 48: Candelaria Forecasted Copper Recovery and Concentrate Grades**

Source: SRK, 2022

## 16.2 Minera Ojos del Salado PAC Plant

The PAC concentrator of Minera Ojos del Salado has been in operation since 1929. The concentrator processes 3,800 tonnes per day from the Santos underground mine with an average head grade of 0.85% copper and copper recovery of 94%. Copper concentrate produced has averaged 30% copper, 5 g/t gold and 67 g/t silver since 2004. Gold and silver recoveries are slightly lower than Candelaria, at 72% each. The current mine plan shows the PAC plant continuing to operate at this capacity until 2034, when it will halt production.

The concentrator flowsheet comprises a closed-circuit crushing plant including a primary jaw crusher (48 by 60 inches), a secondary cone crusher (Symons 7-foot standard) and two tertiary cone crushers (Symons 7-foot short head). Figure 49 shows the current PAC process flowsheet.

The grinding circuit includes three ball mills (one Marcy 9 ft x 9 ft and two Allis-Chalmers 10.5 ft x 13 ft) operating in parallel, in closed-circuit with hydrocyclones. The flotation plant uses multi-stage, mechanical (self-aspirated and forced air) flotation cells varying in size from 100 to 1500 cubic feet. After rougher flotation, regrind milling and column cells are used to generate a final concentrate which is thickened and filtered using a 322 ft<sup>2</sup> (30 m<sup>2</sup>) ceramic disc filter. Final flotation tailings from the PAC plant are pumped to the Los Diques tailings storage facility.

### 16.2.1 Historical Performance

Table 42 shows the PAC plant capacity since 2018. The average plant capacity since 2018 is 3,539 tonnes per day with a plant availability of 94.6%. Copper concentrate produced averaged 28.7%. Average copper production is equivalent to 12,413 tonnes per year. Table 43 shows PAC plant consumables.

**Table 42: PAC Plant Historical Production**

PAC plant	Units	2018	2019	2020	2021	Average
Throughput	tonnes per day	3,699	3,552	3,450	3,456	3,539
Plant Availability	%	96.4	95.9	91.7	94.6	94.6
Concentrate Copper Grade	%	29.0	28.7	28.9	28.3	28.7
Copper Production	t	12,751	12,868	12,069	11,964	12,413

Source: CCMC, 2022

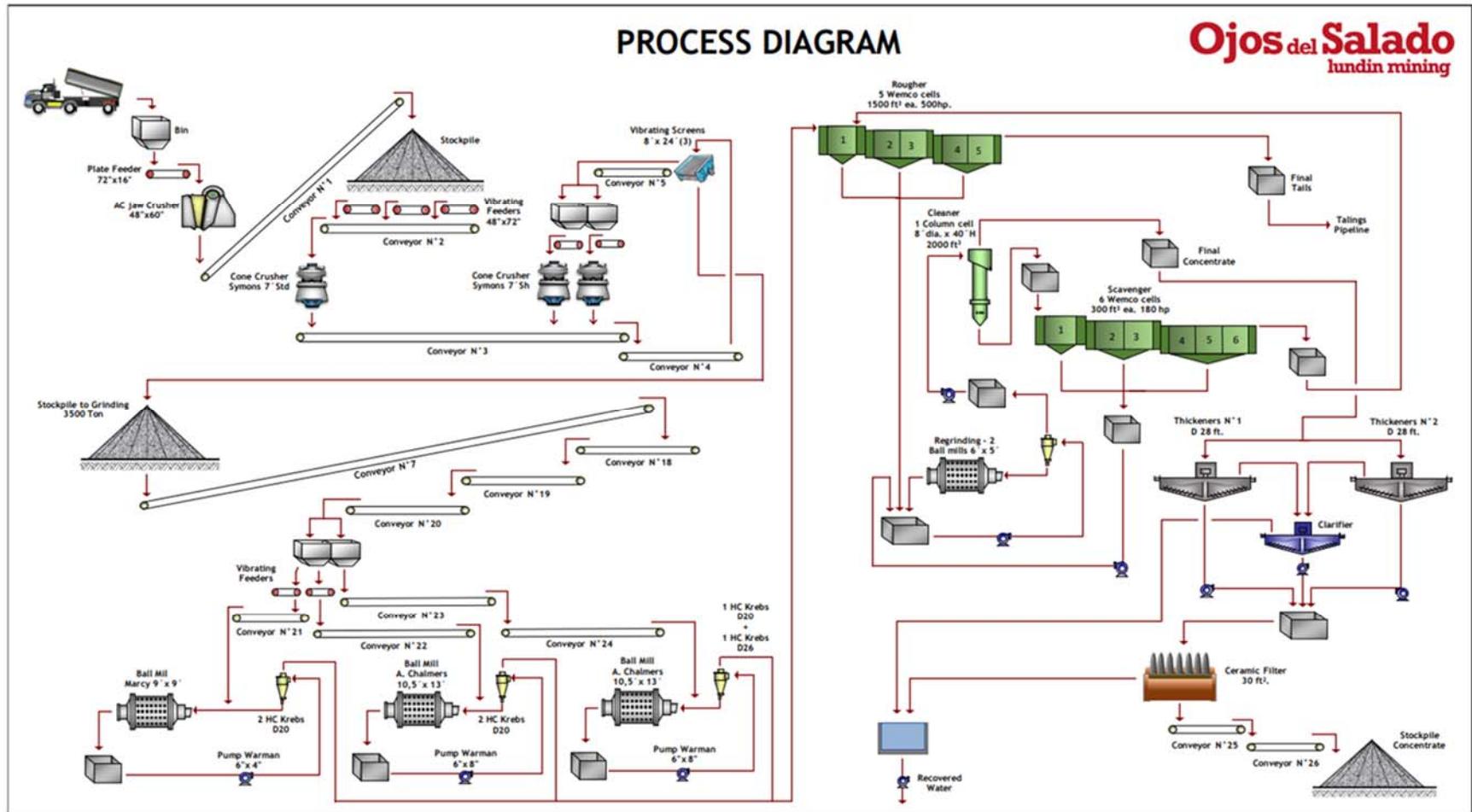
### 16.2.2 Reagents and Consumables

PAC concentrator uses a number of reagents for flotation and dewatering. Table 43 lists the reagents used and average consumption in 2022.

**Table 43: List of Processing Plant Consumables (2022)**

Reagent	Commercial Name	Manufacturer	Range (g/t)	Consumption (g/t)	Average
Primary collector	AERO3894	Solvay	10.0 - 12.0	10.97	
Secondary collector	AEROPHINE	Solvay	1.5 - 4.0	1.88	
Frother	MIBC	Oxiqum	3.0 - 5.0	3.97	
Lime		Inacal	450 - 550	491	
Concentrate flocculant	Optimer 9876	Nalco	2.0 - 5.0	2.0	
Ball Mill Media	2.5 "	Moly Cop	446 - 471	452	

Source: CCMC, 2022

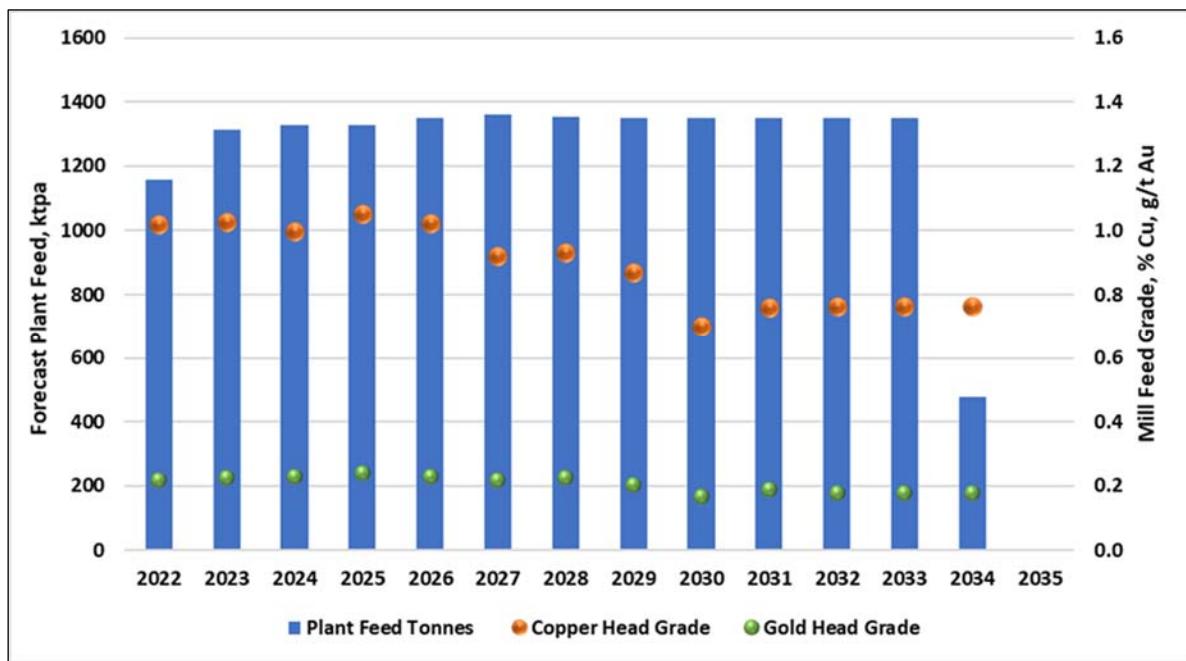


**Figure 49: PAC Plant Flowsheet**

Source: CCMC, 2022

### 16.2.3 PAC Forecasted Performance

Future PAC plant throughput and copper feed grade are shown in Figure 50 until 2034, when it will no longer be operated.



**Figure 50: PAC Forecasted Throughput, Copper and Gold Head Grade**

Source: SRK, 2022

## 16.3 Candelaria Plant Expansion Projects

In 2017, CCMC initiated a feasibility study to evaluate potential expansion of the main processing complex. The feasibility study was conducted after successful exploration programs resulted in discovering additional mineral resources and reserves leading to increased mine life for CCMC. The results of this 2017 study did not demonstrate a sufficient return to justify this expansion as most of the incremental throughput increase was from accelerated processing of low-grade, stockpiled material.

The plant expansion as outlined in the feasibility study was not advanced further but some of the process improvement initiatives highlighted were included in the CMOP. The aim of these initiatives was to improve metallurgical performance from increased throughput by 4,000 tonnes per day (5% higher) and an additional 1.7% copper recovery. These initiatives were planned in 2018 and later renamed “CMOP Phase 1”, are summarized in Table 44 at a total estimated cost of US\$73.9M. Some of these initiatives were delayed due to the impact of the COVID-19 pandemic with completion dates included in Table 44.

**Table 44: CMOP Phase 1 Improvement Initiatives**

<b>Initiative</b>	<b>Benefit</b>	<b>Estimated Cost \$M</b>	<b>Completion</b>
Primary Crusher Motor Upgrade	Increasing the rating of the crusher motor from 700 to 800 HP to allow the crusher to restart under load resulting in higher utilisation. New electrical room included in scope.	2.8	Not completed.
Ball Mill Repowering	Changing four ball mill motors from the current 7500 HP to 9100 HP and the mechanical transmission resulting in higher mill speed and ball load.	32.7	Completed January 2020.
Cyclones and Feed Pump Upgrade	Upgrading cyclones, feed pump motors and pipes to provide more optimal cyclone feed densities and improved classification.	19.9	Completed September 2020.
Flotation Upgrade	Modifications to rougher flotation cells to improve operational performance.	5.1	Not implemented.
Pebble Circuit Upgrade	Modifications to the pebble crusher circuit to increase its capacity and treat all pebbles generated by the SAG mill.	11.2	Not completed. Will be implemented in CMOP2.
Water Upgrades	Increasing the efficiency of the desalination water plant and replacing 1.5 km of freshwater pipeline.	2.2	Not implemented.
<b>Total</b>		<b>73.9</b>	

Source: CCMC, 2022

CMOP Phase 1 delivered most of the expected recovery improvement due to finer flotation feed size from the increase in installed ball mill power and better classification efficiency. However, there has been no improvement in throughput as the primary crusher and pebble circuit upgrades have not been implemented yet. Upgrades to the desalination plant and flotation cells was canceled.

Upgrading of the pebble crushing/grinding circuit was included in CMOP as Phase 2. The objective of this phase was to eliminate the pebble handling bottleneck and increase SAG mill capacity by 1,860 tonnes per day. CMOP Phase 2 aimed to increase the maximum capacity of pebble crushing and dedicated grinding from 500 tph to 700 tph. CMOP Phase 2 was not implemented, and the pebble circuit upgrade is now part of the CMOP Phase 3 as summarized in Table 45..

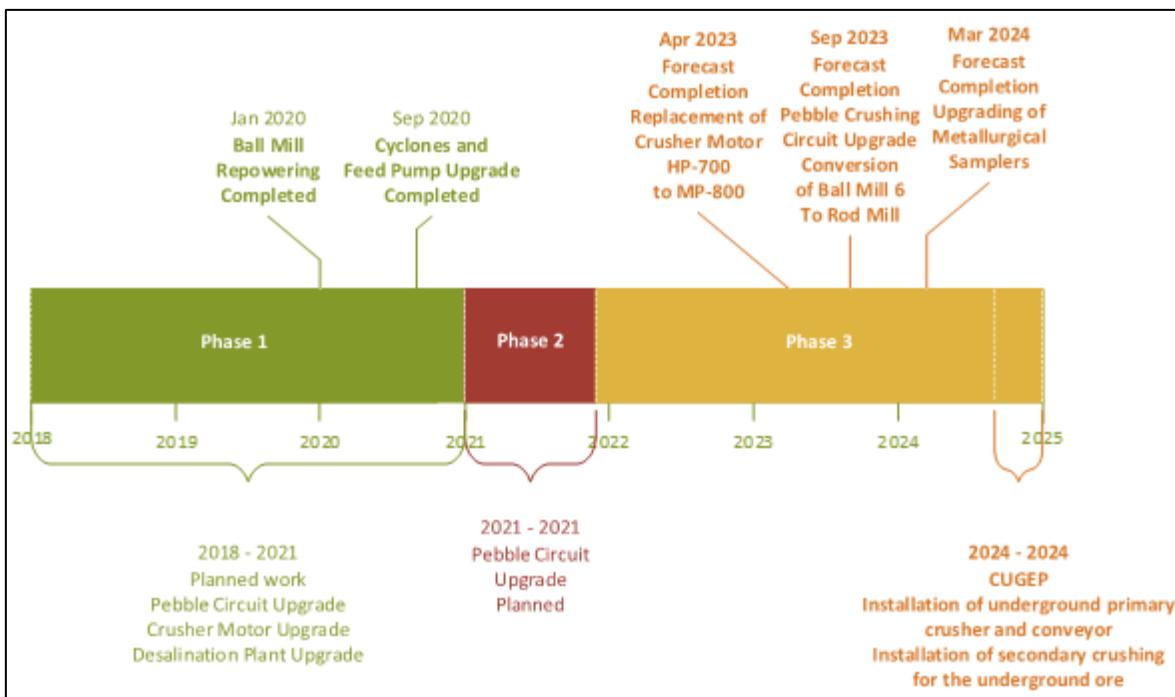
**Table 45: CMOP Phase 3 Improvement Initiatives**

<b>Initiative</b>	<b>Benefit</b>	<b>Estimated Cost \$M</b>	<b>Forecast Completion</b>
Replacement of HP-700 Pebble Crusher by MP-800 Crusher	Increasing pebble crushing capacity by replacing one HP-700 crusher with an MP-800 crusher. Increased	6.1	April 2023
Debottlenecking	To resolve the pebble crushing/grinding bottleneck resulting in an increase of fresh ore by 1,860 tonnes per day. Converting ball mill number 6 to rod mill increasing throughput in the SAG mill.	8.7	September 2023
Upgrading of metallurgical samplers	Resolve discrepancy in head grade between mine and plant to ensure reliable results in metallurgical balances.	2.8	March 2024
<b>Total</b>		<b>17.6</b>	

Source: CCMC, 2022

CMOP Phase 3 focuses on increasing the pebble circuit crushing and grinding capacity by replacing an HP-700 pebble crusher with an MP-800 and converting Ball Mill 6 to a rod mill.

The overall timeline for the CMOP initiatives is shown in Figure 51. The completed initiatives include ball mill repowering and cyclone feed pump and cyclone cluster upgrades. The forecast completion of the pebble crushing and grinding circuit is April 2023.



**Figure 51: CMOP Phase 1 to 3 Timeline**

Source: CCMC, 2022

## 17 Project Infrastructure

This section provides a summary of the major infrastructure of the Candelaria Copper Mining Complex. This section is compiled from information collected during the site visit during October 4-5, 2022 when all major infrastructure was visited by SRK consultants. The major infrastructure is shown in Figure 4.

### 17.1 Candelaria Copper Mining Complex

The Minera Candelaria infrastructure includes:

- The Candelaria Open Pit with a capacity of approximately 245,000 tonnes of rock per day over the next 10 years.
- Surface waste dumps located to the north and southwest of the Candelaria Open Pit.
- The Candelaria processing plant with a nominal capacity of 75,000 tonnes per day.
- The Candelaria Underground mine with a current ore capacity of 14,000 tonnes per day, access from two portals, one located within the Candelaria Open Pit and the other outside of the pit limits.
- The active Los Diques tailings storage facility located to the south-east of the open pit and mine facilities.
- The inactive Candelaria tailings storage facility located north-west of the open pit.
- The closed San Esteban tailings storage facility.
- Ancillary mine services and administrative buildings and road accesses.
- The off-site Punta Padrones port located at Caldera with a 45,000-wet metric tonne designed storage capacity and 1,000 wet metric tonnes per hour loading capacity.
- A desalination plant adjacent to the port facility with a capacity of 500 litres per second and related pipeline to connect to the Bodega pump station (80 kilometres).
- A pipeline from the Bodega pump station to the Candelaria plant site (40 kilometres).

The Minera Ojos del Salado infrastructure includes:

- The Santos underground mine with an ore capacity of 5,200 tonnes per day and access by a separate portal.
- The PAC processing plant with a capacity of 3,800 tonnes per day.
- The closed Ojos del Salado tailings storage facilities.
- Ancillary surface service buildings and road accesses.

### 17.2 Power Supply

Power for the Candelaria Copper Mining Complex, as well as the port and desalination facilities, is supplied under a contract with AES Andes S.A. since 2012. Contract term extension and

negotiations have recently been completed until 2035. An extension agreement was reached with a significant price reduction. Power maximum capacity of 139 megawatts and the option to increase to 160 megawatts.

Starting in 2023, at least 80% of the supply will be from green sources (renewable energy). Typical combined maximum demands for the mines, port, and desalination plant are approximately 110 megawatts. Under the newly signed power contract, the unit power cost is forecast to decrease to approximately US\$0.07 per kilowatt hour from 2026.

In 2021, Minera Candelaria and Minera Ojos del Salado consumed 775 and 71 gigawatt hours, respectively, for a combined total of 846 gigawatt hours per year. Reported power costs in 2021 and 2022 year to date were US\$0.109 and US\$0.143 per kilowatt hour respectively.

## 17.3 Punta Padrones Port Facilities

### 17.3.1 Background

Minera Candelaria infrastructure includes the Punta Padrones port facilities located at Caldera on the Pacific Ocean seaboard (Figure 52). It has been in operation since 1995. The facility comprises a covered concentrate warehouse with a capacity of 45,000 wet metric tonnes and a telescopic ship loader that has a capacity of 1,000 wet metric tonnes per hour. The facility is equipped with dust collection systems and all concentrate truck discharge and warehouse loader activities take place inside covered buildings. The telescopic ship loader is PLC controlled and conveyor discharge to the ship hold is via an “elephant’s trunk.”

The port is able to accommodate ships of up to 58,000 metric tonnes with drafts of up to 12.4 metres. Typically, three vessels are loaded per month. The total capacity of the port is approximately 3.5 million wet metric tonnes per annum. The maximum annual concentrate production over the remaining LOM is approximately 600,000 wet metric tonnes per annum. Overall utilization of the port is therefore low and the excess capacity is potentially available for cost savings and sharing with other concentrate exporters.



Figure 52: Aerial view of the Punta Padrones Port Facility

### 17.3.2 Logistics

Most of the copper concentrate produced at the Candelaria Copper Mining Complex is transported by truck to the Port of Punta Padrones. On occasion, material is delivered by truck to customers in the Atacama Region.

The Port of Punta Padrones, owned and operated by the Candelaria Copper Mining Complex is located 110 kilometres away from mine in Caldera Bay.

Upon arrival at the port complex, trucks are weighed in full before unloading and weighed empty after. The concentrate is discharged into a chute inside the receiving building. The material is moved from the receiving area to the storage warehouse by a conveyor belt system.

Once the vessel is accessed to the loading berth, the concentrate is retrieved from the stockpile with a front-end loader and placed onto a conveyor belt. Material flowing over the belt is weighed and samples are taken automatically as prescribed.

For loading tasks, the port has a mobile loader that moves along the ship, which makes loading more efficient. In addition, it is provided with a telescopic chute that goes into the hold of the ship. All this work is done from the deck, using a remote-control console.

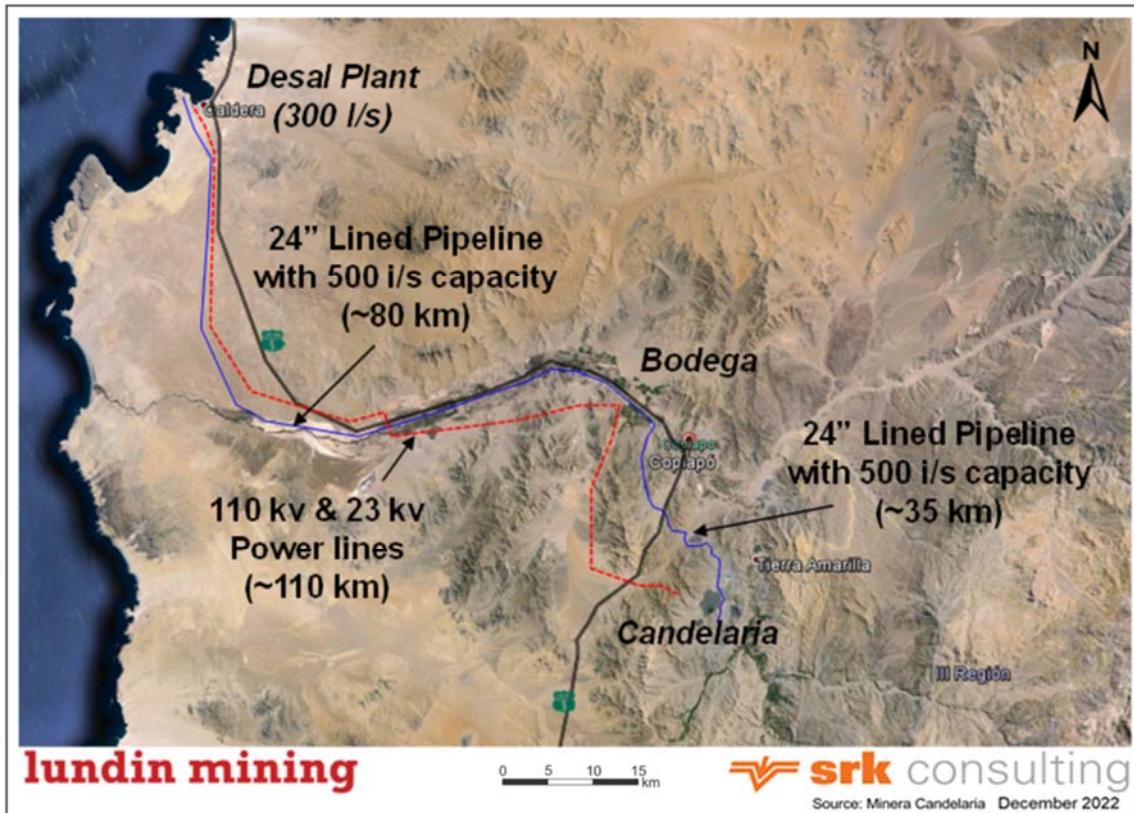
### 17.4 Fresh Water Supply

Historically, the Candelaria Copper Mining Complex sourced fresh water from deep wells in the nearby Copiapó aquifer for which the mines held and continue to hold water rights. During the 2000s, water levels in many of these wells dropped significantly and some went dry.

Following an extensive examination of alternative water supplies, including more distant ground water wells, Minera Candelaria opted to construct a desalination plant at the Punta Padrones port site and pump the water 110 kilometres to the mine site via a dedicated pipeline and booster pump station (Figure 53). The desalination plant was originally designed at 300 litres per second and was later expanded to 500 litres per second.

The desalination plant itself consists of three, nominal 150-litre-per-second lines comprising pre-filtration, ultra-filtration, micro-filtration ahead of conventional reverse osmosis. The reverse osmosis plant includes 468 pressure vessels with 3,276 membranes operating at a pressure exceeding 1,000 pounds per square inch. The desalination plant was commissioned in early 2013 and reached nameplate capacity later that year. In November 2013, extraction from groundwater sources in the Copiapó aquifer was stopped, except for water for potable supply and emergencies.

The water requirements can be met by pumping additional desalinated seawater from the plant at Punta Padrones.



**Figure 53: Desalination Plant Location and Pipeline to Candelaria Site**

Source: Minera Candelaria

## 17.5 Ojos Pipeline Relocation

To ensure operational continuity of the PAC plant, after the expiry of the Candelaria tailings storage facility in 2019, a new tailings pipeline was built in 2019 to carry the tailings to the Los Diques tailings facility. The project was completed in January 2020.

## 17.6 Tailings Storage Facilities

### 17.6.1 Los Diques Tailings Storage Facility (Active)

The Los Diques TSF is designed to provide 600 million tonnes (Mt) of tailings storage capacity based on an average mine process throughput of 75,000 tonnes per day (Figure 54). The design includes 10 growth phases (Phases 0 to 9) with a final dam crest elevation of 873 metres above sea level (for an approximate overall dam height of 160 metres). The dams are currently between Phases 3 and 4. The Phase 9 design provides tailings storage capacity until around 2040. Conceptual design evaluations have been completed to expand the Los Diques TSF beyond 2040.

Los Diques TSF is conceptually designed as a “zero discharge” facility. Other main design criteria include:

- Probable Maximum Flood (PMF) is fully contained within the tailings impoundment, leaving a minimum freeboard of 3 metres
- Dams are designed to withstand the Maximum Credible Earthquake (MCE)
- Minimum operational freeboard of 5 metres

The Los Diques TSF includes three dams (Main, North and South), a tailings distribution system (TDS), water recovery system (RWS), and an infiltration collection system (SCS). All three dams are constructed with the downstream construction method. The Main Dam is constructed with permeable, compacted rockfill (mine waste rock). A transition layer, filter layer and a filter protection layer are placed on the upstream slope of the dam. A series of finger drains underlay the Main Dam. The purpose of these finger drains is to collect seepage from the tailings impoundment and direct this seepage to the seepage collection system described below. The dam is designed to be permeable and to collect seepage from the tailings impoundment, to maximize water recovery.

The South and North Dams are constructed with compacted rockfill. The upstream slopes of these dams are lined with a geomembrane placed over a bedding layer. The plinths of these dams are tied to bedrock. A grout curtain is installed beneath the plinths. These dams are designed to limit seepage migration.

The Los Diques TSF receives flotation tailings from both the Candelaria and PAC processing plants. The Candelaria flotation tailings are thickened and pumped at an average solids content of about 50%. The Minera Ojos del Salado flotation tailings are pumped at an average solids content of about 35%.

The current Los Diques closure plan concept includes a dry cover and a spillway on the North Dam that will direct surface run-off to a drainage canal located on the west boundary of the dam. Water that is collected in the drainage canal will be routed to the pit.

### **17.6.2 Candelaria Tailings Storage (Inactive)**

The inactive Candelaria TSF is located to the north-west of the open pit (Figure 4). This facility received tailings from the Candelaria processing plant between 1994 and 2019. This facility has three embankment dams (Main, North and South), constructed with mine waste material with a final designed crest elevation of 800 metres above sea level. Construction of the final dam configuration was completed in 2015. The dams have a filter system comprised of varying combinations of granular material, geotextile and/or geomembrane liner on the upstream slope. The downstream slope of the dams is 1.6H:1V and the upstream slope is 1.8H:1V. All dams were constructed using the downstream method.

The Candelaria TSF will ultimately be closed and reclaimed in accordance with the approved closure concept. The currently approved closure concept was developed in 2015 and contemplates construction of a 0.3-metre thick rockfill closure cap, plus storm water management features that

would include runoff control ditching, a storm water surge pond on the concave shaped tailings impoundment surface, plus an emergency overflow spillway.

An alternative closure concept, currently under consideration, includes a thicker rockfill closure cap that can be expanded to also provide additional storage capacity for waste rock disposal during ongoing mine operations. This alternative closure configuration would be progressively developed in stages as the waste rock becomes available for capping. Construction of the new waste rock storage area within the Candelaria tailings impoundment area would be staged and sequenced to consolidate and stabilize the underlying tailings mass, thus enhancing the overall stability and security of the closed facility and thus minimizing the long-term risk relating to the closed TSF.



**lundin mining**

 **srk consulting**  
Source: Minera Candelaria December 2022

**Figure 54: Los Diques Tailings Storage Facility, August 2022 (Looking North-West)**

Source: Minera Candelaria

The waste rock pile would allow the area to be transitioned into a stable mounded landform that allows storm water drainage to be routed around the facility, thus removing the requirements for water storage and an overflow spillway from the TSF after closure.

## 18 Market Studies and Contracts

The Candelaria Copper Mining Complex has been selling copper sulphide concentrates to customers worldwide according to established contracts for many years. Market studies are therefore not relevant to the purpose of this Technical Report. This section summarizes the key contracts.

The copper concentrate produced at the Candelaria Copper Mining Complex has the following characteristics: the copper content varies between 27.0% to 33.0%, gold content varies from 4.0 g/t to 12.0 g/t and silver content varies from 30 g/t to 125 g/t. There are certain areas of the ore body that contains zinc which can lead to Zn content in copper concentrate to be up to 3.75%. Aside from Zinc, the material has very low content of impurities like lead, arsenic, antimony, bismuth, and mercury. The concentrate moisture level is typically between 6.0-7.0% which is adequate for transportation and limits dust during handling.

The quality produced at Candelaria / Ojos is marketable worldwide. The low level of elements detrimental to copper smelting and refining makes the concentrate a valued quality for the feed mix for many smelters. The concentrate is shipped to the Far East (Japan, South Korea and China) and Europe.

The copper concentrate production is predominantly sold under long term contracts directly to smelters and some traders. On a yearly basis, up to 15% of the annual copper concentrate production is sold on a spot basis through a tender process allowing for some production fluctuations.

Franco-Nevada (Barbados) Corporation owns a gold and silver stream on production from the Candelaria operation. The stream covers 68% of the payable gold and silver from 100% of the mine which reduces to 40% after 720,000 ounces of gold and 12 million ounces of silver have been delivered to Corporation (Franco-Nevada). As of December 31, 2022 CCMC has delivered 484.koz of gold and 7.8Moz of silver. Based on the 2023 LOM production estimates, the change from 68% to 40% of production is expected to occur in year 2027.

In addition to copper concentrate sales, there is an agreement with Compañía Minera del Pacifico S.A to process Candelaria's flotation tailings to produce a magnetite concentrate and this process creates an additional source of by-product revenue subject to favourable iron ore prices.

## 19 Environmental Studies, Permitting, and Social or Community Impact

This section summarizes the environmental and social aspects of the Minera Candelaria and Minera Ojos del Salado operations and was compiled from information made available by LMC and a site visit by SRK on October 4 and 5, 2022.

### 19.1 Environmental Studies and Regulatory Framework

Chile has a comprehensive regulatory framework in place governing both environmental approvals and associated construction and operating permits, generally referred to as Environmental Sectorial Permits (*Permisos Ambientales Sectoriales*, or PAS). The Environmental Impact Evaluation System (*Sistema de Evaluación de Impacto Ambiental*, or SEIA) came into being in 1994 with the promulgation of Law 19.300. The implementing regulations have been modified on more than one occasion since then as the system has evolved, most recently in 2013. The SEIA is administered by the Environmental Evaluation Service (*Servicio de Evaluación Ambiental*, or SEA), an arm of the Environment Ministry (*Ministerio del Medio Ambiente*, or MMA).

Mining and other activities (with the notable exception of agriculture) in Chile are subject to environmental review and can be approved via three mechanisms, as follows:

1. A “Pertinencia de Ingreso” (or Pertinencia) is a document prepared for small projects or minor modifications to existing projects, which demonstrates that the effects of the proposed action are below the threshold requiring formal environmental review. Once approved by the SEA the project or modification can proceed without undergoing environmental review (although sectorial permits, or modifications to existing permits, may be required).
2. An Environmental Impact Declaration (*Declaración de Impacto Ambiental*, or DIA) is required to be submitted by the proponent for projects or project modifications that are significant enough to warrant environmental review, but which are not expected to result in significant environmental impacts, as these are defined legally.
3. An Environmental Impact Study (*Estudio de Impacto Ambiental*, or EIA) is required to be submitted by the proponent for projects or project modifications where significant environmental impacts are expected to occur, and where specific measures for impact avoidance, mitigation or compensation will need to be agreed upon.

The SEA approves DIAs and EIAs following regulatory review and (in the case of EIAs) formal public consultation, by issuing an Environmental Qualification Resolution (*Resolución de Calificación Ambiental*, RCA). RCAs can run to several hundred pages in length for complex projects, and usually, contain numerous conditions of approval related to both environmental and social aspects of project development, that must be adhered to by the project proponent during all phases of the project life cycle.

Normally, once a proponent obtains an RCA it is necessary to obtain sectorial permits for construction and operation of the new or modified project. These are described further in Section 19.2.2.

## 19.2 Permitting and Compliance

### 19.2.1 Environmental Approvals

#### Minera Candelaria

The original Candelaria project was submitted to a voluntary environmental assessment process and was approved by resolution ORD No. 817 on June 9, 1992. The Candelaria mine officially started operations on March 9, 1995 and has undergone a series of modifications since the early 1990s, which have been permitted through Pertinencias, DIAs, and EIAs (Table 46 and Table 47).

The most recent major environmental permitting effort was the “Candelaria 2030” EIA which included, among other things, an extension to the mine life and the development of the Los Diques tailings storage facility. The SEA approved the EIA via RCA No. 133/ in July 2015. Construction of the initial phases of Los Diques tailings storage facility is now complete and the facility is operational.

Candelaria is in the process of review and approval of EIA 2040. The EIA documents were submitted to the SEIA (Environmental Impact Assessment System, acronym in Spanish) in February 2020 and have gone through various stages of consultations with the Chilean authority. Currently, Minera Candelaria is preparing a response for “Informe Consolidado de Aclaraciones, Rectificaciones o Ampliaciones (ICSARA) 3” which will be submitted in Q2-2023. Approval of the new EIA is expected in late 2023 or early 2024 and has been used as the basis of the 2023 Life of Mine (LOM) plan. The new EIA will allow CCMC to continue its operations to 2040.

**Table 46: Minera Candelaria Environmental Approvals (RCAs\*)**

Project	Legal Reference*
EIA Candelaria project Phase I	Nº 817/1992
EIA Port Facilities Punta Padrones	Nº 001/1994
EIA Candelaria project Phase II	Nº 1/1997
DIA Receipt and storage of tailings from Minera Ojos del Salado	Nº 044/1997
DIA Auxiliary fuel tank Candelaria mine	Nº 006/1998
DIA Mixing plan of diesel and used oil	Nº 104/1998
DIA Copper concentrate transport to new destinations	Nº 26/2000
DIA Exploration ramp Candelaria Underground North Sector	Nº 084/2001
DIA Candelaria Underground North Sector project	Nº 094/2003
DIA Modification of the feeding system of the tailings dam	Nº 116/2005
DIA Reception and processing mineral from Alcaparrosa mine	Nº 012/2005
DIA Exploration ramp Candelaria Underground South Sector	Nº 04/2005
DIA Candelaria Underground North Sector expansion	Nº 175/2007
DIA Optimization pebbles circuit	Nº 106/2007
DIA Water pipeline Chamonate - Candelaria	Nº 273/2008
EIA Candelaria desalination plant	Nº 129/2011
DIA Growth of height La Candelaria tailings dam wall	Nº 74/2012
EIA Candelaria 2030 - Project operational continuity	Nº 133/2015

\* Environmental Approval Resolution (RCA)

**Table 47: Changes at Candelaria Approved Under Pertinencias**

Project /Activity	Legal Reference
Modification of concentrate route	Letter N° 1088/2011, SEA Atacama
Modification of the path of the power line between the mine and the desalination plant	Letter N° 1424/2011, SEA Atacama
Extension of LOM expansion Candelaria Underground North Sector	Letter N° 911/2012, SEA Atacama
Operational optimization Candelaria Underground mine	Resolution N°062/2017, SEA Atacama
Adaptation of Candelaria pipelines in Las Cruces area	Resolution N°35/2018 SEA Atacama
“Adaptation of the Wall Covering of the Los Diques Tailings Deposit”	Resolution N°21/2019 SEA Atacama
“Reception of Third Party Concentrate from the Atacama Region in Puerto Punta Padrones”	Resolution N°96/2019 SEA Atacama

### Minera Ojos del Salado

The Santos mine and PAC processing plant were developed prior to 1994 when the environmental regulatory regime was different from the present day. A sectorial permit for the Santos mine was updated in 2022 and will allow the mine to continue its operations until year 2029.

Tailings from the PAC plant are deposited in the CCMC tailings storage facilities under an environmental approval granted in 1997 and extended through 2030. Environmental permits and Pertinencias related to Minera Ojos del Salado are listed in Table 48 and Table 49.

**Table 48: Summary of Minera Ojos del Salado Approvals (RCAs\*)**

Project /Facility	Description	Approval Reference*
EIA Alcaparrosa mine	2,500 tonnes per day process in Aguirre Cerda plant.	N° 2/1996
DIA Tailings transport to Candelaria	Transport of tailings N° 8 to Candelaria.	N° 048/1997
EIA Modification to Alcaparrosa mine	Process in Aguirre Cerda plant 725,000 tonnes per year between 1998 - 2006 913,000 – 1,450,000 tonnes per year between 2007 - 2008 570,000 tonnes per year in 2010.	N° 6/1999
DIA Cerro Negro mine exploration	12 boreholes	N° 002/ 2000
DIA Modification II Alcaparrosa project	Transport of 4,000 tonnes per day to Candelaria plant (new road).	N° 003/2005
DIA Tortolitas mine exploration	10 boreholes	N°089/2005
DIA Slag removal/tunnel remediation of Edwards smelter	Environmental management and closure of two abandoned facilities (slag deposit and tunnel) from old Edwards smelter.	N° 118/2005
DIA Environmental improvement of six tailings dams	Environmental remediation of six old, abandoned tailings dams.	N° 228/ 2007
DIA Mineral transportation between Santos mine and Alcaparrosa mine	Transportation of approximatively 1,400 tonnes per day of ore from Santos to Alcaparrosa.	N°204/2008
EIA Alcaparrosa Mine – Project operational continuity	Production of 4,300 tonnes per day of ore from Alcaparrosa and transportation to Candelaria. Transportation of 1,400 tonnes per day ore from Santos to Candelaria.	N°158/2017
DIA “Alcaparrosa Mine Short-Term Operational Continuity”	Considers extending the useful life of the currently approved mining project by three (3) years (from 2023 to 2025).	N°163/2021

\* Environmental Approval Resolution (RCA)

**Table 49: Minera Ojos del Salado Changes Approved Under Pertinencia**

Project/Activity	Description	Legal Reference
Tailings transport to Candelaria	Extension until 2017 to the tailings N° 8 transport to Candelaria tailings dam	Letter N° 552/2012
Alcaparrosa mine life extension	Extension of mine life for three years, to end of 2015	Letter N°001/2013
Alcaparrosa mine life extension	Extension of mine life for two years, to end of 2017	Resolution N°239/2015
Santos mine update of exploitation method	Incorporation of north and south extensions of the northeast area	Resolution N° 107/2016

## 19.2.2 Sectorial Permits

Environmental sectorial permits (*Permisos Ambientales Sectoriales*, or PAS) authorizing the construction and operation of new or modified facilities must be obtained following environmental approval. These permits are granted by as many as ten different public agencies including the Water Board (*Dirección General de Aguas*, or DGA), the National Geology and Mining Service (*Servicio Nacional de Geología y Minería*, SERNAGEOMIN) and the Health Ministry (*Ministerio de Salud*).

### Minera Candelaria

The Candelaria Copper Mining Complex has all required permits in place and, through its Environmental Management System keeps a detailed record of each permit and its compliance status. Since 1992, approximately 1,157 specific sectorial permits have been obtained.

During the Candelaria 2030 environmental permitting process 150 sectorial permits were identified, mostly related to the development of the Los Diques tailings storage facilities. The two most important construction permits for Los Diques were granted by the SERNAGEOMIN in July 2016 and by the DGA in August 2016. Construction of the embankment was completed on schedule and the operating permit were granted by the DGA in August 2018.

The Technical Permit from SERNAGEOMIN for the Port and Plant Operations was granted in December 2017. In addition, the Candelaria 2030 Closure Plan was approved in September 2018.

### Minera Ojos del Salado

The Minera Ojos del Salado operations are associated with approximately 296 specific sectorial permits. As with Minera Candelaria, detailed records of all permits and their compliance status are maintained.

## 19.2.3 Environmental Compliance

The environmental approvals and PAS associated with Candelaria and Ojos del Salado include a total of approximately 3,000 conditions of approval. Candelaria uses a software system called SIGEA to catalogue these conditions and to verify compliance with all of them. In addition, internal and external audits are conducted to verify compliance with applicable legal requirements, and the operations are subject to frequent regulatory inspections as well.

The following sections describe previous and open legal cases related to the environmental issues.

## SMA Charges

The SMA is the arm of the Environment Ministry that is responsible for monitoring and enforcing compliance with environmental approval (RCA) conditions and applicable environmental legal requirements. In 2013 and 2014, prior to LMC's acquisition of its interest in the mine, the SMA conducted two inspections of the Candelaria mine and port facilities. In May 2015, the SMA issued Extent Resolution No. 1/ROL D-018-2015 detailing 16 charges against the Candelaria Copper Mining Complex for alleged non-compliance with its environmental approvals.

Following approximately 18 months of information exchange, the SMA issued Extent Resolution No. 1111/2016 in December 2016. With this resolution, the SMA eliminated four of the 16 charges, and levied a fine totaling 5,049 annual tax units (UTA), equivalent to approximately US\$4M. From the total fine amount, approximately 90% was linked to a single charge related to the allegation that the Candelaria Copper Mining Complex did not reduce groundwater consumption sufficiently to reflect the increasing rate of recirculation from the tailings storage facility and the additional supply of treated domestic wastewater from Aguas Chañar and desalinated seawater.

Candelaria appealed the sanctioning resolution to the Environmental Court. In June 2018 Candelaria was notified of the rejection of the appeal in the Environmental Court and in July 2018, Candelaria paid the fine and appealed to the Supreme Court (Corte Suprema). The Supreme Court overturned the ruling, and the case was revisited by the Environmental Court. In November 2021, the Environmental Court overturned the SMA fine (i.e., overextraction of groundwater) and ordered the SMA to carry out a new investigation. SMA appealed to the Court through a cassation legal process in December 2020. The Supreme Court ruling accepted SMA's appeal and ratified the fines to Candelaria in the charges associated with water (Role 4.308-2021) on June 22, 2022.

**SMA Case-Blasting.** On July 23, 2021, the SMA notified Minera Candelaria six (6) charges related to alleged breaches to Candelaria RCAs. The charges are the following: On July 24, 2018, Candelaria received 11 l/s over the daily average flow allowed to be supplied from the Aguas Chañar Plant; In 2016, Candelaria built an emergency pool with a capacity of 1,310 m<sup>3</sup> which exceeded 26.2% of the approved capacity; in some periods of 2018, 2019 and 2020, Candelaria used more than the 90 tons/day limit of explosives authorized in the RCA to carry out each blasting event; and on five (5) occasions during 2019 and 2020, Candelaria exceeded the number of authorized daily blasting events; in 2020, Candelaria used receptor points different than those described in the RCA for vibration monitoring; in some periods of 2018, 2019 and 2020, Candelaria did not report the industrial waste discharges per set in its Monitoring Program.

The SMA considers charges N°1, N°3 and N°4 as serious. A serious offense may imply, per the provisions of art. 38 of Law 20,417, the revocation of the RCA, closure, or a fine of up to 5,000 UTA (US \$ 2.2M for each charge, app). It is considered highly unlikely the final sanction would be the closure of the mine or the revocation of the approval.

**SMA Case-Sinkhole.** On July 30, 2022, a sinkhole 48 metres in diameter and 64 metres deep occurred on property belonging to Compañía Minera Contractual Ojos del Salado. Immediate safety measures were taken, and investigation work was initiated by both the authority and the Company, which is still in progress. On October 6, 2022, the SMA served the Compañía Contractual Minera Ojos del Salado (CCMO), the owner of the Alcaparrosa mine (CCMO), with an infraction notice alleging four breaches of CCMO's environmental permit. The allegations include (i) overextraction of ore in 2019; (ii) unpermitted modification of mine infrastructure impacting the aquifer (which includes piercing the aquifer); (iii) non-compliance with permitted conditions regarding maximum truck tonnage; and (iv) the unpermitted movement of an ore reception point. If convicted, it can mean the revocation of the RCA, closure, or maximum fines of up to US\$10-15M. CCMO is considering its options and strategies for addressing the infraction notice. In providing the notice, the SMA also press released that it had ordered the closure of the Gaby stopes – which the CCMO had already sterilized as a result of the plugging of those stopes.

In addition to the SMA infractions, SERNAGEOMIN requested the temporary stoppage of the Alcaparrosa mine and DGA has imposed a fine to CCMO of about US\$140,000 (maximum fine) stating that the operation of the Alcaparrosa mine has caused the perforation of the Copiapó aquifer causing permanent damage. CCMO expects additional regulatory, administrative (CDE) and civil/constitutional claims (Tierra Amarilla, local residents, other aquifer users, etc.) are likely to be forthcoming in the months/years ahead. Further, the Company anticipates that it will be required to remediate the damage to the aquifer and, eventually, fill the sinkhole.

The sinkhole issue has generated a significant commotion in the area and has affected the Company's reputation and relationship with the communities and also with the authorities. The Company's future actions will be oriented towards the develop of the necessary actions to mitigate and compensate for the damage caused, prevent future related issues, and to regain the trust of the community and authorities. In November 2022, the Company launched the Integrated Plan for the Alcaparrosa mine, outlining six focus areas to address the environmental and social impacts generated by the sinkhole. The plan's scope broadly involves the filling of the sinkhole, stabilizing the stopes, managing water infiltration and sealing the aquifer permeation, and expelling excess water accumulated in the mine, and managing stakeholder relations, legal processes and permit applications, with a budget of \$22.5M.

## 19.3 Environmental Management

The CCMC operations are located in the lower portion of the El Bronce and El Buitre sub-basins. Both sub-basins are oriented east-west and drain towards the Copiapó River.

The CCMC is located near the town of Tierra Amarilla and near an agriculture area of the Copiapó valley. In this region mining activities coexist with communities and agricultural activities. The Copiapó River Basin has significant shortages of groundwater resources and aquifer levels have decreased over time due to water extraction for agricultural, industrial and domestic uses.

The Copiapó valley is located in the southern margins of the Atacama Desert and is characterized by an arid climate. The Tierra Amarilla area has an average annual temperature of 17 degrees Celsius, an average relative humidity of 60% and an annual average precipitation of 17 millimetres. In the coastal area, Caldera has an average annual temperature of 15 degrees Celsius, an average relative humidity of 82% and annual average precipitation of 6 millimetres. Rainfall is irregular from year to year and several years typically pass between significant precipitations events, which are often associated with the El Niño phenomenon.

As seen in previous paragraphs, the environmental management for the CCMC is strongly influenced by climate and regional drainages.

### **19.3.1 Key Environmental Issues**

The key environmental management issues at the Candelaria Copper Mining Complex are related to the specific sensitivities of the region, as summarized in the following sections.

#### **Water Supply**

Taking into consideration the sensitivities of water resources in the Copiapó basin, the Candelaria Copper Mining Complex has developed and implemented a water resource optimization plan for its operations. Since 2013, the operations have eliminated groundwater use for processing activities. The main sources of water are now derived from recirculation of water from the tailings storage facilities and desalinated seawater pumped from the desalination plant located adjacent to the marine terminal at Caldera. Water from groundwater wells remains available for use in case of emergency and maintenance of the desalination plant.

One of the conditions of approval of the Candelaria 2030 EIA is the gradual phase-out of the use of water from the Aguas Chañar wastewater treatment plant by July 2025. Since July 2019 the commitment has been fulfilled because the contract with Aguas Chañar was terminated.

#### **Water Quality**

Water quality management and control of potential water loss from the mining facilities are important issues addressed through the environmental management of the operations.

The inactive Candelaria tailings storage facility and the new Los Diques tailings storage facility have been designed to minimize water losses and maximize water reuse in the processing plant.

For the Los Diques tailings storage facility, hydrogeological studies indicate that seepage flows are low and flow towards the current open pit mine, which will act as a sink. Preferential infiltration flows occur toward the pit, at depths greater than 500 metres below surface, deeper than the depth of the Copiapó aquifer in the area, which is located at depths between 40 and 120 metres.

Generally, both waste rock and tailings at Candelaria exhibit a low potential for acid rock drainage and the arid climate results in conditions whereby the amount of rainwater coming into contact with tailings and waste rock is minimal. Hence the long-term risk of acid rock drainage and associated impacts to surface and/or groundwater quality is considered very low. Despite this, the authorities

raised concerns during the review of the Candelaria 2030 EIA about potential seepage from the tailings storage facilities and any associated impacts on the Copiapó River basin. As a result, one of the approval conditions of RCA 133/2015 is that, if water is present in any of the wells of the Los Bronces drainage (P1 and PP2 monitoring wells<sup>1</sup>), the Candelaria Copper Mining Complex must proceed immediately with the hydrogeological isolation of the Los Bronces sub-basin from the Copiapó area aquifer system, by a mechanism that will require approval from the environmental authorities. According to monitoring data, these wells have not registered any water.

## Air Quality

The Candelaria Copper Mining Complex operates close to populated areas where agriculture is a significant land use along with several other mining operations. Air quality, notably fugitive dust from mining, transportation and other activities, is a relevant environmental issue. In their comments on the Candelaria 2030 EIA, the authorities pointed out that the area is technically saturated for respirable particulate matter (PM 10 and PM 2.5). Following a regional review in 2021, the authorities determination that parts of Tierra Amarilla and Copiapó are saturated areas in terms of dust was published in the Official Gazette (Decree N° 15/2021 Environmental Ministry and the Resolution N°33 (January 21, 2022). The Environmental Authority are working with mine and smelter operators in the region to agree with the Decontamination Plan.

In this context, the Candelaria Copper Mining Complex utilizes a series of measures to control dust emissions, including a road wetting plan, nebulizers on stockpiles, crusher dust collectors, and internal monitoring of emission control. The approval of the Candelaria 2030 EIA required additional dust mitigation measures, which are being implemented in accordance with the RCA.

Candelaria has implemented an online climate and air quality monitoring network with cameras to monitor environmental conditions in Caldera and Copiapó Valley. These monitoring systems give operational alerts of environmental conditions and establish relationships between the operations emissions and the conditions in the valley.

With the declaration of a saturated area, in the evaluation of the Candelaria 2040 EIA, the authority requested the reinforcement of dust measures and proposed compensation measures.

## Environmental Monitoring Program

Since 1993 an environmental monitoring program has been in place to identify any changes in environmental conditions with respect to the baseline dataset. The results are periodically sent to the responsible government authorities. The monitoring program includes groundwater quality and levels, dust, noise and vibration, and marine parameters, among others. The approval of the Candelaria 2030 project (RCA N°133/2015) added additional monitoring requirements which are being implemented. A summary of the current monitoring program is tabulated in Table 50.

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<sup>1</sup> Currently WM-17 and WM-18

**Table 50: Environmental Monitoring Program**

Item	Parameter	Frequency	Area
Air Quality / Meteorology	PM 10 and PM 2.5 (Particular matter less than 10 microns)	Every three days	Tierra Amarilla Caldera Nantoco
	Settleable dust (TDS) and Fe, Cu; As and SiO <sub>2</sub> composition	Monthly	Candelaria mine Punta Padrones Nantoco
	Wind velocity and direction	Continuous	Candelaria mine Caldera Punta Padrones
	Evaporation from tailings dam (l/s)	Continuous	Mine
Noise and Vibrations	NPS	Annual	Tierra Amarilla Caldera
	Vertical acceleration	Annual	Tierra Amarilla
			Mine area/EI Bronce drainage
Water	Phreatic levels	Monthly	Tierra Amarilla Paipote Aquifer 4 area
	Underground water quality	Biannual and annual, depending on parameter	Mine area/EI Bronce drainage Tierra Amarilla Paipote Aquifer 4 area
	Recirculated water quality	Biannual and annual	Mine
	Drinking water quality	Monthly	Port
	Freshwater consumption, water from the sewage plant, desalinated water, and recirculated water (m <sup>3</sup> )	Monthly	Mine
Marine Area Desalination Plant	Oceanographic parameters in sea water column	Biannual	Punta Padrones
	Metals and granulometry in sediments		
	Seawater communities		
	Plankton communities		
	Fish fauna		
	Water quality in brine discharge	Depending on the production of desalinated water	
Marine Area Punta Padrones Port	Metals, temperature, salinity, dissolve oxygen in sea water column; metals and granulometry in sediments	Biannual	Punta Padrones
	Seawater communities		
Piedra Colgada Wetland	Physical, biological, hydro biological characteristics	Biannual	Piedra Colgada
Puerto Viejo	Physical, biological, hydro biological characteristics	Biannual	Copiapó River mouth

Coupled with the monitoring plan described above, the Candelaria Copper Mining Complex has developed and implemented a plan to comply with the commitments of the Candelaria 2030 approval resolution, including maintaining relevant records and reporting to the responsible government authorities in the required timelines.

## Environmental Management System

Since 2018, the CCMC has implemented LMC's Responsible Mining Management Standard (RMMS), updated in 2022 to provide an integrated Health, Safety, Environment and Communities (HSEC) management system aligned with the LMC Sustainability Strategy.

Candelaria Copper Mining Complex implemented the updated standard ISO 14001/2015 for Minera Candelaria and Minera Ojos de Salado. An external audit was performed in January 2021 and the certification was subsequently granted for three years.

In 2021 Candelaria also implemented an Energy Management System (Standard ISO 50.001). An external audit was performed in April 2021 and the certification was subsequently granted for three years.

### 19.3.2 Mine Closure Planning

CCMC has developed a closure plan for each of the Minera Candelaria and Minera Ojos del Salado operations in accordance with applicable legal requirements, specifically Law 20.551/2011 and Supreme Decree N°41/2012, in addition to LMC corporate mine closure planning standard. The competent authority for approving Mine Closure Plans (MCPs) in Chile is SERNAGEOMIN. Under current law, mining projects with an extraction capacity of over 10,000 tonnes per month must provide a financial guarantee, the amount of which will be determined based on the periodic re-evaluation of the closure plan implementation and management costs.

SERNAGEOMIN approved the MCP for Candelaria in September 2018. The MCP addresses the changes to the project documented in the 2030 EIA, including the Los Diques tailings storage facility. The approved closure cost estimate for Minera Candelaria is:

- Total cost 4.2M Unidades de Fomento (UF) (approximately US\$153M), comprising direct closure costs of UF 3.7M (approximately US\$133M), and post-closure costs of UF 0.6M (approximately US\$20M).
- Minera Candelaria is in the process of providing the required guarantees for the approved closure plan. Until year 2022 Candelaria has provided guarantee for the 49% of the present value of closure costs.

SERNAGEOMIN approved the Minera Ojos del Salado MCP in 2018. Estimated closure costs at that time were UF 0.3M (approximately US\$8M).

The closure plan for San Esteban I and II, two legacy tailing facilities, was approved and fully executed. Candelaria received the final certificate of closure for these facilities in 2020.

## 19.4 Social and Community Issues

Tierra Amarilla is the community closest to the Candelaria Copper Mining Complex. This proximity can result in potential impacts of noise, dust, visual intrusion, blasting, and vehicular traffic. The concentrate storage shed, port terminal and desalination plant are located near the community of Caldera. Linear infrastructure and activities including power lines, water pipelines and concentrate transport are in the vicinity of smaller towns and transverse 110 kilometres from mine site to the port.

Minera Candelaria and Minera Ojos del Salado are subject to the requirements of the Chilean regulatory process and must also meet the corporate requirements set by LMC related to stakeholder engagement, impact management, and social investment.

LMC is committed to fostering healthy, resilient, and diversified communities in its areas of operation. To achieve this, the Company places priority on proactive and transparent engagement processes that lead to collaboration with stakeholders which in turn enables the Company to appropriately respond to their concerns.

The Company has developed a consistent and holistic five-year Corporate Social Performance Strategy anchored on strengthening internal skills and competencies, enhancing data-driven decision making, integrating social performance into enterprise-wide strategy and advancing development of social initiatives and targets.

LMC's RMMS and its associated Social Performance Standards are the foundational tools that help implement the five-year Corporate Social Performance Strategy and drive appropriate impact management, engagement and community investment at our sites. As part of these Standards, the operations are required to develop site-specific five-year Social Performance Strategies that outline their main objectives for engagement, investment, and local content. The Company then requires sites to develop Annual Plans to execute on the strategy.

The Candelaria Copper Mining Complex produced its first five-year Social Performance Strategy in 2018. In 2022, CCMC updated its Annual Social Performance Plan to reflect the new socio-economic context triggered by the pandemic, the social unrest experienced in the country and lingering challenges in the relationship with Tierra Amarilla due to the impacts of dust and vibration, as well as the need to enhance local economic development. The revised plan centered on enhancing impact mitigation efforts through more extensive and proactive engagement and the expansion of participatory monitoring activities that build capacity and awareness in the community. The plan also prioritized reigniting direct collaboration with neighborhoods and community organizations mainly in Tierra Amarilla and Caldera to plan and execute community investment projects.

In 2021, LMC launched the Social Licence to Operate Index (SLO index) at all its operations to measure community trust and acceptance levels and identify drivers that can enhance or hinder trust so as to inform their engagement, social investment, and operational activities. To date, Candelaria has completed three surveys since late 2021, effectively collecting over 1300 responses across its area of influence. CCMC plans to conduct quarterly pulse surveys to monitor its progress. This tool,

considered one of the main community engagement channels, has proven effective in improving the Company's responsiveness to community concerns and needs.

CCMC operates community liaison offices in Tierra Amarilla, Copiapó and Caldera to enhance stakeholders' access to information about the Company, facilitate skills training workshops and provide access to computers and internet to the population. Visits to the offices remain a key engagement channel for the Company.

## 20 Capital and Operating Costs

### 20.1 Operating Costs

The summary operating costs per tonne forecasted for Minera Candelaria and Minera Ojos del Salado are tabulated in Table 51.

Candelaria costs have increased compared to the previous years as a result of inflation (CPI and commodity prices), increased external services, repair supplies and mining equipment lease expenses. This is partially offset by a more favorable foreign exchange rate. Unit costs are expected to decrease in the coming years, mainly as a result of lower diesel prices from 2023 (as the new electricity contract comes into effect) and a reduction in mining equipment leasing expenses.

Minera Ojos del Salado unit operating costs have also increased as a result of inflation, also partially offset by the favorable exchange rate. LOM 2023 costs reflect the impact of the suspension of Alcaparrosa mining activities from 2023.

**Table 51: Forecast Unit Operating Costs**

Unit Operating Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Candelaria</b>										
Mining cost - OP	US\$/t mat moved	3.51	2.65	2.28	2.19	2.03	2.08	2.29	1.70	2.21
Mining cost - UG	US\$/t mined	17.69	16.32	15.09	15.77	15.40	12.97	12.44	9.37	12.15
Processing cost*	US\$/t milled	5.62	5.41	4.88	4.62	4.79	4.54	4.48	4.40	4.58
G&A cost	US\$/t milled	2.44	2.36	2.47	1.88	1.80	1.67	1.37	0.74	1.38
<b>Total Unit Cost</b>	<b>US\$/t milled</b>	<b>24.74</b>	<b>22.52</b>	<b>20.28</b>	<b>18.66</b>	<b>18.03</b>	<b>16.73</b>	<b>12.76</b>	<b>8.89</b>	<b>13.89</b>
<b>Ojos del Salado</b>										
Mining cost	US\$/t mined	24.34	22.85	20.89	21.03	20.79	16.27	12.30	-	18.69
Processing cost*	US\$/t milled	9.54	9.37	9.04	10.23	9.93	9.68	9.38	-	9.59
G&A cost	US\$/t milled	2.40	2.25	2.14	2.93	2.90	1.68	0.70	-	1.96
<b>Total Unit Cost</b>	<b>US\$/t milled</b>	<b>36.28</b>	<b>34.47</b>	<b>32.07</b>	<b>34.19</b>	<b>33.62</b>	<b>27.62</b>	<b>22.38</b>	<b>-</b>	<b>30.24</b>

\* The cost of processing Santos ore in Candelaria Plant (in 2023-2025) is credited to Minera Candelaria company and added to Minera Ojos del Salado company

The following sections present a breakdown of the mining, processing, and general and administrative operating costs.

#### 20.1.1 Mining Operating Costs

Table 52 presents a breakdown of the forecast Candelaria Open Pit mining costs.

The average open pit mining cost over the next five years, excluding capitalized waste stripping, is forecast at US\$2.50 per tonne of material moved. Costs have increased over previous estimates due to inflation and additional mining equipment leasing expenses in years 2023 and 2024.

Annual fluctuations in unit costs are also the result of components replacement from the cycle repair program, mainly in shovel fleets. The cost per tonne of material moved is forecast to decrease from 2024 as result of lower diesel and explosives prices. Stripping operations for the "La Española" open pit will start in January 2024.

The volume of ore re-handled from the stockpile will increase to replace throughput reduction from the underground mine due to suspension of the Alcaparrosa mine. Costs will decrease towards the end of the mine life, with the reduction of waste stripping operations and increase in stockpile ore re-handling.

**Table 52: Candelaria Open Pit Mining Costs Forecast**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labor	US\$/t	0.41	0.35	0.32	0.33	0.32	0.31	0.36	0.23	0.32
Contractors	US\$/t	0.80	0.43	0.34	0.31	0.29	0.32	0.40	0.27	0.36
Supplies	US\$/t	1.46	1.28	1.27	1.22	1.09	1.09	1.08	0.86	1.11
Energy	US\$/t	0.95	0.70	0.44	0.44	0.43	0.46	0.58	0.54	0.54
Other	US\$/t	(0.10)	(0.10)	(0.09)	(0.11)	(0.11)	(0.10)	(0.14)	(0.20)	(0.12)
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>3.51</b>	<b>2.65</b>	<b>2.28</b>	<b>2.19</b>	<b>2.03</b>	<b>2.08</b>	<b>2.29</b>	<b>1.70</b>	<b>2.21</b>
<b>Total Cost</b>										
Labor	US\$/M	39.9	38.7	37.8	37.6	36.9	32.1	19.5	7.0	21.9
Contractors	US\$/M	77.6	47.1	40.0	35.0	33.7	33.8	21.6	7.8	24.9
Supplies	US\$/M	142.3	140.3	149.1	139.2	124.9	113.2	57.6	24.4	75.9
Energy	US\$/M	92.7	76.6	51.1	50.1	49.5	48.3	31.1	15.3	36.5
Other	US\$/M	(10.2)	(10.7)	(10.8)	(12.8)	(13.0)	(10.3)	(7.5)	(5.7)	(8.4)
<b>Total Cost</b>	<b>US\$/M</b>	<b>342.4</b>	<b>292.0</b>	<b>267.1</b>	<b>249.2</b>	<b>231.9</b>	<b>217.0</b>	<b>122.3</b>	<b>48.8</b>	<b>150.9</b>
<b>Capitalized Waste Stripping</b>	<b>US\$/M</b>	<b>185.2</b>	<b>135.5</b>	<b>87.4</b>	<b>75.8</b>	<b>94.2</b>	<b>121.8</b>	-	-	<b>115.2</b>
<b>Total Cost excl. Cap Waste</b>	<b>US\$/M</b>	<b>157.1</b>	<b>156.5</b>	<b>179.7</b>	<b>173.4</b>	<b>137.7</b>	<b>119.6</b>	<b>122.3</b>	<b>48.8</b>	<b>105.8</b>
<b>Unit Cost excl. Waste Stripping</b>	<b>US\$/t</b>	<b>3.31</b>	<b>2.70</b>	<b>2.40</b>	<b>2.45</b>	<b>2.36</b>	<b>2.45</b>	<b>2.43</b>	<b>1.70</b>	<b>2.33</b>

\* The negative values under Other refer to the transportation of Santos mines ores to the Candelaria plant, which is undertaken by Minera Candelaria, while the costs are allocated to Minera Ojos del Salado.

\* US\$/t = US\$/ t mat moved

Table 52 also tabulates the amount of waste stripping costs transferred to capital expenditures. LMC capitalizes waste stripping costs when actual strip ratios are above the average planned strip ratio for each open pit phase under development. Total capitalized waste stripping costs have increased from previous forecasts as a result of higher mining costs over the next five years.

The operating costs forecasted for the Candelaria Underground mine operations are presented in Table 53. The average cost over the next five years is forecast at US\$16.05 per tonne. Costs are expected to decrease towards the end of the mine life as mine development requirements reduce.

The operating costs forecasted for Minera Ojos del Salado's Santos underground mine operation are tabulated in Table 54. The average cost over the next five years is forecast at US\$22.10 per tonne, decreasing to US\$16.27 over the following five years because of lower mine development requirements. Santos mine life has been extended from 2030 to 2034.

**Table 53: Forecast of Operating Cost for Candelaria Underground Operations**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labour	US\$/t	2.46	2.57	2.59	2.61	2.57	2.48	2.35	1.96	2.27
Contractors	US\$/t	9.98	9.06	7.43	7.64	7.94	5.44	5.17	3.89	5.42
Supplies	US\$/t	2.77	2.45	3.17	3.62	2.94	3.13	3.08	2.02	2.67
Energy	US\$/t	1.54	1.42	1.08	1.08	1.13	1.10	1.02	0.77	0.99
Other	US\$/t	0.94	0.82	0.82	0.82	0.82	0.82	0.82	0.73	0.79
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>17.69</b>	<b>16.32</b>	<b>15.09</b>	<b>15.77</b>	<b>15.40</b>	<b>12.97</b>	<b>12.44</b>	<b>9.37</b>	<b>12.15</b>
<b>Total Cost</b>										
Labour	US\$M	13.5	14.1	14.2	14.3	14.1	13.6	12.9	11.6	12.8
Contractors	US\$M	54.5	49.7	40.7	41.8	43.7	29.8	28.3	24.1	31.0
Supplies	US\$M	15.1	13.5	17.3	19.8	16.2	17.2	16.9	12.4	15.3
Energy	US\$M	8.4	7.8	5.9	5.9	6.2	6.0	5.6	4.7	5.6
Other	US\$M	5.1	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
<b>Total Cost</b>	<b>US\$M</b>	<b>96.6</b>	<b>89.6</b>	<b>82.6</b>	<b>86.4</b>	<b>84.8</b>	<b>71.1</b>	<b>68.1</b>	<b>57.3</b>	<b>69.3</b>

**Table 54: Forecast of Operating Cost for Ojos del Salado Underground Operations**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labour	US\$/t	1.53	1.65	1.72	2.25	2.16	1.58	1.71	-	1.71
Contractors	US\$/t	19.78	18.52	16.49	15.96	15.82	12.41	8.72	-	14.48
Supplies	US\$/t	1.49	1.47	1.47	1.71	1.70	1.38	0.95	-	1.42
Energy	US\$/t	0.87	0.82	0.82	1.12	1.11	0.90	0.92	-	0.92
Other	US\$/t	0.67	0.38	0.38	0	0	0.00	-	-	0.16
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>24.34</b>	<b>22.85</b>	<b>20.89</b>	<b>21.03</b>	<b>20.79</b>	<b>16.27</b>	<b>12.30</b>	-	<b>18.69</b>
<b>Total Cost</b>										
Labour	US\$M	2.8	3.0	3.2	3.0	2.9	2.1	2.1	-	2.5
Contractors	US\$M	36.1	34.1	30.3	21.5	21.5	16.8	12.2	-	21.8
Supplies	US\$M	2.7	2.7	2.7	2.3	2.3	1.9	1.3	-	2.1
Energy	US\$M	1.6	1.5	1.5	1.5	1.5	1.2	1.2	-	1.4
Other	US\$M	1.2	0.7	0.7	0.0	0.0	0.0	0.0	-	0.2
<b>Total Cost</b>	<b>US\$M</b>	<b>44.4</b>	<b>42.1</b>	<b>38.4</b>	<b>28.4</b>	<b>28.2</b>	<b>22.0</b>	<b>16.9</b>	-	<b>28.0</b>

## 20.1.2 Processing Operating Costs

A breakdown of the forecast Minera Candelaria processing costs including primary crushing and conveying, grinding, flotation, filtering and dewatering, together with water supply are shown in Table 55.

The average processing cost for Candelaria Plant over the next five years is forecast at US\$5.05 per tonne, decreasing from US\$5.60 per tonne in 2023 to US\$4.79 in 2027 as new electricity rates come into effect. The electricity price will drop from the current US\$0.17 to approximately US\$0.08/kWh in 2023-2024 and further down to US\$0.07/kWh starting in 2026.

**Table 55: Forecast of Minera Candelaria Processing Cost**

Processing Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labor	US\$/t	0.75	0.77	0.73	0.73	0.70	0.66	0.57	0.45	0.58
Contractors	US\$/t	0.69	0.46	0.34	0.16	0.29	0.20	0.24	0.23	0.26
Supplies	US\$/t	2.15	2.07	2.01	2.03	2.09	2.07	2.05	2.08	2.07
Energy	US\$/t	2.17	2.24	1.93	1.86	1.85	1.76	1.75	1.75	1.81
Other*	US\$/t	(0.15)	(0.16)	(0.15)	(0.15)	(0.15)	(0.15)	(0.12)	(0.10)	(0.13)
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>5.60</b>	<b>5.40</b>	<b>4.86</b>	<b>4.62</b>	<b>4.79</b>	<b>4.54</b>	<b>4.48</b>	<b>4.40</b>	<b>4.59</b>
<b>Total Cost</b>										
Labor	US\$/M	20.1	20.4	20.1	20.1	19.5	18.1	15.7	12.3	16.0
Contractors	US\$/M	18.5	12.2	9.4	4.4	8.2	5.5	6.5	6.9	7.3
Supplies	US\$/M	57.6	54.8	55.2	55.9	57.8	56.6	56.4	56.1	56.3
Energy	US\$/M	58.2	59.2	53.0	51.3	51.3	48.4	48.1	48.1	49.6
Other*	US\$/M	(4.1)	(4.1)	(4.1)	(4.1)	(4.1)	(4.1)	(3.3)	(2.8)	(3.5)
<b>Total Cost</b>	<b>US\$/M</b>	<b>150.4</b>	<b>142.4</b>	<b>133.6</b>	<b>127.6</b>	<b>132.7</b>	<b>124.5</b>	<b>123.4</b>	<b>120.5</b>	<b>125.7</b>

\* The negative values under Other refer to credits for services provided to the mine and other areas (water supply and laboratory services)

The forecast processing costs for the next five years for Minera Ojos del Salado are presented in Table 56.

**Table 56: Forecast of Minera Ojos del Salado Processing Cost**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labor	US\$/t	1.12	1.20	1.29	1.36	1.33	0.98	1.02	-	1.11
Contractors	US\$/t	4.17	4.01	3.65	3.43	3.14	3.60	3.35	-	3.60
Supplies	US\$/t	3.50	3.46	3.49	3.40	3.43	3.05	3.04	-	3.22
Energy	US\$/t	2.60	2.47	2.24	2.05	2.03	2.05	1.96	-	2.14
Other	US\$/t	-	-	-	-	-	-	-	-	-
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>11.39</b>	<b>11.14</b>	<b>10.67</b>	<b>10.23</b>	<b>9.93</b>	<b>9.68</b>	<b>9.38</b>	-	<b>10.07</b>
<b>Total Cost</b>										
Labor	US\$/M	1.5	1.6	1.7	1.8	1.8	1.3	0.9	-	1.4
Contractors	US\$/M	5.5	5.3	4.8	4.6	4.3	4.9	3.1	-	4.6
Supplies	US\$/M	4.6	4.6	4.6	4.6	4.7	4.1	2.8	-	4.1
Energy	US\$/M	3.4	3.3	3.0	2.8	2.8	2.8	1.8	-	2.7
Other	US\$/M	-	-	-	-	-	-	-	-	-
<b>Total Cost</b>	<b>US\$/M</b>	<b>14.9</b>	<b>14.8</b>	<b>14.2</b>	<b>13.8</b>	<b>13.5</b>	<b>13.1</b>	<b>8.6</b>	-	<b>12.8</b>

The average cost forecasted for PAC plant over the next five years is US\$10.67 per tonne. PAC plant is considerably smaller than Candelaria plant, and therefore the average cost per tonne is more than twice as high. Costs are forecast to decrease from 2023 because of lower energy costs, as noted above.

### 20.1.3 General and Administrative Costs

A breakdown of the forecast general and administration (G&A) costs for Minera Candelaria is tabulated in Table 57.

**Table 57: Forecast of Minera Candelaria General and Administrative Cost**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labour	US\$/t	0.89	0.91	0.89	0.88	0.87	0.77	0.52	0.11	0.50
Contractors	US\$/t	1.33	1.34	1.50	0.98	0.96	0.91	0.84	0.64	0.86
Supplies	US\$/t	0.32	0.24	0.24	0.22	0.16	0.16	0.15	0.07	0.14
Energy	US\$/t	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Other*	US\$/t	(0.12)	(0.15)	(0.17)	(0.20)	(0.20)	(0.18)	(0.14)	(0.09)	(0.14)
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>2.44</b>	<b>2.36</b>	<b>2.47</b>	<b>1.88</b>	<b>1.80</b>	<b>1.67</b>	<b>1.37</b>	<b>0.74</b>	<b>1.38</b>
<b>Total Cost</b>										
Labour	US\$M	23.3	23.6	24.0	24.2	24.0	21.2	14.2	3.1	13.9
Contractors	US\$M	35.1	34.6	40.4	27.0	26.5	24.9	23.2	17.0	23.5
Supplies	US\$M	8.5	6.3	6.5	6.0	4.6	4.3	4.1	1.8	3.8
Energy	US\$M	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Other*	US\$M	(3.1)	(3.8)	(4.5)	(5.5)	(5.5)	(4.9)	(4.0)	(2.3)	(3.7)
<b>Total Cost</b>	<b>US\$M</b>	<b>64.3</b>	<b>61.2</b>	<b>66.7</b>	<b>52.0</b>	<b>49.8</b>	<b>45.8</b>	<b>37.7</b>	<b>19.8</b>	<b>37.8</b>

\* The negative values under Other refer to cost optimization initiatives.

The average G&A cost per tonne for Minera Candelaria over the next five years is forecasted at US\$2.19 per milled tonne. Forecasted costs have increased compared with previous estimates mainly because of inflation and contractor costs. Total annual costs over the LOM period range between US\$20M and US\$67M.

A breakdown of the forecast general and administration (G&A) costs for Minera Ojos del Salado is tabulated in Table 58.

**Table 58: Forecast of Minera Ojos del Salado General and Administrative Cost**

Cost	Unit	2023	2024	2025	2026	2027	Average 2028-32	Average 2033-37	Average 2038-46	Average LOM
<b>Unit Cost</b>										
Labour	US\$/t	0.13	0.14	0.17	0.26	0.25	0.19	0.27	-	0.19
Contractors	US\$/t	2.19	2.03	1.90	2.57	2.56	1.44	0.40	-	1.70
Supplies	US\$/t	0.06	0.06	0.06	0.08	0.08	0.03	-	-	0.05
Energy	US\$/t	0.03	0.02	0.02	0.02	0.02	0.02	0.03	-	0.02
<b>Total Unit Cost</b>	<b>US\$/t</b>	<b>2.40</b>	<b>2.25</b>	<b>2.14</b>	<b>2.93</b>	<b>2.90</b>	<b>1.68</b>	<b>0.70</b>	-	<b>1.96</b>
<b>Total Cost</b>										
Labour	US\$M	0.2	0.3	0.3	0.3	0.3	0.3	0.3	-	0.3
Contractors	US\$M	4.0	3.7	3.5	3.5	3.5	1.9	0.4	-	2.4
Supplies	US\$M	0.1	0.1	0.1	0.1	0.1	0.0	-	-	0.1
Energy	US\$M	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0
<b>Total Cost</b>	<b>US\$M</b>	<b>4.4</b>	<b>4.1</b>	<b>3.9</b>	<b>3.9</b>	<b>3.9</b>	<b>2.3</b>	<b>0.6</b>	-	<b>2.7</b>

The average G&A cost per tonne for Minera Ojos del Salado over the next five years is forecasted at US\$4.04 per milled tonne. The increase is mainly driven by suspension of Alcaparrosa mine. Total annual costs over the LOM period range between US\$0.6M and US\$4.4M.

## 20.2 Capital Costs

The forecast Minera Candelaria capital investment plan for the period from 2023 to 2046 is summarized in Table 59. As shown, total capital expenditures excluding waste stripping over the period 2023 to 2027 are forecasted at S\$732M, and from 2028 to 2046 at US\$655M, adding a total of US\$1,388M over the life of mine.

In the Candelaria Open Pit, the replacement program that commenced in 2018 continues (new trucks, shovels and ancillary equipment), of which approximately US\$154M is expected to be spent in the next five years.

Mine equipment and infrastructure for the new Espanola Open Pit is included in the table, with a total forecast cost of US\$44M over the next five years.

**Table 59: Forecast Capital Investment Plan for Minera Candelaria**

Cost	Unit	2023	2024	2025	2026	2027	Total	Total	Total	Total
							2028-32	2033-37	2038-46	LOM
Mine Open Pit	US\$M	66.1	97.3	58.0	43.0	12.7	33.3	32.5	-	342.9
Mine Underground	US\$M	50.2	47.6	49.5	44.9	45.4	260.6	176.1	91.5	765.7
Mill	US\$M	13.5	19.3	14.8	3.0	20.6	8.6	5.3	-	85.0
Tailings	US\$M	55.2	29.8	12.2	13.1	8.0	34.9	12.3	-	165.5
G&A	US\$M	9.6	16.0	2.6	-	-	0.1	0.1	-	28.5
<b>Total</b>	<b>US\$M</b>	<b>195</b>	<b>210</b>	<b>137</b>	<b>104</b>	<b>87</b>	<b>338</b>	<b>226</b>	<b>91</b>	<b>1,388</b>
<b>Capitalized Waste</b>	<b>US\$M</b>	<b>185</b>	<b>136</b>	<b>87</b>	<b>76</b>	<b>94</b>	<b>487</b>	<b>0.2</b>	<b>-</b>	<b>1,066</b>
<b>Total Cost</b>	<b>US\$M</b>	<b>380</b>	<b>346</b>	<b>225</b>	<b>180</b>	<b>181</b>	<b>825</b>	<b>227</b>	<b>91</b>	<b>2,453</b>

Capital costs for the Candelaria Underground mine have increased over previous forecasts and represent the development and supporting mine infrastructure for the expanded production of Candelaria Underground North & South Sectors. The expected capital expenditure for Candelaria Underground over the next five years is US\$238M. Total forecasted underground capital costs at Candelaria over the LOM are US\$766M.

Candelaria mill capital costs are forecasted at US\$71M over the next five-year period; this includes the CMOP Phase 3, Power System Upgrade SAG, courier replacement, mill monitoring systems, ball mill crown pinion replacement, transformers and building major repairs.

Tailings capital costs include the different phases of Los Diques tailings storage facility.

G&A capital costs include technology initiatives, such as the implementation of the Corporate Project Hornsten S/4 Hana and other local initiatives.

LMC capitalizes waste stripping costs when experienced strip ratios are above the average planned strip ratio for each open pit phase under development. During the production phase of the Candelaria Open Pit, waste stripping costs, which provide probable future economic benefits and improved access to the orebody are capitalized to mineral properties. Capitalized waste stripping from the open pit is forecasted at US\$578M for the period 2023 to 2027 and US\$1,066M over the life of mine.

Capital expenditure estimates for Minera Ojos del Salado over the next 5 years total US\$61 million, and from 2028 to 2046, US\$20M, resulting in a total of US\$81M over the life of mine, as can be seen in Table 60. This is an increase from previous forecasts and reflects the capitalization of mine access development in waste and the extension of Santos mine life to 2034.

**Table 60: Forecast Capital Investment Plan for Minera Ojos del Salado**

Cost	Unit	2023	2024	2025	2026	2027	Total	Total	Total	Total
							2028-32	2033-37	2038-46	LOM
Mine Underground	US\$M	16.9	13.6	12.9	5.3	3.9	20.2	-	-	72.8
Mill	US\$M	2.4	3.4	-	-	-	-	-	-	5.8
Tailings	US\$M	-	-	-	-	-	-	-	-	-
G&A	US\$M	0.5	0.2	-	1.6	-	-	-	-	2.3
<b>Total Cost</b>	<b>US\$M</b>	<b>19.8</b>	<b>17.2</b>	<b>12.9</b>	<b>7.0</b>	<b>3.9</b>	<b>20.2</b>	-	-	<b>80.9</b>

## 21 Economic Analysis

LMC has opted to exclude reporting this section as producing issuers may exclude the information required under Economic Analysis (Item 22 of Form 43-101F1) for Technical Reports on properties currently in production unless the Technical Report includes a material expansion of current production.

## 22 Adjacent Properties

There are no adjacent properties that are relevant to the purpose of this Technical Report.

## 23 Other Relevant Data and Information

There is no other relevant data available about the Candelaria Copper Mining Complex.

## 24 Interpretation and Conclusions

The Candelaria Copper Mining Complex is a significant, long-life, copper mining operation. In 2023, the complex is expected to produce contained metal in concentrate (100% basis) of 145-155 kilotonnes of copper and 85,000-90,000 ounces of gold. Based on the December 31, 2022 Mineral Reserves, the CCMC is expected to support operations until 2046.

Since LMC purchased the Candelaria Copper Mining Complex in late 2014 to the end of June 2022, there has been an investment in exploration of approximately US\$177M. During this period 2,336 core bore holes (678,070 metres) were drilled requiring over 4,000 metres of underground development.

Aggressive ongoing Mineral Resource expansion exploration since acquisition may have the potential to extend the mine life beyond 2046 and to further change the projected copper production profile by replacing low grade open pit and deferring stockpile mill feed with higher grade ore extracted from the expanding underground mines and deferring depletion of the low-grade stockpiles. There are also opportunities to optimize the efficiency of the Candelaria processing plant through ongoing improvement initiatives currently under implementation and modifications to the grinding circuits. Various ongoing onsite innovation / optimization initiatives with certain disciplines (including MIRA, CMOP, Candelaria South development, mining equipment upgrades and various infrastructure upgrades) are progressing well, with each having the potential to have a positive and material impact on operational efficiencies and to the life of mine.

A team of independent consultants returned to the Candelaria Copper Mining Complex during October 2022 to review changes to the assets since undertaking a similar review in the fourth quarter of 2018. Although currently experiencing re-organization with several new team members recently joined The Company, technical information about the CCMC is extensive and attests to the overall high quality of the exploration, mine planning, and design work completed by site personnel. Although Mineral Resource and Mineral Reserve growth through exploration success has decreased in recent years, operational efficiencies, a reduction in reporting cut-off grades, continued Mineral Resource model integrations and the incorporation of material from the expanding Española open pit project have made significant contributions to mine growth.

The authors of this Technical Report have examined the exploration, geology, Mineral Resource modelling, mine designs, Mineral Reserve estimates, processing, and environmental aspects of the Candelaria Copper Mining Complex. The purpose of the investigation was to confirm that the Mineral Resource and Mineral Reserve estimates prepared by mine personnel were prepared in compliance with generally recognized industry best practices and can be reported according to Canadian Institute of Mining, Metallurgy and Petroleum *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014).

The Mineral Resources and Mineral Reserves are distributed in one open pit mine, one open pit project and two separate underground mines. SRK audited representative domains of the various

block models and mine designs. For those models, SRK was able to replicate the tabulations prepared by mine personnel within rounding errors. Based on the results from the 2022 audit combined with knowledge from previous audits, the qualified persons concludes that the Mineral Resources and Mineral Reserves Statements for the Candelaria Copper Mining Complex effective as of December 31, 2022, are appropriately categorized and free of material errors. Financial information examined during the SRK investigations confirm that the Mineral Reserves are economic under the assumptions considered.

The authors of this Technical Report draw the following conclusions:

- The Candelaria Copper Mining Complex is a significant mining, long-life, operation.
- In addition to underground Mineral Resource expansion, surface exploration has also successfully delineated deposits amenable to open pit extraction in the Candelaria district.
- A robust Mineral Resource modelling methodology established in recent years continues to provide a sound basis for Mineral Resource reporting and subsequent mine planning.
- The life of mine plan now forecasts depletion of Mineral Reserves in 2046, with the potential to further increase this in the future.
- Mineral Reserves are estimated using a copper price of US\$3.35 per pound, a gold price of US\$1,600 per ounce and a silver price of US\$22.00 per ounce.
- The Los Diques tailings storage facility which was commissioned during the first quarter of 2018 is fully operational and can now receive 100% of the flotation tailings from the Candelaria processing plant. A tailings pipeline from the PAC plant to the Los Diques TSF was completed in 2020.
- The mines have a customized state of the art export port facility at Punta Padrones with significant excess capacity.
- Exploration success during 2014 to 2022 has defined new Mineral Resources and Mineral Reserves in the underground mines, significantly extending their lives. Further exploration success has the potential to extend their lives further and potentially allow increasing their throughput. This will improve the copper production profile by replacing low-grade open pit and stockpile mill feed with higher-grade underground ore and may defer stockpile depletion.
- Additional drilling at Espanola has significantly increased reported Mineral Resources and Mineral Reserves for this project.
- Although reduced compared to previous periods, the proposed five-year exploration program (US\$48.00M from 2023 to 2027) may continue to add Mineral Resources and Mineral Reserves, if implemented.
- Recent regional exploration in other parts of the Candelaria district has identified several other exploration targets, with good potential for identifying new IOCG sulphide deposits in this exceptional IOCG deposit district.
- Exploration has been instrumental in extending the life of the Candelaria Copper Mining Complex to at least 2046.
- Although mineralized material from the Alcaparrosa mine has been excluded from the current Mineral Reserves, it should be able to again contribute to CCMC's future mine planning once the SMA infraction notices have been addressed.
- The following summarizes the areas of uncertainty and risk associated with the Candelaria Copper Mining Complex:

- Minera Candelaria is in the process of review and approval of EIA 2040. The EIA documents were submitted to the SEIA in February 2020. The 2040 EIA has been through three rounds of review and Minera Candelaria is in the process of preparing its responses through a third Addenda and expects a final determination in late 2023 or early 2024. The EIA will allow CCMC to continue its operations to 2040.
- In July 2018, Minera Candelaria paid a fine (5,049 annual tax units, equivalent to approximately US\$4M) and appealed to the Supreme Court. After an intervention by the Environmental Court, the Supreme Court ratified the fines to Minera Candelaria.
- In July 2021, the SMA notified Minera Candelaria of six charges to Candelaria RCAs. Three of these charges are considered serious by the SMA with a potential fine of up to 5,000 annual tax units (US\$2.2M) for each charge.
- As a result of the July 30, 2022, sinkhole event, Minera Ojos del Salado was issued with an infraction notice by the SMA alleging four breaches of CCMO's environmental permit. According to the SMA, the potential fines can be up to \$15M. In addition, SERNAGEOMIN requested the temporary stoppage of the Alcaparrosa mine and the DGA has imposed a fine on Minera Ojos del Salado of about US\$140K.
- CCMC's future actions should be oriented towards the development of the necessary actions to mitigate and compensate for the damage potentially caused by the sinkhole that appeared near the Alcaparrosa mine in July 2022, prevent future related issues, and to regain the trust of the community and authorities.

Other than what has been disclosed in this Technical Report, the authors of this Technical Report are not aware of any other significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the Mineral Resource and Mineral Reserve estimates prepared for the Candelaria Copper Mining Complex.

## 25 Recommendations

The CCMC comprises several operating copper mines with a combined life of mine projected to 2046 with the depletion of the Mineral Reserve estimates disclosed herein. Since 2010, innovative and aggressive exploration has defined several new sulphide mineralization zones amenable to underground and surface mining. These significant discoveries together with ongoing mine optimization studies have a positive impact on the life and value of the CCMC by primarily replacing low-grade open pit and stockpile plant feed with higher-grade underground ore, thereby deferring processing low grade work-in-progress stockpiles to a later date.

The increase in underground Mineral Reserves has had a positive impact on the life of the underground mines. LMC should continue with the optimization studies initiated in 2016 to investigate expansion options for the underground mines, re-optimization of the Candelaria open pit mine, and to increase the efficiency the main Candelaria process plant.

The mineral resource qualified person recommends reviewing the factors impacting the conversion of Mineral Resources to Mineral Reserves with an objective to increase the conversion ratio.

The copper recovery model used by CCMC has not been updated for a number of years and since 2020, the model estimates are deviating from actual plant results. It is the qualified person's opinion the CCMC recovery model be reviewed and updated to reflect recent plant performance and potentially the greater amount of stockpiled material being processed. (Currently, all stockpiled material is applied the same, discounted recoveries.) Factors such as zinc grade and stockpile ageing may have a greater effect on copper recovery compared to when the model was originally developed.

It is the processing qualified person's opinion that CCMC can improve their recovery and concentrate grade forecasting models, based on recent plant operating data.

The authors of this Technical Report strongly recommend that LMC continue its effective exploration strategy that has been very successful in increasing the Mineral Resources and the Mineral Reserves of the CCMC, with a renewed focus on regional exploration targets external to the current LOM footprint.

Minera Candelaria should continue to actively work with SEIA to facilitate the approval of EIA 2040 to support the production schedule presented in this Technical Report and obtain the operational permits required to develop the new areas of Mineral Reserves and ancillary facilities.

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## **APPENDIX A**

### **List of Exploitation and Exploration Concessions**

**Schedule A – Minera Candelaria Mining Exploitation Concessions  
 Inside Candelaria District**

Nacional Rol	Name	Area (ha)	Registration Information					Status
			Page	Number	Year	Register	City	
1	03203-1863-7	AFUERINA 1/12	53	1404	278	10-Oct-1991	Property	COPIAPO Granted
2	03203-1817-3	AGUILA 1/12	50	1727	V	299	9-Jul-1990	Property COPIAPO Granted
3	03203-1987-0	AGUILA 31/35	23	1005		182	17-Jul-1991	Property COPIAPO Granted
4	03203-1287-6	ALCE 1/3	9	78		37	10-Mar-1986	Property COPIAPO Granted
5	03203-1500-K	AMPARADA 1/2	5	569		150	9-May-1989	Property COPIAPO Granted
6	03203-1775-4	ANA 6	5	2676		536	18-Dec-1990	Property COPIAPO Granted
7	03203-1904-8	ANDALUCIA 1/10	50	27	V	5	Año 1991	Property COPIAPO Granted
8	03201-A364-3	ANDREA UNO 1/4	10	2740		519	24-Jun-2013	Property COPIAPO Granted
9	03201-A365-1	ANDREA UNO 11/20	30	4644	V	948	13-Nov-2013	Property COPIAPO Granted
10	03203-2009-7	ANGELICA 11/13	3	662		112	28-May-1991	Property COPIAPO Granted
11	03203-2717-2	ANTONIA 1/10	100	1772		318	27-Oct-1993	Property COPIAPO Granted
12	03203-2718-0	ANTONIA 11/20	100	1780		319	27-Oct-1993	Property COPIAPO Granted
13	03203-2719-9	ANTONIA 21/30	70	1788		320	27-Oct-1993	Property COPIAPO Granted
14	03203-2720-2	ANTONIA 31/40	100	1796		321	27-Oct-1993	Property COPIAPO Granted
15	03203-2721-0	ANTONIA 41/50	100	1804		322	27-Oct-1993	Property COPIAPO Granted
16	03203-2722-9	ANTONIA 51/70	100	1811		323	27-Oct-1993	Property COPIAPO Granted
17	03203-2723-7	ANTONIA 71/80	100	1818	V	324	27-Oct-1993	Property COPIAPO Granted
18	03203-2724-5	ANTONIA 81/90	100	1826		325	27-Oct-1993	Property COPIAPO Granted
19	03203-2108-5	ANTONIA I 1/24	120	204	V	37	8-Feb-1994	Property COPIAPO Granted
20	03203-0053-3	AURORA (Grupo San Ramon)	1	150	V	255	Año 1904	Property COPIAPO Granted
21	03203-4953-2	BELLAVISTA 1/8	24	1467	V	366	21-Dec-2009	Property COPIAPO Granted
22	03203-4955-9	BELLAVISTA 11/14	16	56	V	14	13-Jan-2010	Property COPIAPO Granted
23	03203-4956-7	BELLAVISTA 15/18	20	63		15	13-Jan-2010	Property COPIAPO Granted
24	03203-4954-0	BELLAVISTA 9/10	6	1474		367	21-Dec-2009	Property COPIAPO Granted
25	03203-0230-7	BERTA DOS AL ESTE	3	316		119	19-Aug-1939	Property COPIAPO Granted
26	03203-0229-3	BERTA UNO AL NORTE	4	316		119	19-Aug-1939	Property COPIAPO Granted
27	03203-1622-7	BRISA 1/10	50	2232	V	383	3-Sep-1990	Property COPIAPO Granted
28	03203-1623-5	BRISA 21/40	60	13	V	3	11-Jan-1991	Property COPIAPO Granted
29	03203-1624-3	BRISA 41/45	25	21		4	Año 1991	Property COPIAPO Granted
30	03203-1370-8	BRONCE 1/10	100	142		31	9-Feb-1987	Property COPIAPO Granted
31	03203-1371-6	BRONCE 11/20	89	81		23	23-Jan-1987	Property COPIAPO Granted
32	03203-1372-4	BRONCE 21/30	100	134		30	9-Feb-1987	Property COPIAPO Granted
33	03203-1373-2	BRONCE 31/36	47	91	V	24	23-Jan-1987	Property COPIAPO Granted
34	03203-1704-5	BRONCE 37	1	935	V	226	26-Jul-1989	Property COPIAPO Granted
35	03203-1705-3	BRONCE 38	2	942		227	26-Jul-1989	Property COPIAPO Granted
36	03203-1374-0	BRONCE 41/50	100	102		25	23-Jan-1987	Property COPIAPO Granted
37	03203-1441-0	BRONCE 51/70	100	470		118	9-Sep-1987	Property COPIAPO Granted
38	03203-1479-8	BRONCE 71/89	86	418	V	166	19-Oct-1988	Property COPIAPO Granted
39	03203-1583-2	BRONCE 91/100	50	966		158	17-Apr-1990	Property COPIAPO Granted
40	03203-1584-0	BRONCE 101/115	75	959		156	12-Apr-1990	Property COPIAPO Granted
41	03203-3940-5	BRONCE CINCO 16/30	50	475	V	136	22-May-2000	Property COPIAPO Granted
42	03203-3939-1	BRONCE CUATRO 1/30	123	465		135	22-May-2000	Property COPIAPO Granted
43	03203-3938-3	BRONCE TRES 1/30	150	2164		486	18-Oct-2011	Property COPIAPO Granted
44	03203-3945-6	BRONCE VEINTE 1/10	28	1407		323	18-Nov-1999	Property COPIAPO Granted
45	03203-1905-6	CALEDONIA 1/5	25	34	V	6	Año 1991	Property COPIAPO Granted
46	03203-4354-2	CARLA 10 11/15	23	67	V	33	8-Feb-2005	Property COPIAPO Granted
47	03203-1430-5	CAROLA 1-20	98	142		46	31-Jan-1989	Property COPIAPO Granted
48	03203-2762-8	CAROLITA CINCO 1/10	28	540		85	11-Apr-1994	Property COPIAPO Granted
49	03203-2782-2	CAROLITA CUATRO 1/10	100	1787	V	316	26-Dec-1996	Property COPIAPO Granted
50	03203-2688-5	CAROLITA DOS 1/25	78	2069	V	372	28-Dec-1993	Property COPIAPO Granted
51	03203-2689-3	CAROLITA DOS 31	1	2079		373	28-Dec-1993	Property COPIAPO Granted
52	03203-2781-4	CAROLITA TRES 1/14	124	1776	V	315	26-Dec-1996	Property COPIAPO Granted
53	03203-2685-0	CAROLITA UNO 1/15	59	2046		369	28-Dec-1993	Property COPIAPO Granted
54	03203-2686-9	CAROLITA UNO 16/22	7	2054		370	28-Dec-1993	Property COPIAPO Granted
55	03203-2687-7	CAROLITA UNO 34/35	2	2062		371	28-Dec-1993	Property COPIAPO Granted
56	03203-3346-6	CAROLITA VEINTIDOS 1/5	24	1495	V	261	8-Oct-1996	Property COPIAPO Granted
57	03203-2330-4	CHIQUITA	3	1083	V	343	3-Jun-1992	Property COPIAPO Granted
58	03203-2331-2	CHIQUITA I	1	1076	V	342	3-Jun-1992	Property COPIAPO Granted
59	03203-1338-4	CIERVO 1/3	9	85		38	10-Mar-1986	Property COPIAPO Granted
60	03203-1808-4	CONDOR 1/3	6	1754		302	9-Jul-1990	Property COPIAPO Granted
61	03203-2095-K	CORA 1/20	140	1352	V	266	7-Oct-1991	Property COPIAPO Granted

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62	03203-2154-9	CORA 21/40	200	1758	332	9-Dec-1991	Property	COPIAPO	Granted
63	03203-1749-5	COSTANERA 1/12	43	1648	V	281 Año 1990	Property	COPIAPO	Granted
64	03203-1645-6	CRUCES 1/20	100	952	155	12-Apr-1990	Property	COPIAPO	Granted
65	03203-1646-4	CRUCES 21/40	77	1768	V	304 9-Jul-1990	Property	COPIAPO	Granted
66	03203-1647-2	CRUCES 41/66	130	2217	V	381 30-Aug-1990	Property	COPIAPO	Granted
67	03203-4995-8	CRUCES DOS 1/26	68	610	V	138 22-Jun-2010	Property	COPIAPO	Granted
68	03203-1772-k	CRUCES I 16/20	14	1750		331 9-Dec-1991	Property	COPIAPO	Granted
69	03203-1773-8	CRUCES I 21/27	10	1646		316 13-Nov-1991	Property	COPIAPO	Granted
70	03203-0784-8	DECIDIDA 1/2	10	261		140 Año 1956	Property	COPIAPO	Granted
71	03203-0775-9	DELIRIO (SLM)	5	929		148 6-Apr-1990	Property	COPIAPO	Granted
72	03203-5820-5	DESPRECIADE 1/2	6	2921	V	612 20-Aug-2012	Property	COPIAPO	Granted
73	03203-0324-9	DESPRECIADE 1/6 (1)	5	180	V	82 14-Sep-1948	Property	COPIAPO	Granted
74	03203-0289-7	DICHOSA	5	272	V	99 13-Dec-1936	Property	COPIAPO	Granted
75	03203-7012-4	ELENA 1 1/8	22	4519		955 28-Dec-2015	Property	COPIAPO	Granted
76	03203-7013-2	ELENA 1 11/12	4	3837		779 11-Nov-2015	Property	COPIAPO	Granted
77	03203-1463-1	ESPERANZA 1/7	22	1652	V	317 13-Nov-1991	Property	COPIAPO	Granted
78	03203-7445-6	ESPERANZA II 1/20	100	304		72 6-Feb-2020	Property	COPIAPO	Granted
79	03203-7496-0	ESPERANZA III 1/20	100	973	vta	306 3-Sep-2020	Property	COPIAPO	Granted
80	03203-7504-5	ESPERANZA IV 1-8	24	992	vta	309 7-Sep-2020	Property	COPIAPO	Granted
81	03203-1409-7	ESTEBAN 1/4	14	499	V	70 1-Feb-1990	Property	COPIAPO	Granted
82	03203-0053-3	ESTRELLA (Grupo San Ramón)	2	147		253 Año 1904	Property	COPIAPO	Granted
83	03203-5824-8	FLORENCIA 14 1/9	35	2434	V	528 26-Jul-2012	Property	COPIAPO	Granted
84	03203-5825-6	FLORENCIA 15 1/5	15	2442	V	529 26-Jul-2012	Property	COPIAPO	Granted
85	03203-6400-0	FLORENCIA 18 2	5	669	V	185 13-Mar-2014	Property	COPIAPO	Granted
86	03203-5826-4	FLORENCIA 22 1/15	51	2449	V	530 26-Jul-2012	Property	COPIAPO	Granted
87	03203-5822-1	FLORENCIA 4 1/5	12	2426		527 26-Jul-2012	Property	COPIAPO	Granted
88	03203-7023-k	FLORENCIA A18 21/24	11	163	v	45 26-Jan-2016	Property	COPIAPO	Granted
89	03203-7021-3	FLORENCIA A3 1/12	21	270	v	58 2-Feb-2016	Property	COPIAPO	Granted
90	03203-0322-2	FUNDENTE 1/5	18	130		95 8-Oct-1951	Property	COPIAPO	Granted
91	03203-5821-3	FUNDENTES 1/20	81	1905	V	429 21-Jun-2012	Property	COPIAPO	Granted
92	03203-7092-2	GEMA II 1/40	158	2062	v	574 18-Nov-2016	Property	COPIAPO	Granted
93	03203-7093-0	GEMA III 1/40	200	768		192 15-Apr-2016	Property	COPIAPO	Granted
94	03203-7094-9	GEMA IV 1/10	50	774	v	193 15-Apr-2016	Property	COPIAPO	Granted
95	03203-7095-7	GEMA V 1/20	100	340		76 12-Feb-2016	Property	COPIAPO	Granted
96	03203-1655-3	GRANATE 120/126	14	40	V	5 2-Jan-1990	Property	COPIAPO	Granted
97	03203-0814-3	INDEPENDENCIA (SLM)	2	835		149 6-Apr-1990	Property	COPIAPO	Granted
98	03203-1200-0	LA ABANDONADA 1/3	15	80	vta	41 3-May-1983	Property	COPIAPO	Granted
99	03203-1464-K	LA PIRITA 1/7	43	100		39 9-Apr-1988	Property	COPIAPO	Granted
100	03203-4748-3	LA PITA 1/15	51	1459	V	365 21-Dec-2009	Property	COPIAPO	Granted
101	03203-1676-6	LA POLLITA 1/13	39	623		160 10-May-1989	Property	COPIAPO	Granted
102	03203-4749-1	LA POLO 1/6	18	1480		368 21-Dec-2009	Property	COPIAPO	Granted
103	03203-0097-5	LA SIETE POR CIENTO 1/3	15	294		133 12-Dec-1955	Property	COPIAPO	Granted
104	03203-1204-3	LAR 1/10	50	220	V	111 22-Aug-1983	Property	COPIAPO	Granted
105	03203-2405-k	MACARENA 111/129	173	1357	V	261 13-Sep-1993	Property	COPIAPO	Granted
106	03203-2484-k	MACARENA 131/140	90	1437	V	271 20-Sep-1993	Property	COPIAPO	Granted
107	03203-2486-6	MACARENA 176/180	20	1049	V	203 18-Aug-1993	Property	COPIAPO	Granted
108	03203-2406-8	MACARENA 181/195	150	1366	V	262 13-Sep-1993	Property	COPIAPO	Granted
109	03203-2487-4	MACARENA 196/200	10	1375	V	263 13-Sep-1993	Property	COPIAPO	Granted
110	03203-2488-2	MACARENA 211/240	291	1057		204 18-Aug-1993	Property	COPIAPO	Granted
111	03203-2407-6	MACARENA 241/260	182	1384		264 13-Sep-1993	Property	COPIAPO	Granted
112	03203-2408-4	MACARENA 261/270	100	1393	V	265 13-Sep-1993	Property	COPIAPO	Granted
113	03203-2489-0	MACARENA 271/273	26	1403		266 13-Sep-1993	Property	COPIAPO	Granted
114	03203-2490-4	MACARENA 274/280	35	1412	V	267 13-Sep-1993	Property	COPIAPO	Granted
115	03203-2491-2	MACARENA 281	4	1421		268 13-Sep-1993	Property	COPIAPO	Granted
116	03203-2493-9	MACARENA 288/297	94	1066	V	205 18-Aug-1993	Property	COPIAPO	Granted
117	03203-2494-7	MACARENA 298/305	73	1075		206 18-Aug-1993	Property	COPIAPO	Granted
118	03203-2495-5	MACARENA 306/307	3	1083		207 18-Aug-1993	Property	COPIAPO	Granted
119	03203-2496-3	MACARENA 316/325	21	1090	V	208 18-Aug-1993	Property	COPIAPO	Granted
120	03203-2497-1	MACARENA 336	1	1100		209 18-Aug-1993	Property	COPIAPO	Granted
121	03203-2409-2	MACARENA 346/365	200	683	V	144 19-May-1993	Property	COPIAPO	Granted
122	03203-2498-k	MACARENA 366/385	200	1107	V	210 18-Aug-1993	Property	COPIAPO	Granted
123	03203-2499-8	MACARENA 386/405	200	1115	V	211 18-Aug-1993	Property	COPIAPO	Granted
124	03203-2500-5	MACARENA 406/425	78	454		106 21-Apr-1993	Property	COPIAPO	Granted
125	03203-2501-3	MACARENA 426/433	26	1123	V	212 18-Aug-1993	Property	COPIAPO	Granted
126	03203-2502-1	MACARENA 434/437	19	1132	V	213 18-Aug-1993	Property	COPIAPO	Granted
127	03203-2503-k	MACARENA 442/444	5	1140		214 18-Aug-1993	Property	COPIAPO	Granted

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128	03203-2504-8	MACARENA 445/464	58	1148	215	18-Aug-1993	Property	COPIAPO	Granted	
129	03203-1501-8	MANTO PEDREGAL 1/3	12	1049	251	22-Aug-1989	Property	COPIAPO	Granted	
130	03203-7004-3	MARTITA 1 1/2	3	3115	646	10-Sep-2015	Property	COPIAPO	Granted	
131	03203-6273-3	MARTITA 10 1/40	163	745	156	11-Feb-2015	Property	COPIAPO	Granted	
132	03203-6495-7	MARTITA 6 1/17	68	662	184	13-Mar-2014	Property	COPIAPO	Granted	
133	03203-7005-1	MARTITA 9 1	1	3121	v	647	10-Sep-2015	Property	COPIAPO	Granted
134	03203-0053-3	MERCEDES (Grupo San Ramón)	1	130	V	227	Año 1905	Property	COPIAPO	Granted
135	03203-1893-9	MILANO 41/44	18	484	V	77	23-Apr-1991	Property	COPIAPO	Granted
136	03203-1894-7	MILANO 51/54	15	1012	183	17-Jul-1991	Property	COPIAPO	Granted	
137	03203-0853-4	NIC CARTER 1/2	7	134	V	95	8-Sep-1942	Property	COPIAPO	Granted
138	03203-1474-7	NIC CARTER II 1/20	78	1119	V	349	11-Jun-1992	Property	COPIAPO	Granted
139	03203-1502-6	OCHO POR CIENTO 1/5	18	1035	249	22-Aug-1989	Property	COPIAPO	Granted	
140	03203-1438-0	OJANCO 1/20	86	205	73	22-Jun-1988	Property	COPIAPO	Granted	
141	03203-1666-9	OJANCO 61/84	120	2430	V	429	19-Oct-1990	Property	COPIAPO	Granted
142	03203-1667-7	OJANCO 85/96	60	1300	V	216	10-May-1990	Property	COPIAPO	Granted
143	03201-5472-3	OJANCO CINCO 3/5	8	540	176	9-Apr-1998	Property	COPIAPO	Granted	
144	03201-5473-1	OJANCO CINCO 6/15 (14/15)	12	546	V	177	9-Apr-1998	Property	COPIAPO	Granted
145	03201-5465-0	OJANCO CUATRO 4/14	78	164	V	27	18-Jan-1999	Property	COPIAPO	Granted
146	03201-5987-3	OJANCO DOS 1	1	869	V	227	7-Dec-2000	Property	COPIAPO	Granted
147	03203-3616-3	OJANCO DOS 1/4	16	773	267	8-Jun-1998	Property	COPIAPO	Granted	
148	03203-3618-k	OJANCO DOS 11/16	36	786	V	269	8-Jun-1998	Property	COPIAPO	Granted
149	03203-3617-1	OJANCO DOS 6/9	6	779	V	268	8-Jun-1998	Property	COPIAPO	Granted
150	03203-2264-2	OJANCO I 41/50	50	492	78	23-Apr-1991	Property	COPIAPO	Granted	
151	03201-5988-1	OJANCO SEIS 1/18	61	236	V	69	11-Apr-2001	Property	COPIAPO	Granted
152	03201-5461-8	OJANCO TRES 11/20	49	1177	V	340	14-Jul-1998	Property	COPIAPO	Granted
153	03201-5463-4	OJANCO TRES 24/38	33	499	V	170	9-Apr-1998	Property	COPIAPO	Granted
154	03201-5460-k	OJANCO TRES 4/10	17	1033	V	316	8-Jul-1998	Property	COPIAPO	Granted
155	03201-5474-k	OJANCO VEINTIUNO 1/3	6	555	V	178	9-Apr-1998	Property	COPIAPO	Granted
156	03201-5476-6	OJANCO VEINTIUNO 12/16	15	561	V	179	9-Apr-1998	Property	COPIAPO	Granted
157	03201-5475-8	OJANCO VEINTIUNO 5/10	41	1062	V	320	8-Jul-1998	Property	COPIAPO	Granted
158	03203-5261-4	OLI CINCO 1/4	20	438	V	99	27-Feb-2012	Property	COPIAPO	Granted
159	03203-3612-0	PAME DOS 26/36	39	184	30	9-Feb-1999	Property	COPIAPO	Granted	
160	03203-3613-9	PAME DOS 38/66	83	1296	V	364	17-Aug-1998	Property	COPIAPO	Granted
161	03203-3609-0	PAME UNO 24/28	7	1290	V	363	17-Aug-1998	Property	COPIAPO	Granted
162	03203-3607-4	PAME UNO 6/7	3	793	V	270	8-Jun-1998	Property	COPIAPO	Granted
163	03203-1497-6	PELIGROSA 1/20	88	713	178	5-Jun-1989	Property	COPIAPO	Granted	
164	03203-1403-8	PELUSIN 1/10	50	35	12	4-Feb-1988	Property	COPIAPO	Granted	
165	03203-1744-4	POLA 1/4	17	1029	V	176	30-Apr-1990	Property	COPIAPO	Granted
166	03203-1585-9	PROTECTORA 1/10	50	487	68	31-Jan-1990	Property	COPIAPO	Granted	
167	03203-1586-7	PROTECTORA 21/40	100	1364	V	267	7-Oct-1991	Property	COPIAPO	Granted
168	03203-1587-5	PROTECTORA 41/52	54	1372	268	7-Oct-1991	Property	COPIAPO	Granted	
169	03203-1588-3	PROTECTORA 55/68	67	1488	243	31-May-1990	Property	COPIAPO	Granted	
170	03203-1625-1	PUDU 1/2	2	2225	382	3-Sep-1990	Property	COPIAPO	Granted	
171	03203-1099-7	RENO 1/6	24	81	V	79	25-Jun-1979	Property	COPIAPO	Granted
172	03203-1506-9	RESCATADA 1/8	36	181	61	9-Feb-1989	Property	COPIAPO	Granted	
173	03203-1626-k	RINCON 1/2	5	403	57	31-Jan-1990	Property	COPIAPO	Granted	
174	03203-0325-7	RINCONADA 1/5 (1/3)	12	464	136	26-Sep-1966	Property	COPIAPO	Granted	
175	03203-1431-3	RORO 1/6	30	261	V	94	11-Aug-1988	Property	COPIAPO	Granted
176	03203-2327-4	ROSALIA I	1	1152	353	11-Jun-1992	Property	COPIAPO	Granted	
177	03203-2328-2	ROSALIA II	1	1158	354	11-Jun-1992	Property	COPIAPO	Granted	
178	03203-2329-0	ROSALIA III	1	1836	V	472	9-Oct-1992	Property	COPIAPO	Granted
179	03203-2903-5	ROSLICER CUATRO 1/40	188	1214	232	14-Sep-1994	Property	COPIAPO	Granted	
180	03203-2904-3	ROSLICER DOS 1/31	140	1438	265	5-Oct-1994	Property	COPIAPO	Granted	
181	03203-2906-k	ROSLICER TRES 1/20	200	1430	264	5-Oct-1994	Property	COPIAPO	Granted	
182	03203-2037-2	ROSITA	1	927	V	171	17-Jul-1991	Property	COPIAPO	Granted
183	03203-0077-0	SAN GREGORIO	5	173	72	28-Jul-1939	Property	COPIAPO	Granted	
184	03203-1496-8	SAN JOSE 1/5	25	748	191	30-Jun-1989	Property	COPIAPO	Granted	
185	03203-1755-k	SAN JOSE Y SOFIA 1	10	2080	356	14-Aug-1990	Property	COPIAPO	Granted	
186	03203-0053-3	SAN LUIS (Grupo San Ramón)	4	152	256	Año 1904	Property	COPIAPO	Granted	
187	03203-1022-9	SAN PANCRACIO 1/3	13	102	V	49	11-Jul-1972	Property	COPIAPO	Granted

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188	03203-1789-4	SAN PEDRO I 11/20, 31/34 Y 46/48	79	1386	V	227	15-May-1990	Property	COPIAPO	Granted
189	03203-1790-8	SAN PEDRO II 1/48	48	1378		226	15-May-1990	Property	COPIAPO	Granted
190	03203-0053-3	SAN RAMON (Grupo San Ramón)	1	54	V	19	Año 1968	Property	COPIAPO	Granted
191	03203-1788-6	SANTA GEMITA II 1/20	123	2543		450	23-Nov-1990	Property	COPIAPO	Granted
192	03203-1680-4	SANTA GEMITA III 1/20	190	927		225	26-Jul-1989	Property	COPIAPO	Granted
193	03203-1742-8	SANTA GEMITA IV 1/5	50	2691		538	19-Dec-1990	Property	COPIAPO	Granted
194	03203-1743-6	SANTA GEMITA V 1/10	100	2145		368	24-Aug-1990	Property	COPIAPO	Granted
195	03203-0112-2	SANTA ROSA 1/10	49	321		142	22-Jun-1959	Property	COPIAPO	Granted
196	03203-1698-7	SANTA SOFIA 1/60	60	664	V	166	12-May-1989	Property	COPIAPO	Granted
197	03203-1756-8	SANTA TERESA I 1/20	100	1842	V	473	13-Oct-1992	Property	COPIAPO	Granted
198	03203-1757-6	SANTA TERESA II 1/20	100	1849		474	13-Oct-1992	Property	COPIAPO	Granted
199	03203-1758-4	SANTA TERESA III 1/20	100	1856	V	475	13-Oct-1992	Property	COPIAPO	Granted
200	03203-1846-7	SUR 1/2	2	2331		400	12-Sep-1990	Property	COPIAPO	Granted
201	03203-2007-0	TORO 521-539	58	1223	vta	184	13-Jul-1995	Property	COPIAPO	Granted
202	03203-1890-4	TORO 621/628	32	1222		228	6-Sep-1991	Property	COPIAPO	Granted
203	03203-1480-1	VENADO 1/22	104	568		234	22-Dec-1988	Property	COPIAPO	Granted
204	03203-1543-3	VENADO 25/39	65	1213		290	10-Oct-1989	Property	COPIAPO	Granted
205	03203-1663-4	VENADO II 1/10	33	386		55	31-Jan-1990	Property	COPIAPO	Granted
206	03203-1759-2	VENADO II 17/46	150	573		82	28-Feb-1990	Property	COPIAPO	Granted
207	03203-2451-3	VENTARRON 1/20	88	577	V	130	5-May-1993	Property	COPIAPO	Granted
208	03203-1478-k	VIENTO 1/20	100	95	V	35	13-Jan-1989	Property	COPIAPO	Granted
209	03203-1408-9	VIENTO 21/31	41	150	V	32	9-Feb-1987	Property	COPIAPO	Granted
210	03203-1544-1	VIENTO 41/58	90	869	V	214	19-Jul-1989	Property	COPIAPO	Granted
211	03203-1545-k	VIENTO 59/84	130	502		132	20-Apr-1989	Property	COPIAPO	Granted
212	03203-1546-8	VIENTO 85/102	90	508	V	133	20-Apr-1989	Property	COPIAPO	Granted
213	03203-1508-5	VIENTO 103/122	100	102		36	13-Jan-1989	Property	COPIAPO	Granted
214	03203-1664-2	VIENTO II 21/29	41	1745	V	301	9-Jul-1990	Property	COPIAPO	Granted
215	03203-3461-6	VISTA HERMOSA 1	1	702	vta	118	3-Jun-1997	Property	COPIAPO	Granted
216	03203-7636-k	ESPERANZA V 1-13	91	3803	vta	2272	2-Aug-2021	Discovery	COPIAPO	In Process
217	03203-7546-0	ESTRELLA 1/4	11	4647		2955	18-Dec-2019	Discovery	COPIAPO	In Process
218		GIANINA I 1/20	100	2805	vta	1622	19-Jul-2022	Discovery	COPIAPO	In Process
219		GIANINA I 21/22	2	2807	vta	1623	19-Jul-2022	Discovery	COPIAPO	In Process
220	03203-7590-8	TITIN 1	1	2900		1781	27-Aug-2020	Discovery	COPIAPO	In Process

### Outside Candelaria District

Nacional Rol	Name	Area		Registration Information				Register	City	Status
		(ha)	Page	Number	Year					
1	03202-1986-8	ANDREA 10 1/20	100	285		62	30-Jul-2015	Property	CALDERA	Granted
2	03202-1987-6	ANDREA 11 1/20	100	291		63	30-Jul-2015	Property	CALDERA	Granted
3	03202-1988-4	ANDREA 12 1/20	100	297		64	30-Jul-2015	Property	CALDERA	Granted
4	03202-1989-2	ANDREA 13 1/20	100	303		65	30-Jul-2015	Property	CALDERA	Granted
5	03202-1990-6	ANDREA 14 1/40	146	453		87	28-Sep-2015	Property	CALDERA	Granted
6	03202-1991-4	ANDREA 15 1/40	200	309		66	30-Jul-2015	Property	CALDERA	Granted
7	03202-1992-2	ANDREA 16 1/40	200	315		67	30-Jul-2015	Property	CALDERA	Granted
8	03202-1993-0	ANDREA 17 1/60	300	322		68	30-Jul-2015	Property	CALDERA	Granted
9	03202-1994-9	ANDREA 18 1/60	300	329		69	30-Jul-2015	Property	CALDERA	Granted
10	03202-1983-3	ANDREA 7 1/20	100	267		59	30-Jul-2015	Property	CALDERA	Granted
11	03202-1984-1	ANDREA 8 1/20	100	273		60	30-Jul-2015	Property	CALDERA	Granted
12	03202-1985-K	ANDREA 9 1/20	100	279		61	30-Jul-2015	Property	CALDERA	Granted
13	03201-9704-K	ANDREA CINCO 1/40	200	3778		754	26-Sep-2013	Property	COPIAPO	Granted
14	03201-A368-6	ANDREA CUATRO 1/6	16	2728		517	24-Jun-2013	Property	COPIAPO	Granted
15	03201-A369-4	ANDREA CUATRO 11/20	48	4655	V	950	13-Nov-2013	Property	COPIAPO	Granted
16	03201-A370-8	ANDREA CUATRO 21/30	70	2734	V	518	24-Jun-2013	Property	COPIAPO	Granted
17	03201-A366-K	ANDREA DOS 1	2	4650	V	949	13-Nov-2013	Property	COPIAPO	Granted
18	03201-9705-8	ANDREA SEIS 21/40	100	3784	V	755	26-Sep-2013	Property	COPIAPO	Granted
19	03202-0932-3	BAHIA IV 1/10	40	12		4	14-Sep-1999	Property	CALDERA	Granted
20	03202-0933-1	BAHIA V 1/30	150	21		6	7-Dec-1999	Property	CALDERA	Granted
21	03202-0934-k	BAHIA VI 1/9	39	26		7	7-Dec-1999	Property	CALDERA	Granted
22	03201-B587-0	ESTELA 1 1/40	200	4209	vta	1038	11-Dec-2014	Property	COPIAPO	Granted
23	03201-B595-1	ESTELA 10 1/60	300	780	vta	161	11-Feb-2015	Property	COPIAPO	Granted

Nacional Rol	Name	Area (ha)	Page	Registration Information				City	Status
				Number	Year	Register			
24	03201-B596-K	ESTELA 11 1/30	145	4236	vta	1042	11-Dec-2014	Property	COPIAPO Granted
25	03201-B597-8	ESTELA 12 1/22	110	787	vta	162	11-Feb-2015	Property	COPIAPO Granted
26	03201-B598-6	ESTELA 12 31/43	39	793	vta	163	11-Feb-2015	Property	COPIAPO Granted
27	03201-B599-4	ESTELA 13 1/60	300	800		164	11-Feb-2015	Property	COPIAPO Granted
28	03201-B600-1	ESTELA 14 1/40	200	807		165	11-Feb-2015	Property	COPIAPO Granted
29	03201-B601-K	ESTELA 15 1/40	200	4243	vta	1043	11-Dec-2014	Property	COPIAPO Granted
30	03202-1941-8	ESTELA 16 1/40	200	436		84	27-Aug-2015	Property	CALDERA Granted
31	03201-B588-9	ESTELA 3 1/50	240	4216		1039	11-Dec-2014	Property	COPIAPO Granted
32	03201-B589-7	ESTELA 4 1/7	21	753	vta	157	11-Feb-2015	Property	COPIAPO Granted
33	03201-B289-8	ESTELA 5 1/60	214	1922		369	12-May-2015	Property	COPIAPO Granted
34	03201-B590-0	ESTELA 6 31/50	100	759	vta	158	11-Feb-2015	Property	COPIAPO Granted
35	03201-B591-9	ESTELA 7 1/40	196	766		159	11-Feb-2015	Property	COPIAPO Granted
36	03201-B592-7	ESTELA 8 1/44	212	4223	vta	1040	11-Dec-2014	Property	COPIAPO Granted
37	03201-B593-5	ESTELA 8 45/60	80	4230	vta	1041	11-Dec-2014	Property	COPIAPO Granted
38	03201-B594-3	ESTELA 9 1/60	300	773	vta	160	11-Feb-2015	Property	COPIAPO Granted
39	03201-C331-8	ESTELA A11 1/2	9	2056	v	573	18-Nov-2016	Property	COPIAPO Granted
40	03201-C330-k	ESTELA A2 1/48	240	2049	v	572	18-Nov-2016	Property	COPIAPO Granted
41	03203-0419-9	INDEPENDENCIA 1/20	50	264	V	109	13-Dec-1958	Property	COPIAPO Granted
42	03201-C772-0	JUANITA 2 1-5	20	1093		295	3-Sep-2018	Property	COPIAPO Granted
43	03201-C877-8	JUANITA 4 1-4	8	109	vta	21	5-Feb-2019	Property	COPIAPO Granted
44	03202-0849-1	PUNTA PADRONES 1/33	132	55		9	24-Jun-1997	Property	CALDERA Granted
45	03201-7174-1	TOLITO SEGUNDA 1/6 (R)	30	574		160	9-Jul-2007	Property	COPIAPO Granted
46	03201-D562-6	TORO LORCA 1-4 COPIAPO 1-6	12	37	vta	10	20-Jan-2022	Property	COPIAPO Granted
47		CALDERA B1 1-20	6	1214		726	24-Mar-2022	Discovery	COPIAPO In Process
48		CALDERA B2 1-20	100	972		513	1-Sep-2022	Discovery	CALDERA In Process
49		CALDERA B3 1-20	100	974		514	1-Sep-2022	Discovery	CALDERA In Process
50		CALDERA B4 1-20	100	976		515	1-Sep-2022	Discovery	CALDERA In Process
51			100	978		516	1-Sep-2022	Discovery	CALDERA In Process

**Schedule A – Minera Candelaria Exploration Concessions  
 Inside Candelaria District**

Nacional Rol	Name	Area (ha)	Registration Information					Status	Expiration Date		
			Page	Number	Year	Register	City				
1	03203-G439-0	MARTITA E17	300	3434	2063	2021-07-12	Discover	COPIAPO	Granted	2025-04-27	
2	03201-O653-3	LICHA C1	200	3432	2062	2021-07-12	Discover	COPIAPO	Granted	2025-04-27	
3	03203-G440-4	MARTITA E21	200	3813	vta	2278	2021-08-02	Discover	COPIAPO	Granted	2025-05-08
4	03203-G430-7	SUR B1	100	3817	vta	2280	2021-08-02	Discover	COPIAPO	Granted	2025-05-08
5	03203-G437-4	MARTITA E2	300	3809	vta	2276	2021-08-02	Discover	COPIAPO	Granted	2025-05-12
6	03203-G438-2	MARTITA E12	300	3811	vta	2277	2021-08-02	Discover	COPIAPO	Granted	2025-05-31
7	03203-G835-3	MARTITA A11	300	138		70	2022-01-10	Discover	COPIAPO	Granted	2025-11-17
8	03203-G837-k	MARTITA A25	200	396	vta	241	2022-01-20	Discover	COPIAPO	Granted	2025-11-18
9	03203-G834-5	MARTITA A10	300	393		239	2022-01-20	Discover	COPIAPO	Granted	2025-11-18
10	03203-G836-1	MARTITA A23	300	394	vta	240	2022-01-20	Discover	COPIAPO	Granted	2025-11-30
11	03203-G838-8	MARTITA A26	100	916		532	2022-03-01	Discover	COPIAPO	Granted	2025-12-28
12	03203-H100-1	MARTITA A15	300	2490		1442	2022-07-04	Discover	COPIAPO	Granted	2026-05-03
13	03203-H096-k	MARTITA A6	300	2486		1440	2022-07-04	Discover	COPIAPO	Granted	2026-05-03
14	03201-P251-7	MARTITA A1	300	3034	vta	1765	2022-08-08	Discover	COPIAPO	Granted	2026-05-12
15	03203-H099-4	MARTITA A14	300	3038		1767	2022-08-08	Discover	COPIAPO	Granted	2026-05-12
16	03203-H103-6	MARTITA A24	300	3042		1769	2022-08-08	Discover	COPIAPO	Granted	2026-05-12
17	03203-H102-8	MARTITA A20	200	2492		1443	2022-07-04	Discover	COPIAPO	Granted	2026-05-20
18	03203-H098-6	MARTITA A8	100	2488		1441	2022-07-04	Discover	COPIAPO	Granted	2026-05-20
19	03203-H095-1	BELLAVISTA E1	100	3032	vta	1764	2022-08-08	Discover	COPIAPO	Granted	2026-05-28
20	03203-H101-K	MARTITA A19	200	3034		1768	2022-08-08	Discover	COPIAPO	Granted	2026-05-28
21	03203-H097-8	MARTITA A7	300	3036		1766	2022-08-08	Discover	COPIAPO	Granted	2026-05-28
22	03203-H297-0	MARTITA A13	300	2841		1644	2022-07-19	Discover	COPIAPO	In Process	
23	03203-H298-9	MARTITA A16	200	2842	vta	1645	2022-07-19	Discover	COPIAPO	In Process	
24		MARTITA A18	100	2844		1646	2022-07-19	Discover	COPIAPO	In Process	
25	03203-H300-4	MARTITA A22	100	2845	vta	1647	2022-07-19	Discover	COPIAPO	In Process	
26	03203-H301-2	MARTITA A3	300	2835		1640	2022-07-19	Discover	COPIAPO	In Process	
27	03203-H302-0	MARTITA A4	300	2836	vta	1641	2022-07-19	Discover	COPIAPO	In Process	
28		MARTITA A5	300	2838		1642	2022-07-19	Discover	COPIAPO	In Process	
29	03203-H304-7	MARTITA A9	300	2839	vta	1643	2022-07-19	Discover	COPIAPO	In Process	

**Outside Candelaria District**

Nacional Rol	Name	Area (ha)	Registration Information					Status	Expiration Date	
			Page	Number	Year	Register	City			
1	03202-3361-5	CALDERA B2 (Renewal)	100	643	486	2020-11-20	Discover	CALDERA	In Process	2024-09-07
2	03202-3360-7	CALDERA B1 (Renewal)	100	641	485	2020-11-20	Discover	CALDERA	In Process	2024-09-07
3	03201-O652-5	JUANITA 2C	100	3815	vta	2279	2021-08-02	Discover	COPIAPO	Granted
4	03201-P020-4	JUANITA C4	100	913	531	2022-03-01	Discover	COPIAPO	Granted	2025-12-28
5	03202-3758-0	CALDERA C1	200	927	484	2022-08-16	Discover	CALDERA	Granted	2026-05-04
6	03202-3757-2	CALDERA C2	200	929	485	2022-08-16	Discover	CALDERA	Granted	2026-05-04
7	03202-3759-9	CALDERA C3	100	931	486	2022-08-16	Discover	CALDERA	Granted	2026-05-04
8	03202-3760-2	CALDERA C4	100	933	487	2022-08-16	Discover	CALDERA	Granted	2026-05-04
9	03201-P250-9	LICHA D3	100	2484	1439	2022-07-04	Discover	COPIAPO	Granted	2026-05-23
10	03201-P486-2	LICHA D2	200	2833	vta	1639	2022-07-19	Discover	COPIAPO	In Process
11	03202-3847-1	CALDERA C6	200	790	404	2022-07-27	Discover	CALDERA	In Process	

**Schedule B – Minera Ojos del Salado Mining Exploitation Concessions  
 Inside Candelaria District**

Nacional Rol	Name	Area (ha)	Registration Information				Status	
			Page	Number	Year	Register		
1	03203-1642-1	ALBA 127/155	132	1164	V	281 22-Sep-1989	Property	COPIAPO Granted
2	03203-1643-K	ALBA 157/160	11	470	V	66 31-Jan-1990	Property	COPIAPO Granted
3	03203-1644-8	ALBA 163/169	22	478	V	67 31-Jan-1990	Property	COPIAPO Granted
4	03203-1637-5	ALBA 17/36	100	1064	V	181 30-Apr-1990	Property	COPIAPO Granted
5	03203-1638-3	ALBA 37/56	100	1157	V	280 22-Sep-1989	Property	COPIAPO Granted
6	03203-1639-1	ALBA 57/76	100	447	V	63 31-Jan-1990	Property	COPIAPO Granted
7	03203-0748-1	ALCAPARROSA	5	163	V	207 24-07-1877	Property	COPIAPO Granted
8	03203-0749-K	ALCAPARROSA II y IV	10	370	V	137 5-Sep-1939	Property	COPIAPO Granted
9	03203-0932-8	ALTA SIERRA 1/11 (2)	8	86	V	33 31-Mar-1965	Property	COPIAPO Granted
10	03203-2165-4	BLANCA TORRE DE CARRIZALILLO 1/25	20	1906	V	482 20-Oct-1992	Property	COPIAPO Granted
11	03201-5796-K	BONANZA CUARTA 1/60	300	347	V	78 22-Mar-1999	Property	COPIAPO Granted
12	03201-5728-5	BONANZA DOS 1/10	40	177	V	29 9-Feb-1999	Property	COPIAPO Granted
13	03201-5797-8	BONANZA SEXTA 1	1	354	V	79 22-Mar-1999	Property	COPIAPO Granted
14	03201-5800-1	BONANZA SEXTA 11, 12, 33/60	150	370	V	82 22-Mar-1999	Property	COPIAPO Granted
15	03201-5798-6	BONANZA SEXTA 6	1	359	V	80 22-Mar-1999	Property	COPIAPO Granted
16	03201-5799-4	BONANZA SEXTA 7/10	13	364	V	81 22-Mar-1999	Property	COPIAPO Granted
17	03201-5795-1	BONANZA TERCERA 1/60	300	340	V	77 22-Mar-1999	Property	COPIAPO Granted
18	03201-5189-9	BONANZA UNO 1/40	200	288	V	44 27-Feb-1997	Property	COPIAPO Granted
19	03203-5656-3	BRISA CUATRO 1/2	6	747	V	148 21-Feb-2013	Property	COPIAPO Granted
20	03203-6329-2	BRISA SIETE 1/2	2	689	V	188 13-Mar-2014	Property	COPIAPO Granted
21	03203-5655-5	BRISA TRES 1/2	2	2457	V	531 26-Jul-2012	Property	COPIAPO Granted
22	03203-6486-8	BUITRE 2 1/48	217	682	V	187 13-Mar-2014	Property	COPIAPO Granted
23	03203-3245-1	CARO TRES 37	1	230	V	34 19-Feb-1996	Property	COPIAPO Granted
24	03203-1876-9	CAROLITA 1/7	22	1296	V	243 26-Sep-1991	Property	COPIAPO Granted
25	03203-3170-6	CAROLITA SEIS 1/10	30	1919	V	302 1-Dec-1995	Property	COPIAPO Granted
26	03203-1978-1	CHICA 1/3	4	997	V	181 17-Jul-1991	Property	COPIAPO Granted
27	03203-1981-1	CHICA 14/20	31	1222	V	365 3-Jul-1992	Property	COPIAPO Granted
28	03203-1982-K	CHICA 22/25	7	971	V	178 17-Jul-1991	Property	COPIAPO Granted
29	03203-1983-8	CHICA 26/31	13	988	V	180 17-Jul-1991	Property	COPIAPO Granted
30	03203-1984-6	CHICA 32/38	24	979	V	179 17-Jul-1991	Property	COPIAPO Granted
31	03203-1985-4	CHICA 39	1	965	V	177 17-Jul-1991	Property	COPIAPO Granted
32	03203-1979-K	CHICA 4/12	20	957	V	176 17-Jul-1991	Property	COPIAPO Granted
33	03203-1970-6	CLAUDIA 1/17	17	153	V	25 18-Feb-1991	Property	COPIAPO Granted
34	03203-2980-9	COALA DOS 11/24	51	42	V	6 5-Jan-1995	Property	COPIAPO Granted
35	03203-2981-7	COALA TRES 13/20	32	51	V	7 5-Jan-1995	Property	COPIAPO Granted
36	03201-2201-5	COOPERATIVA AGUSTINA 1/10	50	438	V	136 18-Nov-1980	Property	COPIAPO Granted
37	03203-6954-1	CORA A1 1/60	300	2819	v	592 27-Jul-2015	Property	COPIAPO Granted
38	03203-6955-K	CORA A2 1/60	300	2827	V	593 27-Jul-2015	Property	COPIAPO Granted
39	03203-6956-8	CORA A3 1/40	200	2848	V	595 27-Jul-2015	Property	COPIAPO Granted
40	03203-6957-6	CORA A4 1/39	177	2834	V	594 27-Jul-2015	Property	COPIAPO Granted
41	03203-6958-4	CORA A5 1/43	168	3843	V	780 11-Nov-2015	Property	COPIAPO Granted
42	03203-6959-2	CORA A6 1/7	16	4277	V	912 14-Dec-2015	Property	COPIAPO Granted
43	03203-1662-6	CORITA 1/8	40	1896	V	326 19-Jul-1990	Property	COPIAPO Granted
44	03203-0276-5	COTOPAXI 1/5 (1/3)	15	483	V	124 16-Nov-1962	Property	COPIAPO Granted
45	03201-5991-1	CRUCES NUEVE 1/20	100	829	V	207 29-Nov-2000	Property	COPIAPO Granted
46	03203-4067-5	CRUCES OCHO 1/15	75	816	V	205 29-Nov-2000	Property	COPIAPO Granted
47	03203-4068-3	CRUCES OCHO 41/60	85	823	V	206 29-Nov-2000	Property	COPIAPO Granted
48	03201-5990-3	CRUCES SIETE 1/20 y 31/50	120	810	V	204 29-Nov-2000	Property	COPIAPO Granted
49	03201-2203-1	CUTANA 1/10	47	138	V	44 2-Jul-1971	Property	COPIAPO Granted
50	03203-6881-2	DANIELA DIEZ 1/3	12	813	vta	166 11-Feb-2015	Property	COPIAPO Granted
51	03203-0294-3	DESCUIDADA II ( R )	2	8	V	3 8-Jan-1940	Property	COPIAPO Granted
52	03203-0782-1	DESCUIDADA VI ( R )	3	113	V	56 15-May-1952	Property	COPIAPO Granted
53	03203-0296-K	DESEADA	5	71	V	34 Año 1942	Property	COPIAPO Granted
54	03203-2751-2	DICASO 1/40 (1/9)	45	131	V	61 16-Apr-1981	Property	COPIAPO Granted
55	03201-0034-8	ESCAPADA	30	406	V	177 1-Nov-1938	Property	COPIAPO Granted
56	03203-1648-0	GRANATE 1/21	105	1279	V	213 11-May-1990	Property	COPIAPO Granted
57	03203-1649-9	GRANATE 22/41	100	1293	V	215 11-May-1990	Property	COPIAPO Granted
58	03203-1650-2	GRANATE 42/48	28	1761	V	303 9-Jul-1990	Property	COPIAPO Granted
59	03203-1651-0	GRANATE 64/76	42	1249	V	210 11-May-1990	Property	COPIAPO Granted
60	03203-1652-9	GRANATE 86/90	15	190	V	21 9-Jan-1990	Property	COPIAPO Granted
61	03203-1653-7	GRANATE 92/104	65	425	V	60 31-Jan-1990	Property	COPIAPO Granted
62	03203-1654-5	GRANATE 105/119	45	1695	V	294 5-Jul-1990	Property	COPIAPO Granted
63	03203-1632-4	HERCULES 35/60	90	610	V	87 8-Mar-1990	Property	COPIAPO Granted
64	03203 1633-2	HERCULES 63/90	112	1903	V	327 23-Jul-1990	Property	COPIAPO Granted
65	03203 1634-0	HERCULES 91/101	40	1306	V	217 10-May-1990	Property	COPIAPO Granted
66	03203-1885-8	HERCULES II 1/12	30	257	V	40 12-Feb-1992	Property	COPIAPO Granted

Nacional Rol	Name	Area (ha)	Registration Information				Register	City	Status
			Page	Number	Year				
67	03203-3224-9	JILGUERO DOS 1/10	20	36	V	5 3-Jan-1996	Property	COPIAPO	Granted
68	03203-3621-k	JILGUERO SEGUNDA 21/23	3	1395	V	321 18-Nov-1999	Property	COPIAPO	Granted
69	03203-3968-5	JILGUERO SEGUNDA 41/45	9	1401		322 18-Nov-1999	Property	COPIAPO	Granted
70	03203-7505-3	JULIA 1-2	4	1007	vta	311 7-Sep-2020	Property	COPIAPO	Granted
71	03203-0829-1	LA DICHOSA 1/2	10	304	V	137 12-Dec-1955	Property	COPIAPO	Granted
72	03203-2800-4	LADRILLOS DOS 27/39	14	2037		368 28-Dec-1993	Property	COPIAPO	Granted
73	03203-2810-1	LADRILLOSTRES 1/10	30	1206	V	231 14-Sep-1994	Property	COPIAPO	Granted
74	03203-2811-k	LADRILLOSTRES 51/52	5	1560	V	284 19-Oct-1994	Property	COPIAPO	Granted
75	03203-2799-7	LADRILLOS UNO 1/22	69	2025	V	367 28-Dec-1993	Property	COPIAPO	Granted
76	03203-4107-8	LAS PINTADAS 1/37	172	1		1 4-Jan-2001	Property	COPIAPO	Granted
77	03203-4109-4	LAS PINTADAS 121/125	7	24	V	3 4-Jan-2001	Property	COPIAPO	Granted
78	03203-4110-8	LAS PINTADAS 131/135	18	32		4 4-Jan-2001	Property	COPIAPO	Granted
79	03203-4111-6	LAS PINTADAS 141	3	38	V	5 4-Jan-2001	Property	COPIAPO	Granted
80	03203-4108-6	LAS PINTADAS 61/120	251	11		2 4-Jan-2001	Property	COPIAPO	Granted
81	03203-0440-7	LASTENIA	2	58		95 16-07-1890	Property	COPIAPO	Granted
82	03203-0444-k	LAURA REBECA (SLM)	2	434		189 15-Dec-1938	Property	COPIAPO	Granted
83	03203-0445-8	LAURA SEGUNDA (SLM)	2	434		189 15-Dec-1938	Property	COPIAPO	Granted
84	03201-7107-5	LECHUZA 1/40	198	65		32 24-Mar-2008	Property	COPIAPO	Granted
85	03201-8842-3	LECHUZA SUR 1/15	53	2464	V	532 26-Jul-2012	Property	COPIAPO	Granted
86	03203-4028-4	MACA DOS 61/62	2	485	V	141 8-Jun-2000	Property	COPIAPO	Granted
87	03203-2481-5	MACARENA 61/70	71	1023	V	200 18-Aug-1993	Property	COPIAPO	Granted
88	03203-2479-3	MACARENA 11/28	144	1014		199 18-Aug-1993	Property	COPIAPO	Granted
89	03203-2480-7	MACARENA 41/49	10	587		131 5-May-1993	Property	COPIAPO	Granted
90	03203-2506-4	MACARENA 469/478	31	1164		217 18-Aug-1993	Property	COPIAPO	Granted
91	03203-2508-0	MACARENA 495/497	6	1182	V	219 18-Aug-1993	Property	COPIAPO	Granted
92	03203-2483-1	MACARENA 101/110	55	1040	V	202 18-Aug-1993	Property	COPIAPO	Granted
93	03203 2505-6	MACARENA 467	4	1157		216 18-Aug-1993	Property	COPIAPO	Granted
94	03203 2507-2	MACARENA 485/494	16	1174		218 18-Aug-1993	Property	COPIAPO	Granted
95	03203-2482-3	MACARENA 81/87	65	1032	V	201 18-Aug-1993	Property	COPIAPO	Granted
96	03203-2517-k	MACARENA 969/978	32	1231		225 18-Aug-1993	Property	COPIAPO	Granted
97	03203-4014-4	MAK CUATRO 1/4	6	491		142 8-Jun-2000	Property	COPIAPO	Granted
98	03203-0564-0	MALAQUITA 1/156	589	183		56 8-Jul-1968	Property	COPIAPO	Granted
99	03203-1736-3	MALAQUITA 157	1	580		83 28-Feb-1990	Property	COPIAPO	Granted
100	03203-1976-5	MALAQUITA 159/161	6	835	V	132 8-May-1992	Property	COPIAPO	Granted
101	03203-0843-7	MANTO MONSTRUO UNO	5	192		87 27-Oct-1948	Property	COPIAPO	Granted
102	03203-0700-7	MARCELA DEL CARMEN 1/5	25	235		155 7-Dec-1950	Property	COPIAPO	Granted
103	03201-7795-2	MARK 1/40	200	445		100 27-Feb-2012	Property	COPIAPO	Granted
104	03201-7797-9	MARK 101/160	300	452	V	101 27-Feb-2012	Property	COPIAPO	Granted
105	03201-7798-7	MARK 161/193	134	1370		308 16-Jun-2011	Property	COPIAPO	Granted
106	03201-7799-5	MARK 201/259	249	1379	V	309 16-Jun-2011	Property	COPIAPO	Granted
107	03201-7800-2	MARK 261/318	243	1389	V	310 16-Jun-2011	Property	COPIAPO	Granted
108	03201-7796-0	MARK 41/100	300	1362	V	307 16-Jun-2011	Property	COPIAPO	Granted
109	03201-9234-K	MARK I 1/40	200	1913	V	430 21-Jun-2012	Property	COPIAPO	Granted
110	03201-9235-8	MARK II 1/60	300	3410	V	700 21-Sep-2012	Property	COPIAPO	Granted
111	03201-9236-6	MARK III 1/60	300	1919	V	431 21-Jun-2012	Property	COPIAPO	Granted
112	03201-9237-4	MARK IV 1/33	134	3417		701 21-Sep-2012	Property	COPIAPO	Granted
113	03201-9238-2	MARK V 1/59	249	3426		702 21-Sep-2012	Property	COPIAPO	Granted
114	03201-9239-0	MARK VI 1/54	238	56		11 10-Jan-2013	Property	COPIAPO	Granted
115	03201-9240-4	MARK VI 55/57	4	3435		703 21-Sep-2012	Property	COPIAPO	Granted
116	03201-9241-2	MARK VI 59/60	3	1926		432 21-Jun-2012	Property	COPIAPO	Granted
117	03203-3260-5	MARTA 1/30 (27/28)	8	192		49 16-Jun-1964	Property	COPIAPO	Granted
118	03203-7440-5	MELENDEZ A1 1-15	17	461	Vta	102 2-Apr-2020	Property	COPIAPO	Granted
119	03203-7441-3	MELENDEZ A2 1-10	55	29	vta	16 14-Jan-2021	Property	COPIAPO	Granted
120	03203-7442-1	MELENDEZ A3 1-9	37	1280		343 1-Oct-2019	Property	COPIAPO	Granted
121	03203-1891-2	MILANO 1/10	35	477	V	76 23-Apr-1991	Property	COPIAPO	Granted
122	03203-7430-8	MILANO A 1/7	35	988		247 1-Aug-2019	Property	COPIAPO	Granted
123	03203-1988-9	MONUNA 1/2	2	951	V	175 17-Jul-1991	Property	COPIAPO	Granted
124	03203-1989-7	MONUNA 3	2	945	V	174 17-Jul-1991	Property	COPIAPO	Granted
125	03203 1990-0	MONUNA 7	3	939	V	173 17-Jul-1991	Property	COPIAPO	Granted
126	03203 1991-9	MONUNA 8	1	933	V	172 17-Jul-1991	Property	COPIAPO	Granted
127	03203 0625-6	ÑA LU 1/6	30	158		59 3-Mar-1959	Property	COPIAPO	Granted
128	03201-5048-5	NATALIA 1/3	6	799	V	144 Año 1996	Property	COPIAPO	Granted
129	03203-2065-8	NEGRA 1/30	300	608		97 6-Apr-1992	Property	COPIAPO	Granted
130	03203-7547-9	NOELIA 1/3	3	374	vta	178 4-Apr-2022	Property	COPIAPO	Granted
131	03203-1971-4	OLGA 1/10	47	146	V	24 18-Feb-1991	Property	COPIAPO	Granted
132	03203-3477-2	PANDA CUARTA 1/20	100	1558		266 26-Nov-1997	Property	COPIAPO	Granted
133	03203-3472-1	PANDA CUATRO 1	4	1546		264 26-Nov-1997	Property	COPIAPO	Granted
134	03203-3473-k	PANDA CUATRO 2/8	21	1551	V	265 26-Nov-1997	Property	COPIAPO	Granted
135	03203-3824-7	PANDA CUATRO 9/10	6	1028	V	196 5-Jul-1999	Property	COPIAPO	Granted

Nacional Rol	Name	Area (ha)	Registration Information					Status	
			Page	Number	Year	Register	City		
136	03203-3750-K	PANDA QUINTA 1/24	111	63	V 21	31-Jan-2000	Property	COPIAPO	Granted
137	03203-3474-8	PANDA SEGUNDA 1/15	75	1564	V 267	26-Nov-1997	Property	COPIAPO	Granted
138	03203-3475-6	PANDA TERCERA 1/10	50	1570	V 268	26-Nov-1997	Property	COPIAPO	Granted
139	03203-3476-4	PANDA TERCERA 11/30	100	1577	269	26-Nov-1997	Property	COPIAPO	Granted
140	03203-0663-9	PEDRO A. CERDA 1/10	40	487	V 125	1-Dec-1962	Property	COPIAPO	Granted
141	03203-5801-9	PINTA 1	3	2472	533	27-Jul-2012	Property	COPIAPO	Granted
142	03203-5802-7	PINTA 2/11	30	2478	V 534	27-Jul-2012	Property	COPIAPO	Granted
143	03203-1657-K	PINTADAS 21/39	71	498	V 79	23-Apr-1991	Property	COPIAPO	Granted
144	03203-1659-6	PINTADAS 66/72	27	60	V 7	2-Jan-1990	Property	COPIAPO	Granted
145	03203-1660-K	PINTADAS 79/96	81	1737	300	9-Jul-1990	Property	COPIAPO	Granted
146	03203 1658-8	PINTADAS 45/65	80	1267	V 212	10-May-1990	Property	COPIAPO	Granted
147	03203-2249-9	PINTADAS 73	1	616	98	6-Apr-1992	Property	COPIAPO	Granted
148	03203 1818-1	PINTADAS II 1/15	50	1257	V 211	10-May-1990	Property	COPIAPO	Granted
149	03203-3703-8	POR SI ACASO 1	2	1428	387	16-Sep-1998	Property	COPIAPO	Granted
150	03203-7239-9	PORFIA 1/5	20	587	v 169	4-Apr-2017	Property	COPIAPO	Granted
151	03201-9891-7	PUNTA NEGRA A 1/40	200	675	V 186	13-Mar-2014	Property	COPIAPO	Granted
152	03203-2912-4	QUILIMARI I 1/11	102	1274	194	27-Jul-1995	Property	COPIAPO	Granted
153	03203-0677-9	REBECA SEGUNDA (SLM)	1	434	189	15-Dec-1938	Property	COPIAPO	Granted
154	03203-0725-2	RELAVE 1/2	10	118	53	7-Apr-1953	Property	COPIAPO	Granted
155	03203-2111-5	RENACER 14/26	55	1135	V 351	11-Jun-1992	Property	COPIAPO	Granted
156	03203-2112-3	RENACER 28/32	20	1144	352	11-Jun-1992	Property	COPIAPO	Granted
157	03203-2113-1	RENACER 35/51	57	1575	286	19-Oct-1994	Property	COPIAPO	Granted
158	03203-2110-7	RENACER 4/13	30	582	V 152	7-Jul-2000	Property	COPIAPO	Granted
159	03203-2114-K	RENACER 55/58	20	1585	287	19-Oct-1994	Property	COPIAPO	Granted
160	03203-2115-8	RENACER 69/83	69	178	34	7-Feb-1994	Property	COPIAPO	Granted
161	03203-2116-6	RENACER 84/92	37	807	V 121	20-May-1994	Property	COPIAPO	Granted
162	03203-2118-2	RENACER 105/135	103	186	V 35	7-Feb-1994	Property	COPIAPO	Granted
163	03203-0588-8	RESGUARDO 1/4	4	418	V 65	31-Jul-1963	Property	COPIAPO	Granted
164	03203-0678-7	RESGUARDO (SLM)	1	434	189	'1938	Property	COPIAPO	Granted
165	03203 1482-8	ROCIO 1/8	55	209	V 72	17-Feb-1989	Property	COPIAPO	Granted
166	03203-0980-8	SAN ESTEBAN	5	48	V 10	14-Jan-1958	Property	COPIAPO	Granted
167	03203-2750-4	SAN JOSE Y SOFIA 2	10	2080	356	14-Aug-1990	Property	COPIAPO	Granted
168	03203-2752-0	SAN PEDRO I 1/10,21/30,35/45	155	1386	V 227	15-May-1990	Property	COPIAPO	Granted
169	03203-2749-0	SAN PEDRO II 49/68	20	1378	226	15-May-1990	Property	COPIAPO	Granted
170	03203-0904-2	SANTA AURORA 1/8	32	121	V 49	3-May-1967	Property	COPIAPO	Granted
171	03203-0888-7	SANTOS VETA Y STOS.	8	306	119	10-Aug-1937	Property	COPIAPO	Granted
	MANTO								
172	03203-0054-1	SOFIA	1	85	V 90	05-07-1890	Property	COPIAPO	Granted
173	03203-3908-1	SOL SEGUNDA 10/12	3	376	V 83	22-Mar-1999	Property	COPIAPO	Granted
174	03203-3909-K	SOL SEGUNDA 13/22	30	382	V 84	22-Mar-1999	Property	COPIAPO	Granted
175	03201-4993-2	SUERTE CINCO 1-60 ( 16 )	80	221	33	19-Feb-1996	Property	COPIAPO	Granted
176	03203-2759-8	TAURO TRES 1 (SLM)	10	1225	V 234	16-Sep-1994	Property	COPIAPO	Granted
177	03203-2760-1	TAURO TRES 3 (SLM)	1	693	V 106	4-May-1994	Property	COPIAPO	Granted
178	03203-0139-4	TERESA MARIA	3	57	V 38	31-Jul-1943	Property	COPIAPO	Granted
179	03203-0145-9	TIRANA	5	113	V 56	27-Jul-1949	Property	COPIAPO	Granted
180	03203-1590-5	TORO 1/20	100	574	V 151	9-May-1989	Property	COPIAPO	Granted
181	03203 1595-6	TORO 101/120	99	653	164	10-May-1989	Property	COPIAPO	Granted
182	03203 1596-4	TORO 121/133	39	645	163	10-May-1989	Property	COPIAPO	Granted
183	03203-1591-3	TORO 21/40	94	630	V 161	10-May-1989	Property	COPIAPO	Granted
184	03203 1592-1	TORO 41/60	100	580	V 152	9-May-1989	Property	COPIAPO	Granted
185	03203 1593-K	TORO 61/75	72	639	162	10-May-1989	Property	COPIAPO	Granted
186	03203 1594-8	TORO 81/100	100	587	153	9-May-1989	Property	COPIAPO	Granted
187	03203-0985-9	VERI 1/11	48	302	V 100	21-Sep-1967	Property	COPIAPO	Granted
188	03203-0603-5	VETA GRUESA	2	7	V 3	28-Mar-1918	Property	COPIAPO	Granted
189	03203-6774-3	VIENTO A10 1	3	866	v 174	18-Feb-2015	Property	COPIAPO	Granted
190	03203-6775-1	VIENTO A11 1/20	96	872	175	18-Feb-2015	Property	COPIAPO	Granted
191	03203-7480-4	VIENTO D1 11/20	50	980	vta 307	3-Sep-2020	Property	COPIAPO	Granted
192	03203-7481-2	VIENTO D2 11/20	50	1001	310	7-Sep-2020	Property	COPIAPO	Granted
193	03203-7421-9	VIENTO D1 1/3 (OP)	6	5597	3616	28-Nov-2017	Discovery	COPIAPO	In Process
194	03203-7422-7	VIENTO D2 1/8 (OP)	16	5599	3617	28-Nov-2017	Discovery	COPIAPO	In Process
195	03203-7431-6	VIENTO D2 11/16	12	5601	3618	28-Nov-2017	Discovery	COPIAPO	In Process
196	03203-7512-6	VIENTO A1 1/3 (OP)	6	4667	vta 2968	18-Dec-2019	Discovery	COPIAPO	In Process
197	03203-7513-4	VIENTO A2 1/8 (OP)	16	4669	vta 2969	18-Dec-2019	Discovery	COPIAPO	In Process
198	03203-7592-4	VIENTO A1 11/13 (OP)	6	3260	vta 2001	10-Sep-2020	Discovery	COPIAPO	In Process
199	03203-7591-6	VIENTO A2 11/18 (OP)	16	3262	vta 2002	10-Sep-2020	Discovery	COPIAPO	In Process
200	03203-7637-8	CAMILA D2 1-18	100	3726	vta 2226	28-Jul-2021	Discovery	COPIAPO	In Process
201	03203-7641-6	SUR 3 1-20	100	3713	vta 2218	28-Jul-2021	Discovery	COPIAPO	In Process
202	03203-7642-4	VIGO 1-39	195	3715	vta 2219	28-Jul-2021	Discovery	COPIAPO	In Process
203	03203-7639-4	CAMILA D3 1-17	100	3764	2250	2-Aug-2021	Discovery	COPIAPO	In Process

Nacional Rol	Name	Area (ha)	Registration Information					Status	
			Page	Number	Year	Register	City		
204	03203-7638-6	NOELIA 11	12	3762	vta 2249	2-Aug-2021	Discovery	COPIAPO	In Process
205	03203-7640-8	SUR 2 1-20	100	3766	2251	2-Aug-2021	Discovery	COPIAPO	In Process
206		VIENTO A2 31/40 (OP)	20	2853	vta 1651	21-Jul-2022	Discovery	COPIAPO	In Process

#### Outside Candelaria District

Nacional Rol	Name	Area (ha)	Registration Information					Status
			Page	Number	Year	Register	City	
1	03201-0095-K	AURORA	5	4	2 15-Jan-1954	Property	COPIAPO	Granted
2	03201-0728-8	CARMEN	5	253	94 8-Nov-1935	Property	COPIAPO	Granted
3	03201-2431-K	CECILIA 1/106	506	173	71 24-Apr-1986	Property	COPIAPO	Granted
4	03201-5126-0	CONDOR 1/20	100	847	143 30-Jun-1997	Property	COPIAPO	Granted
5	03201-0180-8	DESCUBRIDORA 1/2	10	123	62 9-Oct-1952	Property	COPIAPO	Granted
6	03201-1509-4	DESPRECIA DA 1/2	10	1	1 6-May-1947	Property	COPIAPO	Granted
7	03201-2118-3	GLADYS 1/73	358	111	V 57 9-Apr-1981	Property	COPIAPO	Granted
8	03201-2169-8	LAS ADRIANITAS 1/28	45	266	V 124 18-Jun-1970	Property	COPIAPO	Granted
9	03201-5125-2	LEON 1/20	100	855	144 30-Jun-1997	Property	COPIAPO	Granted
10	03201-2302-k	MAMIÑA 1/125	582	219	V 117 26-Jun-1981	Property	COPIAPO	Granted

### Schedule B – Minera Ojos del Salado Exploration Concessions

Nacional Rol	Name	Area (ha)	Registration Information				Status	Expiration Date
			Page	Number	Year	Register		
1	03203-F972-9	VIENTO B3 (Renewal)	100	1331	vta	8205-May-2020	Discover	COPIAPO Granted 10-Mar-2024
2	03203-F975-3	VIENTO B1 (Renewal)	100	1330		8195-May-2020	Discover	COPIAPO Granted 12-Mar-2024
3	03203-F973-7	VIENTO B2 (Renewal)	100	1832		113512-Jun-2020	Discover	COPIAPO Granted 13-Apr-2024
4	03203-G093-k	CAMILA E3 (Renewal)	100	1830		113412-Jun-2020	Discover	COPIAPO Granted 17-Apr-2024
5	03203-G092-1	CAMILA E2 (Renewal)	100	1828	vta	113312-Jun-2020	Discover	COPIAPO Granted 30-Apr-2024
6	03201-O659-2	NORTE B4	300	3422		205712-Jul-2021	Discover	COPIAPO Granted 27-Apr-2025
7	03203-G450-1	SUR B10	300	3430		206112-Jul-2021	Discover	COPIAPO Granted 27-Apr-2025
8	03203-G446-3	SUR B6	300	3428		206012-Jul-2021	Discover	COPIAPO Granted 27-Apr-2025
9	03203-G442-0	SUR B2	300	3426		205912-Jul-2021	Discover	COPIAPO Granted 27-Apr-2025
10	03203-G441-2	MERCEDES A	100	3424		205812-Jul-2021	Discover	COPIAPO Granted 27-Apr-2025
11	03203-O661-4	NORTE B6	200	3789	vta	22652-Aug-2021	Discover	COPIAPO Granted 8-May-2025
12	03201-O658-4	NORTE B3	300	3785	vta	22632-Aug-2021	Discover	COPIAPO Granted 8-May-2025
13	03201-G449-8	SUR B9	200	3801	vta	22712-Aug-2021	Discover	COPIAPO Granted 8-May-2025
14	03203-G445-5	SUR B5	200	3795	vta	22682-Aug-2021	Discover	COPIAPO Granted 8-May-2025
15	03203-G444-7	SUR B4	300	3793	vta	22672-Aug-2021	Discover	COPIAPO Granted 11-May-2025
16	03201-O660-6	NORTE B5	100	3787	vta	22642-Aug-2021	Discover	COPIAPO Granted 12-May-2025
17	03201-O656-8	NORTE B1	100	3781	vta	22612-Aug-2021	Discover	COPIAPO Granted 12-May-2025
18	03203-G447-1	SUR B7	300	3797	vta	22692-Aug-2021	Discover	COPIAPO Granted 12-May-2025
19	03203-G443-9	SUR B3	300	3791	vta	22662-Aug-2021	Discover	COPIAPO Granted 12-May-2025
20	03201-O657-6	NORTE B2	300	3783	vta	22622-Aug-2021	Discover	COPIAPO Granted 31-May-2025
21	03203-G448-K	SUR B8	200	3799	vta	22702-Aug-2021	Discover	COPIAPO Granted 31-May-2025
22	03203-G853-1	VIENTO C10	300	148		7510-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
23	03203-G850-7	VIENTO C1	200	146		7410-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
24	03203-G847-7	CORA A6	100	144		7310-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
25	03203-G843-4	CORA A2	300	142		7210-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
26	03203-G839-6	CAMILA A1	200	140		7110-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
27	03203-G852-3	VIENTO C3	200	391		23820-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
28	03203-G848-5	NORTE B7	200	387	vta	23620-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
29	03203-G845-0	CORA A4	300	384		23420-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
30	03203-G841-8	CAMILA A3	300	380	vta	23220-Jan-2022	Discover	COPIAPO Granted 17-Nov-2025
31	03203-G851-5	VIENTO C2	200	389	vta	23720-Jan-2022	Discover	COPIAPO Granted 30-Nov-2025
32	03201-P021-2	NEGRA A1	200	386		23520-Jan-2022	Discover	COPIAPO Granted 30-Nov-2025
33	03203-G844-2	CORA A3	200	382	vta	23320-Jan-2022	Discover	COPIAPO Granted 30-Nov-2025
34	03203-G840-k	CAMILA A2	300	379		23120-Jan-2022	Discover	COPIAPO Granted 30-Nov-2025
35	03203-G849-3	PORFIA C1	200	922		5351-Mar-2022	Discover	COPIAPO Granted 28-Dec-2025
36	03203-G846-9	CORA A5	300	920		5341-Mar-2022	Discover	COPIAPO Granted 28-Dec-2025
37	03203-G842-6	CORA A1	300	918		5331-Mar-2022	Discover	COPIAPO Granted 28-Dec-2025
38	03203-H105-2	NEGRA A2	200	2478		14364-Jul-2022	Discover	COPIAPO Granted 3-May-2026
39	03201-P252-5	MARK A1	200	3027	vta	17618-Aug-2022	Discover	COPIAPO Granted 12-May-2026
40	03203-H107-9	VIENTO C8	200	3031		17638-Aug-2022	Discover	COPIAPO Granted 12-May-2026
41	03201-P253-3	MARK A3	300	2480		14374-Jul-2022	Discover	COPIAPO Granted 20-May-2026
42	03203-H108-7	VIENTO C9	300	2482		14384-Jul-2022	Discover	COPIAPO Granted 20-May-2026
43	03203-H104-4	BUITRE A2	300	3025	vta	17608-Aug-2022	Discover	COPIAPO Granted 28-May-2026
44	03203-H106-0	VIENTO C6	200	3029		17628-Aug-2022	Discover	COPIAPO Granted 28-May-2026
45	03201-P487-0	MARK A2	200	2796	vta	161619-Jul-2022	Discover	COPIAPO In Process
46	03203-H305-5	VIENTO C4	300	2801		161919-Jul-2022	Discover	COPIAPO In Process
47	03201-P488-9	MARK A4	300	2847		164820-Jul-2022	Discover	COPIAPO In Process
48	03201-P490-0	MARK A6	300	2799	vta	161819-Jul-2022	Discover	COPIAPO In Process
49	03203-H306-3	VIENTO C5	300	2802	vta	162019-Jul-2022	Discover	COPIAPO In Process
50	03203-F312-7	VIENTO A8	200	2629		159228-May-2018	Discover	COPIAPO Granted
51	03203-F314-3	VIENTO A10	300	2632		159428-May-2018	Discover	COPIAPO Granted

## **CERTIFICATE OF QUALIFIED PERSON**

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2022.

I, Glen Cole, do hereby certify that:

- 1) I am a Principal Consultant (Resource Geology) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1500, 155 University Avenue, Toronto, Ontario, M5H 3B7;
- 2) I am a graduate of the University of Cape Town in South Africa with a BSc (Hons) in Geology in 1983; I obtained a MSc (Geology) from the University of Johannesburg in South Africa in 1995 and a MEng in Mineral Economics from the University of the Witwatersrand in South Africa in 1999. I have practiced my profession continuously since 1986. Since 2006, I have estimated and audited Mineral Resources for a variety of early and advanced international base and precious metals projects;
- 3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the Province of Ontario (APGO#1416), the Association of Professional Engineers and Geoscientists of the Province of Saskatchewan (PEGS#26003);
- 4) I have personally inspected the subject property on five occasions with the most recent visit being during October 4 to 5, 2022
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person am independent of Lundin Mining Corporation as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for the Executive Summary, Sections 1 to 8, 18, 22, 23, 24, 25, 26 and accept professional responsibility for those sections of this Technical Report;
- 8) In 2014, 2015, 2017 and 2018, I have co-authored previous Technical Reports about the subject property for Lundin Mining Corporation and Franco-Nevada Corporation;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a Technical Report for the Candelaria Copper Mining Complex located in Chile in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed in accordance with CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and Canadian Securities Administrators' National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) That, as of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Toronto, Ontario  
February 22, 2023

[“signed and sealed”]  
Glen Cole, PGeo (APGO#1416)  
Principal Consultant (Resource Geology)

## **CERTIFICATE OF QUALIFIED PERSON**

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2023.

I, Souvik Banerjee, do hereby certify that:

- 1) I am a Principal Consultant (Resource Geology) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1500, 155 University Avenue, Toronto, Ontario, M5H 3B7;
- 2) I am a graduate of the University of Burdwan in India with a BSc (Hons) in Geology in 2000 and MSc (Geology) in 2002. I have practiced my profession continuously since 2004. Between 2002 and 2004 I worked as a research fellow, working on Himalayan tectonics and structure. Since 2006, I have worked at several exploration projects, underground and open pit mining operations worldwide and held various senior positions, with the responsibility for managing exploration and estimation of Mineral Resources for development projects and operating mines. Since 2008, I have estimated and audited Mineral Resources for a variety of early and advanced international base and precious metals projects;
- 3) I am a Professional Geoscientist registered with the Association of Professional Geoscientists of the Province of Ontario (APGO#2861);
- 4) I have personally inspected the subject property during from October 4 to 5, 2022;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person am independent of the Lundin Mining Corporation as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this Technical Report and responsible for the Executive Summary, Sections 9 to 11, 13, 24 and 25 and accept professional responsibility for those sections of this Technical Report;
- 8) I have no previous exposure to the subject property;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a Technical Report for the Candelaria Copper Mining Complex located in Chile in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed in accordance with *CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators' National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) That, as of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

[“signed and sealed”]

Toronto, Ontario  
February 22, 2022

Souvik Banerjee, PGeo (APGO#2861)  
Principal Consultant (Resource Geology)

## CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2023.

I, Adrian Dance, do hereby certify that:

- 1) I am a Principal Consultant (Metallurgy) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office 22<sup>nd</sup> Floor, 1066 West Hastings Street, Vancouver, British Columbia, Canada
- 2) I am a graduate of the University of British Columbia in 1987 and the University of Queensland in 1991 where I obtained a BASc in Mineral Processing and a PhD in Mineral Processing. I have practiced my profession continuously since 1991 where I have both worked at copper processing operations in Canada and Peru as well as consulted on a range of copper-gold processing projects around the world;
- 3) I am a professional engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia, license #37151;
- 4) I have not personally visited the project area but relied on a site visit conducted by Glen Cole and Benny Zhang of SRK Consulting, co-authors of this Technical Report;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the Lundin Mining Corporation as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this Technical Report and responsible for Executive Summary, Sections 12, 16, 20.1.2, 20.2, 24 and 25 and accept professional responsibility for those sections of this Technical Report;
- 8) I have co-authored previous Technical Reports about the subject property for Lundin Mining Corporation and Franco-Nevada Corporation since 2014;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a technical audit of the Candelaria Copper Mining Complex located in Chile. In conducting our audit, a gap analysis of project technical data was completed in accordance with CIM *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Vancouver, British Columbia  
February 22, 2023

*[“signed and sealed”]*  
Adrian Dance (PEng #37171)  
Principal Consultant (Mineral Processing)

## CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2023.

I, Benny Zhang, do hereby certify that:

- 1) I am a Principal Consultant (Mine Engineering) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1500, 155 University Avenue, Toronto, Ontario, M5H 3B7;
- 2) I graduated with a Bachelor of Engineering degree in Mining Engineering from Central South University, China in 1984, and a Master of Engineering degree in Applied Rock Mechanics for Mine Planning from McGill University, Canada in 2006. I have practiced my profession for 38 years. I have been directly involved in mine operations, mine design and planning, technical review and audit, due diligence, mining project valuation, equipment selection, ventilation, rock mechanics and ground support, and providing various technical services for more than 100 base metal and precious metal mines / projects, including base metal sulphide deposit projects. Since 2000 I have been focusing my career on mining project related consulting services worldwide
- 3) I am a Professional Engineer registered with Professional Engineers Ontario (PEO#100115459);
- 4) I have personally inspected the subject property on three occasions, the most recent site visit being during October 4 and 5, 2022;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this Technical Report and responsible for the Executive Summary and Sections 14.1, 14.2.3, 14.3, 14.4, 15.1, 15.3, 15.4, 15.5, 15.6.2, 15.7, 17, 20.1.1, 20.1.3, 20.1.4, 20.2, 21, 24, 25, and 26, and accept professional responsibility for those sections of this Technical Report;
- 8) During 2017 and 2018, I co-authored three previous Technical Reports about the subject property for Lundin Mining Corporation;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a Technical Report for the Candelaria Copper Mining Complex located in Chile in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed in accordance with *CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators' National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

[“*signed and sealed*”]

Toronto, Ontario  
February 22, 2023

Benny Zhang, PEng (PEO#100115459)  
Principal Consultant (Mine Engineering)

## CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2023.

I, Colleen MacDougall, do hereby certify that:

- 1) I am a Principal Consultant (Mining Engineering) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 1500, 155 University Avenue, Toronto, Ontario, M5H 3B7;
- 2) I am a graduate of McGill University in Montreal, Quebec with a BEng in Mining Engineering in 2006. I have practiced my profession continuously since 2006 working on operating sites and project studies internationally. I have been directly involved in mine optimization, mine design and life of mine planning, equipment and cost estimation, technical reviews and audits, and project evaluation for various international operations and projects.
- 3) I am a professional Engineer registered with the Professional Engineers Ontario PEO#100530936);
- 4) I have not personally visited the subject property;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for the Executive Summary and Sections 14.1, 14.2.1, 14.2.2, 14.2.3, 14.4, 15.1, 15.2, 15.5, 15.6.1, 15.7, 20.1.1, 20.2, 24, 25, and 26, and accept professional responsibility for those sections of this Technical Report;
- 8) I have no previous exposure to the subject property;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a Technical Report for the Candelaria Copper Mining Complex located in Chile in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed in accordance with CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines and Canadian Securities Administrators' National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) That, as of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Toronto, Ontario  
February 22, 2023

[“signed and sealed”]  
Colleen MacDougall, PEng (PEO#100530936)  
Principal Consultant (Mining Engineering)

## CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled *Technical Report for the Candelaria Copper Mining Complex, Atacama Region, Region III, Chile* and having an effective date of December 31, 2022, and a signature date of February 22, 2023.

I, Cameron C. Scott, do hereby certify that:

- 1) I am a Principal Consultant (Geotechnical Engineering) with the firm of SRK Consulting (Canada) Inc. with an office at Suite 2200, 1066 West Hastings Street, Vancouver, British Columbia, Canada;
- 2) I am a graduate of the University of British Columbia in 1974, I obtained a BASc Degree in Geological Engineering and subsequently was granted an MEng. I also obtained a Degree in Civil Engineering (Geotechnical Option) from the University of Alberta in 1984. I have practiced my profession continuously since 1974. I have worked as a Geotechnical Engineer for a total of 40 years. Most of my professional practice has focused on the geotechnical and hydrogeological aspects of mining, including the site selection, design, permitting, operation and closure of mine waste facilities in Canada, the US, Mexico, Central and South America, Europe and various countries within the former Soviet Union.
- 3) I am a professional Engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia (#11523) since 1978;
- 4) I have not personally visited the subject property;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this Technical Report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for the Executive Summary, Sections 19, 24, 25 and 26, and accept professional responsibility for that section of this Technical Report;
- 8) In 2014, 2015, 2017 and 2018 I have co-authored previous Technical Reports about the subject property for Lundin Mining Corporation and Franco-Nevada Corporation;
- 9) I have read National Instrument 43-101 and confirm that this Technical Report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by Lundin Mining Corporation to prepare a Technical Report for the Candelaria Copper Mining Complex located in Chile in accordance with National Instrument 43-101 and Form 43-101F1 guidelines. This assignment was completed in accordance with *CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines* and Canadian Securities Administrators' National Instrument 43-101;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Compañía Contractual Minera Candelaria and Compañía Contractual Minera Ojos del Salado copper projects or securities of Lundin Mining Corporation; and
- 12) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Vancouver, British Columbia  
February 22 2023

[“signed and sealed”]  
Cameron C. Scott (PEng #11523)  
Principal Consultant (Geotechnical Engineering)